

BACKGROUND REPORT

THE WORKING GROUP ON INTERNET GOVERNANCE

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I. Introduction

1. This Background Report accompanies and is complementary to the Report of the Working Group on Internet Governance (The WGIG Report). It includes much of the work produced in the course of the Working Group process and reflects the wide variety of opinions held within the group as well as many comments made by stakeholders during the consultation process. The Background Report does not have the same status as the WGIG Report, which is a short consensus document for policy makers. However, the Background Report can be used as a reference in that it provides a summary of the process and various issue papers, with some additional thoughts and considerations about potential solutions for issues not covered in detail in the WGIG Report. If not every member of the group agrees with every word, they all agree with this approach and the Background Report makes clear whether an argument or opinion is shared by the entire group or only by some of its members.

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

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

4. The WGIG mandate goes back to the Geneva phase of the WSIS, when Heads of State and government recognized the importance of the Internet. They noted that the Internet is a central element of the infrastructure of the emerging information society and established principles to guide the management of the Internet including as definition of the roles and responsibilities of the various stakeholders¹. They recognized that there are differing views on the suitability of current institutions and mechanisms for managing processes and developing policies for the global Internet. For this reason they requested the Secretary-General to set up a Working Group on Internet Governance with a view to preparing the ground for negotiations during the second phase of the WSIS, culminating in the Summit to be held in Tunis in November 2005².

5. The WSIS Declaration of Principles and Plan of Action³ adopted in Geneva set the parameters for the WGIG and contain its Terms of Reference and work programme. The WGIG has been asked, *inter alia*, to “investigate and make proposals for action, as appropriate, on the governance of the Internet by 2005”⁴, dealing with the following issues⁵:

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

6. It was asked to present its findings in a report to be presented “for consideration and appropriate action” for the second phase of WSIS in Tunis in 2005.

¹ WSIS Declaration of Principles, Paragraphs 48 and 49, WSIS-03/GENEVA/DOC/0004.

² WSIS Declaration of Principles, Paragraph 50, WSIS-03/GENEVA/DOC/0004.

³ WSIS-03/GENEVA/DOC/0005.

⁴ WSIS Declaration of Principles, Paragraph 50, WSIS-03/GENEVA/DOC/0004.

⁵ WSIS Plan of Action, Paragraph 13 b), WSIS-03/GENEVA/DOC/0005.

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7. Discussions leading to the establishment of the WGIG took place from early in 2004 and included workshops and consultations at a wide range of meetings of intergovernmental and other organizations. Among the events that took up this issue were the International Telecommunications Union (ITU) Workshop on Internet Governance (26 – 27 February 2004); the UN ICT Task Force Global Forum on Internet Governance (24 – 25 March 2004); ITU Telecom Africa in Cairo (4 – 8 May 2004), INET2004 in Barcelona (10 – 14 May 2004); and WSIS PrepCom-1, held at Hammamet in Tunis (24 – 26 June 2004). Discussions continued at the meeting in Kuala Lumpur of the Internet Corporation for Assigned Names and Numbers (ICANN) (19 – 23 July 2004), at the ITU Telecom Asia in Busan, Korea (7 – 11 September 2004) and other *ad hoc* conferences.

8. The WGIG Secretariat was established in July 2004. Consultations on the setting up of the Working Group were held at the United Nations in Geneva on 20 and 21 September 2004, chaired by Mr Desai in his capacity as Special Advisor to the Secretary-General. The consultations were held in an open mode, allowing all actors involved in Internet issues to participate on an equal footing. Over 250 participants, representing governments, civil society organizations and private sector entities, attended the consultations. Subsequently, after further informal consultations with all stakeholders, on 11 November 2004 the Secretary-General announced the establishment of the WGIG.

9. The WGIG conceived itself not as a negotiating body but as a working group with the task of preparing the ground for the negotiations of the Tunis Phase of the WSIS in November 2005.

10. The guiding principles for the WGIG's working methods are set out in the WSIS Declaration of Principles and Plan of Action. The WGIG is called upon to be "open and inclusive" in its work and design a "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"⁶. The WGIG agreed that transparency was another key ingredient to ensure ownership of the process among all stakeholders. In order to maximise transparency and open communication and to facilitate its own work, the WGIG resolved to use the Internet to the maximum extent possible. Thus members worked extensively through e-mail, Internet Protocol (IP) based streaming video, bulletin boards and a discussion forum, and used the WGIG website to communicate with the public. The public sessions, which were held in conjunction with the WGIG meetings, were webcast from February onwards. Real time captioning was introduced for the public meetings held in April and June and made available on the WGIG website.

11. The WGIG decided that all its formal face-to-face meetings would be accompanied by consultations open to all stakeholders and online consultation processes. Observers from intergovernmental organizations (IGOs) could attend all meetings and participate in online discussion lists. The WGIG relied on external comments and contributions as an integral part of its work. Open ended consultations have been conducted both online and offline. A total of 105 contributors submitted 182 written comments.

12. In addition, the following regional and sub-regional meetings have provided input into the work of WGIG: the South-East and East Asia Conference on Preparations for WSIS II in Bali, Indonesia, 1 – 3 February 2005; the African WSIS Regional Conference in Accra, Ghana, 2 – 4 February 2005; the Pan Arab Conference on WSIS in Cairo, Egypt, 8 – 10 May 2005, for the Arab Region; the High-Level Asia-Pacific Conference for the WSIS in Tehran,

⁶ WSIS Declaration of Principles, Paragraph 50, WSIS-03/GENEVA/DOC/0004 and WSIS Plan of Action Paragraph 13 (b), WSIS-03/GENEVA/DOC/0005.

Islamic Republic of Iran, 31 May – 2 June; and the Regional Meeting for Latin America and the Caribbean in Rio de Janeiro, Brazil, 8 – 10 June 2005.

13. The WGIG also took note of the Marrakesh Declaration and the Action Plan on *The Role and the Place of the Media in the Information Society in Africa and the Arab Region*, adopted at Marrakesh, Morocco, on 24 November 2004.

14. The WGIG chose as its point of entry into the substantive work the identification of public policy issues that are potentially relevant to Internet governance, as called for in Paragraph 13 (b) of the WSIS Plan of Action and started work by gathering facts and mapping out the terrain. The WGIG worked simultaneously on developing a practical definition of the Internet itself and defining Internet governance public policy issues. It was felt that an iterative method would be the best way of moving toward an implicit working definition of Internet governance.

15. The WGIG agreed to take a broad approach and not exclude any potentially relevant issue. This first, fact finding phase was intended to lead to the identification of public policy issues that are relevant to Internet governance. As a first step, the WGIG developed a series of draft working papers. The purpose of these papers was to act as a brief summary document setting out some of the basic issues and to identify aspects of relevance to the task of the WGIG. The production of these papers also secured the effective working of the group via the Internet and thereby laid the foundations for future collaborative work within WGIG. Each paper was written by a small group of contributors and then discussed by the group as a whole. However, the papers do not necessarily present a consensus position, nor do they contain agreed language accepted by every member. This whole process was conducted using Internet tools. In all, 21 draft papers were produced and made available on the WGIG website for public comment.

16. On the whole, comments received commended the WGIG for the openness of its process and added many factual elements and corrections. Different opinions were voiced as regards the content of the draft papers. The WGIG agreed that all comments received would be part of the background material it would use. It was understood that these papers should be read with the comments as part of a package.

17. Based on this fact finding phase, the WGIG established the key public policy areas for further investigation and discussion. Following the group's second meeting, and taking into account the views of the public, the following four clusters of issues were identified:

- (i) Issues relating to infrastructural issues and the management of critical Internet resources, including administration of the domain name system and IP addresses, administration of the root server system, technical standards, peering and interconnection, telecommunications infrastructure including innovative and converged technologies, as well as multilingualization. These issues are matters of direct relevance to Internet governance falling within the ambit of existing organizations with responsibility for these matters;
- (ii) Issues relating to the use of the Internet, including spam, network security, and cybercrime. While these issues are directly related to Internet governance, the nature of global cooperation required is not well defined;
- (iii) Issues which are relevant to the Internet, but with impact much wider than the Internet, where there are existing organizations responsible for these issues, such as intellectual property rights (IPRs) or international trade. The WGIG started examining the extent to which these matters are being handled consistently with the WSIS Declaration of Principles; and
- (iv) Issues relating to developmental aspects of Internet governance, in particular capacity building in developing countries.

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18. In the second phase of its work the WGIG assessed the adequacy of current Internet governance arrangements and looked into the respective roles and responsibilities of all stakeholders, in accordance with the mandate set out by the Geneva phase of the WSIS. Again, it produced 16 papers that were made available on the WGIG website for public comment.

19. In carrying out this assessment, the WGIG took the key WSIS principles as its main point of orientation. The group devoted much attention to the issue of coordination and assessed the capacity of existing Internet governance arrangements to address governance issues in a coordinated manner. It clearly felt there was room for improvement in this area and saw a need for existing institutions to have a closer cooperation on Internet governance issues.

20. The WSIS principles also include the terms “multilateral”, “transparent”, and “democratic” as well as the notion of the “full involvement of governments, stakeholders and international organizations”. While not questioning these principles, the WGIG spent some time clarifying their meaning and developed a common understanding on the extent to which existing arrangements ensure the full involvement of governments, the private sector, civil society and international organizations in a process which is multilateral, transparent and democratic. It came to the conclusion that from an operational point of view, the WSIS criteria of multilateralism, transparency, democracy and full involvement of all stakeholder groups have somewhat different meanings, possibilities, and limits in relation to different types of governance mechanisms. They may therefore be regarded as having different shades of meaning in different contexts. For example, the WGIG recognized that “full involvement of all stakeholders” would not necessarily mean that every stakeholder group should have the same role in the development of policies, the preparation of decisions, the actual decisions and then the implementation of decisions.

21. In the third phase, leading up to its last meeting, the WGIG focused on developing “proposals for action, as appropriate, on the governance of the Internet” and on the drafting of the Background Report. It developed recommendations and options on how to improve on current Internet governance arrangements. Not all options have the support of all members, but all members agree with the approach to present various options.

22. The WGIG consciously decided not to include a separate chapter on the evolution of the Internet. It held the view that by now the Internet was so widely used and its history so well documented that there would be little value added by including a separate chapter on this subject. For readers interested to learn more about the history of the Internet the WGIG recommends the excellent document on this subject available at the website of the Internet Society (ISOC), entitled *A Brief History of the Internet* with contributions by many leading proponents in the invention and development of the Internet, such as Vinton G. Cerf and Robert E. Kahn⁷.

23. Nevertheless, the WGIG found it useful for developing an understanding of governance issues to look at the different phases of the Internet’s development from a research project in the 1960s to a widespread commercial infrastructure with close to one billion Internet users connected in 2004. Looking back, it detected some guiding principles and factors that had enabled or contributed to this development⁸. The WGIG viewed the WSIS principle relating to the stable and secure functioning of the Internet as of paramount

⁷ <http://www.isoc.org/internet/history/brief.shtml>.

⁸ See also the OECD input paper to the WGIG work (DSTI/ICCP(2005)4/FINAL). The paper has been made available at the WGIG website: <http://www.wgig.org/docs/Comments-OECD-April.pdf>. The related paragraphs in this chapter reflect the OECD findings.

importance. At the outset the WGIG agreed that all recommendations aiming to improve current governance arrangements should be fully assessed in function of their capacity to enhance or preserve the stability and security of the Internet. Thus, any recommendation to improve present arrangements should take care of that concern.

24. Furthermore, the WGIG noted the importance of the following factors:
- The decentralized and collaborative process of underlying technological development and core resource management: the technological development and administration of the Internet, allowing participation by all interested parties and rejecting centralized advance validation of content, services and technologies, helps ensure that the network is interoperable, functional, stable, secure, efficient as well as scalable in the long run.
 - The distributed/decentralized open architecture: the Internet, a ‘network of networks’, is made up of tens of thousands of interconnected networks run by Internet service providers, individual companies, universities, governments and others, which can communicate together, based on the key underlying technical idea of open architecture networking in which any type of network anywhere can be included and be made publicly available.
 - The open, non-proprietary nature of the core Internet standards: most of the protocols at the core of the Internet are protocols based on open standards that are efficient, trusted, and open to global implementation with little or no licensing restrictions. The protocol specifications are available to anyone, at no cost, thus considerably reducing barriers to entry and enabling interoperability.
 - Private sector competition and innovation: market mechanisms have by and large enabled the development of the Internet, supported by liberalizing markets.
 - The end-to-end principle: the neutrality of the Internet, chiefly concerned with the effective transportation of packets, enables its intelligence to reside largely at the networks’ ends through applications in computers, servers, mobile and other devices. This has enabled the development of a wide range of new ICT activities, industries and services ‘at the ends’ and turns the Internet into an important tool within the wider context of economic and societal development.

25. All these factors are important elements in any consideration of Internet governance arrangements. Any proposal for change would have to assess whether any of these elements, which are important for the functioning of the Internet, would be affected in one way or another.

II. Towards a working definition

26. The WGIG held an initial discussion of the definition at its first meeting in November 2004 and returned frequently to this question in both its physical meetings and extensive online deliberations.

A. The need for a shared understanding of Internet governance

27. Discussion and debate about Internet governance began in earnest about ten years ago, and has grown and intensified in step with the progressive transformation of the Internet from a research and academic facility into a general purpose communications medium widely available to the public and used for an expanding range of private and public purposes.

28. The founders of the Internet and many of those who participated in its early development did not think of the Internet as being governed, or even as requiring governance. Instead, they saw it as being coordinated in a bottom-up, collaborative, largely voluntary fashion as exemplified in the work of the Internet Engineering Task Force (IETF) and the Internet Assigned Numbers Authority (IANA). However, when the invention of the World Wide Web helped make the Internet accessible to a wide range of users from the mid-1990s on, the increasing commercial value of the Internet, its growing importance to business and government users in all countries, and the emergence of threats to the security of individual users and the Internet as a whole raised new issues and drew new actors into a growing international discussion about how the Internet should be governed.

29. In this new light, different views began to emerge about the appropriate scope and mechanisms of Internet governance. At one end of the spectrum, some actors took a relatively narrow view of these questions in which only the management of the Internet's core resources (e.g. IP addresses, domain names, the root zone) needed special governance arrangements, and in which contracts were the principal governance mechanism. At the other end of the spectrum, some other actors took a much broader view of the scope of Internet governance that included its social, economic, cultural and political impacts in addition to its technical and logical infrastructure, and envisaged the use of a correspondingly wider range of governance mechanisms, including treaty instruments. Many other actors had views on the appropriate scope and mechanisms of Internet governance that fell somewhere in between these two ends of the spectrum.

30. The differences of opinion about the appropriate scope and mechanisms of Internet governance that emerged in the negotiations preceding WSIS-I were accentuated by the absence of a common understanding about the meaning of the term 'governance' and its relationship to government. Although the two words have the same roots, they have very different meanings

31. Governance, in the sense we use it, influences political processes and public institutions by shaping the way people interact with government and how government interacts with them. However, governance also occurs in other areas of social life. In the private sector, it has long been recognized that there is an important dimension of 'corporate governance' underlying the management and operation of private companies, comprised of ongoing interactions between shareholders, directors and managers. In recent years, the increasingly visible role of civil society organizations in shaping the agendas and programmes of public and private organizations nationally and internationally has highlighted the fact that there is a governance dimension to every area of economic and social life. Seen in this light, governance is a part of many different processes related to the Internet, including the development of technical standards and the management of core resources, as well as regulation of the misuse and abuse of the Internet.

32. Even if it is not equated with government, there is sometimes a tendency to think of governance either as a top-down process modelled on government policy making and administration, or as a bottom-up process modelled on electoral mechanisms. As we see it, governance is primarily a horizontal process of interaction that influences the way in which hierarchical processes operate, both top-down and bottom-up. In this sense, governance is closely associated with the notion that all stakeholders should play a role in all Internet related decision making processes, but that the precise way in which they play these roles should vary according to the nature of the issue and the character of the process.

33. For WSIS participants, a lot is at stake in the way the Internet is governed in the future, since all recognize that the Internet is one of the key tools for achieving the development goals that are at the heart of the summit process. Given the relative novelty of the subject, the different points of view that exist, and the lack of previous opportunities to discuss Internet governance in international fora, it is perhaps not surprising that it was not possible to get complete agreement on Internet governance in the negotiations that preceded WSIS-I. In order to break the logjam in the months remaining before the second phase, it is essential for participants to develop a shared view and common understanding of Internet governance, beginning with its definition.

34. As the process evolved, it became clear that the discussion should follow two complementary approaches. First, the WGIG would proceed *deductively* – that is, by moving from general principles or premises to specific implications. In operational terms, this meant, *inter alia*, defining a core set of criteria that a definition would have to meet. It seemed particularly important that the definition should meet five criteria.

(a) *Adequacy*

35. The WGIG's mandate was to arrive at a "working definition". This implied that the definition would have to be 'good enough' to capture the main dimensions that everyone agreed are characteristic of Internet governance and could hence serve to facilitate continuing global dialogue. While a single, scientific, universally accepted, and uncontested definition would be ideal, it is probably impossible to arrive at such a formulation due to the fluid and complex nature of governance activities and larger differences of view in the global community. In this context, it should be recalled that the closely related and broader concept of 'global governance' is commonly employed in the analysis and practice of international cooperation, even though there is no single, universally accepted definition of that term, either. If rough consensus on the main characteristics of global governance has been sufficient to allow progress in the many international issue areas like peace and security, trade, and environmental policy in which the term is used, then the same should be possible with respect to Internet governance.

(b) *Generalizability*

36. The definition should be broadly enough framed to entail the major dimensions and examples of governance activities, both current and potential. Or conversely, it should not exclude such dimensions and activities by its very terms. Governance mechanisms vary widely in terms of institutional form, function, and participants, so it would not be empirically accurate to define the concept in a manner that conflates it with just one type of arrangement, such as either intergovernmental treaties or private contracts.

(c) *Descriptiveness*

37. To be accurate, the definition must capture what Internet governance is, rather than what we wish it to be. This is standard practice with respect to both social and physical

phenomena; one does not define ‘politics’ as the pursuit of truth and justice or ‘temperature’ as pleasant weather, if even both are desirable. Accordingly, while the WGIG gave significant attention to the WSIS Declaration of Principles’ overarching prescriptions⁹ – that Internet governance should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations, and should ensure an equitable distribution of resources, facilitate access for all and ensure a stable and secure functioning of the Internet, taking into account multilingualism – and used these to guide its evaluation of existing governance mechanisms¹⁰, it did not incorporate them into the definition itself.

(d) *Conciseness*

38. Texts produced by committee sometimes grow in length and complexity as the various parties involved each add language reflecting their particular concerns. Given the multi-stakeholder nature of the WSIS and WGIG processes and the wide range of issues and institutions involved in Internet governance, following this approach might result in a long and unwieldy definition that the global community found difficult to work with. For example, if a broad and generic term like ‘rules’ were to be used, it would not be necessary to list all the various institutional forms in which rules are used, e.g. treaties, contracts, recommendations, guidelines, declarations, standards, informal understandings, etc.

(e) *Process-orientation*

39. The core term, ‘governance’, is said to derive from the ancient Greek word *κυβερνάω* (*kybernao*) via the Latin verb *gubernare*, both of which mean “to steer”¹¹. It is commonly used in such disparate environments as business and non-profit sector management, public administration, and global cooperation. The definition should focus on this process and be neutral about who may be doing the steering in any given instance – in other words, emphasizing the act of governance, rather equating it with particular governors.

40. Second, and conversely, the WGIG also would proceed *inductively* – that is, by moving from particular instances to general principles or premises. In operational terms, this involved two steps. On the one hand, the group systematically analyzed a wide range of public sector, private sector, and multi-stakeholder governance mechanisms that currently exist with respect to different Internet issues and functions. The principal findings of this exercise are recounted in Section IV.D.

41. On the other hand, the group also assessed a number of alternative definitions proposed by various parties in the course of the WSIS process and related international discussions. As a starting point, at its inaugural meeting in November 2004, the WGIG considered an informal contribution by the ITU that compiled seven such proposals, including some from WGIG members. In addition, during the subsequent online discussions, several WGIG members suggested additional formulations for consideration. These proposals are replicated in Box 1.

⁹ WSIS Declaration of Principles, Paragraph 48, WSIS-03/GENEVA/DOC/0004

¹⁰ See Section IV.C.

¹¹ Source: Menge-Güthling and Merriam-Webster.

Box 1: Some proposed definitions of Internet governance

Note: Source for 1 to 7: ITU, *Compilation of Proposed Definitions*, informal input paper to the WGIG, November 2004. <http://www.wgig.org/docs/IG-definitions.doc>

1. The set of shared rules, procedures, and processes, including government involvement in the form of laws and regulations (for example for country code top-level domains, generic top-level domains, and security issues including combating SPAMs), that results in practices and operations that are consistent with the sovereign rights of states and the market interests of the operators and end users. Such governance shall be exercised primarily by States acting as national sovereigns. For issues requiring international collaboration and coordination, states should collaborate via intergovernmental organizations, assisted by the private sector, civil society and end users. (Source: Syria, input to ITU-T Q.3/2)
2. The collective rules, procedures, and related programmes intended to shape social actors' expectations, practices, and interactions concerning Internet infrastructure and transactions and content. (Source: William Drake, input to WGIG)
3. Collective action, by governments and/or the private sector operators on 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. (Source: Milton Muller, input to WGIG)
4. Governance is the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is the continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to or perceive to be their interest. (Source: Wolfgang Kleinwachter, input to WGIG)
5. All management/ regulatory/ legal/ treaty issues (national, regional, global) pertaining to any layer (Source: Siemens, input to WGIG)
6. A process through which related parties, including governments from each country, manage, regulate, and control their decisions and implement Internet policies with consistent authority and means (Source: Korea, White Paper Internet Korea 2004)
7. Governance consists of the collective rules, procedures, processes, and related programmes that shape social actors' shared expectations, practices, and interactions and result in practices and operations that are consistent with the sovereign rights of states and the social and market interests of end users and operators. It includes agreements about standards, policies, rules, and enforcement and dispute resolution procedures. (Source: Director of ITU TSB, input to ITU Council Working Group on WSIS)
8. Internet governance is the development of agreements about standards, policies, rules, and enforcement and dispute resolution procedures on issues related to the Internet, through a democratic, multilateral and transparent process with the full involvement of governments, the private sector, civil society and international organizations. (José Alexandre Bicalho, February 2005 WGIG e-mail.)

9. Internet governance is the process by which decisions related to principles, norms, rules, etc. needed to steer, coordinate, administrate and develop the Internet are made so as to ensure multilateralism, transparency, and multi-stakeholder participation. (Ayesha Hassan, February 2005 WGIG e-mail.)
10. Internet governance is the set of Internet coordination and managerial activities based on standards, rules, procedures, recommendations, and global agreements. (Carlos Afonso, April 2005 WGIG e-mail)
11. Within the WGIG terms of reference, Internet governance means:
 - The action that is required by governments to fully, transparently and democratically engage with the private sector and civil society from developed and developing countries, intergovernmental organizations, international organizations and other forums;
 - In the coordinated development and implementation of policies, rules, procedures and programmes that are designed to address international public policy issues arising from the deployment and operation of public networks and services that use the Internet Protocol to communicate among people and other information sources;
 - In such a way as to achieve an equitable distribution of resources, facilitate access for all and ensure a stable functioning of the Internet, with multilingualism; and
 - Support achievement of the general principles regarding ICTs and development that are set out in the WSIS Declaration of Principles.(Don MacLean, February 2005 WGIG e-mail)

42. There are at least five noteworthy commonalities among the formulations in Box 1 that merit consideration when developing a working definition. First, almost all of them position as the core components prescriptive and proscriptive injunctions that constrain and enable participants in the Internet environment. The most commonly used terms were rules and procedures, with related terms like principles, norms, standards, processes, programmes, policies, institutions, and dispute resolution mechanisms varyingly receiving mention. Second, many of the proposed definitions emphasize that the key feature of such injunctions is that they are shared or collectively recognized and applied. Third, many of the proposals state what these injunctions do or how they function in relation to social actors. That is, they shape social actors' expectations, practices, and interactions; steer, coordinate, and administrate; or accommodate conflicting or diverse interests. Fourth, several inclusively identify the parties that develop the injunctions, i.e. governments, the private sector and civil society. And fifth, all the definitions are implicitly or explicitly inclusive with respect to the scope of Internet governance, or the range of issues and functions it encompasses. Most notable in this regard, and in contrast to the common pre-WSIS practice mentioned above, none of the definitions restricts the definition to only the governance of logical infrastructure issues – that is, naming, numbering, and root server and the zone file.

43. Taking into account the criteria, analysis, and proposals mentioned above, as well as the larger debate among stakeholders involved in WSIS and WGIG, and those that are not, we suggest the following working definition:

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

B. Assessing the terms of the definition

44. The terms employed in this working definition merit some elaboration.

(a) *Development and application by governments, the private sector, and/or civil society*

45. This phrase establishes at the outset that governance is fundamentally a process that involves supplying and applying mechanisms that steer or give order to courses of action. It is neutral with respect to how and where these two functions are performed, as this varies widely across different issue areas and institutional contexts. From a logical standpoint, listing the stakeholders who engage in this process is not strictly necessary. But from a political standpoint, it seems useful to underscore that any of the three societal sectors may play a role, depending on the particular case at hand.

(b) *Shared*

46. A core feature of any governance mechanism is that the parties involved collectively recognize that it exists and applies to them. Internet governance being a highly distributed domain involving many different organizational models, the term is neutral with respect to the number of parties and modalities involved in the processes of creating and applying governance. One party, a few, or many, may supply or implement governance, and this can be done through a wide variety of techniques that vary along multiple dimensions, e.g. formal/informal, explicit/implicit, top-down/bottom-up, imposed/negotiated/spontaneously emergent, etc. As the definition is descriptive rather than normative, no judgment can be made within its terms as to whether one or the other approach is more appropriate than others. What matters here is simply that the stakeholders involved in a particular arena acknowledge and are guided by the same mechanisms as their counterparts.

(c) *Principles*

47. In the global policy environment, as elsewhere, this term is often used in two different ways. One is to refer to statements of fundamental facts or causation about the subject matter at hand. Examples in the Internet environment would include the principle of open, non-proprietary technical standardization, or the ‘end-to-end’ principle according to which the network simply provides data transport, with applications and processing left to the users at the ends. The other is to refer to the overarching objectives that define an activity, such as global governance. For example, the interconnection of networks is a guiding principle of the international telecommunications regime, most favoured nation treatment is a guiding principle of the international trade regime, and competition among registrars is a guiding principle of the international regime for Internet naming and numbering. Both of these uses, which can blend into one another at times, are entailed by the term’s inclusion in the definition. In short, principles define what a given governance mechanism is about and, at the highest level, is intended to promote.

Towards a working definition

(d) Norms

48. This term refers to broadly framed behavioural standards that the parties adopt in light of or to give effect to the relevant guiding principles. Norms set out obligations and rights, and are both proscriptive and prescriptive – i.e. they constrain actors from following some courses of action while empowering them to pursue others with community assent.

(e) Rules

49. This term is often used generically for all types of prescriptions and proscriptions of varying degrees of generality or specificity, as in the popular formulation, ‘the rules of the game’. Many of the proposed definitions cited above use the word in this inclusive manner, i.e. as a more economical way of saying ‘rule systems’ or ‘principles, norms, and rules’. However, in the course of the WGIG’s deliberations and consultations with external stakeholders, it has become clear that using the term as a catch-all for any sort of injunction may invite misunderstanding, in that ‘rules’ is sometimes interpreted to mean mandatory rules, or regulatory rules. Hence, it seems advisable to separately mention the terms principles and norms, which seem to be understood in a broader and more open ended manner, and to use rules to refer to more narrowly bounded injunctions to do this or that in a specific circumstance.

(f) Decision making procedures

50. Whereas principles, norms and rules refer to substantive injunctions, this term pertains to the operational processes followed in making decisions.

(g) Programmes

51. This term refers to collective, purposive activities that impact social actors’ expectations and practices but do not consist of developing and applying rules regulating their daily conduct in a given arena. For example, many intergovernmental and nongovernmental organizations develop and administer programmes concerned with producing and disseminating information, monitoring events, managing shared resources and facilities, providing technical and financial assistance to developing countries, and so on. When these activities are significant enough to impact stakeholders’ capabilities and practices and the technical operation of the Internet, they become an important element of Internet governance.

(h) Development and utilization of the Internet

52. Finally, and in keeping with the observations made in Section II.A, this phrase reflects the ‘broad understanding’ of Internet governance that has been collectively embraced in the course of the WSIS process. That is, the objects of governance are expectations and behaviour concerning all arenas in which shared principles, norms, rules, decision making procedures and programmes exist. That includes many (but by no means all) aspects of both the ‘supply side’, i.e. the design and provision of physical and logical infrastructures, services, and applications, and the ‘demand side’, i.e. use of the Internet to communicate, access information resources and processes, and engage in commercial or non-commercial transactions. As this report demonstrates in subsequent chapters, there is a highly distributed and heterogeneous array of governance mechanisms pertaining to different issues and functions, and this definition is intended to cover these and any additional mechanisms yet to be defined.

53. Our working definition seems to fit the five criteria outlined earlier. It is arguably adequate and clearly descriptive, concise, and process-oriented. It also appears to be fully generalizable, in that it applies equally to all extant governance mechanisms that have been

formally agreed by governments, the private sector, civil society, or multi-stakeholder partnerships; or that rest on informal social conventions, including those developed spontaneously, from the bottom up, through an evolutionary process of mutual adjustment among diverse participants. Further, it applies equally irrespective of a particular governance mechanism:

- Substantive focus and purpose (core resources and names and numbers, information or network security, technical standardization, intellectual property, trade and electronic commerce, privacy and consumer protection, communication and content, development, etc.);
- Functions (managing scarce resources, ensuring interconnection and interoperability, establishing terms and conditions for economic transactions and communications, reducing transaction and information costs, establishing liability rules, facilitating knowledge transfer and collective learning, and so on);
- Organizational context (whether negotiated under the aegis of formal organizations or free standing);
- Institutional form, e.g. intergovernmental (e.g. treaties, recommendations, guidelines, declarations, memorandums of understanding, custom) or private sector (contracts, memorandums of understanding, codes, custom) agreements;
- Strength (formal or informal, binding or voluntary of prescriptions and proscriptions);
- Decision making procedures (voting or consensus, dispute resolution and the like);
- Issues covered;
- Participants involved (public sector/private sector/civil society, or, in the case of governmental arrangements, unilateral, bilateral, plurilateral, regional, or multilateral);
- Compliance mechanisms (centralized or decentralized monitoring and enforcement systems, or the absence thereof);
- Distributional biases (equitable or inequitable allocations of rights, responsibilities, and benefits); and so on.

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

A. Issues relating to infrastructure and management of critical Internet resources

1. Introduction

54. Issues relating to infrastructure and the management of critical Internet resources are of direct relevance to Internet governance and fall within the ambit of existing organizations with responsibility for these matters. The issues divide fairly naturally into two subgroups:

- Issues relating to physical infrastructure including related technical standards, and telecommunications infrastructure including innovative and converged technologies; and
- Issues relating to the management of critical Internet resources, including administration of the domain name system and IP addresses, administration of the root server system, as well as multilingualization of the domain name system.

55. The Internet can be envisaged as a large number of interconnected networks that use a common set of protocols, especially the Internet Protocol (IP). The Internet and the applications layered over it are directly dependent on the underlying physical infrastructure being available, secure, well managed, of adequate capacity and service quality, and interconnected. At the same time, Internet protocols are being deployed as a key element in the core telecommunications networks and are the basis of moves towards the convergence of technologies, applications and services that arise from digitization and packetization of telecommunications communications.

2. Physical and secured infrastructure

56. This section summarizes issues relating to the management of the physical infrastructure, including:

- Telecommunications infrastructure, broadband access;
- Peering and interconnection;
- Radio spectrum policy;
- Technical standards.

(a) Governance mechanisms

57. Governance mechanisms operate at four levels: global, regional, national and local, and include intergovernmental agencies with private sector participation, as well as private sector and industrial organizations.

58. The primary regulatory functions, relating to investment and ownership, for the telecommunications networks are exercised through national regulatory bodies, mediated by international agreements through regional institutions and those of the European Union (EU) or treaty organizations such as the World Trade Organization (WTO). The ITU is responsible for the International Telecommunications Regulations (ITRs) which constitute an international treaty covering the provision and operation of international telecommunications services offered to the public and the underlying international telecommunications transport means used to provide such services. Responsibility for broadband access in the 'last mile' is a matter of national development and regulation, with some moderation through international investment and trade rules. In some jurisdictions there is heavy reliance on industry self-regulation and, internationally, a *de facto* form of governance is arising from arrangements being increasingly negotiated by the private telecommunications service providers who own the infrastructure.

59. Interconnection standards and agreements, including peering arrangements, are critical to the successful functioning of the Internet and for maintaining its end-to-end and cost effective availability, and reliability. The primary mechanism for interconnection and peering are private negotiated arrangements or contracts between the owners of the physical infrastructure and do not generally fall under the rubric of international governance mechanisms. International interconnection arrangements and costs have been a matter of study and debate, especially within the ITU, the Asia-Pacific Economic Co-operation Telecommunications and Information Working Group (APEC TEL) and the Organisation for Economic Co-operation and Development (OECD). The ITU Telecommunications Sector (ITU-T) has negotiated a set of principles for international Internet connection, published as Recommendation D.50, as amended. It is not clear to what extent this recommendation has had any effect on interconnection arrangements to date. It has been suggested that peering and the costs of interconnection should be considered in relation to market/trade issues or as a development issue and is, in any case, a highly complex matter of sufficient importance as to require a separate discussion¹².

Box 2: Governance issues related to international Internet connection costs

1. What is the issue?

Internet service providers based in countries remote from Internet backbones, particularly in the developing countries, must pay the full cost of the international circuits.

2. What are the implications for developing countries?

Traditionally, the settlement mechanisms that applied to international telephony have been a source of revenue for developing countries that has helped to subsidize universal service and/or to finance investment in telecommunications infrastructure. As more telecommunication traffic is shifting to the Internet, this revenue is disappearing. The high costs of connecting to the global Internet result in the diversion of many millions of dollars that could otherwise be used for network development. Moreover, dominant public operators typically pass these costs along to independent Internet service providers and customers, thereby helping to suppress the Internet's growth and utilization in government, business, and society within developing countries.

3. How much are we talking about?

The ITU estimates that, between 1993-98, net flows of telecommunications settlement payments from developed counties to developing ones amounted to some \$40 billion.

4. Could a solution be achieved through free markets and competition?

Some think that liberalization and privatization of developing countries' telecommunications industries will provide sufficient incentives for the deployment of backbones in the global South that would reduce the reliance on costly connections to the industrialized world. However, others believe that these measures alone have already proved insufficient to tackle the problem, *inter alia*, due to lack of incentives for the requisite backbone deployments.

5. Can this be compensated by the lower costs of the Internet based telecommunication services?

The costs of Internet based telecommunication services are indeed much lower where the infrastructure is already in place. This is not the case for developing countries, where in many cases new and lower cost technologies, like Voice over Internet Protocol (VoIP), are seen as

¹² See Section III.D.1(iii) and Box 2.

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threats because they deprive the country of revenue needed to modernize their infrastructure and to deploy widely new technologies such as Internet. This is regardless of whether the country has a liberalized competitive regime or the traditional monopoly regime. On the other hand, from the consumers' perspective, there is the advantage of reduced cost for services.

6. *So is this a 'Digital Divide' issue?*

Yes indeed, and it also cuts across other issues such as: 'equitable distribution of resources' and 'access for all'. It is also related to other political and developmental aspects, such as: 'investment and funds for development', 'international cooperation', etc. Finally this could become critical to a 'stable and secure functioning of the Internet'.

7. *Was this issue raised on the first phase of WSIS?*

This issue is directly mentioned in WSIS Plan of Action C2. 9. k): "Internet transit and interconnection costs should be oriented towards objective, transparent and non-discriminatory parameters, taking into account ongoing work on this subject." Also, a possible way to find a solution to this problem is mentioned in the Plan of Action C2. 9. j): "The creation and development of regional ICT backbones and Internet exchange points, to reduce interconnection costs and broaden network access."

8. *What is the ongoing work in this subject?*

ITU Study Group 3 started discussing the issue of international Internet connectivity in 1998. In October 2000, the ITU World Telecommunications Standards Assembly approved the ITU-T Recommendation D.50 regarding 'peering' or 'transit' arrangements between ISPs and Internet backbone providers. The Recommendation is voluntary and suggests that parties involved take into account the possible need for compensation for elements such as traffic flow, number of routes, geographical coverage and the cost of international transmission among others when negotiating commercial arrangements. The Recommendation was hotly contested and is not being implemented, most notably by key industrialized countries and elements of the global private sector. The issue has also been debated at length within APEC TEL and has been raised in the WTO.

Some countries have suggested that provisions from these Recommendations should be included in the International Telecommunication Regulations (ITRs) so as to give them binding force. They have also suggested that there should be a binding international dispute resolution mechanism (similar perhaps to that which exists in the WTO) in order to resolve disputes concerning these matters.

9. *What are the results so far?*

Study Group 3 agreed in June 2001 to pursue further studies on international Internet connectivity (IIC), and established two Rapporteur Groups, one for developing further guidelines to facilitate the implementation of Recommendation D.50, and the other for examining the possibility of using traffic flow as a main factor of negotiation for IIC. In June 2004, Study Group 3 adopted Amendment 1, on "General considerations for charging criteria and options for international Internet connectivity", which complements Recommendation D.50. However, the study on the traffic flow methodology was not concluded and work continues during a new study period 2005-2008. ITU's Council Working Group on ITRs is studying the matter and will report to the ITU Council in 2005.

60. The ITU is responsible for global organization of radio spectrum policies and agreements, with regional organizations in each region of ITU playing an important role. National governments are responsible for radio spectrum policies and management within their jurisdiction.

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61. Physical infrastructure standards are developed by a wide range of technical organizations. Each has its own method of determining the status of standards. Several examples include:

- National voting on recommendations: e.g., the International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), European Technical Standards Institute (ETSI);
- One company one vote (many industry fora);
- Full consensus of the membership (ITU);
- ‘Rough consensus and running code’: demonstration of interoperability and proof that things actually work, with review/approval by technical management which has been put in place by a nominating committee drawn from individual participants (IETF).

62. Generally, however, market forces are more dominant than governance mechanisms in determining if or when standards are adopted.

(b) *Coordination*

63. Coordination of activities relating to telecommunications infrastructure at the international level is through the various Sectors and Study Groups of the ITU on the one hand, and internationally negotiated private sector arrangements on the other, and generally functions well. International coordination of radio spectrum through the ITU Radio Sector (ITU-R) is generally said to be excellent.

64. Despite the multiplicity of organizations involved in developing standards, the limited and overlapping memberships of many of these mean that coordination is generally good. Nevertheless, problems may arise when technical bodies are not well informed of critical policy issues, and vice versa¹³.

(c) *Overall assessment*

65. International level governance of the telecommunications infrastructure is mainly under auspices of intergovernmental treaty organizations on the one hand and private sector owners of infrastructure on the other.

66. Concerns expressed, especially by developing countries, about international Internet charging arrangements have resulted in ongoing discussions in ITU Study Group 3 in relation to a mechanism for implementing ITU Recommendation D.50. However, some feel that it is not clear that any such mechanism would overcome the lack of transparency inherent with commercial arrangements between the contracting parties, nor increase opportunities for multi-stakeholder participation. On the other hand, recent OECD work indicates that a competitive transit market does exist. Some have suggested that, to the extent that WTO Member States include the Reference Paper as part of their specific commitments in telecommunications, the application of the regulatory principles contained in the Reference Paper to Tier One telecommunications services provided by operators in that Member State could be clarified, and that the WTO agenda for market liberalization and increased competition might well provide a different basis for dealing with the issue and, hence, approach to solutions. Others have suggested that this is primarily a development issue.

¹³ A recent example involved the DNSSEC standard where there was a potential clash between the technical standard and access to zone file information. In this case a near final draft standard for the secure distribution of zone files could have resulted in circumvention of policies held by some top-level domain (TLD) managers that limit or preclude general access to zone file information.

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67. Some believe that current mechanisms for allocating spectrum work well and are satisfactory including, for example, spectrum auctions, which are believed to be more transparent and efficient under specific conditions than beauty contests. Others are disturbed at what has happened in the past, including with domestic auctions of mobile telephony spectrum. In addition, some note the upcoming spectrum management and interconnection challenges that will be introduced by new technologies such as WiMax and similar technologies and note that careful regulation will be required so as to enable adoption and create the maximum benefits possible.

68. Some new technologies (both wireless and terrestrial), because they are inexpensive and effective, allow users to create and share their own community networks. However, existing operators, and some governments, are wary of such developments, fearing that they may upset existing business models, which might result in unfavorable impacts on universal access, competition, and/or research and development. Some perceive the actions or inactions of governments and operators as attempts to outlaw or reduce the phenomena of radical new developments, as they are afraid of the loss of control and revenues potentially associated with them. On the other hand, some stakeholders see such developments as being effective and innovative means of extending access to online networks and are encouraging these entrepreneurial activities.

69. The highly technical nature of standards development and promulgation means that many organizations and countries that might wish to have a voice, or to closely track and anticipate developments, lack the capacity to become involved in organizations engaged in standards development work.

70. Generally, direct participation by those parts of the private sector that have greatest interest in these issues is high, as sector members in the case of the ITU, or through membership of industry organizations such as the Institute for Electrical and Electronics Engineers (IEEE).

71. On the other hand, participation by civil society in governance mechanisms is low. Civil society organizations have said that they are not able, for financial reasons, or because they lack the resources or expertise, to become sector members of the ITU, or to join other organizations. It has been suggested that the ITU should extend its outreach activities to enable and encourage civil society organizations to engage with its work and that free access to ITU publications, which is presently available only to members, should be made more readily available.

72. There is broad agreement on the need to encourage, and provide opportunities for, full participation by actors from developing countries, including governments, the private sector and civil society organizations, in international fora such as ITU-T, and in industry forums such as IEEE and IETF where standards are agreed. Increasing participation from the developing world can be seen as a key development and capacity building need.

3. Critical Internet resources

73. This section summarizes issues relating to the management of critical Internet resources, including:

- Administration of the domain name system;
- Administration of IP addresses;
- Administration of the root zone file and root server system;
- Multilingualism of the domain name system;
- Voice over IP (VoIP).

(a) *Governance mechanisms*

74. The governance of critical resources has been motivated by a combination of bottom-up operational development, standards and process documents, and a variety of contracts and agreements that originated during the formative period of the Internet and that have evolved with the Internet. Consequently, a wide variety of governance mechanisms and actors have formed or adapted to address the many emerging Internet governance issues.

(i) *Domain name system (DNS) management*

75. In the management/governance of domain names, the main actors are ICANN and organizations under the ICANN umbrella: Governmental Advisory Committee (GAC), Generic Names Supporting Organization (GNSO) and the Country Code Names Supporting Organization (ccNSO), the IANA functions, and the related international and regional country code top-level domain (ccTLD) organizations, including the Council of European National Top-Level Domain Registries (CENTR), the Asia Pacific Top-Level Domain Association (APTLD), the Latin American and Caribbean Top-Level Domain Association (LACTLD), the North America Top-Level Domain Organization (NATLD) and the African Top-Level Domain Association (AFTLD). The participation of governments in ICANN decision making occurs through the GAC; that of civil society occurs through the Non-Commercial Users Constituency of the GNSO, in respect to generic domain name issues, and through the At-Large Advisory Committee (ALAC) for all issues within ICANN's mandate. While the policy functions in each of the top-level domain (TLD) types, country code (ccTLD), generic (gTLD) and sponsored (sTLD) differ, the operational aspects are similar. There are concerns over TLD policy management, some of which have figured prominently in the discussions of the Geneva WSIS meeting. The ITU has a mandate from Member States to work in this area¹⁴.

76. With the ccTLDs, issues include:

- Some have expressed concern that the formal arrangements¹⁵ provided in existing ICANN documentation requiring memoranda of understanding (MoUs) to be executed between ICANN/IANA and ccTLD registrars are inadequate. Others feel that generally arrangements between ICANN/IANA and ccTLDs have been stable and satisfactory;
- The application of national sovereignty decisions to ccTLD management is evolving and is considered by some to be problematic. The *GAC Principles and Guidelines for the Delegation and Administration of Country Code Top-Level Domains* (the GAC Principles) "strongly encourage" that "ccTLDs (be) administered in the public interest, within the framework of ... national public policy and relevant laws and regulations". The GAC Principles further specify that the ccTLD manager "has a duty to serve the local Internet community as well as the global Internet community". Some governments consider this to be an adequate and clear direction, while others believe that the directions are unclear and inadequate. However, the GAC has no decision making powers, and cannot determine policies. Despite recognition of regional registries (most recently in Africa), holding formal meetings around the world and attempts to introduce more diversity to its board membership, ICANN is

¹⁴ ITU Plenipotentiary Resolution 102 on *Management of Internet domain names and addresses* (adopted in 1998 and revised in 2002) and Resolution 133 on the *Role of administrations of Member States in the management of internationalised (multilingual) domain names*.

¹⁵ See, e.g., ICP-1: *Internet Domain Name System Structure and Delegation (ccTLD Administration and Delegation)*, ICANN, May 1999.

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still felt by some to have met with limited success in extending its outreach to all regions of the world;

- There is disagreement about whether there is clear direction regarding the limits of national sovereignty in relation to delegation and redelegation. Some are of the view that formal international arrangements for the delegation and redelegation of ccTLDs are needed, while others are of the opinion that workable guidelines are constituted by the GAC Principles and the Best Practice document of the ccTLD Community on delegation and redelegation. The GAC Principles specify that redelegations of ccTLD management should be resolved nationally and in accordance with national laws, taking into account the views of all local stakeholders and the rights of the existing ccTLD Registry. Such redelegations are performed as an IANA function and require confirmation of the agreement of all parties involved in a redelegation.

77. With the gTLDs, areas of concern include:

- The need for further development of policies for the management and further development of the domain name space which, due to the inherent complexity of the matter, impacts strongly on key issues such as the equitable distribution of resources, access for all, trademark maintenance costs, multilingualism, and others;
- Whether ICANN makes use of the best method for allocating or reallocating gTLDs;
- The level of competition in the domain name registry market which is still dominated by one big player, who controls more than 50% of the market, and whose players are still based in a few countries only;
- The lack of clarity about the status of the .int TLD, where the planned transfer from IANA to an organization under the authority of the UN has been delayed several times;
- The zone files of the three gTLDs (.gov, .mil and .edu), used predominately by US institutions, are linked to the authoritative root and part of the root zone file, but operate outside the ICANN system and do not currently have any contractual relationship with ICANN.

78. Some consider that the reason ICANN (or, more precisely, ICANN's Generic Names Supporting Organization (GNSO), which is the entity that deals with gTLD policy) has not addressed these concerns is that the decision making power in the GNSO is primarily in the hands of the private sector, with a tiny minority role for users and no direct role for governments. Moreover, many of the industry constituencies in the GNSO are dominated by a small number of representatives of big players from a few countries.

79. Some have expressed concern about the nature of the exclusive relationship between the US Government and ICANN, which is expressed through three agreements:

- The MoU between the US Department of Commerce (US DoC) and ICANN, which terminates at the end of September 2006, the terms of which require that ICANN take the necessary steps by that time to assure the US DoC and the Internet community that ICANN is able to effectively carry out its important core technical missions in a stable and sustainable manner into the future. However, it has been noted that this also provides an opportunity for constructive developments and underlines the importance of establishing, in a timely manner, the appropriate governance structure and mechanisms consistent with the WSIS principles, including those relating to the roles and responsibilities of all the stakeholders, to ensure stable and secure functioning of the Internet into the future;
- The contract between the US DoC and ICANN for performance of the IANA function, which regulates the special elements of the IANA service;
- The Cooperative Research and Development Agreement (CRADA) between the US DoC and ICANN, which regulates the special treatment of proprietary information, which has no fixed date for a termination and specifies that the US DoC has the right

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to terminate should control of ICANN be transferred to a foreign company or government.

80. Some are concerned about the nature of the contract between the US DoC and VeriSign Inc. relating to the operation and management of the root servers.

81. There are concerns about the absence of privacy protection with respect to access to information on the WHOIS database¹⁶. On one hand the registrars require accurate and detailed identifying information of applicants for operational purposes. On the other there is a need to protect the privacy of individuals and to prevent crimes such as identity theft.

82. The composition and mechanism for selection of ICANN Board members is of concern to some. Currently, the Board of ICANN includes six members selected by the industry through the Supporting Organizations, eight members selected by a Nominating Committee formed by ten voting members appointed by private sector constituencies, and seven voting members appointed by civil society constituencies. Given the nature of this type of process, where confidentiality and full consensus are required, there is no transparency to the public of the nominations considered and of the evaluations made.

83. While the general public interest and the consumers' side is intended to be represented through the eight Board members selected by the Nominating Committee, civil society groups think that this mechanism is not sufficiently effective to serve that purpose, and that the present structure of power is unduly imbalanced in favour of the private sector. According to these groups, the principles embodied in the original ICANN structure – half of the Board selected by industry and the other half selected by consumers through an open process involving a vote by the general public – should be used as a basis to adjust the current structure and to create a better balance between the representation of private sector interests and general public interest.

(ii) *IP address management*

84. The management/governance of IP addresses is primarily in the hands of not-for-profit private sector organizations, that is ICANN/IANA and the five regional Internet registries (RIRs). The ITU has a mandate from Member States to work in this area¹⁷. The RIRs have demonstrated their capability to fulfil their tasks and to make their contribution to the functioning of the Internet. They have been able to manage the transfer of functions from the American Registry for Internet Numbers (ARIN) to the Latin American and Caribbean Internet Addresses Registry (LACNIC) and from ARIN, the Réseaux IP Européens Network Coordination Centre (RIPE NCC) and the Asia Pacific Network Information Centre (APNIC) to the African Network Information Centre (AfrINIC) in a way which did not only not interrupt Internet services and connectivity for end users but also developed broader opportunities for the regional Internet community in regions served by the new RIRs. This demonstrates the ability for change and improvement in the Internet management structure without causing disruption to the functioning of Internet services. IP numbers are considered a valuable international resource to be shared by all users in all nations.

85. Concerns have been expressed in the following areas:

- Some have expressed the view that the current management system and distribution of responsibilities for number allocation has worked well, and that realistic projections of requirements indicate that there will not be any problems for the foreseeable future. Others have argued that, because of the rapid increase of demand

¹⁶ Cf. Glossary.

¹⁷ See Paragraph 75 and Footnote 12.

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and utilization of the Internet, a review of the current numbering management is required to ensure equitable distribution of resources and access for all into the future;

- There is currently limited involvement of either governments or civil society in the policy making or practical management of IP addresses, although generally RIRs encourage such groups to participate in RIR policy development. Some governments have the position that the allocation of IP numbers, or some subset of these numbers, should be under the sovereignty of national governments and should be managed via a national Internet registry (NIR). Note that in some regions there are already NIRs, which respond to regional needs; the allocation of IP addresses from RIRs to NIRs is made on the normal basis of documented need. Some other governments and stakeholders do not see the need for any change to the existing system. Some consider that making a change in the address allocation mechanisms would result in operational risks, for example, with routing aggregation.

(iii) Root server system management

86. The root zone file contains records for all TLDs and is managed by the distribution master root server.

87. There are many steps involved in the root server system: standard setting, initiation, selection, editing, and the IANA functions of allocation, authorization, publication and mirroring. Some of the activities are purely technical or operational while other activities include a public policy dimension. The system is managed on the basis of numerous bilateral and multilateral cooperative agreements, MoUs, sponsorship agreements, contracts, statements of work, and voluntary arrangements. The main actors in management/governance of the root zone file and root name servers are ICANN, the IANA functions, the US Department of Commerce (US DoC), VeriSign Inc. and the root server operators themselves.

88. The operators of root servers restrict themselves to operational matters and are not involved in policy making and data modifications. Some have expressed concerns about the current situation and consider that the following issues should be addressed:

- They have no clearly defined responsibilities and accountability, especially in relation to the stability and secure functioning of the Internet;
- The decision making procedure for the authorization of the publication of modifications, additions or deletions to the root zone file or associated information that constitute delegation or redelegation of top-level domains ('approval' of IANA function recommendations by the US DoC) is neither multilateral nor democratic and does not involve other governments, private sector, civil society or international organizations;
- The existing system is mainly based on trust, not on a treaty. The system reduces the governmental participation in the authorization of modifications, additions or deletions to one single government, which has no contractual relationship with other governments with regard to the execution of this function.

(iv) Multilingualism

89. Governance issues associated with multilingualism are closely linked with DNS governance issues. The IETF is responsible for technical standardization and maintains its role as a technical standard discussion forum, generator, and publisher. ICANN is responsible for policies including confirmation of language code tables, decision to support multilingual TLDs, registration policy for script variants, etc. Currently, countries in Asia and Africa (generally the actors are the national network information centres (NICs) under the support of the their governments) are actively participating in such activities. The ITU liaises and cooperates with relevant entities concerning internationalized domain names (IDNs), and provides information to its membership in order to promote effectively the role of Member

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States in the internationalization of domain names and addresses in their respective languages. Other actors involved in this issue include UNESCO, the Multilingual Internet Names Consortium (MINC), ISO, and national governments.

90. Concerns have been expressed that:
- Despite the efforts to date, insufficient progress has been made towards providing solutions to IDN issues. Unsolved issues include stable versions of alphabets for digitization, rendering of characters which include versions and variants of ‘.’, agreements on the use of alphabets and scripts that are shared by many countries, languages, and cultures, security matters such as homographic attacks, e-mail addresses, and keyword lookup;
 - For global deployment of IDNs, international coordination is key. The current mechanism of governance has an evident weak point in the capacity for international coordination, particularly among sovereign state governments and intergovernmental organizations, which must continue their efforts in an environment that is particularly sensitive to WSIS criteria;
 - An orderly and well-studied process of global deployment of IDN is necessary to prevent cybersquatting, phishing and user confusion¹⁸. For example, no clear attribution of responsibilities has been made in regards to the definition of variant tables and equivalences; no procedure has been considered to protect existing ‘romanized’ registrations. In the absence of clear rules, processes and responsibilities, the risk is that the adoption of IDN will be stopped (some browser makers have already disabled IDN from their products);
 - The current market led approach to IDN only tends to maximize the number of domain names that are sold. However, there might be cases in which global public service issues should be considered – for example, whether gTLDs should be required to support all scripts, including minority scripts that might not be commercially viable. Without these considerations, IDN might become available only for scripts used by big countries and communities, thus contributing to the loss of linguistic diversity.

(v) *Voice over IP (VoIP)*

91. Overall, for Voice over IP (VoIP), any applicable regulation is mostly dealt with at the national level. National regulators are dealing with the question of how, or indeed if, VoIP services are regulated alongside conventional telephony services. Of particular concern are universal service obligations, licensing, classification, numbering, emergency services, legal intercept and tariffing.

92. Standards work has been, and is, carried out by the IETF and the ITU. Various ITU study groups are exploring VoIP and its implications for their work.

(b) *Coordination*

93. Coordination between the DNS and the root server system, as well as within the different segments of the DNS, is mainly organized by ICANN, its supporting organizations and the relevant constituencies. The cross constituency coordination is mainly guaranteed via a system of liaisons in the relevant councils of the GNSO and the ccNSO. Conflicts, which arise from the registration of domain names, are either settled by national courts (in particular in the ccTLD name space) or by mechanisms such as mediation or alternative dispute resolution methods. In the case of the gTLDs and some ccTLDs the Uniform Domain Name

¹⁸ See Glossary for definitions of ‘cybersquatting’ and ‘phishing’.

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Dispute Resolution Policy (UDRP), which was adopted by ICANN on the basis of recommendations made by the World Intellectual Property Organization (WIPO), is used.

94. Coordination between the DNS, IP addresses and the root server system is also mainly organized via ICANN. Each of the Address Supporting Organization (ASO), gNSO and ccNSO elects two directors to the ICANN Board. The cross constituency coordination is guaranteed via a system of liaisons in the relevant councils of the ASO, gNSO and the ccNSO.

95. There is no direct coordination mechanism between the management of the root zone file and root name server and other issues related to the broader Internet governance agenda. Coordination is achieved via the ICANN Board of Directors, where the Root Server System Advisory Committee is represented by a liaison in the form of a non-voting Director. This liaison also guarantees the coordination with the governance mechanisms established for the management of domain names, IP addresses and Internet protocols.

96. There are few global mechanisms for specific coordination with governance mechanisms for Internet applications on higher levels such as e-commerce and e-government, although the OECD and APEC have been very active in these areas. The World Customs Organization has also been working to facilitate e-commerce. The key issue is to guarantee that these applications can function properly in a stable and secure environment.

97. On multilingualism of the domain name space (IDN), the IETF and ICANN are working with groups, including leading IDN implementing registries, establishing working models for IDN implementation and prototypes and pilots to demonstrate IDN functionality with relevant communities. UNESCO and MINC are working on wider aspects of multilingualism.

98. This is an area where policy and technical concerns interact strongly. There are few instances where the use of a language or an alphabet is coincident with the jurisdiction of a single national government. Even where a names registry that starts an IDN operation is a ccTLD, the reach of the DNS remains global, and an ill-advised operation will have global, not only national, impact. Approaches that depend on plug-ins, for example, may easily lead to a breakdown of the global interoperability of the Internet. Further, IDNs introduce some security and stability issues of their own, such as forms of homographic attacks, and problems related to confusion or collision of domain names and between domain names and other known names including trademarks. Technical standards like Unicode are important, but in some countries and languages what is missing is a more fundamental piece, the coding of the alphabet (Khmer is often quoted as an example in this context, as are some languages in Africa). This is also an important object for public policy attention.

99. With VoIP, some believe that the main concerns are with operational issues, in particular with end-to-end guarantees of service quality. In this context, they see a need, or an opportunity, for the provision of facilities for telecommunications service providers to conduct multiparty negotiations in order to ensure that service quality is maintained across the different networks traversed by VoIP services. Others raise the concern that the conduct of multiparty negotiations between telecommunications service providers could impede the free and open development of services on the Internet (the 'end-to-end' principle).

(c) *Overall assessment*

100. In general, the existing system has functioned well for more than two decades. Adjustments, where needed, both for technical/operational and for political reasons, must be done so as not to interfere or disrupt the operational qualities of the system in terms of

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stability and security, and must be done in a way that assists, and does not hinder, further development of the Internet.

101. There are differing views as to whether the assignment of domain names is being done in a manner consistent with the WSIS principles. One view is that governments have no formal authority in the decision making of ICANN, therefore the process cannot be viewed as being fully democratic and, it is argued, the only way for the process to be fully democratic would be to place it under a fully global international authority such as the UN. More specifically, the IANA functions, being under the authority of the US DoC, cannot be seen as multilateral or democratic since they do not involve other governments, the private sector, civil society or international organizations. Others believe that the multi-stakeholder approach taken by ICANN, though considered by some to be incomplete and imperfect, offers the right approach for the Internet today and into the future. They have pointed out that ICANN does provide all stakeholders with the ability to contribute to all other steps of redelegations and that the GAC provides a direct input by governments to ICANN's decision making processes¹⁹. ICANN is required under the terms of the MoU with the US DoC to take necessary steps by the end of September 2006 to assure the US DoC and the Internet community that it is able to effectively carry out its important core technical missions in a stable and sustainable manner into the future. However, it has been noted that this also provides an opportunity for constructive developments and underlines the importance of establishing, in a timely manner, the appropriate governance structure and mechanisms consistent with the WSIS principles, including those relating to the roles and responsibilities of all the stakeholders, to ensure stable and secure functioning of the Internet into the future.

102. In terms of IP address allocation, some express concern with the means for assuring the equitable distribution of addresses. This requires the full use of the IPv4 address space and development of a methodology for the assignment of IPv6 addresses. There is interest among some governments in developing and clarifying a role for international organizations and national governments in the policies for the allocation of IP addresses. There is also an operational requirement that the addresses allocated by the RIRs remain aggregated in a way that allows for the routing that interconnects the networks of the Internet. The solution of this issue will require creativity.

103. The root server system (DNS protocol and root zone file) is a critical operational aspect of the Internet network, which is stable and reliable. Governance of the root server system needs to be addressed in a way that attempts to improve the current situation without doing harm to the functioning of the DNS system or its operation. Some feel that standards development organizations should also consider re-engineering the concept, creating new procedures if necessary, and re-organizing its technical architecture and management in a way that is responsive to the requirements of all users, including countries, the private sector and civil society.

104. Internet users who use languages with scripts, which do not use the ASCII character set, both existing and potential, have an urgent need for implementing multilingual domain naming systems globally. ICANN, and organizations that coordinate through ICANN, have made important progress with IDNs. The most pressing areas where progress is needed is the identification of stable character sets, developing rules on how to construct IDNs for specific languages/alphabets, developing a clear strategy to address consumer protection and to ensure that all languages are supported, and the construction and operation of test beds with systems that are actually operational. Some policy issues that emerge are the extensions of naming collisions, not only with trademarks but also with culturally significant names.

¹⁹ See fuller discussion in Section IV.D(c).

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105. Based on this general evaluation, studies on possible improvements have been suggested by different members of the WGIG in the following directions:

- Revising the balance and roles of the three stakeholder groups (governments, private sector and civil society) in the Internet governance structure and policy making. This includes the governance structure of ICANN and of the other organizations that may be involved in critical resource management. An appropriate balance would recognize the permanent and valuable contribution of the academic and technical communities to the stability, security, functioning and evolution of the Internet through their extensive interaction with and within all stakeholder groups;
- Revising the roles within ICANN of GAC and other stakeholders with regard to decision making in, and a transparent and inclusive policy for, the process of introduction of new gTLDs and delegation and redelegation of ccTLDs;
- Clarifying the status of the .int TLD and the relationship between ICANN and the gTLD registries for .edu, .gov and .mil;
- Ensuring more balanced use of the IPv4 space, correcting the unbalanced distribution of IP numbers and sustainable transformation of the IP addressing system to IPv6;
- Involving governments and civil society in the policy making for, or practical management of, IP addresses;
- Defining the institutional arrangements, and the responsibilities and relationships between the institutions, required to guarantee continuity of a stable and secure functioning of the root system;
- Involving governments in the public policy aspects of modifications, additions or deletions to the root zone file and clearly defining the role of interested parties in authorizing such changes to the root zone file;
- Defining requirements for intergovernmental involvement in the future development and management of root server architecture;
- Noting that the number of root servers cannot be increased to more than thirteen due to protocol limitations, carrying out a requirements analysis to determine the appropriate evolution, including possible restructuring, of the architecture to meet end user requirements;
- Reviewing responsibility for the content of the root zone file in view of WSIS governance criteria;
- Clarifying the institutional arrangements needed to guarantee continuity of a stable and secure functioning of the root system during and after a possible period of governance reform;
- Reassessing concerns over operational requirements and the role of privacy and data protection within the WHOIS database;
- Assessing the effectiveness of the UDRP in areas such as the protection of the interests of non-commercial users and the protection of country names;
- Extending and increasing the involvement of all stakeholder groups in Internet governance processes, especially from the developing countries;
- Ensuring bottom-up and inclusive development of a transparent policy for the introduction of multilingual domain names;
- Strengthening participation and coordination of all governments at an appropriate level in the governance process to push forward the development and implementation of IDN solutions including multilingual e-mail addresses and key word lookup;
- Strengthening cooperation between IETF and IDN registries, thus creating a sound international environment for the further development of technical standards and action plan for global deployment;
- Strengthening inter-organizational coordination and maintenance of VoIP service quality.

B. Issues relating to the use of the Internet, including spam, network security, and cybercrime

1. Introduction

106. This group of policy issues is derived from growing use and the global role of the Internet. Each of these issues is directly related to Internet governance, however the nature of global cooperation required is currently not well defined. The global nature of the Internet may require international legal frameworks, coordination mechanisms or cooperation structures to promote effective and consistent handling of these issues. The lack of an international legal framework or coordination mechanism regarding misconduct in relation to use of the Internet is considered by some to pose a risk to the stability of the Internet.

107. The WGIG recognized that questions over freedom of expression within the Internet are significant cross cutting issues that impact all areas of public policy as well as many operational activities²⁰.

2. Governance mechanisms

108. The issues fall into three broad categories:

- (i) Issues with technological aspects that, therefore, overlap to some extent with certain infrastructure issues. Standardization of software or procedures is a key element in dealing with them:
 - Spam;
 - Cybersecurity, cybercrime;
 - Security of network and information systems;
 - Critical infrastructure protection.
- (ii) Issues where legal concerns or global regulatory harmonization are the key concerns:
 - Applicable jurisdiction, cross border coordination;
 - Consumer rights;
 - Data protection and privacy rights;
 - Freedom of expression;
 - Internet service providers (ISPs) and third party liabilities.
- (iii) National policies and regulations.

109. While there is considerable international activity on many of these issues, regional or special interest groups carry out most of the work that is done at the international level. Nevertheless, this group of issues is characterized by the fact that there are no international or intergovernmental organizations that have specific responsibility for coordinating global governance activities.

(a) Informal arrangements

110. In terms of information and network security, the first line of defence in many countries is the computer emergency response team (CERT) when there is a breach, potential or otherwise, in information and network security. CERTs are typically made up of technical experts who are in communication with other CERTs to share knowledge and best practices and to warn of impending attacks. In some countries CERTs are part of a government

²⁰ See also Chapter I, Paragraph 13.

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department; in other countries they may be in private sector organizations such as companies, or universities. Many CERTs belong to the Forum of Incident Response and Security Teams (FIRST) as membership enables a more effective response.

(b) *IETF and related organizations*

111. The IETF has done, and continues with, a significant amount of work on developing security protocols, as well as in related areas such as public key infrastructures (PKI). It requires that all protocols it approves for standardization be securable, i.e. protocols must undergo a security evaluation before being brought out. However, vendors often do not implement the security mechanisms, or users ignore the tools available. Use of the security mechanisms is always optional.

112. Various Internet specific entities have been established with the primary goal of ensuring the stability and security of critical infrastructure. Among these are the IETF and operators' groups such as the North American Network Operators' Group (NANOG), the Asia Pacific Network Information Centre (APNIC) and RIPE. In these groups, threats to stability and security are considered and resolutions, both in terms of protocols and operational methods, are proposed and deployed.

(c) *APEC*

113. APEC TEL has work programmes dealing with spam issues, as well as security and cybercrime. The TEL has established an e-Security Task Group, which works on coordinating regional activities on a wide range of security and related issues. Current activities include investigation of possible action on spyware, security of wireless networks, PKI interoperability, cybercrime legislation and a programme for capacity building of enforcement measures in developing economies. The TEL is also investigating measures to improve cooperation and coordination of activities between CERTs in the region.

114. The APEC Electronic Commerce Steering Group (ECSG) has ongoing work in the areas of consumer protection and privacy and has developed the APEC voluntary online consumer protection guidelines and developed a set of draft APEC Privacy Principles.

(d) *OECD and related organizations*

115. The OECD has organized a number of workshops on spam to further understanding by its member countries, which has formed the basis for developing an OECD work programme on spam. An *ad hoc* experts group has been formed to develop and implement an OECD Spam Toolkit comprised of legislative, technological and self-regulatory components.

116. The OECD in 1980 published a *Recommendation of the Council Concerning Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data* and has continued to provide international leadership in the area of privacy protection and information security.

117. In the area of online consumer protection, the International Consumer Protection and Enforcement Network (ICPEN) has conducted annual sweeps for consumer fraud. ICPEN is a membership organization consisting of the trade practices law enforcement authorities of 29 countries, most of which are members of the OECD. The mandate of ICPEN is to share information about cross border commercial activities that may affect consumer interests, and to encourage international cooperation among law enforcement agencies.

(e) *Council of Europe*

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118. The Council of Europe's cybercrime convention creates a common approach to criminal policy aimed at the protection of society against cybercrime, *inter alia*, by requiring the adoption of appropriate legislation and fostering international co-operation. It recognizes the need for cooperation between States and private industry in combating cybercrime and the need to protect legitimate interests in the use and development of information technologies. It is a multilateral convention that requires signatory states to comply with and commit to its provisions and implement national legislation that is consistent with the convention. Any country can join the convention if particular criteria are met. The involvement of private industry is acknowledged in the convention, however other stakeholders may not be able to participate.

(f) *European Union*

119. The European Commission has identified and endorsed a multi-faceted and comprehensive plan that includes the related security issues that are increasingly associated with spam such as attacks on computers and networks, virus propagation, phishing and others. The EU banned spam in the e-Privacy Directive (2002/58/EC). To ensure the effectiveness of the rules and to share experiences with enforcement, the Commission has established a Contact Network of Anti-Spam Enforcement Authorities (CNSA). CNSA meets regularly to cooperate on anti-spam enforcement and has recently agreed to procedures for cross border complaints. Other Commission initiatives, such as the Safer Internet Plus programme, complement the enforcement activities to empower parents and teachers with Internet safety tools to combat illegal and harmful content as well as spam. The Commission also participates in the London Action Plan (LAP).

120. In addition to existing EU legislation on security, the European Network and Information Security Agency (ENISA) has been established to ensure network and information security within the European Community. The Agency aims to contribute to the development of a culture of network and information security for the benefit of the citizens, consumers, enterprises and public sector organizations of the European Union.

(g) *ITU*

121. The ITU conducts workshops on spam and surveyed existing work on this issue. ITU has also called on its technical standardization committees to address the issue in cooperation with other bodies such as the IETF. Further, ITU is implementing a series of cooperative activities on countering spam, to foster international cooperation, to create harmonized policy frameworks to promote the exchange of information and best practices, and to provide support to developing countries.

122. Some ITU work has laid the basis for current work on cybersecurity and current security measures such as public key infrastructure (PKI). In addition to technical work in its standardization groups, and educational work in its development sector, ITU is working to build confidence and security in the use of ICTs and the promotion of a global culture of cybersecurity as called for in the WSIS Declaration of Principles and Plan of Action. Work, in conjunction with operators and manufacturers in cooperation with concerned government agencies, is proceeding within ITU-T Study Group 6.

123. The ITU Development Sector (ITU-D) publishes extensive information regarding national policies and regulations. Topics cover the full range of national regulatory activities, including: spectrum management, numbering issues, pricing and costs, universal service, unbundling, licensing, interconnection, quality of service, consumer issues, dispute resolution, etc.

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(h) *Hague Conference Private International Law*

124. The Hague Conference is drafting a Convention on Exclusive Choice of Court Agreements that will focus on choice of court provisions between businesses (B2B). This convention has the potential to achieve more predictability and certainty in international contracts within a reasonable time frame and to become valuable for companies engaged in cross-border transactions.

(i) *Other groups*

125. *Interpol* has a number of regionally based working parties which bring together expertise and experience in the field of information technology crime.

126. The *London Action Plan (LAP)* to combat spam, currently consists of 26 agencies from 19 countries, plus 11 private sector representatives. The LAP was formed in 2004 as an informal international network for spam enforcers and industry representatives. LAP builds relationships between these entities based on a short document that sets forth a basic work plan for improving international enforcement and education cooperation against illegal spam. Membership is open to any spam enforcement agency and relevant private sector representatives from around the world and is growing. LAP calls on members to encourage and support the involvement of less developed countries in spam enforcement cooperation.

127. The *International Working Group on Data Protection in Telecommunications (IWGDPT)* and the International Conference of Data Protection and Privacy Commissioners are two of a number of international initiatives on the privacy area. The IWGDPT adopted its *Ten Commandments to Protect Privacy in the Internet World* in 2000.

3. Coordination

128. It is widely acknowledged that international cooperation is essential to deal with spam in terms of both technical and regulatory/legislative matters and cooperation and coordination with industry groups such as ISPs, mobile carriers and direct marketing associations is necessary.

129. There is a degree of coordination between international groups especially where there are overlapping memberships. Examples are between the European Commission, the OECD and the ITU on anti-spam policies and enforcement activities, and between APEC TEL and the OECD over anti-spam and security issues. These issues also are increasingly featuring in bilateral and multilateral trade agreements.

130. There is a reasonably effective, albeit relatively informal, level of coordination between those responsible for rapid response to security threats such as viruses, worms and direct attacks on infrastructure, through e.g. denial of service attacks, through the Forum of Incident Response and Security Teams (FIRST)²¹.

4. Overall assessment

(a) *General*

131. In assessing existing mechanisms against the WSIS criteria, it is important to bear in mind that some of the institutions responsible for addressing, handling or governing the issues

²¹ See Paragraph 110.

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included in this cluster are intergovernmental organizations and therefore meet the process criteria of being multilateral, transparent and democratic in the traditional intergovernmental organizational (IGO) sense explained in Section IV.D. The scope for full participation by different stakeholder groups in the decision making processes of intergovernmental organizations generally varies according to the nature of the governance mechanism and the organizations' structure.

132. Some hold the view that these issues would be better handled with more coordination, sharing of information and involvement of all stakeholders in the processes that are handling them. A global governance mechanism is viewed by some as not being the appropriate solution to handling some of these issues though they may support information exchange and coordination in some cases.

133. Others are of the opinion that one option is to initiate a process to negotiate a treaty with the full participation of all stakeholders. The treaty is envisioned to be a binding treaty, but if there is no consensus for having a binding treaty, a 'soft-law' approach could be used. It was suggested by some that negotiations could be conducted under the auspices of the UN. UN Member States would have to negotiate the ways in which the other stakeholders could participate in the negotiation of any such treaty. While some suggest that states around the world should consider becoming parties to the Council of Europe's Convention on Cybercrime, others see the Convention as a possible starting point for negotiations.

134. It is apparent that a range of possible approaches exists, ranging from action taken by national governments in consultation with all local stakeholders, through bilateral and plurilateral agreements, and communication and coordination between organizations such as the OECD, ITU and APEC as well as business and civil society organizations. Cooperative work could include the development of toolkits for dealing with issues such as spam, development of 'best practice' guidelines or drafting model laws. All or some of these could be combined depending on the circumstances.

135. Some approaches or possible solutions are suggested below.

(i) *Spam*

136.

- Recognizing that a consensus global definition of 'spam' may be difficult, many agencies are focusing on cooperation and enforcement mechanisms to stop harmful and fraudulent e-mail;
- There are a growing number of bilateral and plurilateral agreements between countries to enforce national anti-spam laws and provisions across borders; coordinated efforts at such levels may be very effective and, if so, should be evaluated with a view to wider application;
- Legal, policy and regulatory frameworks at the national level are complementary with the development and implementation of technological solutions to spam;
- Technical work can affect the context for policy decisions;
- Protecting legitimate use of e-mail can conflict with anti-spam requirements;
- It is not necessary to recreate the international cooperative work that is already underway, for example at the OECD or LAP;
- Communication and coordination between OECD, ITU, APEC as well as between non-governmental organizations has begun, but is in its nascent stages;
- Spam has a unique impact on infrastructure in developing countries.

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(ii) *Cybersecurity, cybercrime*

137.

- To avoid the creation of ‘cybercrime havens’, it will be necessary to ensure that criminalization of specific conduct committed in cyberspace, should be put in place on a global level, respecting the diversity of cultures and legal systems;
- Different nationalities and different legal systems and criminal laws pose challenges to arrangements and cooperation mechanisms between enforcement agencies in dealing with cybercrime that crosses borders;
- Effective criminal investigation and prosecution of cybercrimes need to be accommodated with appropriate protection of privacy;
- Procedural safeguards for the interception, preservation, production and seizure of data can conflict with appropriate data privacy protection thus affecting the efficiency and efficacy of the response to law enforcement requests, including a safe harbour for cooperation with law enforcement;
- There may be difficulties in reconciling the protections granted in Human Rights conventions and treaties with actions taken to combat criminalized behaviour;
- The provisions of Council of Europe Convention on Cybercrime identify issues that provide a useful basis for strengthening national legal frameworks dealing with the cybercrimes. Countries could be encouraged to become parties to the Council of Europe Convention on Cybercrime. Countries that are not prepared to sign and ratify the Convention may nevertheless consider using it as a basis for strengthening their legal framework for dealing with the cybercrimes addressed by the Convention.

(iii) *Security of network and information systems*

138.

- Because a standardized approach to information security may undermine the level of network security, security requires a holistic approach, with each participant undertaking measures appropriate to their role, understanding that there may be principal spheres of influence, and that collaboration on many levels will be required;
- All stakeholders need to be able to implement an approach appropriate for their needs and risks;
- It is possible that standardized approaches may have negative consequences, such as:
 - Stifling innovative activity;
 - Increasing vulnerabilities by necessarily sharing and disclosing security sensitivity information;
- A well recognized guiding principle is that information system security needs to be proportional – inherent in the concept of proportionality is the need to assure that the administrative burdens of record keeping and compliance do not result in unintended consequences that impede the use or deployment of security technology;
- Security involves regular exchanges between governments and other stakeholders as well as the sharing of information about the configuration of systems and availability of network protection tools;
- Governments need to have a strong role in raising awareness and education of all stakeholders;
- Certain ITU-T Recommendations and OECD guidelines provide a basis for coordination of efforts at the national, regional and international levels.

(iv) *Applicable jurisdiction, cross border coordination*

139.

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- Unpredictable grounds for asserting jurisdiction over e-commerce activities, when not previously agreed between contracting parties, are harmful to the information society with the result that:
 - many goods and services are offered only in a limited number of jurisdictions, or not offered at all in the global electronic marketplace, due to uncertainty over the applicable jurisdiction;
 - the costs and complexities of resolving disputes over applicable jurisdiction could preclude participation by small and medium enterprises (SMEs) in an information society, particularly emerging entrepreneurial ventures in developing economies;
- Business-to-business (B2B) and business-to-consumer (B2C) transactions present different issues and concerns, therefore the appropriate fora and legal approach to handle these issues also differ;
- In the case of B2B transactions across borders, there exist established conventions and best practice models, which help guide such transactions:
 - contracting parties may chose to incorporate choice of law and choice of forum clauses in their agreements;
 - contracting parties may identify the option to use alternative dispute resolution mechanisms to avoid litigation in the courts of one contracting party's country;
 - freedom of contract should be respected in such transactions;
- Creating certainty in this area requires, as a first step, the necessary legal, policy and regulatory frameworks at a national level;
- The work of the Hague Conference, which is drafting a Convention in this area²² as well as UNCITRAL's effort on electronic contracting, may assist this process.

(v) *Consumer rights*

140.

- Consumer rights are usually defined and regulated by national legislation. There currently is no international mechanism for the protection of consumer rights other than ICPEN initiatives;
- Even when statutory rights exist, consumers have difficulty in enforcing them across borders. In the Internet context most consumers are likely not to be aware of the country or jurisdiction regulating their transactions. In addition, there are linguistic and cultural barriers to effective international protection of consumer rights;
- The rights and duties of the users of digital content also may be defined not by consumer protection legislation but rather by mechanisms found in intellectual property law, such as software licenses and other end user license agreements (EULAs). Under these arrangements, it is argued, rights holders determine rights granted to consumers. In this context, traditional rules applicable to protection of consumers in the physical world often do not apply to transactions involving software and digital content;
- Technologies such as 'trusted computing', usually developed and self-regulated through industry consortia, might pose significant threats to the privacy and the rights of consumers. There is currently no established mechanism to evaluate and address potential risks to personal rights that might arise from the development and deployment of new technologies;
- In other contexts, use of competition law and policy has been used to address problems arising from vendors in a dominant position;
- Efforts need to be made to define standard consumer rights and duties for the fruition of online digital goods, reconciling regulations on consumer protection, IPR, competition law and on other related issues (for example, freedom of expression or media regulation for websites).

²² See Paragraph 124.

(vi) *Data protection and privacy rights*

141.

- Privacy, a fundamental human right according to Article 12 of the Universal Declaration of Human Rights, becomes even more important over the Internet, where the intrinsic nature of the Internet makes it possible to effectively track an individual in cyberspace and use information about him/her illegally or without authorization. Threats to personal privacy increase the mistrust towards the Internet.
- Privacy protection is regulated through national laws. There are two basic approaches to protecting privacy, with significant differences. In general terms, one approach presumes that personal data are not private unless the data object explicitly declares it so. Another approach presumes that personal data are private and not to be disclosed unless there is an explicit consent authorizing disclosure and use.
- Expectations and rights of privacy protection are often subject to exceptions for public policy, national security, political or law enforcement reasons.
- Third parties may attempt to identify and track users of the Internet for a variety of reasons. On one end of the scale there are marketing and commercial interests. Data are also used for unsolicited commercial e-mail (spam). Personal data are also used for so-called identity theft, in which one individual supplies other people's data when accessing online services that require identification, then commits crimes through these services and disappears, leaving to the defrauded individuals the hard task of proving that it was someone else who misused their identity. Individuals may also be exposed to harassment, discrimination, or to direct legal pressures.
- There are a host of specific issues that have often been regulated nationally but that lack global coordination. Among these are:
 - whether individuals should be required to identify themselves when using the Internet, or whether the information necessary to track them *ex post* should be mandatorily recorded and kept by ISPs and service operators, and to what extent;
 - whether services that increase the degree of privacy or fully anonymize the usage of the Internet should be allowed, encouraged, or forbidden;
 - whether individuals should be required to identify themselves or to register their websites, especially when posting news or political material;
 - to which extent applications installed on a personal computer (including so-called spyware) should be allowed to monitor its usage, report information back to the software supplier or vendor, or take control of the content and capabilities of the personal computer;
 - whether users should have the right to prevent archival of publicly posted information that they want to remove from the Internet (old website content, newsgroup messages, e-mail etc.), and how this can be accomplished.

(vii) *Freedom of expression*

142.

- Vigilance is required to ensure that public policy initiatives and technical solutions introduced to ensure a safe and stable Internet are balanced with the need to protect freedom of expression, and are not implemented as proxy measures for new and increased forms of censorship.

(viii) *Internet service providers (ISPs) and third party liabilities*

143.

- There are no groups currently working on harmonization of approaches to ISP liabilities, but the World Intellectual Property Organization (WIPO), aware of the impact of the issue on its members, has begun to hold seminars on the issue.

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Discussions regarding these issues need to include all stakeholders at the national, regional and international levels;

- Best practice continues to evolve and countries can learn from each other;

(ix) *National policies and regulations*

144.

- National policies and regulations are the realm of national governments in consultation with other stakeholders, however, there may be a need for some harmonization and possibly a forum for discussion and exchange of information and experiences to guide national policy and regulatory decision making to maximize a country's ability to interact using ICTs and the Internet across borders.

C. Issues which are relevant to the Internet, but with impact much wider than the Internet

1. Introduction

145. This Section identifies and assesses three groupings of public policy issues that are relevant to Internet governance but that have an impact much wider than the Internet:

- (i) Competition policy, liberalization, privatization and regulations;
- (ii) E-Commerce and trade; and
- (iii) Intellectual property rights (IPRs).

2. Relationship to Internet governance

(a) *Competition policy, liberalization, privatization and regulations*

146. The Internet and its applications run primarily over telecommunications networks. The Internet as we know it today is a result in large part of pro-competition and pro-private sector policies in the telecommunications sector. Ten years ago, the transformation of telecommunications was a necessary precondition for the transformation of the Internet.

147. During this period, state owned operators were privatized, markets were liberalized, and new, independent regulatory authorities established. Later on, regulation shifted from technology oriented and sector specific regulation toward more competition oriented regulatory frameworks. In the last ten years, the transformation of the telecommunications sector coincided with the transformation of the Internet (thanks to the World Wide Web) from a medium primarily used by the research and academic communities into what the WSIS Declaration of Principles²³ calls "a global facility available to the public". These transformations were mutually dependent and resulted from shifts in policies affecting the enabling environment. For users, these policies enabled greater access to higher quality services and greater affordability, and lower barriers to entry for network operators and service providers, first in the developed world, then increasingly in developing countries.

148. The next stage in the transformation of telecommunications and the Internet will see the extension of IP based technologies and services to networks previously served only by traditional (analog or digital but non-IP) telephony, and to those characteristic of radio and television broadcasting. The convergence on IP platforms, also referred to as 'next generation networks' (NGNs) is already raising new challenges to competition policy and regulation,

²³ WSIS Declaration of Principles, Paragraph 49, WSIS-03/GENEVA/DOC/0004.

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especially *vis-à-vis* traditional technical regulation and will affect a new array of consumers and mostly private sector operators and service providers and suppliers.

(b) *Intellectual property rights (IPRs)*

149. The Internet allows the relatively low cost duplication and easier worldwide distribution of works of intellectual property in digital form. The ease of duplication and distribution also makes such works in the digital world highly vulnerable to unauthorized copying and modification. Thus the Internet raises fundamental questions about IPRs²⁴ including:

- Are IPR issues changed in form and substance as a consequence of the Internet, and how can intellectual property laws appropriately be adapted to this new technological and policy environment?
- If so, is management of IPRs in the digital world achieved simply by extending the IPR rules developed for the physical, material world into the, digital ‘space’ of the Internet? What adaptations are necessary?

150. Each of the three forms of IPR (that is, copyright, patents and trademarks) is qualitatively different and therefore raises different IPR management issues. Copyright, in particular, raises profound questions about how to achieve the greatest overall economic and social benefit by striking the right balance between the respective rights of intellectual property creators (‘author’s rights’) and legitimate needs, expectations and interests of users as expressed in national laws (e.g., educational and research uses, use by people with disabilities, ‘fair use’ or ‘fair dealing’). Achieving this balance will depend on providing incentives to innovate and create while not unduly restricting the use and dissemination of information across the Internet and the creation of ‘secondary’ forms of content based on the ‘primary’ or original form.

151. Two distinct approaches to IPR management and the Internet are emerging. For some (who are critical of the intellectual property system), the current international framework for IPR management is targeted towards an extensive and ongoing protection of monopoly rights granted to producers, and stricter pressure and enforcement on non-complying parties. With respect to copyright issues, for example, it is argued that there is an imbalance in the regime and there is a need to make access to knowledge and culture easier, especially for developing countries, individual citizens, and non-commercial users. For others, the challenge is ensuring that the international intellectual property system effectively encourages creativity and innovation, while at the same time being responsive to the legitimate needs and expectations of users. They would argue that the current regime provides incentives to disseminate knowledge, and that it is in the interests of the rights holders to ensure the widest possible dissemination of their works including through the Internet.

(c) *E-Commerce and trade*

152. The Internet also provides new ways of trading goods and services through e-commerce. This section looks primarily at the following enabling environment aspects of

²⁴ The term IPR describes the legal rights, which result from intellectual activity in the industrial, scientific and artistic fields. The three main types of IPR that are dealt with in this part of the report are patents, copyright and trademarks (since they are particularly relevant to the Internet), although other forms of intellectual property, such as trade secrets, may be relevant as well. The three forms of IPR are different and these variations may impact on the Internet and Internet related services differently. In addition, some might argue that the Domain Name System (DNS) managed by ICANN creates Internet related IPR of a new kind when domain names are registered (although ICANN itself would contend that no such rights are created).

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e-commerce: legal recognition of ‘digital signatures’²⁵, electronic contracts and admissibility of electronic evidence²⁶. Two basic questions (similar to those raised with respect to IPRs) arise in this area:

- Whether the rules and practices developed to govern trade in physical goods and services can and should be applied to e-commerce?
- Whether governance mechanisms affect the growth of international e-commerce and its benefits extended to and shared by all countries?

153. An additional question (related to data privacy protection concerns discussed above) arises in connection with authentication of online transactions. The transactional certainty obtained through authenticating the parties to a transaction needs to be balanced with legitimate privacy needs and rights of users to ensure that data used in the authentication process is not used illegally or in an unauthorized fashion by third parties.

154. The answers to these questions generally are seen as interdependent. While there is concern that the application to e-commerce of rules and practices that were developed to govern the movement of physical goods and services may unduly inhibit the growth of e-commerce, there is also recognition that special rules may be required to facilitate e-commerce.

3. Institutions and governance mechanisms

155. In each of the three clusters of issues, there are organizations and mechanisms with direct influence on Internet related issues, and others with an indirect influence. While many of the governance issues are really matters of national law or policy, the relevant institutions, while mainly operating at the international level, have an undeniable influence at the national level.

(a) Competition policy, liberalization, privatization and regulations

156. Issues of competition policy, liberalization, privatization and regulations are primarily governed at the national level. Intergovernmental institutions are particularly influential in national policy making during times of transformation and instability. Intergovernmental organizations²⁷ with influence over these issues as they relate to Internet governance include the ITU, the WTO²⁸ and the OECD.

157. ITU has a number of fora, some formal and limited, others less formal and more inclusive. The principal formal mechanism is the World Conference on International

²⁵ In this report, ‘digital signatures’ is used generically to refer to an electronic or digital means to authenticate the identity of a party to an electronic transaction. While it is recognized that the term ‘digital signature’ is most commonly associated with public key infrastructure (PKI), it is used and intended here to be technology neutral.

²⁶ It is recognized that there are a variety of other factors contributing to the enabling environment for e-commerce such as network security, digital data privacy protection, enforcement (cybercrime) and jurisdictional matters, as well as a host of other technical, financial regulatory and capacity factors, which are not discussed here, but which are developed in other parts of this report.

²⁷ It should be noted that there are a number of regional organizations, and also the EU, that affect these issues – the Inter-American Telecommunication Commission (CITEL), the Organization of American States (OAS), Regulatel, as well as organizations such as the Commonwealth Telecommunications Organization (CTO).

²⁸ The principal governance mechanism of the WTO is through the General Agreement on Trade in Services (GATS), and in particular the agreements on trade in enhanced and basic telecommunication services that form part of the GATS.

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Telecommunication (WCIT)²⁹, which updates the International Telecommunication Regulations (ITRs)³⁰. Some of the less formal governance mechanisms that include the World Telecommunication Policy Forum (WTPF)³¹ and other consultative activities undertaken by the Bureau of Telecommunications Development (ITU-D), including its annual Global Symposium for Regulators and numerous research and policy reports.

(b) *Intellectual property rights*

158. Institutions with *direct* responsibility for developing international rules and procedures for establishing and protecting IPR or resolving IPR disputes include WIPO and WTO. Among institutions with an *indirect* role in this area is ICANN³².

159. The mechanisms deployed by the institutions with direct or primary Internet/IPR governance responsibilities are at the ‘hard’, or treaty making, end of the scale described in Section IV.B.

- agreements that establish international law in relation to copyright, patents and trademarks in the case of WIPO; and
- agreements aimed at standardizing rules for establishing and protecting IPR in internationally-traded goods and services, in the case of WTO.

160. Among WIPO’s Internet related treaty making activities are the ‘Internet treaties’ – i.e. the 1996 WIPO Copyright Treaty and WIPO Performances and Phonograms Treaty – as well as other WIPO instruments that affect Internet governance issues, such as the *Joint Recommendation on the Protection of Marks, and Other Industrial Property Rights in Signs, on the Internet*.

161. WTO’s main influence is through its *Agreement on Trade-Related Aspects of Intellectual Property Rights* (TRIPS)³³.

162. A number of standardization organizations have a significant role, including ICANN, the IETF, the World Wide Web Consortium (W3C) and ITU-T³⁴. Private sector

²⁹ WCIT (formerly known as World Administrative Telephone and Telegraph Conference (WATTC)), the last WATTC periodically updating the ITRs, took place in 1988.

³⁰ Following the conclusion of the initial GATS agreements on trade in telecommunication services in 1995, discussions began within the ITU about what to do with the ITRs. These discussions were triggered by the apparent contradiction some saw between the ITRs and the obligations some ITU members had assumed under the GATS. Following several rounds of inconclusive debate about whether the ITRs should be terminated, lightly revised or substantially re-written, the 2002 Marrakech Plenipotentiary Conference decided that a WCIT would be held during the 2007-2010 timeframe to decide this question.

³¹ A forum that meets periodically to develop non-binding Opinions in relation to important policy and regulatory issues. Among other subjects, the ITU held WTPFs in 1998 to discuss the implications of the WTO telecommunications agreements and, in 2000, to discuss the implications of Internet telephony. Although not binding, the Opinions resulting from the WTPF have generally provided useful guidance to national policy makers and regulators, particularly in developing countries, as well as to the ITU Sectors

³² ICANN’s function is ‘indirect’ in the sense that it has rules and procedures intended to ensure that IPR are respected and protected by its members and by other parties involved in its operations and decision making processes.

³³ Countries that accede to the WTO *ipso facto* not only agree to implement the WTO provisions in national law, but also accept binding procedures for resolving disputes between countries. WIPO treaties should also be transposed into national law, but do not provide a binding mechanism for resolving disputes between countries. This difference was one of the reasons the WTO TRIPS agreement was established, i.e. to strengthen implementation of the WIPO IPR regime with the assistance of the WTO enforcement mechanism.

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standardization bodies and industry associations seek to provide ‘private governance’ of IPR on the Internet by embedding IPR protection mechanisms into new technologies, developing technologies intended to increase control by IPR holders over distribution of copyrighted content, or to secure compliance with IPR protection policies through the licensing conditions for such technologies³⁵. The International Trademark Association (INTA), with more than 10,000 members, represents trademark owners and practitioners from around the world. INTA, through its Internet Committee evaluates treaties, laws, regulations and procedures relating to domain name assignment, use of trademarks on the Internet, and unfair competition on the Internet. It also develops and advocates policies to advance the protection of trademarks on the Internet.

163. A number of intergovernmental and other international institutions and organizations participate in e-commerce issues, with direct and indirect influence. Intergovernmental organizations include the WTO, WIPO, United Nations Commission on International Trade-Related Law (UNCITRAL), United Nations Conference on Trade and Development (UNCTAD), International Trade Centre (ITC)³⁶, United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), and ITU-T. A number of regional organizations and also the EU influence e-commerce governance, including the OAS, APEC, Association of Southeast Asian Nations (ASEAN), and United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). Finally there are a number of other organizations including the OECD, International Chamber of Commerce (ICC), Hague Conference on Private International Law, UNIDROIT, Internet Society (ISOC), Global Business Dialogue on e-Commerce (GBDe), and the IETF.

4. Assessment of governance institutions and mechanisms against WSIS criteria

(a) Competition policy, liberalization, privatization and regulations

(i) Multilateral, transparent, democratic and inclusive

164. The formal treaty making mechanisms of the ITU and WTO are limited to their respective Member States and are multilateral, transparent, and democratic in the traditional intergovernmental organizational (IGO) sense explained in Section IV.D. As far as other actors are concerned, if countries wish to include representatives of the private sector and civil society on their national delegations, there is nothing to prevent them from doing so and private sector input into the negotiating process is obtained through a variety of informal mechanisms at both at the national level (e.g., industry advisory councils), and at the international level.

165. The other, less formal, governance mechanisms of the ITU to address these issues are more inclusive. Representatives of national governments, the private sector, and civil society all have the right to participate in their own name – in the case of the private sector and civil society, not merely as members of national delegations – as long as they are sector members of the ITU. Few civil society organizations are sector members of the ITU.

166. The WTO has made an effort in recent years to reach out to civil society and to solicit its views through informal, consultative mechanisms, such as the annual WTO Public

³⁴ Patent issues in developing Internet related standards are dealt with them through IPR policies intended to ensure that standards are not ‘owned’ by IPR holders.

³⁵ See Section IV.F(c) for a discussion of the growing importance of private governance arrangements, including these kinds of activities.

³⁶ Jointly sponsored by WTO and UNCTAD.

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Symposium. In addition, a wide range of non-government actors, including many from civil society, have been accredited to attend the biennial WTO Ministerial Conferences as observers.

(ii) *Roles and responsibilities*

167. The ITU's formal treaty making mechanisms limit the extent to which non-governmental actors can formally participate. The informal mechanisms provide considerable scope for other actors to provide input into ITU decision making processes. Almost all ITU decisions on substantive matters are influenced by private sector participants in the national delegations of many countries. The main obstacle faced by non-governmental organizations (NGOs) is in becoming an ITU-D Sector Member. By contrast, the WTO does not provide an equivalent range of formal opportunities for non-governmental actors to provide input to its work.

(iii) *Outcome criteria*

168. To date, the major impact of ITU and WTO governance activities regarding competition, privatization, liberalization, and regulation has been on the 'access for all' criterion. The tremendous growth of the Internet and increase in Internet users over the past ten years has been made possible, in part, by the growth of the telecommunications networks over which the Internet runs. The growth of these networks, in turn, has largely been driven by market forces that were unleashed as a result of policies and regulations that favoured competition, privatization, and liberalization. Internationally, the WTO agreements on trade in telecommunication services have given impetus to these policies, and to the widespread adoption of pro-competitive regulatory principles.

169. ITU-D, in particular, has undertaken many 'soft' governance activities aimed at helping its constituency adjust to the realities of a globally competitive telecommunications marketplace, and learn to benefit from its possibilities.

(b) *Intellectual property rights*

(i) *Multilateral, transparent, democratic and inclusive*

170. The mechanisms deployed by the institutions with direct or primary Internet/IPR governance responsibilities are at the 'hard', or treaty making, end of the scale described in Section IV.B. WIPO has also used open consultation processes to develop IP rules. The first WIPO Internet Domain Name Process for example addressed conflicts between domain names and trademarks through an open international process of consultations.

171. The intergovernmental nature of WIPO and the WTO limits the extent to which NGOs can participate in their treaty making activities. However, with respect to the Member States, the two institutions are "multilateral, transparent, and democratic"³⁷.

172. They allow partial involvement of non-governmental actors in the sense that they permit accredited non-governmental organizations to attend at least some of their meetings as observers. In the case of WIPO, approximately 200 non-governmental organizations (NGOs) from the private sector and civil society are accredited observers³⁸. Both WIPO and the WTO

³⁷ WIPO provides financial assistance to facilitate participation of developing countries in its meetings and activities.

³⁸ A list of permanent observers (<http://www.wipo.int/about-wipo/en/members/admission/pdf/observers.pdf>) and the criteria for admission as permanent observer (<http://www.wipo.int/about-wipo/en/members/admission>) are posted on WIPO's web site. However, civil society organizations

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have attempted to reach out to NGOs in order to build understanding and improve communication by providing better information on their activities (e.g. through workshops and seminars), as well as to obtain information on the views of non-government stakeholders on issues facing these organizations.

173. Among institutions with indirect responsibilities, ICANN represents various stakeholder groups and constituencies in its formal governance structures and decision making processes. However, questions have been raised and continue to be discussed about whether the interests of different stakeholder groups are always fairly represented and in a balanced fashion in all of ICANN's decision making processes. This has been a source of some concern in relation to IPR.

(ii) Roles and responsibilities

174. In addition to its treaty making activities described above, WIPO is engaged in a number of other Internet related activities:

- Implementation of the Uniform Domain Name Dispute Resolution Policy (UDRP) which was developed by WIPO in the First WIPO Internet Domain Name Process and was adopted by ICANN;
- Delivery of intellectual property services through Internet based systems that allow the electronic filing and processing of international patent and trademark applications, for example under the Patent Cooperation Treaty and the Madrid system for the international registration of marks; and
- Capacity building activities for developing countries, including by online means, aimed at enhancing access to the intellectual property system, and its use as a tool for economic development.

175. WIPONET is a global intellectual property information network, which facilitates the digital exchange of intellectual property information between 330 national intellectual property offices and provides developing countries with Internet connectivity and basic information technology infrastructure. ICANN's IPR policies, for example, require parties seeking to register domain names to disclose information that may be IPR related as part of the registration process. The UDRP requires disputes about the ownership of domain names (i.e. trademark disputes) to be resolved through WIPO's Arbitration and Mediation Centre, or through the services of another dispute resolution mechanism accredited to ICANN.

176. The IPR policies of standards institutions vary. Some (IETF, ITU-T, and the International Trademark Association (INTA)) require participants to disclose any IPR they hold in technologies related to the standard being developed and to agree either to license these rights on a royalty free basis or on reasonable terms and conditions and on a non-discriminatory basis, should they be incorporated in the standard being approved. Others, such as W3C, however, require such technologies to be licensed publicly for free, or they will refuse accreditation as a standard.

(iii) Outcome criteria

177. Internet related IPR governance impacts all of the WSIS outcome criteria, but has particular implications in the areas of "equitable distribution of resources" and "access for all".

recently complained about discriminations effected by WIPO during the accreditation process for its next meetings. According to these organizations, WIPO would have arbitrarily refused accreditation to many organizations representing the rights of IPR users, while facilitating participation by non-governmental organizations representing the rights of IPR holders.

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178. The balance between the rights of creators and the rights of users through copyright law has a major impact on the distribution of ‘intellectual objects’ – including information and knowledge – and on the practical possibility for users, particularly in developing countries, to access these resources. What is less clear, and subject to discussion, is the precise nature of the balance that will be most beneficial to all stakeholders.

179. At a much different level, the manner in which Internet related patent and trademark issues are governed has important implications for the ‘stable and secure’ functioning of the Internet with respect both to the DNS and Internet related standardization processes.

(iv) Coordination with governance of other Internet related issues

180. The Internet has brought new policy challenges to many areas of what might be called ‘governance’: the need to act faster, to develop flexible responses, and to act in a coordinated fashion on an international basis with a variety of stakeholders from diverse backgrounds. Some feel that the major Internet related IPR governance mechanisms do not appear to be well coordinated internationally since, in spite of the cooperation agreement between the two organizations, there may not be sufficient coordination between WIPO and the WTO, let alone with other organizations with a stake in IPR issues in relation to the Internet. Also, the proliferation of litigation (admittedly at the national level) between rights holders and inventors and users of new technologies has an effect on the possibility to resolve these issues at an international level. These legal disputes make it hard to facilitate and promote reciprocal understanding and to forge consensus. For others, most of these Internet related policy challenges can be, and are being, addressed in accordance with the same principles – and in the same fora – as governance issues that arose before the birth of the Internet. The main challenge is to make these existing fora more efficient and responsive to needs created by the Internet. While Internet related issues may call for novel approaches, these approaches must stay in touch with general principles and policies of intellectual property. For them, international policy making in intellectual property must ensure that the intellectual property system remains effective in encouraging creativity and innovation, that it meets the legitimate needs and expectations of users, and that it is flexible enough to accommodate rapid technological developments and diverse national policy objectives.

(d) E-Commerce and trade

(i) Multilateral, transparent, democratic and inclusive

181. All of the intergovernmental institutions with direct or indirect governance responsibilities relating to e-commerce and trade are multilateral, and to some extent ‘democratic’ in the traditional sense that each country has one vote. Decisions are made by consensus as much as possible, and balanced geographical representation is an important factor in filling both elected and appointed offices within the organization. Yet they are not ‘democratic’ in the sense that not all stakeholders share the same level of participation in decision making. There is a range of approaches taken by the regional and other organizations to seek inputs from NGOs, the private sector and civil society. In general, these organizations are ‘transparent’ in the sense that they publish information about their activities (in this respect, the Internet has greatly improved the transparency of many of these organizations). In this respect, the IETF is the most transparent of all, since its work is done online.

182. These organizations allow partial involvement of non-governmental actors. They generally permit accredited non-governmental organizations to attend at least some of their meetings as observers. Among intergovernmental organizations, ITU-T is again an exception to these general practices. Only non-governmental organizations that are ITU members (and have paid the necessary fees) can attend its meetings. In addition, ITU-T restricts access to

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much of its most important information either by limiting access to ITU members (e.g. working documents) or by charging fees (e.g. for approved standards).

183. The extent to which the rules and operating procedures of these organizations allow non-governmental actors to participate directly (i.e. in their own right, rather than as members of national delegations) in their decision making processes varies according to the nature of the decision being taken, being most open in the case of relatively 'soft' governance processes that aim at promoting understanding and coordinating policies in relation to specific issues (e.g. UNCTAD conferences) and most restricted when binding treaties are being negotiated (e.g. WTO Agreements).

184. The practical possibility for governments, the private sector, civil society and international organizations to participate directly in the decision making processes of organizations that govern e-commerce and trade also varies according to the nature of the work. In some cases the very technical or highly specialized nature of an institution's work limits the range of actors that can make a practical contribution to its governance process. In other cases, the e-commerce and trade related governance issues being dealt with by an organization are broad enough to permit a wide range of actors to participate effectively in decision making processes (e.g. UNCTAD).

185. There is no easy and simple answer to the question of the extent to which the diverse governance institutions and mechanisms affecting e-commerce and trade issues meet the WSIS process criteria of being "multilateral, transparent, democratic, and with the full involvement of governments, the private sector, civil society, and international organizations". Progress has been made by many of these organizations in recent years in relation to at least some of the WSIS process criteria. For example, some organizations that traditionally were seen as closed to civil society have instituted outreach programmes and encouraged non-governmental organizations to get involved in their work (e.g. WTO and WIPO). Moreover, these organizations have improved their transparency to non-governmental stakeholders, by publishing information on their organizational structures, main lines of activity, meetings, and decisions, as well as background information on issues.

(ii) Roles and responsibilities

186. The current institutional arrangements for governing e-commerce and Internet related trade issues are relatively open to inputs from the different stakeholder groups.

187. Members of the WTO have not attempted to develop a treaty level agreement for e-commerce. Instead, in 1998 they established an electronic commerce work programme to explore how e-commerce affects trade in goods, services and intellectual property, and how it fits within the agreements that resulted from the Uruguay Round³⁹, since these institutions are currently focusing on 'soft' approaches to governance that aim at developing a shared understanding of the potential of e-commerce to benefit all countries, and at identifying models, policies and practices that will facilitate the development of e-commerce within and between countries.

188. UNCITRAL's activities in the field of e-commerce have led to the development of model laws for electronic signatures and e-commerce, and its current work is the

³⁹ Within the WTO governance framework, it could be argued that the TRIPS Agreement, and the Trade in Services Agreement, particularly the provisions relating to trade in telecommunication services, go some distance towards putting in place the foundations of a régime for governing e-commerce.

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consideration of a convention on electronic contracting that is aimed at bringing a degree of harmonized treatment with respect to electronic contracts among different trade instruments.

189. The other institutions aim at promoting understanding of trade related issues and coordinating policies between their members (e.g. UNCTAD), or at recommending business practices and customs procedures designed to facilitate trade (e.g. UN/CEFACT).

(iii) Outcome criteria

190. At the present time, because of the consultative nature of certain of the intergovernmental groups, there are fairly open, informal means of communication and information sharing.

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

1. Overview

191. Access to ICT resources, including the Internet, is vital to enable all to be empowered to self-determine their lives in all sectors of society, be they economic, political, social, cultural or environmental. Access to and use of ICTs, including the Internet, is becoming fundamental to the delivery of the Millennium Development Goals (MDGs). Differentiated access to ICT resources is reinforcing a ‘digital divide’; a structural divide between developed and developing countries, and within a country between urban and rural communities, rich and poor, young and old, able and disabled and women and men, minority and dominant cultures.

192. The WSIS Declaration of Principles asserts a commitment “to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge”⁴⁰. The goal of this commitment is to enable “individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life”. Given a working definition of Internet governance that embraces the development and use of the Internet⁴¹ there is an inextricable linking of Internet governance and development issues. Not only are there myriad issues within this cluster but also many of these issues are cross-cutting in nature and therefore manifest themselves in several of the other three clusters. These general cross-cutting issues of concern include:

- Facilitating participation of all in the ‘information age’;
- Promoting national economic, political, cultural and social development;
- Supporting information and communication rights for all;
- Reducing urban-rural disparity;
- Contributing to poverty alleviation;
- Taking up challenges posed by global technological and economic trends;
- Preventing the marginalization of people and communities from the global networked economy;
- Delivering on economic and social developmental objectives.

193. In addition, there are a number of specific issues related to infrastructure development and access, content development and access, and human capacity building in relation to these challenges.

⁴⁰ WSIS Declaration of Principles, Paragraph 1, WSIS-03/GENEVA/DOC/0004.

⁴¹ Chapter II.

(a) *Affordable and universal access*

(i) *Affordable and universal access for all*

194. Affordable and universal access to the Internet embraces a wide range of issues, many of which fall outside the mandate of WGIG. However, one of the basic issues is access to the Internet for everyone and such concerns have a direct impact on the nature of policies for universal service and universal access. Although subject to international debate, for example within the WTO Reference paper on Telecommunications, the issue of affordable and universal access to basic telecommunications infrastructure is one of national public policy.

195. Current policy initiatives have seen a greater role for the private sector in addressing questions of universal services and access. These ‘market access’ policy initiatives have in many cases dramatically increased access for end users, enhanced quality of service and reduced prices. However an ‘access gap’ continues to exist in many developing countries, and in some cases the gap for socially disadvantaged populations has been made worse by market access initiatives. In such cases the use of smart subsidies has had a marked impact on facilitating access where there is an ‘access gap’⁴². Moreover, in developing countries in which the market is very small, such as the Small Island States (SISs), market forces can even less, by themselves, solve the issue of increased access. In these cases, public sector investment is vital.

(ii) *National and regional backbone infrastructure development*

196. With the rise of new ‘last mile’ technologies, such as those based on wireless, and regional licensing of multiple players, investment in and development of national and regional backbone capacity is becoming a major policy issue. It is recognized that in many cases the market provides an effective solution to the development of backbone infrastructure. Furthermore, policy measures can encourage the development of alternative telecommunications networks, based on open access principles⁴³. Many countries have extensive backbone capacity (including dark fibre) that exists as a result of investments by firms in other sectors, for example electricity and railways. Such capacity can form the basis of new backbone infrastructure and increase Internet connectivity. Exploiting this capability includes not only creating the technical capacity to use these resources as public telecommunications networks but also removing the necessary national and international policy barriers to interconnection and use.

197. However, the lack of adequate national and regional backbone may reflect market/public policy failure and require public policy intervention both in terms of funding and policy reform. In such cases there are clear international public policy issues and a need for donor support. Recent initiatives, for example in East Africa, have demonstrated that

⁴² Considerable evidence from Latin America has documented how both market liberalization and ‘smart subsidies’ can successfully leverage additional investment and reduce the broad access gap (*International Telecommunications Union Trends in Telecom Reform 2003: Promoting Universal Access to ICTs – Practical Tools for Regulators*, ITU, 2003).

⁴³ *InfoDev: Open Access Models for Information and Communication Infrastructure: Some Basic Principles* (2005), and *Leveraging New Technologies and Open Access Models: Options for Improving Backbone Access in Developing Countries (with a focus on sub-Saharan Africa)* (forthcoming).

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market failures in the provision of backbone can be effectively addressed through donor based funding.

(iii) International interconnection costs

198. For many ISPs in developing countries, the cost of buying international circuits and transit services for end-to-end connectivity in the Internet remains a major issue. In essence the nature of the cost of transit depends on the volume and flow of traffic within a network and within a country. The total cost to ISPs is influenced by many factors including local and regional connectivity, the availability of local content as well as the cost of international circuits. These issues are discussed in more detail in Box 2.

199. The issues of cost of transit and international connectivity are the subject of major policy debates. A number of measures can be initiated to reduce the cost of Internet in developing countries, including:

- A shift towards a ‘peering’ regime between and among regional ISPs will help reduce the high cost linked with international component cost. This, in turn, will encourage better optimization in the use of international bandwidth, lowering the overall cost of Internet access in developing countries;
- The development of local content and the stimulation of Internet use and market expansion;
- A public-private partnership approach could be employed, with the support of intergovernmental organizations and the donors, in the establishment of the sub-regional clusters of IXPs and liberalization of the telecommunication industry to lower costs of international connectivity;
- In Small Island States (SIS), funding of basic infrastructure by the public sector or international funding mechanisms, with competition by the private sector on top of the government created infrastructure may contribute towards lowering of access costs and increased access in unserved and underserved areas;
- The establishment of national telecommunications policies that provide an environment conducive to the establishment of network access points in the country by backbone providers.

(b) Multilingualism, content accessibility and cultural diversity

200. It is well acknowledged that affordable access to physical infrastructure alone will not create the necessary conditions to ensure that “everyone can create, access, utilize and share information and knowledge” enabling “individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life”.

(i) Multilingualism and access to content

201. Multilingualism⁴⁴ and access to content raise a broad range of issues and require policy development and actions at all levels based on the involvement of many different actors and the coordination of existing initiatives. At the international level, UNESCO is the only global mechanism prioritising access to education and knowledge, as well as cultural diversity. While some of these issues fall outside the mandate of WGIG, efforts can be made to link with existing IGOs such as UNESCO to improve coordination, these issues being a core element in development of national ICT strategies.

202. Increasing opportunities for access to content related to Internet governance and ICT policy is an issue that could be seen to fall within the WGIG mandate. Affordable access to

⁴⁴ Some aspects of multilingualism, such as that of domain names, have been discussed in Section III.A.

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information is a pre-requisite to knowledge development and capacity building that can lead to more informed engagement in ICT policy and Internet governance processes.

203. Content that is hosted on websites is often inaccessible due to the lack of application of global usability standards such as the W3C web accessibility initiative (WAI) standards in website design.

(ii) Technology choice/open-source and free software

204. Free and open source software (FLOSS) is discussed in Box 3. An important issue with regard to FLOSS is that of public education. All stakeholders, including governments, need to be informed about the pros and cons of the use of FLOSS, especially compared to proprietary software. There are many issues involved in the choice of a licensing platform for software, and many developing countries are unaware of the issues involved and thus cannot make truly informed choices about their long-term economic ramifications. A public education initiative, involving a balance between proponents of both FLOSS and proprietary software, can go a long way towards building this capacity.

Box 3: Free and open source software (FLOSS)

1. Free/Libre Open Source Software (FLOSS) is a broad term used to describe software developed and released under an 'open source' license that allows for the inspection, modification and redistribution of the software's source without charge. The term also encompasses the Free Software movement, which releases software under similar terms to the Open Software movement, but with one important distinction: the derivative works must be made available under the same non-restrictive license terms.
2. One of the strengths of the Internet is that it is based on an 'open architecture' with 'open standards'. FLOSS incorporates these ideals and has grown hand in hand with the Internet. Starting from the early days of the Internet the TCP/IP protocol stack was included free of charge with mainframes and minicomputers thus providing a universal protocol that enabled the easy interconnection of disparate networks forming the seed of what is today's Internet. The free and ready availability of the GNU/LINUX operating system is seen by many as an important factor in the growth of the Internet.
3. The WGIG has examined the issues related to FLOSS and has come to the tentative conclusion that FLOSS does not present an Internet governance issue in terms of the need for an analysis of 'governance mechanisms' and an assessment of global coordination. However a key issue related to FLOSS is the incorporation of 'open standards' and the support of an 'open architecture' that allow interoperability of its software and easy data exchange. This is seen as an underlying principle. Therefore a key issue is the propagation of 'open standards' in all types of software.
4. Furthermore, the WGIG has identified FLOSS as a pertinent issue in the developmental context. FLOSS can be used as an enabling or empowering technology to promote access to the Internet. It can also reduce the costs of software purchase for projects aimed at reducing the digital divide, foster creation of locally owned software companies and reduce dependence of developing countries on proprietary applications they are unable to control. However, FLOSS should not be seen as a panacea nor is it necessarily cheaper to implement and administer than proprietary software. What type of software is best to use depends very much on the given circumstance. Each country and stakeholder group should evaluate, according to the proposed use, whether to recommend or require adoption of a specific licensing model, or whether regulations and programmes should be agnostic of the type of license. It is important to ensure technology neutrality and to ensure that legal, regulatory and policy frameworks that may affect FLOSS, or proprietary software models, leave options open for these models to evolve and develop; and for users to have all choices available to them.
5. Some supporters of free software advocate the mandatory use of the FLOSS licensing model for software developed or used by public administrations, or in publicly funded projects, so that the results of public investments can be reused by the community at large.
6. Two factors in particular characterize FLOSS:
 - While FLOSS has no initial financial outlay in terms of getting the software, its installation and maintenance can require a higher level of technical understanding than proprietary software. Therefore, depending on the circumstance the total cost of ownership for FLOSS may not be less than for other software. However, the costs involved are a long-term investment in human capital and can be seen as a contribution to capacity building;
 - While FLOSS lacks formal technical support, it can rely on assistance through mailing lists, websites and a vibrant online community that can answer most

questions.

7. Proponents of FLOSS cite the free and open nature of the software as a significant strength:

- Anybody with a computer, an Internet connection and the inclination may join any of the groups and contribute to the creation of the software package;
- They can submit code for the inclusion in the main package or make add-ons to suit their particular needs without worrying about complicated licensing arrangements;
- This can act as an enabler in the development context because local populations with the requisite skill levels can adapt the software at no charge and redistribute those changes;
- Free distribution of new software eliminates the time and cost of rewriting similar applications reducing entry barriers to new ICT developments for all subsequent users;
- Skilled users can examine the software source code and verify its operational integrity, thus ensuring that it does not hamper their privacy, security, and other rights;
- Skilled users can use the base of freely available software to quickly build new products, and start new enterprises, without the cost of purchasing proprietary software;
- At the desktop level, FLOSS software is generally as easy to use as other solutions;
- Free software also strictly adheres to open standards and interoperability, runs with little or no modification on multiple platforms, has a standard data exchange format to enable the easy transference of information, and avoids dependency on a specific application to read historical content.

8. The fact that FLOSS can be had at practically zero upfront cost has fuelled interest in FLOSS as a development issue, although as stated above this does come with a requirement to invest in human capital for the training of competent administrators. Once these skills are developed these professionals may in turn freely contribute to the larger FLOSS projects or customize programs for the local language, for example to lower the barriers of entry onto the Internet.

9. An illustrative example of the advantageous use of FLOSS is one taken from Cambodia.

The Cambodian Internet community saw the need for a Cambodian script to foster the spread of ICT's in their country through the use of the local language. Since the market for Khmer is a small one, it was not seen as a high priority for software companies to develop a user interface in the Cambodian script. The onus for the development of applications with the user interface in the Cambodian language that can handle the Cambodian script was left to the local community. They gathered together several ICT graduates to develop a fully localized user interface in Khmer by adapting the code for the FLOSS programs: Open Office suite, the browser Firefox, and the e-mail program Thunderbird. Funding for the first several months was through personal donations.

10. This illustrates how local people in small markets can use FLOSS to develop or adapt programs to suit their purposes where it is not an economic priority for software makers to accommodate their needs. Above all FLOSS can be a tool that allows local communities to use their own language on the Internet.

2. Analysis of the main issues

(a) International interconnection charges

205. International interconnection charges are discussed briefly in Section III.A, Paragraph 59, and in Paragraphs 198, 199, above. For further detail see Box 2.

(b) Capacity building and meaningful participation in global policy development

(i) Issue

206. The WGIG considered the development perspective as an overarching priority in its deliberations. In line with the overall theme of the WSIS, the WGIG saw a need for mainstreaming Internet governance into the broad context of ICTs for development. Enabling effective and meaningful participation by developing countries is the ultimate aim. The extent to which policies are deemed/perceived as legitimate is directly related to the extent to which all stakeholders are able to make informed contributions to policy debates and see the results of their actions in the outcomes. Therefore, effective and meaningful participation in global governance processes is increasingly acknowledged as a critical contributing factor in the development of more successful and legitimate policies and outcomes.

(ii) Concern

207. To ensure that all stakeholders have the ability to participate it is necessary to strengthen developing countries' participation in international ICT decision making fora. Participation in the global ICT policy debate has been the subject of many studies over the past five years. Initiatives looking at this include ORDIG⁴⁵, Louder Voices⁴⁶ and the Internet Governance Resolution from the African WSIS regional meeting in Accra (Feb 2005).

208. These meetings and groups have generally concluded that there is a need for sustainable capacity building in developing countries to strengthen their participation in the international ICT decision making process.

209. Common barriers to participation have been given as follows:

- Lack of a coherent ICT policy in many developing countries and an understanding of the role that ICTs can play in helping these countries achieve their development objectives.
- Insufficient number of, and support for, regional and sub-regional bodies that can address issues of infrastructure access (bandwidth, interconnection pricing and 'last mile' coverage) and insufficient local exchange points.
- Weakness in national and regional institutions that deal with policy issues. This is seen as the most significant barrier to increasing meaningful and effective participation in global governance processes.
- Lack of easy, affordable, timely access to information about ICT related issues, decision making fora and processes by stakeholders in developing countries.
- Limitations with the structure, functioning and working methods of international ICT policy fora. In spite of efforts to include developing countries in decision making processes, there is a general view that such measures will not result in effective

⁴⁵ The Open Regional Dialogue on Internet Governance initiated in October 2004 by United Nations Development Programme's Asia-Pacific Development Information Programme (UNDP-APDIP).

⁴⁶ A 2002 Panos, G8 Dot Force and UK Department for International Development initiated survey and recommendation for actions to be taken by developing countries and international agencies to promote more effective, participation in decision making around ICTs (<http://www.panos.org.uk/images/books/Louder%20Voices.pdf>).

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participation until underlying weaknesses in developing country technical and policy capacity are addressed.

- Flaws in the processes for identification and selection of the right people to receive funding that many institutions make available for people from developing countries to participate in international ICT conferences.
- Unused ICT capacity due to either unfinished development projects or a lack of knowledge on how to utilize the technology effectively, to take advantage of existing and emerging technologies, such as lighting and connecting the vast amount of existing dark fibre optic lines to the Internet.
- Lack of participation from women, indigenous peoples, civil society and SMEs.
- Limited resources for participation in the relevant international meetings. The frequency and venues of global ICT policy meetings force some stakeholders from less central regions of the globe to limit their participation in these meetings due to the expense involved in funding the long haul trips necessary to attend these conferences. Possible solutions suggestions include more online fora using collaborative work environments and techniques such as webcasting, general members meetings only once or twice a year and the possibility of de-centralization of inter-governmental agencies. Committees and task forces of these bodies would meet as regularly as required outside the general body meetings.

(iii) Commentary

210. In order to improve ICT capacity in the developing countries and help them fully participate in ICT policy issues, one priority is to look at the structural aspects that would enable better access to the Internet improving access to knowledge, choice of technology, building local content and spreading multilingualism. Another priority is the need for awareness raising programmes for policy makers to enable stakeholders to comprehend the stakes and challenges of Internet governance and guide national policy formulation. ORDIG prioritises capacity building in technical standard development, particularly technologies based on open standards that can be used in the detection and prevention of network vulnerabilities/risk factors.

211. The WSIS action plan has as a primary goal, getting half the world's population connected to the Internet by 2015⁴⁷. The first question that arises is how this will be done. The second is how governance mechanisms at global, regional and national levels can facilitate the creation of enabling environments to an increased equality of access to ICTs and the Internet. The Internet Governance Resolution from the WSIS Africa Regional Preparatory Conference in Accra (Feb 2005) calls for the mainstreaming of Internet governance aspects with the creation and support of regional and sub-regional bodies that can address issues of infrastructure access⁴⁸.

212. The WGIG has tentatively concluded that global Internet governance can only be effective if there is coherence with regional and national level policies.

213. To further development in these areas, a priority is the affordable and universal access to infrastructure, knowledge (content) and choice of technology. This can be helped through the creation of local content and multilingualism. Free/Libre and Open Source Software (FLOSS) is one of the several technologies that may have a role in this⁴⁹.

⁴⁷ <http://www.wsis-si.org/prepcom3A-action.html>.

⁴⁸ A summary of the resolution available at: <http://www.itu.int/wsis/docs2/regional/outcome-accra.html>.

⁴⁹ See Box 3.

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214. The WSIS Task Force Report on Financing Mechanisms⁵⁰ highlighted several areas that interact directly with global Internet governance.

- Attracting investment in ICT depends crucially upon an enabling environment that is supportive of the private sector and for business as a whole, and an ICT policy and regulatory environment that encompasses open entry, fair competition, and market oriented regulation.
- That the broad based deployment of ICT also depends on a supportive development policy environment for ICT for development (ICT4D) particularly the establishment of national e-strategies and the integration of ICT into poverty reduction and/or other national development strategies and the Poverty Reduction Strategy Papers⁵¹ process.
- Policy and regulatory incentives and more open access policies are also needed if private investment and community networks are to be effective in expanding ICT access to high cost (predominantly rural) and low income populations to address the so-called 'bottom of the pyramid' populations.
- National Universal Service/Access Fund and other mechanisms to lower costs of delivery to underserved markets and promote community access can play an important role in helping to address ICT access gaps, but require substantial institutional and implementation capacity to succeed.
- Building human resource capacity (knowledge) at every level is a central requirement for achieving Information Society objectives.
- ICT related capacity building needs in the public sector represent a high priority in all developing countries and current financing levels have not been adequate to meet these needs.

3. Assessment

(a) National and regional backbone infrastructure

215. New ways of deploying national and regional ICT backbone infrastructure to enable development should be explored as a matter of public policy affecting open access to the Internet in deliberations of the forum proposed in Section V.A.1 of the WGIG report.

(b) International interconnection costs

216. Some options which could be considered to address concerns with international interconnection issues:

- Invite national governments to stimulate local content as well as universal access, and adopt policy framework that enables fair competition;
- Encourage civil society organizations to participate in building local contents, and to stimulate local use of the Internet;
- Invite international agencies and the donor community to intensify their studies in this area, in particular to examine and support alternatives solutions like the development of regional IP backbones and/or the establishment of local and regional Internet exchange points (IXPs);
- Call on the groups studying these issues to take note of the WSIS Declaration of Principles: multilateral, transparent, democratic, capacity to address Internet governance in a coordinated manner and multi-stakeholder approach;
- Invite organizations such as ITU and OECD to report on these matters to whatever forum, body or mechanism(s) that the WSIS may create for issues related to Internet governance and global coordination, with emphasis on the developing countries;

⁵⁰ <http://www.itu.int/wsis/tffm/index.html>.

⁵¹ For more information visit: <http://www.imf.org/external/np/prsp/prsp.asp>).

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- Encourage donor programmes/financing mechanisms to take note of the need to support regional ISP associations in their efforts, and provide funding for initiatives, that advance connectivity, IXPs and local content for developing countries;
- Eliminate national restrictive telecommunications policy regimes that inhibit the establishment of network access points, including exchange points, and the development and use of applications that can reduce the costs for the end users.

(c) Access to content and multilingualism

217. This issue is primarily addressed through recommendations, policies or guidelines being taken up on a purely voluntary and largely uncoordinated basis. Some key points that need addressing include:

- Implementation of existing UN recommendations and agreements by Member States and intergovernmental and international organizations (UNESCO, WSIS Declaration and Plan of Action);
- An assessment of the extent to which publicly funded content (by the UN system and other international organizations) that is essential for knowledge creation in relation to ICT policy and Internet governance is made available and affordable to the public;
- Exploration of more effective distribution mechanisms of development information (soft and hardcopy), in developing countries, both online and offline, to ensure that those who need them are able to access them;
- Exploration of the application of alternative licensing systems (open content policies) for such publicly funded content;
- Application of existing open standards such as the W3C WAI on websites.

(d) Capacity building and meaningful participation in global policy development

218. There are various sets of recommendations for capacity building in relation to ICT policy and Internet governance emerging from processes pre-WSIS (such as the G8 DOT Force and Louder Voices Study) as well as several that have emerged during the WSIS process.

219. A priority is to harness the political will and explore means to leverage existing resources at national, regional and global levels to implement capacity building activities that have been identified as priorities, such as:

- Budgeting for, and incorporating, capacity building for ICT policy and Internet governance in national e-strategies which are aligned with MDG based poverty reduction strategies and led by national multi-stakeholder teams or networks;
- Budgeting for, and incorporating, capacity building for ICT policy and Internet governance in regional action plans mobilising funds from existing financial mechanisms;
- Ensuring public policy issues such as universal access, interconnection charges, capacity building and meaningful participation, are central to the Internet governance arrangements proposed in Section V.A.1 of the WGIG report;
- Developing a virtual coordination arrangement in the Internet governance arrangements proposed in Section V.A.1 of the WGIG report which could act as a base for mobilization of existing resources to support existing and emerging national, regional and global capacity building recommendations;
- Continued efforts should be made by international organizations, including IGOs, to improve arrangements for the participation of developing country and civil society delegates in the processes and structures, consistent with the WSIS principles of transparency, democracy, multilateralism and with the full participation of all stakeholders.

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

A. Introduction

220. This chapter provides a framework for assessing the current and potential roles and responsibilities of all stakeholders in different kinds of Internet governance arrangements against four sets of criteria derived from the WSIS Declaration of Principles and Plan of Action:

- *Process criteria* – the extent to which existing arrangements ensure the full involvement of governments, the private sector, civil society and international organizations in a process, which is multilateral, transparent and democratic;
- *Roles and responsibilities criteria* – the extent to which all stakeholders and relevant intergovernmental and international organizations are able to fulfill the different roles and responsibilities recognized by WSIS:
 - Governments: authority over public policy;
 - Private sector: important role in the technical and economic fields;
 - Civil society: community inputs;
 - Intergovernmental organizations: coordination and facilitation inputs;
 - International organizations: Internet related technical standards and relevant policies.
- *Outcomes criteria* – the extent to which existing arrangements have contributed to achieving an equitable distribution of Internet resources, providing access for all, ensuring a stable and secure functioning of the Internet, and multilingualism;
- *Coordination criteria* – the extent to which governance of Internet related issues are addressed in a coordinated manner.

221. These different sets of criteria are linked – at least conceptually – in the sense that open, participatory governance processes that enable all stakeholders to fulfill their roles and responsibilities effectively and in a coordinated manner should result in better outcomes. Conversely, deficiencies in governance processes and/or weaknesses in the capacity of stakeholder groups to fulfill their roles and responsibilities will likely result in outcomes that fall short of the WSIS targets.

222. This chapter examines some of the criteria for good Internet governance expressed in Paragraph 48 of the WSIS Geneva Declaration of Principles: “multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations”. In assessing existing mechanisms against these criteria, it is important to remember that some of the institutions responsible for governing the issues are intergovernmental organizations founded on treaty agreements between nation states. The intergovernmental nature of these institutions shapes the extent to which the WSIS criteria for good Internet governance can reasonably be expected to be applied, particularly in relation to decision making structures and processes, as well as in relation to the roles and responsibilities of different stakeholder groups.

B. Types of governance mechanisms

223. Within different organizations, very different kinds of governance decisions, using very different kinds of mechanisms, are made in relation to Internet governance issues. These decisions and the underlying mechanisms can be conceived as running on a scale from ‘hard’

to 'soft' forms of governance, in terms of the results they achieve and the obligations they generate⁵².

224. The term 'soft law' is increasingly used to describe non-binding international instruments, such as declarations, resolutions, guidelines, recommendations, and codes of conduct. It is of growing importance, especially in situations where states agree on specific issues but are not ready to bind themselves legally. 'Soft law' is sometimes chosen over 'hard law' in order to avoid the potential complexity of the domestic ratification process. 'Soft law' instruments are also used in the gradual development of norms, which can result in the adoption of international legal instruments.

225. The main corpus of existing instruments in the field of Internet governance is non-binding. It includes instruments adopted during the WSIS process (Declaration of Principles, Plan of Action, regional documents) as well as other decisions that impact on Internet governance: the OECD Guidelines related to ICT, the UNCITRAL Model Laws in e-commerce and digital signatures, resolutions and declarations of the UN and other international organizations dealing with Internet governance related issues (e.g., UN General Assembly Resolutions on Internet Security).

226. 'Soft law' provides certain advantages in addressing Internet governance issues. First, it is a less formal approach, not requiring the official commitment of states and thereby reducing potential policy risks. Second, 'soft law' is flexible enough to facilitate the testing of new approaches and adjustment to the fast developments in the field of Internet governance, which is characterised by many uncertainties. Third, 'soft law' provides greater possibilities for a multi-stakeholder approach than does an international legal approach, which is restricted to states and international organizations.

227. There are significant differences among organizations – and in some cases within them – on the extent to which the WSIS criteria for good Internet governance can reasonably be expected to be applied to specific issues. It all depends on the nature of the governance decision being taken, as discussed below.

(a) *Treaty making mechanisms*

228. There is a significant number of intergovernmental agreements that currently or potentially affect Internet governance. Although these agreements may have different kinds of titles (e.g. the Telecommunications Annex to the WTO Trade in Services Agreement, the ITU International Telecommunication and Radio Regulations, the WIPO Copyright and Performances and Phonograms Treaties) they are all international legal instruments according to the Vienna Convention on Treaty Law, since they have been signed and ratified by various national authorities (governments, parliaments, and Heads of State). Thus, these agreements establish both national and international legal obligations. However, although they have a similar status in international law, there are important differences in the degree to which intergovernmental agreements are enforceable, and binding on Member States. The WTO, for example, is able to make determinations on trade issues that are internationally enforceable. Through its dispute settlement mechanism it has the power to authorize retaliation when a country does not comply with a ruling. The other international organizations, whose activities affect aspects of Internet governance, such as ITU, WIPO, and UNESCO, do not have these kinds of enforcement powers. In addition, not all decisions made by international organizations are necessarily binding on Member States. For example, the resolutions on

⁵² See MacLean, D.J., "Herding Schrödinger's Cats: Some Conceptual Tools for Thinking About Internet Governance", in MacLean, D.J. (ed.), *Internet Governance: A Grand Collaboration*, New York, UN ICT Task Force (2004) for a more de-tailed mapping of governance forms and issue areas. Available as a free pdf download at <http://www.unicttaskforce.org>.

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Internet governance adopted by the recent ITU Plenipotentiary Conferences are not binding on ITU Member States.

(b) *Standards making mechanisms*

228. There are intergovernmental arrangements that establish norms and standards but are not subject to national ratification and do not create obligations in national or international law (e.g. ITU Recommendations).

(c) *Policy coordination mechanisms*

229. There are intergovernmental arrangements aimed at coordinating national policies and providing direction to international organizations but which do not create agreed norms or standards (e.g. UNCTAD Conferences, UNCITRAL model laws, OECD and APEC policy frameworks).

(d) *Development assistance mechanisms*

230. There are also intergovernmental arrangements for providing assistance to developing countries with respect to particular issues (e.g. UNCTAD, International Trade Centre UNCTAD/WTO, UN/CEFACT, ITU).

(e) *Non-governmental mechanisms*

231. There are a number of non-governmental mechanisms, including:

- Non-governmental organizations (NGOs): private corporations established to carry out, or tasked with responsibility for, management of certain functions. An example of these is ICANN. ICANN's nature, composition, and methods have been put under the lens of public-private partnerships (PPPs), due to the explicit and unique roles and participation of governments.
- Arrangements between non-governmental stakeholders, or between multiple stakeholders including governments, for developing public policy recommendations, developing standards, or providing assistance to developing countries (e.g. IETF standards).
- Informal or semi-formal online mechanisms for the management of collective efforts and resources: for example, Usenet and mailing list moderation teams or steering committees for open software development projects.

C. Applying the WSIS criteria: a general assessment

233. There is a wide range of organizations, types and scope of issues, and governance mechanisms available for dealing with these. From an operational point of view, the WSIS criteria of multilateralism, transparency, democracy and full involvement of all stakeholder groups have somewhat different meanings, possibilities, and limits in relation to these different types of governance mechanisms.

(a) *Multilateralism*

234. Multilateralism is well understood in the international context to apply to organizations formally constituted by more than two governments. In the context of the WSIS criteria it stands alongside the need for "full involvement of all stakeholder groups" and should not be taken to exclude multi-stakeholderism, where multi-stakeholderism is understood to be subject to the WSIS definition of roles and responsibilities. This is discussed more fully in Section IV.D.

(b) *Transparency*

235. Transparency is understood in different ways by different stakeholders. It is agreed that transparency includes such criteria as requiring that the bylaws and mandate of the organization are clearly defined and published, that meetings and meeting agendas are announced well in advance, and that meeting minutes and documents are promptly published. Some believe that documents should be made freely available on the Web, that proceedings are webcast etc. and that transparency also requires that to the greatest extent possible, any member of an affected stakeholder group is allowed to physically observe meetings where decisions are taken. Others believe that the key requirement is that any affected stakeholder be represented, for example through national or industry representatives, and note that webcasting is useful only for those that have access to the Internet. While some argue that it is not so clear to what extent the concept includes, for example, multilingualism, others believe that multilingualism is a criterion in its own right and should be a basic requirement for transparency. They hold the view that, because many of the concerned stakeholders do not understand English, key criteria include availability of documents in all UN languages. For countries using other than the UN languages, their governments should be encouraged to translate them into national languages. Similarly, because many do not have access to the Web, publication should be by a range of mechanisms (including both electronic and paper distribution), and national governments should publish by national means such as national web sites, official registers, etc.

236. Others believe that publication in English only and free availability on the Web is sufficient, at least in the case of standards documentation, because the concerned stakeholders speak (or at least understand) English and have access to the Web. They hold the view that one of the characteristics of language diversity is the fact that the nuance and meaning one can achieve in one language can often not be achieved in any other language. While they see this as a great asset to literature or philosophy, they think this may be a liability in technical standards where a requirement for all translated technical standards to have equal authority might actually be a barrier to the interoperability that is the goal of standardization.

237. A specific note needs to be made with regards to the availability of policy documents, i.e. the texts of the agreed recommendations, binding directions, technical standards etc. In the case of international treaties, national laws, and other legal agreements among governments, these documents are publicly available, and usually freely downloadable from the Web. However, there are numerous cases in which technical standards are not so easily available; some organizations require fees to allow access to the standards; others (especially industry-based organizations) require subscriptions, non-disclosure agreements or strict licensing conditions before allowing access to the documents, or will allow access only for companies that are members of the consortium.

238. While some of these limitations might be necessary for specific reasons, costs and restrictions to the availability of policy documents reduce the possibilities for competition, especially by small enterprises and free software developers, for education (e.g. for university students), and for information and public review. For this reason, some hold the view that transparency requires that documents that are technically, commercially or legally binding should be made readily available free of charge.

(c) *Democracy*

239. Democracy is defined in different ways in a multilateral context and by different stakeholders according to their particular perspectives. Governments generally hold to a view based on national sovereignty with equal say for all countries and decisions reached through consensus. Each citizen is held to be represented and to be able to influence decisions through

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national consultation and decision making mechanisms. Some are of the view that most governments include members of their civil society in their delegations to the extent practical and in any case they take into account the interests of their civil societies when establishing agreements at multilateral bodies. Civil society advocates on the other hand would argue that the term goes beyond this, requiring direct full participation in decision making by many non-governmental groups from the private sector and civil society. Furthermore, they have expressed the view that governments are not actively or consistently consulting with other sectors of society prior to establishing agreements within multilateral bodies.

240. Due to what they see as failure of accountability whilst negotiating at the level of international institutions, civil society advocates now argue that the need, and hence the definition, must go beyond the government view of democracy and must include direct full and meaningful participation in decision making by many non-governmental groups from the private sector and from civil society. Common requirements in all contexts would include the need to ensure non-discriminatory accreditation rules and to ensure that within each constituency all members are equal.

241. ICANN has developed a model for involving groups of stakeholders in a meaningful way by grouping them into separately organized constituencies. This allows different groups of stakeholders to interact effectively with those of other constituencies as well as within the organization itself. This model might well prove effective in other organizations as well.

242. Additionally it would include the requirement that adequate instruments and facilitations are provided to reach, educate and ensure the participation of disadvantaged stakeholders (e.g. developing countries, civil society).

D. Assessing the actors against the WSIS criteria

243. There is a wide range of types of international and intergovernmental organizations involved in governance arrangements. The extent to which each of these meets, or attempts to meet, the WSIS criteria, varies between intergovernmental organizations and private sector organizations but there is also a large degree of commonality.

(a) Intergovernmental organizations (IGOs)

244. Some of the institutions that have governance responsibilities are multilateral in the traditional sense, meaning that only national governments are members, and that only national governments have full rights in decision making processes. However, to varying degrees, these institutions have accreditation processes and rules of procedure that allow other stakeholder groups to participate in their work as observers (for example, OECD, APEC), or in the case of the ITU, as sector members and associates. In general, the scope for participation by non-governmental stakeholders in their own right (i.e. not as members of national delegations) is tightly circumscribed in the case of treaty making processes, but more open in other kinds of governance processes that do not result in legally binding outcomes. These less formal processes typically provide opportunities for input from the private sector, civil society, and other intergovernmental and international organizations on standards making and policy coordination activities, through consultative mechanisms or, in the case of the ITU, through direct participation in non-binding decision making processes.

245. Use of the Internet has improved the transparency of all of the organizations that have governance responsibilities. Their websites now generally provide information on the organization, the issues it is dealing with, its structure and decision making processes, its meetings and their results – sometimes via webcasts. The websites of these organizations also provide access to meeting agendas, background papers, contributions, and working

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documents, as well as to publications – although practices vary in terms of how much information is publicly available, and how much is free of charge. In some cases, the transparency of institutions is enhanced by the activities of satellite organizations which represent the interests of specific stakeholder groups (e.g. business, civil society, developing countries), and which monitor the activities of intergovernmental organizations and provide policy analysis and advice to their members.

246. The intergovernmental organizations responsible for participating in the governance of Internet related issues are generally democratic in the traditional international relations sense that each member country has one vote, that decisions are made by consensus as much as possible, and that geographic/demographic factors are taken into account when elected and appointed offices are being filled. In the case of organizations that are members of the United Nations family, membership is open to any state that wishes to join and assume the rights and obligations of membership through relatively simple accession procedures. The WTO, the OECD, and regional organizations have different and more restrictive membership rules, although they generally allow countries that do not meet their membership criteria to participate in their work as observers, if there is a mutual interest in doing so.

247. The scope for full participation by different stakeholder groups in the decision making processes of intergovernmental organizations generally varies according to the nature of the governance mechanism. As pointed out above, the scope for involvement by non-governmental actors tends to greatest at the ‘soft’ end of the governance scale, where private-public partnerships (PPPs) and other multi-stakeholder initiatives have emerged as new governance models. In contrast, it tends to be most restricted at the ‘hard’ end of the scale, particularly in areas where enforceable international laws that provide significant sanctions are being created.

(b) Non-governmental mechanisms

248. Broadly speaking, non-governmental mechanisms encompass both the private sector and civil society. These are considered in some detail in Sections IV.F and IV.G respectively. It is not always clear whether organizations involved in Internet governance at the national or international level should be considered as belonging to the private sector, or civil society. The following are some key non-governmental organizations.

249. The IETF sits under the umbrella of ISOC, which is registered as a not-for-profit corporation in Washington, D.C., and is generally regarded as a civil society organization. Both the IETF and the World Wide Web Consortium (W3C) are not-for-profit global coordination bodies working as key Internet standards organizations. Both work in most ways like formal standard organizations and standards are developed involving multi-stakeholders, with an open and participative bottom-up style. Participation in the work of the IETF is enhanced and made equitable through online mechanisms.

250. ICANN, which is incorporated as a not-for-profit corporation under California law and is generally regarded as a private sector led organization, is the prime example of a non-governmental mechanism, as described in Section IV.B(e), Paragraph 231, although as mentioned there it also falls more and more under the lens of public-private partnerships. Some hold the view, because of the legal basis under which ICANN is established, that ICANN does not fulfill the WSIS criterion that recognizes policy authority for Internet related public policy issues as the sovereign right of states. Others hold the view that ICANN meets many of the WSIS criteria more effectively than some intergovernmental organizations.

251. From the outset, ICANN has attempted to be fully inclusive of all recognized stakeholder groups. There has been considerable debate over the degree to which it has succeeded in this and this debate has resulted in substantial reform of ICANN’s structure,

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membership, mechanisms of participation, inclusiveness, effectiveness, accountability, and mechanisms to populate the Board in the recent restructuring. Civil society is represented in the GNSO, in the At-Large mechanisms for participation in decision making (ALAC), through its participation, with significant international variation, in ccTLD management and in the address registries (RIRs), through the IETF and Internet Architecture Board (IAB) liaisons, and in the selection of the Board to the extent that groups are included in the stakeholder groups and mechanisms for Board member selection. There is a business constituency group that many business representatives participate in. Business further discusses its interest in the specific field of trademarks and anti-counterfeit interests. ICANN provides unrestricted access to its meetings and, through public fora, encourages open discussion of issues. It has attempted to make provision on its Board for representatives of the 'at large' constituency without so far achieving this aim, although ALAC advice to decision making carries significant weight. Online discussions provide equitable participation for people and organizations in developed and developing countries.

(c) The special case of the Governmental Advisory Committee (GAC)

252. The GAC provides a mechanism for government participation in the provision of advice to the ICANN Board on issues with public policy implications that reflect a consensus among its members. The GAC does not have the right to enforce adoption of a policy and does not have a vote on the ICANN Board. ICANN may adopt, or not, any advice provided by GAC. However, the ICANN Board is obliged to provide a statement of reasons if it does not follow advice from the GAC. Some members of the GAC have put forward the view that substantive and influential advice has been provided on issues as diverse as ICANN restructuring, reservation of country names in new gTLDs, WHOIS policies, IDNs and security. They see as perhaps its most important contribution, the newly revised *GAC Principles and Guidelines for the Delegation and Administration of Country Code Top-Level Domains*⁵³.

253. Nevertheless, the GAC cannot be said to be truly a multilateral organization in the traditional sense of the word. The GAC is open to all "national governments, multinational governmental organizations and treaty organizations, and distinct economies as recognized in international fora". However, it does not qualify as an organization, being a committee under the bylaws of ICANN and not having its own legal personality. In addition, its function is to advise ICANN – an organization constituted as a private body – which is a unique, innovative situation.

E. Special considerations

(a) Developing country participation

254. In addition to questions of process and procedure, it is very important to assess the capacity of different stakeholder groups – particularly governments, the private sector and civil society from developing countries – to participate fully and effectively in the governance processes of relevant intergovernmental and other international organizations. This is particularly relevant in the field of ICTs, where participants in international discussions are working in a fast moving technological environment that makes it difficult to keep abreast of new developments. Lack of knowledge or obsolete knowledge can be a serious impediment to meaningful developing country participation by governments and other stakeholders. Previous research on the participation of six developing countries in a wide range of international ICT fora and issues as well as in the ITU, WTO and ICANN has shown that factors such as lack of

⁵³ The GAC Principles – see Section III.A.3, Paragraph 77.

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awareness of the relationship between ICTs and development, lack of technical, policy and financial capacity, and weaknesses in national and regional governance processes are serious obstacles to more effective participation by developing country stakeholders at the international level. This research concluded that, although improvements to the governance processes of these and similar intergovernmental organizations is a necessary condition for fuller and more effective participation, they are not a sufficient condition in themselves. In other words, to achieve full participation by all stakeholders – whatever the specific governance context – mutually reinforcing actions are needed at all levels in the governance hierarchy⁵⁴.

255. Structural aspects (institutional and geographical) of existing international governance mechanisms are also obstacles to meaningful participation of developing country delegates. Internet governance issues are as many and diverse as the bodies responsible for their governance. Meaningful participation in international governance processes requires having the capacity to engage in multiple processes of multiple organizations in a diversity of geographical locations. This is often beyond the capacity or resources of developing (and in many cases also developed) country delegates and efforts to explore mechanisms to coordinate the diversity of Internet governance policy discussions and outcomes should be encouraged.

256. Some consider that participants from developing countries in the IETF, ISOC, ICANN, and related organizations have thrived. They observe that equitable access to all discussion fora, availability of introductory educational materials (also increasingly in languages in addition to English), an adaptation of discussion modes to non-Northern styles, etc., have allowed citizens from societies whose formal representations were suffering from the limitations described above to skip, or cover in accelerated manner, many development stages, and have served their societies well as pioneers. Some see further evolution of the innovative Internet governance organizations as continuing to foster this type of participation.

(b) *General public participation*

257. Direct involvement of the broad general public in the decision making processes of international organizations is always likely to prove controversial. In the case of intergovernmental organizations the voice of the public ‘at large’ is entirely dependent in the extent to which such representatives are included as part of national delegations. Thus such representation is a matter for national decision making rather than organizational constitution, and in general is discretionary, which can result in less powerful and minority groups not being included in national delegations. However, as previously indicated, the decision making processes of intergovernmental organizations often include mechanisms for consulting non-governmental organizations and admitting them to meetings as observers. Some believe that almost none of this happens in the realm of the intergovernmental organizations with a claim to participation in Internet governance, and even less is predictable and transparent.

258. Notwithstanding the different practical possibilities that attach to different kinds of governance mechanisms, it is clear from the WSIS Declaration of Principles that the interests of all stakeholder groups should always be consulted in a fair and balanced manner when decisions are made. It is apparent that governments and intergovernmental organizations have a special responsibility to ensure that all stakeholder groups are consulted appropriately. In

⁵⁴ See MacLean, D., Souter, D., Deane, J. and Lilley, S., *Louder Voices: Strengthening Developing Country Participation in International ICT Decision-Making*, London, Commonwealth Telecommunications Organization (2002). Available at http://www.cto.int/publications/louder_voices_final_report.pdf.

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assessing the Internet governance mechanisms against the WSIS evaluation criteria, it therefore may be useful to analyze them not only in relation to issues, but also in relation to these different points, in particular the nature of the various forums as measured on the ‘governance scale’, ranging from ‘hard’ to ‘soft’ forms of governance arrangements.

(c) *Intellectual property status of technical standards*

259. Another controversial issue is whether technologies that are adopted as standard, or are recommended or required by law or other policies, should be required to be free from patents and other IPR claims.

260. The supporters of this idea note that the generalized adoption of patented technologies gives to the owner of the patent effective control on the usage of that technology and on the resulting market; moreover, royalties required by the owners are often unaffordable for small enterprises, for the development of free software and for other non-profit efforts, including developmental ones. However, the opponents note that many technical advances on the Internet are studied by private companies, which would not support such development if they could not envisage economical returns from their researches.

261. The current situation in this regard is the result of hardly fought compromises between the two parties, and thus is not uniform; for example, both the IETF and ITU accept patented technologies that are subject to royalties, provided that these technologies are made generally available through “reasonable and not discriminatory” licensing terms. On the other hand, the W3C does not accept any patented technology unless it is publicly and generally licensed in a royalty free manner.

F. Impact of the private sector on governance

(a) *The not-for-profit private sector*

262. There are numerous examples of not-for-profit enterprises with responsibility for governance functions and/or administration of critical Internet resources at the national, regional and international level. Frequently they have constitutions that require them to operate in the public interest and have corporate structures designed to protect against capture by a particular sector. It is common for such organizations to operate in an open and transparent manner with memberships representative of the relevant Internet user community and therefore meet many of the WSIS criteria for Internet governance.

263. At the national level, the natural monopolies implicit in the management of ccTLD registries are often under the control of not-for-profit enterprises with explicit or implicit recognition by their respective governments of their role in ensuring that a critical resource is properly managed in the public interest. Regional examples include the regional Internet registries with responsibility for allocating IP addresses.

264. Global not-for-profit organizations include ICANN as well as the key Internet standards organizations, the IETF and W3C, which have the declared aim of working for open and non-proprietary standards in the global public interest. The W3C standards are based on simple principles such as interoperability (i.e., it should work on any hardware, with any operating system, and from any software), and universality (i.e., it should work irrespective of culture, language, character sets used; and it should be accessible to people with disabilities).

(b) *Self-regulatory mechanisms*

265. The private sector can work quickly and flexibly in some areas and industry self-regulation can play an important governance role, however, there may be questions of enforceability and legitimacy if it is 'voluntary self-regulation'. There are instances where government endorsement, at national, regional or international levels, of industry codes of practice or voluntary agreements can be useful.

266. There are many good examples of private sector contributions to governance as illustrated by the following examples.

- Concerns in the private sector during the height of the '.com' boom that government over regulation of e-commerce could reduce its potential. The result was the establishment of the Global Business Dialogue on e-Commerce (GBDe), which produced in the first two meetings (Paris 1999 and Miami 2000) good and productive industry self-regulation, but failed later to continue. The GBDe had a long list of issues, very similar to WGIG, including cybersecurity, consumer confidence, trustmarks, alternative dispute resolution (ADR), content, IPR, privacy, digital bridges etc. Many of the Paris and Miami recommendations made their way into national and international legislation
- Organizations such as ICC and WITSA and others continue to produce policy statements and practice tools for policy makers and other stakeholders on issues ranging from information and network security, privacy and VoIP to telecommunications liberalization which impact policy and regulatory frameworks and the use of the ICTs and the Internet.
- Business software vendors have been trying to strengthen the enforcement of WIPO's instruments through the Business Software Alliance (BSA). BSA represents industry and commercial IPR interests. The organization carries out a variety of activities in the field of ICT and Internet related IPR, including assistance with the drafting of national law, training police in how to combat IPR violation and influencing the work of intergovernmental organizations. Other similar institutions also have a considerable impact in the field of international IPRs. A few cases have already taken place where Tier 1 Internet bandwidth carriers that have a *de facto* monopoly have used their communication market position to influence national legal systems: examples include Sweden and The Netherlands.

(c) *'Privatization' of governance*

267. In an increasingly liberalized regulatory environment, there has been a shift in many arenas away from intergovernmental measures and toward market mechanisms, especially at a global level. While the efficiency of market mechanisms is generally recognized, some consider that this negatively affects the possibility for policies to serve the global public interest, rather than the interests of specific industry sectors, mostly from developed countries. The extent to which rules that shape markets and are binding for consumers are made by industry consortia is steadily growing. These rules are enforced through business-to-business contracts, IPR licensing policies, end user agreements, private dispute resolution mechanisms and a variety of other methods. Some developing countries lack the technical or financial capability to exert influence at the industry consortium or business-to-business level and feel increasingly excluded from a 'privatized' governance environment. Similarly, civil society organizations and Internet users have limited access to these policy making activities.

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268. There are many cases where businesses make decisions in the normal course of doing business that can have a more rule-like impact on the Internet than much of what happens in formal collective decision making bodies, whether public and private. While private sector collaborations to formalize collective rules can count as governance, private ‘international regimes’ are often not the most important sources of collective international order generated by business. Concentrated market structures can allow powerful firms to in effect set proprietary rules that can significantly shape the security of networked systems, the privacy of users or the conduct of e-commerce. Some consider that decisions of Tier 1 backbone providers regarding operating agreements and interconnection prices fall into this category, however others do not, pointing to recent OECD research which indicates that there is a competitive market amongst Tier 1 providers.

G. Civil society involvement in global governance arrangements

269. Civil society in the context of governance is both a traditional concept and a new concept. While direct participation by citizens in politics dates back to the roots of civilization, civil society as a concept, indicating direct participation by active individuals and groups to promote non-commercial, general policy interests and broad social changes, has only been formally recognized in recent years.

270. While there is no unanimously agreed definition of civil society a working definition, which draws on several United Nations documents, includes:

“Organizations – including movements, networks and other entities – which are autonomous from the State, are not intergovernmental or do not represent the private sector, and which in principle, are non-profit-making, act locally, nationally and internationally, in defense and promotion of social, economic and cultural interests, defense of human rights, promotion of development objectives and for mutual benefit.”

271. In its applicable form to Internet governance it also includes the users of the Internet who are professionally affiliated with neither governments nor industry.

272. In the context of WSIS, civil society has been specifically defined for accreditation and by civil society itself during Prepcom II of the first phase. It is not merely a catch phrase for ‘all other’ as has been sometimes assumed. Rather as a grouping, civil society is distinguished from government and business by being organized in a bottom up fashion and by being not-for-profit.

273. When looking at civil society and the Internet, the origins can be found during the earliest days of the Internet when academic users and other dedicated individuals played a very strong part in the *ad hoc* governance of the Internet though their participation as the locations for the gateways and servers that provided both the core services of the networks making up the Internet and the applications that were developed for the networks. As use of the network expanded beyond the academy, Internet development engineers and users began to form themselves into various user and professional groups that also had a voice in governance.

274. Civil society organizations have played a role in extending connectivity to the global South and largely animated the take up and use of the Internet in many developing countries.

275. Activists from civil society were heavily involved in promoting low cost connectivity, particularly in developing countries in the late 1980s and early 1990s. This was done through

experimentation with Fidonet and UUCP hubs and gateways at Internet connected ISPs largely in the UK, Canada, Brazil, Australia, Nicaragua, the US and South Africa.

276. This work, supported by several Northern based organizations, including ISOC, supported the development of 60 to 80 Internet-UUCP/Fidonet hosts in the developing world. In many cases these small hosts were the first in their country to offer e-mail services, and sometimes news, to NGOs, academics, international organizations, and individuals. These early efforts created the first wave of Internet users in the countries involved. These early Internet communities were also responsible for generating local content adding diversity to content on the Internet, which at the time was largely US sourced.

277. These network connections enabled civil society communities in many countries to use the Internet for a multitude of purposes and essentially, created a bottom-up demand for Internet connectivity.

278. While the current infrastructure of the network has been mostly deployed by governments and private operators, many of the applications and protocols, as well as bottom-up governance structures (not just the IETF, but also software project communities, Usenet moderation teams, anti-spam cooperative networks, etc.), social practices and attitudes, have been created by grassroots collaborative efforts, often supported by the free development model. The ability of users to innovate and change the future of the Internet is one of its great differences from previous telecommunication systems, and has been one of the fundamental conditions for its extraordinary growth and success.

279. Traditionally, citizens engaged in policy processes would aggregate around non-profit, non-governmental civil society organizations. These entities have a long track of participation in UN processes and are included in the current makeup of civil society. As the Internet became available to the general public, however, the Internet became a powerful enabler for grassroots activism, and has increased the ways in which civil society operates and organizes itself. Groups, some of them NGOs, began to form around specific issues or concerns for the Internet. Additionally, many new forms of political aggregation were created, such as website campaigns, e-mail mailing lists, issue based coalitions and online petitions.

280. Today there are many civil society organizations, with concerns ranging from address resolution to international development, from civil liberties to intellectual property concerns such as patents, copyright and trademarks, from press freedom to women's and minorities' rights. There are also numerous NGOs and other groups concerned with regional and cross-cultural issues. Currently civil society comprises all of these organizations, groupings and individuals, including *inter alia*, NGOs, academics, independent researchers, professional organizations and other affiliations that concern themselves with the topics included under the broadest definitions of Internet governance.

281. Civil society is in a constant and ongoing state of self-organization. Several organizational mechanisms have been developed during the WSIS processes that are expected to continue to mature through 2005 and beyond.

H. A way forward

282. It is apparent that there is a wide range of organizations, types and scope of issues, and governance mechanisms available for dealing with these. While there is room for improvement on all sides in endeavoring to meet the WSIS criteria, there is also room for a number of approaches and structures so that coordination of different issues may be approached in a variety of ways.

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283. The WSIS criteria themselves may well be regarded as having different shades of meaning in different contexts. For example, it is obviously not the case that “full involvement of all” must mean that everybody should have the same role in the development of policies, the preparation of decisions, the actual decisions and then the implementation of decisions.

284. At the same time, the globalization of society and the delocalization of economy have already caused a significant shift in the actual attribution of powers. At times, decisions taken by a private company in one part of the world determine important consequences to people in another part of the world. Sovereignty, in this case, may be an ineffective tool for the affected stakeholders to influence such decisions. The Internet is an environment where these phenomena are very advanced; moreover, on issues that cannot be addressed on a national scale, its distributed and borderless nature makes it almost impossible to enforce policies that are not globally coherent and broadly supported by the industry and by the final users. These are some of the reasons that brought forward the need to discuss the effective involvement of all stakeholders in the determination of new policies. While not questioning the need for involvement of all stakeholders, others believe that the traditional national sovereignty model, and traditional intergovernmental cooperation, should continue to be used to determine policies at both national and international levels, and do not necessarily agree that national policies should not or cannot be enforced with respect to the Internet.

285. Some have argued that on the global level we have to go beyond thinking in terms of national sovereignty. They believe that although national sovereignty will remain a key principle of international law in the 21st century, it would have to be interpreted in a new and broader environment, which includes players with different legal status. Others are of the view that national sovereignty and international law must remain the keystone of any international governance system. Some developing country governments feel that their best option for participating in global decision making processes on an equal footing with the rest of the world remains at the intergovernmental level. They point out that their industrial base is too weak and their civil society structures not advanced enough to allow their stakeholders’ voices to be heard in global policy making fora. However, some people from developing countries hold the view that multi-stakeholderism should be the keystone for future international governance systems, since it is the civil society and the private sector from many of those countries that engage in international forums where their governments remain absent or are not fully engaged. Most multi-stakeholder organizations are prepared, at least to some extent, to involve governments as they become knowledgeable and engaged.

286. This emerging new ‘tri-stakeholderism’ involving governments, the private sector and civil society, would suggest the need for a new conceptual framework which is on the one hand embedded in the existing system of international law, but on the other hand goes beyond this, bringing other type of norms (for example, ‘soft law’, self-regulation) to global governance concepts. Generally, non-government stakeholders recognize that governments have the prerogative of decision making for public policy, but increasingly expect to be fully involved in the process of decision shaping at national, regional and international levels. There is however some reason for concern about the lack of participation of private sector and civil society representatives from developing countries. Some concerted capacity building efforts would seem necessary to allow for their meaningful and effective participation in trilateral global governance arrangements.

ANNEX

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GLOSSARY

AfrINIC	: African Network Information Centre: the registry for Internet number resources for the African region
AfrISPA	: African ISP Association
AFTLD	: African Top-Level Domain Association
ALAC	: At-Large Advisory Committee (to ICANN)
APEC	: Asia-Pacific Economic Cooperation
APEC ECSG	: APEC Electronic Commerce Steering Group
APEC TEL	: APEC Telecommunication and Information Working Group
APNIC	: Asia Pacific Network Information Centre: the registry for Internet number resources for the Asia Pacific region
APTLD	: Asia Pacific Top-Level Domain Association
ARIN	: American Registry for Internet Numbers
ASCII	: American Standard Code for Information Interchange; seven-bit encoding of the Roman alphabet
ASEAN	: Association of Southeast Asian Nations
ASO	: Address Supporting Organization (of ICANN)
B2B	: Business-to-business (in relation to e-commerce)
B2C	: Business-to-consumer (in relation to e-commerce)
BSA	: Business Software Alliance
ccNSO	: Country Code Names Supporting Organization (of ICANN)
ccTLD	: Country code top-level domain, such as .uk (United Kingdom), .de (Germany) or .jp (Japan)
CENTR	: Council of European National Top-Level Domain Registries
CERT	: Computer Emergency Response Team
CITEL	: Inter-American Telecommunication Commission
CNSA	: Contact Network of Spam Enforcement Authorities
CTO	: Commonwealth Telecommunications Organization

Cyber-squatting	: The practice of registering and claiming rights over Internet domain names over which someone else may have a more legitimate claim.
DNS	: Domain name system: translates domain names into IP addresses
DNSSEC	: Domain Name System (DNS) Security Extensions
DoC	: Department of Commerce (of the United States Government)
DOT Force	: Digital Opportunity Task Force
ENISA	: European Network and Information Security Agency
ETSI	: European Technical Standards Institute
EULA	: End user license agreements
FIRST	: Forum of Incident Response and Security Teams
FLOSS	: Free/Libre and Open Source Software
GAC	: Governmental Advisory Committee (to ICANN)
GATS	: General Agreement on Trade in Services
GBDe	: Global Business Dialogue on E-Commerce
GNSO	: Generic Names Supporting Organization (of ICANN)
GNU/LINUX	: GNU is Not UNIX / Linux is a free Unix-type operating system originally created by Linus Torvalds with the assistance of developers around the world.
gTLD	: Generic top-level domain (such as .com, .int, .net, .org, .info)
IAB	: Internet Architecture Board
IANA	: Internet Assigned Numbers Authority
ICANN	: Internet Corporation for Assigned Names and Numbers
ICC	: International Chamber of Commerce
ICPEN	: International Consumer Protection and Enforcement Network
ICT	: Information and communication technology
ICT4D	: Information and communication technology for development
IDN	: Internationalized domain names: web addresses using a non- ASCII character set
IEC	: International Electrotechnical Commission
IEEE	: Institute of Electrical and Electronics Engineers

IETF	: Internet Engineering Task Force
IGO	: Intergovernmental organizations
INET 2004	: INET is an annual conference held by ISOC. In 2004, it took place in Barcelona, Spain, May 10-14, on the theme: “Strengthening the Net: Building an Open and Trusted Internet”.
INTA	: International Trademark Association
Interpol	: Interpol is the largest international police organization in the world with 182 member countries
IP	Internet Protocol
IP Address	: Internet Protocol address: A unique identifier corresponding to each computer or device on an IP network. Currently there are two types of IP addresses in active use: IP version 4 (IPv4) and IP version 6 (IPv6). IPv4 (which uses 32 bit numbers) has been used since 1983 and is still the most commonly used version. Deployment of the IPv6 protocol began in 1999. IPv6 addresses are 128-bit numbers.
IPR	: Intellectual property right
IPv4	: Internet Protocol version 4
IPv6	: Internet Protocol version 6
ISO	: International Organization for Standardization
ISOC	: The Internet Society
ISP	: Internet service provider
ITC	: International Trade Centre
ITR	: International Telecommunication Regulations
ITU	: International Telecommunication Union
IWGDPT	: International Working Group on Data Protection in Telecommunications
IXP	: Internet exchange point
LACNIC	: Latin American and Caribbean Internet Addresses Registry
LACTLD	: Latin American and Caribbean Top-Level Domain Association
LAP	: London Action Plan
MDG	: United Nations Millennium Development Goals
MINC	: Multilingual Internet Names Consortium
MoU	: Memorandum of understanding, referring to the agreement between the US DoC and ICANN
NANOG	: North American Network Operators’ Group

NAP	: Network access point
NATLD	: North America Top-Level Domain Organization
NGN	: Next generation network
NGO	: Non-governmental organization
NIC	: Network information centre
NIR	: National Internet registry
OAS	: Organization of American States
OECD	: Organisation for Economic Cooperation and Development
ORDIG	: Open Regional Dialogue on Internet Governance, an initiative launched by the UNDP's Asia-Pacific Development Information Programme (APDIP) to strengthen the voice of stakeholders from that region in Internet governance and make ICT policy making responsive to development priorities.
Phishing	: The act of using the Internet, usually through a website, to fraudulently attempt to obtain sensitive personal information such as passwords, personal identification numbers (PINs) etc. (Also known as 'spoofing'.)
PKI	: Public key infrastructure
PPP	: Private-public partnership
PRSP	: Poverty Reduction Strategy Papers
Registrar	: A body approved ('accredited') by a registry to sell/register domain names on its behalf.
Registry	: A registry is a company or organization that maintains a centralized registry database for the TLDs or for IP address blocks (e.g. the RIRs – Regional Internet registries). Some registries operate without registrars at all and some operate with registrars but also allow direct registrations via the registry.
Regulatel	: Latin-American Forum of Telecommunication Regulators
RIR	: Regional Internet registry. These non-profit organizations are responsible for distributing IP addresses on a regional level to ISPs and local registries .
Root servers	: Servers that contain pointers to the authoritative name servers for all TLDs . In addition to the 'original' 13 root servers carrying the IANA managed root zone file , there are now a large number of Anycast servers that provide identical information and which have been deployed worldwide by some of the original 12 operators.
Root zone file	: Master file containing pointers to name servers for all TLDs
SIS	: Small island states
SMEs	: Small and medium sized enterprises

sTLD	: Sponsored TLD
TCP/IP	: Transport Control Protocol/Internet Protocol
TLD	: Top-level domain, e.g, generic TLD such as .com, or country code TLD such as .nz.
TRIPS	: Trade-Related Aspects of Intellectual Property Rights
UDPR	: Universal domain name dispute resolution policy. It was initially developed by WIPO and implemented by ICANN as the key dispute resolution procedure for domain names.
UN/CEFACT	: United Nations Centre for Trade Facilitation and Electronic Business
UNCITRAL	: United Nations Commission on International Trade-Related Law
UNCTAD	: United Nations Conference on Trade and Development
UNDP	: United Nations Development Programme
UNESCAP	: United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	: United Nations Educational, Scientific and Cultural Organization
Unicode	: Unicode is intended to provide a unique number for every character, independent of computing platform, program, or language
UN ICT Task Force	: United Nations Information and Communication Technologies Task Force
UNIDROIT	: International Institute for the Unification of Private Law
UUCP	: Unix-to-Unix copy protocol
VoIP	: Voice over IP
W3C	: World Wide Web Consortium
W3C WAI	W3C Web Accessibility Initiative
WATTC	: World Administrative Telephone and Telegraph Conference
WCIT	: World Conference on International Telecommunication
WGIG	: Working Group on Internet Governance
WHOIS	: WHOIS is a transaction-oriented query/response protocol that is widely used to provide information services to Internet users. While originally used by most (but not all) TLD Registry operators to provide ‘white pages’ services and information about registered domain names, current deployments cover a much broader range of information services, including RIR WHOIS look-ups for IP address allocation information.
WiMax	: Broadband wireless access technology
WIPO	: World Intellectual Property Organization

- WITSA** : World Information Technology Services Alliance
- WSIS** : World Summit on the Information Society.
- WTO** : World Trade Organization
- WTPF** : World Telecommunication Policy Forum