

Internet Governance and the Domain Name System: Issues for Congress

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November 18, 2016

Congressional Research Service

7-5700 www.crs.gov R42351

Summary

The Internet is often described as a "network of networks" because it is not a single physical entity, but hundreds of thousands of interconnected networks linking hundreds of millions of computers around the world. As such, the Internet is international, decentralized, and comprised of networks and infrastructure largely owned and operated by private sector entities. As the Internet grows and becomes more pervasive in all aspects of modern society, the question of how it should be governed becomes more pressing.

Currently, an important aspect of the Internet is governed by a private sector, international organization based in California called the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN manages and oversees some of the critical technical underpinnings of the Internet such as the domain name system and Internet Protocol (IP) addressing. ICANN makes its policy decisions using a multistakeholder model of governance, in which a "bottom-up" collaborative process is open to all constituencies of Internet stakeholders.

National governments have recognized an increasing stake in ICANN policy decisions, especially in cases where Internet policy intersects with national laws addressing such issues as intellectual property, privacy, law enforcement, and cybersecurity. Some governments around the world are advocating increased intergovernmental influence over the way the Internet is governed. For example, specific proposals have been advanced that would create an Internet governance entity within the United Nations (U.N.). Other governments (including the United States), as well as many other Internet stakeholders, oppose these proposals and argue that ICANN's multistakeholder model is the most appropriate way to govern the Internet.

Previously, the U.S. government, through the National Telecommunications and Information Administration (NTIA) at the Department of Commerce, held a "stewardship" role over the domain name system by virtue of a contractual relationship with ICANN. On March 14, 2014, NTIA announced its intention to transition its stewardship role and procedural authority over key domain name functions to the global Internet multistakeholder community. NTIA also stated that it would not accept any transition proposal that replaces the NTIA role with a government-led or an intergovernmental organization solution.

For two years, Internet stakeholders were engaged in a process to develop a transition proposal that would meet NTIA's criteria. On March 10, 2016, the ICANN Board formally accepted the multistakeholder community's transition plan and transmitted that plan to NTIA for approval. On June 9, 2016, NTIA announced its determination that the transition plan met NTIA's criteria and that the plan was approved. On September 30, 2016, the contract between NTIA and ICANN expired, thus completing and implementing the transition.

With the transition now complete, Congress may continue assessing how effectively NTIA is advancing U.S. government positions within the Governmental Advisory Committee. Of particular interest may be to what extent ongoing and future intergovernmental telecommunications conferences constitute an opportunity for some nations to increase intergovernmental control over the Internet—at the expense of the multistakeholder system of Internet governance—and how effectively NTIA and other government agencies (such as the State Department) are working to counteract that threat.

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What Is Internet Governance?

There is no universally agreed-upon definition of "Internet governance." A more limited definition would encompass the management and coordination of the technical underpinnings of the Internet—such as domain names, addresses, standards, and protocols that enable the Internet to function. A broader definition would include the many factors that shape a variety of Internet policy-related issues, such as such as intellectual property, privacy, Internet freedom, e-commerce, and cybersecurity.

One working definition was developed at the World Summit on the Information Society (WSIS) in 2005:

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.¹

Another definition developed by the Internet Governance Project (IGP)² delineates three aspects of the Internet that may require some level of governing: *technical standardization*, which involves arriving at and agreeing upon technical standards and protocols; *resource allocation and assignment*, which includes domain names and Internet Protocol (IP) addresses; and *human conduct on the Internet*, encompassing the regulations, rules, and policies affecting areas such as spam, cybercrime, copyright and trademark disputes, consumer protection issues, and public and private security. With these three categories in mind, the IGP definition is:

Internet governance is collective decisionmaking by owners, operators, developers, and users of the networks connected by Internet protocols to establish policies, rules, and dispute resolution procedures about technical standards, resource allocations, and/or the conduct of people engaged in global internetworking activities.³

How Is the Internet Currently Governed?

The nature of the Internet, with its decentralized architecture and structure, makes the practice of governing a complex proposition. First, the Internet is inherently international and cannot in its totality be governed by national governments whose authority ends at national borders. Second, the Internet's successful functioning depends on the willing cooperation and participation by mostly private sector stakeholders around the world. These stakeholders include owners and operators of servers and networks around the world, domain name registrars and registries, regional IP address allocation organizations, standards organizations, Internet service providers, and Internet users.

Given the multiplicity and diversity of Internet stakeholders, a number of organizations and entities play varying roles. It is important to note that all of the Internet stakeholders cited above participate in various ways within the various fora, organizations, and frameworks addressing Internet governance and policy.

¹ Tunis Agenda for the Information Society, November 18, 2005, WSIS-05/TUNIS/DOC6(Rev.1)-E, p. 6, available at http://www.itu.int/wsis/docs2/tunis/off/6rev1.pdf.

² The IGP describes itself as "an alliance of academics that puts expertise into practical action in the fields of global governance, Internet policy, and information and communication technology." See http://www.internetgovernance.org.

³ Milton Mueller, John Mathiason, and Hans Klein, "The Internet and Global Governance: Principles and Norms for a New Regime," *Global Governance*, vol. 13 (2007), p. 245.

Key organizations in the private sector include the following:

Internet Corporation for Assigned Names and Numbers (ICANN)—ICANN was created in 1998 through a Memorandum of Understanding with the Department of Commerce (see the following section of this report, "Role of U.S. Government"). Directed by an internationally constituted Board of Directors, ICANN is a private, not-for-profit organization based in Los Angeles, CA, which manages and oversees the critical technical underpinnings of the Internet such as the domain name system (DNS) and IP addressing (see the **Appendix** for more background information on ICANN). ICANN implements and enforces many of its policies and rules through contracts with *registries* (companies and organizations who operate and administer the master database of all domain names registered in each top level domain, such as .com and .org) and accredited *registrars* (the hundreds of companies and organizations with which consumers register domain names). Policies are developed by Supporting Organizations and Committees in a consensus-based "bottom-up" process open to various constituencies and stakeholders of the Internet. As such, ICANN is often pointed to as emblematic of the "multistakeholder model" of Internet governance.

Internet standards organizations—As the Internet has evolved, groups of engineers, researchers, users, and other interested parties have coalesced to develop technical standards and protocols necessary to enable the Internet to function smoothly. These organizations conduct standards development processes that are open to participants and volunteers from around the world. Internet standards organizations include the Internet Engineering Task Force (IETF), the Internet Architecture Board (IAB), the Internet Society (ISOC), and the World Wide Web Consortium (W3C).

Governmental entities involved in Internet governance include the following:

Governmental Advisory Committee (GAC)—As part of ICANN's multistakeholder process, the GAC provides advice to the ICANN Board on matters of public policy, especially in cases where ICANN activities and policies may interact with national laws or international agreements related to issues such as intellectual property, law enforcement, and privacy. GAC advice is developed through consensus among member nations. Although the ICANN Board is required to consider GAC advice and recommendations, it is not obligated to follow those recommendations. Membership in the GAC is open to all national governments who wish to participate. Currently, there are 171 members and 35 observers. The GAC Chair is currently held by Switzerland, with Vice Chairs held by Egypt, Peru, France, the United Kingdom, and China.

Internet Governance Forum (IGF)—The IGF was established in 2006 by the United Nations' World Summit on the Information Society (WSIS). The purpose of the IGF is to provide a multistakeholder forum which provides an open discussion (in yearly meetings) on public policies related to the Internet. Open to all stakeholders and interested parties (governments, industry, academia, civil society), the IGF serves as an open discussion forum and does not have negotiated outcomes, nor does it make formal recommendations to the U.N. In December 2010, the U.N. General Assembly renewed the IGF through 2015 and tasked the U.N.'s Commission on Science and Technology for Development (CSTD) to develop a report and recommendations on how the IGF might be improved. A Working Group on Improvements to the Internet Governance Forum was formed by the U.N., which includes 22 governments (including the United States) and the participation of Internet stakeholder groups. In December 2015, the General Assembly renewed the IGF through 2025.

Other International Organizations—Other existing international organizations address Internet policy issues in various ways. The International Telecommunications Union (ITU) is the United Nations' specialized agency for communications and information technology. The World

Intellectual Property Organization (WIPO) is another specialized agency of the U.N., which addresses a wide range of intellectual property issues, including those related to Internet policy. The Organisation for Economic Co-operation and Development (OECD) provides a forum for governments to work together to address economic issues, including the recent development of Internet policymaking principles. While none of these organizations have direct control or authority over the Internet, their activities can have influence over future directions of global Internet policy.

National governments—National governments have acted to address various Internet policy issues within their own borders. Many of the national laws and regulations pertain to user behavior on the Internet. For example, in the United States, laws have been passed addressing such issues as cybersecurity and cybercrime, Internet gambling, Internet privacy, and protection of intellectual property on the Internet. Governments have also established internal Internet policy coordinating bodies (e.g., the National Telecommunications and Information Administration's Internet Policy Task Force and the European Commission's Information Society).

Role of U.S. Government

The U.S. government has no statutory authority over ICANN or the domain name system. However, because the Internet evolved from a network infrastructure created by the Department of Defense, the U.S. government originally funded and operated (primarily through private contractors) many of the key components of network architecture that enabled the domain name system to function. In the early 1990s, the National Science Foundation (NSF) was given a lead role in overseeing domain names used in the civilian portion of the Internet (which at that time was largely comprised of research universities). By the late 1990s, ICANN was created, the Internet had expanded into the commercial world, and the National Telecommunications and Information Administration (NTIA) of the Department of Commerce (DOC) assumed the lead role.

A 1998 Memorandum of Understanding between ICANN and the DOC initiated a process intended to transition technical DNS coordination and management functions to a private-sector not-for-profit entity. While the DOC played no role in the internal governance or day-to-day operations of ICANN, the U.S. government, through the DOC/NTIA, most recently retained a role with respect to the DNS via three separate contractual agreements:

- a 2009 Affirmation of Commitments (AoC) between DOC and ICANN;⁴
- a contract (referred to as the "IANA contract") between ICANN and DOC to perform various technical functions such as allocating IP address blocks, editing the root zone file, and coordinating the assignment of unique protocol numbers; and
- a cooperative agreement between DOC and VeriSign to manage and maintain the official DNS root zone file.

By virtue of those three contractual agreements, the U.S. government—through DOC/NTIA—exerted a legacy authority and stewardship over ICANN, and arguably had more influence over ICANN and the DNS than other national governments. While NTIA has been the lead agency

⁴ For more information on the Affirmation of Commitments, including the precursor agreements between DOC and ICANN such as the Joint Project Agreement and the Memorandum of Understanding, see CRS Report 97-868, *Internet Domain Names: Background and Policy Issues*, by Lennard G. Kruger.

overseeing domain name issues, other federal agencies have maintained a specific interest in the DNS that may affect their particular missions. For example, the Federal Trade Commission (FTC) seeks to protect consumer privacy on the Internet, the Department of Justice (DOJ) addresses Internet crime and intellectual property issues, and the Department of Defense and Department of Homeland Security address cybersecurity issues. However, none of these agencies has legal authority over ICANN or the running of the DNS.

NTIA Transitions Stewardship of the DNS⁵

The IANA functions contract with ICANN and the cooperative agreement with Verisign gave NTIA the authority to maintain a stewardship and oversight role with respect to ICANN and the domain name system. On March 14, 2014, NTIA announced its intention to transition its stewardship role and procedural authority over key domain name functions to the global Internet multistakeholder community. NTIA stated that it would let its IANA functions contract with ICANN expire if a satisfactory transition could be achieved. NTIA asked ICANN to convene interested global Internet stakeholders (both from the private sector and governments) to develop a proposal to achieve the transition; NTIA stated that it will not accept any transition proposal that would replace the NTIA role with a government-led or an intergovernmental organization solution and that the transition proposal must have broad community support and address the following four principles:

- support and enhance the multistakeholder model;
- maintain the security, stability, and resilience 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.

Transition Proposal

ICANN convened a process through which the multistakeholder community came to consensus on a transition proposal. The process was divided into two separate but related parallel tracks: (1) IANA Stewardship Transition and (2) Enhancing ICANN Accountability. On March 10, 2016, the ICANN Board formally accepted the IANA Stewardship Transition proposal⁷ and the Enhancing ICANN Accountability report.⁸ The Board formally transmitted the transition and accountability plans to NTIA for approval.

⁵ For a full discussion of this issue, see CRS Report R44022, *The Future of Internet Governance: Should the United States Relinquish Its Authority over ICANN?*, by Lennard G. Kruger.

⁶ NTIA, *Press Release*, "NTIA Announced Intent to Transition Key Internet Domain Name Functions," March 14, 2014, available at http://www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-internet-domain-name-functions.

⁷ ICANN, *Adopted Board Resolutions*, "IANA Transition Stewardship Proposal from ICG," March 10, 2016, available at https://www.icann.org/en/system/files/files/iana-stewardship-transition-proposal-resolutions-excepts-10mar16-en.pdf.

⁸ ICANN, *Adopted Board Resolutions*, "Proposal from CCWG on Enhancing ICANN Accountability," March 10, 2016, available at https://www.icann.org/en/system/files/files/ccwg-accountability-proposal-resolutions-exceprts-10mar16-en.pdf.

Under the proposal, a new, separate legal entity, called Post-Transition IANA (PTI), is created as an affiliate (subsidiary) of ICANN that becomes the IANA functions operator in contract with ICANN. ICANN assumes the role previously fulfilled by NTIA (overseeing the IANA function), while PTI assumes the role previously played by ICANN (the IANA functions operator).

Regarding accountability, the proposal seeks to enhance ICANN's accountability by specifying powers for the ICANN community that can be enforced when consensus cannot be reached. Specifically, the proposal called for the creation of a new entity, referred to as the "Empowered Community," that will act at the direction of the multistakeholder community as constituted by ICANN's Supporting Organizations and Advisory Committees. Under California law, the new entity would take the form of a California unincorporated association and be given the role of Sole Designator of ICANN Board Directors. Triggered by a petitioning, consultation, and escalation process, the Empowered Community would have the power to, among other things, reject ICANN budgets, approve changes to ICANN bylaws, and remove ICANN Board members.

On June 9, 2016, NTIA issued its *IANA Stewardship Transition Proposal Assessment Report*. The report announced NTIA's formal determination that the transition proposal met the criteria set forth when NTIA announced its intention to transition U.S. government stewardship over IANA. ICANN took a number of steps to implement the transition, including the adoption of revised bylaws. ¹⁰

Finally, on September 30, 2016, NTIA let its contract with ICANN expire, and the transition was complete. NTIA modified its cooperative agreement with Verisign to remove NTIA's role in authorizing changes to the authoritative root zone file. Additionally, aspects of the Affirmation of Commitments—including mandated periodic community reviews mere incorporated into the new ICANN bylaws.

U.S. Role Post-Transition

With the IANA contract expired and the transition of ICANN away from NTIA authority, the U.S. government—like any other nation—can provide input into the ICANN policymaking process through its participation in the Governmental Advisory Committee (GAC). GAC formal advice to the ICANN Board must be reached by full consensus, ¹³ at which point the Board and GAC will try to find a mutually acceptable solution. If a mutual agreement cannot be reached, the Board can choose not to follow that advice by a vote of at least 60% of Board members. Additionally, the GAC will participate in the Empowered Community, except in matters where the Empowered Community is deciding whether to challenge a board action based on GAC advice.

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 $^{^9\} Available\ at\ https://www.ntia.doc.gov/report/2016/iana-stewardship-transition-proposal-assessment-report.$

¹⁰ NTIA, *Press Release*, "NTIA Finds IANA Stewardship Transition Proposal Meets Criteria to Complete Privatization," June 9, 2016, available at NTIA Finds IANA Stewardship Transition Proposal Meets Criteria to Complete Privatization.

¹¹ See https://www.ntia.doc.gov/files/ntia/publications/amendment_33.pdf.

¹² See https://www.icann.org/resources/reviews/specific-reviews.

¹³ A formal objection by any one nation in the GAC blocks "full consensus." The accountability proposal and revised ICANN bylaws ensures that only a full consensus GAC decision will be considered by the ICANN Board.

Legislative Activities in the 114th Congress

Reflecting Congressional concerns over the U.S. government proposal to relinquish its contractual authority over ICANN, legislation in the 114th Congress sought to prohibit, limit, or delay the transition.

DOTCOM Act

The DOTCOM Act of the 113th Congress was reintroduced into the 114th Congress by Representative Shimkus as H.R. 805 on February 5, 2015. As introduced, the DOTCOM Act of 2015 would have prohibited NTIA from relinquishing responsibility over the Internet domain name system until GAO submitted a report to Congress examining the implications of the proposed transfer. H.R. 805 would have directed GAO to issue the report no later than one year after NTIA received a transition proposal. On June 17, 2015, the House Committee on Energy and Commerce approved an amended DOTCOM Act. The amended version of H.R. 805 reflected a bipartisan agreement and was approved unanimously by voice vote. On June 23, 2015, H.R. 805 was passed by the House (378-25) under suspension of the rules.

H.R. 805, as passed by the House, does not permit NTIA's authority over the IANA function "to terminate, lapse, be cancelled, or otherwise cease to be in effect" until 30 legislative days after NTIA submits a report to Congress on the final IANA transition proposal. Specifically, the report must contain the final transition proposal and a certification by NTIA that the proposal

- supports and enhances the multistakeholder model of Internet governance;
- maintains the security, stability, and resiliency of the Internet domain name system;
- meets the needs and expectations of the global customers and partners of IANA services;
- maintains the openness of the Internet; and
- does not replace the role of NTIA with a government-led or intergovernmental organization solution.

H.R. 805 also requires NTIA to certify that the required changes to ICANN's bylaws contained in the transition proposal have been adopted by ICANN.

S. 1551, the Senate companion version of the DOTCOM Act of 2015, was introduced on June 11, 2015, by Senator Thune. The language of S. 1551 is virtually identical to H.R. 805 as approved by the House Committee on Energy and Commerce. S. 1551 was referred to the Senate Committee on Commerce, Science, and Transportation.

FY2016 Department of Commerce Appropriations

On June 3, 2015, the House passed H.R. 2578, the FY2016 Commerce, Justice, Science (CJS) Appropriations Act, which appropriated funds for DOC and NTIA. Section 536 of H.R. 2578 stated that "[n]one of the funds made available by this Act may be used to relinquish the responsibility of the National Telecommunications and Information Administration with respect to Internet domain name system functions, including responsibility with respect to the authoritative root zone file and the Internet Assigned Numbers Authority functions."

On June 16, 2015, the Senate Appropriations Committee reported its version of the FY2016 Commerce, Justice, Science, and Related Agencies Appropriations Act. In the bill report (S.Rept. 114-66) the committee directed NTIA to "continue quarterly reports to the committee on all

aspects of the transition process, and further directs NTIA to inform the Committee and the Senate Committee on Commerce, Science and Transportation, not less than 45 days in advance of any decision with respect to a successor contract." The committee also stated that it "continues to be concerned about this process and supports the continued stewardship role of the United States over the domain name system in order to ensure the security of the .gov and .mil domains and to protect the freedom of speech and expression internationally."

The Consolidated Appropriations Act, 2016 (P.L. 114-113) prevents NTIA from relinquishing its contractual control over IANA in FY2016. Section 539 of P.L. 114-113 states the following:

- (a) None of the funds made available by this Act may be used to relinquish the responsibility of the National Telecommunications and Information Administration, during fiscal year 2016, with respect to Internet domain name system functions, including responsibility with respect to the authoritative root zone file and the Internet Assigned Numbers Authority functions.
- (b) Not withstanding any other law, subsection (a) of this section shall not apply in fiscal year 2017.

FY2017 Department of Commerce Appropriations

On April 21, 2016, the Senate Appropriations Committee reported its version of the FY2017 Commerce, Justice, Science, and Related Agencies Appropriations Act (S. 2837). The bill report (S.Rept. 114-239) expressed the committee's continued concern about the proposed IANA transition and the security of the .gov and .mil domains. The committee directed NTIA to continue quarterly reports to the committee on all aspects of the transition process, and further directed NTIA to inform the committee and the Senate Committee on Commerce, Science, and Transportation not less than 45 days in advance of any decision with respect to a successor IANA contract.

On May 24, 2016, the House Appropriations Committee approved the FY2017 Commerce, Justice, Science (CJS) Appropriations act (H.R. 5393). The committee continued seeking to prohibit NTIA from relinquishing authority over IANA in FY2017. Section 534 stated that for FY2017,

[n]one of the funds made available by this Act may be used to relinquish the responsibility of the National Telecommunications and Information Administration with respect to Internet domain name system functions, including responsibility with respect to the authoritative root zone file and the Internet Assigned Numbers Authority functions.

The bill report (H.Rept. 114-605) stated:

The Committee remains concerned by NTIA's intent to transition certain Internet domain name functions to the global multistakeholder community. Any such transition represents a significant public policy change and should be preceded by an open and transparent process. In order for this issue to be considered more fully by the Congress, the Committee includes section 534 prohibiting funding for the transition.

However, the FY2017 Continuing Resolution, as passed by the Senate and House and signed into law on September 29, 2016 (P.L. 114-223), did not include language to prevent NTIA from allowing its contract with ICANN to expire on September 30, 2016, thus enabling the transition to take place.

Other Legislation

S. 3034, the Protecting Internet Freedom Act, was introduced by Senator Cruz on June 8, 2016. The legislation would prohibit NTIA from relinquishing its authority over the IANA function and the root zone file unless Congress enacts a federal statute which expressly grants NTIA such authority. The bill also requires that no later than 60 days after enactment, NTIA shall provide to Congress a written certification that the U.S. government has secured sole ownership of the .gov and .mil top level domains, and that NTIA has entered into a contract with ICANN ensuring that the U.S. government has exclusive control and use of the .mil and .gov domains in perpetuity. On June 7, 2016, Senator Cruz submitted language of the Protecting Internet Freedom Act as an amendment (S.Amdt. 4486) to the FY2017 National Defense Authorization Act (S. 2943).

H.R. 5418, the companion House version of the Protecting Internet Freedom Act, was introduced by Representative Duffy on June 9, 2016.

Other introduced legislation that addresses the proposed IANA transition includes

- H.R. 355 (Global Internet Freedom Act of 2015, introduced by Representative Duffy on January 14, 2015), which would prohibit NTIA from relinquishing its authority over the IANA functions.
- H.R. 2251 (Defending Internet Freedom Act of 2015, introduced by Representative Mike Kelly on May 15, 2015), which would prohibit NTIA from relinquishing its responsibilities over domain name functions and the IANA function unless it certifies that the transition proposal meets certain specified criteria.
- H.R. 5329 (Securing America's Internet Domains Act of 2016, introduced by Representative Kelly of Pennsylvania on May 25, 2016), which would require NTIA to extend the IANA functions contract unless it certifies that the United States government has secured sole ownership of the .gov and .mil top-level domains and that it has entered into a contract with ICANN that provides the United States with exclusive control and use of those domains in perpetuity.

S.Res. 71—designating the week of February 8 through February 14, 2015, as "Internet Governance Awareness Week"—was introduced by Senator Hatch on February 5, 2015. S.Res. 71 seeks to increase public awareness regarding NTIA's proposed transition, encourage public education about the importance of the transition process; and call the attention of the participants at the ICANN meeting in Singapore to the importance of designing accountability and governance reforms to best prepare ICANN for executing the responsibilities that it may receive under any transition of the stewardship of the IANA functions. S.Res. 71 was passed by the Senate on February 5, 2015.

Congressional Hearings

As part of its continuing oversight over NTIA and the domain name system, a series of hearings were held in the 114th Congress on the proposed IANA transition and on ICANN's management of the domain name system:

- On February 25, 2015, the Senate Committee on Commerce, Science, and Transportation held a hearing entitled, "Preserving the Multistakeholder Model of Internet Governance."
- On May 13, 2015, the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, held a hearing entitled, "Stakeholder Perspectives on the IANA Transition."¹⁵
- On May 13, 2015, the House Committee on the Judiciary, Subcommittee on Courts, Intellectual Property and the Internet, held a hearing entitled, "Stakeholder Perspectives on ICANN: the .Sucks Domain and Essential Steps to Guarantee Trust and Accountability in the Internet's Operation."
- On July 8, 2015, the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, held a hearing entitled, "Internet Governance Progress After ICANN 53."¹⁷
- On March 17, 2016, the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, held a hearing entitled, "Privatizing the Internet Assigned Number Authority."
- On May 24, 2016, the Senate Committee on Commerce, Science, and Transportation held a hearing entitled, "Examining the Multistakeholder Plan for Transitioning the Internet Assigned Number Authority."
- On September 14, 2016, the Senate Committee on the Judiciary, Subcommittee on Oversight, Agency Action, Federal Rights and Federal Courts, held a hearing entitled, "Protecting Internet Freedom: Implications of Ending U.S. Oversight of the Internet."

Debate over Future Models of Internet Governance

Given its complexity, diversity, and international nature, how should the Internet be governed? Some assert that a multistakeholder model of governance is appropriate, where all stakeholders (both public and private sectors) arrive at consensus through a transparent bottom-up process. Others argue that a greater role for national governments is necessary, either through increased influence through the multistakeholder model, or under the auspices of an international body exerting intergovernmental control.

To date, ICANN and the governance of the domain name system has been the focal point of this debate. While ICANN's mandate is to manage portions of the technical infrastructure of the Internet (domain names and IP addresses), many of the decisions ICANN makes affect other

¹⁴ Testimony available at http://www.commerce.senate.gov/public/index.cfm?p=Hearings.

¹⁵ Testimony available at http://energycommerce.house.gov/hearing/stakeholder-perspectives-iana-transition.

¹⁶ Testimony available at http://judiciary.house.gov/index.cfm/hearings?ID=7E5AF16E-B1F8-45B8-803B-9E389A9B745E.

¹⁷ Testimony available at http://energycommerce.house.gov/hearing/internet-governance-progress-after-icann-53.

 $^{^{18}\} Testimony\ available\ at\ https://energycommerce.house.gov/hearings-and-votes/hearings/privatizing-internet-assigned-number-authority.$

¹⁹ Testimony available at http://www.commerce.senate.gov/public/index.cfm/hearings?ID=418B1D81-1F0B-4E09-BB71-A98FBABE42B9.

²⁰ Testimony available at http://www.judiciary.senate.gov/meetings/protecting-internet-freedom-implications-of-ending-us-oversight-of-the-internet.

aspects of Internet policy, including areas such as intellectual property, privacy, and cybersecurity. These are areas which many national governments have addressed for their own citizens and constituencies through domestic legislation, as well as through international treaties.

As part of the debate over an appropriate model of Internet governance, criticisms of ICANN have arisen on two fronts. One criticism reflects the tension between national governments and the current performance and governance processes of ICANN, whereby governments feel they lack adequate influence over ICANN decisions that affect a range of Internet policy issues. The other criticism has been fueled by concerns of many nations that the U.S. government has held undue legacy influence and control over ICANN and the domain name system.

The debate over multistakeholderism vs. intergovernmental control initially manifested itself in 2005 at the World Summit on the Information Society (WSIS), which was a conference organized by the United Nations. More recently, this debate has been rekindled in various international fora.

Proposed Models for Internet Governance

As discussed above, ICANN is a working example of a multistakeholder model of Internet governance, whereby a bottom-up collaborative process is used to provide Internet stakeholders with access to the policymaking process. Support for the multistakeholder model of Internet governance is reflected in international organizations such as the Organisation for Economic Cooperation and Development (OECD) and the Group of Eight (G8). For example, the OECD's *Communiqué on Principles for Internet Policy-Making* cites multistakeholderism as a central tenet of Internet governance:

In particular, continued support is needed for the multi-stakeholder environment, which has underpinned the process of Internet governance and the management of critical Internet resources (such as naming and numbering resources) and these various stakeholders should continue to fully play a role in this framework. Governments should also work in multi-stakeholder environments to achieve international public policy goals and strengthen international co-operation in Internet governance.²¹

Similarly, at the G8 Summit of Deauville on May 26-27, 2011, the G8 issued a declaration on its renewed commitment for freedom and democracy that contained a new section on the Internet. Support for a multistakeholder model for Internet governance with a significant national government role was made explicit:

As we support the multi-stakeholder model of Internet governance, we call upon all stakeholders to contribute to enhanced cooperation within and between all international fora dealing with the governance of the Internet. In this regard, flexibility and transparency have to be maintained in order to adapt to the fast pace of technological and business developments and uses. Governments have a key role to play in this model.²²

As discussed below, in 2005, the World Summit on the Information Society (WSIS) considered four models of Internet governance, of which three would have involved an intergovernmental body to oversee the Internet and the domain name system. While the WSIS ultimately decided not

²¹ Organisation for Economic Co-operation and Development, OECD High Level Meeting, The Internet Economy: Generating Innovation and Growth, *Communique on Principles for Internet Policy-Making*, June 28-29, 2011, p. 4, available at http://www.oecd.org/dataoecd/33/12/48387430.pdf.

²² G8 Declaration, Renewed Commitment for Freedom and Democracy, G8 Summit of Deauville, May 26-27, 2011, available at http://www.g20-g8.com/g8-g20/g8/english/live/news/renewed-commitment-for-freedom-and-democracy.1314.html.

to pursue an intergovernmental model in 2005, some nations have again advocated an intergovernmental approach for Internet governance. For example:

- India, Brazil, and South Africa (referred to as IBSA) proposed that "an appropriate body is urgently required in the U.N. system to coordinate and evolve coherent and integrated global public policies pertaining to the Internet." The IBSA proposed body would "integrate and oversee the bodies responsible for technical and operational functioning of the Internet, including global standards setting."²³
- In order to implement the major aspects of the IBSA proposal, the government of India proposed (in the U.N. General Assembly) the establishment of a new institutional mechanism in the United Nations for global Internet-related policies, to be called the United Nations Committee for Internet-Related Policies (CIRP). CIRP would be comprised of 50 member states chosen on the basis of equitable geographical representation. The Internet Governance Forum (IGF) and four advisory stakeholder groups would provide input to CIRP, which would report directly to the General Assembly and present recommendations for consideration, adoption, and dissemination among all relevant intergovernmental bodies and international organizations.²⁴
- Another group of nations, including China and the Russian Federation, proposed a voluntary "International Code of Conduct for Information Security," for further discussion in the U.N. General Assembly. The Code includes language that promotes the establishment of a multilateral, transparent, and democratic international management system to ensure an equitable distribution of resources, facilitate access for all, and ensure a stable and secure functioning of the Internet.²⁵
- On January 13, 2015, the same group of nations released a revised International Code of Conduct for Information Security which states that

all States must play the same role in, and carry equal responsibility for, international governance of the Internet, its security, continuity and stability of operation, and its development in a way which promotes the establishment of multilateral, transparent and democratic international Internet governance mechanisms which ensure an equitable distribution of resources, facilitate access for all and ensure the stable and secure functioning of the Internet.²⁶

²³ IBSA Multistakeholder meeting on Global Internet Governance, *Recommendations*, September 1-2, 2011 at Rio de Janeiro, Brazil, available at http://www.culturalivre.org.br/artigos/IBSA_recommendations_Internet_Governance.pdf.

²⁴ The CIRP proposal is available at http://igfwatch.org/discussion-board/indias-proposal-for-a-un-committee-for-internet-related-policies-cirp.

²⁵ United Nations General Assembly, Sixty-sixth session, Item 93 of the provisional agenda, Developments in the field of information and telecommunications in the context of international security, "Letter dated 12 September 2011 from the Permanent Representatives of China, the Russian Federation, Tajikistan, and Uzbekistan to the United Nations addressed to the Secretary-General," September 14, 2011, A/66/359, available at http://blog.internetgovernance.org/pdf/UN-infosec-code.pdf.

²⁶ United Nations 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," January 13, 2015, p. 5, available at http://regmedia.co.uk/2015/02/04/un-internet-security-13jan15.pdf.

Thus, governments such as the United States and the European Union support ICANN's multistakeholder model, while at the same time advocating increased governmental influence within that model.²⁷ By contrast, other nations support an expanded role for an intergovernmental model of Internet governance. The debate has been summarized by NTIA as follows:

By engaging all interested parties, multistakeholder processes encourage broader and more creative problem solving, which is essential when markets and technology are changing as rapidly as they are. They promote speedier, more flexible decision making than is common under traditional, top-down regulatory models which can too easily fall prey to rigid procedures, bureaucracy, and stalemate. But there is a challenge emerging to this model in parts of the world.... Some nations appear to prefer an Internet managed and controlled by nation-states. In December 2012, the U.S. will participate in the ITU's World Conference on International Telecommunications (WCIT). This treaty negotiation will conduct a review of the International Telecommunication Regulations (ITRs), the general principles which relate to traditional international voice telecommunication services. We expect that some states will attempt to rewrite the regulation in a manner that would exclude the contributions of multi-stakeholder organizations and instead provide for heavy-handed governmental control of the Internet, including provisions for cybersecurity and granular operational and technical requirements for private industry. We do not support any of these elements. It is critical that we work with the private sector on outreach to countries to promote the multi-stakeholder model as a credible alternative.²⁸

2005 World Summit on the Information Society (WSIS)

Following the creation of ICANN in 1998, many in the international community, including foreign governments, argued that it was inappropriate for the U.S. government to maintain its legacy authority over ICANN and the DNS. They suggested that management of the DNS should be accountable to a higher intergovernmental body. The United Nations, at the first phase of the WSIS in December 2003, debated and agreed to study the issue of how to achieve greater international involvement in the governance of the Internet, and the domain name system in particular. The study was conducted by the U.N.'s Working Group on Internet Governance (WGIG). On July 14, 2005, the WGIG released its report, ²⁹ stating that no single government should have a preeminent role in relation to international Internet governance. The report called for further internationalization of Internet governance, and proposed the creation of a new global forum for Internet stakeholders. Four possible models were put forth, including two involving the creation of new Internet governance bodies linked to the U.N. Under three of the four models, ICANN would either be supplanted or made accountable to a higher intergovernmental body. The report's conclusions were scheduled to be considered during the second phase of the WSIS held in Tunis in November 2005. U.S. officials stated their opposition to transferring control and

²⁷ The European Commission has been a particularly strong voice in favor of significantly increasing GAC influence on the ICANN policy process. See Kieren McCarthy, "European Commission calls for greater government control over Internet," *.nxt*, August 31, 2011, available at http://news.dot-nxt.com/2011/08/31/ec-greater-government-control.

²⁸ Remarks by Lawrence Strickling, Assistant Secretary of Commerce for Communications and Information, National Telecommunications and Information Administration, Department of Commerce, before the PLI/FCBA Telecommunications Policy and Regulation Institute, Washington, DC, December 8, 2011, available at http://www.ntia.doc.gov/speechtestimony/2011/remarks-assistant-secretary-strickling-practising-law-institutes-29th-annual-te.

²⁹ Working Group on Internet Governance, Report from the Working Group on Internet Governance, World Summit on the Information Society, Document WSIS-II/PC-3/DOC/5-E, August 3, 2005, available at http://www.itu.int/wsis/docs2/pc3/html/off5/index.html.

administration of the domain name system from ICANN to any international body. Similarly, the 109th Congress expressed its support for maintaining existing U.S. control over ICANN and the DNS (H.Con.Res. 268 and S.Res. 323).³⁰

The European Union (EU) initially supported the U.S. position. However, during the September 2005 preparatory meetings, the EU seemingly shifted its support toward an approach which favored an enhanced international role in governing the Internet. Conflict at the WSIS Tunis Summit over control of the domain name system was averted by the announcement, on November 15, 2005, of an Internet governance agreement between the United States, the EU, and over 100 other nations. Under this agreement, ICANN and the United States maintained their roles with respect to the domain name system. A new international group under the auspices of the U.N. was formed—the Internet Governance Forum (IGF)—which would provide an ongoing forum for all stakeholders (both governments and nongovernmental groups) to discuss and debate Internet policy issues.

World Conference on International Telecommunications (WCIT)

The World Conference on International Telecommunications (WCIT) was held in Dubai on December 3-14, 2012. Convened by the International Telecommunications Union (the ITU, an agency within the United Nations), the WCIT was a formal meeting of the world's national governments held in order to revise the International Telecommunications Regulations (ITRs). The ITRs, previously revised in 1988, serve as a global treaty outlining the principles which govern the way international telecommunications traffic is handled.

Because the existing 24-year-old ITRs predated the Internet, one of the key policy questions in the WCIT was how and to what extent the updated ITRs should address Internet traffic and Internet governance. The Administration and Congress took the position that the new ITRs should continue to address only traditional international telecommunications traffic, that a multistakeholder model of Internet governance (such as ICANN) should continue, and that the ITU should not take any action that could extend its jurisdiction or authority over the Internet.

As the WCIT approached, concerns heightened in the 112th Congress that the WCIT might potentially provide a forum leading to an increased level of intergovernmental control over the Internet. On May 31, 2012, the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, held a hearing entitled, "International Proposals to Regulate the Internet." To accompany the hearing, H.Con.Res. 127 was introduced by Representative Bono Mack expressing the sense of Congress regarding actions to preserve and advance the multistakeholder governance model. Specifically, H.Con.Res. 127 expressed the sense of Congress that the Administration "should continue working to implement the position of the United States on Internet governance that clearly articulates the consistent and unequivocal policy of the United States to promote a global Internet free from government control and preserve and advance the successful multistakeholder model that governs the Internet today." H.Con.Res. 127 was passed unanimously by the House (414-0) on August 2, 2012.

A similar resolution, S.Con.Res. 50, was introduced into the Senate by Senator Rubio on June 27, 2012, and referred to the Committee on Foreign Relations. The Senate resolution expressed the

³⁰ In the 109th Congress, H.Con.Res. 268 was passed unanimously by the House on November 16, 2005. S.Res. 323 was passed in the Senate by Unanimous Consent on November 18, 2005.

³¹ Available at http://energycommerce.house.gov/hearings/hearingdetail.aspx?NewsID=9543.

sense of Congress "that the Secretary of State, in consultation with the Secretary of Commerce, should continue working to implement the position of the United States on Internet governance that clearly articulates the consistent and unequivocal policy of the United States to promote a global Internet free from government control and preserve and advance the successful multistakeholder model that governs the Internet today." S.Con.Res. 50 was passed by the Senate by unanimous consent on September 22, 2012. On December 5, 2012—shortly after the WCIT had begun in Dubai—the House unanimously passed S.Con.Res. 50 by a vote of 397-0.

During the WCIT, a revision to the ITRs was proposed and supported by Russia, China, Saudi Arabia, Algeria, and Sudan that sought to explicitly extend ITR jurisdiction over Internet traffic, infrastructure, and governance. Specifically, the proposal stated that "Member States shall have the sovereign right to establish and implement public policy, including international policy, on matters of Internet governance." The proposal also included an article establishing the right of Member States to manage Internet numbering, naming, addressing, and identification resources.

The proposal was subsequently withdrawn. However, as an intended compromise, the ITU adopted a nonbinding resolution (Resolution 3, attached to the final ITR text) entitled, "To Foster an enabling environment for the greater growth of the Internet." Resolution 3 included language stating "all governments should have an equal role and responsibility for international Internet governance" and invited Member States to "elaborate on their respective positions on international Internet-related technical, development and public policy issues within the mandate of ITU at various ITU forums." ³³

Because of the inclusion of Resolution 3, along with other features of the final ITR text (such as new ITU articles related to spam and cybersecurity), the United States declined to sign the treaty. The leader of the U.S. delegation stated the following:

The Internet has given the world unimaginable economic and social benefits during these past 24 years—all without UN regulation. We candidly cannot support an ITU treaty that is inconsistent with a multi-stakeholder model of Internet governance. As the ITU has stated, this conference was never meant to focus on internet issues; however, today we are in a situation where we still have text and resolutions that cover issues on spam and also provisions on internet governance. These past two weeks, we have of course made good progress and shown a willingness to negotiate on a variety of telecommunications policy issues, such as roaming and settlement rates, but the United States continues to believe that internet policy must be multi-stakeholder driven. Internet policy should not be determined by member states but by citizens, communities, and broader society, and such consultation from the private sector and civil society is paramount. This has not happened here.³⁴

Of the 144 eligible members of the ITU, 89 nations signed the treaty, while 55 either chose not to sign (such as the United States) or remain undecided.³⁵

³² See Article 3A, "Proposals for the Work of the Conference," available at http://files.wcitleaks.org/public/Merged%20UAE%20081212.pdf.

³³ International Telecommunications Union, *Final Acts*, World Conference on International Telecommunications, Dubai, 2012, Resolution 3, p. 20, available at http://www.itu.int/en/wcit-12/Documents/final-acts-wcit-12.pdf.

³⁴ Statement delivered by Ambassador Terry Kramer from the floor of the WCIT, December 13, 2012. U.S. Department of State, *Press Release*, "U.S. Intervention at the World Conference on International Telecommunications," December 13, 2012, available at http://www.state.gov/r/pa/prs/ps/2012/12/202037.htm.

³⁵ The official ITU list of signatories and non-signatories is at http://www.itu.int/osg/wcit-12/highlights/signatories.html.

While the WCIT in Dubai is concluded, the international debate over Internet governance is expected to continue in future intergovernmental telecommunications meetings and conferences. The 113th Congress oversaw and supported the U.S. government's continuing efforts to resist international attempts to exert control over Internet governance. On February 5, 2013, the House Committee on Energy and Commerce, Subcommittee on Communications and Technology, held a hearing entitled "Fighting for Internet Freedom: Dubai and Beyond." The hearing was held jointly with the House Committee on Foreign Affairs, Subcommittee on Terrorism, Nonproliferation, and Trade and the Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations.

On April 16, 2013, H.R. 1580, a bill "To Affirm the Policy of the United States Regarding Internet Governance," was introduced by Representative Walden. Using language similar to the WCIT-related congressional resolutions passed by the 112th Congress (S.Con.Res. 50 and H.Con.Res. 127), H.R. 1580 stated that "It is the policy of the United States to preserve and advance the successful multistakeholder model that governs the Internet." On May 14, 2013, H.R. 1580 was passed unanimously (413-0) by the House of Representatives.

Montevideo Statement on the Future of Internet Cooperation

In October 2013, the President of ICANN and the leaders of other major organizations responsible for globally coordinating Internet technical infrastructure³⁶ met in Montevideo, Uruguay, and released a statement calling for strengthening the current mechanisms for global multistakeholder Internet cooperation. Their recommendations included the following:

- They reinforced the importance of globally coherent Internet operations, and warned against Internet fragmentation at a national level. They expressed strong concern over the undermining of the trust and confidence of Internet users globally due to recent revelations of pervasive monitoring and surveillance.
- They identified the need for ongoing effort to address Internet Governance challenges, and agreed to catalyze community-wide efforts toward the evolution of global multistakeholder Internet cooperation.
- They called for accelerating the globalization of ICANN and IANA functions, toward an environment in which all stakeholders, including all governments, participate on an equal footing.³⁷

NETmundial

The day after the Montevideo Statement was released, the President of ICANN met with the President of Brazil, who announced plans to hold an international Internet governance summit in April 2014 that would include representatives from government, industry, civil society, and academia. NETmundial, which was described as a "global multistakeholder meeting on the future of Internet governance," was held on April 23-24, 2014, in Sao Paulo, Brazil.³⁸ The meeting was open to all interested stakeholders, and was intended to "focus on crafting Internet governance

³⁶ The Internet Society, World Wide Web Consortium, Internet Engineering Task Force, Internet Architecture Board, and all five of the regional Internet address registries.

³⁷ Full statement is available at http://www.icann.org/en/news/announcements/announcement-07oct13-en.htm.

³⁸ Further information on NETmundial is available at http://netmundial.br/.

principles and proposing a roadmap for the further evolution of the Internet governance ecosystem."³⁹

The outcome of NETmundial produced a nonbinding "NETmundial Multistakeholder Statement" that set forth general Internet governance principles and identified issues to be discussed at future meetings on the future evolution of Internet governance. According to the U.S. government delegation at NETmundial, the meeting outcome reaffirmed the multistakeholder model of Internet governance, endorsed the transition of the U.S. government's stewardship role of IANA functions to the global multistakeholder community, emphasized the importance of strengthening and expanding upon the mandate of the Internet Governance Forum, and underscored the importance of human rights in the implementation of a free and open Internet. 41

NETmundial Initiative

On August 28, 2014, the creation of a NETmundial Initiative for Internet Governance Cooperation and Development was announced by the World Economic Forum in partnership with ICANN and other governmental, industry, academic, and civil society stakeholders. While having no formal relationship with the April 2014 NETmundial summit held in Brazil, the purpose of the NETmundial Initiative is "to apply the NETmundial Principles to solve issues in concrete ways to enable an effective and distributed approach to Internet cooperation and governance."

2014 Plenipotentiary Conference in Busan

The ITU's three-week Plenipotentiary Conference in Busan, Republic of Korea, concluded on November 7, 2014. The purpose of the conference, which meets every four years, is to set ITU general policies, adopt four-year strategic and financial plans, and elect ITU officials. Prior to the conference, the U.S. delegation (headed by the State Department) had concerns that some ITU members would attempt to expand ITU's role in Internet governance. In the view of the State Department, the conference concluded successfully, with "the member states decid[ing] not to expand the ITU's role in Internet governance or cybersecurity issues, accepting that many of those issues are outside of the mandate of the ITU."

WSIS+10

On December 15-16, 2015, the United Nations General Assembly held a high-level meeting in New York to review the implementation of outcomes of the World Summit on the Information Society (WSIS). The meeting was preceded by an intergovernmental process that took into account inputs from all relevant WSIS stakeholders. ⁴⁴ During this process, some nations argued for an enhanced role for national governments in Internet governance and the internationalization

³⁹ Ibid.

⁴⁰ Available at http://netmundial.br/wp-content/uploads/2014/04/NETmundial-Multistakeholder-Document.pdf.

⁴¹ United States Diplomatic Mission to Brazil, "Official Statement by the USG Delegation to NETmundial," April 25, 2014, available at http://brazil.usembassy.gov/statementusgdeletationnetmundial.html.

⁴² World Economic Forum, NETmundial Initiative, available at http://www3.weforum.org/docs/WEF_1NetmundialInitiativeBrief.pdf.

⁴³ U.S. Department of State, "Outcomes from the International Telecommunication Union 2014 Plenipotentiary Conference in Busan, Republic of Korea," media note, available at http://www.state.gov/r/pa/prs/ps/2014/11/233914.htm.

⁴⁴ Information on WSIS+10 is available at http://unpan3.un.org/wsis10/GA-High-Level-Meeting.

of ICANN and the domain name system. ⁴⁵ The WSIS+10 outcome document supported "the need to promote greater participation and engagement in Internet governance discussions that should involve governments, the private sector, civil society, international organizations, the technical and academic communities, and all other relevant stakeholders." ⁴⁶ The outcome document also supported the role of the Internet Governance Forum (IGF) and the General Assembly extended the IGF mandate for another 10 years. The U.S. government supported the WSIS+10 outcome, stating that it "establishes a strong foundation for the next ten years, based on multi-stakeholder collaboration." ⁴⁷ The United States further stated that "greater governmental control could allow repressive regimes to advance policies for censorship or content controls on the web – which is anathema to what the Internet should be about."

Internet Governance and Terrorism

With ongoing concern over the use of the Internet by terrorist organizations, the question has arisen whether Internet governance mechanisms could be used to combat the use of the Internet by terrorist entities. Traditionally, nation-states can govern the use and content of the Internet within their national boundaries and many have the authority, pursuant to their respective national laws, to monitor, block, and/or shut down websites within their borders. ⁴⁹ In some instances, these powers and actions have been controversial when, for example, antiterrorism concerns may be used to justify censorship or the suppression of free speech on the Internet. ⁵⁰

On an international level, governance of the Internet with respect to its content and use is problematic. As discussed earlier in this report, the Internet is decentralized and its functioning relies on the cooperation and participation by mostly private sector stakeholders around the world. As such, there is no international governance entity that currently has authority to remove global Internet content used to promote terrorism. While there have been proposals to establish some level of authority over the Internet by the United Nations, these proposals have originated, for the most part, from regimes such as China, Russia, and Iran, and have been consistently opposed by the United States and other Western nations who fear that increased United Nations authority over the Internet would ultimately support censorship and suppression of free speech.⁵¹

Could ICANN—a functioning model of nongovernmental multistakeholder Internet governance—be deployed to restrict or limit the use of the global Internet by terrorist groups? Currently, ICANN administers the technological infrastructure of the Internet (domain names,

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⁴⁵ See for example comments submitted to the U.N. General Assembly by China (http://workspace.unpan.org/sites/Internet/Documents/UNPAN95318.pdf) and Russia (http://workspace.unpan.org/sites/Internet/Documents/UNPAN95301.pdf).

⁴⁶ General Assembly of the United Nations, "WSIS+10 Outcome: Countries Adopt New Plan to Utilize Internet and Information Technologies in Implementation of New Sustainable Development Agenda," press release, December 16, 2015, available at http://www.un.org/pga/70/2015/12/16/press-release-wsis10-outcome/.

⁴⁷ Catherine A. Novelli, Under Secretary for Economic Growth, Energy, and the Environment, U.S. Department of State, "Statement by the United States of America at the WSIS+10 High Level Meeting," December 15, 2015, available at http://www.state.gov/e/rls/rmk/250719.htm.

⁴⁸ Ibid.

⁴⁹ See for example, Conway, Maura, "Terrorism and Internet Governance: Core Issues," *Disarmament Forum*, 2007, pp. 23-34, available at http://www.peacepalacelibrary.nl/ebooks/files/UNIDIR_pdf-art2644.pdf.

⁵⁰See CRS Report R41837, *Promoting Global Internet Freedom: Government and Industry Initiatives*, by Patricia Moloney Figliola.

⁵¹ For example, see the previous section on the 2012 World Conference International Telecommunications (WCIT) in this report.

Internet protocol numbers and standards) and explicitly does not regulate Internet content. Any attempt to change ICANN policy toward regulating Internet content would likely be strongly opposed by most of the Internet stakeholders who administer and set policy for ICANN through a consensus process.

Issues for Congress

Congress has played an important role overseeing NTIA's stewardship of ICANN and ICANN's management of the domain name system. The House Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation have held numerous oversight hearings exploring ICANN's performance in general, as well as specific DNS issues that arise. Additionally, other committees, such as the House and Senate Judiciary Committees, maintain an interest in the DNS as it affects Internet policy issues such as intellectual property, privacy, and cybercrime. Since 1997, congressional committees have held over 40 hearings on the DNS and ICANN. ⁵²

The 114th Congress closely examined NTIA's proposal to relinquish its authority over ICANN and the DNS, thereby transitioning ICANN to a wholly multistakeholder-driven entity. With the transition now complete, Congress may continue assessing how effectively NTIA is advancing U.S. government positions within the Governmental Advisory Committee. Of particular interest may be to what extent ongoing and future intergovernmental telecommunications conferences constitute an opportunity for some nations to increase intergovernmental control over the Internet—at the expense of the multistakeholder system of Internet governance—and how effectively NTIA and other government agencies (such as the State Department) are working to counteract that threat.

Finally, the ongoing debate over Internet governance will likely have a significant impact on how other aspects of the Internet may be governed in the future, especially in such areas as intellectual property, privacy, law enforcement, Internet free speech, and cybersecurity. Looking forward, the institutional nature of Internet governance could have far-reaching implications on important policy decisions that will likely shape the future evolution of the Internet.

⁵² For a complete list, see the Appendix in CRS Report 97-868, *Internet Domain Names: Background and Policy Issues*, by Lennard G. Kruger.

Appendix. ICANN Basics

ICANN is a not-for-profit public benefit corporation headquartered in Los Angeles, CA, and incorporated under the laws of the state of California. ICANN is organized under the California Nonprofit Public Benefit Law for charitable and public purposes, and as such, is subject to legal oversight by the California attorney general. ICANN has been granted tax-exempt status by the federal government and the state of California.⁵³

ICANN's organizational structure consists of a Board of Directors (BOD) advised by a network of supporting organizations and advisory committees that represent various Internet constituencies and interests (see **Figure A-1**). Policies are developed and issues are researched by these subgroups, who in turn advise the Board of Directors, which is responsible for making all final policy and operational decisions. The Board of Directors consists of 16 international and geographically diverse members, composed of one president, eight members selected by a Nominating Committee, two selected by the Generic Names Supporting Organization, two selected by the Address Supporting Organization, two selected by the Country-Code Names Supporting Organization, and one selected by the At-Large Advisory Committee. Additionally, there are five nonvoting liaisons representing other advisory committees.

The explosive growth of the Internet and domain name registration, increasing responsibilities in managing and operating the DNS, and the rollout of the new gTLD program has led to marked growth of the ICANN budget, from revenues of about \$6 million and a staff of 14 in 2000, to total support and revenue of \$162.9 million and a headcount of 382 budgeted for 2016.⁵⁴ ICANN has been traditionally funded primarily through fees paid to ICANN by registrars and registry operators. Registrars are companies (e.g., GoDaddy, Google, Network Solutions) with which consumers register domain names.⁵⁵ Registry operators are companies and organizations that operate and administer the master database of all domain names registered in each top level domain (for example VeriSign, Inc. operates .com and .net, Public Interest Registry operates .org, and Neustar, Inc. operates .biz).⁵⁶ ICANN also collects significant revenue from new gTLD application fees (an estimated \$49.5 million in 2016).

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⁵³ ICANN, 2008 Annual Report, December 31, 2008, p. 24, available at http://www.icann.org/en/annualreport/annualreport-2008-en.pdf.

⁵⁴ ICANN, *FY16 Operating Plan & Budget*, June 25, 2015, pp. 12, 27, available at https://www.icann.org/en/system/files/files/adopted-opplan-budget-fy16-25jun15-en.pdf.

⁵⁵ A list of ICANN-accredited registrars is available at http://www.icann.org/en/registries/agreements.htm.

⁵⁶ A list of current agreements between ICANN and registry operators is available at http://www.icann.org/en/registries/agreements.htm.

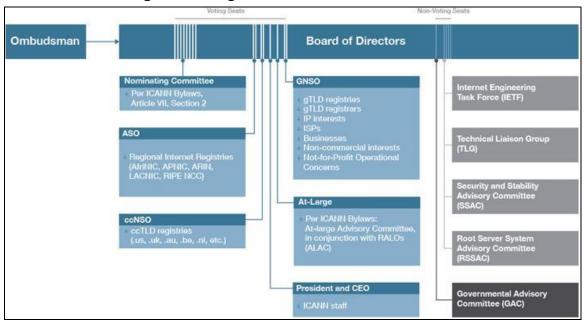


Figure A-I. Organizational Structure of ICANN

Source: ICANN; http://www.icann.org/en/groups/chart.

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