The Internet Governance Ecosystem

OVER THE PAST decade, the Internet and its governance has become the topic of major discussion, debate, and controversy. In infancy, the Internet was a research project sponsored by the U.S. Department of Defense's Advanced Research Projects Agency. It expanded with the participation of the U.S. Department of Energy, NASA and, especially, with the NSF's involvement.

In the mid-1980s, U.S. government Internet research policy rested with the Federal Research Internet Coordinating Committee, which later evolved into the Federal Networking Council, forming a part of the Federal Coordinating Council for Science, Engineering and Technology, which later re-formed into the National Science and Technology Council (NSTC). Within NSTC is the Committee on Technology that has a National Information Technology Research and Development subcommittee managed by the National Coordination Office. A related presidential advisory committee called the President's Information Technology Advisory Committee was formed during the Clinton administration and was later folded into the President's Committee of Advisors on Science and Technology.^a

Many of the R&D and operational functions associated with Internet networks originated as research contracts with U.S. agencies and other governments worldwide. Over time, the various agencies have shed responsibilities for public Internet policy in favor of academic or private-sector organizations, which emerged or were created to fulfill particular functions. The Internet Activities Board was formed in the U.S. to oversee the research leading to the Internet's technical evolution. It became the Internet Architecture Board (IAB) as the Internet Society was created to provide an institutional home and financial support for the IAB and the Internet Engineering and Research Task Forces (IETF and IRTF). Regional Internet Reg-

istries (RIRs) were created to help manage the IP address space: the African Network Information Center, the Asia/Pacific Network Information Center, the American Registry of Internet Numbers, the Latin American and Caribbean Network Information Center, and the Réseaux IP Européens—Network Coordination Center.

In 2003, the World Summit on the Information Society (WSIS) was convened in Geneva. While it was not quite clear what an information society was, many pointed to the Internet as a prototype for its infrastructure. The question then became who was in charge of the Internet; the assembled diplomats had trouble accepting the idea it was highly collaborative and decentralized. They soon focused on the Internet Corporation for Assigned Names and Numbers (ICANN)—created by a White House initiative as a private-sector entity responsible for administering key parts of the Internet's unique space.

Incorporated within ICANN was the Internet Assigned Numbers Authority (IANA) that had been the responsibility of ARPANET/Internet pioneer Jonathan B. Postel^b for years. IANA managed the top-level allocation of Internet address space to RIRs, the so-called root zone of top-level domains of the Domain Name System (DNS), and the registration of key parameters of the Internet protocols specified by the IETF.

The WSIS convened a Working Group on Internet Governance to develop a definition of Internet governance; identify public policy issues; and develop a common understanding of the roles of governments, existing international organizations, and other forums as well as the private sector and civil society from developing and developed countries.

Internet governance was still a focal point at the second WSIS meeting in 2005, where the Internet Governance Forum (IGF) was created for multistakeholders to elaborate further. The first IGF meeting took place in 2006 and the group continues to meet annually.

Today there are multiple efforts to understand the players, roles, and responsibilities manifested in the widespread implementation and operation of the Internet. ICANN President Fadi Chehadé set up four strategic advisory panels to address Identifier Technology Innovation, Multistakeholder Innovation, a Public Responsibility Framework, and ICANN's Role in the Internet Governance Ecosystem. Chehadé also convened a high-level panel to develop principles for Internet governance. Later this month, Netmundial will convene in São Paulo, Brazil.^c The World Economic Forum, together with the U.K.'s Chatham House and Canada's Centre for International Governance, announced a two-year investigation into the way governments use data, including data found on the Internet, for surveillance purposes. Finally, the ITU will convene its quadrennial meeting later this year in South Korea.

The ICANN panel observed that the Internet's ecosystem is vast, diverse, evolving, and dynamic. It recognized that there exists a web of relationships exist among the ecosystem's many players and it would be most valuable to document these relationships. Moreover, it recommended the parties in these relationships consider forming Affirmations of Commitments (AOCs) to recognize one another's responsibilities and make mutual commitments to reinforce them. The panel also urged that means be established to resolve disagreements between the AOC parties. The resulting Web of Commitments would provide an adaptable and evolvable framework for Internet governance. It remains to be seen whether such a vision can be realized but it is fair to say the multistakeholder, cooperative, and collaborative nature of the Internet's development has been a major source of its resilience and its ability to absorb new applications and players since its conception 40 years ago and should form the basis for its future evolution.

c <http://netmundial.br/> and <http://1net.org/>

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a For a summary of the U.S. role in Internet development, see <http://bit.ly/1hJiXRS/>

b http://en.wikipedia.org/wiki/Jon_Postel