

PANEL II: ICANN AND WIPO AT WORK: TOWARDS A PARADIGM OF INTERNATIONAL
TELECOMMUNICATIONS GOVERNANCE?: PRINCIPAL PAPERS: THE MANAGING LAWMAKER IN
CYBERSPACE: A POWER MODEL

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SUMMARY:

... The purpose of this Article is to analyze how the power of the Internet Corporation for Names and Numbers ("ICANN") was created, augmented, strengthened and reined in. ... I believe that a similar idea of a contestable market helps understand ICANN's environment. ... More importantly, the large Internet service providers' ("ISPs") consensus to use a single root constitutes the foundation of ICANN's power. ... ICANN received the mantle of Dr. Postel as the manager of the naming and numbering system. ... In addition, ICANN established an option of less expensive resolution of disputes between trademark owners and domain name owners. ... A recent decision regarding a domain name indirectly supports ICANN's power. ... In a recent letter to ICANN, the Department encouraged ICANN to move forward in the selection of new TLDs in order to increase competition in the domain name space. ... A monopolist in the power market may need that support, and ICANN needs it. ... The contestable market theory is not helpful to predict ICANN's evolution if its competitors cooperate, and this possibility is not negligible. ... The naming and numbering system has passed through a chaotic stage, emerging as ICANN with rules that are resisted in part, and evolving into an institution. ...

TEXT:

I. Introduction

This Article is about power -- the ability to gain obedience whether by captivating followers, persuading skeptics or awarding and withdrawing economic benefits. The purpose of this Article is to analyze how the power of the Internet Corporation for Names and Numbers ("ICANN") was created, augmented, strengthened and reined in. Many controversies surround ICANN, including the very foundation of its existence -- the need for a single "root" in the Internet naming infrastructure -- its organizational form and accountability, and the utterances, policies and actions of its management.

The purpose of this Article is not to argue and prescribe but to describe and explain. Description, however, is rarely, if ever, neutral. This Article is no exception. The author is biased in favor of the ICANN experiment. I hope it matures to become a model for a global organization -- with a limited mission, grounded in a unique type of consensus, and operated in a special kind of balance of power environment. I hope that ICANN's processes and activities will reflect the spirit of the Internet that it influences. I hope that it will exercise its power only to address problems when they arise, and nurture innovation whenever possible. I hope that the Internet community and ICANN will follow the

"rule of consensus" just as civil societies follow the rule of law. Events in the past month are perhaps bringing the issues to a head, but at this stage my crystal ball is dim and hope reigns supreme.

ICANN operates in a dual capacity: as a manager and a lawmaker. It provides high-level management of some of the Internet's operational infrastructure. I use the term management in a very broad sense. ICANN neither operates nor fully controls any of the actors that constitute the Internet's infrastructure. It has, however, power, in varied degrees, to direct these actors. n1 For lack of a better word, I call this direction "managing." In addition, ICANN establishes some of the Internet's constitutive rules that facilitate universal connectivity. n2 It has used its power to determine the process under which new top-level domain names ("TLDs") are allocated. To this extent it is a lawmaker.

The inquiry into ICANN is important because ICANN plays a significant role in the operation of the Internet. The inquiry is interesting because, like the Internet, ICANN has no precise analog. n3 The inquiry is difficult because the location and identity of ICANN's power is murky, contradictory and confusing. Its power structure is fashioned after a private not-for-profit corporation, but it does not operate an enterprise that such a corporation usually operates, like a museum, hospital or a membership organization of credit card issuers. ICANN's operations involve an enigma -- the Internet -- which defies a clear analogy. The Internet has been defined as: a new world community; the foundation of democracy; a communication system; a form of commerce; a network of networks; and a novel technology. Each definition brings an analogy to relationships and power structures. It has been suggested that new technologies undergo a process of chaos and finally settle at something close to familiar models, with some adjustments. n4 I believe that this thesis is correct, and that what we see today is a stage in the evolutionary process of the Internet and its infrastructure. However, the road to the ultimate adjusted model may determine its choice. The road to ICANN's final model may be less bumpy if the model reflects the characteristics of the Internet. I believe that the Internet is closer to a market. Therefore, I analogize ICANN to a manager of a unique type of market.

The use of the market image for the Internet and its infrastructure may seem counterintuitive. More often, ICANN's image is drawn from the store of political metaphors as a global government, and its users as citizens; the relationship among users, service providers and ICANN is thereby grounded in a "social contract." Markets and political units share some features. Both require an infrastructure and an implicit agreement -- a consensus -- among most actors as to the fundamental "rules of the game." Mainly, these rules are born of a rule of consensus, which people follow even if they are free not to do so. A "social contract" governs many aspects of our lives, and so do the markets on which we draw for the essentials for living and for earning our livelihood. The distinction, therefore, between the two is not in impact but perhaps in the enforcement power. The markets' coercive powers are more limited. Yet concern for the integrity of the system (whether the political or economic system) drives many dissenters on details to adhere to the general rules of the majority. It seems that the main difference is in the kinds of enforcement tools that markets can use. In that respect, ICANN's enforcement tools resemble those of the markets and not those of the political units.

I believe that even though ICANN's objectives and powers have not yet been fully defined, its analog is closer to the New York Stock Exchange, Inc. ("NYSE") than to a civil society. ICANN's foundation is grounded in technical and business practices, the objectives of its social contract are limited, and it lacks coercive state power. Therefore, I stick to my market model. But because the Internet affects social interaction, and because it is evolving, I admit to ICANN's political undertones. n5

Perhaps because of ICANN's political aspects, the Internet market and ICANN differ from the securities markets and their managing lawmakers. ICANN and the actors constituting the infrastructure of the Internet are essentially unregulated. n6 Their accountability to a "higher authority," such as the Department of Commerce ("DOC"), is unclear. Even the authority of the DOC is subject to queries. Moreover, ICANN functions partly as a policy setting institution, partly as a platform for negotiation and mediation. ICANN has not yet reached maturity, and is likely to operate in a state of flexible adjustment for some time to come. Recent events suggest that the state of flux may also turn into a state of shocks, counter shocks, restructure and substitution.

ICANN poses a number of puzzles. First, it is essentially an unregulated and undemocratic natural monopoly. It is managing and making rules for a hierarchical system that, in the view of experts, cannot be governed by two entities efficiently. Yet ICANN's power at its inception was quite weak. How can a monopoly be weak? Is not a weak monopoly a contradiction in terms?

Part II of this Article addresses this query. After a brief description of the basic structure of the Internet naming and numbering system relevant to ICANN's power, Part II describes the unique circumstances under which ICANN was created to explain its weak initial existence. ICANN's power was and remains a default power. There were many candidates for managing and controlling ICANN's functions. All vied for the position. But no candidate agreed that any

of the others would take control of the entity. ICANN's power stemmed from the consensus by the parties that none of them would control. ICANN was not vested with power. It came into being by the grace of powerful constituencies that refrained from asserting their power. Hence, ICANN's weakness.

A second puzzle follows. While ICANN started weak, it has managed to become far stronger. How could this weak monopoly become stronger with time? Part III of this Article offers an answer. ICANN has maintained and strengthened its following by strongly supporting the stability of the Internet (standardizing the infrastructure). This prime directive of maintaining stability is of great concern to almost everyone around the globe. In addition, ICANN's staff has taken special care to ensure that none of the potential claimants to ICANN's control would be sufficiently displeased to attempt to wrench control over it. The staff solved problems through mediation. Other events and external parties helped. ICANN has flexed its muscles in exercising the powers clearly vested in it, that is, allocating the valuable right to operate TLDs. ICANN has augmented its power through a stable and able management, including the preparation of its contracts, which contain significant powers. This staff has steered ICANN through the turbulent waters of complex international and national laws, supervised its statements and negotiated on its behalf. Part III of this Article offers a few examples that demonstrate ICANN's rising power.

However, in the past month, ICANN's staff proposed to restructure the institution. The new structure would eliminate some of the constraints under which the staff was operating, expand the staff and offer more powerful positions to constituents that would finance ICANN and its expansion.ⁿ⁷ The proposal would establish tighter control and greater power for ICANN and its staff, a self-perpetuating board representing the strong constituencies with vested interests in the Internet and lower input by the unorganized public.

The proposal seems to have been approved by some constituencies, but has prompted protests by others and raised questions in Congress (although ICANN's restructure is not one of the main topics in Congress today). The result of these protests is unclear. Short-term, the staff may ignore them: the proposal may be a basis for negotiation and some "softening." Long-term, if controls tighten and public input shrinks, some predict a cessation of some parts of the infrastructure and perhaps a temporary split of the Internet.ⁿ⁸ These developments support the explanation of ICANN's rising powers.

A third puzzle that ICANN poses relates to its current status. While it has flexed its muscles and become stronger, its exercise of power has been fairly contained. Since ICANN is a natural monopoly that has become stronger with time, what has prevented it in the past, and what prevents it today, from taking a far more high-handed and extensive ruling posture?

Part IV of this Article deals with this question. The emergence of ICANN, its staying power, and the limitations on the exercise of its power can be partly explained by an analogy to the economic theory of "contestable markets."ⁿ⁹ The theory deals with price. I equate price to power. High prices denote a high level of power. Low prices denote a lower level of power. The theory of contestable markets suggests that in some cases a monopolist (or an oligopolist) will charge the low price it would have charged had the market been competitive. These are the cases in which the monopolist is more efficient than its potential competitors, and can therefore sell or service at lower prices. At these prices, the less efficient competitors would not enter the market.ⁿ¹⁰ Yet the monopolist will not raise the prices in contestable markets. In these markets, entry costs for potential competitors would not be higher than the entry costs for the monopolist.ⁿ¹¹ For example, the cost of airplanes for two airlines will be close, if not identical. In addition, the exit costs for competitors would be zero or close to zero.ⁿ¹² Thus, the theory predicts that competitors will not enter the market only so long as they cannot afford to charge the monopolist's low prices. If, however, the monopolist charges higher prices, competitors will enter the market to offer the same service at the same prices or lower. When prices fall, these competitors will pocket their profits and exit the markets. This theory suggests that the "potential or threatened competition of possible new competitors" presents a great constraining force.ⁿ¹³ Potential competition will "extend the beneficent sway of the invisible hand" that leads the market.ⁿ¹⁴

The theory of contestable markets highlights a special "balance of power" and its restraining effect. I believe that a similar idea of a contestable market helps understand ICANN's environment. To be sure, while its institutional structure is still evolving, ICANN's existence and activities are based on a consensus among numerous power holders. More importantly, the large Internet service providers' ("ISPs") consensus to use a single root constitutes the foundation of ICANN's power. Most importantly, the tugging pressure of "path dependence" in the case of ICANN is very great. It costs to change legacy-systems. A move by some and not by other participants of the infrastructure may endanger the universality and integrity of the Internet. Even a slight move may generate a slippery slope towards disorder and unpredictability. The beneficent principle of "the devil you know" engenders an almost knee-jerk reaction in this case.

Nonetheless, I believe that the need for one guiding hand -- a natural monopoly, on the one hand, and the ability of some players to overthrow ICANN or particular actions of ICANN, as illuminated by the theory of contestable markets -limits ICANN's exercise of power.

The recent proposal to restructure ICANN supports the thesis of this Article. n15 Under the proposal, public representation on ICANN's board has been eliminated. Five of the nine directors' seats reserved for representatives of the public were allocated to representatives of governments -- each seat to be occupied by a representative of a world region. n16 Arguably, the governments are the effective representatives of the people. n17 Each of the other representations will be selected by a particular powerful constituency. One reason for the change seems to be ICANN's management's concern with ICANN's financing. Specifically, the management desired to finance the expansion of ICANN's activities and its staff. The governments will finance, but obtain a stronger voice in ICANN's governing body. It seems that the European Union will also gain ICANN's support for its new country code top-level domain name ("ccTLD"), ".eu," as an exception to the practice that only United Nations-recognized countries be awarded this type of name. Thus, the potential competitors of ICANN joined it and presumably would compete or negotiate inside rather than outside the organization. A consensus among the constituents will make ICANN a very strong monopoly because the ranks of the constraining outside forces will dwindle. That development may ultimately pose a danger to the integrity of the Internet. A strong and authoritarian ICANN may become a true regulator that departs from the spirit and loose structure of the Internet. That may press dissidents to combine, build and offer an alternative, which is technically feasible even today. Today, such an alternative does not draw members of the infrastructure. If ICANN tightens the reins sufficiently to strengthen the dissidents, an alternative will gain followers, or the dissidents may gain control, "capture" ICANN, and the experiment will continue.

A less prominent aspect of the contestable markets theory is the interest of all competing parties in maintaining a viable market. If competition drives the consumers away altogether, or destroys the market structure, the competitors have nothing to compete for. n18 One of the main objectives of the parties interested in the Internet is to ensure a thriving Internet. Control by itself is insufficient unless the Internet is preserved. The binding force of all parties today is the belief that the Internet will not survive unless it has a single root. Parties with a stake in the continued operation of the Internet are very reluctant to enter into a competing structure that may endanger the Internet's interoperability. This is the glue that holds all participants together. On this issue the rule of consensus is imperative. But if a new technology develops in which one or more alternative roots do not disrupt the smooth operation of the Internet, then ICANN's power will become meaningless or far weaker than its controllers currently aim. They will then grasp at nothing, just as they cannot grasp today at some parts of the Internet's infrastructure that are not dependent on the single root concept. Even though the probability that this alternative will be effective seems very low, its effect is drastic. Therefore, pressure to develop and build alternatives to the single root may be another constraining element in the Internet power market.

This Article concludes that ICANN's power is still being shaped. It could emerge along a market model, as a central catalyst for consensus building among parties with different interests. ICANN would address problems as they arise. This model would also be closer to the model that the technical community follows, although money is not its mover. In a previous draft of this Article, I suggested that "alternatively, ICANN could also move towards a more regulatory model based on the consensus of powerful constituencies who have a significant stake in ICANN." It seems that the current restructuring attempt of ICANN's management moves toward this model. Or ICANN can combine the two models to form a more structured market and more flexible regulatory body. Or none of these governance models would make a difference. A new ICANN, an alternative system or no system may rise by a technology that is today a mere twinkle in someone's eye.

II. A Puzzle: How Can a Natural Monopoly Be Weak?

A. ICANN Manages a Hierarchical System that Is a Natural Monopoly

As everyone knows, the Internet can be viewed as a network of networks free of central control and led by an "invisible hand." That is true to an extent, just as markets can be viewed as interactions among individuals and groups free of central control. To this extent, both systems are led by an invisible hand. Both, however, cannot function without an infrastructure. n19 Put in biblical terms, without a common language, both systems can become a dysfunctional Tower of Babel. The current Internet network structure requires that each receiver and sender of messages will have a unique one-of-a-kind designation, and that each computer message will have a unique number so that the "packages" of transported information will reach their destination. n20 The design further requires that transmissions be governed by acceptable protocols. If receivers, senders or spaces do not have unique designations and if the actors serving as the

infrastructure do not follow the protocols, messages will miss their destinations. The Internet will become the Tower of Babel. n21

1. The Feudal Structure of the Naming and Numbering System

With a view to preventing chaos and ensuring stability, the Internet naming and numbering system was designed in a hierarchical mode. Each level contains a signifier, under which names and numbers within its sphere of influence are recorded. The single root or dot (".") is in fact a database for two letter country code domain names such as ".uk" (United Kingdom) or ".fr" (France). The single root zone also contains generic top-level domain names ("gTLDs"), such as ".com," ".org," ".gov" and ".edu." n22 That system ensures, for example, that no other ".edu" exists. Listed under the ".edu" umbrella are Boston University and other educational institutions. No other Boston University can be listed. Under the name of each institution, other lower level domain names can be listed and managed, such as "tfrankel." No other "tfrankel" can be listed. There is a general belief that the inter-connectivity of the Internet depends on the integrity and maintenance of this hierarchical structure, and that unless the message senders and transferors comply with the same rules, or protocols, confusion will reign. Hence, like market standards of weights and measures and prohibitions on fraud, the Internet is governed by a structure of names, numbers and protocols. n23

The intermediaries that form the Internet infrastructure are the ISPs, registries and registrars. ISPs receive and transfer messages usually to other ISPs and through them to the final destination. n24 Registries manage the database of the names under their umbrella in the pyramid. Thus, the "root registry" registers the ccTLDs and gTLDs. n25 Registries manage and publish the zone files of ccTLDs and gTLDs. Registrars manage names under specific gTLDs. The current uniform practice among the large ISPs is to follow the single root structure. Some people question the necessity of one root and maintain that dual roots will not necessarily disrupt the connectivity of the Internet. n26 But no one has made a serious attempt to experiment with two roots for fear of disrupting the smooth operation of the Internet.

2. The Power of Bestowing Internet Names and Numbers

An Internet "domain name" differs in value and function from a name in real space. n27 A domain name is the spark that breathes life and the very existence on the Internet. The loss of a name on the Internet is death without a trace. In fact, when reassigned, the name breathes life into another being. Our Internet names must be unique to us. More than in real space, the Internet name system deprives us of the freedom to use the names allocated to others. While in real space people with the same name can be distinguished by other means, on the Internet there is little distinguishing information about people. Names are the only means of recognition. n28 Therefore, name allocation and withdrawal can be a source of power and wealth.

Like the naming system, the management of the system is hierarchical, and so is the power to allocate names. Since all names derive from one source, that source reigns supreme, and like the vassals in the feudal system, each vassal source derives its power from the lord above it, until it reaches the pinnacle -the king. That king is ICANN.

3. Enter ICANN

ICANN was established to achieve a number of objectives. The foremost objective was to ensure the Internet stability and expand its capacity. ICANN was also required to increase the number of gTLDs and registries, to facilitate competition among them, n29 and to help establish a dispute settlement mechanism between holders of domain names and holders of registered trademarks. n30 The precise nature of ICANN's authority was not spelled out. Some viewed it as a forum for developing policy by building a consensus. Some viewed it as a far more proactive manager of a technology-based market, designed to monitor and evaluate the infrastructure actors of the naming and numbering system and its performance, as well as to prevent transgressions that endanger the system.

ICANN's lawmaking functions include allocation and regulation of some, though not all, lucrative infrastructure services, such as the registries and registrars, n31 and setting the qualifications of these actors. n32 ICANN can therefore create such businesses and limit entry into such businesses. Unlike governments, ICANN's mission is limited to its enterprise. The enterprise, however, affects many areas of human lives -business, culture, politics, community, public morals and private rights. Its reach is global. In that sense as well, ICANN is a lawmaker.

ICANN's structure is unique, and I may say, unwieldy. It consists of a board, a president and staff, and three "supporting organizations," the most problematic of which is the Domain Name Supporting Organization ("DNSO"). n33 Each organization nominates three board members, while nine board members are elected by users. Elections by millions of people over the globe have not yet been achieved. ICANN's processes required transparency and public

participation. This requirement has not been entirely met. Further, it is unclear whether ICANN was expected to establish policies or merely to approve policies established by its three supporting organizations. The DNSO did not succeed in reaching a consensus on proposed policies. n34 In its proposal to restructure ICANN, the staff has declared the current structure and constraints a failure, and proposed to simplify the structure. n35 Five directors representing the governments of each global region would substitute for the nine publicly elected directors. No review panel would be established to determine the board's policy authority. ICANN will move towards a corporate model of the traditional not-for-profit corporation vintage.

B. ICANN Emerged as a Weak Monopoly Because of the Circumstances Surrounding Its Creation

Two views explain the creation of ICANN. One view describes ICANN's creation as the expression of a consensus on a specific agenda among parties with different interests and views. n36 The other view on the creation of ICANN is also consensus-based. n37 But the consensus was about something else. The interested parties, such as the technical communities, the large business interests, Network Solutions, Inc. ("NSI") (that managed the root zone and the gTLDs ".com," ".net" and ".org"), the various governments, the large ISPs, the small ISPs and the small businesses that use the Internet, had very different views of what the Internet infrastructure should be and how it should be managed. Most importantly, they disagreed on who should have the power to manage the naming system. They were also very concerned about the possible "capture" of the naming and numbering system by one interest group. Therefore, their consensus on the issues was reached at a very high level of generality. The devil of the details was left to be resolved.

1. Power by Default: "I Will Not Claim Control if You Do Not Claim Control" n38

A review of ICANN's creation and emerging power suggests that different interest groups agreed not to claim control if everyone else would not claim control of the naming and numbering system. ICANN's power was therefore created by default. No one interest group has agreed to put another interest group on the throne to manage and regulate the infrastructure of the Internet, and each group was anxious about capture by another.

There were many candidates for the job: (1) the United States and other governments; (2) the established technical communities headed by Dr. Jon Postel, who designed the system and managed it for over twenty years; (3) the large businesses; (4) the professionals who sought to participate in the infrastructure for profit; (5) people who claimed to represent the consumers or users; and (6) international communication organizations.

The United States, which triggered the emergence of the Internet, and the U.S. administration, which exercised the management power over the Internet naming and numbering system, did not seek to continue its hegemony. The administration was hard pressed by a number of countries to de-Americanize the Internet. Other difficult political issues have arisen that the U.S. wished to avoid. For example, how to define a country entitled to a ccTLD, and how to convert into competition the monopoly position of registries, notably NSI (now VeriSign), that managed ".com," ".org" and ".net." The U.S. administration was not interested in mediating disputes between the business communities and the technical communities, since the solutions involved costs in dollars and time.

The U.S. administration was ready to offer the Internet to the world, but with strings attached. To de-Americanize the management and regulation of the Internet infrastructure without severing its American umbilical cord, the administration considered different avenues. Since the interested groups did not reach a consensus, the administration conducted meetings and produced a policy paper that seemed, at a high level, to represent a consensus not only between the U.S. groups, but also with foreign governments. n39

While different governments demanded the de-Americanization of the Internet, none claimed to be the sole governor of the Internet infrastructure. It was recognized that none would succeed in realizing such a demand, and the only country which in fact controlled the infrastructure, namely the U.S., was unlikely to relinquish control to another country. Neither was the UN an acceptable alternative. Control over the Internet infrastructure required a nimble guiding management and sensitive rulemaking. The UN and its various organizations were considered too slow and inflexible to respond to the kaleidoscopic, fast-changing demands of the Internet.

The technical community, especially the Internet Assigned Numbers Authority ("IANA"), led by Dr. Postel, was a natural candidate for the management of the infrastructure of the Internet. It had been managing the infrastructure since the Internet's inception. Many members of the communities were in fact the ISPs and registries. They also commanded support of some European governments. These communities wanted to undertake the management and regulatory function. However, the U.S. business community and NSI did not agree to a transfer of control to the technical communities, and demanded a voice, even a decisive voice, in decisions concerning the Internet infrastructure.

Therefore, a compromise between these two interest groups and their different visions of the Internet had to be reached before a private corporation could be established.

The conflict between the technical communities and the business communities was complicated because many had members in each camp. Some "techies" were employed by large business organizations such as MCI (now WorldCom, Inc.), AT&T Corp. and IBM Corp. These persons were also involved in the Internet service providing activities. Thus, not all parts of the business communities necessarily objected to influence of the technical groups. On the other side of the coin were the registries, and especially NSI, that were publicly owned and operated as businesses rather than as volunteer or scientific enterprises. Thus, it would be more accurate to describe the conflict as a conflict between two philosophies and cultures. The one viewed the Internet as a tool for business development or as a source of profit from servicing. The other, rejecting the view of the Internet as a tool for "making money," viewed the Internet as the product of technological creativity, whose purpose was to continue to contribute to science, national society and the global community. n40

The small business interests and those who claimed to represent the users and "net citizens" were not candidates for controlling the infrastructure, but demanded participation in the control. n41 They, too, were divided. Some aligned with technical communities and some with different clusters of interest, but many did not align with anyone.

It was recognized that technical decisions concerning the infrastructure could no longer be made by technology criteria alone. Political and business consequences of technical decisions mattered. The future body that would guide the infrastructure of the Internet had to consider all three criteria (technical, business and political), mediate among them and balance them correctly. This conclusion brought about the idea of an entirely new organization to meet the new demands.

The route to establishing the entity that would manage and regulate the Internet infrastructure had to be foggy. The U.S. administration wished to avoid "establishing" and "acquiring" a private corporation because such a corporation must be established under an act of Congress. n42 There was concern that if the matter came before Congress it might become a problematic "political football." To avoid the required act, the administration had to avoid the "establishment" or "acquisition" of such a corporation. From the point of view of the administration and some members of Congress, the solution was to help create a private corporation, grounded in market principles, and an Internet infrastructure moved by competition. This creation would be an entity that no one established, but just came into being. In fact, that is the closest description of the emergence of ICANN. Not one invisible hand, but many invisible hands, brought it about. Had only one hand, as invisible as it might have been, propelled the entity into existence, other powerful hands would have been raised in protest. The flurry of negotiations, promises, some broken, some re-negotiated or abandoned, and alliances formed and reformed brought about an equilibrium that allowed the entity to emerge. The driving force of the negotiation and consensus seems to have been the recognition that no better alternative was available. ICANN was therefore born by default. n43

2. ICANN's Initial Power Was Weak

In addition to ICANN's default creation, it was not very powerful either. The circumstances of its birth did not inspire much confidence or legitimacy. ICANN had no blessing of an authorizing statute. n44 It did not have the benefit of the invisible hand of the free market or the citizens' votes in a democratic regime. In fact, it emerged as a result of negotiations among interest groups with the service of go-betweens. Its great leadership weakness was the image of secret negotiations, behind the scenes agreements, and mistrust of "outsiders." Mistrust breeds mistrust.

In addition, ICANN's mandate was general. Some of its missions posed conflicts between technological, business and political views. ICANN was required to establish additional gTLDs. But the largest corporations with the most famous brand names objected to any such addition because it imposed heavy costs on them in protecting their trademarks. n45 ICANN was required to create competition among registries, and especially to break up NSI's monopoly. Yet that monopoly was in part based on the infrastructure of the Internet that required registries to maintain a central database to avoid duplications of the names and the numbers. In addition, the "ownership" or other form of entitlement of the names and the databases was not established. To create competition among registries and registrars required portability of the names, and demand for names coupled with the vision of a free market in the names gave the names the features of property with attendant unanticipated consequences, such as cybersquatting. Thus, ICANN's management decisions could have far reaching consequences, and at the same time conflict with the desires of one or more of its supporting interest groups.

ICANN received the mantle of Dr. Postel as the manager of the naming and numbering system. But not quite. It did not have his authority nor the adoration of his followers, which had grown with twenty-five years of devoted service and good judgment. It did, however, have a contract with the DOC, but a conditional contract at that. n46 To become fully vested with the powers of the United States (whatever these are) over the systems, ICANN had to meet additional conditions under a certain deadline. n47 These involved the heart of its control structure -- public participation in its decision making and in its board. These conditions were precisely the ones that some of ICANN's promoters rejected. Elections are antithetical to self-perpetuating boards. Elections endanger the position of the existing controlling group and open the doors to capture of the institution.

In sum, when ICANN emerged, its mission and power were not clearly defined. Its strength lay in the lack of better alternatives. ICANN's power was strengthened at the outset by the highly reputable persons who populated its first board, and by a dedicated expert staff with significant knowledge of the Internet, its organizations and its history. This knowledge complemented the expertise of the board members. Needless to say, ICANN was not strong. The world sat back, folded its arms, and took a wait-and-see attitude. ICANN was not powerless, however. It was backed by a number of power centers: (1) the technical communities; (2) the large business communities, including the large ISPs; (3) NSI; and (4) the involved governments. This was ICANN's power base, and it was quite broad. n48

III. Puzzle: How Does a Weak Monopoly Augment Its Power?

A. Consolidating the Power

1. Constitutional Documents: The Articles and Bylaws

ICANN's articles of incorporation and bylaws have the potential of providing the entity with significant power. n49 However, the entity's structure is also very complex, and the division of power among the different groups, such as the board on the one hand and the supporting organizations on the other hand, is not spelled out in the document. That is also because there was no clear consensus on the division of the power. Supporting organizations could designate their candidates to the board and could propose policies to the board. Although it seems to have been the consensus that the board could not reject the candidates, it was not clear whether the board had to accept the policy proposals and whether the board could initiate its own proposals. It was also not clear whether initiation would be limited to non-technical policies, and whether one could distinguish between technical, political and business considerations. Thus, the vagueness of the documents could provide ICANN with power, or rob it of power, depending on the implementation of its policies and solutions to the problems with which it would be presented.

2. The Contracts with Internet Service Providers and Registries

An important part of ICANN's power base is grounded in the contracts that ICANN negotiated with the Internet infrastructure operators, the registries and registrars. These contracts should rightly be added as part of ICANN's constitution. Said ICANN's President, Mike Roberts: "ICANN had to take the very informal handshake world of [Internet founder] Jon Postel and turn that into language that can be written down and form the basis of a legal arrangement." n50 ICANN sought to formalize its relationship with the government, the registries and the service providers through the mechanism of contracts. n51

The contracts contain features that empower ICANN. For example, the parties to the contract are obligated to abide by ICANN's policies if these policies command consensus. A review board (to be established) has the authority to make a finding of the existence or absence of a consensus. The importance of these contracts cannot be exaggerated (because the definition of policy decision is vague). Thus, so long as ICANN's policy decisions command a consensus they are binding on the signatories of the contracts, that is, on the actors in the Internet infrastructure. n52

Some economists have suggested the use of contracts as a response to the failures of the contestable markets theory, especially in the deregulation period. "The ultimate objective is to replace transitory regulation with the contracts that would have been in effect had they not been superseded by regulatory institutions." n53 Therefore, lawmakers should negotiate laws in the market, and pass laws that are as close as possible to the negotiated result had there been a market. The visible regulators' hand should be led by the visible hand of the parties. The contestable market theory and the use of contracts are proposed as alternatives to heavy-handed inefficient government regulation. ICANN is using contracts as a negotiated regulatory device. n54

3. General Support for ICANN's Prime Directive: To Maintain the Stability of the Internet

ICANN's primary directive has had the support of many, if not all, powerful stakeholders. Both governments and businesses that invest millions in Internet commerce and in persuading their customers to use this new medium put a high premium on stability and operability of the Internet. Blackouts and other mishaps, even short lived, can cause heavy losses and terminate client relationships.

The prime directive of ICANN could be interpreted in different ways, some of which allow for more flexibility and experimentation than others. Many questions can be differently determined depending on this interpretation. For example, does stability require one root at all costs? Can a multitude of roots be designed in a way that would support stability and increased scope? Should experiments at the fringe of the Internet be encouraged, and if so, how can they be implemented once proven not to endanger the stability? Should these experiments be left to the regulation of the market? If experiments are allowed, to what extent, if any, should enterprises that invested heavily in existing technology and structure have control over these experiments? Should these issues be raised now, or should they be raised when the existing structure is well established? Or, should they be raised when the experiments are launched, or when problems arise?

With respect to stability of the Internet, ICANN has taken a conservative attitude, in line with the interpretation of its stakeholders and many governments. It sought to standardize the Internet infrastructure. This interpretation strengthens ICANN's power. One root creates a natural monopoly that, by definition, vests decision and lawmaking power in the manager of the system. Any additional root weakens or completely undermines this power. So long as the main stakeholders view the prime directive as crucial to their own interests, ICANN must be endowed with sufficient power to implement this prime objective. That was and has remained a significant basis of ICANN's power.

4. Indirect Help From Congress

I believe that even though some members of Congress would have preferred to deal with Internet governance by legislation rather than mere monitoring, most members of the House of Representatives committees that dealt with the Internet were willing to take the "wait-and-see" attitude towards ICANN. n55 However, whether unwittingly or by design, Congress has also helped ICANN perform a task that seemed impossibly conflicted: creating additional gTLDs and facilitating greater competition among registries. The task met strong opposition from a large, important stakeholder constituency of ICANN: the owners of famous trademarks. n56 These stakeholders have been protecting their trademarks at great cost, and additional gTLDs could increase these costs because each new gTLD can breed trademark violations under its cap.

Congress responded to the trademark owners in a way that reduced their objections to additional gTLDs. Congress passed a law to protect famous trademarks from dilution. n57 This was a fundamental change in trademark law, which was based on protection of consumers from confusion. In addition, ICANN established an option of less expensive resolution of disputes between trademark owners and domain name owners. The new statute and the less costly process by which trademark owners could protect their trademarks against competing domain names reduced the objection of the large corporations to the creation of new gTLDs.

In addition, congressional monitoring has helped ICANN by offering accurate information, criticism and a sense of the limits on ICANN's actions. For example, when ICANN proposed to levy a \$ 1 charge on all registrars world-wide for every domain name registration, the protest, which was aired also in Congress, caused ICANN to back off. n58 Some would consider this a failure. I consider this event a success. Congress helps ICANN evaluate its trial and error attempts at expanding its power.

5. Help From the Courts

A recent decision regarding a domain name indirectly supports ICANN's power. n59 This case involves a claim by a national government. The government of South Africa sued an American enterprise that used the words "South Africa" in its domain names. n60 The government of South Africa maintained that the name is its property. n61 The District Court for the Southern District of New York denied jurisdiction and referred the parties to arbitration in accordance with ICANN's procedures. n62 The decision indirectly supports ICANN's power. Courts are unlikely to entertain claims of sovereign powers to ccTLDs, and the issue is designed to be resolved in accordance with the process established by ICANN. It is unlikely that any and all uses of a state's name will be barred by the arbitration tribunal. Thus, ICANN will be freed of making difficult decisions. It seems that the government of South Africa and some other governments have determined to protect their names by internal legislation. n63 This approach as well relieves ICANN from the burden of determining the issue and exposing a weakness if it cannot implement its decision.

6. Mediation and Negotiations with and Among Stakeholders

ICANN has chosen appropriate methods for consolidating power. Before decisions were made public, the governments and other large stakeholders were consulted and a consensus was obtained. Only then would the results be published. Further, ICANN has not always insisted on exerting authority. It deals with powerful constituencies by negotiation rather than ruling. However, every agreement with any such constituency helps build precedents for agreements with others, thereby helping to establish future customary rules. Moreover, when a conflict arose among powerful stakeholders, ICANN was often inclined to play the role of a mediator rather than an arbitrator. It has provided an effective forum for negotiation and a face-saving intermediary service. That increased its value to those participants. Repeat requests to ICANN augmented its power.

However, consensus-building negotiations make it harder to gain public support and broad leadership. The process is far from public and the method limits ICANN's freedom to factor in public comments. Therefore, the solicitation of public comments and input seems to be a sham. To some extent it is. That may explain why ICANN's power rests primarily on its constituencies and far less on public support and leadership.

B. Demonstrating ICANN's Rising Power

Recent events concerning ccTLDs demonstrate that ICANN's power is on the rise. ICANN's interaction with ccTLD registries has increased in recent years. The context and substance of these interactions differ, but all indicate the nature and level of ICANN's power.

1. Country Code Top-Level Domain Names

ccTLDs are two-letter names designed to inform about the physical location of name holders. They are on the same level as gTLDs. With the rise of the value of gTLDs, such as ".com," the value of ccTLDs has risen as well. That is because under a ccTLD, one can create many new (and sometimes known) gTLDs under its umbrella. ccTLDs are similar to TLDs except that they are limited to existing political real entities (countries), regardless of how we define them. n64

When the value and importance of names and their management was not accompanied by political or economic values, ccTLDs and their registries -- delegates of the power to manage the database of the domain names under their authority -- were recognized generously. n65 For example, IANA, which preceded ICANN, recognized the delegation of a ccTLD to Palestine, and thereafter confirmed a reassignment of the delegation to other registries. n66

The use of ccTLDs varies. In some countries, they are used as gTLDs that have a similar name as the country's name. In other countries, they represent a political geography. n67 Some countries have privatized (sold) their ccTLDs, as the U.S. government is considering doing. n68 Other countries deem the registries of ccTLDs to be the delegates of the governments and under their control.

2. The Dispute over ccTLD ".au" Between the Registry and the Australian Government

In 1986, Professor Robert Elz received from Dr. Postel the delegated authority over the registry of Australia's ccTLD ".au." Even though the registry had the power to create secondlevel domains, such as ".com.au" and ".net.au," n69 Professor Elz seemed to believe that the main Internet services should not be commercial. n70 No commercial use also meant no value for the names. Consequently, "Australia has never had a cybersquatting problem like the United States has." n71 No one compiles names for sale.

The government of Australia, however, has different priorities, planning a far more aggressive commercial development of the Internet, n72 as well as tighter government control over domestic Internet use. n73 It established the authority "auDA," n74 and required Professor Elz to re-delegate the registry's functions to this authority. The re-delegation of the ".au" space would also affect the sub-domains. n75 Professor Elz agreed to re-delegate, but it appeared unlikely that he would do so until certain conditions had been met. n76 A year later, the redelegation had still not taken place. n77 On June 13, 2001, a news headline stated: Internet's Reclusive Pioneer Hangs on to Keys to Web. n78 Interestingly, Professor Elz was deemed not to have responded to the government's request -- "just not doing anything" -- rather than refused the request. n79 The government viewed this distinction as "relatively important." n80 In September 2001, ICANN announced that it had awarded control of the ".au" domain to auDA. n81 However, Elz refused to release the ".org.au" and ".id.au" second-level domains, and they were seized from him in February 2002. n82

The power relationship between a sovereign country, the registry of its name and ICANN is unclear. ICANN and IANA published the relevant information in 1999, n83 yet the power relationship is being established by actions rather than by words and rules. Arguably, a country should be entitled to its own name. But if the name has been assigned by a

private body and used by a private individual, then presumably it cannot be the property of a government. n84 The entitlement to the names is a subject worthy of a separate paper. n85 The important and interesting point for the purpose of this Article is the fact that the government of Australia approached ICANN for help. n86 After all, Professor Elz was an Australian resident and perhaps an Australian citizen. The government could have introduced a bill that would have required the redelegation. It perhaps could have imposed a fine by law or used eminent domain over the ccTLD to requisition the name and appoint its own delegate. It took none of these steps. Instead it sought ICANN's intervention in the matter. n87 Other countries have taken another route. They have asserted their power over the management of their ccTLD, and passed laws to give the assertion real teeth. n88 These steps, however, do not weaken ICANN, though they do not strengthen it either.

3. The Rebellion of the ccTLD Registries

The registries of ccTLDs relate in various ways to the governments of the countries to which they provide access, and these differences are reflected in relationships between the ccTLD registries and ICANN. A number of small countries have allowed registries, for a fee, to use their ccTLDs for commercial purposes, like gTLDs. n89 These registries act and relate to the system and to ICANN as registries of gTLDs do. They have signed contracts with ICANN as required, and pay registration fees. But these registries are a minuscule minority of the 240 ccTLD registries. The others, such as those serving France, Germany and the U.K., are generally the designates of the governments of those countries, and the governments assert the right to re-delegate the management of the ccTLDs to others. Generally, as between the registries and the governments this is not an issue, and the registries consider themselves as an arm of their governments to further their governments' political and social policies.

Although these registries have been paying ICANN dues that cover about a third of ICANN's budget, many have not signed ICANN's contracts. Because they are not uniform in their functions and relationships to their governments, and because ICANN does not service all registries, a standard contract does not fit all of them. The text of these contracts has been negotiated for some time, and a number of contract models have been developed both for those registries that ICANN services and those that it does not. n90 In the process, feathers have been ruffled. In one case, ICANN has written to their governments, and this letter has raised the ire of the registries because some have interpreted the language to invite a review of the registries' performance. n91 In sum, ICANN's relationship with many of these registries has not yet been formalized, and the task is formidable. n92

Historically, both ICANN and the ccTLD registries have adopted a "hands off" approach towards each other's activities. That has changed as ICANN sought to formalize its relationship with these registries -- establishing controlling measures over them -- and the registries demanded a greater role in ICANN and its policy decision making. n93 This is significant. The registries did not repudiate or question ICANN's authority. On the contrary, they demanded a greater voice in its power structure, that is, they demanded membership on its board. n94 The latest proposed structure of ICANN might resolve the issue. ccTLDs or their governments will pay dues to ICANN. The governments will occupy a board seat, however, and that might satisfy the demand for a greater voice in ICANN's government. ICANN's power as an entity will then be augmented by further support and money.

4. The Three Events Demonstrate ICANN's Increasing Power

The three events described above differ. One involves a dispute between a sovereign state and a registry of its ccTLD. The second is a dispute between ccTLD registries, the DNSO and ICANN. The third case represents a disagreement between ICANN and an aspiring ccTLD registry. All three events demonstrate recognition of ICANN's power to determine the existence and nature of ccTLDs, and the power to affect, at least by qualifications and imposition of fees, the identity and functions of the registries of these ccTLDs. The Australian government applied to ICANN to determine its dispute with the existing registry of its ccTLD. n95 Professor Elz may have implied ICANN's power to select or qualify registries because indirectly he based his rights on Dr. Postel's appointment rather than on the appointment by his government. The ccTLD registries felt that the DNSO, to which these registries belonged, did not represent the registries' interests. Therefore, the registries left the DNSO, but did not leave ICANN. Instead they demanded a more prominent place in its organization: a separate supporting organization and the right to appoint, select or recommend directors to its board. n96 The registries were critical of ICANN's operating practices but not of ICANN "as an organization." n97 The registries argued that there should be "no taxation without representation." n98 The use of these words is revealing. The power to tax is governmental; the right to representation is that of the citizen. It is unclear, however, whether the registries placed themselves in the position of citizens and ICANN -- in the position of a government. That is because the registries viewed their payments as fees for specific services and not as financing the operations of ICANN generally. But perhaps they only meant that if they financed ICANN's operations they ought to

have a say about the way the money is spent. In any event, the registries recognized ICANN as the regulator of the ccTLDs, both by explicitly mentioning their recognition and by demanding greater power in the organization.

5. The Position of the U.S. Department of Commerce

On June 25, 2001, the DOC responded to a request by Mr. William H. Bode on behalf of Atlantic Root Network, Inc. ("Atlantic"). Atlantic was concerned about ICANN's process in selecting new TLDs. The DOC stated in part:

In July 1998, the Department of Commerce made it clear that it would not participate in the selection process of new TLDs as set forth in the Statement of Policy, entitled Management of Internet Names and Addresses. . . . In the Statement of Policy, the Department recognized that the selection of new TLDs should be conducted by the private sector through a notfor-profit organization, globally representative of the Internet stakeholder community. The Department recognized ICANN as that organization in November 1998 through a Memorandum of Understanding.

We note that at its May 2001 board of directors meeting, ICANN approved the establishment of a New TLD Evaluation Process Planning Task Force (Task Force) to monitor the implementation process and to evaluate the selection process of the new TLDs. The ICANN board resolution stated that the Task Force will make recommendations to the ICANN board and the Internet community regarding the selection process. It is our understanding that the Task Force will allow public input when formulating its recommendations. We encourage you to participate in this opportunity. In a recent letter to ICANN, the Department encouraged ICANN to move forward in the selection of new TLDs in order to increase competition in the domain name space.

Again, we encourage you to direct Atlantic Root Network's concern regarding ICANN's selection process directly to ICANN.

Sincerely,

Signed

John F. Sopko

Acting Assistant Secretary for

Communications and Information n99

The letter speaks for itself, making it clear that the U.S. supports ICANN in this matter, and recognizes ICANN's power most explicitly. The government encouraged the complainant to apply to ICANN. It is not surprising that the only party that did not concede ICANN's power was the aspiring rejected registry.

6. The Latest Move to Restructure

The latest move of ICANN's staff to restructure demonstrates how the institution is reaching for power. The proposal would greatly minimize constraints over the board and the staff. It would eliminate nine publicly elected directors and substitute for them fewer -- (five) -- representatives of governments reflecting the five regions of the globe. n100 Thus, each of ICANN's board members will represent specific identified interests, and will be selected by these interests. Governments will presumably ensure that ICANN will be better endowed and staffed. If this proposal is put into effect and if it works, ICANN will become stronger. At the same time, if its members contain each other's claims to hegemony, its overall powers may remain in check.

IV. Boundaries of Power

A. Contestable Markets Theory

The introduction to this Article describes the theory of contestable markets. ICANN's circumstances (from its first birthday to its third birthday) bring to mind this theory and help explain ICANN's evolution. In fact, the inadequacies of the theory in the markets context are less pronounced in the context of power. I assume that the stability of the Internet requires the existence of a single root. I further assume that if more than one manager manages the root, the financial and social costs of the Internet would rise. The two cooks will spoil the broth. Therefore, the structure of the Internet naming and numbering system mandates a single manager -- a natural monopolist. I assume further that there is no superpower that regulates ICANN. The question is whether this monopoly will result in an excessive exercise of power, similar to excessive charges that a monopolist would extort from consumers.

B. The Nature of the Market for Power

The market that is discussed here is the market for managing the numbering and naming system. While in the business market competitors seek rents represented mostly by money, the rents from the power of ICANN are varied. These rents include the ability of the power holder to ensure the stability of the Internet and the integrity of the naming and numbering system. The power holder can guard over the technical integrity of the system, or maintain and expand the value of its investments in the current system as registry or ISP. The power holder can control the system for political reasons or protect one's trademarks by freezing or reducing the number of additional upper-level domain names.

Potential competitors may be interested in social benefits, and the stronger they are as potential competitors, the greater is ICANN's constraint on its power to conflict with these social benefits. These self-interested goals cannot be achieved unilaterally because the Internet is dependent on the support and actions of many others with other agendas (e.g., governments, legislatures and different ISPs). They must all agree to the management's edicts. By their consent to ICANN they can achieve their own self-interested objectives, at least to an acceptable degree. n101 It is the management power and its lawmaking capabilities that are the product in this market. n102

The power for which there is a market in this case is of two kinds. One relates to particular actions in the exercise of management and lawmaking -- "specific power." The other is the power to take over all the managerial and lawmaking activities -- "general power." Firms that produce a number of related products can "cross-subsidize" their products and thereby block market entry to competitors that produce only one type of product. Arguably, like business corporations, ICANN can cross-subsidize one type of special power by another type of special power. For example, it can subsidize qualification requirements for other less stringent contract terms. However, many of ICANN's potential competitors, such as governments, are also multi-product firms in this sense. They too can subsidize one special power by another. The difference between these potential competitors and ICANN is in their institutional structure. As compared to ICANN, they have limited powers outside their territories but greater power within their territories. Even ISPs have some multi-product capabilities and can cross-subsidize. Thus, ICANN's competitors seem to be stronger than one-product business competitors.

C. The Competitors that Present a Constraining Force to the Monopolist

Under the contestable markets theory, competitors who can constrain the monopolist are those whose sunken costs are similar to the monopolist's sunken costs. Sunken costs for a general power are the costs of establishing a broad supporting coalition to take over ICANN's general power or at least to create a credible threat of such a possible takeover. Thus, if the members of ICANN's current supporting coalition were dissatisfied with the existing ICANN and had sufficient power to establish a different entity, they would present a formidable threat to ICANN's existence, and could force it to restructure or comply in other ways.

Alternatively, if a coalition of other competitors is sufficiently strong to convince the actors in the Internet infrastructure to cease following ICANN's instruction and the single root, the possibility and existence of such a coalition would deter ICANN from exercising any power in a way that would displease this coalition. In February 2002, I believed that this scenario is unlikely. Today, that may not be the case. As the management of ICANN proposed a new structure, Dr. David Farber, a respected academic who was involved in the design of the naming and numbering system, and others have raised the possibility of removing the powers of ICANN to another technical organization. In fact, the proposal would resurrect some of Dr. Postel's hegemony. n103

Another scenario that is unique to the Internet is the possible addition of new names through existing ISPs. I consider this scenario a threat of competitors of specific power, not general power. The competitors' investment or sunken costs in the market for specific power are the costs of establishing a coalition aimed at the specific power, or a credible threat to the exercise (or non-exercise) of that specific power. As in the case of the commercial markets, the market for power, in which ICANN operates, is populated by different actors with different entry costs. They may exert political power, form coalitions or offer rich revenues. Their sunken costs need not be higher than ICANN's entry costs, or may be lower, especially in the case of special powers.

The exit costs of such competitors should be close to zero if their investments can be used elsewhere. However, once a power structure is established, the very loss of the power is not a zero loss even if the coalition can continue to exist and flex its muscle, for example, by entering ICANN's power structure. The investment in creating a competitor to ICANN may be high, because the powerful interests that are potential competitors conflict, and the competitors would be successful only if they find a better way to complement their interests than the one found by ICANN. n104 Otherwise, potential competitors would enter the market only if ICANN exerts a higher degree of power than they would together. If ICANN increases or extends its power, competitors may invest in entering the market to enjoy the

benefits of the greater power until it will dilute by the mere existence of the competition. Then they will exit, as the exit costs are not high for them.

D. Differences Between Business and Power Markets

One difference between the business market and the power market is that potential competitors can constrain ICANN's power exercise not only by threatening to assert their own claims to power, but also by withdrawing their support of ICANN. A monopolist in the business market does not need the support of its competitors -- he receives the support from the consumers. A monopolist in the power market may need that support, and ICANN needs it. Withdrawal involves no direct cost to competitors, but it may be very costly if it undermines ICANN and produces a worse alternative. n105

Further, while in the business market competitors threaten to offer a competing product, in the power market competitors can threaten to exert power with respect to one special "power product." If ICANN attempts to exercise power that competitors deem to provide "higher rents," these competitors may enter the market, but only in the area requiring low -- or no -- investment (they already have the power), and where exit is costless (they will exercise the power elsewhere), while the benefit from entry provides high rents. It is harder in the power market to calculate a quantifiable price in terms of power that a monopolist should "charge." Even in the business market this determination has raised a debate. In the power market one can only speculate.

E. When Competitors Will Cooperate

The contestable market theory is not helpful to predict ICANN's evolution if its competitors cooperate, and this possibility is not negligible. Presumably, cooperation among the competitors should be encouraged. It is then renamed a consensus. In fact, the proposed restructure of ICANN seems to be heading towards such a coalition and power sharing. A broad-based participation within ICANN signifying a broad-based consensus could lend ICANN legitimacy. Its monopoly power will be constrained from within, as the different interests negotiate. To this extent, ICANN may resemble a policy-making legislative body.

However, legislatures are elected. ICANN is a not-for-profit organization. The power of elected bodies is bestowed on them by the votes. Therefore, elected members must account for their actions to those who bestowed the power on them -- the voters. The assets of a not-for-profit corporation are donated usually by its directors (or the directors' designates). They exercise their management power with a sense of entitlement that their donations give them. There is not a legal duty to account to others; there is a duty to account to their conscience. This is ICANN's deepest and most serious dilemma.

V. Conclusion

This Article focused on balance of power and structure. It said very little about the crucial component of legitimacy. An organization that lacks clear support of law in a country, lacks a vote of a democratic body politic, lacks a theoretical following of professionals and lacks a popular trust is vulnerable. It is unclear whether political strategies and machinations will sustain it for long. What this Article discusses is another form of sustenance that does not depend on legitimacy but on raw containment of power. Such containment may not be long-term because the actions of the participants are based on self-interest rather than self-governing principles. Its power does not rest on the rule of consensus except the consensus to rule. Whether this base will be sufficient for longevity remains to be seen. On the other hand, if ICANN becomes a platform for negotiations among the interested parties, and in time facilitates the development of acceptable rules and consensus, it will have become a most impressive and unique success.

In a very insightful book, *Ruling the Waves*, Debora L. Spar suggests that significant innovations pass through four stages. n106 They first introduce chaos. n107 Next, from the chaos there emerge rules and some patterns of behavior. n108 Eventually, these patterns form institutions. n109 Finally, and surprisingly, the institutions begin to look and behave as familiar institutions serving the same purposes through and with the aid of the new technology. n110 ICANN may be a very good test case for this prediction. The naming and numbering system has passed through a chaotic stage, emerging as ICANN with rules that are resisted in part, and evolving into an institution. The last stage of "globalization" and the Internet naming system may be grounded in the states or federations of states representing the political systems. Accountability, community values and public interest will return to their rightful position. Business and technical interests will find their voice, but it will not be the dominant voice. We may thus return to the basic form

of civic organization, adding to it the Internet service with sufficient links to the rest of the world. Then we could say that there is nothing new under the sun.

FOOTNOTES:

n1 ICANN's power over the Internet service providers ("ISPs") is minimal, and depends on their consensus of using a single root. Its power over the registries of most country code top-level domain names is limited, but it can exert more pressure on registries of generic top-level domain names. See *infra* Part II.A.1-2.

n2 ICANN plays a lesser role with respect to ISPs. Large ISPs can decide whether to point at the ICANN root. They have no contractual obligation to follow ICANN's policies, or otherwise interact with ICANN except in connection with the allocation of intellectual property blocks.

n3 Some international organizations, such as the International Olympic Commission and the Diamond Exchange, have arisen not by the support of governments or laws, but through the initiative of participants. Similar initiatives have given rise to national organizations, such as stock exchanges, trade organizations and professional associations. However, they differ from ICANN in a number of important aspects. They were organized directly by the interested parties; their purpose of organization was usually quite specific (such as the Olympic games) or for the purpose of regulating their members, and most national organizations are regulated by governments, who serve as backup regulators.

n4 See Debora L. Spar, *Ruling the Waves* 11-22 (2001).

n5 I do not analogize ICANN to the United Nations or its organizations, first because UN membership is usually limited to political units, while ICANN was explicitly designed to exclude the control, though not the influence, of such units. In addition, the UN's decisions can be backed by force, while it is doubtful whether ICANN's will ever have such a backing. See Nancy C.M. Hartsock, *Money, Sex, and Power* 55 (1983) (dealing with economic markets, noting the disparities among the actors and arguing that the market model legitimizes domination by the strong actors over the weaker actors). ICANN can be analogized to the NYSE. Both institutions act as a focal point and as a synthesizer among the disparate parts that constitute the infrastructure of a system. Both pass rules affecting the infrastructure of the markets. ICANN deals with the domain name registries and the registrars, and to some extent influences the ISPs. The NYSE deals with the underwriters, brokers and dealers. Both Internet actors and securities market actors operate independently, some for profit and some not for profit. Both the NYSE and ICANN combine management and lawmaking. Both have a board of directors, officers and employees who carry out institutional functions. Both are in the public eye, for all to see and judge. Like the New York brokers who gathered on the curb in the late eighteenth century, ICANN's creators started by interacting and searching for a network communication unlimited by subject matter and purposes.

n6 ICANN is a not-for-profit corporation incorporated under the laws of California. However, the regulatory scope of both laws and enforcers of laws is very limited. See ICANN, *Articles of Incorporation* (1998), available at <http://www.icann.org/general/articles.htm> [hereinafter Arts. of Incorporation].

n7 See ICANN, *President's Report: ICANN The Case for Reform* (2002), at <http://www.icann.org/general/lynn-reform-proposal-24feb02.htm> [hereinafter *President's Report*].

n8 See A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 *Duke L.J.* 17, 181-82 (2000) [hereinafter *Wrong Turn*].

n9 See William J. Baumol et al., *Contestable Markets and the Theory of Industry Structure* 5 (1982). The authors state:

We define a perfectly contestable market as one that is accessible to potential entrants and has the following two properties: First, the potential entrants can, without restriction, serve the same market demands and use the same productive techniques as those available to the incumbent firms. Thus, there are no entry barriers in the sense of the term used by Stigler. Second, the potential entrants evaluate the profitability of entry at the incumbent firms' pre-entry prices. That is, although the potential entrants recognize that an expansion of industry outputs leads to lower prices -- in accord with the market demand curves -- the entrants nevertheless assume that if they undercut incumbents' prices they can sell as much of the corresponding good as the quantity demanded by the market at their own prices.

Id. "Stigler defines an entry barrier to be present when the potential entrants face costs greater than those incurred [by the incumbent]." Id.

n10 For example, if one airline provides an optimal service between two towns (e.g., twice a week), and charges a price that allows it minimal profits, no competing airline will choose the same route. Another example is traditional securities underwriting, which involves high risks and requires very high investment and a distribution system. Smaller broker-dealers did not enter this market because they could not compete with the very large underwriters on price and reliable performance. Among the underwriters there exists an apex structure. In 1983, the structure was predicted to continue, and it seems in 2001 that it has. See Samuel L. Hayes III et al., *Competition in the Investment Banking Industry* 72-73, 76 (1983). The authors note research which suggests that "investment banking has long tended to assume a pyramidal competitive structure, with a few preeminent firms providing leadership in both financing and collateral services" and a tendency towards increased concentration. *Id.* at 78. Nonetheless, the authors argue that this structure "masks a competitive structure" because the markets are segmented. Id. "Certain types of clients and industries tend to gravitate towards [certain types of investment bankers]." *Id.* at 79.

n11 See Baumol, *supra* note 9, at 7 (stating the airline industry as an example).

n12 For example, an airline can exit a route with little cost by redirecting its planes to another route.

n13 Baumol, *supra* note 9, at 13.

n14 The theory of contestable markets has led to the deregulation of the airlines, among others. Deregulation, however, demonstrated the flaws in the theory's predictions. The correct monopolistic or competitive price absent actual competition is controversial. Entry barriers defined as "sunken costs" are difficult to determine. It was discovered that exit involves transaction costs. Further, there is a price lag that provides insufficient after-entry profits for the entering competitors during the "hit-and-run" period. All these issues require correction, but judicial or government correction increases costs, and small corrections may result in far larger deviations. Thus, application of the theory is far from perfect. See William B. Tye, *The Theory of Contestable Markets* (1990) (listing a number of flaws in the theory).

n15 See President's Report, *supra* note 7.

n16 Id.

n17 Governments were excluded from the board under the current structure. They did, however, participate as an advisory committee. The proposed restructure would include government representatives as directors.

n18 Thus, competitors will not use violence to compete (plant bombs at each other's shops) because the marketplace becomes too dangerous to visit and consumers will avoid all shops.

n19 See Tamar Frankel, *The Legal Infrastructure of Markets: The Role of Contract and Property Law*, 73 *B.U. L. Rev.* 389 (1993).

n20 See, e.g., Milton Mueller, *Technology and Institutional Innovation: Internet Domain Names*, 5 *Int'l J. Comm. L. & Pol'y* 1 (2000), available at LEXIS, Lawrev Library, Allrev File.

n21 See Internet Architecture Board, *Technical Comment on the Unique DNS Root* (1999), at <http://www.icann.org/correspondence/iab-tech-comment27sept99.htm> (stating that information emphasizing the current one root should remain intact to avoid confusion within the Internet community); James Middleton, *Icann Tackles "Alternative" Domain Names*, Vnunet.com (June 1, 2001), at <http://www.vnunet.com/News/1122310> (The author notes "rogue domains" and that "ICANN plans to set up an oversight panel to take a firm stance against the alternative movement, claiming that there are 'solid technical grounds for a single authoritative root.'"). The report describes the arguments and explanations for the emergence of these rogue alternative roots. See InterNIC, *The Domain Name System: A Non-Technical Explanation -- Why Universal Resolvability Is Important*, at <http://www.internic.net/faqs/authoritative-dns.html> (last visited Apr. 21, 2002).

n22 Jon Postel, *Domain Name System Structure and Delegation 1* (1994), at <ftp://ftp.isi.edu/in-notes/rfc1591.txt> (describing the domain name system). On the arguments on whether new gTLDs should be added, see ICANN, *Report (Part One) of Working Group C (New gTLDs) Presented to Names Council* (2000), at <http://www.icann.org/dns/wgcreport-21mar00.htm>; ICANN, *Supplemental Report to Names Council Concerning Working Group C* (2000), at <http://www.icann.org/dns/wgc-supp-report-17apr00.htm>; ICANN, *Consideration of Introducing New Generic Top-Level Domains* (2000), at <http://www.icann.org/dns/gtld-topic20apr00.htm>.

n23 To be sure, there are networks, and very large networks, that have different names, numbers and protocols. But if they are to interconnect with the global network, they must fit within the naming, numbering and protocols of the global Internet.

n24 In addition, there are services that do not actually transfer the messages but facilitate the search for particular sites on the Internet, such as America Online.

n25 Domain Name Services Organization, *Root Level Registry Rules, The Manner of Adding New gTLDs to the Internet* (1999), at <http://www.dns.net/mhsc-tld.htm> ("The function of the root registry is to register and advertise TLDs.").

n26 See Kieren McCarthy, *The Insider's Guide to the ICANN Meeting*, Register (Sept. 21, 2001), at <http://theregister.co.uk/content/6/21533.html> (noting that "some within ICANN" have supported multiple roots).

n27 See Tamar Frankel, *The Common Law and Cyberspace* (2001) (unpublished manuscript, on file with Journal).

n28 Because short names help memory, they are in short supply. Although we view the Internet as a source of new and more information, often the details are lost on Internet communications. For example, we can receive information quickly from all over the globe. But information about the senders and receivers is more limited than in face-to-face or even telephone interaction. As one dog in front of the computer says to another in a cartoon in the *New Yorker*: "On the Internet, nobody knows you're a dog." Peter Steiner, *New Yorker*, July 5, 1993, at 61, 61.

n29 See ICANN Announces Decision on .com/.net/.org Domains, *Computer & Internet Law.*, June 2001, at 31 (describing the revised agreement between ICANN and the registry of ".com," ".org" and ".net," that VeriSign had acquired the registry and that Network Solutions, Inc. has been split, thus facilitating competition on the registry level); Sandra Dillich, *Network Solutions Loses .com, .net and .org*, *Computer Dealer News*, Feb. 25, 2000, at 42 (describing the negotiations that led to the agreement, and the history and summary of the agreement).

n30 See ICANN Watch, *ICANN for Beginners*, at <http://www.icannwatch.org/icann4beginners.php> (last visited Apr. 21, 2002); Improvement of Technical Management of Internet Names and Addresses, *63 Fed. Reg.* 8826 (Feb. 20, 1998) (to be codified at 15 C.F.R. ch. 13) (proposing a rule to improve the management of the Internet Domain Name System, and describing the infrastructure of the Internet). This rule was not passed. Instead, the DOC issued a Statement of Policy in the form of a White Paper, which stated the main objectives contained in the proposed rule. See *Management of Internet Names and Addresses*, *63 Fed. Reg.* 31,741 (June 10, 1998).

n31 See Dillich, *supra* note 29 (noting that registry services "became a huge revenue maker"). As to ISPs, aside from contracting with Regional Internet Registries for some policymaking intellectual property address block allocation, which involves little policy making, there are no qualifications or other regulation of ISPs.

n32 See Saroja Ginshankar, *Internet Domain Name Registry Up for Bids*, *InternetWeek*, Feb. 15, 1999, LEXIS, News Library, News Group File. The monitoring and evaluation is to be determined by a committee of third parties. See ICANN, *Preliminary Report, Meeting of the ICANN Board in Stockholm* (2001), at <http://www.icann.org/minutes/prelimreport-04jun01.htm> ("Whereas in resolution 01.60, the ICANN Board directed 'the President to prepare and present to the Board . . . a proposal to form a committee to recommend processes for monitoring the implementation of the new TLDs and evaluating the new TLD program, including any ongoing adjustments of agreements with operators or sponsors of new TLDs.'").

n33 ICANN, *Domain Name Supporting Organization (DNSO)*, at <http://www.icann.org/dns0/dns0.htm> (last visited Apr. 20, 2002). The DNSO structure does not contain a working group which deals with issues concerning the ccTLDs. For a chart of the ICANN organization, see ICANN Watch, *The ICANN-GAC Organization*, at <http://www.icannwatch.org/archive/orgchart.gif> (last visited Apr. 21, 2002) (ICANN organization chart by Tony Rutkowski).

n34 See *infra* Part III.B.4. describing the disaffection of the ccTLD registries.

n35 See President's Report, *supra* note 7.

n36 In 1998, prior to ICANN's creation, the author chaired meetings entitled the International Forum on the White Paper. These meetings were held in Reston, Virginia, on July 1-2, 1998; Geneva, Switzerland, on July 24-25, 1998; Singapore, on August 11-13, 1998; and Buenos Aires, Argentina, on August 2021, 1998. The author spoke to the group in Buenos Aires but did not chair that meeting. The participants represented many different stakeholders. The purpose of the meetings was to reach a rough consensus regarding the structure, governance and participation of the company that was to take over the management of the naming and numbering system of the Internet. The consensus achieved in these meetings contributed to the establishment of ICANN. See Domain Name Handbook, International Forum on the White Paper (IFWP), at <http://www.domainhandbook.com/ifwp.html> (last visited Apr. 20, 2002).

n37 *Id.*

n38 *Id.*

n39 *Id.*

n40 *Id.*

n41 *Id.*

n42 Under federal law, the executive branch may establish and control a private sector corporation only under a statute. See Government Corporation Control Act of 1945, *31 U.S.C. § 9102* (1994) [hereinafter GCCA]. See also A. Michael Froomkin, *Reinventing the Government Corporation*, *1995 U. Ill. L. Rev.* 543 (1995) [hereinafter *Reinventing Government*]. Arguably, because the executive neither "established" nor "acquired" ICANN, the statute did not apply to it. ICANN has been operating on the basis of an agreement with the DOC. The DOC asserts its authority to enter into such agreements, but questions persist.

n43 Congress was merely apprised of the emergence of ICANN. The ccTLD registries are currently paying ICANN a fee for services that they used to receive free from the U.S. government. It was suggested that they are willing to do so in order to "pry the Internet naming system from the U.S. government." *Revolt Threatens ICANN's Budget*, *USA Today* (Nov. 20, 2000), at <http://www.usatoday.com/life/cyber/tech/cti821.htm>.

n44 Under federal law, the executive branch may establish and control a private sector corporation only under a statute. See GCCA, *31 U.S.C. § 9102*. See also *Wrong Turn*, *supra* note 8, at 22-23.

n45 See *Reinventing Government*, *supra* note 42, at 547.

n46 Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers (n.d.), available at <http://www.icann.org/general/icann-mou-25nov98.htm> (last updated Dec. 31, 1999).

n47 ICANN did not meet the requirements of the DOC and was therefore not fully vested with the authority over the root. However, the DOC has averred its intention to make the transfer, and retreated from a clear intent. The question of ICANN's legal status was discussed in a General Accounting Office report of 2000. See Office of the Gen. Counsel, U.S. Gen. Accounting Office, Dep't of Commerce: Relationship with the Internet Corporation for Assigned Names and Numbers (2000), available at <http://www.gao.gov/new.items/0g00033r.pdf> [hereinafter GAO Report].

n48 This power base did not include recognized consumer representatives, except to the extent that national governments may be deemed to represent the interests of their citizens and residents.

n49 See ICANN, Bylaws (2002), available at <http://www.icann.org/general/bylaws.htm>; Arts. of Incorporation, *supra* note 6.

n50 Maureen Sirhal, Net Governance: ICANN Makes Progress on Sticky Issue of Domains, Nat'l J. Tech. Daily, Feb. 6, 2001, LEXIS, News Library, News Group File [hereinafter Sticky Issues]. Such agreements have not yet materialized with most registries, let alone been standardized. See Maureen Sirhal, Net Governance: European Domains Want ICANN's Attention, Nat'l J. Tech. Daily, Dec. 7, 2000, LEXIS, News Library, News Group File [hereinafter European Domains Want ICANN's Attention].

n51 See Mark Sableman, ICANN Faces Major Challenge with Country Codes, Nat'l L.J., Dec. 18, 2000, at C10.

n52 In the proposed restructure of ICANN, the review board is eliminated. Conflict on whether a policy commands consensus is then likely to be determined among the parties, a court or other mechanism which the parties will establish at the time of dispute.

n53 Tye, *supra* note 14, at 121 (suggesting that contracts can be viewed as an extension of the Coase theorem).

n54 See David Johnson & David Post, And How Shall the Net Be Governed?: A Meditation on the Relative Virtues of Decentralized, Emergent Law, in *Coordinating the Internet* 62 (Brian Kahin & James H. Keller eds., 1997).

n55 The doubts about the legality of ICANN persisted, and Congress requested the General Accounting Office to inquire how ICANN came into existence. See GAO Report, *supra* note 47, at 1.

n56 See Wrong Turn, *supra* note 8, at 22-23.

n57 Consolidated Appropriations Act of 2000, Pub. L. No. 106-113, § § 3001-3010, 113 Stat. 1501, 1501A-521 to -552 (1999) (codified in scattered sections of 15, 16 & 28 U.S.C.).

n58 See Sableman, *supra* note 51.

n59 See *Virtual Countries, Inc. v. Republic of South Africa*, 148 F. Supp. 2d 256 (S.D.N.Y. 2001).

n60 *Id.* at 259.

n61 *Id.*

n62 *Id.* at 268.

n63 See Bill on Internet Due Soon, Africa News, Oct. 4, 2001, LEXIS, News Library, News Group File; Cyber Cops to Ensure Safe Surfing, Africa News, Mar. 22, 2002, LEXIS, News Library, News Group File (noting that the bill was tabled in March 2002).

n64 The argument of whether a country can assert exclusive right to its name was raised in a United States court. See *Virtual Countries*, 148 F. Supp. 2d at 256. The district court did not assert jurisdiction and suggested that the parties resort to the international arbitration system provided for disputes concerning domain names. *Id.* at 268.

n65 See John C. Klensin, Internet Engineering Task Force, Reflections on the DNS, RFC 1591, and Categories of Domains (2000), at <http://public.research.mimesweeper.com/standards/IETF/Draft/draft-klensin-1591-reflections-02.txt> (describing ccTLDs and gTLDs and the controversies involving their delegation).

n66 To avoid making a political decision, IANA followed a list by ISO 3166 Maintenance Agency, and agreed to the re-delegation of Palestine when Palestine was accorded the status of "Occupied Palestine Territory." IANA, IANA Report on Request for Delegation of the .ps Top Level Domain (2000), at <http://www.icann.org/general/ps-report-22mar00.htm> (containing IANA's report and analysis which led to the recommendation to approve the re-delegation). See also International Organization for Standardization, ISO 3166 Maintenance Agency (ISO 3166/MA), at <http://www.din.de/gremien/nas/nabd/iso3166ma> (last visited Apr. 20, 2002) (describing the complete list of country names and ISO 3166-1 Alpha-2 code elements -- the ISO country code used on the Internet).

n67 See Postel, *supra* note 22, at 1. Part of this description has changed with the years. The principles, however, remained the same. See ICANN, ICP-1: Internet Domain Name System Structure and Delegation (1999), at <http://www.icann.org/icp/icp-1.htm> [hereinafter ICP-1] (describing ICANN's administration practices, and noting that IANA has remained the overall authority for day-to-day administration of the naming system, intellectual property addresses, autonomous system numbers and TLDs, and other aspects of the system). The document includes the source where the "procedures to be followed in requesting TLD delegations or changes" can be found. *Id.* The document contains the qualification requirements for TLD managers. *Id.*

n68 See Nat'l Telecomms. and Info. Admin., The Digital Opportunity Trust: The DOT in .US, at <http://www.ntia.doc.gov/ntiahome/domainname/ usrfc2/comments.html> (last visited Apr. 21, 2002) (proposing an elaborate plan to manage ".us" for the benefit of all U.S. citizens); Commerce Department Poised to Accept Bids for .us, Nat'l J. Tech. Daily, June 1, 2001, LEXIS, News Library, News Group File. See also ICANN Watch, More on the .us Solicitation, at <http://www.icannwatch.org/article.php?sid=208> (June 14, 2001).

n69 See Kate Mackenzie, Domains Taken from Elz, Australian, Feb. 5, 2002, at 29; Multimedia Seeks .au Registry, Australian Fin. Rev., Dec. 3, 2001, at 42 (Professor Elz assigned the ".au" rights to a "commercial spin-off" of Melbourne University - Melbourne IT) [hereinafter Domains Taken from Elz].

n70 It seems that Professor Elz controlled more than the database containing the current domain name holders. See Kirsty Needham, Australian Government to Take Over Domain Names, Sydney Morning Herald, Jan. 22, 2001, at 35 (noting that the government agency bought a database of all domain names registered in Australia).

n71 Kirsty Needham, Internet's Reclusive Pioneer Hangs on to Keys to Web, Sydney Morning Herald, June 13, 2001, at 25, available at <http://old.smh.com.au/news/0106/13/biztech/biztech3.html> [hereinafter Internet's Reclusive Pioneer].

n72 National Office for the Information Economy, Reforming .au Domain Name Administration, at <http://www.noie.gov.au/projects/information%5Feconomy/domains%5Fau/index.htm> (last visited Apr. 21, 2002) (The website notes that government recognition of "effective administration of the .au domain space" is "important to the development of e-commerce in Australia.").

n73 See ICANN Watch, AUDA Seeks ICANN's Help to Force .au Redefinition, at <http://www.icannwatch.org/article.php?sid=197> (June 6, 2001) [hereinafter ICANN's Help] (the Australian authority suggests that Professor Elz's administration had been slow, but did not allege any wrongdoing).

n74 James Riley, New Board Set Up for Domain Rule, Australian, Apr. 27, 1999, at 49, 49.

n75 See Push for Name Controls, Age (Melbourne), Mar. 7, 2000, at 1 ("The policy and administration of the .au domain would affect the sub-domains.").

n76 Dot.au Domain Name Registration Gets Nasty, Bus. Rev. Weekly (Australia), May 19, 2000, at 44 (The article states that it was "unlikely Elz would relinquish his authority until auDA had secured the confidence of the industry and was endorsed by the National Office for the Information Economy.").

n77 For a precedent by which IANA redelegated a ccTLD of an island of forty-nine residents, with the support of all but two of its adult inhabitants, see Jeri Clausing, Pacific Islands Seek Control of Internet Designations, N.Y. Times, Feb. 14, 2000, at C1. See also Sableman, supra note 51.

n78 Internet's Reclusive Pioneer, supra note 71, at 25 ("[Professor Elz] refused to relinquish his historic guardianship, flatly ignoring requests from the Federal Government to pass control of the country's Internet addressing system to a new regulatory body. . . . The clash is one of the last stand-offs between the old school of the Internet and the commercial interests that now dominate it.").

n79 Id.

n80 Kate Mackenzie, Tough Call on Names for ICANN, Australian, June 26, 2001, at 33, 33.

n81 See Kevin Murphy, ICANN Hands .au Domain to Aussie Non-Profit, Computer Wire, Sept. 5, 2001, LEXIS, News Library, News Group File.

n82 See Domains Taken from Elz, *supra* note 69, at 29.

n83 ICP-1, *supra* note 67. On transfer and disputes over delegation of TLDs, IANA should receive communications from both parties. It takes no action until the parties agree, noting that "it is far better when the parties can reach an agreement" because of the time it would otherwise take and that "it is appropriate for interested parties to have a voice in the selection of the designated manager." *Id.*

n84 See Kate Mackenzie, Domain Standoff Tests ICANN, Australian IT (June 21, 2001) (on file with Journal) [hereinafter Domain Standoff].

n85 See *id.* (suggesting that sovereign countries should have control over their names and over the registries, but if the names are used as gTLDs, with the consent of the governments, the names should be treated as such).

n86 See Internet's Reclusive Pioneer, *supra* note 71 (The representative of the government "has written to the Internet's governing body, the International Corporation for Assigned Names and Numbers, requesting his organisation be recognised as the peak Internet body in Australia, not Mr Elz."); Domain Standoff, *supra* note 84 (noting that such an application is "virtually unprecedented" in that the delegate is refusing the redelegation and that the other application for redelegation involved Pitcairn Island).

n87 See ICANN's Help, *supra* note 73 (administrators of ccTLDs who have not been "designated managers" in the database of IANA have sought ICANN's redelegation but were denied the request, except for Canada). What would prevent the government of the Ukraine from taking such steps if the registry were stationed in the Ukraine? See Julia Barton, Ukraine's Domain in Dot-Dispute, Wired News (June 22, 2001), at <http://www.wired.com/news/politics/0,1283,44012,00.html>.

n88 Early in March 2002, the South African government proposed legislation, the Electronic Communications and Transactions Bill, which would nationalize the administration of its ccTLD ".za." If enacted, the law would prohibit any organization from continuing its operation as a ".za" administrator. See Bill on Internet Due Soon, *supra* note 63; Cyber Cops to Ensure Safe Surfing, *supra* note 63 (noting that the bill was tabled in March 2002). The government of Ireland has also taken steps to assert its jurisdiction over the administration of its ccTLD. See Denis Kelleher, Cybersquatters' Rights Go West Under New Laws, Irish Times, May 15, 2000, at 8 (noting that legislation would allow the Minister of Public Enterprise to control rules governing domain name registration in Ireland); Karlin Lillington, Digital Gesture by President Makes History, Irish Times, July 11, 2000, at 16 (noting passage of legislation).

n89 See, e.g., IANA, IANA Report on Request for Redelegation of the .pn Top-Level Domain (2000), available at <http://www.icann.org/general/pn-report-11feb00.htm> (Pitcairn Island); ICANN Watch, VeriSign Buzzes with the .bz Biz(ness), at <http://www.icannwatch.org/article.php?sid=185> (May 31, 2001); .NU, .NU Domain /IUS-N Mission, at <http://www.nunames.nu/about/about.cfm> (last visited Apr. 20, 2002); The .tv Corporation, About Us, at http://www.tv/en-def-e9763cedc23f/en/about/about_companyoverview.shtml?Hhype=content6/20/01 (last visited Apr. 20, 2002).

n90 For a draft of a contract between ICANN and ccTLD registries, see ICANN, CENTR Draft Contract for Services, at <http://www.icann.org/cctlds/centr-7th-draft-contract20sep00.htm> (last visited Apr. 20, 2002). For a draft of a proposed unsponsored TLD agreement with ICANN, dated September 21, 2001, see ICANN, Proposed Unsponsored TLD Agreement, at <http://www.icann.org/tlds/agreements/unsponsored/registry-agmt26apr01.htm> (Apr. 26, 2001). For a discussion draft of a ccTLD Manager-ICANN "Status Quo" Agreement, see ICANN, Discussion Draft of ccTLD Manager-ICANN "Status-Quo" Agreement, at <http://www.icann.org/yokohama/draft-cctld-statusquo-agreement-05jul00.htm> (July 5, 2000); William New, Net Governance: ICANN Nears Deal on Country-Specific Domains, Nat'l J. Tech. Daily, Mar. 12, 2001, LEXIS, News Library, News Group File. See also Revolt Threatens ICANN's Budget, supra note 43.

n91 See ICANN, Discussion Draft of Letter to Governments Regarding ccTLD Managers, at <http://www.icann.org/cctlds/draft-letter-to-govts-12nov00.htm> (Nov. 12, 2000); Mark Ward, Name Row Threatens the Net, BBC News (Nov. 28, 2000), at <http://news.bbc.co.uk/hi/english/sci/tech/newsid1043000/1043509.stm>.

n92 See Sticky Issues, supra note 50; Sableman, supra note 51.

n93 Juliana Gruenwald, Domain Group Revolts Against ICANN, at <http://www.zdnet.com/zdnn/stories/news/0,4586,2767690.html> (May 31, 2001); Andrew Orłowski, Country Domain Chiefs Prefer Jaw-Jaw to War-War, Register (June 14, 2001), at <http://www.theregister.co.uk/content/6/19712.html>.

n94 ICANN's relationship to the registry of ".us" is unclear, as is the fate of the ccTLD. It is likely, however, that whoever wins the bid on this ccTLD will have to conform to ICANN's policies. See ICANN Watch, More on the .us Solicitation, at <http://www.icannwatch.org/article.php?sid=208> (last visited Apr. 21, 2002). But see Brian Kahin, Making Policy by Solicitation: The Outsourcing of .us, at <http://icannwatch.org/essays/kahin.htm> (July 16, 2001) (suggesting that the winning contractor will determine policies and criticizing the current proposal to auction ".us"). While prior to 1999, IANA determined policy and NSI acted as a registry and performed the registration, after 1999, the policy function shifted to ICANN. NSI continued as a registry and registration became competitive, supervised by ICANN. It seems that under this plan, if ICANN is not the supervisor of the contract operator, it would be losing some of its hegemony.

n95 See ICANN's Help, supra note 73.

n96 See Laura Rohde, Defections at ICANN's Support Organization, Industry Standard.com, June 4, 2001, LEXIS, News Library, News Group File [hereinafter Defections]; European Domains Want ICANN's Attention, supra note 50. For the language of the registries' resolution, see WorldWide Alliance of Top Level Domain Names, Executive Summary of ccTLD Stockholm Meeting on 31 May and 1 June 2001, at http://www.wwtld.org/meetings/cctld/Stockholm2001/Executives_summary.01June2001.html (last visited Apr. 21, 2002). Arguably, not all registries were of the same mind. Of the over 250 registries, only thirty-one voted to make the demand and take the action. However, the others did not object nor abstain, but simply did not take part in the process. See Ward, supra note 91.

n97 Defections, supra note 96.

n98 Id. See also Mark Ward, Net Groups in World Wide Wrangle, BBC News (July 4, 2000), at <http://news.bbc.co.uk/1/hi/english/sci/tech/newsid817000/817657.stm> (stating that the registries believe that the costs levied on them stem from legal costs of ICANN's dealing with NSI, and refuse to pay for costs over which they had no control).

n99 Letter from John F. Sopko, Acting Assistant Secretary for Communications and Information, U.S. Department of Commerce, to William H. Bode, Partner, Bode & Beckman, LLP (June 25, 2001), quoted in ICANN Watch, Commerce Dept: We Don't Do TLDs, at <http://www.icannwatch.org/article.php?sid=237&mode=nested&order=0> (July 8, 2001).

n100 See President's Report, *supra* note 7.

n101 ICANN's power and the power of money are similar. Both are a store of value through which other objectives can be achieved. In fact, these are two different aspects of freedom and coercion. It is important to note that the purpose for which power is held is not the topic here. Power, like money, can be obtained voluntarily by consent from others, and usually in an exchange. Power, like money, can also be obtained from others by violence and extortion. The use of money, however, is generally more limited than the use of power. Money can be used coercively if it is necessary to obtain values (assets) which other persons want. The person who has bread and would not part with it except through money has power over the hungry person. Yet this power is based on the possession of the bread, not the money.

n102 ICANN's power can be analogized to the power of other managers and the market for chief executive officers. They compete for the position of managers by obtaining the consent (or at least the passive non-intervention) of shareholders, nominators, existing top management, unions and perhaps others that wield power in the corporation. Or they may only receive the support of the nominators. They do, however, have competitors. Their market is small, though not a monopoly. But it may be sufficiently small to resemble a contestable market.

n103 See ICANN "A Failure" Says ICANN, Newswire (VNU), Mar. 19, 2002, LEXIS, News Library, News Group File.

n104 While outsiders who wish to get into the ISP and registry business and increase the number of domain names may try to form such a coalition, they will have to overcome the power of the governments and those who would oppose the extension, as well as those who would be concerned about the stability of the Internet. Thus, it may well be that those who wish to enter the field with two roots will have higher costs than those who would wish to replace ICANN with one root only.

n105 ICANN may refrain from exercising its power, for example, to establish additional domain names opening the doors to new businesses. Potential competitors may form coalitions to overcome the inaction, and ICANN may take steps to stymie their efforts.

n106 See Spar, *supra* note 4, at 11-22.

n107 See *id.* at 11-12.

n108 See *id.* at 12-15.

n109 See id. at 15-18.

n110 See id. at 18-22.