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**article:**

# ICANN and internet governance sorting through the debris of 'self-regulation'

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*The Internet Corporation for Assigned Names and Numbers (ICANN) is a new private corporation for managing internet domain names and IP addresses. In creating it the Clinton administration made 'industry self-regulation' its guiding principle. This paper is a historical and conceptual assessment of that policy. It argues that the rhetoric of 'industry self-regulation' and 'self-governance' only served to obscure the policy issues raised by the historic transition. Regulation of internet names and numbers involved creating an entirely new institutional and property rights framework. At its centre was the problem of who owned critically important data and assets. The private sector itself was bitterly divided over the resolution of the property rights questions. The situation gave private and public sector actors powerful incentives to seize control of the process or to win a struggle for power. Historical analysis shows that 'self-regulation' was not a coherent policy but a rhetorical device used by one party in the power struggle (the Internet Society) to legitimate its own agenda and to preserve its own control. Ironically, the ICANN process has not avoided either government regulation or government control. To resolve the bitter divisions, the US Commerce Department has announced its intention to retain 'policy authority' over the DNS root indefinitely, and has imposed utility-style regulation upon Network Solutions' wholesale prices.*

In June 1998 the US Department of Commerce released a white paper on the administration of internet names and numbers, the ostensible purpose of which was to move administration of internet domain names and IP addresses out of the US federal government and into the hands of a private, non-profit, internationally representative organization.<sup>1</sup> In November 1998, the Commerce Department officially recognized the Internet Corporation for Assigned Names and Numbers (ICANN) as the organization that would inherit the responsibility for managing names and numbers.<sup>2</sup>

In effecting this transition, the Clinton administration made its guiding principle the concept of 'industry self-regulation'. 'Self-regulation' allegedly meant that US government would not create the new organization or specifically define its powers or structure. Instead, it invited the private sector to form the organization based on a broad consensus among industry stakeholders. Once the 'private sector' came to the government with a proposal for an organization that could legitimately claim the 'consensual' support of the 'internet community', it would be handed control of the assets, and the government would, after a two-year monitoring period, walk away. That, at any rate, was what was supposed to happen.

'Self-regulation' has been a leitmotif of other Clinton administration approaches to the digital economy. It characterizes its approach to digital television broadcasting,<sup>3</sup> the protection of online privacy,<sup>4</sup> and content regulation.<sup>5</sup> 'Self-governance' was also a term commonly applied to the internet itself, and resonated rhetorically with the culture of the internet's engineering/technical community.

However, it is now clear that something has gone seriously awry with the Commerce Department's attempt to implement the concept. ICANN looks and acts more like an incipient inter-governmental agency than a private-sector corporation. The process of forming ICANN has been mired in so much factionalism and political controversy that references to 'consensus-based' self-regulation are laughable. To top it off, ICANN's anniversary in September 1999 brought a set of agreements among ICANN, Network Solutions, Inc, and the US Department of Commerce that demonstrated that the most important long-term policy decisions are still being made by means of privately negotiated contracts with the US government that bypass ICANN's organic processes. By preserving the US government's ultimate 'policy authority' over the root, the Fall 1999 agreements constitute a major pullback from the policy of self-regulation.

This paper is an attempt to assess, one year after the formation of ICANN, the so-called 'privatization' of internet administration. It describes ICANN's creation and characterizes the controversies and issues it faces. The basic thesis of the piece is that the rhetoric of 'industry self-regulation' and 'self-governance' only serves to confuse and obscure the policy issues raised by the historic transition. The white paper and ICANN were not products of a coherent philosophy of regulation, but poorly thought-out improvisations. The focus on whether the institutional actor is governmental or private diverts attention from the more important issue of whether the *power* exercised by the institution is governmental in nature and whether that power is adequately circumscribed by law, market forces, and internal checks and balances.

Some of the problems with ICANN are the result of bad implementation decisions by the US government, which might be expected – and excused – given the move into uncharted territory. Even if they had managed to avoid missteps, however, there is still reason to doubt whether the Clinton administration's 'self-regulation' concept provides a coherent basis for the future of internet administration. The

1. Department of Commerce, NTIA, 'Management of internet names and addresses', Statement of Policy, *Federal Register*, vol 63, No 111, 10 June 1998, 31741.

2. <http://www.ntia.doc.gov/ntiahome/domainname/icann-memorandum.htm>. Visited October 1999.

3. In December 1998, an Advisory Committee on Public Interest Obligations for Advanced Television recommended that the National Association of Broadcasters, acting as the representative of the broadcasting industry, draft an updated voluntary Code of Conduct to highlight and reinforce the public interest commitments of broadcasters. <http://www.benton.org/PIAC/>

4. The Department of Commerce, along with the Office of Management and Budget was asked to report to President Clinton on industry efforts to establish self-regulatory regimes to ensure privacy online and to develop technological solutions to protect privacy. This led to its staff discussion paper, 'Elements of effective self regulation for protection of privacy', <http://www.ntia.doc.gov/ntiahome/privacy/index.html>

5. The administration has passed legislation to install the 'V-chip' and associated ratings system in TVs and has encouraged the development of the Platform for Internet Content Selection (PICS) standard for internet content.

rhetoric of 'private sector control' obscures the fact that the most salient issues in the transition concern the definition and scope of property rights – in domain names, IP addresses, trademarks, and zone file data. The policy also glossed over the fact that control of the internet's centralized coordination mechanisms could be exploited or abused to attain regulatory powers over internet users and suppliers. The definition and enforcement of individual rights is a function normally associated with government and with formal law. Indeed, without a clear definition of property rights there can be no 'private sector' and no cohesively organized 'industry.' By abdicating its responsibility to define the scope and the limits of the rights involved and the assets that were being transferred to ICANN, the US government's 'self-regulation' policy has engendered confusion, conflict and delay. Whether its approach will bring corresponding gains remains to be seen.

## ICANN's prehistory

ICANN did not emerge from a vacuum. From 1994 to 1998, a series of attempts to move internet administration into private hands were made. The attempts began with the Internet Society (ISOC) in the US, but gradually escalated as ISOC discovered that allies were needed to carry out its agenda.

There is a direct lineage between these early attempts by ISOC to privatize internet administration and the final approach of 'self-regulation' adopted by the Clinton administration. This historical linkage must be understood if the policy is to be assessed properly. ICANN began as an attempt by the small group of technologists centred in the Internet Society to retain control of 'their' internet as it evolved into a commercial medium. Their efforts eventually converged with the drive of corporate trademark and intellectual property interests to gain control over digital media to strengthen and expand protection of intellectual property. Later, their interests intersected with telecom regulators outside the United States who feared and resented American dominance of the internet and were seeking ways to participate in its governance.

### *The first attempt to privatize the root*

Vinton Cerf is the true mastermind behind ICANN, though this fact is seldom acknowledged. Cerf was a co-developer of the IP protocol enabling internetworking and is now a Vice-President at MCIWorldcom, a largely honorary position that has given him a platform to engage in internet politics. As early as 1990, he attempted to consolidate internet standards administration in the hands of an 'Internet Architecture Board' (IAB).<sup>6</sup> Cerf then created a private, non-profit membership society that could serve as the organizational platform for the IAB and other internet governance entities. The Internet Society (ISOC) was incorporated in 1992, and the IAB was constituted as a committee of ISOC. The first Director of the Internet Society was Mike Roberts – the man who later became the first CEO of ICANN.

The late Jon Postel, another internet pioneer closely linked to Cerf and ISOC,<sup>7</sup> managed the administration and editing of the 'request for comment (RFC) series' that documented internet standards and practices since the early 1970s. Postel worked at the University of Southern California's Information Sciences Institute (USC-ISI). With funding support from DARPA, Postel also handled most of the domain name and address administration. These activities came to be known as the Internet Assigned Numbers Authority (IANA).

6. V. Cerf, 'The internet architecture board', RFC, No 1160, 1990.

7. Jon Postel was a founding member of the Internet Architecture Board and served continuously from its founding until his death in October 1998. He was the first individual member of the Internet Society. V. Cerf, 'I remember IANA', RFC 2468, October 1998.

In July 1994, Postel prepared a charter proposing to transfer the IANA function from a government contract with USC-ISI to the Internet Society. In proposing IANA privatization, Postel sought to provide for his operation a more secure and independent legal and financial footing in the new commercialized environment. It was a measure of the informality of the early internet administration arrangements – and typical of the attitude of Postel and Cerf – that the proposed self-privatization of IANA was expected to move forward without any legal authorization. Postel's proposal, however, prompted debate within federal government agencies about whether ISOC possessed the 'jurisdiction and overall responsibility' for the domain name and address spaces.<sup>8</sup> Clearly, ISOC was attempting to assert ownership of the name and address space via its control of IANA. Just as clearly, it had no legal basis for this assertion. But if ISOC and IANA did not own it, who did? The question was left unanswered at the time. IANA nevertheless began to refer to itself as an organization 'chartered' by the Internet Society.

### *NSI and domain name charging*

After 1994 the World Wide Web application facilitated an explosion of consumer and business interest in the internet. The rapid growth of users produced a rush for domain names. New domain name registrations grew from 300 per month in 1992 to 45,000 per month by late 1995. From 1995 to 1996 the number of registered domains had increased from 150,000 to 637,000, with .com alone accounting for 60% of them.

Domain name registrations under .com and other generic top-level domains were handled by a private, for-profit corporation, Network Solutions, Inc (NSI), under a 5-year cooperative agreement with the National Science Foundation (NSF).<sup>9</sup> Originally NSI was expected to perform the job for a fixed payment of \$1 million annually. The huge growth of domain name registrations and the inappropriateness of federal subsidies for commercial registrations, however, prompted NSI to ask that it be allowed to charge fees for domain name registrations. The federal government approved that request and beginning in July 1995, domain names under .com, .net, and .org were assigned to end users for an annual fee of \$50 a year.

The annual fee transformed NSI's domain name registration contract into a lucrative, multi-million dollar revenue stream. Relative to domain name services in other countries, which adopted more restrictive practices, NSI was fantastically successful at commercializing the registration of domain names. As a result, NSI's cooperative agreement became, in effect, an exclusive licence on the North American domain name registration business. NSI's market share, its for-profit character, and the fact that it operated with little regard for the norms of the ISOC-based technical community were resented by many in that community. By establishing a commercial beachhead in the heart of internet administration, NSI posed a real threat to ISOC's attempt to retain stewardship of the Net. For the next four years, the internet governance debate would be dominated by the ISOC – NSI animosity/rivalry. For all the talk about 'private sector' governance, up until September of 1998 the poles in the internet governance dialectic were defined by the positions taken by two government contractors.

### *IANA/ISOC's second attempt to privatize the root*

In September of 1995 Postel expressed his view that: 'I think this introduction of charging by [NSI] for domain registrations is sufficient cause to take steps to set up a small number of alternate top level domains managed by other registration centres. I'd like to see some competition between registration services to encourage good service at low prices.'<sup>10</sup> Postel drafted a proposal that would have added up to 150 new, 'descriptive' top-level

8. A. Rutkowski, former ISOC Director, reproduces emails among members of the Federal Networking Council from this period revealing an intense debate about who owned the name and address space and whether IANA and ISOC had any right to take it over. See <http://www.wia.org/pub/iana.html>  
9. <http://www.ntia.doc.gov/ntiahome/domainname/proposals/docnsi100698.htm>.  
10. Email, Postel to ISOC trustees, 15 September 1995; Rutkowski WIA website.

domain names such as .web, .sex, or .biz over a period of three years. Each of the TLDs would be managed by proprietary registries that paid a fixed fee of \$2,000 a year plus 2% of the income from registrations into a fund managed by the Internet Society.<sup>11</sup> ISOC's board endorsed the plan in June 1996.

Postel's initiative was motivated by a valid concern: the need for new TLDs to counter the NSI monopoly. Once again, however, IANA and ISOC were proposing what was in essence a privatization of the root without any formal legal authority. Moreover, it was even more evident than before that IANA and ISOC viewed administration of the root as a money-spinner that would provide long-term financial support for their organizations.

IANA's assertion of authority was not successful this time, either. The proposal encountered vocal opposition from various sources. The trademark interests objected to the expansion of the name space because they feared that it would increase the scope for domain name speculation and trademark infringement. Robert Shaw of the International Telecommunication Union (ITU) publicly spoke out challenging IANA's authority to implement the plan.<sup>12</sup> Postel even failed to win the support of the prospective businesses poised to operate new TLDs. Rather shortsightedly, they complained bitterly about the fees and IANA's lack of legitimate authority to assess them.<sup>13</sup> By autumn 1996 it was clear that Postel's proposal was going nowhere. Neither IANA nor ISOC possessed the legitimacy, the political clout, or the legal authority needed to pull off such a coup. In their next attempt, however, IANA and ISOC were much more ambitious.

### *Third attempt to control the root: The IAHC and the gTLD-MoU*

In October 1996 the Internet Society seems to have recognized that if they were to succeed in their mission to gain control of the root they would have to break new institutional ground. ISOC put together what it called a 'blue ribbon international panel' to develop a plan to take over the internet domain name system.<sup>14</sup>

ISOC CEO Don Heath put together an 11-member committee, dubbed the 'International Ad Hoc Committee' (IAHC). The committee represented an alliance between ISOC and its most powerful critics from the previous round. Trademark owners and the ITU's Shaw were incorporated into the planning process. IAHC contained two representatives of large trademark holders, one appointed by the International Trademark Association (INTA) and another by the World Intellectual Property Organization (WIPO). It also contained representatives from the ITU, the NSF, and five IETF/ISOC technical members selected by Postel. The IAHC charter was released on 11

November 1996, and public comments were solicited via email. Only three months later, a Final Report laid out a new system of internet governance.<sup>15</sup>

The IAHC Final Report embodied a new conception of the domain name space as a 'public resource'.<sup>16</sup> It proposed a structural model for the domain name registration business that diverged significantly from the practices of NSI. In Postel's first plan, the right to operate a new domain name registry was owned by a private, for-profit company. In effect, the plan would have created many new NSIs to compete against each other. TLD registries were conceived as proprietary and for-profit; consumers would be protected by open market competition between registries. The IAHC plan, on the other hand, conceived of the registry database as a non-profit monopoly, and sought to separate the 'wholesale' operation of the registry database from the 'retail' function of registering names for customers, billing them, and maintaining contact information. The former function was termed the 'registry' and the latter the 'registrar'. Under the IAHC plan a single,

11. Originally, Postel had proposed a \$100 000 fee plus 2% of revenues, but the squeals of outrage this provoked prompted a quick reduction in successive drafts.

12. G. Lawton, 'New top-level domains promise descriptive names', *SunWorld Online*, September 1996. Although few high officials within the ITU followed internet developments, the organization viewed itself as the natural home for administration of global network resources and encouraged Shaw's incursions into this new territory.

13. *Ibid.*

14. 'Blue ribbon international panel to examine enhancements to internet domain name system', News Release, ISOC, Washington DC, 22 October 1996.

15. IAHC Final Report, URL, February 1997.

16. See Craig Simon, 'The technical construction of globalism: internet governance and the DNS crisis', unpublished ms, <http://www.flywheel.com/ircw/dnsdraft.html> visited August 1999.

monopoly registry would be administered on a non-profit basis. The registry would be co-owned by multiple, competing registrars, who would all share access to the same TLDs. (The concept of a registry co-owned by registrars was based on the model used by the British internet industry to operate the .UK top-level domain.)

Another dramatic difference was that the new system proposed by IAHC linked trademark protection procedures directly to the administration of the DNS. This important but controversial innovation was clearly meant to eliminate the trademark owners' objections to new TLDs by giving them extraordinary power over domain name registrations. Domain names would not be operational until after a 60-day waiting period, during which they would be subject to review by 'Administrative Challenge Panels' run by WIPO. Neither the law nor the legal principles WIPO would use to resolve disputes were specified. IAHC also proposed to exclude from the domain name space all names that corresponded to or resembled 'famous' trademarks. Where Postel had originally thought in terms of hundreds of new descriptive TLDs, IAHC proposed to add only seven.<sup>17</sup> This, too, was a concession to the trademark interests. The smaller the name space, the easier their policing problem. Thus, the IAHC expanded the name space slightly but treated it as a regulated cartel.

The IAHC also established a complicated governance structure, which was defined in a document known as the Generic Top Level Domain Memorandum of Understanding (gTLD-MoU). Registrars would be incorporated in Geneva as a non-profit Council of Registrars (CORE). To join CORE, registrars had to pay a \$20,000 entry fee and \$2,000 per month, plus an anticipated but as yet unspecified fee for each domain name registration. The top governance authority was a committee designated as the Policy Oversight Committee (POC). POC's membership mirrored the composition of the IAHC: two members were to be appointed to it by ISOC, the internet Architecture Board, IANA, and CORE; one member was to be appointed by ITU, INTA, and WIPO. In formulating policy the POC would issue requests for comments just as a regulatory commission might. There was also a Policy Advisory Board (PAB), a consultative body that any signatory to the gTLD-MoU could join.

The gTLD-MoU was signed by Heath and Postel 1 March 1997. ISOC and ITU then organized an official signing ceremony in Geneva in an attempt to assume all of the trappings of an international treaty agreement. Yet ISOC and IANA still had no more formal legal authority over the root than they had had in mid-1996.

ISOC and IANA's assertion of authority failed again, but this time the bold creation of a new institutional framework was enough to send ripples through the international system. The highest levels of the US Government began to pay attention.<sup>18</sup> NSI, which correctly saw its control of the lucrative .com domain as the target of the gTLD-MoU's shared registry model, mounted a lobbying campaign against the proposal. The internet entrepreneurs positioning themselves as alternative registries loathed the

gTLD-MoU. Instead of opening the market it had limited TLD expansion to a monopoly registry, and it imposed heavy fees and regulations upon participating registrars. Many policy analysts and user groups criticized the gTLD-MoU as a sellout to the trademark interests. Many trademark interests, however, were still unhappy with the creation of any new TLDs and criticized INTA for its participation. Congressional hearings were held.<sup>19</sup> The European Commission weighed in against the plan, charging that it was 'too US-centric' and demanding more EC representation and 'further public debate'. The seven proposed new gTLDs were never added to the root, and the 80-odd companies that had paid fees to become CORE registrars saw nearly a million dollars evaporate.

CORE's debt and its creation of a class of stranded

17. The seven proposed gTLDs were: .web, .info, .nom, .firm, .rec, .arts, .store.

18. In late April 1997 US Secretary of State Madeline Albright wrote a memo criticizing the ITU Secretariat for acting 'without authorization of member governments' to hold a 'a global meeting involving an unauthorized expenditure of resources and concluding with a quote international agreement unquote.' Other parts of the Executive branch (Commerce Department and White House domestic policy advisors) also began to investigate the issue.

19. US House of Representatives, Committee On Science, Subcommittee On Basic Research, 'Hearing on internet domain names, 30 September 1997.

entrepreneurs played an important role in the further evolution of internet governance. CORE had succeeded in tapping into a fairly widespread antipathy toward NSI and the way it, with 75% of the world market for domain name registrations, dominated the business. In the ensuing months, and continuing through the formation of ICANN, CORE-allied businesses placed enormous pressure on ICANN to resolve policy issues as quickly as possible so that they could recoup their stranded investments and begin registering domain names in competition with NSI as soon as possible. The economic pressure on CORE also motivated them to make whatever concessions were necessary to appease the trademark/intellectual property interests, so that trademark protection issues would not block the addition of new gTLDs.

### *The US Government formally intervenes*

The political pressures created by the gTLD-MoU finally prompted the US Government to formally intervene. The key agent of federal policy was Presidential policy advisor Ira Magaziner. In December 1995 Magaziner convened an interagency group to look at the potential of electronic commerce and the internet, but domain name issues were too obscure to attract his attention at that time. By the end of 1996, however, trademark-domain name conflicts had joined taxation, copyright, and several other issues on the interagency group's e-commerce agenda. It was the trademark issue that enhanced its priority. In December of 1996, the US Patent and Trademark Office, with the backing of the Department of Commerce, tried to express an official interest in the administration of DNS. According to Magaziner, 'I heard them raising a concern that was backed up by a number of business people that if you ignored trademarks in the issuance of domain names, it could have a negative commercial impact.'<sup>20</sup> Magaziner at that point formed a separate interagency group on domain names to complement his e-commerce group.

The Clinton administration had an established history of advancing the interests of intellectual property holders in exchange for major campaign contributions. Bruce Lehman, the administration's Commissioner of Patents and Trademarks at the time, was a former copyright industry lobbyist and 'copyright maximalist'<sup>21</sup> who produced the white paper on 'Intellectual Property and the National Information Infrastructure', a policy document notorious for its overreaching on behalf of intellectual property rights.<sup>22</sup> A number of other factors besides trademark prompted the USG to intervene. NSF had become disenchanted with the IAHC/gTLD-MoU process and made known its intention to terminate the NSI contract. IANA's DARPA contract was also due to expire. Some people within the administration and in the corporate world believed that the stability of the internet would be threatened unless the government created formal

arrangements to replace IANA and NSI. Thus, on 1 July 1997 a Presidential Executive Order authorized the Secretary of Commerce to 'support efforts to make the governance of the domain name system private and competitive and to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis.'<sup>23</sup> Responsibility for implementing the transition was removed from NSF and given to Commerce's National Telecommunication and Information Administration (NTIA). Commerce/NTIA issued a Notice of Inquiry on domain name policy 2 July 1997.<sup>24</sup>

In issuing the Notice, the USG was asserting its ultimate authority over the root, but also indicating its intention to relinquish that authority in a way that involved internet stakeholders internationally. ISOC, CORE and the gTLD-MoU supporters did not welcome the US government's proceeding.

20. Gordon Cook, transcript of interview with Ira Magaziner, 24 September 1998.

21. Pamela Samuelson, 'The copyright grab', *Wired* 4.01, January 1996.

22. Intellectual Property and the National Information Infrastructure, *The Report of the Working Group on Intellectual Property Rights*, 1 September 1995,

<http://www.uspto.gov/web/offices/com/doc/ipnii/> (Visited November 1999).

23. *A Framework for Global Electronic Commerce*, The White House, 1 July 1997.

<http://www.ecommerce.gov/framework.htm>

Visited 7 October 1999. Presidential Directive on Electronic Commerce, memorandum for the heads of executive departments and agencies, 1 July, 1997,

<http://www.ecommerce.gov/presiden.htm>.

24. US Department of Commerce, NTIA, Request for Comments, 62 FR 35896, 2 July 1997.

They saw it as intrusive 'intervention' into a process that was more properly left to the 'self-governance' of the internet technical community.

### *The white paper and 'industry self-regulation'*

After two rounds of public comments, the Clinton administration released its final plan, the so-called white paper, on June 3, 1998.<sup>25</sup> The white paper's policy approach surprised everyone who was not privy to the secret negotiations that created it. Previous drafts<sup>26</sup> had stated that the domain name registration business should become 'competitive and market-driven', and proposed specific ways to achieve that goal immediately. The white paper, however, abandoned direct action by the US government. No new TLDs would be authorized. No competing registries would be recognized. No decisions about the structure or composition of the new corporation's Board would be made. These decisions would be left to a new private sector organization. The Commerce Department said that it would simply wait four months for the 'private sector' to form a corporation that commanded 'consensus' among stakeholders. It would then recognize this corporation and transfer to it the functions of IP address space allocation, protocol parameter assignment, domain name system management, and root server system management. The white paper also gave the World Intellectual Property Organization (WIPO) a formal role in the transition. It called upon WIPO to initiate a process to investigate domain name trademark conflicts and make recommendations about how to resolve disputes, and how new TLDs would affect trademark holders.

Commerce Department official J. Beckwith Burr explained, 'We got a lot of comments and we read them all very carefully. One of the main messages was, "You're calling for private sector leadership – let the private sector lead. There is no need [for government] to make a significant number of decisions in the interim." After listening to those comments, we agree.'<sup>27</sup>

Burr's approach sounded plausible, but there was confusion at its heart. Had the US government really adhered to a policy of private sector leadership, it never would have initiated the Commerce Dept proceeding in the first place. It would have simply let the IANA and NSI contracts expire and allowed the internet industry to work out new arrangements on its own. And, it never would have invited WIPO, an inter-governmental treaty organization, to play a formal role in the process. In reality, the Clinton administration's policy was an improvised response to political pressures pulling in various directions. In response to corporate lobbying, it wanted official government involvement to ensure 'stability' and to create what amounted to a new system of administrative law to protect trademark holders. But it did *not* want to create a government corporation or take direct responsibility for passing new laws or negotiating a treaty. ISOC, of course, lobbied hard for leaving everything in 'the internet community's' hands. But the US government also had to respond to pressure from European and Australian governments for more formal, international and governmental involvement. 'Industry self-regulation' was an appealing label for a process that could be more accurately described as the US government brokering a behind-the-scenes deal among what it perceived as the major players – both private and governmental.

Who were those players, and what did they want? Although there are still holes in our understanding that can only be remedied by the passage of time, there is enough evidence to put together a reasonably clear picture.

The ISOC-led coalition was one key player, and the real winner. ISOC and CORE mounted an intensive lobbying campaign aimed at Magaziner and Commerce, and also got many of their members to file comments in the NTIA proceeding. These efforts succeeded in convincing the US government to view Jon Postel's IANA and the gTLD-MoU coalition as the appropriate vehicle for 'private sector leadership.'

25. Department of Commerce, *op cit*, Ref 1.

26. US Department of Commerce, NTIA, 'A proposal to improve technical management of internet names and addresses', *Federal Register*, 20 February 1998, Green Paper.

27. J. Kornblum and C. Macavinta, 'Domain white paper comes up short', *CNET News.com*, 5 June 1998.

In retrospect, it is clear that the US government did not understand how deeply divided the internet community was over governance issues. They took at face value ISOC's claim to be the embodiment of the will of internet users and private sector players. In deferring all the important policy decisions to the new organization, ISOC knew that its gTLD-MoU coalition would be in the strongest position to influence those decisions. Of course, that approach also prolonged the paralysis afflicting DNS policy. The operant philosophy held by many of the players was that it would be better to do nothing at all rather than run the risk of doing something they didn't like.

Naturally, ISOC greeted the white paper with praise. According to one contemporary news account,

*Don Heath, president of the Internet Society and former chair of a proposed private-sector body to take over internet addressing responsibilities, said the final policy represents a victory for the Internet Society-influenced Generic Top-Level Domain Memorandum of Understanding. 'It's excellent', he said, that government had decided to leave internet governance to users and the private sector instead of governments.<sup>28</sup>*

The white paper also gained the active support of IBM and a few other major American internet and e-commerce corporations.<sup>29</sup> This was due mainly to the personal influence of Vinton Cerf and also to the belief of the major American corporations that they would be well-positioned within any 'private-sector-led' internet governance regime.<sup>30</sup>

European governments also were key players in the formation of the white paper's policy approach, but their influence pushed in the opposite direction. Their main concern was that the US was taking all the initiative and would shape the new regime without their input. The point man for the 'European viewpoint' was Christopher Wilkinson, a member of the European Commission DG XIII. Wilkinson had been actively involved in the gTLD-MoU and achieved prominence in the debate because he was probably the only person within the Directorate who had been following domain name issues. The European interest in participation affected the outcome in several distinct ways. First, corporate and governmental participants on the US side wanted to short-circuit European desires to turn over internet governance to a formal, inter-governmental body. If internet governance was taken over by a 'private sector' organization, the US could pretend that it was not responsible for the outcome, and hence, European demands for the participation of other governments in the decisions could be finessed. Of course, if the 'self-regulatory' process was firmly in the hands of US-based interests such as IANA, ISOC, IBM and MCIWorldCom, the US could have the best of both worlds.

In order to pull this off, however, certain concessions had to be made. The Europeans insisted that WIPO, an international agency based in Geneva, be given a formal role in the process. Many Europeans feared that US trademark law would be imposed on the world otherwise. They also feared the possibility that the creation of new gTLDs would reinforce US dominance of the domain name market, and hence they supported deferring the creation of new domains to a new, and presumably more internationally representative, organization. They also insisted that NSI's lucrative .com, .net and .org domains be opened to registrar competition and subjected to a more stringent regulatory regime. Finally, European and the Australian governments insisted that even if internet administration was to be privatized, there had to be some formal channel for governments to be involved.<sup>31</sup> Later on, the US promised the Europeans that they would have three of the nine seats on the corporation's interim Board.

The white paper also assuaged the intellectual property interests by giving WIPO lead responsibility for defining the

28. W. Rodger, 'Government hands domain-name reins to private sector', *ZDNet News*, 5 June 1998.

29. IBM, working through its 'Global internet Project' (GIP), became a major behind-the-scenes player in internet governance at this time. Its employees played an active role in selecting the interim ICANN Board. See <http://www.gip.org>

30. Many of the key members of the Internet Architecture Board, the ISOC-appointed hierarchy that controls the IETF, are now employees of IBM, MCIWorldcom, or Cisco.

31. 'The White Paper indicates that the international organizations may be Advisers to the new corporation. As many of you know... the Commission is seeking a clear role for the international organizations such as WIPO and ITU in international communications policy. The internet is not an exception. We regard the statement in the White Paper as a minimum role, which should be implemented in the Bylaws of the new organization. I notice that the current draft Bylaws include a provision for Advisory Councils, and there may be a solution to be found in that context.' C. Wilkinson, European Commission 'Internet governance - implementation of the US white paper', Internet DNS Summit, Geneva, 24 July 1998. Wilkinson's wish was granted when ICANN's GAC was created. <http://www.ispo.cec.be/eif/dns/cwgeneva.html>

new domain name-trademark regime. WIPO was pushed forward by the Commerce Department as an impartial, expert agency. The intellectual property interests, however, knew that it saw intellectual property holders, as opposed to internet technologists or individual domain name holders, as its constituency. WIPO proved to be highly solicitous of the needs of the IPR holders.<sup>32</sup>

The overall effect of the white paper process was to expand the ISOC-led coalition once again. This time it gained the official imprimatur of the US Commerce Department and the backing of major e-commerce corporations such as IBM. It also paved the way for the support of a former critic – the European Commission.<sup>33</sup> This coalition had the additional effect of isolating NSI, which was viewed with fear, suspicion or hostility by all the coalition members.

### *The International Forum on the White Paper*

The release of the white paper broadcast a profoundly mixed message. In reality, it represented a private agreement among the US executive branch, ISOC, IBM, and Wilkinson to pursue the basic agenda of the gTLD-MoU under IANA's leadership. Read from that insider's perspective, the content of the white paper could be interpreted as a mandate. Read from a different perspective, however, one less connected to the insiders, it seemed to embody a sincere commitment to self-regulation and a willingness to accept whatever the private sector decided to do. Many people interested in the internet governance process took the call for 'private sector leadership' at face value and welcomed the challenge. They assumed that the policy statement was an open invitation for the internet community to set aside their differences and come together to forge a new consensus on what would be the new organization's structure, powers, and initial Board members.

That optimistic spirit led to a series of truly self-organized international meetings known as the International Forum on the White Paper (IFWP). The IFWP was conceived as a way of bootstrapping the new corporation into existence by bringing together private-sector stakeholders into open meetings that would hammer out agreements about its charter and its composition. More than once, it was compared to an internet 'constitutional convention'.<sup>34</sup> Meetings were held in Virginia, Geneva, Singapore, and Buenos Aires between 1 July and late August. Ira Magaziner appeared at the beginning of two of the meetings and 'blessed' the IFWP process. Extensive records were kept of the meetings' consensus points.<sup>35</sup> The policy positions agreed upon in IFWP meetings often differed markedly from the gTLD-MoU agenda.

In parallel to the IFWP process, however, IANA and ISOC were privately moving ahead with their own plan. Postel had acquired a corporate lawyer, Joe Sims of Jones Day, to advise him during the transition. Sims and Postel drafted articles of incorporation and by-laws designed to make the power pyramid devolving from IANA-ISOC the nucleus of the new corporation. The ISOC inner circle also set about selecting the initial Board members. This was done in consultation with Magaziner, IBM's John Patrick, the EC's Wilkinson, and probably the Japanese and Australian governments. During Congressional testimony it emerged that IBM's Roger Cochetti, who worked for Patrick, had played the most active role in contacting prospective board members. At least one Board member, future Chair Esther Dyson, was first approached by Magaziner himself.

Tensions between these two parallel processes – the open, democratic forum of the IFWP and the private, behind-the-scenes networking of IANA, IBM, the European and other governments – steadily mounted during the summer of 1998. Matters came to a head in September 1998, when the IFWP

32. A. Michael Froomkin, 'A commentary on the WIPO's management of internet names and addresses: intellectual property issues', 19 May 1999 version 1.0a <http://personal.law.miami.edu/~amf/commentary.htm> (visited October 1999)

33. Andrew Craig, 'European commission oks domain proposal', 29 July 1998, *TechWeb News*, <http://www.techweb.com/wire/story/domnam/TWB19980729S0013> (visited October 1999).

34. See, eg, P. Keys, 'Is the IFWP an internet constitutional convention?' *Nikkei Internet Technology*, 31 July 1998 [in Japanese]; J. Borland, 'Domain-name policy convention draws barbs', *TechWeb*, 30 June 1998.

35. See Ellen Rony's archives of the IFWP at [www.domainhandbook.com](http://www.domainhandbook.com)

tried to put together a public wrap-up meeting that would bring IANA, NSI and other select stakeholders together to work out a consensual constitution for the new corporation that would reflect the work of all groups. IANA flatly refused to participate in such a meeting, insisting that it would use its own draft articles and by-laws as a starting point and decide unilaterally, based on comments submitted to its own website, whether to alter them or not. IANA's supporters on the IFWP steering committee, most notably Mike Roberts, pushed to disband the IFWP instead of holding a wrap-up meeting. After destroying the only available forum for broad-based, open, private sector consensus, IANA, prodded by Magaziner to resolve the outstanding differences, then entered into private negotiations with NSI and emerged with a joint draft.<sup>36</sup> The internet's 'constitutional convention' had been reduced to two government contractors negotiating in secret. These negotiations, incidentally, came up the new corporation's optimistic acronym: ICANN.

IANA's credibility was damaged by its brief association with NSI, and it quickly backed away from the agreement. It was damaged further by its next step in the process, the unilateral naming of an initial Board of Directors. In early October, IANA announced its selection of the 9 initial Board members who would be charged with the task of building the new organization. Earlier that summer, Jon Postel had proposed that the Board should be composed of respected dignitaries, people with no particular expertise about the internet, but who were not partisans in the intense battles of the past. That rationale, however, turned out to be a ruse. Some of the selected Board members were indeed 'neutrals', but the most active and informed members were directly tied to IANA, the gTLD-MoU coalition, or IBM. More ominously, the new CEO of the organization, supposedly a position to be elected by the Board, had already been designated, and it was none other than Mike Roberts, a charter member of ISOC and a fierce gTLD-MoU partisan. To most of the Board members, ICANN was a part-time job, and they relied on Roberts for most of their direction. Thus, the initial Board was heavily stacked in favour of one faction in the DNS wars. Furthermore, the method of their selection rankled many in the internet community. Why had their selection not been put before the IFWP, or at least aired publicly, rather than presented as a *fait accompli*?

Placed in historical context, IANA's unilateral Board selection and its unwillingness to participate meaningfully in the IFWP were unsurprising. Behind the scenes, Magaziner and the Commerce Department had already tacitly anointed it as the nucleus of the new corporation. It is clear that Magaziner himself, as well as IBM and foreign governments, had been involved in vetting the initial board selections. IANA's privileged position could only be dissipated by entering into negotiations with parties outside its self-selected circles. The whole point of the 'self-regulation' philosophy, from Cerf's and Postel's point of view, was to preserve IANA's control of the name and address spaces, not to open the transition process up. Only NSI, with its grip on domain names and the root server system, posed a significant threat to its agenda. IANA's intransigence did pose a policy dilemma for Magaziner, however, who believed sincerely in the cultivation of a broad consensus.

By the end of September 1998, it was clear that no real consensus existed. As the white paper's deadline and the expiration of the NSI cooperative agreement approached, NTIA had received three proposed articles and by-laws instead of the single, widely supported proposal Magaziner had hoped for. One came from the Open Root Server Confederation (ORSC), a group of alternative registries that had the backing of NSI. The other came from an independent and informal group of ICANN critics known as the Boston Working Group (BWG). NTIA called for another round of public comments. The results revealed the confusion and disillusionment generated by the process. ICANN's proposal received unqualified support

36. 'Rather than something different, IANA gives us politics as usual: Insiders, in closed meetings, answering to ideas and arguments as only they think best. Not a promising start for the process of self-governance on the internet.' L. Lessig, 'A bad turn for net governance', *The Industry Standard*, 18 September 1998.

from only about one third of those who submitted the comments, and nearly all of them were directly affiliated with CORE, ISOC, and the gTLD-MoU. Another one third of the comments rejected the ICANN proposal and expressed support for one of the alternatives. The last third accepted ICANN as the default option, but raised serious questions about the accountability, fiscal responsibility, and structure of the proposed organization. Because the criticisms voiced by this latter group echoed those made by the drafters of the alternative proposals, Magaziner and Burr ordered ICANN to enter into negotiations with BWG and ORSC to make amendments.<sup>37</sup> ICANN suffered another blow when Postel died suddenly of a heart attack on 18 October 1998.

To appease Magaziner, ICANN's interim board made a few minor changes in its articles and by-laws, the only notable one being a commitment to create an open membership structure. Apparently satisfied, on 25 November the Commerce Department officially recognized ICANN as the entity it would work with in effecting the transition.

## ICANN's stormy first year

As noted before, the white paper process was plagued by a fundamental contradiction. On the one hand, it could be interpreted as a call for the private sector to self-organize, to develop an unconstrained consensus. On the other hand, it reflected a behind-the-scenes agreement that IANA-ISOC and their corporate allies would be the ones in control of the new organization and that a specific program acceptable to the trademark lobby, the US Commerce Department and the Europeans would be executed. The formation of ICANN carried this contradiction forward and intensified it.

ICANN's articles and by-laws committed it to the creation of entirely new structures of accountability, representation and policy formation on a global scale. It was supposed to be composed of three Supporting Organizations (SOs) that would elect 9 of the 18 Board members. All substantive policies were supposed to begin with Supporting Organizations and work their way up for approval by the Board in what was often described as a 'bottom up' coordination process. No Supporting Organizations existed yet, however. ICANN was also supposed to create an at-large membership that would elect 9 new Board members to replace the initial Board. But no membership or criteria for membership existed yet; indeed, because the very idea of an open, at-large membership had been forced upon ICANN by its critics it is fair to say that the initial Board had no idea how to create one.

Creating ICANN would have been difficult enough – but possible – had it restricted itself to building its SOs, defining its processes and putting a membership structure in place during its first year of existence. But ICANN instead tried to adopt and execute domain name policies as it was doing that. Its self-appointed board, steeped in controversy regarding its origins,

immediately set about making decisions about the most divisive policy issues in internet governance. In many respects the Board could truthfully claim that it was executing the marching orders of the white paper. The white paper called upon ICANN and WIPO to create a dispute resolution procedure and other policies that would make the DNS safe for trademark owners.<sup>38</sup> The white paper also called upon ICANN to implement a shared registration system that would open up the .com, .net, and .org TLDs to competing registrars.<sup>39</sup> Most fundamentally, in order to execute and enforce these policies, ICANN needed to establish centralized control over the registration process, which put ICANN on a collision course with NSI (see next section). The fact that ICANN's interim Board was totally controlled by a single faction further

37. 'The submissions of the Boston Working Group and the Open Root Server Confederation, among others, articulate specific concerns, many of which we share. As you refine your proposal, we urge you to consult with these groups and others who commented critically on your proposal to try to broaden the consensus.' Letter from J. Beckwith Burr, Associate Administrator, NTIA, to Dr Herb Schorr, Executive Director, USC Information Sciences Institute, 20 October 1998.

38. 'Management of internet names and addresses (white paper), *Federal Register*, No 63, Vol 111, p. 31750–1 under section titled 'Trademark Issues.'

39. *Ibid*, p 31751.

reinforced its propensity to implement whatever it could as quickly as possible, before other forces had a chance to elect Board members or impose checks.

The white paper, in short, was a flawed and confused policy document. It called for 'self-regulation' by a private sector corporation that was broadly representative and accountable, but it also called upon the initial board – a completely unaccountable and unrepresentative group – to make the most difficult policy decisions before any of the structures of accountability and representation were in place. The combination of process definition with policy execution destroyed ICANN's ability to function as a consensus vehicle. Participants were more concerned with obtaining immediate results than with the definition of fair and durable processes.

### *The struggle with NSI*

The most disruptive and potentially dangerous issue left unresolved by the white paper, however, concerned the future status of NSI's registry. The US government said that it wanted DNS to be 'managed by the private sector on the basis of voluntary contractual undertakings among interested stakeholders.'<sup>40</sup> The word *voluntary* was a euphemism, because the DNS, as a centralized point of interconnection, gave whoever controlled it the leverage to impose almost any terms they wished upon domain name registrants, registration services, and registries. The incorporation of ICANN was the first step in an attempt to shift the chain of authority from one centred on contractual relations with the US government to one based on contracts with ICANN. Figures 1–4 show the relevant relationships and how the US Commerce Department expected them to progress as the white paper was implemented. Figure 5 depicts what we actually ended up with.

Prior to the creation of ICANN, NSI held a 'cooperative agreement' with the National Science Foundation (administration of the agreement was shifted to the Commerce Department in 1998). Under this arrangement, NSI had exclusive control of the .com, .net and .org database (the 'registry' business) and was also the 'registrar' through which end users selected and paid for domain names. (Figure 1) Other businesses could resell registrations in NSI's gTLDs, but NSI still dictated the price and the content of the end-user's contract. There were, however, 240 country-code TLDs (ccTLDs) not run by NSI, with a diverse range of contracts and pricing schemes.

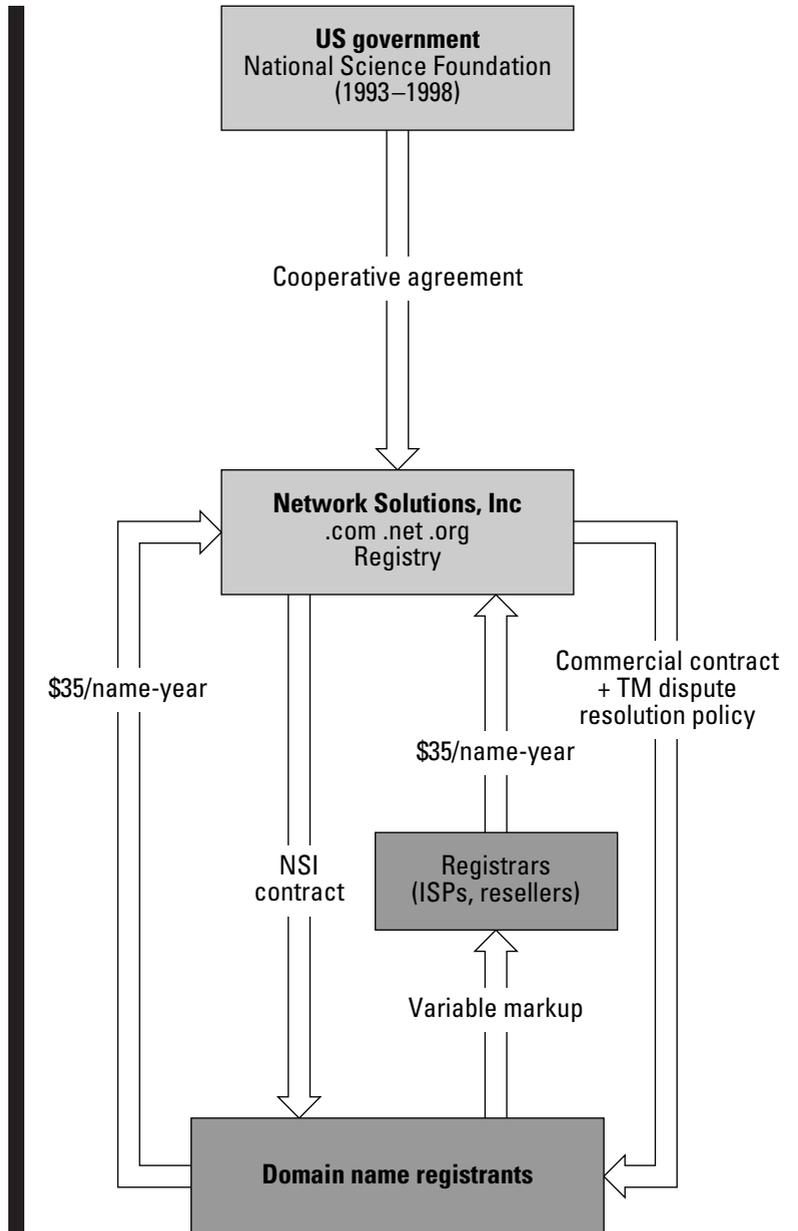
Figure 2 represents the changes that took place between October 1998 and June 1999. First, ICANN and the Dept of Commerce entered into a MoU for 'collaborative development and testing of the mechanisms, methods, and procedures necessary to transition management responsibility for specific DNS functions to the private sector'. At about the same time, Commerce Dept and NSI amended their contract to require NSI to create a 'Shared Registration System' (SRS) that would allow multiple, competing companies to register names in .com, .net, and .org on equal terms. NSI itself, however, would continue to operate as both registry and registrar; ie, it could continue accepting domain name registrations directly via its own website.

In March 1999, ICANN issued a set of regulations that would be used to 'accredit' any company that wanted to function as a registrar in the NSI TLDs. These 'registration accreditation guidelines' specified financial and business qualifications, including obtaining \$500,000 in liability insurance. Registrars were required to pay ICANN a one-time fee of \$5000, and \$1 per year for every domain name registration (the notorious 'domain name tax'). In anticipation of the WIPO recommendations, the accreditation contract contained a variety of regulations meant to protect trademark interests, such as pre-payment for registrations and the possibility that ICANN would exclude certain names from the database of available names. In April, ICANN accredited 5 registrars to participate in the 'testbed' phase of the shared registry.<sup>41</sup>

40. Andrew J. Pincus, General Counsel, US Department of Commerce, to Rep. Tom Bliley, 8 July 1999.

41. ICANN's choice of testbed registrars reflected its biases. The organization of registrars left over from the gTLD-MoU, CORE, was accredited as one registrar despite the fact that it consisted of a consortium of 88 different registration service providers. France Telecom and AOL had both donated \$25,000 to ICANN and were vocal supporters of it during the NTIA proceeding. The fourth, Melbourne IT, was also a CORE member.

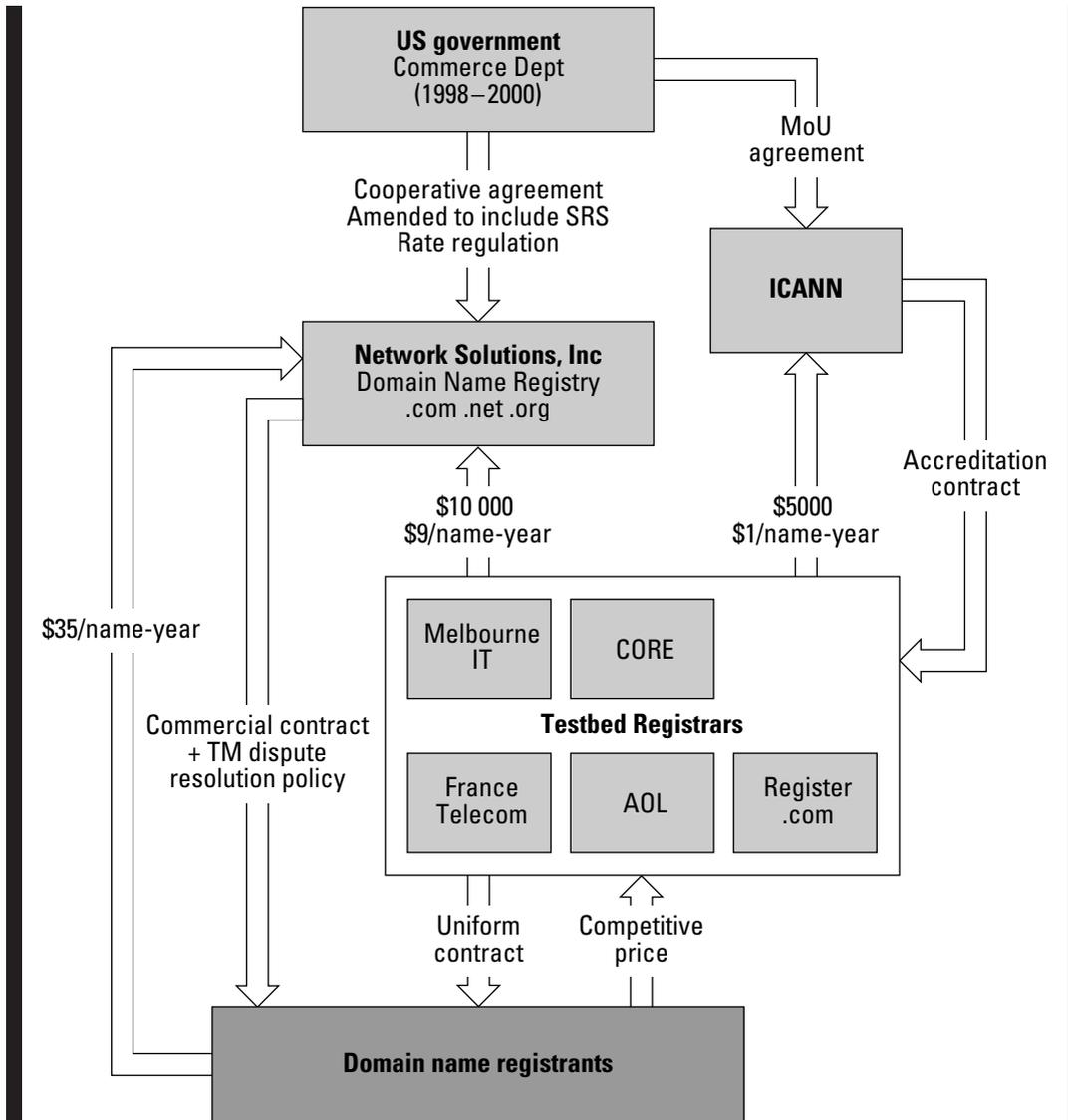
Figure 1: Pre-ICANN arrangements.



In the same month, the Commerce Dept concluded an agreement with NSI regulating its economic relationships with the accredited registrars. Commerce chose to regulate the wholesale price for registration, setting it at \$9 per name-year. Registrars would also pay a one-time fee of \$10,000 to NSI to be equipped with the SRS software. In essence, Commerce treated the NSI registry as a regulated utility, even declaring in one document that ‘the price to be paid by registrars for each domain name registration... should reflect demonstrated costs and a reasonable rate of return.’<sup>42</sup> NSI still held exclusive control of the gTLD registry and was still an integrated supplier of both registry and registrar services.

42. Pincus to Bliley, *op cit*, p 15.

**Figure 2:** Testbed shared registry for generic TLDs.

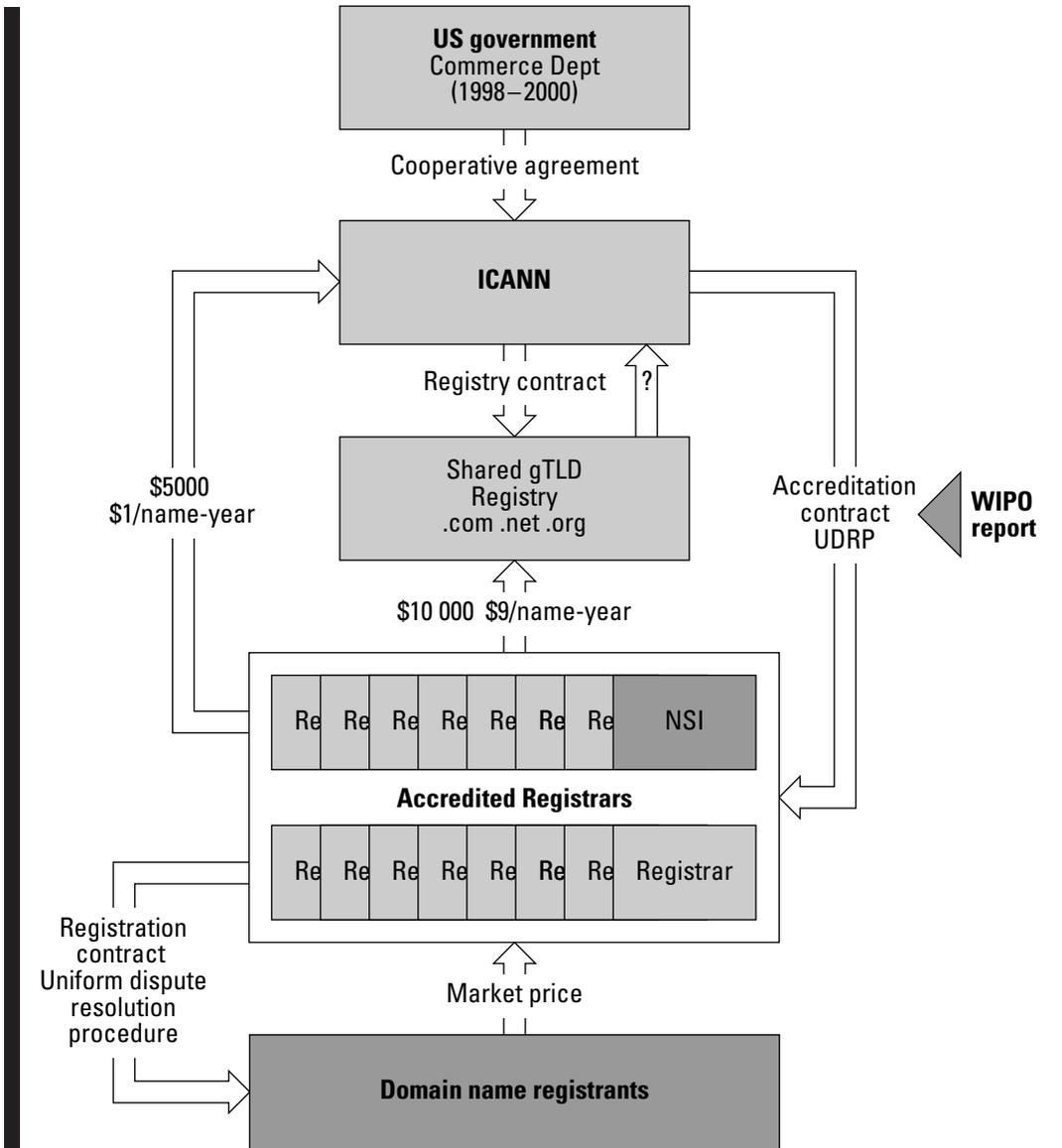


After concluding these negotiations in April 1999, ICANN and the Commerce Department boasted that ‘competition’ had been introduced into the domain name business.<sup>43</sup> But the reality was that Commerce/NTIA were simply regulating NSI, and offering the regulated discounts to a special class of businesses that paid ICANN for the privilege of accreditation. The real impact of the changes was to put authority over registrars in ICANN’s rather than NSI’s hands, and to allow ICANN to exploit its government-created gateway into the com, net and org database as a source of revenue. Furthermore, by reducing the price of dot com registrations and creating an expanded sales force for NSI’s .com, .net and .org domain names, the shared registration system reinforced rather than undermined the market dominance of the NSI generic TLDs. Not surprisingly, NSI was willing to go along with this step in the transition.

43. ICANN ‘ICANN names competitive domain-name registrars’, News Release, 21 April 1999, <http://www.icann.org/registrars/icann-pr21apr99.htm>

The next step in the process, however, brought ICANN, the Commerce Department and NSI into bitter conflict. To ICANN and the Commerce Department, the next phases of the planned transition were supposed to look like Figures 3 and 4. First, ICANN would adopt the recommendations of WIPO and develop a uniform dispute resolution policy (UDRP) and a famous names exclusion policy to make it easier and cheaper to protect trademark claims on domain names. The UDRP would be imposed on all registrars via the accreditation contract, and through them, it would be applied to all consumers of domain names. Next, NSI was expected to sign an ICANN registrar accreditation contract, and become 'just another registrar' among a potentially unlimited number (Figure 3). That contractual recognition of ICANN would be tantamount to giving up its exclusive control of the gTLD registry, by subordinating NSI's licence to run the registry to ICANN's decisions.

Figure 3: NSI recognition of ICANN and divestiture of registry.



**Figure 4:** September 2000 transfer of authority (projected).

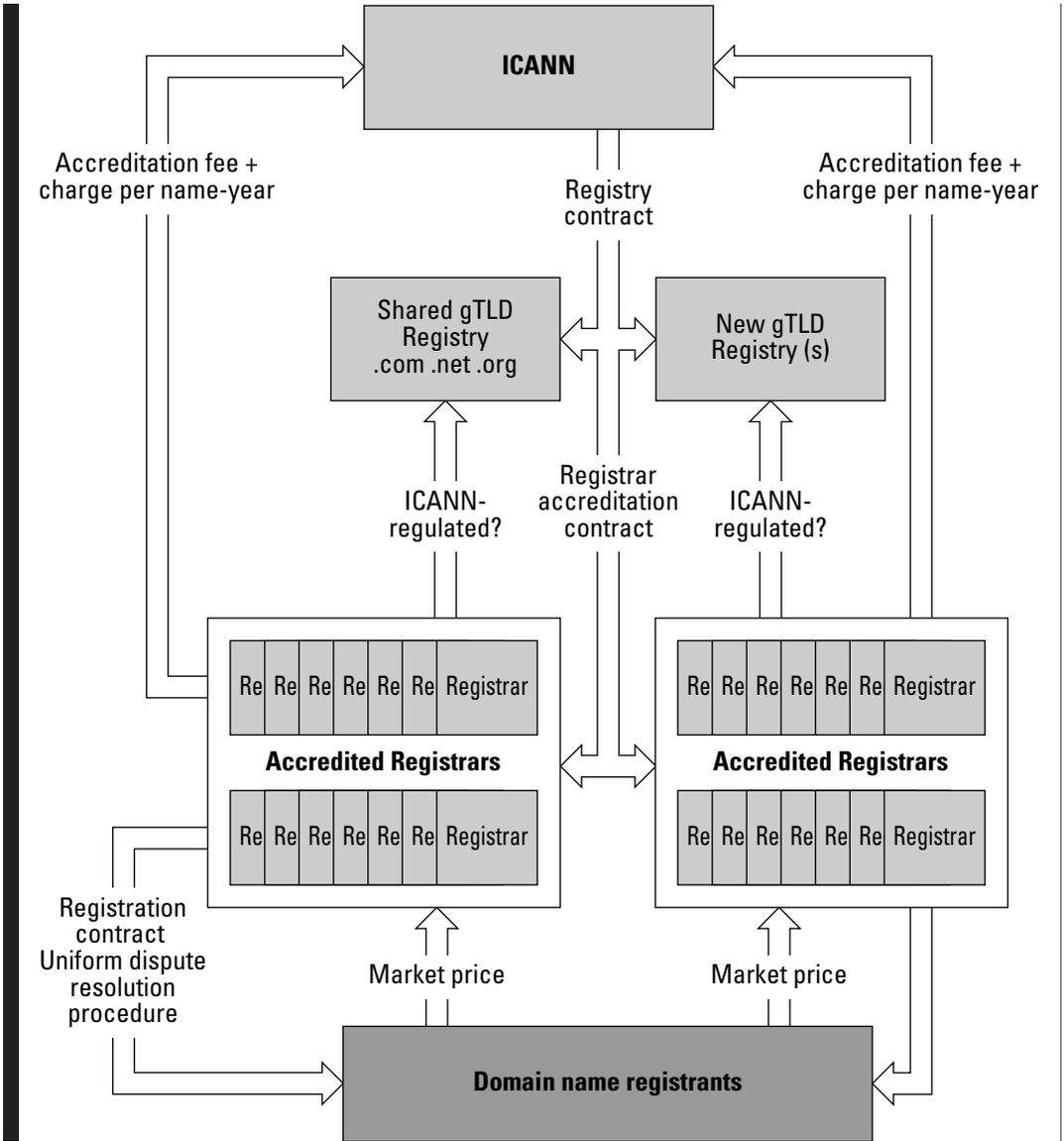


Figure 4 shows what was expected to happen after the two-year supervision period ended. The US government would step out of the picture, and ICANN would be in full control of the root of the domain name system, an ‘essential facility’ for global interconnection of computers using domain names. All registries, including NSI, would be licensed by ICANN and under its control; all registrars would also be directly accredited by ICANN.

This whole scheme could not be implemented without NSI’s acquiescence, however. NSI operated the authoritative root server and maintained the files of registered names in .com, .net and .org, which constituted three-fourths of the world’s registrations. Its cooperative agreement obligated it to provide Commerce/NTIA with a copy of the database when the agreement expired or was terminated, but it did not clearly and explicitly say whether NSI could go on registering names or

not. Commerce and ICANN believed that the right to operate the registry could be reassigned through a re-competition of the cooperative agreement. NSI, on the other hand, believed that if its cooperative agreement with NTIA expired or ended, as possessor of the zone files it would be able to continue operating the generic TLDs without any supervision by the government. One of the government's biggest fears was that if it failed to come to an agreement with NSI the company would continue to register names in .com, .net, and .org and possibly even set up an alternative root server system, completely out of the government's control. Such a step, though drastic, was possible if NSI leveraged the critical mass of the .com .net and .org registrations.

The problem for NSI was that as soon as it signed the accreditation contract and recognized ICANN, its bargaining power over the transition process would be eliminated. Its control over the asset upon which its business had been built, the database of registered domain names under .com, .net, and .org, would be subordinated to ICANN's decisions. Since ICANN at this point consisted of nothing more than 9 self-appointed people, many of whom had a long history of hostility to NSI, it was only rational for the company to strenuously resist being incorporated into the scheme. During the summer of 1999 ICANN reinforced these fears by stripping NSI of voting rights in the Domain Name Supporting Organization (DNSO) and refusing to recognize constituencies that might dilute the gTLD-MoU coalition's dominance of the DNSO's policy-making council. NSI lobbyists went on the offensive against ICANN in the US Congress. ICANN critics hammered away at the \$1/name 'tax' and began to embarrass the Clinton administration politically. Rep Bliley of Virginia held hearings on the theme 'Is ICANN out of control?' The 'testbed' period, which could not be brought to a close until NSI officially recognized ICANN, was extended several times. Under pressure from the Commerce Department, ICANN was forced to give up \$1/name-year fee. With no source of financial support, it went deeply into debt. At that time the core of ICANN's support was clearly revealed. Vinton Cerf and IBM's John Patrick frantically appealed to the industry for loans and donations, and Cerf delivered half a million dollars from MCI.<sup>44</sup>

Finally, in late September 1999 a series of agreements were made between the Commerce Department, NSI, and ICANN that represented a settlement acceptable to the three parties.<sup>45</sup> The agreement deviated significantly from what had been the Commerce Department's planned end point as shown in Figure 4. The main points of the agreements are listed below:

- NSI recognized ICANN and agreed to operate the gTLD registry (.com, .net, and .org) in accordance with the provisions of a 'registry agreement' with ICANN. ICANN agreed to license NSI as the gTLD registry for four (4) years. If NSI fully divests the registry from the registrar functions within 18 months, the registry contract will be extended for another four (4) years.
- NSI agreed to only accept domain name registrations from ICANN-accredited registrars.
- NSI agreed not to deploy an alternative DNS root server system.
- NSI's wholesale registry price will be reduced to \$6/name-year from \$9/name-year beginning January 15, 2000.
- NSI's 'retail' registrar prices were deregulated (the \$35/name-year price had been fixed by its Cooperative Agreement).
  - NSI will pre-pay registrar fees to ICANN of \$1.25 million.
  - NSI will continue to operate the authoritative root server system in accordance with the directions of the US Commerce Department.

44. In late August 1999, MCI loaned ICANN \$500 000 and Cisco Systems loaned it \$150 000. See J. Niccolai, 'ICANN survives on corporate dole', *The Industry Standard*, 20 August 1999, <http://thestandard.com/articles/display/0,1449,6037,00.html>.

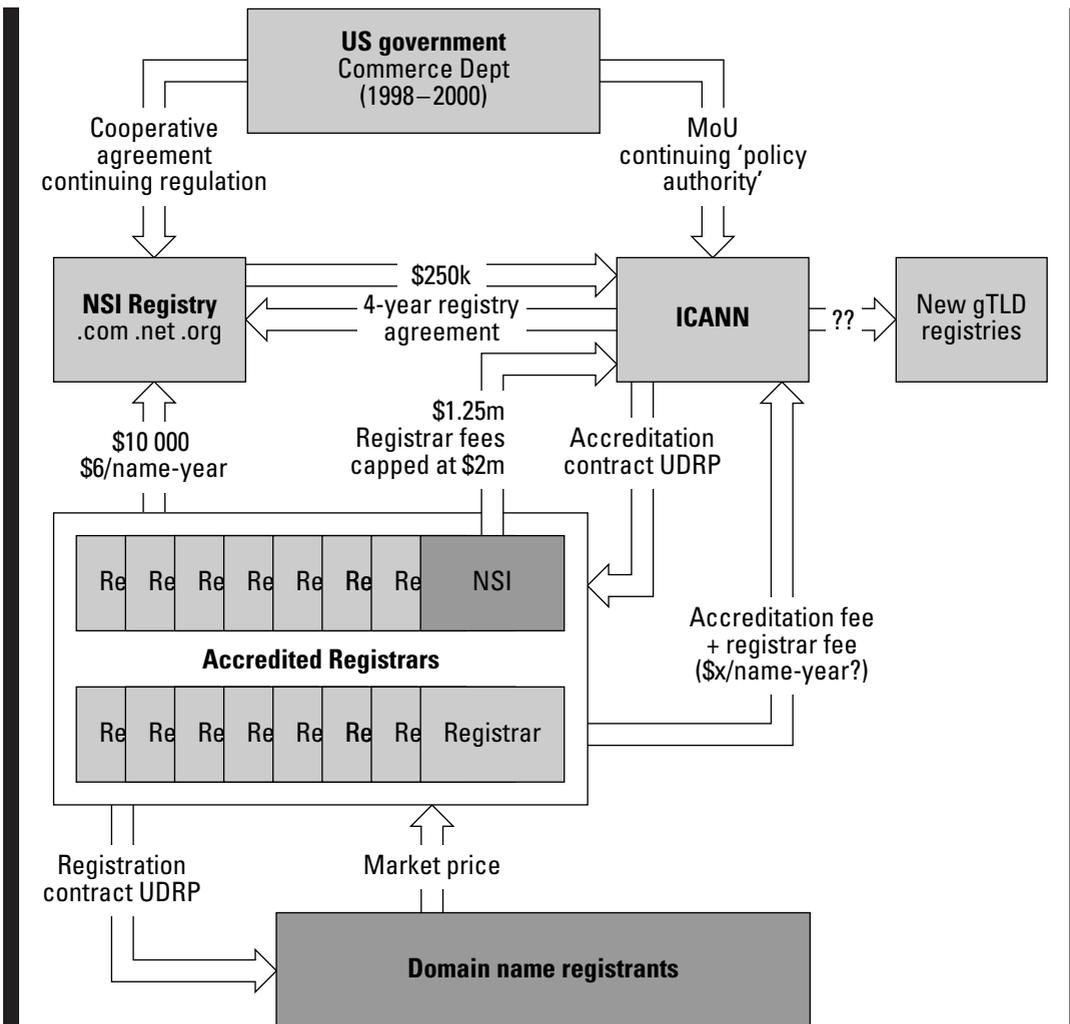
45. See <http://www.icann.org/agreements.htm>. Visited October 1999.

The new agreements also clarified ICANN's obligations:

- ICANN was required to comply with specific procedural limitations on the exercise of its authority. Many of its decisions will require a 2/3 majority of the supporting organization councils.
- ICANN's policy authority over the gTLD registry can be terminated if it does not succeed in bringing other registries into its centralized contractual regime and NSI is competitively disadvantaged as a result. Presumably, this refers to ccTLD registries.
- The fees ICANN imposes on registrars must be 'equitably apportioned' and approved by the registrars that pay 2/3 of the fees. This will give NSI significant leverage over ICANN's 'taxing' policies.
- The amount of registrar fees NSI must pay to ICANN is capped at \$2 million.

Finally, in a little-noticed but very important part of the agreement, the Commerce Department backed away from yielding ultimate authority over the root to ICANN or its successor. The agreement noted that while Commerce may transfer operation of the authoritative root server system from NSI to ICANN at some point in the future, it has no plans to transfer to any entity its 'policy authority' over the root server.<sup>46</sup>

**Figure 5:** New arrangement after NSI-ICANN-commerce dept agreements of September 1999.



The new arrangements are diagrammed in Figure 5. The arrangements raise serious questions about the whole direction of 'self-regulation' in the medium-term. The agreements clearly assert the US government's intention to maintain 'policy authority' over the root indefinitely. They also seem to indicate that the Commerce Dept will regulate the rates of the gTLD registry indefinitely. The Commerce-NSI-ICANN agreements extend into the future for a maximum of 8 years, indicating that the US government will directly regulate registry prices for at least that long. The agreements talk about the possibility of raising the regulated rate if ICANN or Commerce Department actions raise the registry's costs. The NSI-ICANN registry agreement may be construed to have precedent value when ICANN authorizes new gTLD registries. Will ICANN attempt to fix their price, too? At any rate, the agreements did succeed in eliminating end users' direct access to the gTLD registry. All domain name registrations will have to go through ICANN-accredited registrars.

## 'Self-regulation' in perspective

It is useless to debate concepts such as 'private sector leadership', 'avoiding government intervention', or 'self-governance' in the abstract. To understand what these abstractions really mean, one must examine the historical process through which ICANN came into being. That analysis makes it clear that the policy is flawed both in its conception and its implementation.

### Conception

Self-regulation of internet names and numbers is not at all comparable to the other areas where the concept has been applied. Content labelling standards and privacy codes of conduct, for example, both involve collective action by well-established industries around narrowly circumscribed areas of conduct. The basic institutional regime under which these businesses operate pre-date the 'self-regulation' process and are fairly clear and stable. Internet governance, on the other hand, involved creating an entirely new institutional and property rights framework. At its centre was the problem of who owned critically important, valuable assets: the name and address spaces. Control of these assets had to be transferred from an informal set of relationships loosely centred in the US government and its private contractors to a formal, internationally representative, legally incorporated entity. A host of related and very complicated property rights issues flowed from that. How could domain name registration, which provided globally exclusive control of a character string, be reconciled with trademark protection, which provided jurisdiction-, industry-, and product-specific forms of protection to certain names? What rules or procedures governed access to the root of the domain name space? How much control did a

domain name registry have over the zone files containing the authoritative list of second-level names? These and many other difficult questions were fundamentally legal in nature; that is, the way in which they were decided assigned property rights to specific actors and strengthened or diminished various individuals' freedom of action. The legal questions were greatly complicated by the global, trans-jurisdictional scope of the system. The Commerce Department basically devolved global state power to ICANN.

To call such a policy a form of 'self-regulation' comparable to the voluntary adoption of a code of conduct by an established group of businesses is not just mistaken, but dangerously obtuse. The error was compounded by the fact

46. 'The Department of Commerce expects to receive a technical proposal from ICANN for management of the authoritative root and this management responsibility may be transferred to ICANN at some point in the future. The Department of Commerce has no plans to transfer to any entity its policy authority to direct the authoritative root server.' NTIA, *Domain Name Agreements between the US Department of Commerce, Network Solutions, Inc, and the Internet Corporation for Assigned Names and Numbers (ICANN)*, Fact sheet, 28 September 1999. <http://www.ntia.doc.gov/ntiahome/domainname/agreements/summary-factsheet.htm>, visited 7 October 1999.

that the private sector itself was deeply, bitterly divided over the resolution of the property rights questions. The divisions were neither irrational nor minor. Control of valuable assets was up for grabs. Decisions about the distribution of property rights and transaction costs would create major winners and losers. There was little incentive for the contesting parties to cooperate or compromise. On the contrary, the situation gave private and public sector actors powerful incentives to seize control of the process or to win a struggle for power. There was a pressing need for an impartial government to impose constraints upon the process based on some notion of justice and the proper distribution of rights.

Under these circumstances, the Clinton administration's decision to throw up its hands and wait for the 'internet community' to come forward with a 'consensus proposal' was disingenuous, at best. It is clear from the detailed history presented above that 'private sector leadership' did not mean turning over governance to the internet industry and its users to work out for themselves – even if that had been possible. In practice, 'self-regulation' was a code word for something very different:

- leaving control of name and address administration in the hands of the hierarchy established by the Internet Society and a small band of its corporate allies; and
- implementing a private deal made between a few government officials in the US Commerce Department and the EC.

The real object of 'self-regulation' seems to have been avoidance of any formal, public processes.

## Implementation

If the results of the policy are good, criticisms of the conceptual basis for the policy are rendered irrelevant. The white paper's impact can be benchmarked against its own professed criteria:

- Fostering stability;
- Encouragement of stakeholder consensus;
- Creating competition in the domain name markets;
- Resolving domain name-trademark conflicts; and
- Avoiding government intrusion

*Stability:* Preserving the 'stability' of the internet is frequently cited as the 'first principle' of the Commerce Department and its corporate backers. The idea that computer networking and e-commerce could flourish without the direct involvement of a centralized, government-sanctioned authority is completely alien to them. Leaving aside the question whether that assumption is true, recent developments have shown that the US government's concern about 'stability' is fundamentally at odds with its nominal commitment to 'private sector self-regulation'. The government has been forced to state explicitly that it is unwilling to relinquish policy authority over the root because of the instability engendered by its own process. It was unwilling to stand aside and let ICANN and NSI and other private sector players work out their differences on their own.

Indeed, it seems evident now that the biggest threat to stability came from the government's logically inconsistent form of intervention. If the government wanted to regulate and subordinate NSI, it should have done so directly and openly, via laws and regulations. Instead, it created a private sector corporation that was completely dominated by avowed enemies of NSI, and then expected NSI to voluntarily play along. The resulting blood feud was predictable. Just as predictably, in the end all the real work was performed by the US government, not by ICANN. It was the Commerce Department that regulated NSI's rates and practices and renegotiated its contract in ways that got it to recognize ICANN and find a place within its regime. ICANN simply had no leverage other than as a proxy for the

Commerce Department. One could therefore reasonably ask, what purpose did the philosophy of 'self-regulation' serve?

The threats to stability are not over. ICANN is now a heavily politicized organization that is attracting the interest and attention of the politically-minded. There will be more power struggles, more polarization as this process continues.

*Stakeholder consensus:* The Commerce Department allowed ICANN's initial board to be selected in secret by a group with a divisive policy agenda. The determination of that faction to implement its policies as quickly as possible seriously undermined the new corporation's ability to function as a vehicle for consensual policy development. As the conflicting forces met on the battleground known as ICANN, its organizational units metastasized into a structure of byzantine complexity, and its processes took on the character of sheer 'ad hocery'.

We can say without qualification that ICANN has failed to provide a vehicle for developing 'stakeholder consensus'. ICANN's creation has not resolved the DNS wars; it has simply fostered a political competition that allowed one faction to win at the expense of others. It is a serious mistake to view the dissent as a product of NSI's opposition alone. Virtually every major academic who follows ICANN is positioned on the critical side of the spectrum;<sup>47</sup> opposition to ICANN has united Naderites and libertarians.

*Competition in the domain name space:* Two and a half years after the initiation of the NTIA process, there are still no new gTLD registries authorized to compete with Network Solutions' dot com. In its responses to Congressional inquiries, the Department of Commerce has complained repeatedly of the enormous market power of NSI and the complex problems it poses. But the Commerce Dept itself is responsible for that market dominance. In 1997 NSI, in response to requests by competing registries, asked whether it could add new TLDs to the DNS root. The National Science Foundation was prepared to let it do so, but the Commerce Department prevented it. The object of this refusal was to protect trademark holders and, more subtly and importantly, to avoid creating new stakeholders in the root that might undermine Commerce's ability to impose a centralized policy on the process. During the white paper process the Commerce Department originally came up with a detailed proposal for quickly adding five new gTLDs to the root, but then bowed to pressure from foreign governments and ISOC to leave that decision to the new corporation.

Those delays have been a devastating setback to the cause of competition in DNS. Commerce has delayed competition for more than two years. During that period the number of .com, .net, and .org domain name registrations quadrupled and the .com TLD obtained an almost unbreakable hold on the minds of internet businesses as the place to be visible. Although ICANN is now established as the authority for adding new TLDs, its procedures for doing so are multi-layered bureaucratic processes dominated by established stakeholders, such as trademark holders, country code TLD registries, and large businesses with an established stake in dot com. Many of these players have a vested interest in preventing the addition of new registries and new gTLDs.

ICANN's formation was followed by the opening up of the .com, .net, and .org domains to registrar competition. However, there is less here than meets the eye. The registry is still a monopoly, it is just being regulated. The transformation of the NSI gTLDs into a regulated, shared system is a product of direct government intervention by the US Dept of Commerce, not the work of ICANN. It was the Commerce Dept's contractual agreement with NSI that created the shared registration system and imposed wholesale price regulation on NSI. ICANN and its processes were completely unnecessary to the achievement of that goal, and the benefits of registrar competition are not all that impressive.<sup>48</sup>

47. See [www.icannwatch.org](http://www.icannwatch.org).

48. For a critique of the economic basis of registrar competition, see Milton Mueller, 'Competition in DNS', *Business Communications Review*, August 1999.

*Trademark-domain name conflicts:* ICANN has provided the institutional mechanism for the development of a global, uniform process to resolve disputes between trademark holders and domain name registrants. Indeed, ICANN and WIPO together have given trademark and intellectual property interests a privileged role in the definition of a new system of global administrative law. Without ICANN's grip on access to the root of the domain name system and its ability to leverage that monopoly into a system of centralized, uniform contracts, it would be impossible to impose uniformity on the process. But even here, there are strong reasons to doubt whether ICANN was needed. Despite ICANN's existence, trademark lobbyists have prevailed upon the US Congress to pass powerful new laws that punish 'cyber-squatters' and extend trademark protections into the assignment of domain names.<sup>49</sup> Trademark owners are now complaining that ICANN's dispute resolution process is too fair to domain name holders and they will not use it. Countries such as New Zealand, in contrast, have succeeded in completely separating trademark disputes from domain name registrations, leaving resolution to the courts. After court precedents in New Zealand made it clear that cyber-squatting was illegal, there does not seem to be any significant problem in that country.

*Avoidance of governmental intrusion:* Keeping things out of the hands of 'government' has been one of the leitmotifs of ISOC and its supporters. But what is the object of this avoidance? To prevent name and number administration from falling into the hands of a top-heavy, ITU-like intergovernmental organization? To prevent burdensome regulation of the internet and its content? Certainly, the public comments in the Commerce Department proceedings and IFWP processes document overwhelming support for the principle of a lightweight ICANN strictly confined to technical coordination of the internet.

But ICANN has completely failed to live up to that promise. Even before ICANN's creation, the Internet Society's Faustian bargains with the ITU and the trademark interests, coupled with the Clinton administration's subservience to trademark lobby demands, had already undermined the neutrality of name and address administration. Linking trademark protection to DNS administration completely politicized the process of domain name assignment. Once it became evident that domain name administration could be leveraged into a mechanism for policing and enforcing property rights in names, ICANN became a *de facto* legislator, a definer and enforcer of rights. These functions encroached deeply into the territory of governmental power. It was only natural, then, for ICANN to be subject to the same demands for accountability and procedure as a governmental body. Those demands in turn are leading inexorably to the growth of bureaucracy and formal procedure. Prediction: if ICANN survives another five years, it will rival the ITU in size.

Had the Clinton administration's white paper explicitly and firmly distanced internet administration from trademark protection and other issues not directly related to technical coordination of the internet, then its policy of 'industry self-regulation' would have had some coherence. However, the white paper was first and foremost a political bargain; its commitment to self-regulation and private enterprise was mainly rhetorical.

The same tendency to stray into the realm of regulation and governance is evident in the new regime's approach to the creation of competition in domain name registration. ISOC's gTLD-MoU and its deep-seated animosity to NSI committed it to a specific business model for domain name registries. The gTLD-MoU adherents profess an ideological, almost religious belief that all domain name registries must be non-profit and permit shared access to TLDs for competing registrars on equal terms. Whether one supports or opposes that agenda, the imposition of a specific economic model on private sector businesses is a regulatory function. In order to enforce this model upon registrants, ICANN has had to establish a

49. HR 3028, a badly-drafted law that criminalizes cybersquatting and extends sweeping, possibly unconstitutional forms of trademark protection into the DNS, was passed on 26 October 1999.

contract-based accreditation system that is highly centralized and regulatory. The US Commerce Dept, likewise, has imposed a cost-plus utility regulation model upon NSI via its cooperative agreement contract. This is not technical coordination but economic regulation.

Finally, ICANN has failed to avoid an even more direct form of government involvement: the sovereignty claims on country code TLDs advanced by national governments. Governments were given a direct channel in ICANN via its Government Advisory Commission (GAC), and the GAC has been used as the point of departure for declaring the name space a 'public resource'.

The new regime is establishing sweeping new rights for trademark and intellectual property holders. It is asserting forms of economic control over domain name registries and registrars that did not exist before. It has provided a vehicle through which national governments can assert sovereignty claims over the name space. In short, the 'self-regulatory regime' being constructed by ICANN is actually far more centralized and controlling in nature than the pre-ICANN internet. Is it all that different from what could have been expected of direct government intervention?

Whether deceptively or naively, official US policy characterized the creation of ICANN as a private-sector driven process that did not affect basic political and legal rights. It described an act of imposing wholesale centralization and regulation at the internet's core as a way to avoid 'government regulation'. The rhetoric of market liberalism was cynically abused to gloss over the true nature of the transition. In short, a fundamental untruth festers at ICANN's core. The tumult of ICANN's first year is the price being paid for that.