

Internet Governance

Background to the Internet Governance Forum

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The Internet, which has connected over 20 per cent of the world's population¹ in under a decade, is considered by many to be the global infrastructure of the information society—the most vital piece of the economic, social and cultural foundation of our time. Much of our world now depends on the stability and security of this critical network. As the Internet continues to develop, evolve and grow, many technical decisions that will shape its future will also have public policy implications beyond those they would have had in the early days, when the Internet was still a project of the U.S. government's Advanced Research Projects Agency. These decisions concern everything from translating domain names (for example, <http://www.iisd.org>) into Internet protocol addresses (192.197.196.1, in IISD's case), to developing access pricing models in developing countries, to distributing knowledge through the network.

As a network of networks spanning the globe, the Internet links many groups of interconnected computers and devices located in many jurisdictions. Since it relies on a combination of public and private components, there is no single owner of the Internet as a whole and “nobody can turn it off.”² As it crosses borders, no single government or other type of entity has sole power over its functioning;³ however, the actions of governments, businesses and even individual users can, and do, have serious local and international implications on the availability and functionality of the network from a user's perspective. Of special concern for developing countries are high costs and uncertainties surrounding availability of access, frequently caused by a combination of underdeveloped infrastructure, the disproportionately large percentage of the costs of spam borne by these countries, lack of competition and inadequate governance. The differences in levels of access, referred to as the “digital divide,” contribute to linguistic and content divides, placing severe limitations on the opportunities the Internet offers for development.

Internet Stability in Zimbabwe

According to the Integrated Regional Information Networks (IRIN), the UN service for news and analysis about sub-Saharan Africa, the Middle East and Central Asia, government failure to pay a US\$700,000 bill to a satellite company brought Zimbabwe's Internet services to a virtual standstill in September 2006. IRIN directly linked the loss of service to further isolation of a country plagued by food shortages, persistent high unemployment rates and massive inflation.

Source: <http://www.irinnews.org/report.asp?ReportID=55630>

Without a doubt, the net effect of Internet technologies has been to increase the flow of knowledge and the ease of communication around the world. In part, this is due to the fact that the underlying technology on which the Internet rests does not require centralization of any of the network's functions, with the exception of the highest level database of Internet

¹ According to the CIA Handbook, and Worldwatch Institute's report “Vital Signs 2006–2007,” the Internet population reached 1.06 billion in 2005.

² See Carpenter, Brian. (ed.) “Request for Comments (RFC) 1958 – Architectural Principles of the Internet” (June 1996) at s. 2.4. Last accessed August 18, 2006. <http://www.ietf.org/rfc/rfc1958.txt>.

³ Mayer-Schoenberger, Viktor and Malte Ziewitz. “Jefferson Rebuffed: The United States and the Future of Internet Governance.” Faculty Research Working Paper Series, Harvard University, May 2006. p. 4.

addresses, the so-called “root.” The transmission control protocol, or TCP, widely used on the Internet, is the type of technical standard that makes centralization on the Internet unnecessary.. It does so by relying on the end-to-end principle, the concept that operations involved in communicating across the network should always occur on its ends, close to the source of the information.⁴ In other words, when users communicate with one another, the exchange of information can happen on either end, instead of at a point between them where activities controlling user behaviour, like interception and censorship, would be easier. Unfortunately, censorship at other layers of the system⁵ is not only possible, but also on the rise and well documented by groups such as the Open Net Initiative (<http://www.opennetinitiative.org>).

The potential of the Internet to serve as the primary infrastructure for mass and point-to-point communication has led some to underline the fact that many of the activities enabled by Internet technologies are in the

The multifunctional nature of the Internet, the lack of centralization of any of its functions and the uniquely wide importance of this communications medium mean that many different actors have a stake in Internet governance, and must be involved in its development and enforcement. This challenge is the driving force behind the Internet Governance Forum.

global public interest; however, the Internet itself consists of many privately owned elements; making the direct analogy to global commons, such as the deep sea bed, problematic. One of the major challenges of Internet governance is the reconciliation of the investments made by private sector, government, civil society and academic actors with the responsibility to effectively and fairly govern this increasingly critical facility for human social and economic activity.

Meaningful governance of the many functions of the Internet requires the recognition of their interdependence and of the various roles played by industry, governments, academia and civil society. The specific need to involve diverse groups of stakeholders has not emerged, at least not to the same extent as with previous information and communications technologies. In other words, the Internet requires a complex system of governance,⁶

⁴The end-to-end principles was first discussed in 1984 by Jerome H. Saltzer, David P. Reed and David D. Clark, in “End-To-End Arguments in System Design.” ACM Transactions on Computer Systems. Vol. 2 No. 4, November 1984, 277–288. he article is still useful for understanding the principle and its implications on the Internet.

⁵The various ‘layers’ are described in Yochai Benkler’s theory of communication. In The Future of Ideas, Lawrence Lessig gives a useful short summary of this elaborate theory:

At the bottom is a "physical" layer, across which communication travels. This is the computer, or wires, that link computers on the Internet. In the middle is a "logical" or "code" layer—the code that makes the hardware run. Here we might include the protocols that define the Internet and the software upon which those protocols run. At the top is a "content" layer—the actual stuff that gets said or transmitted across these wires. Here we include digital images, texts, on-line movies, and the like.

⁶For a discussion of different visions on whether the Internet needs governance and what specific areas of Internet regulation need governance, see MacLean, Don M. “Herding Schrödinger’s Cats: Some Conceptual Tools for Thinking about Internet Governance: Background Paper for the ITU Workshop on Internet Governance.” Geneva, February 26–27, 2004.

<http://www.itu.int/osg/spu/forum/intgov04/contributions/itu-workshop-feb-04-internet-governance-background.pdf>

perhaps more complex than any other international governance method currently available. This challenge was articulated at the World Summit on the Information Society (WSIS). The final WSIS meeting in November of 2005 in Tunis saw the creation of the Internet Governance Forum (IGF), a “multistakeholder” space aimed at crossing what Akash Kapur calls gaps in culture and vocabulary of the various stakeholders (business, civil society, academia and the technical community)—and therefore in underlying priorities and goals—among sectors.⁷ The IGF is not envisioned as a decision-making body, but the dialogue it enables may well affect any of the issue areas involved. Its inaugural meeting, held in Athens in the fall of 2006, made some promising steps toward a constructive global discourse on Internet governance. Continuing on that path, and adequately integrating the concerns of the five billion people without access, are just two of many complex challenges facing the Forum.

⁷ Kapur, Akash. *Internet Governance: A Primer*. Elsevier: UNDP-APDIP, 2005. p. 30.

<http://www.apdip.net/publications/iespprimers/igovprimer.pdf>