



214 Massachusetts Avenue, NE • Washington DC 20002 • (202) 546-4400 • heritage.org

CONGRESSIONAL TESTIMONY

**Stakeholder Perspectives on the IANA
Transition**

**Testimony before
Subcommittee on Communications and
Technology**

**Energy and Commerce Committee
United States House of Representatives**

May 13, 2015

**Brett D. Schaefer
Jay Kingham Senior Research Fellow in International
Regulatory Affairs
The Heritage Foundation**

My name is Brett Schaefer. I am the Jay Kingham Senior Research Fellow in International Regulatory Affairs at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

Chairman Upton, Ranking Member Pallone, and other distinguished Members of the committee, thank you very much for inviting me to testify on stakeholder perspectives on the Internet Assigned Numbers Authority (IANA) transition.

As most of the committee likely knows, the history of the Internet is one of astounding innovation, growth, and success. 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.¹ 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.² This growth has been global and, in recent years, particularly rapid in developing countries.³

During this period, the U.S. economy has become increasingly reliant on the Internet. A 2014 Hudson Institute study calculated that the information and communication technology sectors contributed 19 percent to America’s economic gross output growth from 1997 to 2002 (more than 582 billion 2013 dollars) and 9.3 percent to gross output growth from 2002 to 2007 (more than 340 billion 2013 dollars).⁴

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.

In the early years of the Internet, this governance role was fulfilled by the U.S. government in a largely ad hoc cooperation with academic experts. Since 1998, the U.S. government has contracted with the Internet Corporation for Assigned Names and

¹Worldmapper, “Internet Users 1990,” Map No. 335, <http://www.worldmapper.org/display.php?selected=335> (accessed May 12, 2015).

²Internet 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 12, 2015).

³Ibid.

⁴Harold Furchtgott-Roth and Jeffrey Li, “The Contribution of the Information, Communications, and Technology Sector to the Growth of the U.S. Economy: 1997–2007,” Hudson Institute, August 14, 2014, <http://www.hudson.org/research/10595-hudson-institute-releases-study-on-the-worth-of-the-internet-to-the-u-s-economy> (accessed May 12, 2015).

Numbers (ICANN) to manage most of the technical aspects of Internet governance, including the IANA function.

The IANA function is critical to the smooth operation of the Internet through the management and global coordination of the domain name system (DNS) and the Internet protocol numbering system. The DNS is, in essence, the Internet address book that translates the alphanumeric name of a website (heritage.org) into the unique numerical IP address (72.21.81.133) that computers use to identify specific websites. In order for the Internet to work, there has to be a central depository (the authoritative root zone file) ensuring that website names and numeric IP addresses remain unique so that websites always lead to the same place and computers can communicate with each other.

Since the establishment of ICANN, the U.S. federal government has expressed its intent to make management of the IANA fully private—that is, free from government oversight. However, this transition has been repeatedly deferred due to a perceived value in retaining U.S. influence and concerns over ICANN’s ability to fulfill its responsibilities absent the oversight role played by the National Telecommunications and Information Administration (NTIA). Until recently, the U.S. has periodically renewed the IANA contract with little controversy.

This arrangement is about to change. In March 2014, the U.S. announced that it intended to end its oversight role over ICANN.⁵ Under the terms of the current contract with ICANN, the U.S. government will have to decide in a few short months whether to allow the transition to proceed when the current contract expires on September 30, 2015, or whether to extend the current arrangement to allow transition proposals to be more fully developed and/or implemented.

The committee obviously knows this; it is after all the subject of the today’s hearing. However, I wanted to underscore the seriousness of this decision.

When the U.S. government oversight role ends, ICANN will come under considerable pressure from a number of interested parties to adopt policies that they favor. It is critical that the U.S. ensure that ICANN is sufficiently insulated from these pressures to make independent decisions while simultaneously being responsive and accountable to the multi-stakeholder community. This is a tough line to walk. Failure could lead to inefficiencies, instability, partiality, or other problems that could result in substantial financial costs and inhibit a vital medium for speech and political discourse. However, there will only be one opportunity to do this and it must be done right.

⁵Specifically, 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.” The 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).

Critical Next Steps for the Transition

Although the NTIA has the lead position on the ICANN transition, Congress has a legitimate interest and role to play. Congress represents over 300 million U.S. citizens of which the vast majority directly access or benefit from the Internet and related activities. Congress has a duty to safeguard their constituents' interests by overseeing this process and verifying that the IANA transition will not cause immediate or long-term disruption or harm. With this in mind, there are two overriding issues on which Congress should focus.

First, Congress should inform itself of the reforms and changes necessary to preserve the competency, reliability, and stability of the current system, establish new oversight to effectively replace the current U.S. role, and ensure ICANN remains accountable to the multi-stakeholder community and focused on its core mission.

Second, Congress must verify that those changes are included in the multi-stakeholder transition proposals, are being welcomed by ICANN, and have been approved and implemented prior to the transition.

For much of the past year, 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. Heritage has participated in this process through its research, submissions through ICANN's public comment process, involvement in and attendance at ICANN meetings, and participation in ICANN's Accountability and Governance Cross Community Working Group (CCWG-Accountability) and the Noncommercial Users Constituency.

To coordinate multi-stakeholder recommendations, ICANN convened the CCWG-Accountability and the IANA Stewardship Transition Coordination Group (ICG), which is comprised of three sub-groups on Domain Names: the Cross Community Working Group on Stewardship (CWG-Stewardship), Numbering Resources (CRISP Team), and Protocol Parameters (IANAPLAN Working Group).⁶

The working group participants have done incredible work and logged thousands of hours to develop recommendations that address the areas of concern and have broad support in the multi-stakeholder community. They should be commended for their work.

Nonetheless, much remains to be done and many of the specific recommendations remain under discussion. The U.S. remains months away from having a final, fully fleshed out consensus proposal to consider. That said, let me give a few thoughts on where things stand currently.

⁶Information about both groups and the process is available at ICANN, "IANA Stewardship Transition and Enhancing ICANN Accountability," <https://www.icann.org/stewardship-accountability> (accessed May 12, 2015).

Stewardship. The ICG is focused on the more technical questions surrounding the IANA transition and is charged with drafting and submitting a proposal on the steps needed to ensure that the transition will comply with the requirements outlined by the NTIA. This part of the transition process, particularly the two groups on numbering resources and protocol parameters, were generally viewed as less controversial than the accountability measures under consideration by the CCWG-Accountability.

As expected, the CRISP Team⁷ and the IANAPLAN Working Group⁸ drafted and submitted proposals by early January that largely reflected current contractual arrangements for handling the IANA functions for numbers and protocols or made small changes generally considered non-controversial. In both instances, however, there exists the possibility that the Regional Internet Registries and the Internet Engineering Task Force could, in the future, enter into a contract with some entity other than ICANN for these tasks.

This is an important accountability check. 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 between ICANN and the Commerce Department. Bluntly, 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.

The proposals by the CRISP Team and the IANAPLAN Working Group help address this concern. Separability is also included as a key recommendation in the CWG-Stewardship proposal.⁹

⁷In essence, the CRISP Team proposal would replace the NTIA role with a contractual arrangement with the Regional Internet Registries. Number Resource Organization, "Internet Numbers Community Proposal FAQ," <https://www.nro.net/nro-and-internet-governance/iana-oversight/internet-numbers-community-proposal-faq> (accessed May 12, 2015).

⁸As summarized by the Internet Engineering Task Force, "Because the system for administering the protocol parameters registries is so robust and has served the Internet community so well, the transition announced by NTIA last year has little practical impact on the protocol parameters registries. The IETF has already reached consensus that no new structures or organizations are required as a result of the transition. NTIA already has no practical role in the administration of the protocol parameters registries, thus no changes are necessary in day-to-day operations. In short, the existing system has served to support the stability, security, and openness of the Internet for decades. The transition of IANA oversight announced by NTIA will do nothing to change that in the future." Internet Engineering Task Force (IETF), "Transition of the Oversight of the Internet Assigned Numbers Authority (IANA): Fact Sheet: Internet Engineering Task Force (IETF) Protocol Parameters," <http://www.ietf.org/iana-transition/pp-fact-sheet.pdf> (accessed May 12, 2015).

⁹CWG-Stewardship, "Response to the IANA Stewardship Transition Coordination Group Request for Proposals on the IANA Stewardship Transition from the Cross Community Working Group on Naming Related Functions," <https://www.icann.org/en/system/files/files/cwg-stewardship-draft-proposal-with-annexes-22apr15-en.pdf> (accessed May 12, 2015).

Unfortunately, ICANN seems to be having cold feet. According to CRISP team member Bill Woodcock, ICANN is still negotiating over the January proposals that were considered non-controversial:

The areas we're furthest apart on in negotiation are related: termination and separability of the three communities' IANA functions operators. ICANN has verbally represented that they will reject any proposed agreement in which ICANN is not deemed the sole source prime contractor for IANA functions in perpetuity. ICANN asserts that neither NTIA nor the US Congress will approve any transition plan which leaves open the possibility of a future non-US IANA Functions Operator.¹⁰

As noted by Syracuse University Professor and ICANN expert Milton Mueller,

Since all three communities (names, numbers and protocols) have made separability (i.e., the ability to change to a different IANA functions operator) a requirement of the post-NTIA world, this is truly alarming. ICANN seems to be using these contract negotiations to undo the community process. Worse, these reports seem to indicate that ICANN's staff are viewing themselves, rather than the formal IANA transition process shepherded by the ICG, as the final authority on the transition. It also means that behind the scenes, ICANN's staff is claiming to speak on behalf of the NTIA, and even the U.S. Congress regarding what solutions are or are not acceptable. This attempt to veto ideas by appealing to a silent third party authority poisons the transition dialogue.¹¹

A key aspect of the stewardship discussion is how to mirror the independent check on ICANN historically filled by NTIA by putting in place structural separation between the ICANN policy apparatus and the IANA functions so that, if necessary, there is a means for severing the IANA functions from ICANN and awarding them to another organization. One alleged basis for ICANN's resistance to the separability proposal is the "perception" that the NTIA and Congress oppose the idea. There is nothing that I can see in the public record that supports such a perception, but to the extent it might be useful Congress should clarify that, contrary to the impression given above, it is not opposed to the idea of separability. It should also urge the NTIA to likewise make it clear that this additional concern is not a condition precedent to the transition.

Accountability. The CCWG-Accountability is charged with developing "proposals that would enhance ICANN's accountability towards all stakeholders" after the U.S. contractual oversight role ends. The CCWG-Accountability has identified two work streams: Work Stream 1 contains those accountability mechanisms that must be in place or committed to prior to the transition and Work Stream 2 contains those accountability measures that are important but can wait until after the transition to be implemented.

¹⁰As quoted in Milton Mueller, "ICANN Wants an IANA Functions Monopoly—Will It Wreck the Transition Process to Get It?" April 28, 2015, <http://www.internetgovernance.org/2015/04/28/icann-wants-an-iana-functions-monopoly-and-its-willing-to-wreck-the-transition-process-to-get-it/> (accessed May 12, 2015).

¹¹Ibid.

The CCWG-Accountability team has done an incredible job of filtering dozens, if not hundreds, of different accountability proposals into a digestible and implementable plan.

In my opinion, the paramount concerns of the U.S. and the multi-stakeholder community should be to ensure that the transition, when it occurs, is done in a manner that preserves the vitality and freedom so central to the success of the Internet while at the same time ensuring that sufficient safeguards are in place prior to the transition so that:

1. ICANN can avoid capture by governments or other vested interests to the detriment of the broader multi-stakeholder community;
2. ICANN's purpose is narrowly defined to prevent mission creep;
3. An independent review process is in place to adjudicate and issue binding judgements over disputes between ICANN and the community; and
4. ICANN is responsive and accountable to the multi-stakeholder community by establishing means for recall of the Board or individual Board members, approving the budget, and approving the strategic plan.

This is not to say that a number of other issues, such as increasing transparency and accessibility to ICANN by reforming its disclosure policies that are ridiculously tilted toward non-disclosure, are unimportant.¹² However, addressing these key issues would establish the minimum accountability criteria necessary for comfort in the transition.

As currently drafted, the CCWG-Accountability proposal addresses all of these concerns. However, sound ideas and intent can be thwarted by poor implementation. Prudence demands that the transition not occur before these steps are verified to be in place and observed.

Timing

The existing contract between the U.S. government and ICANN expires on September 30, 2015. Under the terms of the contract, "The Government may extend the term of this contract by written notice to the Contractor [ICANN] within 15 calendar days before the expiration of the contract; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 calendar days before the

¹²For instance, among other exemptions, information provided to or by a government is off-limits if ICANN believes that there was an expectation of confidentiality or if it could harm relations with the government; internal documents, memoranda, or other communications from ICANN directors, staff, consultants, contractors, or others that "would or be likely to compromise the integrity of ICANN's deliberative and decision-making process by inhibiting the candid exchange of ideas and communications" can be excluded; any draft "correspondence, reports, documents, agreements, contracts, emails, or any other forms of communication" are excluded; and any requests deemed by ICANN to be unreasonable, overly burdensome, unfeasible, or made by a person deemed "abusive or vexatious" or considered to be made with that intent can be denied. ICANN, "ICANN Documentary Information Disclosure Policy: Defined Conditions of Nondisclosure," <http://www.icann.org/en/about/transparency/didp> (accessed May 12, 2015).

contract expires.”¹³ Specifically, the NTIA must provide notice to ICANN by August 31, 2015, of its intent to extend the contract.

As a practical matter, NTIA must have the details of the various proposed changes and evidence of their implementation at least several weeks in advance of this date to make an informed decision on whether its conditions for the transition have been met satisfactorily. Looking at the hurdles that must be cleared prior to August, there is very little chance that this will happen.

Specifically, the draft proposals of the CWG-Stewardship and the CCWG-Accountability are currently available on the ICANN website and are open for public comment from the broader multi-stakeholder community. These comments will be taken into account by the working groups who are expected to submit finalized proposals to the ICANN Board of Directors. Originally, this was to take place prior to the ICANN 53 meeting in Buenos Aires in late June, but the latest timeline for the CCWG-Accountability projects delivery of the finished proposal in time for the ICANN 54 meeting in October in Dublin.¹⁴

More important, there are several additional steps in this process that may push the finalization and implementation of the transition even further down the road. For instance:

1. **The ICANN Board may request significant changes to the proposals** that would have to be negotiated in the working groups and, presumably, resubmitted for public comment.
2. **The NTIA must review the proposal in coordination with other Executive Branch departments** with equities and, hopefully, Congressional consolation.
3. **Possible amendments to ICANN’s bylaws will like lengthen the finalization process.** It is very likely that the working group proposals will require amendments to ICANN’s bylaws. Past practice indicates that that process would involve multiple steps and take at least a month even if everything were expedited and no objections were raised. If the community raises significant concerns during the comment process, it could force revisions and a second public comment period.
4. **Finally, the NTIA must verify that the steps outlined in the transition proposal have actually been implemented as described.**

¹³The current contract permits the NTIA to exercise two renewal clauses, each for two-year periods, which could extend the current contract through September 30, 2019. U.S. Department of Commerce, Award to Internet Corporation for Assigned Names and Numbers (ICANN), Contract No. SA1301-12-CN-0035, Effective September 1, 2012, Section I.59, p. 58, http://www.ntia.doc.gov/files/ntia/publications/sf_26_pg_1-2-final_award_and_sacs.pdf (accessed May 12, 2015).

¹⁴ICANN, “CCWG-Accountability Initial Draft Proposal for Public Comment,” May 4, 2015, p. 91, <https://www.icann.org/en/system/files/files/cwg-accountability-draft-proposal-with-annexes-04may15-en.pdf> (accessed May 12, 2015).

All of these steps make it very likely, as many experts involved in the process have privately conceded for months, that the NTIA will have to extend the current contract. Indeed, the CCWG-Accountability timeline projects that implementation will take until July or August of 2016.

The current contract permits the NTIA to exercise two renewal clauses, each for two-year periods, which could extend the current contract through September 30, 2017, and September 30, 2019.

There has been some consideration given to negotiating an extension that is less than the September 2017 option. Considering the projected CCWG-Accountability timeline, this makes little sense. If an acceptable proposal is approved and implemented prior to 2017, the NTIA and ICANN always have the option of mutually ending the contract. Moreover, a shorter extension of a year or less could introduce unnecessary complications if the process encounters delays requiring a second shorter extension and could, perversely, create disincentives for addressing some Work Stream 2 accountability measures prior to the transition if there is a perceived lack of time.

The issue of timing should be of particular concern for Congress, which is scheduled to be in recess in August 2015. Thus, the earliest that the proposal is likely to be finalized and considered by the NTIA will also occur when Congress, which has expressed great interest in this issue, will not be able to exercise oversight by questioning the NTIA, ICANN, or industry experts at a formal hearing, thoroughly assessing the proposal, or adopting legislation expressing support or opposition.

Conclusion

Both NTIA administrator Lawrence Strickling and ICANN CEO Fade Chehade have insisted that September 30 is a goal, not a deadline. Administrator Strickling underscored this point in January 2015:

I want to reiterate again that there is no hard and fast deadline for this transition. September 2015 has been a target date because that is when the base period of our contract with ICANN expires. But this should not be seen as a deadline. If the community needs more time, we have the ability to extend the IANA functions contract for up to four years. It is up to the community to determine a timeline that works best for stakeholders as they develop a proposal that meets NTIA's conditions, but also works.¹⁵

Once the NTIA's contract with ICANN expires so does its ability to ensure changes are made. This matter merits serious consideration by Congress, the NTIA, ICANN, and the multi-stakeholder community. The pressure to approve the transition should not be allowed to result in a hasty decision. It is becoming increasingly clear that the September

¹⁵Lawrence E. Strickling, remarks at the State of the Net Conference, January 27, 2015, <http://www.ntia.doc.gov/speechtestimony/2015/remarks-assistant-secretary-strickling-state-net-conference-1272015> (accessed May 12, 2015).

date is not realistic and the U.S. should be prepared to exercise its option to extend the contract with ICANN. Moreover, it should not wait until the last minute when pressure will be highest to accept a partial or substandard proposal. Only after an acceptable transition proposal is offered and all the necessary reforms to ICANN are adopted and in effect should the U.S. agree to end the contract.

Chairman Upton, Ranking Member Pallone, and other distinguished Members of the committee, thank you very much for inviting me to testify today and I look forward to your questions.

The Heritage Foundation is a public policy, research, and educational organization recognized as exempt under section 501(c)(3) of the Internal Revenue Code. It is privately supported and receives no funds from any government at any level, nor does it perform any government or other contract work.

The Heritage Foundation is the most broadly supported think tank in the United States. During 2013, it had nearly 600,000 individual, foundation, and corporate supporters representing every state in the U.S. Its 2013 income came from the following sources:

Individuals	80%
Foundations	17%
Corporations	3%

The top five corporate givers provided The Heritage Foundation with 2% of its 2013 income. The Heritage Foundation's books are audited annually by the national accounting firm of McGladrey, LLP.

Members of The Heritage Foundation staff testify as individuals discussing their own independent research. The views expressed are their own and do not reflect an institutional position for The Heritage Foundation or its board of trustees.