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## What if ICANN Can't?: Can the United Nations Really Save the Internet?

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### I. Introduction

Try to imagine life without the Internet. Over the last half century, the dramatic growth of the Internet has fundamentally changed the way humans shop, communicate, and entertain themselves.<sup>2</sup> The Internet's one billion users<sup>3</sup> make nearly six billion searches a year.<sup>4</sup> The growth of the Internet has been dramatic, with usage increasing 200 percent since 2000.<sup>5</sup> According to the Department of Commerce (DoC), e-commerce now accounts for over fifty-six billion dollars in retail sales annually in the United States (U.S.) alone.<sup>6</sup>

As the Internet has grown, challenging technological issues associated with the Internet's administration have arisen.<sup>7</sup> What began as a simple communication between two Massachusetts and California computers has become a complex network of hardware and data.<sup>8</sup> To manage this

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<sup>2</sup> Peter T. Holsen, *ICANN'T Do It Alone: The Internet Corporation for Assigned Names and Numbers and Content-Based Problems on the Internet*, 6 MARQ. INTELL. PROP. L. REV. 147, 148 (2002).

<sup>3</sup> Internet World Stats, Internet Usage Statistics—The Big Picture, (last visited Mar. 4, 2006).

<sup>4</sup> Nielsen//Net Ratings, Online Search Hits All-Time High of 5.7 Billion Searches, [http://www.nielsen-netratings.com/pr/pr\\_060302.pdf](http://www.nielsen-netratings.com/pr/pr_060302.pdf) (last visited Mar. 3, 2006).

<sup>5</sup> Internet World Stats, *supra* note 3.

<sup>6</sup> United States. Department of Commerce, *E-Stats*, at 4, available at <http://www.census.gov/eos/www/papers/2003/2003finaltext.pdf>.

<sup>7</sup> Holsen, *supra* note 2, at 149.

<sup>8</sup> *Id.*

infrastructure, some administrative body is required.<sup>9</sup> The Internet's administrative body has taken a number of forms over the years.<sup>10</sup> Initially, the U.S. government managed the Internet in partnership with various research institutions.<sup>11</sup> However, the rapidly advancing needs of the market outpaced government competency and it became clear U.S. government administration was inadequate.<sup>12</sup> The U.S. government then experimented with several administrative bodies whose task was to implement the domain name system (DNS) and technically manage the growth of the Internet.<sup>13</sup> As the Internet's popularity boomed, these bodies were overwhelmed by the technical demands and complex legal issues associated with administering the DNS.<sup>14</sup> Criticism mounted, both domestically and internationally.<sup>15</sup> In response to these criticisms the Internet Corporation for Assigned Names and Numbers (ICANN) emerged as the recognized authority charged with DNS governance.<sup>16</sup> Although ICANN is purportedly an independent non-profit organization, the U.S. government retains ultimate control of the DNS through unique contractual arrangements between ICANN and the DoC.<sup>17</sup>

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<sup>9</sup> Holsen, *supra* note 2, at 149.

<sup>10</sup> *Id.* at 150.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 151.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *See generally* Generic Top Level Domain Memorandum of Understanding, <http://www.gTLD-MOU.org> (last visited Mar. 4, 2006); Holsen, *supra* note 2, at 151.

<sup>16</sup> Generic Top Level Domain Memorandum of Understanding, <http://www.gTLD-MOU.org>.

<sup>17</sup> Kim G. von Arx & Gregory R. Hagen, *Sovereign Domains: A Declaration of Independence of ccTLDs from Foreign Control*, 9 RICH. J.L. & TECH. 4 (2002).

In spite of the apparent success of ICANN, criticism continues to be widespread. International bodies have been perhaps ICANN's most vocal critic.<sup>18</sup> States are fearful ICANN control of the DNS will threaten their sovereignty and national security.<sup>19</sup> ICANN policy making has been challenged as biased in favor of U.S. interests.<sup>20</sup> Human rights concerns remain unaddressed under current dispute resolution procedures.<sup>21</sup> Recognizing the threats posed by U.S. Internet dominance, many States have called for greater transparency and accountability within ICANN, and have demanded control of the DNS.<sup>22</sup> The conflict reached a crescendo at the recent United Nations World Summit on the Information Society (WSIS) meetings in Tunis, where a coalition of nations called for the transfer of DNS control to an international body.<sup>23</sup>

After providing a brief history of the Internet and a review of how the DNS operates, this paper examines a number of criticisms that have forced ICANN to confront the challenge of an increasingly hostile international community. This paper identifies several international alternatives to ICANN and evaluates their effectiveness. Ultimately this paper concludes management of the DNS by an international organization is unrealistic, inadvisable, or both. This

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<sup>18</sup> Von Arx & Hagen, *supra* note 17; Center for Democracy and Technology (hereinafter CDT), European Nations Push for More Government Control Over the Internet, <http://cdt.org/publications/policyposts/2005/23> (last visited Nov. 18, 2005). CDT at <http://cdt.org/about/> ("The Center for Democracy and Technology works to promote democratic values and constitutional liberties in the digital age. With expertise in law, technology, and policy, CDT seeks practical solutions to enhance free expression and privacy in global communications technologies. CDT is dedicated to building consensus among all parties interested in the future of the Internet and other new communications media.").

<sup>19</sup> von Arx & Hagen, *supra* note 17.

<sup>20</sup> See Nick Farrell, *Bush Bids to Block XXX Domain: Pressure From Christian Groups*, THE INQUIRER, available at <http://www.theinquirer.net/?article=25422> (last visited Nov. 18, 2004).

<sup>21</sup> See generally Council of Europe, *Draft Declaration on Freedom of Communication on the Internet*, available at <http://www.humanrights.coe.int/media/documents/Draftdeclaration.rtf> (last visited Mar. 4, 2006).

<sup>22</sup> von Arx & Hagen, *supra* note 17.

<sup>23</sup> CDT, *supra* note 18.

reality necessitates a restructuring of ICANN to adequately address the international concerns surrounding the current framework.

## II. History of ICANN and the Domain Name System

Originally computers were simply stand alone devices, unable to communicate with the outside world.<sup>24</sup> In 1965, scientists first developed a method known as packet switching, which allowed two computers to communicate through telephone lines.<sup>25</sup> Recognizing the defense potential a decentralized communication network could provide in the midst a major nuclear attack, the Department of Defense (DoD) provided generous funding that allowed the Internet to grow.<sup>26</sup> Soon the network included universities and government agencies across the United States.<sup>27</sup>

To identify individual computers on the network, each computer was assigned a unique 32-bit number called an Internet protocol (IP) address.<sup>28</sup> As more computers joined the network, it became increasingly difficult for users to remember the long digit strings that identified each computer.<sup>29</sup> To solve the problem scientists developed new technology which “mapped” each IP address to an alphanumeric domain name, so that <http://www.law.syr.edu> for example, would

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<sup>24</sup> Holsen, *supra* note 2, at 149.

<sup>25</sup> Jonathan Weinberg, *ICANN and the Problem of Legitimacy*, 50 DUKE L.J. 187, 192 (2000); Holsen, *supra* note 2, at 149. (For more information regarding packet switching theory, see Leonard Kleinrock, *Information Flow in Large Communication Nets*, RLE QUARTERLY PROGRESS REPORT (1961)).

<sup>26</sup> *See* Weinberg, *supra* note 25, at 198.

<sup>27</sup> *See* Barry M. Leiner et al., *A Brief History of the Internet*, <http://www.isoc.org/internet/history/brief.shtml> (last visited Mar. 3, 2006) (early academic Internet installations included MIT, UCLA, UCSB, and the University of Utah); Holsen, *supra* note 2, at 149.

<sup>28</sup> *Id.*; Weinberg, *supra* note 25, at 193.

<sup>29</sup> Leiner et al., *supra* note 27; Holsen, *supra* note 2, at 149.

signify the computer tagged 12345678912345678912345678912345.<sup>30</sup> Thus, the DNS was born. The DNS requires an administrative body to determine how IP addresses and domain names should be allocated, and address related policy issues such as trademark infringement resulting from domain name usage.

The administrative body governing the DNS has taken a number of forms over the years.<sup>31</sup> At first, the DoD administered the DNS through subcontracts with various research institutes.<sup>32</sup> Subsequently the National Science Foundation, through subcontracts with Network Solutions, Inc., administered domain name registration.<sup>33</sup> As the Internet's popularity exploded in the late 1980's and early 1990's, it became clear Network Solutions could no longer handle administration of the DNS.<sup>34</sup> The International Telecommunications Union (ITU), the International Trademark Association (ITA), and the World Intellectual Property Organization (WIPO) began vocally criticizing the U.S. for failing to meet user demands in the modern age.<sup>35</sup> Others criticized the mechanisms for settling domain name disputes as ineffective and cumbersome.<sup>36</sup> Additionally, the European Union (EU) lead a growing coalition of international bodies opposed to the U.S.'s firm control over an invaluable economic resource.<sup>37</sup>

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<sup>30</sup> Weinberg, *supra* note 25, at 194; Holsen, *supra* note 2, at 149-50.

<sup>31</sup> Holsen, *supra* note 2, at 150.

<sup>32</sup> *Id* (including the Stanford Research Institute and the Information Sciences Institute).

<sup>33</sup> ICANN Watch, *ICANN For Beginners*, <http://icannwatch.com/essays/icann4beginners.html> (last visited Mar. 3, 2006); Holsen, *supra* note 2, at 151.

<sup>34</sup> Holsen, *supra* note 2, at 151 (the sheer number of users and complex legal issues involved were beyond Network Solutions' capabilities).

<sup>35</sup> *See generally* Generic Top Level Domain Memorandum of Understanding, *supra* note 15; Holsen, *supra* note 2, at 151.

<sup>36</sup> *See, e.g.*, Amanda Rohrer, *UDRP Arbitration Decisions Overridden: How Sallen Undermines the System*, 18 OHIO ST. J. ON DISP. RESOL. 563 (2003).

<sup>37</sup> ICANN Watch, *supra* note 32.

The Clinton administration responded to these criticisms in 1998, issuing a White Paper titled *Management of Internet Names and Addresses* (hereinafter White Paper).<sup>38</sup> The White Paper recognized a “need for change” regarding the Internet’s administration.<sup>39</sup> The White Paper called on the Internet community to create an administrative body “based on a broad consensus among industry stakeholders,” that would be free from government control.<sup>40</sup> Four principles were identified in the White Paper to guide the formation of the new administrative body, including stability, competition, private sector bottom-up coordination, and representation.<sup>41</sup>

According to the drafters of the White Paper, the stability of the Internet should be any administering body’s first priority.<sup>42</sup> Competition in the free market was viewed as essential, because “mechanisms that support competition and consumer choice ... lower costs, promote innovation, encourage diversity, and enhance user choice and satisfaction.”<sup>43</sup> A non-governmental organization was preferred because private bodies are more flexible, specialized, and able to act rapidly.<sup>44</sup> Experienced has demonstrated governments are simply too bureaucratic and politically charged to effectively meet consumer demands. Finally, the drafters noted the organization’s “[m]anagement structures should reflect the functional and geographic diversity

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<sup>38</sup> Management of Internet Names and Addresses, 63 Fed. Reg. 31,741 (proposed Feb. 20, 1998), available at [http://www.ntia.doc.gov/ntiahome/domainname/6\\_5\\_98dns.htm](http://www.ntia.doc.gov/ntiahome/domainname/6_5_98dns.htm) (last visited Mar. 3, 2006) [hereinafter White Paper]; von Arx & Hagen, *supra* note 17.

<sup>39</sup> White Paper, *supra* note 38; Holsen, *supra* note 2, at 151.

<sup>40</sup> Holsen, *supra* note 2, at 152 (quoting ICANN Watch *supra* note 32).

<sup>41</sup> White Paper, *supra* note 35; A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17, 67 (2000).

<sup>42</sup> White Paper, *supra* note 38; Froomkin, *supra* note 41, at 67.

<sup>43</sup> White Paper, *supra* note 38; Froomkin, *supra* note 41, at 67.

<sup>44</sup> White Paper, *supra* note 38; Froomkin, *supra* note 41, at 67.

of the Internet and its users.”<sup>45</sup> To accomplish this goal the drafters encouraged the development of mechanisms ensuring international participation in decision making.<sup>46</sup>

Industry stakeholders answered the challenge proposed in the White Paper by creating the Internet Corporation for Assigned Names and Numbers (ICANN).<sup>47</sup> ICANN is made up of “a broad coalition of the Internet's business, technical, academic, and user communities,” and “has been recognized by the U.S. and other governments as the global consensus entity to coordinate the technical management of the Internet's domain name system, the allocation of IP address space, the assignment of protocol parameters, and the management of the root server system.”<sup>48</sup> ICANN continues to be the recognized authority for DNS administration today.

### **III. How the Domain Name System Works**

Many of the international concerns regarding ICANN arise as a direct result of the DNS's structure. The DNS is hierarchical in nature which ensures that each domain name remains unique.<sup>49</sup> At the very top are 258 top-level domains (TLD).<sup>50</sup> TLDs come in three types.<sup>51</sup> The first is generic (known as gTLD), such as .com, .org, or .aero, which are not associated with any

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<sup>45</sup> White Paper, *supra* note 35; Froomkin, *supra* note 38, at 67.

<sup>46</sup> White Paper, *supra* note 35; Froomkin, *supra* note 38, at 67.

<sup>47</sup> ICANN, Welcome to ICANN, <http://www.icann.org/new.html> (last visited Mar. 3, 2006) (an ad hoc committee including the ITU, ITA, and WIPO provided the impetus for ICANN's formation. The committee, in consultation with the academic, business, and international communities, issued a proposal that was ultimately adopted after negotiations with the U.S. government); ICANN, Fact Sheet, <http://www.icann.org> (last visited Mar. 4, 2006); Holsen, *supra* note 2, at 152.

<sup>48</sup> ICANN, Welcome to ICANN, <http://www.icann.org/new.html>; Holsen, *supra* note 2, at 153.

<sup>49</sup> Froomkin, *supra* note 41, at 41.

<sup>50</sup> Arx & Hagen, *supra* note 17.

<sup>51</sup> *Id.*

region or country.<sup>52</sup> The second is country specific (known as a ccTLD), such as .uk (United Kingdom), .ch (Switzerland), .au (Australia), or .jp (Japan).<sup>53</sup> The third is used solely for infrastructure purposes and is not relevant for the typical user.<sup>54</sup> TLDs provide a mechanism for name servers to recognize websites requested by Internet users.

Recall that domain names are simply an alphanumeric representation of an associated IP address. When a domain name is inserted into a web browser, a local name server “translates” the domain name into its associated IP address.<sup>55</sup> Often, the local name server already knows which IP address corresponds to the entered domain name and the user is connected to the website.<sup>56</sup> Sometimes however, the local server doesn’t have the connecting information already listed in its cache.<sup>57</sup> In that case, the server forwards the request up a chain of name servers until a name server is eventually able to answer the request.<sup>58</sup> If necessary, the request eventually reaches the top of the chain, known as the root zone file, available on thirteen servers labeled A-M.<sup>59</sup> One of these root name servers responds to the query with an answer somewhat analogous

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<sup>52</sup> *Id.*; see IANA, Generic Top Level Domains, <http://www.iana.org/gtld/gtld.htm> (last visited Mar. 3, 2006) (list of generic TLD).

<sup>53</sup> von Arx & Hagen, *supra* note 17; see IANA, Root-Zone Whois Information, <http://www.iana.org/> (last visited Mar. 4, 2006) (list of country specific TLD).

<sup>54</sup> von Arx & Hagen, *supra* note 17; see IANA, ARPA-Zone Whois Information, <http://www.iana.org/arpa-dom/> (last visited Mar. 3, 2006).

<sup>55</sup> Wikipedia, [http://en.wikipedia.org/wiki/Name\\_server](http://en.wikipedia.org/wiki/Name_server) (last visited Dec. 4, 2006) (“A name server is a computer server that implements a name service protocol. It will normally map a computer-usable identifier of a host to a human-usable identifier for that host. For example, a Domain Name System (DNS) server might translate the domain name en.wikipedia.org to the Internet Protocol (IP) address 145.97.39.155.”).

<sup>56</sup> von Arx & Hagen, *supra* note 17.

<sup>57</sup> *Id.*; Webopedia, Cache, <http://www.webopedia.com/TERM/c/cache.html> (last visited Mar. 10, 2004) (discussing cache; a cache, pronounced “cash,” is also known as cache memory, and is a rapid data storage device).

<sup>58</sup> Arx & Hagen, *supra* note 17.

<sup>59</sup> *Id.* at n.17 (U.S. government continues to operate the E, G, and H root servers. Servers A, B, C, D, and L are operated by non-governmental, US-based entities. The I, K, and M root servers are operated abroad); David Conrad



to the following: I don't know which IP address corresponds to the requested domain name either, but I know which server has that information.<sup>60</sup> The root name server then refers the request to the server containing the authoritative list of all registered domain names in the relevant TLD.<sup>61</sup>

Only the A root, administered by ICANN, contains the original authoritative list of top level domain names.<sup>62</sup> The B-M root name servers contain copies made available from the A root.<sup>63</sup> Seven of the nine root name servers located in the U.S. are owned by the U.S. Government.<sup>64</sup> The remaining three root servers are located in the UK, Sweden, and Japan.<sup>65</sup> Since nearly every participant in the DNS gets its data from the A root or one of the servers below it, one who controls the A root essentially controls the Internet.

#### **IV. The Source of the United State's Control of the Internet**

Although ICANN is a non-profit organization based in California, the U.S. government retains ultimate control of the DNS.<sup>66</sup> This is because in spite of ICANN, the U.S. government continues to control the A root.<sup>67</sup> ICANN's only authority to administer the DNS derives largely

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et al., *Root Nameserver Year 2000 Status*, <http://www.icann.org/committees/dns-root/y2k-statement.htm> (last visited Mar. 4, 2006) (a list of root server locations).

<sup>60</sup> von Arx & Hagen, *supra* note 17.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*

<sup>65</sup> *Id.*

<sup>66</sup> *Id.*

<sup>67</sup> Some scholars have argued U.S. control of the A root is ephemeral since control of the A root is only important because Internet users agree the A root's data is authoritative. Froomkin, *supra* note 41, at 44.

from contracts with the DoC.<sup>68</sup> Three features of the DoC's contractual relationship with ICANN are particularly telling.<sup>69</sup> First, the DoC must give written approval before the A root can be modified.<sup>70</sup> Second, ICANN's management over the DNS is on an "experimental basis," over which the DoC retains ultimate oversight.<sup>71</sup> Third, under a cooperative research and development agreement the DoC is entitled to review ICANN actions and acts as a "supervising Federal agency."<sup>72</sup> The DoC has the authority to terminate the agreement on 120 days notice, and ICANN contacts are up for renewal annually or semi-annually.<sup>73</sup> Because ICANN's authority and very existence depend upon DoC approval, the DoC exerts tremendous influence over ICANN policy making and is able to pressure ICANN into adopting positions favorable to the U.S.<sup>74</sup> Accordingly, members of the international community have voiced concern and indeed opposition to the U.S. government's Internet dominance.

## **V. International Concerns Over ICANN/DoC Administration of the Domain Name System**

Concerns emanating from the international community may be grouped in three general categories. The first includes risks U.S. Internet dominance poses to foreign states sovereignty

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<sup>68</sup> von Arx & Hagen, *supra* note 17.

<sup>69</sup> A. Michael Froomkin & Mark A. Lemley, *ICANN and Antitrust*, 2003 U. ILL. L. REV. 1, 16 (2003).

<sup>70</sup> *Id.*; von Arx & Hagen, *supra* note 17; See U.S. Dep't of Com. and Network Solutions, Inc., Cooperative Agreement No. NCR-9218742, amend. 11, (Nat'l Telecomm. and Info. Admin. Oct. 7, 1998) (Sept. 23, 2002), available at <http://www.ntia.doc.gov/ntiahome/domainname/proposals/docnsi100698.htm>.

<sup>71</sup> Froomkin & Lenley, *supra* note 69; von Arx & Hagen, *supra* note 17; Memorandum of Understanding, Dep't of Commerce and ICANN, available at [www.ntia.doc.gov/ntiahome/domainname/icann-memorandum.htm](http://www.ntia.doc.gov/ntiahome/domainname/icann-memorandum.htm) (last visited Mar. 4, 2006); Memorandum of Understanding, Dep't of Commerce and ICANN, amend. 1, available at [www.icann.org/nsi/amend1-jpamou-04nov99.htm](http://www.icann.org/nsi/amend1-jpamou-04nov99.htm) (signed Nov. 10, 1999) (last visited Mar. 4, 2006).

<sup>72</sup> Cooperative Research & Development Agreement, U.S. Dep't of Commerce & ICANN, <http://www.icann.org/committees/dns-root/crada.htm> (last visited Mar. 3, 2006); von Arx & Hagen, *supra* note 17.

<sup>73</sup> Memorandum of Understanding, Dep't of Commerce and ICANN, *supra* note 71; von Arx & Hagen, *supra* note 17.

<sup>74</sup> von Arx & Hagen, *supra* note 17.

and security. A second category encompasses concerns over ICANN's purported policy making bias in favor of U.S. interests. A final grouping reflects concern that potential human rights abuses may remain unaddressed under the current framework.

### **A. Threats Posed to the International Community**

State sovereignty is potentially compromised by ICANN policies.<sup>75</sup> Manipulation and control of a country's Top-Level Domain is one prominent example of how this can occur. Although nothing about a ccTLD is inherently sovereign, the U.S. has called its .us ccTLD a "national resource."<sup>76</sup> Australia, South Africa, and the EU have claimed authority over their ccTLDs,<sup>77</sup> with the EU claiming "ownership" of its own ccTLD.<sup>78</sup> Many countries now "require a domestic presence for a registrant to obtain [permission to operate] a ccTLD, thereby creating an association between the country and the registrant."<sup>79</sup> Viewed in this light, there is support for the view that a ccTLD is entitled to sovereign protections available under international law.

ICANN has stated "national governments now have, and will continue to have, authority to manage or establish policy for their own ccTLDs."<sup>80</sup> Despite these pronouncements, currently only Australia, Japan, Barundi, and Malawi have contracts with ICANN to administer their own

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<sup>75</sup> von Arx and Hagen, *supra* note 17.

<sup>76</sup> Press Release, NeuStar, Inc., U.S. Government Selects Neustar to Manage America's Internet Address, .us (Oct. 29, 2001), [http://www.neustar.us/press/pr\\_archives/dotus\\_pr\\_10.29.01.pdf](http://www.neustar.us/press/pr_archives/dotus_pr_10.29.01.pdf) (last visited Mar.4, 2006); *Id.*

<sup>77</sup> Commission Working Paper, The Creation of the .EU Internet Top Level Domain, at 5, *available at* [http://ec.europa.eu/comm/information\\_society/policy/internet/pdf/doteu\\_en.pdf](http://ec.europa.eu/comm/information_society/policy/internet/pdf/doteu_en.pdf) (Feb. 2, 2000) (last visited Nov. 19, 2006); Letter from Richard Alston, Senator and Minister for Communications, Information Technology and the Arts, Australia, to M. Stuart Lynn, President and Chief Executive Officer, Internet Corporation for Assigned Names and Numbers (July 4, 2001), [www.iana.org/cctld/au/alston-to-lynn-04jul01.htm](http://www.iana.org/cctld/au/alston-to-lynn-04jul01.htm) (last visited Mar. 6, 2006); Electronic Communications and Transactions Bill No. 23195, GOV'T GAZETTE (Mar. 1, 2002), *available at* [www.gov.za/gazette/bills/2002/23195.pdf](http://www.gov.za/gazette/bills/2002/23195.pdf) (last visited Mar. 4, 2006), von Arx & Hagen, *supra* note 17.

<sup>78</sup> The Creation of the .eu Internet Top Level Domain, *supra* note 77; von Arx & Hagen, *supra* note 17.

<sup>79</sup> von Arx & Hagen, *supra* note 17.

<sup>80</sup> White Paper, *supra* note 38; *Id.*

ccTLD.<sup>81</sup> Hypothetically, by editing the A root, ICANN/DoC could entirely remove any other ccTLD from recognition. The more realistic possibility is that ICANN will simply reassign a ccTLD's management to a more sympathetic organization. ICANN uses the threat of ccTLD management reassignment to coerce countries like those above into agreements favorable to ICANN, while ensuring compliance with its policies from those countries not protected by contractual agreements.<sup>82</sup> ICANN has made good on the threat of reassignment several times before in cases involving Pitcairn Island, Canada, and somewhat mysteriously the U.S.<sup>83</sup> Countries disagreeing with ICANN policy are left with an unenviable choice, comply with ICANN policy to gain contractual control of their ccTLD, or disagree and risk giving control to an antagonist organization. The choice, it seems, is no choice at all.

ICANN has also enlarged the scope of domestic trademark rights through the Uniform Domain-Name Dispute Resolution Policy (UDRP).<sup>84</sup> The UDRP is a binding arbitration procedure used to settle trademark disputes involving domain names.<sup>85</sup> The UDRP has been

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<sup>81</sup> von Arx & Hagen, *supra* note 17.

<sup>82</sup> *Id*; See M. STUART LYNN, PRESIDENT'S REPORT: ICANN -- THE CASE FOR REFORM (2002), <http://www.icann.org/general/lynn-reform-proposal-24feb02.htm> (last visited Mar. 3, 2006)..

<sup>83</sup> Typically, redelegation of a ccTLD requires ICANN Board approval as well as an agreement between the new and old registrant. However, this was not the case in the .us ccTLD redelegation. The official explanation for the discrepancy was "the United States Government informed ICANN on 16 November 2001 that, because of complexities of U.S. procurement laws, it was not able to extend the existing arrangements with VeriSign nor complete the necessary three-way set of communications among itself, ICANN, and NeuStar." ICANN, *Announcement: Redelegation of .us Country-Code Top-Level Domain* (2001), [www.icann.org/announcements/announcement-19nov01.htm](http://www.icann.org/announcements/announcement-19nov01.htm) (last visited Mar. 4, 2006); von Arx & Hagen, *supra* note 17.

<sup>84</sup> von Arx & Hagen, *supra* note 17.

<sup>85</sup> ICANN, Domain Name Dispute Resolution Policies, <http://www.icann.org/udrp/#udrp> (last visited Mar. 4, 2006). For the complete text of the UDRP, see ICANN, Uniform Domain Name Dispute Resolution Policy, <http://www.icann.org/dndr/udrp/policy.htm> (last visited Mar. 4, 2006). A typical controversy alleges "cybersquatting," where an individual acquires a well-known name such as [www.apple.com](http://www.apple.com) in an effort to resell the domain name to Apple computers at windfall prices.

criticized as biased towards U.S. trademark holders.<sup>86</sup> The broad application of the UDRP has not prevented U.S. courts from extending their jurisdiction to bind foreign defendants. In *Heathmount*, the court asserted jurisdiction where the applicable registry was located within the jurisdiction, despite the fact that both disputants were located in foreign countries.<sup>87</sup> The result is a registrant who violates the trademark laws of his own country may escape liability under U.S. law, while one who does not violate the trademark laws of his own country may nonetheless be guilty under U.S. law.<sup>88</sup>

Privacy issues are also implicated by U.S. Internet dominance.<sup>89</sup> ICANN's model agreement with ccTLD managers requires accurate personal information be compiled about those who register domain names.<sup>90</sup> While the practice may be justified to prevent illegal activity and promote operational stability, one byproduct is that countries with differing views as to privacy, surveillance, and criminal investigation may be forced into violation of their own laws and policies in order to secure control over their own ccTLD.<sup>91</sup>

Unilateral Internet control also poses a national security threat to foreign nations.<sup>92</sup> The Internet has become a critical infrastructure, similar to telecommunications, energy, banking, and

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<sup>86</sup> Milton L. Mueller, *An Analysis of ICANN's Uniform Dispute Resolution Policy*, <http://www.acm.org/usacm/IG/roughjustice.pdf> (last visited Mar. 4, 2006); von Arx & Hagen, *supra* note 17.

<sup>87</sup> *Heathmount A.E. Corp. v. Technodome.com*, 60 U.S.P.Q.2d (BNA) 2018 (2000); von Arx & Hagen, *supra* note 17.

<sup>88</sup> Von Arx & Hagen, *supra* note 17.

<sup>89</sup> *Id.*

<sup>90</sup> ICANN, *Model ccTLD Sponsorship Agreement -- Triangular Situation*, § 4.5.1, <http://www.icann.org/cctlds/model-tscsa-31jan02.htm> (last visited Mar. 4, 2006); *Id.*

<sup>91</sup> von Arx & Hagen, *supra* note 17.

<sup>92</sup> *Id.*

transportation.<sup>93</sup> The President's Commission on Critical Infrastructure Protection noted that an attack directed at a nation's e-commerce and communications structure could have a potentially devastating effect on the nation's peace and security.<sup>94</sup> Billy Tauzin, Chairman of the House Committee on Energy and Commerce has written, "[w]e believe that any assumption of control over that asset by any outside entity would be contrary to the economic and national security interests of the United States."<sup>95</sup> A physical attack on any of the thirteen A-M root servers themselves could disrupt the Internet's functioning.<sup>96</sup> While the actual level of the threat remains uncertain, military exercises have demonstrated attacks on the military information structure through the Internet can be carried out successfully.<sup>97</sup> According to Paul Vixie, an expert and ICANN consultant, a calculated attack "is capable of bringing down the Internet",<sup>98</sup> and that "[i]t would be very easy for an angry teenager with a \$300 computer to create almost unlimited pain for anyone on the Internet and not get caught."<sup>99</sup>

The DNS could be used as tool for wielding economic sanctions on a nation unsympathetic to American interests. For example, the U.S. and its allies could legally extend

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<sup>93</sup> von Arx & Hagen, *supra* note 17; (defining critical infrastructure as "systems whose incapacity or destruction would have a debilitating impact on the defense or economic security of a nation").

<sup>94</sup> Executive Summary, President's Commission on Critical Infrastructure Protection, *Critical Foundations: Protecting America's Infrastructures*, available at <http://www.fas.org/sgp/library/pccip.pdf#search=%22Critical%20Foundations%3A%20Protecting%20America%E2%80%99%20Infrastructures%22> (last visited Sept. 29, 2006); von Arx & Hagen, *supra* note 17.

<sup>95</sup> Letter from Billy Tauzin, et al., Chairman, House Committee on Energy and Commerce, to Donald L. Evans, Secretary of Commerce (Mar. 13, 2002), available at <http://www.politechbot.com/p-03268.html> (last visited Mar. 4, 2006), von Arx & Hagen, *supra* note 17.

<sup>96</sup> von Arx & Hagen, *supra* note 17.

<sup>97</sup> For more information these military exercises, see Future Joint Warfare, Joint Experimentation, Transformation and Concepts Division, available at <http://www.dtic.mil/futurejointwarfare> (last visited Mar. 4, 2006).

<sup>98</sup> Reuters, *Experts: Hackers Could Easily Shut Down Net*, USA TODAY (Nov. 14, 2001), available at <http://www.usatoday.com/life/cyber/tech/2001/11/14/internet-vulnerable.htm> (last visited Mar. 4, 2006).

<sup>99</sup> *Id.*

sanctions such as those imposed against Iraq by simply deleting Iraq's ccTLD, .iq.<sup>100</sup> For countries with significant investments in cyberspace the effect of economic sanctions using the Internet could be tremendous.

### **B. ICANN's Policy Making Bias: The .XXX Controversy**

Through control of the DNS, the U.S. is able to exert a large degree of influence over Internet policy making, potentially in violation of internationally recognized principles. In November of 2005 the World Summit on Information Society (WSIS) convened in Tunisia.<sup>101</sup> Based on the participation of 175 nations (including the U.S.)<sup>102</sup>, the Summit resulted in the adoption of a Declaration of Principles (Tunis Declaration), a Plan of Action (Tunis Plan), the Tunis Commitment, and the Tunis Agenda for the Information Society (Tunis Agenda).<sup>103</sup> The Declaration of Principles noted "the management of the Internet encompasses both technical and public policy issues and should involve all stakeholders and relevant intergovernmental and international organizations."<sup>104</sup> Other principles recognized that "policy authority for Internet-related public policy issues is the sovereign right of States,"<sup>105</sup> and that "[i]nternational

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<sup>100</sup> von Arx & Hagen, *supra* note 17.

<sup>101</sup> World Summit on the Information Society [hereinafter WSIS], *available at* <http://www.itu.int/wsis/index.html> (last visited Mar. 4, 2006).

<sup>102</sup> WSIS, Summit Newsroom, *available at* <http://www.itu.int/wsis/geneva/newsroom/index.html> (last visited Mar. 4, 2006). For a complete list of participants in both the Geneva and Tunis phases of the WSIS, *see* WSIS, Final List of Participants, *available at* [http://www.itu.int/wsis/docs/geneva/summit\\_participants.pdf](http://www.itu.int/wsis/docs/geneva/summit_participants.pdf) (last visited Mar. 4, 2006); WSIS, Final List of Participants, *available at* <http://www.itu.int/wsis/docs2/tunis/final-list-participants.pdf> (last visited Mar. 4, 2006). In addition to state participants, entities and organizations having received a standing invitation to participate in the sessions and the work of the General Assembly, invited Intergovernmental Organizations, the United Nations System, accredited entities, and associate members of the Regional Commissions were granted observer status. WSIS, Participation, *available at* <http://www.itu.int/wsis/participation/index.html> (last visited Mar. 4, 2006).

<sup>103</sup> WSIS, *supra* note 101.

<sup>104</sup> WSIS, Declaration of Principles, ¶ 49, <http://www.itu.int/wsis/docs/geneva/official/dop.html> (last visited Mar. 4, 2006).

<sup>105</sup> *Id.* at ¶ 49(a).

organizations have also had and should continue to have an important role in the development of Internet-related technical standards and relevant policies.”<sup>106</sup> The Tunis Agenda recognized that “[c]ountries should not be involved in decisions regarding another country’s ccTLD.”<sup>107</sup> The document announced that each country’s legitimate interests regarding their ccTLDs, as expressed and defined by them, “need to be respected, upheld and addressed via a flexible and improved frameworks and mechanisms.”<sup>108</sup> The delegates pushed for multilingual domain names and content on the Internet,<sup>109</sup> coupled with strengthened co-operation among stakeholders is the development of gTLDs.<sup>110</sup> These statements reflect a growing trend toward increased international participation in the Internet’s governance. Following the WSIS, global consensus seems to indicate at least in regards to public policy issues relating to a countries own ccTLD, ICANNs authority is and should be limited.

Despite these pronouncements it was recognized that “many cross-cutting international public policy issues . . . [have not been] adequately addressed by current mechanisms.”<sup>111</sup> These issues are social, economic, and technical, including not only naming and addressing but management of critical Internet resources as well as the safety and security of the Internet.<sup>112</sup>

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<sup>106</sup> WSIS, Declaration of Principles, *supra* note 104 at ¶ 49(e).

<sup>107</sup> WSIS, Tunis Agenda, ¶ 63, <http://www.itu.int/wsis/docs2/tunis/off/6rev1.html> (last visited Mar. 4, 2006).

<sup>108</sup> *Id.*

<sup>109</sup> *Id.* at ¶ 53(a).

<sup>110</sup> *Id.* at ¶ 64.

<sup>111</sup> *Id.* at ¶ 60.

<sup>112</sup> *Id.* at ¶ 58-59.



Many have accused ICANN of bowing to U.S. political pressure at the expense of international Internet interests.<sup>113</sup> The recent .xxx domain name controversy is illustrative of the critique.

The online adult-entertainment industry is “one of the largest and fastest-growing sectors of the Internet.”<sup>114</sup> Sex is the number one searched for topic on the Internet.<sup>115</sup> Sixty percent of all Internet traffic is sexual in nature, comprising the third largest source of online revenue.<sup>116</sup> Several persuasive policy reasons exist for creating a .xxx domain name, including shielding children from offensive material and protecting legitimate consumers from abusive practices. To this end, industry stakeholders have identified a need to work together to: (a) develop mechanisms to reach only those online users who want to use adult products or services, (b) respond to the growing demand from child and family safety groups to ensure the Internet is safer, and (c) to respond to the privacy, security, and consumer protection concerns of adult customers.<sup>117</sup> The .xxx domain could potentially meet each of these three challenges. Filtering mechanisms could legally be implemented that would separate pornography from other speech currently protected by the First Amendment. Child pornography could be screened. Parents could more accurately monitor and limit their child’s Internet activities. Regulation would reduce consumer fraud and increase consumer confidence in legitimate materials.

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<sup>113</sup> Nick Farrell, *Bush Bids to Block XXX Domain: Pressure From Christian Groups*, THE INQUIRER, available at <http://www.theinquirer.net/?article=25422> (Aug. 16, 2005) (last visited Nov. 18, 2005).

<sup>114</sup> *Group OKs suffix for porn Web Sites*, THE WASH. TIMES (June 3, 2005), available at <http://www.washtimes.com/business/20050602-103608-2132r.htm> (last visited Dec. 21, 2006).

<sup>115</sup> Jim Dyar, *Cyber-Porn Held Responsible for Increase in Sex Addiction; Mental Health Experts Warn of Adverse Impact on Job, Family*, WASH. TIMES, Jan. 26, 2000, at A2.

<sup>116</sup> *Id.*

<sup>117</sup> ICM Registry, Fact Sheet, <http://www.icmregistry.com> (last visited Nov. 18, 2005).

Despite the purported benefits and initial enthusiasm from ICANN surrounding the introduction of the .xxx domain name,<sup>118</sup> ICANN has refused to authorize the project in the midst of intense pressure from the Bush Administration, who received thousands of e-mails and letters in opposition to the issue.<sup>119</sup> The Bush Administration was under intense pressure from conservative groups such as the Family Research Council, who objected to the legitimization of the adult industry arguing “[s]elling hard-core pornography on the Internet is a violation of federal obscenity law no matter where it is located.”<sup>120</sup> Other organizations such as the ACLU objected out of fear that .xxx restrictions may force non-pornographic material to jump ship to the .xxx domain name.<sup>121</sup> The .xxx controversy demonstrates how American politics affects ICANN and Internet policy in ways which may or may not be favorable to the international community as a whole. Following the developments at the WSIS declaring policy choices the “sovereign rights of States,”<sup>122</sup> one wonders if this type of Internet policy manipulation is advisable, or even permissible.

### **C. Restraints on Free Speech and Other Internet Rights**

ICANN’s policy making authority may also have broader implications for world populations reaching core democratic values such as freedom of expression and personal property rights. For example, Article 19 of the Universal Declaration of Human Rights states,

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<sup>118</sup> The .xxx domain name was initially approved by ICANN five years after its proposal. ICANN later reversed course “allow[ing] time for additional governmental and public policy concerns to be expressed before reaching a final decision.” BBC News, *Delay for .xxx “Net Sex” Domain*, Aug. 16, 2005, <http://news.bbc.co.uk/1/hi/technology/4155568.stm> (last visited Mar. 4, 2006).

<sup>119</sup> *Id.*

<sup>120</sup> Patrick Trueman, *.xxx Would Legitimize Porn*, USA TODAY, Sept. 15, 2005, at 12A, available at [http://www.usatoday.com/news/opinion/editorials/2005-09-14-oppose\\_x.htm](http://www.usatoday.com/news/opinion/editorials/2005-09-14-oppose_x.htm) (op/ed) (last visited Mar. 4, 2006).

<sup>121</sup> *c/net news.com, Racy Domain at Center of Controversy*, [http://news.com.com/2061-11199\\_3-5837468.html](http://news.com.com/2061-11199_3-5837468.html) (last visited Mar. 3, 2006).

<sup>122</sup> WSIS, *supra* note 101.

“Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.”<sup>123</sup> The Council of Europe Draft Declaration on freedom of communication on the Internet recognizes a right of access to the Internet.<sup>124</sup> Other acknowledged Internet rights include a right to privacy as well as intellectual property rights in cyberspace.<sup>125</sup>

Under the current framework the potential for abuses of these alleged Internet rights remains high. One recent example is the highly publicized Yahoo case, in which a French court exercised jurisdiction over the popular American Internet search engine, Yahoo.<sup>126</sup> The French court ordered Yahoo to remove web pages showing Nazi memorabilia, material that is illegal to

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<sup>123</sup> Universal Declaration of Human Rights, G.A. Res. 217A, at 74-75, U.N. GAOR, 3d Sess., 1st plen. mtg. U.N. Doc A/810 (Dec. 12, 1948), *available at* <http://daccessdds.un.org/doc/RESOLUTION/GEN/NR0/043/88/IMG/NR004388.pdf?OpenElement> (last visited Mar. 4, 2006). Although the Universal Declaration of Human rights is not “binding” international law, the United Nations General Assembly unanimously ratified the Declaration by a vote of 48 to 0, and the Declaration has been considered “an obligation for the members of the international community” by the United Nations. United Nations Association in Canada, *Questions and answers about the Universal Declaration of Human Rights*, <http://www.unac.org/rights/question.html> (last visited Mar. 4, 2006).

<sup>124</sup> See Council of Europe, *Draft Declaration on Freedom of Communication on the Internet*, <http://www.humanrights.coe.int/media/documents/Draftdeclaration.rtf> (last visited Mar. 4, 2006). Founded in 1949, the Council of Europe is an intergovernmental organization. The Council of Europe sits in Strasbourg and its 43 members include: Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Former Yugoslav Republic of Macedonia, Turkey, Ukraine, and the United Kingdom. Council of Europe, <http://www.apc.org/english/rights/europe/coe.html#overview> (last visited Mar. 4, 2006).

<sup>125</sup> See generally The Association for Progressive Communications, *APC Internet Rights Charter*, <http://rights.apc.org/charter.shtml> (last visited Mar. 4, 2006). “The Association for Progressive Communications is an international network of civil society organisations dedicated to empowering and supporting groups and individuals working for peace, human rights, development and protection of the environment, through the strategic use of information and communication technologies, including the internet.” About-APC, <http://www.apc.org/english/about/index.shtml> (last visited Mar. 4, 2006).

<sup>126</sup> Ray August, *International Cyber-Jurisdiction: A Comparative Analysis*, 39 AM. BUS. L.J. 531, 531-532 (2002).

view in France but legal to view in virtually every other country worldwide.<sup>127</sup> The court ordered the content removed despite the fact none of the servers involved were located in France.<sup>128</sup> In yet another example, a British man was held liable for posting photographs on an American web server which were considered obscene in Britain but not in the U.S.<sup>129</sup>

While many scholars have posited possible solutions to this jurisdictional dilemma,<sup>130</sup> the legal reality is that countries taking a narrow view regarding free speech, or even those countries who regulate speech extensively, can exercise a type of universal jurisdiction to suppress democratic values such as freedom of expression. Citizens of countries adopting western notions of human rights such as those identified by the Universal Declaration of Human Rights and the Council of Europe may face liability for activities entirely legal in their home country. Under current mechanisms of international dispute resolution such as the UDRP, these potential violations of human rights remain unaddressed, while mechanisms for suppressing expression remain viable.

Other ICANN policies such as current ccTLD registrant requirements may potentially infringe on internationally recognized rights and obligations. As noted above, those who wish to become registry operators must meet a number of ICANN requirements.<sup>131</sup> The Tunis Commitment and Tunis Agenda acknowledged that access and opportunity to become a part of

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<sup>127</sup> August, *supra* note 126, at 532.

<sup>128</sup> *Id.*

<sup>129</sup> *Id.* at 565-566.

<sup>130</sup> See Paul Schiff Berman, *The Globalization of Jurisdiction*, 151 U. PA. L. REV. 311, 367-414 (2002), available at <http://lsr.nellco.org/cgi/viewcontent.cgi?article=1012&context=uconn/ucwps> (last visited Oct. 17, 2006).

<sup>131</sup> For a list of requirements see ICANN, *Accreditation Overview*, <http://www.icann.org/registrars/accreditation.htm> (last visited Oct. 17, 2006).

the Internet's structure should not be limited, particularly to citizens of developing nations.<sup>132</sup> Yet comprehensive registry requirements inherently limit access to the Internet's structure, especially to those from developing economies. While the utility and legality of registrant requirements are beyond the scope of this paper, it's worth noting the potential discrepancies between ICANN policies and the standards articulated at the recent WSIS.

## VI. International Alternatives to ICANN

Recognizing U.S. dominance over Internet policy-making poses significant threats to the international community, many States have called for dramatic reforms of Internet governance. The issue of Internet governance became a critical and controversial issue of debate at the recent WSIS. Countries such as Argentina, New Zealand, the U.S., and many African nations supported working to improve existing structures.<sup>133</sup> The opposition effort was spearheaded by the EU, China, Iran, and Brazil, who called on world governments to exert control over the Internet's core technological management functions.<sup>134</sup> Canada and Australia have also been vocal in their criticism of ICANN.<sup>135</sup> In the midst of international opposition to ICANN, several international proposals for reform have been introduced.

The EU proposal offered during the WSIS would transfer control of the A root to an alternative governing body such as the International Telecommunications Union (ITU). The ITU is an international body within the United Nations system that works with governments and the

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<sup>132</sup> WSIS, Tunis Agenda, *supra* note 103, ¶ 50; WSIS, *Tunis Commitment*, ¶ 9, available at <http://www.itu.int/wsis/docs2/tunis/off/7.html> (last visited Oct. 17, 2006).

<sup>133</sup> CDT, *supra* note 18.

<sup>134</sup> *Id.*

<sup>135</sup> von Arx & Hagen, *supra* note 17.

private sector to coordinate global telecom networks and services.<sup>136</sup> The ITU's membership includes nearly every nation on the globe as well as "over 650 private members from the telecommunication, broadcasting, and information technology sectors...."<sup>137</sup> Since its inception in 1865, the ITU's mandate has grown from regulation of the first international telegraph network to voice telephony, the development of radio communications, and more recently satellites communications.<sup>138</sup> The ITU is experienced in regulating and facilitating development of cellular and broadcasting technologies, aircraft navigation,<sup>139</sup> and "boast[s] a long and highly successful track record in developing and managing our telecommunication resources."<sup>140</sup>

One of the ITU's main responsibilities is management of the radio-frequency spectrum.<sup>141</sup> Currently, the ITU views segments of the electromagnetic spectrum necessary for broadcasting as a sovereign national resource subject to general ITU policy restrictions.<sup>142</sup> Proponents analogize the DNS to the electromagnetic spectrum, with each ccTLD being comparable to a segment of the electromagnetic spectrum.<sup>143</sup> Under the EU proposal, the ITU would take complete control of the A root. General policy making would be handled by the ITU,

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<sup>136</sup> International Telecommunications Union (ITU), *Purposes*, <http://www.itu.int/aboutitu/overview/purposes.html> (last visited Oct. 19, 2006). For general information on the ITU's structure, purpose, and composition see ITU, <http://www.itu.int/osg/> (last visited Oct. 19, 2006).

<sup>137</sup> ITU, *Foreword by the Secretary-General Yoshio Utsumi*, <http://www.itu.int/aboutitu/overview/foreward.html> (last visited Mar. 4, 2006).

<sup>138</sup> *Id.*

<sup>139</sup> ITU, *Purposes*, *supra* note 136.

<sup>140</sup> ITU, *Foreword by the Secretary-General Yoshio Utsumi*, *supra* note 137.

<sup>141</sup> ITU, *Purposes*, *supra* note 136.

<sup>142</sup> von Arx & Hagen, *supra* note 17.

<sup>143</sup> *Id.*

with specific ccTLD policy making left in the hands of each respective nation. ICANN would be divested of all authority and therefore no longer relevant as an organization.

This proposal is favored by the EU and others because it addresses the ultimate source of U.S. Internet dominance, control of the A root. The EU argued that transferring the A root to the ITU would increase international participation in the policy making process and reduce the risks posed by unilateral U.S. control. An additional advantage of the EU proposal is that the UN framework, due to its experience and position as an authoritative international body, is particularly well-suited to manage the judicial challenges posed by trademark disputes, jurisdictional limitations, and human rights.

A second proposal, considered by the NGO and Academic ICANN Study (NAIS), would disband ICANN at the end of its contract with the DoC.<sup>144</sup> At that time, the functional equivalent to a multilateral treaty organization would be established by multilateral treaty to manage the A root and govern the Internet.<sup>145</sup> Signatory governments would elect representatives to serve on the organization's board.<sup>146</sup>

This proposal offers many of the same advantages as the EU proposal. It alleviates international concern (at least those of signatories) because the A root is controlled by an international body. Each member shares an equal stake in the Internet's policy making authority, with ccTLD policy making firmly in the hands of member States. And because treaty disputes

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<sup>144</sup> The NGO and Academic ICANN Study [hereinafter NAIS], At Large Directors Appointed by Governments, § 3.3.3.2, <http://www.naisproject.org/report/final/3.3.3.2.shtml> (last visited Oct. 20, 2006). The NAIS was an "international project to review the nature of public representation in the Internet's domain name management organization [ICANN]." The project was conducted by a team of experts from nine countries including Ghana, South Africa, Japan, South Korea, Germany, U.K., U.S., Uruguay, and Brazil. NAIS, <http://www.naisproject.org/> (last visited Oct. 4, 2006).

<sup>145</sup> NAIS, At Large Directors Appointed by Governments, *supra* note 144; *See also* Berman, *supra* note 130, at 388-91.

<sup>146</sup> NAIS, At Large Directors Appointed by Governments, *supra* note 144.

could be resolved by the International Court of Justice (ICJ) or another authorized arbitration forum applying binding substantive international law, international disputes could be more effectively litigated.<sup>147</sup>

Under a third more radical proposal, Kim von Arx and Gregory Hagen have gone so far as to challenge States to declare independence over their own ccTLD.<sup>148</sup> Under this plan countries would no longer recognize the A root as authoritative.<sup>149</sup> The solution attempts to ensure national participation, accountability, and visibility by reasserting sovereign control over a country's own ccTLD.<sup>150</sup> This process can be accomplished with or without U.S. assistance.<sup>151</sup> Under one scenario, the process would be analogous to a former U.S. colony exercising its right to self determination.<sup>152</sup> The U.S. would facilitate the transition to self governance by recognizing the government's authority over its ccTLD and provide support to ensure the stability of the new administrative body.<sup>153</sup> If the U.S. proves hostile to the move (a very likely scenario) the process would instead resemble the American Declaration of Independence.<sup>154</sup> Each state would declare independence over its territory, and multilateral negotiations could establish a framework under which sovereign States could choose to recognize other domains.<sup>155</sup>

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<sup>147</sup> See Berman, *supra* note 130, at 388-91.

<sup>148</sup> von Arx & Hagen, *supra* note 17 at 64.

<sup>149</sup> *Id.*

<sup>150</sup> *Id.* at 68.

<sup>151</sup> *Id.*

<sup>152</sup> *Id.*

<sup>153</sup> *Id.*

<sup>154</sup> *Id.*

<sup>155</sup> *Id.*



von Arx suggests these negotiations could be conducted under the guise of a cooperative, international body whose goal would be to establish uniform technical standards and could provide a forum for discussing general policy issues.<sup>156</sup>

This declaration of independence is possible because, as stated earlier, the A root is only seen as authoritative because everyone agrees it is.<sup>157</sup> The technical infrastructure of the DNS makes it possible for countries to take sovereign control over their ccTLD.<sup>158</sup> Governments could establish an alternate authoritative root for its own ccTLD.<sup>159</sup> For example Japan could establish a .jp root completely distinct from the A root or any other server getting its data from the A root.<sup>160</sup> Japan could then enact legislation mandating all domestic Internet Service Providers (ISP) recognize the .jp root as authoritative.<sup>161</sup> For websites not located in Japan's own .jp root, the state root server would query the authoritative server for each of the other ccTLDs.<sup>162</sup>

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<sup>156</sup> See Kim G. von Arx, *Now and Then: ICANN's Reform and its Problems*, 2003 DUKE L. & TECH. REV. 7 (2003). von Arx recognizes nine principles to guide the formation of this international body. These include: "(1) It should embrace and focus on the common governing values of a 'Civil Society' on the Internet and not each member country's values .... (2) It should ensure that architecture and politics remain within their respective spheres. It should eliminate the possibility of using architecture to influence individual member politics and vice versa outside their respective spheres .... (3) It should seek the moral, legal, and popular authority to effectively guide and administer the DNS .... (4) It must be attentive and responsive to the needs and interests of the Internet community and yet authoritative (on moral, legal, and popular levels) in the final decision-making process. ... (5) It should be separated into pillars of power which should be decentralized across the globe .... (6) Despite point (5) the ccTLD cooperation organization should be merely technical at first and it should already have policy institutions in place .... (7) Each member of the organization should be subject to its own country's legal obligations and protections while ensuring defeasible participation .... (8) It should be a private, not-for-profit, and independent body which is, financially, politically, and legally separate from any member country's government and other international governmental or non-governmental organizations .... (9) It should eliminate foreign control over a country's own ccTLD by embracing technical independence."

<sup>157</sup> *See id.*

<sup>158</sup> *Id.* at 41-43.

<sup>159</sup> *Id.*

<sup>160</sup> *See id.*

<sup>161</sup> *Id.*

<sup>162</sup> *Id.*

For the purposes of explanation assume we are located in the hypothetical state of Euphoria which has declared independence over its ccTLD of .ep. When an address is entered into a browser such as <http://www.law.syr.edu>, the home computer would contact a server provided by the local ISP. If the ISP did not already have the address listed in its cache, it would contact the .ep state root server now designated as authoritative. Since the .edu root is not within the .ep root, the .ep state root server would forward the request to the .edu server controlled by the .edu registrar (presumably administered by the U.S.). The .edu server would then send the response down the chain to the home computer. The process would unfold in milliseconds in a fashion similar to the current framework, but ICANN would be completely bypassed and state sovereignty could be achieved.

This proposal offers the greatest degree of independence to sovereign states because by definition they control the right to administer their ccTLD in any fashion they see fit. The A root as it is know today would no longer be relevant, since only individual countries would be seen as authoritative. The U.S. would be essentially co-equal with every other state in cyberspace. Furthermore, since the jurisdiction of the ccTLD would correspond to definite national borders, jurisdictional challenges would be virtually eliminated, national laws and taxes could be imposed and enforced, and policy determinations could be made in a manner consistent with the will of the state.

## **VII. The Limitations of International Reform Proposals**

While the merits of these proposals remain open to debate, it's unlikely any of these proposals will take effect anytime in the near future. Each of these proposals suffers from one or more critical limitations. Critics of the EU proposal argue the politically charged United Nations is inefficient, illegitimate, and unqualified as an administrator of the DNS. The NAIS proposal is

constrained by limitations inherent in the treaty process. Treaty making requires substantial consensus-building, a process ill suited to the demands of controversial, complex, rapidly developing technological issues. Experience has shown treaties are largely limited to the codification of universally accepted practices, and as such would be wholly inadequate for effective Internet administration.<sup>163</sup> Both the EU and NAIS proposals also neglect basic principles deemed essential to any governing body by the White paper, namely competition and private sector-bottom up control.<sup>164</sup>

Even if these limitations could be overcome, the EU and NAIS proposals remain unlikely because the U.S. simply refuses to relinquish control of the A root under any circumstances. Ambassador David Gross, the U.S. coordinator for international communications and information policy at the State Department, has said, “[w]e will not agree to the U.N. taking over the management of the Internet.”<sup>165</sup> Gross noted, “[s]ome countries want that. We think that’s unacceptable.”<sup>166</sup> David McGuire, a spokesman for the Center for Democracy and Technology in Washington, said there is no compelling reason for any government to interfere with ICANN.<sup>167</sup> Assistant Commerce Secretary Michael Gallagher has echoed the sentiment, stating the “U.S. government will maintain its historic role in authorizing changes or modifications to the authoritative root zone file,” and that the government will continue to maintain “oversight” of

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<sup>163</sup> Berman, *supra* note 130, at 395-96 (discussing the shortcomings of the Berne Convention for the Protection of Literary and Artistic Works). *See also*, Paris Act Relating to the Berne Convention for the Protection of Literary and Artistic Works of September 9, 1886, concluded July 24, 1971, 1161 U.N.T.S. 3.

<sup>164</sup> White Paper, *supra* note 38; Fromkin, *supra* note 41, at 67.

<sup>165</sup> *U.S. Wants To Maintain Grip On Web*, CBS NEWS, Sept. 29, 2005, <http://www.cbsnews.com/stories/2005/09/29/tech/main890387.shtml>.

<sup>166</sup> *Id.*

<sup>167</sup> Hiawatha Bray, *Don't Give UN Control over Internet*, BOSTON GLOBE, Oct. 17, 2005, at E2, *available at* [http://www.boston.com/business/technology/articles/2005/10/17/dont\\_give\\_un\\_control\\_over\\_internet/?page=2](http://www.boston.com/business/technology/articles/2005/10/17/dont_give_un_control_over_internet/?page=2).

ICANN.<sup>168</sup> For these reasons the EU and NAIS proposals are insufficient to alleviate concerns from the international community.

The von Arx and Hagen proposal however, remains viable because it does not depend on U.S. cooperation for its effectiveness. Yet, this proposal too has its limitations. In addition to neglecting important DNS structural realities complicating the von Arx and Hagen proposal,<sup>169</sup> the plan threatens the stability of the Internet. As noted in the White Paper, stability of the Internet is of paramount concern.<sup>170</sup> For that reason most industry stakeholders have an aversion to any type of split or shared authoritative root.<sup>171</sup> Investors are fearful instability may compromise profits from e-commerce.

The proposal's success depends largely on intense cooperation between states. The recent controversy at the WSIS demonstrates such consensus is far from a guarantee. Furthermore, since ten of the thirteen root servers are located within the U.S. it's likely even after ccTLD independence the U.S. would continue to handle a large degree of Internet traffic. Even assuming widespread cooperation from a large number of countries, dissenting cartels of nations could monopolize access to large blocks of important web sites. Nothing could prevent two people entering the same domain name from accessing completely different websites based on what country they reside in. The risk involved makes a successful transition to ccTLD independence an unlikely scenario. However, the potential remains. Therefore, creative options for reform are

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<sup>168</sup> Declan McCullah, *U.S. to Retain Control of Internet Domain Names*, C NET NEWS.COM, June 30, 2005, [http://news.com.com/U.S.+to+retain+control+of+Internet+domain+names/2100-1028\\_3-5770937.html?tag=nl](http://news.com.com/U.S.+to+retain+control+of+Internet+domain+names/2100-1028_3-5770937.html?tag=nl).

<sup>169</sup> For a critique of the von Arx and Hagen proposal listing limitations, see Posting of Jefsy Morfin to cctld-discuss, Dec. 22, 2004, <http://wwld.nic.mx/mailarchive/cctld-discuss/vol04/0108.html>.

<sup>170</sup> White Paper, *supra* note 38; Froomkin, *supra* note 41.

<sup>171</sup> von Arx & Hagen, *supra* note 17.

necessary if the concerns of the international community are to be addressed in a manner compatible with U.S. interests.

### **VIII. ICANN Structural Reform Options**

One option is to restructure ICANN itself so that international concerns can be more adequately addressed. An internationally representative voice with voting authority may be the best option for alleviating pressures from disenfranchised nations and eliminating the threats of instability associated with the von Arx and Hegan proposal.

The authority for ICANN decision making is vested in its Boards of Directors (Board).<sup>172</sup> The Board consists of fifteen voting members called Directors and six non-voting members called liaisons.<sup>173</sup> Directors one through eight are selected by a nominating committee composed of various industry stakeholders.<sup>174</sup> Two directors are selected by the Address Supporting Organization (ASO).<sup>175</sup> Directors eleven and twelve are selected by the Country-Code Names Supporting Organization (ccNSO).<sup>176</sup> The final three directors include the ICANN President and two directors chosen by the Generic Names Supporting Organization (GNSO).<sup>177</sup> Board members are uncompensated, and officials of governments and multinational treaty organizations are expressly prohibited.<sup>178</sup>

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<sup>172</sup> For current Board of Director member profiles see ICANN, Board of Directors, <http://www.icann.org/general/board.html> (last visited Nov. 1, 2006).

<sup>173</sup> ICANN, Bylaws for Internet Corporation for Assigned Names and Numbers (hereinafter ICANN Bylaws), art. VI, § 1, <http://www.icann.org/general/bylaws.htm#VI> (last visited Nov. 1, 2006).

<sup>174</sup> *Id.* art. VI, § 2(1)(a). Nominating committee members are identified in Article VI, § 4 of the ICANN Bylaws.

<sup>175</sup> *Id.* art. VI, § 2(1)(b).

<sup>176</sup> *Id.* art. VI, § 2(1)(c).

<sup>177</sup> *Id.* art. VI, § 2(1)(d)-(e).

<sup>178</sup> *Id.* art. VI, § 3(5); art. VI, §4(1).

ICANN attempts to ensure global representation on the board by limiting the number of board members from each geographical region.<sup>179</sup> Currently ICANN has identified 5 regions: Europe, Asia/Australia/Pacific, Latin America/Caribbean islands, Africa, and North America.<sup>180</sup> Each Geographic Region must have at least one Director, and no region can have more than five Directors at any one time.<sup>181</sup>

The Board receives advice on policy making decisions from several advisory committees including the aforementioned ASO, ccNSO, and GNSO as well as the At-Large Advisory Committee (ALAC), Governmental Advisory Committee (GAC), the Root-Server System Advisory Committee (RSSAC), the Security and Stability Advisory Committee (SSAC), and the Technical Liaison Group (TLG).<sup>182</sup> Each advisory committee is without voting authority.

The international community has an opportunity to influence ICANN policy making through membership in the ccNSO. The ccNSO is responsible for developing policies relating to ccTLDs, nurturing consensus across ccTLD managers, and coordinating with other ICANN organizations.<sup>183</sup> The ccNSO is comprised of ccTLD managers and a council whose membership is geographically diverse.<sup>184</sup> Because the ccNSO is responsible for ccTLD policy making and has appointment power over two voting members of the board, the ccNSO provides a forum for members of the international community to affect ccTLD policy making directly.<sup>185</sup> The degree of influence exerted by international members, however, remains fairly small. This is because

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<sup>179</sup> *Id.* art. VI, § 5.

<sup>180</sup> *Id.*

<sup>181</sup> *Id.*

<sup>182</sup> *Id.* art XI, § 2.

<sup>183</sup> *Id.* art. IX, § 1.

<sup>184</sup> *Id.* art. IX, § 4.

<sup>185</sup> *Id.* art IX, §§ 1, 3.

most ccTLD managers (a large percentage of the ccNSO) are U.S. companies, and because the body only appoints two of the fifteen members of the board.

Members of the international community also have an opportunity to influence ICANN policy making through membership in the ALAC. The ALAC's role is "to consider and provide advice on the activities of ICANN," but it is directed primarily to the "activities of individual Internet users."<sup>186</sup> Two members of the ALAC are chosen by regional At-Large Organizations.<sup>187</sup> In their role as ALAC committee members, those with international interests adverse to U.S. policy choices have an opportunity to have their voices heard. However, the committee's non-voting status and limited scope make the forum less than adequate to meet the needs of states on the national level.

The primary method for governments to voice concern over ICANN policies is through membership in the GAC. The GAC is open to all national governments, as well as multinational governmental organizations, treaty organizations, and distinct economies as recognized in international fora.<sup>188</sup> The GAC is charged with providing "advice on the activities of ICANN as they relate to concerns of governments, particularly matters where there may be an interaction between ICANN's policies and various laws and international agreements or where they may affect public policy issues."<sup>189</sup> According to ICANN bylaws, the advice of the GAC on public policy matters "shall be duly taken into account,"<sup>190</sup> and disagreement between GAC and the board must be resolved "in good faith and in a timely and efficient manner, to find a mutually

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<sup>186</sup> *Id.* art. XI, § 2(4)(a).

<sup>187</sup> *Id.* art. XI, § 2(4)(b).

<sup>188</sup> *Id.* art. XI, § 2(1)(b).

<sup>189</sup> *Id.* art. XI, § 2(1)(a).

<sup>190</sup> *Id.* art. XI, § 2(1)(j).

acceptable solution.”<sup>191</sup> While the GAC provides a forum for governments to advance their policy interests, the GAC has no voting authority and remains merely an advisory committee.

Despite all of ICANN’s attempts to achieve international diversity within its organization, the lingering criticism demonstrates further need for reform. To be viable, these reforms must be acceptable to all stakeholders. Reforms must increase the role of international governments, while at the same time reinforcing the principles of private sector bottom up control on which ICANN was founded.

Reforms to ICANN’s structure allowing for increased international representation could take a number of forms depending on the degree of international control desired. At a minimum, the number of international participants in the ccNSO could be increased to provide greater representation of international policy concerns, particularly those of developing nations. Other options include giving advisory committees such as the ALAC and the GAC nomination powers over one or more board positions. More dramatic reforms would give the GAC a veto power, which could be overridden by a majority or supermajority of the board. Reforms could go so far as to allow the GAC to appoint the entire board, either by popular vote, a country rotation scheme, or based on the percentage of Internet users from a given geographical region.

The purpose of these reform proposals is to fulfill the promises given by the WSIS Tunis Declaration and Tunis Agenda, namely, allowing the international community a direct say in the public policy issues that affect them. A modest increase in government participation may be achieved without compromising ICANN as an effective governing body. Indeed, following the WSIS, ICANN itself has enthusiastically encouraged the involvement of governments.<sup>192</sup>

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<sup>191</sup> *Id.*

<sup>192</sup> Mohamed Sharil Tarmizi, *Following WSIS: Open Invitation to the Governments of the World*, <http://gac.icann.org/web/index.shtml> (last visited Mar. 4, 2006).



Allowing the GAC to appoint one or two board members, for example, would have the effect of increasing international participation without any real fear of a government controlled DNS. The principle of representation identified in the White Paper can be furthered without compromising stability, competition, or private sector bottom-up coordination. Perhaps most importantly, dissent among nations over a critical resource could be reduced, increasing the potential for peace and security around the globe.

## **IX. Conclusion**

International concern surrounding ICANN/DoC administration of the DNS is mounting. These concerns have caused a growing coalition of States and commentators to directly challenge the authority of ICANN and the DoC. International actors are worried about threats posed to their sovereignty, national security, and the effect on their domestic legal landscape. Of particular concern is the effect ICANN/DoC control of the A root has on ccTLD policy making. Recent developments at the WSIS confirm that the rift between those nations favoring international reforms and those supports existing frameworks is widening.

Increasingly, States are taking a keen interest in the Internet as a valuable resource. As access to the information superhighway becomes a reality for those in developing nations around the globe, the role of the Internet in State affairs will continue to grow. Additional investment of capital and the development of new Internet technologies will fuel the controversy. To avoid threatening the Internet's stability, the concerns of the international community must be addressed in a manner consistent with the best interests of all stakeholders.

Reform proposals have attempted to shift control of the A root to a more internationally representative body such as the ITU or other multilateral treaty organization. Other proposals challenge States to strip ICANN and the DoC of Internet administrative functions altogether.

These proposals are favored by opponents of ICANN because they solve the underlying problem of U.S. control over the A root. But the limitations of each of these proposals and the current state of politics among the Internet elite make such reform unlikely. However the concerns remain. Therefore, perhaps the best option is modest international reform to ICANN's structure itself. Reform is warranted, both to more adequately meet the goals originally advanced in the White Paper and to help alleviate pressure from international governments. Limited escalation of international representation on ICANN's committees and board, coupled with delegation of ccTLD policy making authority to individual governments, would greatly serve to reduce international apprehension of current systems and strengthen the Internet's stability. Perhaps now more than ever, it's time to make cyberspace a democracy.