Keeping the Internet Global

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Will technologists continue to have a say in the future of the network?

The founding leadership of the Internet—the computer scientists who built their authority on the foundation of the technology they invented—are moving on. Vint Cerf, who co-invented TCP/IP, left the presidency post at the Association for Computing Machinery (ACM) three years ago. Steve Crocker, the author of the first request for comments (RFC 1) and Cerf’s successor as the Board Chair for the Internet Corporation for Assigned Names and Numbers (ICANN), will soon vacate his post. The question for the new generation of Internet leaders is simple: Will the Internet remain an international institution, or will it be reduced to rubble by the stubborn vibrations of nationalism?

Since its inception, the Internet has been shaped by the interests of private corporations, national governments, civic institutions, and technological organizations. These interests include three classes of issues: freedom of expression, free use of assets, and freedom of development. The technological community has been uniquely interested in the freedom to expand and develop the services provided by the Internet, which is a feature of Internet technology that isn’t guaranteed. Traditionally, governments kept close control of their telecommunications infrastructure, either running it as a state-owned enterprise or as a state-sanctioned monopoly. In both cases, new groups could not alter telecommunications services, even if they had the technical ability do so.

Private corporations own most of the Internet infrastructure and governments have been increasingly ready to regulate the use of that infrastructure within their borders. Technological organizations mostly have control over two aspects of the Internet: technical standards and the coordination of the Domain Name System (DNS).

Over the past four years, the DNS has been at the center of a discussion over the future of the Internet. Like the Internet, it’s a distributed system operated by private contractors or government agencies. For example, Verisign registers .com names while Libyan Telephone and Telegraph, a government monopoly, registers those ending in .ly. However, the entire system has been coordinated by ICANN.

Although the Internet is an international institution, ICANN is a private company with decidedly national roots. For 15 years, it managed the DNS system as an American company under contract to the US government, which announced in 2014 that it would no longer oversee the operation of the Internet, leaving ICANN to determine how to operate as an international organization.

There are two models for international organizations. Treaty organizations (like the United Nations) are managed by government representatives rather than by members of the technical community. This approach was unacceptable to a large contingent of the Internet community. The alternative is to create a national company with well-defined rules for international operation and participation, such as the International Red Cross and Save the Children. ICANN decided to become this kind of organization. It rewrote bylaws, restructured governance, and shed its government contract in the fall of 2016.

Although ICANN is now operating as an international organization, it has little ability to address the three major issues facing the Internet. These issues will be shaped by national legislation and regulation. However, ICANN has been an important forum for the technical community. It was one place where the founding generation was able to articulate its vision for an international infrastructure, and that generation is passing the baton to its successors.

We shouldn’t expect that the Internet is beginning a slow slide to mediocrity, but we do need to ask who will be articulating the technological point of view and advocating for freedom of development.

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