A Proposal for More Realistic Domain Name Governance

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The following paper addresses the need for significant change to how the domain name industry is regulated, and proposes a specific set of reforms that will create a system for domain name governance that better takes into account the divergent interests of the many parties affected by such governance. This paper supplements New.net’s previous paper, “A Proposal to Introduce Market-Based Principles into Domain Name Governance,” released in May 2001. New.net hopes that this new paper will stimulate further discussion regarding the need to reform domain name governance and the specific means for doing so. As always, New.net welcomes feedback on its proposals.
Executive Summary

The Internet Corporation for Assigned Names and Numbers (ICANN) represents a bold attempt to privatize the administration and coordination of Internet naming and addressing on a worldwide basis that failed because ICANN quickly evolved to assume a broad worldwide regulatory role without the authority, accountability, checks and balances, and legitimacy of a government to regulate effectively. ICANN has always been controlled by vested interests intent on using regulation to preserve the status quo, further their own interests and stifle competition. We do not believe that current calls for reform to make ICANN bigger and more powerful serve the interests of the Internet community. Instead, we propose to replace the existing ICANN governance structure with one that provides for ICANN to serve a more limited advisory and educational role as a trade association, provides for greater reliance on market forces to guide industry practices, and provides for continued use of country-level regulation where local governments deem it necessary to protect local social and economic interests.

Specifically, we propose the following:

- ICANN should redefine its role as a consensus-based trade association that focuses on developing “best practices” for members of the domain name industry, providing forums for receiving input from diverse constituencies and providing advice to private and governmental entities regarding coordination issues, proposed legislation and other policy matters. ICANN would accept that it does not have the authority to compel adherence to its policies, and would be compelled to develop only truly consensus-based policies among its members.

- Market forces should play a greater role in determining issues affecting domain name industry participants. As in most industries, market forces have a significant impact on standards adoption, product development, product design, product use and adoption, and ultimately product success and failure. Allowing greater market influence may result in the development of new competing naming systems and competing roots, but such systems and roots are inevitable and should be allowed to flourish, as they will lead to increased innovation and economic growth.

- Substantive regulation of social and/or economic policy issues that affect Internet naming and addressing at the local level should always be preferred to regulation of such matters on a global scale because local regulations almost always

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1 See Jonathan Weinberg, ICANN and the Problem of Legitimacy, 50 Duke L.J. 187, 257 (2000), (“If ICANN is to establish its legitimacy, it must be able to answer the charge that its exercise of authority is inconsistent with our ordinary understandings about public power and public policymaking.”).

2 In this regard we propose that the Internet provides an infrastructure for an industry that is little different from others. The MPAA provides an example of a trade association on which ICANN might model itself.

3 See Milton Mueller, Competing DNS Roots: Creative Destruction or Just Plain Destruction?, Research Conference on Communication, Information, Cabbages and Kings (2001) (“... competition among DNS roots should be permitted and is a healthy outlet for inefficiency and abuses of power by the dominant root administrator.”).
better reflect local interests. In other words, regulation of the domain name industry should occur much in the same way that regulation of virtually every other industry is conducted.

- In recognition of the vital interests of the United States in the ongoing operation of some or all of the generic top level domains (gTLDs) supported on the legacy domain name system (DNS) root, the U.S. Government should retain control over the legacy DNS root on an ongoing basis, with the expectation that most Internet users will continue to rely primarily on root servers that contain the legacy root zone files, at least until other systems develop.

- In recognition of the vital interests of non-U.S. interests in the ongoing operation of country code top level domains (ccTLDs), the ccTLD operators should be encouraged in their efforts to form their own trade association (or separate entity within the overall ICANN trade association) to agree on, among other things, the content of the root zone files for all ccTLDs (other than .us), and the U.S. Department of Commerce (DOC) should agree in writing with such association to include the contents of such zone files in the legacy DNS root on an ongoing-basis.\(^4\)

- Technical coordination among competing naming systems and roots should be conducted via agreements among governments and organizations that operate naming systems or roots, either directly or through treaty organizations. A competitive market guided by naming system and root operators that want to serve their citizens’ or customers’ welfare should provide an environment that fosters interoperability agreements and standards.

The governance structure proposed in this paper would provide participants in the domain name industry unfettered participation in a trade association, in the form of ICANN, that would be free to influence root operators’ root policies and association members’ business practices in much the same manner as other trade associations influence governmental and private action affecting other industries. Such a structure also would be responsive to the public at large, as root operators would compete to recognize and offer new and innovative registries and services to meet market demand. The proposed structure would provide a solution for a U.S. Government that no longer desires to give away control of the vital legacy DNS root resource, as was originally contemplated under a prior administration’s agreement with ICANN. Finally, this structure would empower other governments and private enterprises to develop their own roots, individually or collectively, and once and for all put an end to their current positions of dependence. Whether root operators choose to address interoperability standards through multiple bilateral agreements, through multilateral agreements or through treaty organizations and standards committees will depend on their needs and goals.

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I. Introduction

On February 24, 2002, Stuart Lynn, the Chief Executive Officer of ICANN, published a report highlighting shortcomings of ICANN over its brief history and declaring that ICANN has failed in its mission and will continue to fail unless dramatic reforms are implemented.\(^5\) Mr. Lynn then proposed a sweeping series of reforms that would entail ICANN obtaining an official imprimatur of governmental authority, obtaining significant additional funding support from government sources, and dispensing with the need for ICANN to become more democratic in its processes and more representative of the broader Internet community generally.

Although New.net agrees with Mr. Lynn’s diagnosis of ICANN’s current ailments, we strongly oppose Mr. Lynn’s suggested reforms. We believe that such reforms would create an Internet naming and addressing regulatory regime with more power and the potential to be more effective, but at a cost of creating an organization that has significantly less accountability to the interests of Internet users generally, increased control by the vested interests that currently dominate ICANN and a further chilling effect on competition and innovation in Internet addressing. More fundamentally, implementation of the new reforms would merely perpetuate many of the problems inherent in the current ICANN structure that call into question its ongoing legitimacy. Mr. Lynn’s proposed reforms represent an honest, last-ditch effort to save ICANN from increasing marginalization, but the cure proposed is worse than the current sickness.

This paper discusses why ICANN has not been capable of providing an adequate form of governance for Internet naming and addressing matters, and proposes reforms for the current system to reflect more realistically the wide range of interests of persons, entities and nations with a stake in the Internet’s naming and addressing systems.

We anticipate that some will criticize the contents of this paper as threatening the stability and interoperability of the Internet. We note that the aim of this paper is in fact to promote such interoperability by recognizing that the local naming needs of communities around the world are not currently being met by the DNS, and that radical solutions are required to ensure that interoperability is maintained as these needs are addressed. This paper also takes as its premise that due to inadequacies dating back to its creation, ICANN can no longer claim to be speaking for the global internet community or to be operating the DNS in the “public trust.”

II. The Failure of ICANN in Its Current Form

As a worldwide coordinator and administrator of Internet addressing, ICANN represents a failure in both theory and practice that is now widely acknowledged among members of the Internet community, public interest groups and ICANN itself.\(^6\) ICANN is


a failure in theory in the sense that its concept as a governance entity was flawed from the outset, and a failure in practice in the sense that it has failed to achieve much of its original mandate to build consensus on technical coordination matters. ICANN originally was formed as a worldwide coordinator and administrator of Internet naming and addressing matters, but it has evolved into a regulatory entity without the authority, accountability, checks and balances, and legitimacy of a government to regulate effectively. ICANN has always been controlled by vested interests intent on using ICANN in a broader regulatory role to preserve the status quo, to further their own interests and to stifle competition. Consequently, ICANN has failed its original mission of technical coordination and is a regulator that is both ineffective and incapable of serving the interests of Internet stakeholders generally. ICANN’s claim to represent the “public trust” is no longer credible.

**Flawed Conceptual Beginnings**

The creation of ICANN was a bold experiment in privatizing governmental administration of U.S. resources used by the international community that never was likely to succeed. Founded in 1998, ICANN was the product of well-intentioned, but unrealistic expectations that the Internet’s supranational nature would change the world substantially and quickly, bypassing the constraints of the physical world and traditional business and politics. For some utopian thinkers, ICANN seemed to present an opportunity to turn their dream into a reality – a truly consensus-based world government of the Internet. For others, ICANN represented an opportunity for private industry to coordinate and administer a shared global resource. Unfortunately, just as the burst of the “dot-com” bubble demonstrated that the Internet would not form the basis for a transformed business landscape immune from traditional economic models, hopes of achieving privatized, consensus-based governance of complex issues also must be tempered by reality.

The creation of ICANN was a response to a rapidly changing technical and business environment that gave rise very quickly to a perception that the DNS required global administration and coordination. Prior to ICANN’s formation, technical operation and administration of the DNS and IP address allocation was managed by the Internet Assigned Names and Numbers Authority (IANA) pursuant to a contract with the U.S. Department of Defense’s Advanced Research Projects Agency. IANA had a limited technical role that was largely performed by one individual, Dr. Jon Postel. As use of the Internet expanded dramatically in the late 1990’s, demand for domain names and IP addresses also increased dramatically, which led to various groups putting pressure on


8 See A. Michael Froomkin, Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution, 50 DUKE L.J. 17 (2000); Joseph P. Liu, Legitimacy and Authority in Internet Coordination: A Domain Name Case Study, 74 IND. L.J. 587 (1999), available online at http://www.uchastings.edu/Liu/teaching/01ipsem/liu_legit.html.

IANA and the U.S. Government to play a more significant role in making policy and allocation decisions regarding DNS and IP address issues. The Clinton Administration’s response to this situation was the creation of ICANN as “a new, not-for-profit corporation formed by the private sector Internet stakeholders to administer policy for the Internet name and addressing system.”

For those that view ICANN as a regulator, ICANN’s inherent structural flaw lies in its conception as a vehicle for privatizing governmental decision-making on matters of economic and social policy without having the legitimacy of a national or international governmental entity derived from concepts of authority and accountability. During its early history, IANA had been relatively immune from such problems because its role was limited to technical coordination matters. When ICANN attempts to move beyond a coordination role – by attempting to regulate economic and social policy matters without being representative of the entire Internet community and without having any real accountability to anyone – it does so without legitimacy in the eyes of those affected by its policies and without any ability to enforce its policies. Lacking legitimacy and enforcement power, ICANN is at best a toothless tiger.

Another structural flaw in ICANN’s form is the U.S. Government’s effective delegation of control over national and international public resources to some, but not all, private parties with vested interests in how such resources are used. In other words, ICANN’s organizational structure gives to certain groups with vested interests in the DNS and IP allocation issues power over other groups affected by the same issues but lacking similar representation in ICANN processes. Moreover, ICANN’s formation favored U.S. interests over non-U.S. interests through the intended and actual predominant participation of U.S. companies in ICANN, despite ICANN’s stated goal of representing the interests of Internet users worldwide. Thus, for persons that believe that ICANN should have a regulatory role, the formation of ICANN was akin to the U.S. Government giving to leading U.S. automobile companies regulatory authority over all environmental matters worldwide. It is not surprising that this “fox guarding the hen house” approach to regulation has been routinely criticized by public interest and consumer advocacy groups, international entities and businesses shut out of ICANN processes.

**Lack of Consensus Development in Favor of Top-Down Edicts**

ICANN’s departure from its original mandate to perform technical coordination though a “bottom-up consensus” approach has further eroded ICANN’s appearance of legitimacy in the eyes of the worldwide Internet community, as attempts to build consensus have waned in favor of more expedient, top-down decision-making processes. Rather than an organization of open, consensus-building forums, ICANN

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10 Id.

11 See ICANN Organizational Chart, online at [http://www.icann.org/general/icann-org-chart_frame.htm](http://www.icann.org/general/icann-org-chart_frame.htm) (there are still seats on the ICANN Board of Directors that have not yet been filled by public elections since ICANN’s inception, which are intended to be elected by the public at large, consequently leaving those not permitted to join a constituency without Board representation).
has become dominated by secret board meetings, backroom deals, exclusionary practices and a secretive professional staff. Whether by design or as a result of lack of interest of members of the Internet community in ICANN policies, ICANN’s decision-making process was quickly captured and controlled by the private interests that had most to benefit from controlling and dominating policy development. The much-vaunted consensus development process was never implemented, and the resulting vacuum of policy-making resulted in a permanent staff and inner cabal with the ability to force their own “policies” on the rest of the Internet community.

The issuance by ICANN’s CEO of “Internet Coordination Policy 3” in June 2001 illustrates well how bottom-up consensus has been replaced by top-down fiat. This paper purported to restate existing ICANN policy that the DNS could only operate with one public technical root and that this root must be controlled and operated by ICANN. Despite widespread criticism of both the closed process that led to this substantial statement being issued and criticism of the logical merit of the argument, the ICANN staff took steps to ensure that the statement quickly became a central pillar supporting their restrictive actions.

The experience of the ccTLDs in dealing with ICANN also demonstrates the lack of regard for genuine consensus building in policy formation. ICANN's control of policy regarding the contents of the root zone file in the legacy DNS root gives it a degree of power over the managers of top level domains (TLDs) within that root zone. Over the

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12 ICANN director Karl Auerbach has consistently posted minutes of closed door sessions of ICANN Board meetings at http://www.cavebear.com. The ICANN Board is rumored to make most of its real policy decisions in unofficial gatherings of the Board that precede Board meetings that occur in public, and ICANN quarterly meetings typically are rife with secret discussions and lobbying of ICANN staff and Board members. As a further example, after the recent retreat of ICANN directors to discuss Stuart Lynn’s restructuring plan, ICANN director Andy Mueller-Maguhn posted digital photos of the meeting at http://www.ccc.de/~andy/ICANN/Reports/2002/20020223/. He was privately reprimanded by another ICANN director. Mueller-Maguhn’s report of this incident is available online at http://www.ccc.de/~andy/ICANN/Reports/2002/20020223/censored.html.


14 See Jonathan Weinberg, Request for Reconsideration (2002), available online at http://www.icann.org-committees/reconsideration/weinberg-request-08aug01.htm; Milton Mueller, supra note 3; Interestingly, Internet Coordination Policy 3 followed after Internet Consensus Policy 2 and Internet Consensus Policy 1. However, visitors to ICANN’s web site will no longer find Internet Consensus Policy 1 or Internet Consensus Policy 2. Instead they will find Internet Coordination Policy 1 and Internet Coordination Policy 2. That is because ICANN has re-written its history by renaming the documents to reflect its new style of decision making. Internet Consensus Policies 1 and 2 were formed by bottom-up processes, processes in which many have argued that not all affected parties were given equal influence, but processes that nonetheless had a superficial appearance of consensus formation. Internet Coordination Policy 3, however, was not promulgated via such a consensus process. Instead, it was promulgated by ICANN’s CEO unilaterally and without open participation by ICANN’s constituent organizations. Consequently, ICANN could not refer to it as an “Internet Consensus Policy,” and thus used the label “Internet Coordination Policy 3.” To remedy the odd result of having an Internet Coordination Policy 3, but not an Internet Coordination Policy 1 or 2, ICANN simply re-wrote its history and retroactively changed the names of Internet Consensus Policies 1 and 2 so that they are now known as “Internet Coordination Policies.” ICANN’s staff abandoned consensus based decision making and rewrote its history in such a manner so that it could accomplish its goal of publishing Internet Coordination Policy 3.
past two years, the managers of the ccTLDs have painstakingly created and documented their consensus position that any contractual agreements between such operators and ICANN must include service level commitments by ICANN regarding its operation of the legacy DNS root. Despite this carefully built consensus, ICANN has refused to offer firm commitments to service levels in root server operation, and ccTLDs have continued to express their dissatisfaction with ICANN.\textsuperscript{15}

The recent proposal by ICANN’s CEO also makes clear that ICANN’s staff has a somewhat hostile attitude toward the principle of achieving bottom-up consensus as the basis for ICANN’s policy making role.\textsuperscript{16} ICANN’s CEO now suggests that effectiveness, and not consensus, must be the guiding principle for ICANN as it establishes policy in the future.\textsuperscript{17} ICANN’s CEO also complains about ICANN suffering from “too much process.”\textsuperscript{18} These complaints about consensus and process strike at the heart of ICANN’s legitimacy as a technical coordination body or regulator accountable to the broader Internet community.

The inability of ICANN to reach consensus on policy matters is not surprising given the diverse mix of its constituents and the difficulty of reaching consensus generally on non-technical policy matters.\textsuperscript{19} Nonetheless, the actions cited above of unilateral statements of policy and willingness to forego a consensus-based approach to policy development demonstrate ICANN’s lack of accountability, and thus its appearance of illegitimacy, to the larger Internet community.

\textit{Mission Creep: From Technical Coordination to Regulation of Social and Economic Issues}

ICANN also has lost significant support within the Internet community because of its ongoing efforts to broaden substantially the scope of its role to include broader regulatory functions. ICANN’s original mandate was “to address the narrow issues of management and administration of Internet names and numbers on an ongoing basis.”\textsuperscript{20} Instead of limiting its role to “technical coordination,” however, ICANN repeatedly has attempted to regulate broad social and economic issues pertaining to the DNS. For example, ICANN often has attempted to regulate consumer protection and intellectual property issues associated with buying, selling and using domain names. ICANN also has attempted to make economic policy and business decisions, such as when the ICANN staff and Board of Directors performed marketing and

\textsuperscript{16} See Stuart Lynn, supra note 5 at 13-15.
\textsuperscript{17} Id. at 13.
\textsuperscript{18} Id.
\textsuperscript{19} See New.net, A Proposal to Introduce Market-Based Principles into Domain Name Governance, New.net (2001) at page 3 (New.net argues that consensus-based decision making is not effective when consensus requires agreement by diverse interests on matters with social or economic implications).
business analyses of prospective TLD operators and their marketing and business plans for particular TLDs in deciding which TLDs to add to the legacy DNS root.\textsuperscript{21} Deciding which TLDs to add to the root certainly goes beyond ICANN’s mission as expressed in the Memorandum of Understanding between the DOC and ICANN, which states that ICANN is to have “[o]versight of the policy for determining the circumstances under which new top level domains would be added to the root system” (emphasis added), not oversight over determining which new top level domains would be added to the root system.\textsuperscript{22}

Tackling social and economic issues is a laudable goal, but regulation of such issues is usually the purview of local, national and international governmental organizations. Most countries choose to preserve their authority to regulate social and economic policy issues instead of assigning authority over such issues to an international body. Where international regulation of policy matters does occur, it generally is the product of agreements between governments or regulatory action by an international body that is imbued with legitimacy and authority conferred by member nations who agree to abide by actions of such body. This is far different than social and economic policy created by an organization that lacks any specific agreement among countries to support its policies or the consent of persons and entities affected by its policies.

To many observers, ICANN has become a bloated bureaucracy with a governmental regulatory mentality. This “thick” ICANN approach has resulted in extremely long, burdensome contracts between ICANN and domain name registries and registrars that seek to regulate every aspect of their businesses. It also has resulted in ICANN trying desperately to convince ccTLD operators and root server operators to sign one-sided agreements containing loyalty-oaths that give ICANN the upper hand and final say. And, it also has resulted in ICANN having an unwarranted obsession with asserting claims to supranational authority (in the guise of “the will of the . . . Internet community”) in areas where there is no requirement for ICANN to be involved.\textsuperscript{23} Such an approach is dramatically different from the “thin” ICANN approach suggested by many others (including New.net) as the only means of preserving ICANN’s ongoing legitimacy.\textsuperscript{24}

\textbf{Vested Interests Use ICANN to Further Own Interests}

Some groups of vested private interests have been particularly effective at using ICANN to further their own interests at the expense of other groups whose interests are underrepresented. ICANN has a complicated governance structure with multiple layers

\textsuperscript{22} Memorandum of Understanding between the DOC and ICANN, dated November 25, 1998, Section II.B.c.
\textsuperscript{23} See Stuart Lynn, supra note 5 at 9.
of authority, including, for domain name issues, many constituencies representing different interest groups, a Names Council representing the constituencies, multiple task forces charged with responsibility for specific subject matters and a Board of Directors that receives input from the Names Council and task forces. Among these groups, the most influential are separate constituencies representing business and intellectual property interests, a constituency comprised of ccTLD operators and separate constituencies for ICANN-accredited registries and registrars. There is no separate constituency that represents individual interests or those of the Internet community at large, although there exists a “General Assembly” for all participants in the ICANN process that is often relegated to a virtually non-existent role. In general, the business oriented interests (including intellectual property interests) tend to have the most influence in ICANN’s policy making processes, while the interests of the public at large are undervalued.25

The world’s largest telecommunications companies and trademark owners (and their attorneys), mostly from North America and Western Europe, have formed groups that have successfully controlled the ICANN process to promote their own private interests, through, among other mechanisms, their domination of ICANN’s Business Constituency.26 Such control and domination exists despite ICANN’s original mandate for it to reflect “the functional and geographic diversity of the Internet and its users.” 27 Very few small or medium size businesses are members of the Business Constituency, and the Business Constituency makes it quite difficult for small businesses to join.28 The businesses that dominate the Business Constituency use it as a forum to further their own agendas and ensure that their interests are disproportionately represented within the ICANN “global” arena.

While groupings of business interests often coalesce to form interest groups and trade associations, the quasi-governmental authority that ICANN claims makes this ability to advance private interests both a matter of concern and another factor contributing to the growing clamor for a solution to the issues of Internet governance in the face of ICANN’s failure.

25 See The Origins of ICANN’s At Large Membership, CYBER-FEDERALIST 10 (2001), available online at http://www.cpsr.org/internetdemocracy/cyber-fed/Number_10.html; and ICANN Organizational Chart supra note 11.
26 See Membership Web Page for Business Constituency, available online at http://www.bizconst.org/members.htm; and ICANN Organizational Chart, supra note 11.
28 As one example, the Business Constituency has taken affirmative actions on numerous occasions to block repeated attempts by New.net to become a member of the Business Constituency on grounds that New.net sells domain names and thus more appropriately should join ICANN’s Registrar Constituency, despite the fact that the same leaders of the Business Constituency attempting to exclude New.net proclaim elsewhere that New.net does not sell “domain names,” Internet keyword provider RealNames is a member of the Business Constituency and many members of the Business Constituency, including its chairperson, are representatives of intellectual property organizations that might otherwise be members of ICANN’s Intellectual Property Constituency, but choose to extend their influence into the Business Constituency.
Opposition to Broader Representation

ICANN has made many efforts to oppose attempts to broaden its representation of Internet users worldwide beyond those vested business interests that circled ICANN before its creation. ICANN’s initial Board of Directors committed to elect nine of its 18 directors from a global electorate of Internet users, but only five of these “at-large” directors were ever elected, and ICANN’s staff and dominant vested interests worked hard for two years to push off consideration of the need to elect additional at-large directors. More recently, ICANN’s Board of Directors formed an At-Large Study Committee to study this issue, which ultimately resulted in a proposal for ICANN to elect at least six at-large directors, but even this proposal appears unlikely to get adopted. Overall, ICANN, its staff and its Board of Directors have demonstrated an open hostility to the goal of achieving broader representation, and ICANN’s CEO most recently stated that the “obsession” with at-large issues is a significant impediment to ICANN achieving its mission. Such an attitude constitutes a failure of the ICANN process to value underrepresented viewpoints.

ICANN Stifles Competition

One of the ironies of ICANN’s four year existence is that despite one of the key reasons for its creation being the introduction of greater competition in the domain name industry, ICANN has in practice become a vehicle for stifling competition. Many of the key vested interests within ICANN use their position to oppose the introduction of new TLDs in order to maintain the status quo, which many of such interests prefer. ICANN’s failure to introduce more TLDs in a timely fashion is a prime example of its lack of responsiveness to external market pressures. Instead, ICANN has maintained an artificial scarcity of good, meaningful domain names, and thus created an imbalanced market where a few players have been able to participate. In addition, ICANN has used this imbalance to allow it to impose restrictive contracts on domain name industry

29 See Stuart Lynn, supra note 5 at 15.

30 See Articles of Incorporation of Internet Corporation for Assigned Names and Numbers (As Revised), Article 4 (stating that ICANN “shall operate . . . through open and transparent processes that enable competition and open entry in Internet-related markets”), available online at http://www.icann.org/general/articles.htm; Memorandum of Understanding between DOC and ICANN, dated November 25, 1998, Section II.A. (which states “On July 1, 1997, as part of the Administration’s Framework for Global Electronic Commerce, the President directed the Secretary of Commerce to privatize the management of the domain name system (DNS) in a manner that increases competition and facilitates international participation in its management,” and further states as one of the four principles by which ICANN shall abide: “This Agreement promotes the management of the DNS in a manner that will permit market mechanisms to support competition and consumer choice in the technical management of the DNS. This competition will lower costs, promote innovation, and enhance user choice and satisfaction.”); and Management of Internet Names and Addresses, 63 Fed. Reg. 31,742 (1998) (stating “The Internet succeeds in great measure because it is a decentralized system that encourages innovation and maximizes individual freedom. Where possible, market mechanisms that support competition and consumer choice should drive the management of the Internet because they will lower costs, promote innovation, encourage diversity, and enhance user choice and satisfaction”).
participants in order to reinforce the dominance of its own position as policy-making authority for the legacy DNS root.

**ICANN Lacks International Legitimacy**

ICANN suffers from a lack of legitimacy among representatives of non-U.S. governmental and private interests who view ICANN with skepticism due to its lack of accountable structures and umbilical ties to the U.S. Government.\(^{31}\) Moreover, ICANN is losing the trust of the vital regional addressing authority in Europe due to its overbearing attitude towards consensus building processes.\(^{32}\) This concern about international legitimacy will only increase as alternative naming solutions for non-English speaking nations proliferate.\(^{33}\) Ironically, at the same time, ICANN is rapidly losing the confidence of key members of the U.S. Congress who feel that the U.S. Government ceded too much control over vital U.S. assets to international interests when it formed ICANN.\(^{34}\) Security concerns raised in the wake of the September 11, 2001 terrorist attacks may further erode such confidence. This lack of perceived

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\(^{32}\) See Axel Pawlik, supra note 31.

\(^{33}\) Increasingly, private companies are addressing the multilingual requirements of non-English speaking nations. See Millennium Inc. press release dated February 18, 2001 (stating “Millennium Inc.; Home of the ArabicDomainName.com; started today accepting online registration of Any Arabic Domain Name. Finally Arabic speaking consumers can browse and reach web sites using 100% Arabic characters URL like http:////الشبكة العربية.الشركة\.) This is being offered utilizing NativeNames.net advanced multilingual technology. The First truly working Global Server-Based Arabic Domain Name Registration capability.”), available online at http://www.any-dns.com/press/pr021801.htm; and ITU Briefing Paper on Multilingual Domain Names, Section 75 (stating “Generally, as a matter of principle and where possible, it seems appropriate that decisions affecting language users should be made by the language users themselves.”).

\(^{34}\) See Letter to U.S. Department of Commerce Secretary Donald Evans, dated March 21, 2001 from Senator Conrad Burns (asking Secretary Evans not to take any "hasty actions" or "any major steps to further empower or delegate authority to ICANN."), available at http://icannwatch.com/article.php?sid=59; Letter to General Accounting Office Comptroller General David Walker, dated March 21, 2001 from Senator Conrad Burns (describing a Senate hearing focusing on “(1) whether the delegation of authority over the domain name system (DNS) from the Department of Commerce (DOC) to ICANN is legal; (2) whether ICANN is the appropriate body to manage the DNS; and (3) whether ICANN has performed well,” stating that “serious questions continue to be raised . . . about the legality of DOC’s delegation of authority to ICANN in practice” and requesting that the GAO “assess whether the actions of ICANN have been legal under the non-delegation doctrine of the U.S. Constitution, the APA and other federal statutes”), available at http://icannwatch.com/article.php?sid=59; Letter to U.S. Department of Commerce Secretary Donald Evans, dated August 6, 2001 from Representatives Tauzin, Dingell, Upton and Markey, available at http://energycommerce.house.gov/107/letters/08062001_361.htm; Letter to U.S. Department of Commerce Secretary Donald Evans, dated March 30, 2001 from Representatives Tauzin, Dingell, Upton and Markey, available at http://energycommerce.house.gov/107/letters/03302001_150.htm; and Representative Markey aide Colin Crowell’s comments that “classifying [ICANN’s top level domain name selection process] as a process is quite generous” and that ICANN has been “so unresponsive to the general public interest,” available at http://www.newsbytes.com/news/01/167478.html.
legitimacy among U.S. and non-U.S. interests makes it very difficult for anyone to view ICANN as a viable solution for providing governance over the DNS over the long term.

III. Proposal for Reforming Governance of the DNS

In light of the failure of ICANN to fulfill its original mandate as a technical coordination body and its efforts to assume a much larger role as worldwide regulator of Internet addressing, we now have the opportunity to learn from yesterday’s mistakes and design better solutions for the future. ICANN’s CEO has proposed that ICANN assume a larger, more powerful and less representative regulatory role – one that many others and we would consider to be a significant step in the wrong direction toward a utopian vision of a world government for the Internet. Instead, we propose the following structure as a better alternative to replace the status quo:

ICANN as Consensus-Based Trade Association

Rather than trying to become a global quasi-governmental regulator, ICANN can continue to do much of what it currently does well in its capacity as a trade association for parties interested in issues related to domain names, IP addresses and Internet protocols. Many would argue that ICANN currently is more akin to a trade association and indeed its quarterly meetings are frequently characterized as trade shows. Whether such characterizations are fully accurate, in its capacity as a trade association, ICANN serves a valuable function of enabling diverse constituents to come together to discuss technical and policy issues, identify “best practices” and contribute to the formulation of consensus-based policies that ICANN members can choose to make voluntary or binding on themselves. Trade associations are driven and financed by their members, and, accordingly, many of the perceived financing problems of ICANN would likely disappear as ICANN grew in legitimacy in its new capacity.

As a trade association, ICANN could continue to perform many of the functions that it performs today, and its constituents could continue to have a forum in which to influence domain name policies. ICANN-accredited registrars could still come together to discuss issues affecting their businesses and agree on best practices for their benefit and to protect the interests of their customers. Representatives of business, non-commercial and intellectual property interests could still meet to discuss and provide their collective input to registrars and registries regarding domain name matters that impact such interests. Individuals and other commercial interests could continue to attend and participate in formal ICANN meetings and processes in order to have input and learn about industry developments. The information gathering and dissemination that occurs through ICANN today is quite valuable and would continue if ICANN’s role were narrowed to that of a trade association. Ultimately, the level of participation by diverse interests in an ICANN trade association would be determined by its most active members, which most likely would be domain name registries and registrars.

In order for ICANN to be an effective trade association – one in which its members desire to participate actively and adhere to its mandates – ICANN will be
forced to reflect the views and wishes of the community it serves. The current frustration expressed by ICANN’s management and others regarding ICANN’s inability to compel ccTLD and root server operators to sign binding agreements stems from a fundamental misunderstanding of ICANN’s ability to do so when it lacks consensus among those burdened by the contracts and policies. In fact, the experience of the ccTLDs is particularly instructive here as an example of the failed ICANN process. Despite a carefully built and documented consensus from the ccTLDs asking for root server service level agreements, ICANN’s staff has not moved forward in that direction. If stripped of all illusion of legal regulatory authority (and thus its power of intimidation), ICANN will be forced to focus on promulgating policies that have the consensus support of its members. ICANN’s members will choose to be bound by such policies only if they believe in the inherent benefits that such policies bring to the members and the industry overall.

The Uniform Domain Name Dispute Resolution Policy (UDRP) exemplifies a policy that arguably has gained consensus support of most, if not all, registries, registrars and other major industry participants. Although, true to form, ICANN did not follow its own consensus policy formation rules in promulgating the UDRP, through luck, or design, ICANN did end up with a policy that many have argued reflects the consensus opinion of its constituents. In many respects, adoption of the UDRP by ICANN was an intelligent industry response to pressure brought to bear by representatives of intellectual property interests who, in the absence of such adoption, likely would have sought similar protection through legislation at the national level. (For clarity, the UDRP was developed by the World Intellectual Property Organization (WIPO) but adopted by ICANN. In fact, it took substantially longer for ICANN to adopt the UDRP than it did for WIPO to develop it). The collective decision of the domain name industry, through ICANN, to adopt the UDRP resembles the approach taken by the Motion Picture Association of America (MPAA) when it adopted a voluntary movie rating system in 1968 in an effort to address growing concerns regarding movie content, the perceived shortcomings of the then current industry rating system established in 1934, and the possibility of government censorship. Like the MPAA, ICANN can be a powerful trade association that represents the interests of its members vis-à-vis other groups and governments with interests affected by domain name industry policies and practices.

ICANN as a trade association will be best served by maintaining its international focus, attempting to bring together all persons and organizations involved in domain names matters worldwide. ICANN also should endeavor to conduct public outreach to attract worldwide participation by persons and entities reflecting a broad diversity of interests. ICANN should practice policies of inclusion and attempt to avoid the exclusionary practices that currently are common within ICANN, which only serve to undermine ICANN’s credibility and legitimacy and are contrary to a consensus-building approach. Of course, the willingness of members of an ICANN trade association to engage in this sort of outreach likely would depend on whether doing so would be valued by ICANN’s members.
If limited in scope and authority to acting as a trade association, ICANN would have greater flexibility to delve into new areas of interest to its members, such as security of the domain name system, without raising the specter of inappropriate regulatory mission creep. In this sense, limiting ICANN’s role to a trade association would enable ICANN to serve its members better by eliminating constraints on the scope of its activities, albeit within the confines of what is permissible and possible for a trade association. As with any trade association, ICANN is and will continue to be limited by what it can do within the confines of applicable antitrust laws, so as not to become an illegal cartel or to otherwise act in restraint of trade. Limiting ICANN’s role also would eliminate the need to significantly increase the size of its operating budget, thereby lessening the financial strain on ICANN’s members.

**Greater Reliance on Market Forces Instead of Regulation**

Although the Internet needs technical standards in order to function as a network, market forces should be the dominant factor in regulating conduct of persons buying, selling and using Internet-related products and services. It is the market that will drive persons and companies to innovate and introduce new products and services using the DNS, much in the same way that market forces drive much innovation in other areas of technology. There are numerous examples of innovation in the name space that have occurred without the official sanction of ICANN or any other “Internet authority,” but which have been widely embraced by Internet users and provide significant consumer benefit. ICANN can only stand in the way of innovation because it operates with a centralized planning mindset, is insulated from consumer demands and is less equipped to identify and implement efficiencies. Accordingly, ICANN’s regulatory role (and that of any other governmental or quasi-governmental entity) should be as circumscribed as possible and certainly not have a hostile viewpoint toward free market activity.

From a regulatory standpoint, market forces can provide necessary checks on the manner in which market innovators conduct their businesses. Consumers tend to vote quickly with their wallets, electing whether to support new products and services by purchasing and using them. Products will succeed or fail depending on how consumers perceive the utility and benefit of such products or services. One aspect of utility or benefit might be the extent to which a product or service is interoperable with other similar products and services. Businesses may adopt standards as a means of ensuring interoperability, but different businesses will choose to adopt different standards for different reasons. In general, products and services that fail will be

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Examples include (1) VeriSign’s sale of multilingual domain names that require use of a client application (including an Internet browser) to enable resolution, (2) AOL’s use of “keywords” that are accessible only by AOL users, (3) New.net's introduction of domain names with more descriptive and useful TLDs that are accessible by users that choose to support New.net, (4) RealNames’ offering of keywords that can be resolved by many, but not all Internet users, (5) InternetNumber’s offering of numbers that can be used in cell phones to access content via the Internet, (6) managed DNS services that enable users to manage large numbers of domain names, (7) directory services that can be accessed using DNS resources, and (8) enom’s “Name Your Phone” service that allows a domain name owner to enable users to send text messages to the owner’s cell phone via an Internet browser using a domain name.
discontinued and other products and services will take their place. These are the aspects of a natural lifecycle of products and services, which is driven by market forces and not the desires of government regulators. The same is true with domain name related products and services.

As with most industries, governmental or quasi-governmental regulation of the domain name industry should take a back seat to the regulative effects of market forces. Such a strategy of using competition instead of governmental regulation to induce economic growth has proven successful in analogous industries, including the telecommunications and transportation industries.

**Greater Reliance on Local vs. Global Regulation**

Where formal governmental regulation is needed to supplement industry practices and market forces to provide additional social and/or economic protections in a particular industry, such regulation should almost always occur at the local level instead of attempting to enact global regulation. Until the advent of ICANN, few bodies had sought to be International regulators without the establishment of treaties. In fact, virtually all regulation of business conduct, whether at the local or international level and irrespective of industry type, is performed by national, local and regional governments, or, in some cases, by formal treaties between governments. As such organizations are used to address most significant policy issues, there is no reason why such organizations should not also be used to address Internet naming matters as well.

Local regulation is always likely to be more appropriate because local governments better reflect the needs of their local constituents. Different nations and cultures have different and particular standards of behavior and sensitivities. Thus, conduct must be regulated in accordance with particular standards of the nation in which such conduct occurs, and, where there is commonality among nations, it may be regulated by treaty. ICANN is neither a national, regional nor local government, nor is it formed by agreement of multiple governments pursuant to any treaty. In fact, many of the strains that ICANN has endured may have resulted from futile attempts to try to reach consensus across such differing international standards and sensitivities. It is hubris to assume that there is something so special about Internet naming issues that the domain name industry requires a unique form of government that is different from all other industries. Those who seek a blueprint for Internet naming governance would be wise to examine traditional models.

**Root Server Competition and Control**

**Competing Naming Systems and Root Servers**

Many of ICANN’s public statements criticizing New.net, providers of multilingual domain names and others that provide new products and services to customers by challenging the status quo are predicated on the assumption that ICANN must, at all cost, preserve and protect a single, unified, global name space. This is also reflected in the contractual loyalty oaths that ICANN has unsuccessfully attempted to extract from
It is technically possible for different Internet users to utilize different roots that have identical, complementary or even conflicting data. In fact, everyone knows this is possible because it is done today. There are Internet users that choose to use alternative root servers that contain zone files that are not identical to the zone files contained on the legacy DNS root server operated on behalf of the U.S. Government. Use of these alternative root servers has not resulted in hampering the ability of other users that routinely use the legacy DNS root to access Internet resources. In fact, some within ICANN have convincingly argued that competing roots are a form of standards competition.\textsuperscript{36} Likewise, there is no technical reason why New.net’s operation of a private naming system – one that utilizes existing DNS infrastructure but is only accessible by users that choose (or by users of ISPs that choose) to enable access to the system – hampers in any way the Internet experience of users that choose to use only domain names with TLDs included on the legacy DNS root. Similarly, if a company chooses to use a localized naming system for its employees, or a country elects to provide its citizens with access to localized addressing options (such as domain names in a country’s native language), other Internet users outside those systems are unaffected.

ICANN often trumpets maintaining the “stability of the Internet” as the \textit{sine qua non} justification for rejecting any initiative to introduce new Internet naming options outside of a single authoritative root, but use of this mantra is a red herring. It is certainly true that any network will be more stable if it has fewer connected components and fewer variables. It is also true that, in an ideal world, it would be preferable for everyone to always adhere to the same precise technical standards and protocols for every aspect of everything relating to computing and networking. The problem with these ideals is that the world is a complicated place, different people want different things at different times, and technology evolves to enable new functionality, standards and protocols. The needs and desires of Internet users constantly change over time, and every day new technology is introduced that makes the Internet more complicated and thus, by some definitions, less stable. It is not a sufficient response for supporters of the status quo to state that providing users more addressing options should somehow be precluded merely because doing so increases the complexity of one aspect of Internet networking. Such statements do not provide a meaningful counterweight against which to measure the benefit to Internet users of continued innovation.

Putting aside the esoteric technical debate about whether adding more naming options justifies the increased technical complexity that such change brings, the most compelling justification for NOT attempting to prohibit such change is its inevitability. Or, in other words, don’t stand in front of a moving train! Many private and public naming systems that supplement the names supported by the legacy DNS root exist

\textsuperscript{36} See Milton Mueller, supra note 3 at 5 (“Competing roots are a form of standards competition.”).
today and are growing rapidly, and new systems are likely to be introduced in the future. These competing systems take the form of naming conventions used by private corporations for internal and/or customer-related purposes, alternate roots used by small and large communities, supplemental naming systems such as New.net, keyword systems such as those supported by AOL and RealNames, multilingual domain name systems, number-based systems (such as WebNum, BangoNet and InternetNumber) and government-sponsored systems. Indeed, some commentators have endorsed a multiple rooted Internet as the best solution to the requirements of speakers of languages that do not use the limited English character set.  

There also are other naming systems used on mobile devices that enable users to connect to Internet resources without utilizing domain names. It is fanciful to think that any private or public organization is going to somehow put the genie back in the bottle on naming systems on a worldwide basis and prevent further growth in the future, especially against the backdrop of ICANN having failed to facilitate rapid coordinated development of naming resources over the last three years.

The inevitability of competing naming systems and competing roots does not mean the end of the Internet as we know it, nor does it mean the end of the ability of Internet users to achieve end-to-end connectivity with other Internet resources. Given the prevalence of the legacy DNS root (and the other 12 root servers that mirror the legacy DNS root) today, it is very likely that Internet users all over the world will continue to rely on the contents of the legacy DNS root – at least for gTLDs – for many years. Users that demand additional naming options, whether in the form of more descriptive domain names or names in their native language, likely will access such additional naming resources in a manner that also pulls in the legacy content of the legacy DNS root for names supported on such root. Others might choose not to access the legacy TLDs, such as if China decided that it wanted to restrict its citizens from accessing .us web sites (which China could do today if it wanted). Ultimately, it will be up to individual users, their ISPs and/or nations to decide which TLDs a user would be able to access and through which channels such TLDs would be accessed. It is quite conceivable that private companies would arise to provide “root service” with specified service level agreement commitments. The addition of competing naming systems and competing roots merely will provide end users with greater choice and potentially improved reliability, as well as increase competition in the domain name industry generally.

**Control of Legacy DNS Root**

As discussed above, the formation of ICANN represented an attempt by the DOC to transfer to a private non-profit corporation responsibility for administering and forming technical policies relating to the domain name system (and other related addressing infrastructure). Much has been debated in many circles regarding whether the DOC

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38 See Karl Auerbach, Protecting the Internet’s Domain Name System (2001), available online at [http://www.cavebear.com/rw/steps-to-protect-dns.htm](http://www.cavebear.com/rw/steps-to-protect-dns.htm) (discussion on how use of multiple roots would improve Internet stability and resilience through redundancy.).
should complete such transfer and give up control over this important Internet infrastructure (as contemplated by the current Memorandum of Understanding between the DOC and ICANN), and much of the criticism leveled at ICANN by non-U.S. interests is that ICANN is too beholden to the U.S. Government. Consistent with our proposal for ICANN to limit its role to that of a trade association and in recognition of legitimate U.S. national interests at stake, we propose that the U.S. Government maintain control over the legacy DNS root indefinitely and not ever cede control to an organization with ICANN’s characteristics.

In large part, the U.S. Government funded early development of Internet infrastructure, including the domain name system. From the outset, the U.S. Government has used the gTLDs “.mil” and “.gov” for its exclusive use, and such gTLDs, especially in the case of .mil and .gov, constitute use of vital U.S. assets on which U.S. resources rely. Moreover, as the primary funding source for development of the domain name system and given the importance of Internet stability and usage to U.S. citizens and commercial interests (as the largest single driver of commercialization of the Internet over the last five years), many within the United States believe that it has some form of entitlement or ownership over aspects of the commercial Internet. Whether one accepts such belief, there is substantial sentiment among members of the U.S. Congress and Federal agencies with oversight over the legacy DNS root and ICANN-related matters that the United States should not turn over control of the legacy DNS root to ICANN or any other third party. It is this sentiment that makes it very unlikely that ICANN, whether in its current form or after substantial reform, would ever actually assume the level of control over the legacy DNS root that ICANN’s management believes is necessary for ICANN to fulfill its mission.

We expect that the U.S. Government would continue to rely on third parties to perform the physical operation of legacy DNS root server, but the U.S. Government would be responsible for making all policy decisions regarding the legacy DNS root. We also would expect the legacy DNS root to continue to support all existing gTLDs (.com, .net, .org, mil, .gov, .edu, .arpa, .int, .biz, .info, .name, .museum, .coop, .aero and .pro), and the DOC could either step into the existing agreements with the registry operators for such TLDs or continue to outsource administration of such contracts to ICANN. We also propose, as part of these reforms, that the DOC agree contractually to include in the legacy DNS root the contents of a new root zone source file for ccTLDs to be provided by a newly formed, worldwide association of ccTLDs (except for .us, which the U.S. Government always would control). See “Control of ccTLD Root Zone Files” below.

In exercising its control over the legacy DNS root, the U.S. Government should act with regard for the interests of the worldwide Internet community and consult with other governments as appropriate. We would expect that on certain policy matters the U.S. Government would want to consult with governments of other nations regarding coordinating regulatory approaches. This type of coordination could occur through the use of a version of the Government Advisory Council of ICANN. Not being a treaty organization, this GAC-like entity would not agree to binding measures, but rather would
serve as a trade association for nations involved in Internet naming and addressing issues. This entity presumably would interact with the ICANN trade association in a manner similar to the current relationship between the GAC and ICANN. The U.S. Government also might recognize a need to set up an advisory council that would advise the U.S. Government on domain name policy matters that affect operation of the legacy DNS root, and establish clear-cut technical guidelines for adding new gTLDs to the legacy DNS root, whether through coordination with other competing roots or other initiatives that the DOC would seek to support.

By maintaining control over the legacy DNS root, the United States could be assured that its national interests are protected. Such control would ensure that members of the U.S. military could always access .mil domain name requests without worrying that an international organization chose to redelegate the .mil extension. Likewise, such control would ensure the continued ability of the United States to have exclusive use of the .gov TLD. If conflicting TLDs were introduced on competing root systems, the United States could still be assured of continued access to its TLDs by having persons seeking access to Internet resources using such TLDs to utilize name servers that look solely to the legacy DNS root or other mirror root servers.

Because of the current widespread use of the legacy DNS root and other mirror root servers, the legacy DNS root servers likely would continue to be the most widely used root servers in the future. Individual users and ISPs that desire to take advantage of the significant network effects that come from using a root system that is used by most other Internet users will continue to do so. What will change is the current environment that actively discourages use of competing roots and competing naming systems, making it more politically acceptable for individual users and ISPs to use other systems that provide some or all of the same network effects but also provide additional naming options.

**Control of ccTLD Root Zone Files**

Just as it is important for the Internet community worldwide to acknowledge the legitimacy of U.S. interests in preserving control over the legacy DNS root, U.S. interests should acknowledge the legitimacy of the interests of non-U.S. ccTLD operators in being able to control delegation of their ccTLDs. A common non-U.S. criticism of the ICANN process is that it affords too much regulatory control over ccTLD operators to ICANN itself and too much control over ccTLD delegation to the U.S. Government. Any reform of the current process for managing the domain name system must do a better job of addressing these concerns.

We propose that ccTLD operators form a new association to represent its interests vis-à-vis ICANN, the U.S. Government and other entities involved in Internet naming and addressing matters. This association could be a new free-standing entity or a separate within the ICANN trade association. A chief purpose of the ccTLD association would be to agree on the content of the root zone files for all non-U.S. ccTLDs, which the organization would make available to root server operators, including
the U.S. Government root, as the official source for ccTLD root zone files. To ensure interoperability with the dominant legacy DNS root, the DOC (or other U.S. Federal agency that assumes oversight over the legacy DNS root) should enter into a memorandum of understanding or other formal agreement with the new ccTLD organization that would require the legacy DNS root to always include up-to-date root zone files for ccTLDs as provided by the ccTLD organization. This type of arrangement would go far in ensuring non-U.S. governments and ccTLD operators that their nations’ Internet infrastructures are less susceptible to control by the U.S. Government. This type of assurance will be critical as nations begin to embrace ENUM and IP-based telephony systems due to concerns with the existing structure that would give the U.S. Government the power to cut off access to IP-based telephony systems that utilize the domain name system for addressing.

Coordination of Competing Root Systems

It seems universally accepted that the Internet is a global resource requiring global coordination of its underlying systems, but the question of who or what should provide such coordination is the subject of much debate. New.net has asserted repeatedly from its launch in March 2001 that market forces, and not governmental or quasi-governmental powers, should be the primary force on which the Internet community relies to regulate development of Internet resources, including the domain name system. The formation of ICANN was an attempt to privatize a regulatory function previously performed by the U.S. Government, with the idea that self-regulation by private enterprise would likely better reflect the interests of Internet “stakeholders” than regulation by one or more governments. Unfortunately, for the reasons discussed above, giving regulatory authority over allocation of scarce global resources and matters of social policy to a private entity dominated by large vested interests is the same as granting authority to foxes to guard the hen house. We believe that a better system is based on a combination of market forces that better regulate supply and demand of domain names, local regulation at the country or local level where matters of social policy are at stake, and technical coordination among roots in a manner that is responsive to governmental interests and market forces.

Technical coordination among competing root systems should be conducted via agreements among governments and organizations that operate naming systems or roots, either directly or through treaty organizations. A competitive market, guided by naming system and root operators in the interest of serving their citizens’ or customers’ welfare, should provide an environment that fosters interoperability agreements and standards.

To address the issue of competing claims to a particular ccTLD, such as competing claims by a ccTLD operator and the country whose citizens utilize such ccTLD, the U.S. Government likely would need to reserve the right not to honor a re-delegation request for a ccTLD if it was ordered not to do so by a court with appropriate jurisdiction over the DOC or other U.S. Government agency responsible for overseeing the legacy DNS root. However, the U.S. Government could agree that, if it were presented with a re-delegation request from an entity other than the current ccTLD operation, the U.S. Government would honor a facially valid order of the highest court in the jurisdiction of the country affected, meaning that resolution of competing claims would be decided under the laws of the applicable country.
Whether root operators choose to address interoperability standards through multiple bilateral agreements, through multilateral agreements or through treaty organizations and standards committees, will depend on their needs and goals. However, it seems rather unlikely that they will delegate political and economic decisions to third parties, as doing so would be against the interests of their citizens and customers. To the extent that root operators delegate any decision making to third parties, it is most likely to be in the realm of technical decisions to ensure that their roots can be used in connection with other roots, as the roots offering the most resources in the most consumer-friendly manner will offer the most value to those who use them. Some could argue that such matters should be addressed through agreements among root operators, and that there is no need to delegate technical decision making to a third party. Others could argue that such delegation may be the most efficient way of addressing interoperability issues – more efficient than reconciling multiple, and possibly conflicting, agreements. The entity to which such technical decisions are delegated would take an active role in trying to facilitate interoperability, much in the same way that the International Telecommunications Union (ITU) coordinates interoperability among disparate national telephone systems. In addition to the political and market dynamics mentioned above that should cause root operators to counter such an entity’s natural tendency towards mission creep, such an entity’s charter could be narrowly defined to address specific aspects of technical coordination, and true accountability could be built into it, such as providing voting power for each member that is proportionate to the percentage of total Internet users residing in such member’s country or region so that allocation decisions, among others, appropriately reflect the interests of active Internet users.

While we do not favor one approach over another in determining how technical interoperability issues should be addressed, we believe that root operators will need to address such issues in order to operate their roots successfully. Clearly, there are several mechanisms available to them. It is for the market to decide which ones they will choose.

IV. Conclusion

Just about everyone involved in the broader Internet community, including ICANN’s CEO, agree that ICANN cannot continue in its current form. This leaves the Internet community standing at a crossroads where one path leads to ICANN either imploding or morphing into the new ICANN as proposed by its CEO, and the other path leads in a new unknown direction. The first likely results in a larger, more powerful, supranational regulatory role for an institution that historically has failed to develop policies that are supported by those affected. The second represents an opportunity to learn from our past mistakes and design a new solution that better balances the interests of industry participants, market forces, national interests and the Internet community at large. We think that the proposals discussed in this paper achieve a balanced approach that is consistent with the ideals from which ICANN originally was forged, but better take into account the realities of real world governance structures, the
need for accountability and legitimacy, the importance of continued competition and
innovation, and the preservation of national interests coupled with mutual respect
among nations.

We believe that the governance structure proposed in this paper would provide
industry participants an unfettered voice in a trade association, in the form of ICANN,
that would be free to influence root operators' root policies and association members’
business practices in much the same manner as other trade associations influence
governmental and private action affecting other industries. Such structure also would
respond to the public at large, as new naming systems and root operators would
compete to recognize and offer new and innovative registries and services to meet
market demand. The structure would provide a solution for a U.S. Government that no
longer desires to give away control of the vital legacy root resource, as was originally
contemplated under a prior administration’s agreement with ICANN. Finally, this
structure would empower other governments and private enterprises to develop their
own roots, individually or collectively, and once and for all put an end to their current
positions of dependence. Whether root operators choose to address interoperability
standards through multiple bilateral agreements, through multilateral agreements or
through treaty organizations and standards committees, will depend on their needs and
goals.

We offer our proposals in the spirit of constructing the best governance regimes
possible for regulation of Internet infrastructure, which sometimes means governance
regimes that are the least intrusive. We welcome feedback and comments.