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Telematics and Informatics 19 (2002) 159–171

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TELEMATICS  
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INFORMATICS

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# ICANN – EU can't: Internet governance and Europe's role in the formation of the Internet Corporation for Assigned Names and Numbers (ICANN) <sup>☆</sup>

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## Abstract

This paper analyzes the policy process that led to the formation of the Internet Corporation for Assigned Names and Numbers (ICANN), focusing on the actions of the European Commission. The analysis of the relevant documents shows the difference between the regulatory ideas in the US and the EU. The European Commission would have preferred an institutional framework with a prominent role for public actors, but had to accept the preference of the US Government, which directed the institutionalization of a private regime for the management of Internet addresses and names. Nevertheless, the Commission managed to establish itself as a major player in the emerging field of Internet governance. © 2002 Elsevier Science Ltd. All rights reserved.

*Keywords:* Internet Corporation for Assigned Names and Numbers; Internet regulation; European Union; United States

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## Article by an MPIfG researcher

Volker Leib: ICANN - EU Can't: Internet Governance and Europe's Role in the Formation of the Internet Corporation for Assigned Names and Numbers (ICANN). In: Telematics and Informatics 19(2), 159-171 (2002). Elsevier

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<sup>☆</sup> A previous version of this paper was presented at the conference "Regulating the Internet: EU and US Perspectives" at the University of Washington, Seattle, USA, 27–29 April, 2000. I wish to thank the organizers and the participants of the conference as well as Raymund Werle for useful comments.

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PII: S0736-5853(01)00011-9

## **1. Introduction**

Internet governance, in the sense of management of Internet addresses and domain names, was not a political issue in Europe until the US Government initiated and moderated the formation of the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN became the core of a set of non-governmental organizations, which ensure the interoperability of the Internet. Global networks require a minimum of universally accepted technological and political standards. Despite the threat that the Internet poses to territorially based legal systems, the decentralized nature of this network of seamlessly interconnected networks does allow the coexistence of diverse regulations. However, the few central institutions necessary to ensure interoperability of the Internet must form a unified whole.

The policy process to build ICANN illustrates how different regulatory traditions in the US and in Europe may clash at the global level. At the two opposite poles of this process were state regulation and market coordination. Although none of the players advocated an extreme position, the differences were significant. The US Government pushed for a market-oriented solution and private sector self-regulation of the Internet, whereas the EU favored a mixed public–private regime with a well-established role for state authorities. Furthermore, fearing a kind of Pax Americana in Cyberspace, the EU proposed a multilateral international framework for the transformation of the Internet’s governance structure. Although, in the end, the EU had to accept the American leadership in the process, and the establishment of a private regime, it was still able to achieve the inclusion of public actors in the new organization, as well as an adequate representation of Europeans in its relevant bodies. One point remains at issue: the authority over the most important computer on the Internet – the A root server – is still held by the US Government, a situation the EU is not willing to tolerate in the long run. The formation of ICANN triggered a more active role of the EU in Internet governance. Arguably, the European Commission’s most important step so far has been the application for the new top-level domain .EU.

The following sections of this paper analyze Europe’s role in the process that led to the incorporation of ICANN. Section 2 explores the conditions under which the Internet developed in Europe. Section 3 introduces the term “Internet governance” and leads to the starting point of Internet privatization. Section 4 analyzes the US Government’s Green Paper and White Paper, and Europe’s responses to them. Section 5 offers a short characterization of how the output of the whole policy process materialized in ICANN’s organizational structure. Section 6 draws the conclusion, and discusses Europe’s role in the formation of ICANN and the emerging field of Internet policy. The building of ICANN presents a distinct piece of transatlantic relations. Although it would be incorrect to generalize from this case, it can certainly be viewed against the background of discussions about new forms of governance. Despite the advance of liberalization and privatization in Europe, the

long-standing continental state tradition favors “governance with government” over private sector self-regulation.

## 2. The development of the Internet in Europe

Until the second half of the 1990s, the Internet was almost an irrelevant issue in the plans of the European Union. At that time, the EU’s priorities were multimedia and the information society and the Internet was an alien element that did not fit in its programs (Werle, 2000). To be sure, the influential report of the High-Level Group on the Information Society (known as the “Bangemann report”) conceded that the Internet could not be ignored, but it only suggested an active European role in the “development of interlinkages” (Bangemann, 1994). In contrast, the report of the American National Information Infrastructure initiative recognized “the richly enabling nature of the Internet” (Kahin, 1997, p. 158), although the Internet is mentioned explicitly only once in the whole document (IITF, 1993).

The comparison of the various political approaches to the information revolution helps to elucidate the difference between US and EU regulatory ideas (Schneider, 1997; Grewlich, 1999). Information policy in Europe has comprised manifold arenas. First of all, the European Commission struggled with the Member States and their national Post, Telephone and Telegraph Administrations (PTTs) for a truly European network. The EU Trans-European Networks (TEN) program tried to overcome the state of the national telecommunication networks, which were interconnected under the terms of the national PTTs. At the technological level, the TEN program was based on Integrated Services Digital Network (ISDN) and, for future broadband services, on Asynchronous Transfer Mode (ATM) (European Commission, 1994; Turner, 1997). In the arena of data networking standardization, the Commission and the Member States pulled together and promoted the open systems interconnection (OSI) protocols of the International Standardization Organization (ISO). The European commitment to open, non-proprietary standards was not only aimed at competitive markets, but also part of an industrial policy to avoid IBM dominance in the data networking market. The developers and users of research computer networks in Europe had to cope both with the OSI policy and the national PTT monopolies (Birkenbihl, 1994). Despite large amounts of money and resources dedicated to OSI, the use of the Internet and its standard Transmission Control Protocol/Internet Protocol (TCP/IP) in Europe grew steadily and gained momentum, especially with the diffusion of the World Wide Web. In the second half of the 1990s, policy makers in Europe could no longer dismiss the Internet, and the effort to catch up with the US began. At the same time, the discussions about regulation of the Internet began. The upcoming trademark conflicts signified the importance of domain names, and opened up the arena of Internet governance.

### **3. Internet governance: The politicization of technical coordination of the Internet**

There is no generally accepted definition of the term “Internet governance”. In this article, Internet governance refers to the management of IP addresses and domain names. To a large extent, this is nothing else besides technical coordination to ensure interoperability, but technical coordination involves control over resources and standards, and therefore it has political implications. Although the Internet is decentralized by nature, the following functions require central coordination:

- Standardization of communication protocols and technical parameters.
- Assignment of numerical Internet addresses, which must be unique.
- Registration of domain names (registrar function).
- Maintenance of name servers to translate domain names into numerical addresses (registry function).
- Maintenance of central servers to find the proper name server (Root Server System).

As long as the Internet was a research network, these functions were performed in an informal manner by self-organization of the academic sector, although supported by government agencies. But with the commercialization of the Internet, two issues have become highly politicized: the addition of new top-level domains to the root, and the implementation of dispute resolution procedures to solve domain name conflicts.

In the first half of the 1990s, the Internet started to develop from a research computer network into a universal infrastructure used for commercial, political and individual purposes. Since the operation of the network had become commercially viable, the US Government withdrew its support of different Internet functions. First, in 1995, the backbone of the National Science Foundation’s NSFNET was privatized and commercialized. Second, the US Government announced the termination of the agreements between government agencies and the institutions that administered IP addresses and domain names. This measure involved the contract between the Department of Defense and the Information Sciences Institute at the University of Southern California (USC ISI) for performing the IANA function (Internet Assigned Numbers Authority), as well as the cooperative agreements between the National Science Foundation and Network Solutions for registering names in the generic top-level domains (.com, .net and .org) and for maintaining name and root servers.

The Domain Name System provided the door through which politics entered the technical coordination of the Internet. The importance of domain names for e-commerce, trademark issues and cybersquatting, as well as the monopoly of Network Solutions, brought in politicians and lawyers. At this point the European Commission, which had resisted the Internet for quite a long time, also entered the process.

The first major plan to reorganize the management of Internet addresses and names was initiated by the Internet community itself. In 1996, the Internet Society

and the Internet Assigned Numbers Authority set up the Internet International Ad Hoc Committee (IAHC), which brought together the Internet community and renowned intergovernmental organizations, namely the International Telecommunication Union (ITU) and the World Intellectual Property Organization (WIPO) (Werle and Leib, 1999). In addition, the IAHC included observers of the Federal Networking Council and the European Commission. The IAHC proposed a private competitive system of DNS management backed by the ITU, without any formal role for national governments. The new system was laid down in the generic Top Level Domain Memorandum of Understanding (gTLD-MoU), and the ITU Secretary-General acted as its depository. The European Commission requested revisions but, overall, it was content with the IAHC plan, since a considerable number of registrar companies were European. However, the IAHC plan was not realized; it was stopped by the US Government, which took over and launched a new approach to reorganize the Internet's governance structure. In July 1997, the responsibilities of the National Science Foundation were transferred to the Department of Commerce's National Telecommunications and Information Administration (NTIA) and, since then, the NTIA has led the transformation process.<sup>1</sup> As a first step, the NTIA issued a Request for Comments (RFC) seeking input from various sources, such as experts, firms and governments. But the request also clearly laid out the position of the US Government: "The Government supports continued private sector leadership for the Internet and believes that the transition to private sector control should continue" (NTIA, 1997). NTIA's RFC consisted of a catalogue of questions, among others the following one concerning the role of public actors: "What is the proper role of national or international governmental/non-governmental organizations, if any, in national and international domain name registration systems?". The NTIA received about 400 answers, including one from the European Commission.<sup>2</sup>

In its response to the RFC, the Commission expressed deep concerns that the European private sector was inadequately represented in the self-governing mechanisms of the Internet, and that the US Government's perception of the Internet was too US-centered. The Commission's response reiterated nearly word for word the position laid down in the Bonn Ministerial Declaration:<sup>3</sup>

The Commission supports the principle of an internationally recognized and transparent system of management of the Domain Name System. We consider it imperative to ensure adequate European representation in this system (European Commission, 1997).

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<sup>1</sup> The whole process of transforming the management of Internet names and addresses is covered on the NTIA's Web pages at <<http://www.ntia.doc.gov/ntiahome/domainname/domainhome.htm>>.

<sup>2</sup> For an analysis of the comments to the RFC, see Mathiason and Kuhlman (1998).

<sup>3</sup> European Ministerial Conference on Global Information Networks (Bonn, Germany, 6–8 July, 1997). <[http://www.ispo.cec.be/bonn/Min\\_declaration/i\\_finalen.html](http://www.ispo.cec.be/bonn/Min_declaration/i_finalen.html)> [Point no. 12].

The Commission emphasized the importance of the ITU and WIPO in establishing the legal basis of the new system, but it was forced to admit its lack of detailed knowledge about how the Domain Name System and the Root Server System worked. The EU had to learn about the Internet, and it did so. The politicization of Internet naming and addressing had just begun.

#### **4. Europe's responses to the Green Paper and the White Paper**

On January 30, 1998, the US Department of Commerce's National Telecommunications and Information Administration (NTIA) published "Improvement of Technical Management of Internet Names and Addresses", which became known as the "Green Paper". The Green Paper highlighted the need for change, and listed four principles the new system should provide (NTIA, 1998a):

- stability,
- competition,
- private, bottom-up coordination,
- representation.

The document distinguished between coordinated and competitive functions. It proposed that the coordinated functions be carried out by a private, non-profit corporation, incorporated under US law, and located in the US. The board of directors of the new organization was to represent the Internet community and to include people from around the world. It was explicitly stated that no officials of governments or intergovernmental organizations should serve on the board. Private sector coordination was preferred because of its greater flexibility and speed.

The competitive functions included the registrar and the registry functions. Concerning the registrar function, there was consensus that the registration of domain names should be market-driven. However, it was unclear whether the registry function (the more critical business of maintaining the domain name database) could work in a competitive environment. The Green Paper called for experimentation with competing registries, and new top-level domains were to be created for that purpose. The planned new system of domain name administration also required the registries to install dispute resolution procedures to protect trademark holders. In sum, the Green Paper set out a highly competitive system with minimal central coordination, based on private sector self-regulation.

The Green Paper can be characterized as the declaration of privatization of the Internet's Domain Name System. However, it completely bypassed the IAHC process and the gTLD-MoU, which irritated some of the European observers, and led to the speculation that the actual goal of the process initiated by the US Government was to keep the Internet under American control.

Officials of the European Commission became very busy at this time. In February 1998, the European Commission published two communications alerting the

Member States, and inviting the US Government to jointly work on a comprehensive public multilateral base for global electronic commerce. The first document, “Globalisation and the Information Society”, stressed the “need for strengthened international coordination” and an “international enabling framework” to foster electronic commerce (European Commission, 1998a). The guiding principle here was that the legal framework of the offline world should be applied to the online world. At the international level, the work of existing international organizations should be recognized and lead to a set of consistent rules. The Commission proposed an International Charter for the global electronic marketplace that would provide for a “method of coordination in which public and private sector interests are adequately represented” (European Commission, 1998a).

The second document, titled “International policy issues related to Internet governance”, showed that the Commission had, somewhat reluctantly, embraced the Internet. Its first sentence represented an opening of European policy to Internet governance: “The Internet is rapidly becoming the principal infrastructure for electronic communications of all kinds. . .” (European Commission, 1998b). The critical points listed in this communication formed the base for the EU’s official response to the Green Paper.

The EU’s reply expressed deep concerns about the process and the content of the Green paper (European Community, 1998; see also Grewlich, 1999, pp. 204–208).<sup>4</sup> First of all, the EU stated that the Green Paper neglected the “Joint EU–US Statement on Electronic Commerce”<sup>5</sup> of December 1997, which called for an international approach and adequate representation of Internet stakeholders from around the world. The EU stressed its “responsibility to ensure that communication networks are inter-operable and are developed in a way to promote economic and social cohesion and economic competitiveness”. It worried that the Green Paper process could establish “permanent US jurisdiction over the Internet as a whole, including dispute resolution and trademarks used on the Internet” (European Community, 1998). The EU demanded that a balance of interest and responsibilities should be reached, “so that the international character of the Internet is recognized with respect to the relevant jurisdictions around the world”. The EU’s reply to the Green Paper prescribed several principles for Internet governance, among them the equitable international private sector participation (including the representation of consumer and user interests), and the representation and participation of relevant international organizations.

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<sup>4</sup> The reply was received by the Department of Commerce on 20 March 1998. It was accompanied by several meetings of EU officials with US Government agencies. See <[http://www.ntia.doc.gov/ntiahome/domainname/130dfmail/03\\_20\\_98.htm](http://www.ntia.doc.gov/ntiahome/domainname/130dfmail/03_20_98.htm)> and <<http://www.ntia.doc.gov/ntiahome/domainname/130dfmail/Verrue.htm>>.

<sup>5</sup> Available online: <<http://www.qlinks.net/comdocs/eu-us.htm>>.

The EU concluded:

We recommend that the US Administration limits its direct regulatory intervention in the Internet only to those relationships which fall clearly under existing contracts between the Agencies of the US Government and their contractors and that all other decisions be referred to an appropriate internationally constituted and representative body (European Community, 1998).

Europe's reply confirmed that several aspects of the Green Paper needed "thorough bilateral and multilateral consideration". Overall, the EU heavily criticized the lack of international participation and the exclusion of intergovernmental bodies, but did not completely disagree with the US model of private sector self-regulation. In addition to producing official documents, the European Commission sought bilateral contacts with the US administration and established a kind of "Internet governance diplomacy".

The NTIA received more than 600 comments on the Green Paper. It became apparent that building a new regime for the management of the Domain Name system was not an easy task. Moreover, it was evident that the level of global diffusion the Internet had reached made it inappropriate for the US Government to go at it alone. Nevertheless, no national government from Europe had replied to the Green Paper (the Japanese and Australian governments were the only ones that did so). The criticisms of the Green Paper pushed the process ahead and led to the "White Paper", issued in June 1998. Different positions were taken, and the US Government kept things firmly in hand.

The White Paper summarized the comments on the Green Paper, added the US Government's responses and a revised policy statement. It was, in many respects, less concise than the Green Paper; it weighed the different positions, and it left numerous decisions to the "new corporation" (as the planned private not-for-profit organization was called). The principal subject of the White Paper was to go ahead with the foundation of the new organization. But at the same time that it highlighted the importance of a broadly representative board of directors and of mechanisms to ensure international participation, it showed that the US Government was determined to limit the role of governmental organizations to advisory functions:

While international organizations may provide specific expertise or act as advisors to the new corporation, the US continues to believe, as do most commenters, that neither national governments acting as sovereigns nor intergovernmental organizations acting as representatives of governments should participate in management of Internet names and addresses (NTIA, 1998b, p. 31 744).

In addition to the advisory function, public actors were given the opportunity to participate in DNS management as users of the Internet. The White Paper went



beyond the Green Paper by adding a second principle to the process: the privatization and the internationalization of the Internet's address and name system.

Despite continuous differences, the European Commission was satisfied with the White Paper and saw substantial changes in the US Government's policy. Informing the Member States about the White Paper, the Commission stated:

The US White Paper has the merit of recognising that an US-centric approach is increasingly outdated. Accordingly, there is now an opportunity for European and other international interests to take up the challenge to participate fully in the next phase of Internet development (European Commission, 1998c).

In particular, the Commission was now convinced that the US Government did not plan to extend US jurisdiction over the Internet at the expense of other jurisdictions, although the incorporation of the new organization under US law remained a worry to Europe. Despite the short time left before the scheduled establishment of the new corporation, the EU sounded optimistic about the ongoing process:

In keeping with the belief that a comprehensive multi-lateral process is required in this area, the European Union and the Member States together with the US and the other international partners concerned, including the appropriate international organisations, should participate in the process of setting up the future organisation, and contribute to defining its basic operating principles (European Commission, 1998c).

Although the Commission reiterated the need to include governmental bodies in the process, it accepted (or rather, it had to accept) that direct representation of public entities in the planned new corporation could not be achieved. Instead, the Commission picked up two opportunities offered by the White Paper in order to gain influence in the new governance structure. Firstly, the Commission drew attention to the significant role of public actors as users of the Internet:

The Commission and the Member States should recognise the growing importance of their roles as Internet users. Indeed, in the context of a private-sector self-regulatory organisation, the main official input from the public authorities to the long-term Internet management structures will be in their capacities as major users of the Internet and providers of information and services to the public (European Commission, 1998c).

Secondly, the Commission strongly supported the institutionalization of the advisory function of governmental actors.

## 5. The formation of ICANN

In the Fall of 1998, the process of forming the new corporation proceeded rapidly. In September of that year, the ICANN was legally incorporated and, two months later, it was recognized by the US Government.<sup>6</sup> Many details of what happened between the publication of the White Paper and the foundation of ICANN are still unclear. Several activities, such as the International Forum on the White Paper,<sup>7</sup> ran parallel to the US Government's action, but could not influence the process considerably. The reform of the Internet's governance structure had moved to high-level politics and behind closed doors.

The organizational structure of ICANN reflected the relative power positions of the major players in the process. First of all, the US Government insisted on establishing the new organization in the US, and, accordingly, ICANN was incorporated as a private not-for-profit corporation under California law. Nevertheless, the Europeans (and other participants from outside the US) prevailed in that ICANN's units were filled using principles of geographic diversity and international representation. In particular, the EU was content that three out of nine directors of the initial board came from Europe, one of them a former employee of the European Commission.

Moreover, ICANN's structure included the Governmental Advisory Committee (GAC) as a forum for public actors of all kinds – government officials, as well as representatives of intergovernmental organizations. The existence of the GAC indicates that the voices of those actors who spoke out against the purely private sector self-regulation of Internet addresses and names, especially the European Commission, were not completely ignored. But the GAC's limited competence also indicates that the US Government carried through the idea of private sector self-regulation of the Internet. Since its establishment, ICANN has formed the center of a predominantly private global regime of Internet governance whose evolution has not yet come to a close.

## 6. Conclusion

Following the credo of the US Government, the private sector leads in Internet governance. Clearly, the search for a new framework for the management of Internet addresses and names was motivated by the desire of the US Government to give up its support of the Internet's technical coordination. In other words, ICANN is the

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<sup>6</sup> Memorandum of Understanding between the US Department of Commerce and ICANN. <<http://www.icann.org/general/icann-mou-25nov98.htm>>.

<sup>7</sup> A coalition of Internet stakeholders' associations from around the globe. See <<http://www.ifwp.org>> and <<http://www.domainhandbook.com/ifwp.html>>.

product of government-induced self-regulation, rather than self-organized self-regulation. The American government guided the transition process, while the EU had to accept the role of a partner running behind. The European suggestion for a multilateral international framework did not materialize. But the EU and a few national governments were able to ensure that the bylaws of ICANN provide for international private sector representation.

The inclusion of the Governmental Advisory Committee in ICANN was the EU's most important accomplishment. However, how the interaction between private and public actors will develop is still an open question. The GAC might be a mere appendix of ICANN's governing board, but it might also be a Trojan horse hiding a future "Governmental Authority – not Advisory – Committee". Indeed, if every country in the world participated in ICANN, the GAC would be by far its largest unit. In practice, ICANN's Board of Directors has repeatedly stressed the mere advisory function of the committee, but it has followed the suggestions of the GAC so far.

In the end, there is no world-wide harmony in Internet governance. The disagreement about how to coordinate the global Internet fostered inherent tension between private and public in ICANN. The EU stated in early 2000 that "it is already the case that ICANN and the GAC are taking decisions of a kind that governments would, in other contexts, expect to take themselves in the framework of international organisations" (European Commission, 2000). In theory, the private, transnational administration of a global public good is not a problem, as long as the delegation of authority is well organized and widely accepted. However, this was not the case in Internet governance, because of the historical role the US Government has played in the development of the Internet. The "dormant authority" over the Root Servers claimed by the US government was (and at the end of 2000 still is) the most offensive point for the EU and its Member States. Therefore, European policy makers established the position that "genuine globalisation of Internet management" remained a task to work on. Once more, they have encouraged the International Telecommunication Union to "take an active part" in the international discussions and initiatives related to Internet governance (Council of the European Union, 2000).

The transformation of Internet management has an inner European dimension as well. The formation process of ICANN established the European Commission as a major player in the emerging Internet regime. Administrators at the Commission's Directorate General XIII have built up their knowledge about the technical coordination of the Internet, and have gained a lead over the Member States' administrations. The Commission has thus successfully taken control of the new Internet policy domain, a situation that can be compared to the expansion of the Commission's competence in the field of telecommunications in the 1980s (Schneider et al., 1994). In addition, the Commission established the EC PoP (European Community Panel of Participants) as an open forum, bringing together all European Internet stakeholders, including Internet service providers, registrars and registries, national governments and EU officials, as well as social scientists.

Last but not least, the Commission's vigor to set up the new top-level domain .EU has indicated a move to enact a more independent Internet policy in Europe. Being responsible for the TLD .EU would empower the Commission to determine the rules that registrants in this domain must comply with. At the end of 2000, the process to launch dot EU was well under way.

In a nutshell, after quite a long time of neglect, the European Union embraced the Internet and developed the ambitious eEurope action plan to catch up with the US.<sup>8</sup> At the international level, the European Commission influenced the transformation of Internet management and the formation of ICANN, but had to put up with the US Government's leadership. However, the Commission made the best out of this asymmetric situation. Recognizing that it cannot set policy at the highest level of Internet coordination, the Commission has sought a domain to govern independently and has applied for its own Internet top-level domain .EU. The common interest in the stability and the integrity of the Internet unites the EU and the US, but the quarrel about the institutional framework to ensure these goals remains. The European Community has accepted the quasi-governmental nature of the private, US-based ICANN as an exception fitting the Internet, but not as a new paradigm for international governance.

*Note:* All URLs cited in this article were accessed on October 30, 2000 and were found active. Most of the documents of the EU relating to Internet governance can be accessed alternatively via the new Internet Policies-Homepage at <<http://www.ispo.cec.be/eif/InternetPoliciesSite/InternetGovernance/Main.html>>.

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<sup>8</sup> The homepage of eEurope is at <[http://europa.eu.int/comm/information\\_society/europe/index\\_en.htm](http://europa.eu.int/comm/information_society/europe/index_en.htm)>.

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