

## Internet Governance: Past, Present, and Future

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Over the past 25 years, the Internet has gone from a relatively unknown arena populated primarily by academics, government employees and researchers, and other technical experts into a nearly ubiquitous presence that contributes fundamentally and massively to communication, innovation, and commerce. In 1990, only about 3 million people worldwide—0.05 percent of the world’s population—had access to the Internet, of which 90 percent were in the U.S. and Western Europe.<sup>22</sup> Between 2000 and mid-2014, the total number of Internet users worldwide grew from 361 million to more than 3 billion—more than 42 percent of the world’s population.<sup>23</sup> This growth has been global and, in recent years, particularly rapid in developing countries.<sup>24</sup> Thus, it is unsurprising that, as the Internet has expanded in importance both as a means of communication and as a catalyst for entrepreneurship and economic growth, calls for increased governance have also multiplied.

Some governance of the Internet, such as measures to make sure that Internet addresses are unique, and that changes to the root servers are conducted in a reliable and non-disruptive manner, is necessary merely to ensure that it operates smoothly and has already been in place for decades.<sup>25</sup>

In the early years of the Internet, this governance role was fulfilled by the U.S. government in a largely informal cooperation with academic experts. Since 1998, the U.S. government has contracted with the Internet Corporation for Assigned Names and Numbers (ICANN) to manage most of the technical aspects of Internet governance. ICANN solicits input and feedback from the multi-stakeholder community, including Internet registries, registrars, businesses, civil society, and governments.

But a great contributing factor to the growth and success of the Internet, from which nearly everyone has benefited directly or indirectly, is that formal governance and regulation has been light and relatively non-intrusive. Indeed, the very light governance of the Internet and the resulting success raises the question of whether governments need to be involved in any substantial way in Internet governance.

Not all governments agree, however. Some, particularly governments eager to enhance their

control over the Internet content and commerce, have repeatedly sought to assert international regulation and governance over the Internet far exceeding what is currently the case. The U.S. must work in concert with the broader Internet community—including businesses, civil society, registries, and registrars—to resist these efforts or risk crippling this enormously valuable catalyst for growth and communication.

### Light Governance, Spectacular Growth

The relatively small number of Internet users and networks prior to the 1990s permitted a very informal and ad hoc approach to coordination and governance consisting of experts populating working groups, boards, and task forces established and tweaked as deemed necessary. An example of this informal approach was the fact that management of the Internet Assigned Numbers Authority (IANA), that is, the allocation and recording of unique numerical addresses to computers called IP addresses that ensure that data is sent to the correct destination, was conducted by Dr. Jon Postel as a voluntary service from the early 1970s until his death in 1998.<sup>26</sup>

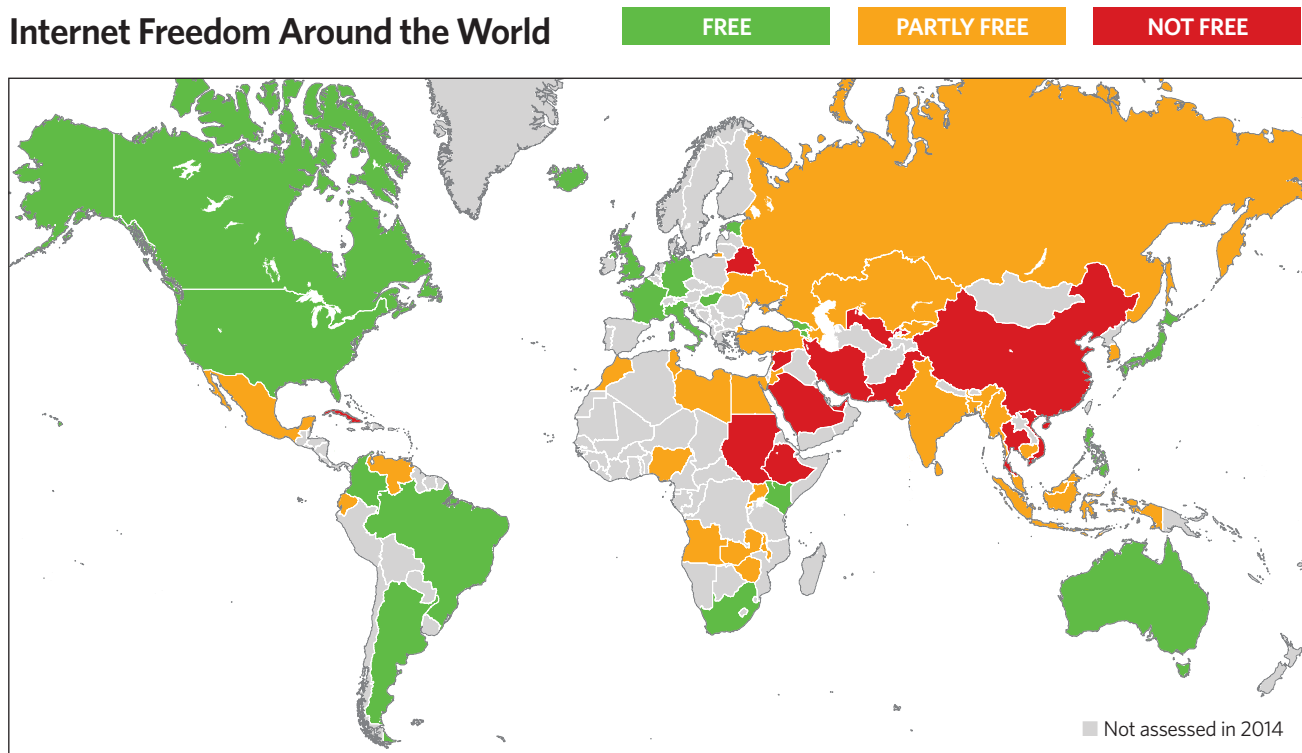
As the Internet grew in importance and use, more formal governance structures were developed. To facilitate policy decisions and manage the technical end of the Internet, the U.S. government supported the establishment of ICANN as a private non-profit corporation in 1998 and contracted with it to undertake its current responsibilities. Along with managing the IANA functions, ICANN was charged with managing the Internet’s domain name system (DNS) and the system of global top-level domains (gTLDs), such as “.org,” “.com,” and “.gov.”

Since ICANN was created, it has been under contract with the U.S. Department of Commerce’s National Telecommunications and Information Administration (NTIA) to administer IANA. As noted by Harvard law professor Jack Goldsmith:

These oft-renewed contracts are why so many believe ICANN is controlled by the United States. Foreign governments resent this control because the top-level domain names are worth billions of dollars and have significant political and moral salience (think of .gay, or .islam). Control over

MAP 1

## Internet Freedom Around the World



Source: Freedom House, "Freedom of the Net 2014," [https://freedomhouse.org/sites/default/files/FOTN\\_2014\\_Full\\_Report\\_compressedv2\\_0.pdf](https://freedomhouse.org/sites/default/files/FOTN_2014_Full_Report_compressedv2_0.pdf) (accessed April 23, 2015).

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domain names also entails the potential for censorship (by regulating domain name use on a global basis) that authoritarian states in particular find attractive.<sup>27</sup>

In reality, although the Commerce Department, through its contract with ICANN, has authority to review and reject ICANN policy and technical decisions, it very rarely has exercised this authority. By leaving Internet governance almost entirely to the private sector, the U.S. has allowed the Internet to grow and develop at a fantastic pace.

### Imminent Change

While ICANN has been responsible for a large part of the technical details of running the DNS system, it works cooperatively with an American for-profit corporation, Verisign, which implements changes in the root zone file. This is essentially the core "address book" of the Internet. In addition, various technical constituencies, groupings, and organizations—some, such as the Internet Society and the

Internet Engineering Task Force predate ICANN—exist independently of ICANN but participate in its deliberations and, like the Registrars Stakeholder Group, can in some instances play a role in selecting the ICANN board of directors. These various constituencies, groupings, and organizations along with the broader population of individual Internet users, businesses, and governments comprise the multi-stakeholder community whose bottom-up deliberations are to serve as the basis for ICANN decisions.

Although the U.S. has taken a very hands-off approach to ICANN, its contractual leverage arguably has helped ensure that ICANN pays due attention to issues and objections raised by the Internet community and adheres to processes as established in its bylaws and the Affirmation of Commitments with the Commerce Department. Since 1998, the Commerce Department has entered into contracts with ICANN to manage the IANA. These contracts have been periodically renewed with little controversy. However, the department always had the option of awarding the contract to an entity other

than ICANN if it proved incompetent, unreliable, or otherwise unsatisfactory. The possibility that the Commerce Department could award the IANA contract to another organization, however unlikely, has provided an independent check on ICANN's monopoly position.

This arrangement is about to change. In March 2014, the U.S. announced that it intended to end its oversight role over ICANN.<sup>28</sup> This announcement has energized debate over the next stage of Internet governance.

The Internet community has conducted detailed discussions inside and outside ICANN on how to enhance and ensure ICANN accountability, transparency, and reliability absent U.S. oversight.

At the same time, some governments have seen the U.S. decision to end its current relationship with ICANN as an opportunity to expand their influence over the Internet. China, Russia, and a number of Muslim countries<sup>29</sup> have sought for years to impose limits on online speech that they deem offensive or damaging to their interests.<sup>30</sup> These efforts have largely been blunted internationally, but have had far more success in individual nations. As noted by Freedom House in its *Freedom on the Net 2014*:

Global internet freedom declined for a fourth consecutive year.... New laws criminalized online dissent and legitimized overbroad surveillance and data collection, while more people were arrested for legitimate online activities than ever before.

“Authoritarian and democratic leaders alike believe the internet is ripe for regulation and passed laws that strengthen official powers to police online content,” said Sanja Kelly, project director for Freedom on the Net. “The scramble to legislate comes at the expense of user rights, as lawmakers deliberately or misguidedly neglect privacy protections and judicial oversight.” The situation is especially problematic in less democratic states where citizens have no avenues to challenge or appeal government's actions.

“Countries are adopting laws that legitimize existing repression and effectively criminalize online dissent,” the report concludes. “More people are being arrested for their internet activity than ever before, online media outlets are

increasingly pressured to censor themselves or face legal penalties, and private companies are facing new demands to comply with government requests for data or deletions.”

Freedom on the Net 2014 found 36 of the 65 countries assessed experienced a negative trajectory in internet freedom since May 2013, with major deteriorations in Russia, Turkey, and Ukraine.<sup>31</sup>

According to the 2014 Freedom House report, the worst abusers of Internet freedom were Iran, Syria, and China. Very few countries registered lasting policy improvements.

Indeed, governments are able to control Internet policies within their borders, albeit with varying degrees of success. Efforts to control Internet content globally, however, would be greatly facilitated by expanding government influence over the numbering, naming, and addressing functions of the Internet through enhanced authority over ICANN or the IANA directly through a stronger Governmental Advisory Council (an existing body that provides a forum for advice to ICANN by governments) or by placing it under the authority of an intergovernmental organization like the International Telecommunication Union (ITU).

This is not a new ambition for these nations and the U.S. has had to periodically rally opposition to similar efforts in the past. For instance, in the lead-up to the U.N. World Summit on the Information Society (WSIS) in 2003 and 2005, the U.N. Secretary-General established the Working Group on Internet Governance “to investigate and make proposals for action, as appropriate, on the governance of Internet by 2005” and to define Internet governance for the WSIS.<sup>32</sup> While the U.S. and other countries expressed support for the status quo, some nations called for granting the U.N. supervision of the Internet.<sup>33</sup>

As a result, this issue was deferred rather than resolved.<sup>34</sup> In the end, the WSIS adopted a generally positive, albeit imprecise, definition of Internet governance<sup>35</sup> that endorsed a role for the private sector and civil society—not just governments—and established the Internet Governance Forum (IGF) to bring together governments and nongovernmental entities to meet annually to hash out issues of concern and contention. Predictably, the IGF has struggled to bridge differences because key players

fundamentally disagree over the role of states in Internet governance.

As such, the issue has arisen repeatedly in multiple forums since 2005. For instance, at the 2012 World Conference on International Telecommunications (WCIT), Russia, China, Saudi Arabia, and several other countries proposed that governments “shall have the sovereign right to establish and implement public policy, including international policy, on matters of Internet governance, and to regulate the national Internet segment, as well as the activities within their territory of operating agencies providing Internet access or carrying Internet traffic.”<sup>36</sup> These countries supported adopting new International Telecommunications Regulations (ITRs) that would grant the ITU authority over and responsibility for some of ICANN’s responsibilities.

Countries suspicious of ITU governance of the Internet took an equally strong position in opposition. Specifically, the U.S. stated, “[T]he United States will not support proposals that would increase the exercise of control over Internet governance or content. The United States will oppose efforts to broaden the scope of the ITRs to empower any censorship of content or impede the free flow of information and ideas.”<sup>37</sup>

The end result was division. After contentious negotiations, the U.S. and dozens of other countries announced that they could not support the proposed ITRs. In the end, only 89 countries, including many authoritarian regimes, such as Russia and China, signed the new ITRs.<sup>38</sup>

Unfortunately, the leaking of National Security Agency (NSA) surveillance in 2013 eroded the support that the U.S. had in these debates, despite the fact that NSA surveillance has nothing to do with the NTIA’s oversight of ICANN, and spurred renewed efforts to end U.S. oversight of ICANN.<sup>39</sup> The NTIA announcement of March 2014 temporarily blunted these calls. NETmundial’s Global Multi-stakeholder Meeting on the Future of Internet Governance in 2014 in Brazil, at which many countries were believed to be poised to call for U.N. oversight of the Internet, instead ended up endorsing the bottom-up, multi-stakeholder-driven model for Internet governance that the U.S. supports.<sup>40</sup> Similarly, the 2014 ITU Plenipotentiary Conference in Busan, South Korea, could have been a more lopsided replay of the WCIT, but ended up not adopting measures to extend ITU authority to cover the Internet, with

a large number of countries endorsing the multi-stakeholder model for Internet governance.<sup>41</sup>

In essence, the debate is on hold until everyone can digest the results of the IANA stewardship and accountability transition proposals currently being developed by ICANN and the multi-stakeholder community. Once finalized, these proposals will be reviewed and approved by the multi-stakeholder community, the ICANN board of directors, and the NTIA.<sup>42</sup>

This effort is supposed to be finalized in summer 2015, but it is virtually certain that many governments will be dissatisfied with the results. After all, the NTIA must approve the final transition proposal, and its instructions are clear that the U.S. role should not be replaced by a “government-led or an inter-governmental organization solution.” Several upcoming and periodic events provide opportunities for renewed debate over Internet governance.

- The WSIS Forum provides an important opportunity for governments to voice support or opposition.
- The Commission on Science and Technology for Development (CSTD), a subsidiary body of the U.N. Economic and Social Council, is charged with serving as the focal point for U.N. follow-up of the WSIS and providing “the General Assembly and ECOSOC [Economic and Social Council] with high-level advice on relevant issues through analysis and appropriate policy recommendations or options in order to enable those organs to guide the future work of the United Nations, develop common policies and agree on appropriate actions.”<sup>43</sup> The CSTD, whose membership includes Russia, Cuba, China, Iran, and other states that have pressed for increased U.N. control of the Internet,<sup>44</sup> meets annually in May.
- The mandate of the Internet Governance Forum, established in 2005 at the WSIS and renewed in 2010, expires in 2015. The U.N. General Assembly is expected to renew the forum mandate, but potential exists for controversial additions regarding Internet governance, such as endorsing the proposal by China, Russia, and several central Asian nations to establish an “international code of conduct for information security.”<sup>45</sup>

- The ITU has adopted a number of resolutions on Internet-related issues, including governance, and governments dissatisfied with the IANA transition are likely to revive their agendas in the organization.<sup>46</sup>

For instance, Resolution 102 adopted at the 2014 Plenipotentiary asserted that “all governments should have an equal role and responsibility for international Internet governance and for ensuring the stability, security and continuity of the existing Internet and its future development and of the future Internet” and resolved to “explore ways and means for greater collaboration and coordination between ITU and relevant organizations [including ICANN], involved in the development of IP-based networks and the future Internet, through cooperation agreements, as appropriate, in order to increase the role of ITU in Internet governance so as to ensure maximum benefits to the global community.” It also instructed the Secretary-General to “continue to take a significant role in international discussions and initiatives on the management of Internet domain names and addresses and other Internet resources within the mandate of ITU” and “take the necessary steps for ITU to continue to play a facilitating role in the coordination of international public policy issues pertaining to the Internet.”<sup>47</sup>

While these assertions are not necessarily incompatible with the IANA transition principles outlined by the NTIA, it clearly is a marker that the ITU continues to consider Internet governance within its remit to be addressed by the organization in future meetings.

Whether any of these venues adopt or endorse an increased role for governments in Internet governance depends in part on the success of ICANN and the multi-stakeholder community in drafting proposals that satisfy not only the broader Internet community and the NTIA, but enough governments around the world to ensure that a critical mass of countries that support increased government

control over the Internet does not coalesce. Indeed, the generally acknowledged impetus behind the NTIA announcement was to forestall this very outcome. But other nations are not sitting idle, as illustrated by China hosting the first “World Internet Conference” that, among other things, sought support for increased control of content and respect for “Internet sovereignty.”

## Conclusion

The future of Internet governance is at a crossroads. No system of Internet governance is perfect, including the current system, which many countries resent because of a perceived dominance by the U.S. However, the strong growth of the Internet in recent decades, and the economic growth resulting from that development, illustrate the virtues of the minimal governance model. The greatest risk to this successful model would arise from granting a more overt governance role to states either through the ITU or another intergovernmental organization, or by enhancing government authority within ICANN.

The March 2014 NTIA announcement clearly expresses the U.S. preference that governments and intergovernmental organizations should be relegated to a backseat role, following the lead of the private sector and civil society. Most of the private sector represented in the multi-stakeholder community supports this U.S. perspective on Internet governance. However, many powerful governments would prefer to exert tighter control of and oversight over the Internet. There are ample opportunities for countries that want more direct government control of the Internet to press their agenda.

It is unclear how this dispute will be resolved. But the stakes are high. If Internet functions and freedom are harmed or subjected to unnecessary regulatory burdens or political interference, not only would there be economic damage, but a vital forum for freedom of speech and political dissent would be compromised.

## Endnotes

22. Worldmapper, "Internet Users 1990," Map No. 335, <http://www.worldmapper.org/display.php?selected=335> (accessed May 1, 2015).
23. Internet Society, "Internet World Stats—The Internet Big Picture: World Internet Users and 2014 Population Stats," June 30, 2014, <http://www.internetsociety.org/internet/what-internet/facts-and-figures> (accessed May 1, 2015).
24. Ibid.
25. Internet governance is the development and observance of principles, mechanisms, rules, regulations, and laws by governments and groups of governments, the private sector, or civil society. A definition that has currency in international discussions was endorsed by the 2005 World Summit on the Information Society: "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 use of the Internet." "Report of the Working Group on Internet Governance," June 2005, p. 4, <http://www.wgig.org/docs/WGIGREPORT.pdf> (accessed May 1, 2015).
26. ICANN Security and Stability Advisory Committee, "Overview and History of the IANA Functions," SAC067, August 15, 2014, <https://www.icann.org/en/system/files/files/sac-067-en.pdf> (accessed May 1, 2015).
27. Jack Goldsmith, "The Tricky Issue of Severing US 'Control' Over ICANN," Hoover Institution, February 24, 2015, <http://www.hoover.org/research/tricky-issue-severing-us-control-over-icann> (accessed May 1, 2015).
28. Specifically, the NTIA stated that before the transition would be approved, a proposal would need to be developed that, absent U.S. oversight, would "Support and enhance the multistakeholder model; Maintain the security, stability, and resiliency of the Internet DNS; Meet the needs and expectation of the global customers and partners of the IANA services; and, Maintain the openness of the Internet." NTIA also clarified that it would "not accept a proposal that replaces the NTIA role with a government-led or an inter-governmental organization solution." News release, "NTIA Announces Intent to Transition Key Internet Domain Name Functions," National Telecommunications and Information Administration, March 14, 2014, <http://www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-internet-domain-name-functions> (accessed May 1, 2015).
29. A large number of Muslim countries have, and enforce, laws against blasphemy and apostasy and have sought repeatedly to pass resolutions in the U.N. circumscribing freedom of expression and freedom of religion to legitimize those laws and their demands for censorship of expression, images, and other communications that they believe constitute a defamation of religion. Angelina Theodorou, "Which Countries Still Outlaw Apostasy and Blasphemy?" Pew Research Center, May 28, 2014, <http://www.pewresearch.org/fact-tank/2014/05/28/which-countries-still-outlaw-apostasy-and-blasphemy/> (accessed May 1, 2015), and Steven Groves, "Why the U.S. Should Oppose 'Defamation of Religions' Resolutions at the United Nations," Heritage Foundation *Backgrounder* No. 2206, November 10, 2008, <http://www.heritage.org/research/reports/2008/11/why-the-us-should-oppose-defamation-of-religions-resolutions-at-the-united-nations>.
30. Even some democratic nations have supported limiting undesirable speech or limiting economic freedoms online. News release, "An Internet Search Engine Operator Is Responsible for the Processing that it Carries Out of Personal Data Which Appear on Web Pages Published by Third Parties," Court of Justice of the European Union, May 13, 2014, <http://curia.europa.eu/jcms/upload/docs/application/pdf/2014-05/cp140070en.pdf> (accessed May 1, 2015).
31. Freedom House, "Freedom on the Net 2014: New Controls, Arrests Drive Internet Freedom Decline," December 2, 2014, [https://freedomhouse.org/article/freedom-net-2014-new-controls-arrests-drive-internet-freedom-decline#.VRrb31\\_D\\_cs](https://freedomhouse.org/article/freedom-net-2014-new-controls-arrests-drive-internet-freedom-decline#.VRrb31_D_cs) (accessed May 1, 2015).
32. World Summit on the Information Society, "World Summit on the Information Society Concludes First Phase by Adopting Declaration of Principles and Plan of Action," updated December 23, 2003, <https://www.itu.int/wsis/geneva/newsroom/summaries/12roundup.html> (accessed May 1, 2015).
33. Working Group on Internet Governance, "Internet Governance Mechanisms: Questionnaire," 2005, <http://wgig.org/docs/IG-questionnaire-response.pdf> (accessed May 1, 2015).
34. For instance, in March 2005, China's ambassador to the U.N. criticized U.S. "monopolization" of the current system stating, "We feel that the public policy issue of Internet should be solved jointly by the sovereign states in the UN framework." Declan McCullagh "Will the UN Run the Internet?" CNET News, July 11, 2005, [http://news.cnet.com/2100-1071\\_3-5780157.html](http://news.cnet.com/2100-1071_3-5780157.html) (accessed May 1, 2014).
35. Specifically, "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 programs that shape the evolution and use of the Internet." World Summit on the Information Society, "Tunis Agenda for the Information Society," November 18, 2005, <http://www.itu.int/wsis/docs2/tunis/off/6rev1.html> (accessed May 1, 2015).
36. WCIT-12, "Russia, UAE, China, Saudi Arabia, Algeria, Sudan, and Egypt: Proposals for the Work of the Conference," December 5, 2012, <http://files.wcitleaks.org/public/Merged%20UAE%20081212.pdf> (accessed May 1, 2015).
37. U.S. Department of State, "U.S. Contributions to the World Conference on International Telecommunications (WCIT-12)," August 3, 2012, <http://www.state.gov/e/eb/rls/othr/telecom/196031.htm> (accessed May 1, 2015).
38. Techdirt, "Who Signed the ITU WCIT Treaty... And Who Didn't," December 14, 2012, <https://www.techdirt.com/articles/20121214/14133321389/who-signed-itu-wcit-treaty-who-didnt.shtml> (accessed May 1, 2015).

39. See, for instance, Grant Gross, "Internet Infrastructure Groups Move Away from US Gov't Over Spying," *PC World*, October 16, 2013, <http://www.pcworld.com/article/2055240/internet-infrastructure-groups-move-away-from-us-govt-over-spying.html> (accessed May 1, 2015).
40. NETmundial, "Multistakeholder Statement," April 24, 2014, <http://netmundial.br/netmundial-multistakeholder-statement/> (accessed May 1, 2015).
41. For a summary, see Paul Szyndler, "Why We Don't 'Stick to Our Knitting': auDA's Role in the Internet Governance Landscape," Circle ID, November 13, 2014, [http://www.circleid.com/posts/20141113\\_why\\_we\\_dont\\_stick\\_to\\_our\\_knitting\\_auda\\_role\\_in\\_internet\\_governance/](http://www.circleid.com/posts/20141113_why_we_dont_stick_to_our_knitting_auda_role_in_internet_governance/) (accessed May 1, 2015).
42. Brett D. Schaefer, Paul S. Rosenzweig, and James L. Gattuso, "Time Is Running Out: The U.S. Must Be Prepared to Renew the ICANN Contract," Heritage Foundation *Issue Brief* No. 4340, February 3, 2015, <http://www.heritage.org/research/reports/2015/02/time-is-running-out-the-us-must-be-prepared-to-renew-the-icann-contract>.
43. U.N. Conference on Trade and Development, "Mandate and Institutional Background [of the CSTD]," <http://unctad.org/en/Pages/CSTD/CSTD-Mandate.aspx> (accessed May 4, 2015).
44. U.N. Conference on Trade and Development, "Membership of the Commission on Science and Technology for Development," <http://unctad.org/en/Pages/CSTD/CSTD-Membership.aspx> (accessed May 4, 2015).
45. U.N. General Assembly, "Letter dated 9 January 2015 from the Permanent Representatives of China, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan and Uzbekistan to the United Nations addressed to the Secretary-General," A/69/723, January 13, 2015, [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/69/723](http://www.un.org/ga/search/view_doc.asp?symbol=A/69/723) (accessed May 4, 2015).
46. International Telecommunication Union, "Internet Policy and Governance: Internet-Related Resolutions," <https://www.itu.int/en/action/internet/Pages/default.aspx> (accessed May 4, 2015).
47. International Telecommunication Union, "ITU's Role with Regard to International Public Policy Issues Pertaining to the Internet and the Management of Internet Resources, Including Domain Names and Addresses," Resolution 102 (Rev. Busan, 2014), [http://www.itu.int/en/action/internet/Documents/Resolution\\_102\\_pp14.pdf](http://www.itu.int/en/action/internet/Documents/Resolution_102_pp14.pdf) (accessed May 1, 2015).