

GOVERNING BY NEGOTIATION: THE INTERNET NAMING SYSTEM

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I. INTRODUCTION

This Article is about the governance of the Internet naming system. The subject is fascinating, not simply because the naming system is an important system affecting the Internet, although it is; and not because the Internet is important, although it is. The subject is fascinating because it offers a rare opportunity to examine and learn from the evolution of an incoherent governance structure. The naming system is special in that it is the product of a new technology; it reflects the changes and pressures brought by the new technology, and involves the interests of government and private entities, domestic and international. And while this combination is complex and special, the players are known and their motivations are quite familiar: a quest for power and money, a professional pride and national patriotism, and deep commitments to various ideologies. Can we predict or even speculate with some certainty how this governance system will develop? Regardless of whether we can, what lessons can we learn from what we see? How should we approach the questions? How can we generalize our findings?

The governance of the naming system involves the actors in the system's infrastructure – the registries, registrars, governments, the Internet Service Providers, and the Internet Corporation for Assigned Names and Numbers (“ICANN”). The naming system is designed as a pyramid, with the one source root at the top.¹ This pyramid is operated by a number of entities.

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¹ Under this root, in a secondary line, are ccTLDs, such as “.uk” or “.au,” and under them in the hierarchy are Top Level Domain names, such as “.com,” “.org,” “.gov” and “.edu.” Under these Top Level domain names, such as “.edu,” are names of educational organizations, such as Boston University, and under the names of the organizations could be additional layers, such as “.law,” and at the bottom of the pyramid are the names of individuals, such as “Tamar Frankel.”

The naming system presents many questions. Does ICANN's policy-making power matter; and if so, to whom? I do not deal with these issues, but I address them briefly because they constitute part of the context of my inquiry. ICANN's policy-making is an important matter. It coordinates some activities among the actors in the naming system infrastructure. It offers, mostly through others, some services for the actors in the infrastructure. It has authority to create new Top Level Domain Names in the United States under ".us," or otherwise. It has authority to create new country code Top Level Domain Names ("ccTLDs"), and to approve (or disapprove) the "delegation" of the operating power of top level domain names, including ccTLDs. It is involved in, and can affect, matters concerning conflicts between trademark holders and domain name holders. It is involved in determining whether a particular entity is an organization entitled to use ".org," or an educational institution entitled to use ".edu." ICANN may have the power to determine the use of domain names in languages other than English. And the list can be extended to the qualifications and the duties of registrars and registries that manage top-level domain names at different levels.²

ICANN's powers involve money. Every power that ICANN may exercise and every request that must be directed to it, can, and usually does, carry a price tag. ICANN can set charges for whatever services, permissions, consents, or requests for consents it entertains. To the extent that ICANN can define the scope of its powers and the price tags that it attaches to the exercise of its powers, it may indeed build a significant empire that involves the infrastructure of the Internet naming system and affects the operations of the Internet.

TO WHAT EXTENT DOES ICANN'S EMPIRE CONCERN THE USERS?

Indirectly, ICANN affects users in two ways. First, individuals may be affected by the amounts they have to pay to the registrars. To the extent that ICANN is instrumental in encouraging competition among the registrars and registries, it can influence the price of domain names. Moreover, to the extent that ICANN has power over the transfer of domain names from one registry or registrar to

² See Kim G. Von Arx & Gregory R. Hagen, *Sovereign Domains, A Declaration of Independence of ccTLDs from Foreign Control*, 9 RICH. J. L. & TECH. 4 (2002) (providing a short, coherent description).

another, it can induce competition among them, and consequently, impact the users. In addition, ICANN's decisions and the processes it imposes to protect trademark holders can greatly affect small businesses. In particular, if the protection offered by ICANN's regime encompasses pejorative use of names by trademark holders, there may be a detrimental impact on small businesses which were tardy in registering names. In their defense, entrenched trademark holders will likely assert that such businesses conceded the use of particular names by failing to register.

HOW SERIOUS WILL THESE ISSUES BE IN THE FUTURE?
HOW IMPORTANT WILL THE NAMING SYSTEM BECOME?

To the extent that search engines, such as Google, relieve users from resorting to domain names in searching for specific sites, the pressure on short and easily remembered domain names may be eased. Furthermore, work is being done on a new system of naming that may be more suitable for the current and future states of the Internet, especially if it can be combined with telephone and fax numbers for a comprehensive digital information source.

Yet, some of the issues discussed above cannot be resolved by a "telephone book" type of search, such as Google. There are pressures to support the continuation of the system. For instance, the ccTLDs are being considered as alternatives to geographical addresses for other communication systems. If this development takes place, the importance of ccTLDs will grow, and they are likely to carry with them the current naming system. Moreover, the longer the system remains in place, the harder it might be to change it, for people are creatures of habit and the current system acquires important stakeholders that may not easily give up their benefits. Thus, the current system is unlikely to disappear soon.

The focus of this article is not on ICANN or its ambitions or on any problems of accountability that it may pose.³ Neither is the focus on the technical solutions to the existing system. This article focuses on an incoherent governance system (including, but not limited to, ICANN), and its future development.

³ See Tamar Frankel, *Report to the Markle Foundation* (2002), available at <http://www.tamarfrankel.com>.

A. *The Governance of the Naming System:
Tracing the Power Structure*

The governance of the naming system consists of a few loosely connected powerful entities. ICANN is a pivotal component because it has some management powers over the system, and because the naming system is designed as a natural monopoly. However, although ICANN has indicated a clear desire for more power and money, it is not necessarily the strongest member of the group as its powers are vested by default.⁴ Its competitors, mostly foreign governments and United Nations institutions, such as the International Telecommunication Union ("ITU"), can offer the same or even better services than ICANN. These competitors refrain from doing so by "negative consensus" – none of the participants agree that any of the others will control the Internet naming and numbering system. Indeed, if the ICANN agenda threatened any of its competitors' vital interests, these competitors would signal that they are ready to take over, or consider taking over, ICANN's functions. While ICANN and its representatives may yearn for more leverage with respect to governance of the system, its potential competitors effectively limit its ambitions.

Accordingly, ICANN is a weak member of the naming system governance structure, except for three facts. First, ICANN derives its power from a contract with the United States Department of Commerce. The United States is not inclined to relinquish its influence on the system any time soon. Second, the actual operation of the root is in the hands of another organization in contract with both the United States Department of Commerce and ICANN. Third, ICANN's competitors have not managed to establish a sufficiently stable coalition for a sturdier power structure.

⁴ See Tamar Frankel, *The Managing Lawmaker in Cyberspace: A Power Model*, 27 BROOK. L. REV. 859 (2002) (examining the puzzle of ICANN as a weak monopoly. Although it controls the Internet naming system and its "root," ICANN is quite weak in its freedom to exercise this power and has a limited ability to raise funds. The article analogizes ICANN's environment to that of a monopolist in a "contestable market" where the monopolist achieves its position because it can profitably offer a price which is lower than the price that other competitors can offer. However, if the competitors are able to enter and exit the market without cost or with very low cost, their ability to do so constrains the monopolist from raising its prices. If the monopolist charges higher prices, its competitors will enter the market, and when competition drives the prices down to an extent that makes it unprofitable for them, the competitors will exit. Hence, in order to enjoy its preferred position, the monopolist will choose not to raise its prices above the prices that its competitors find profitable).

The strongest support for ICANN, however, is the fear of Internet disintegration. That is what feeds cooperation among all the parties.

This glue of cooperation is reminiscent of the first constitutional assembly in the United States. The various States had different objectives and many disagreements. What brought them together was the War of Independence against the British. Together they were stronger. Defection meant a danger to survival of each and all. In the Internet, defection from some, but not all, structural arrangements may mean a danger to connectivity, for each and all, which is also a form of survival. The naming system may belong to this structural arrangement.

However, parties' motivations in changing the status quo differ. ICANN, for example, is interested in signing contracts with, and gaining funding from, the registries of the ccTLDs. Most registrants are far less eager. As one of ICANN's directors noted, "no agreements can be reached unless all parties want to play."⁵

None of the other parties involved has a significant power advantage over the others. Even though the Department of Commerce seems to be in control, it is also bound by legal limitations in exercising power over ICANN. The purpose of this self-limitation becomes clear when one examines the history of ICANN's creation. During the late 1990s, when the Internet emerged as an "information highway" and a tool for commercial expansion, the United States government was hard pressed by a number of governments to relinquish its control over the root and "internationalize" the naming system. The United States, however, was not of the same mind, and some strongly argued for the United States retaining its power, especially since American taxpayers had financed the building and development of the Internet in the first place.

The United States government reacted by offering a binding self-limitation that significantly weakened its control over the root. The United States government limited its own ability to change its position, under the current federal law. The U.S. facilitated (but did not "establish") the creation of a type of corporation that the government could not directly "control." Under federal law, the executive branch may "establish" and "control" a private sector

⁵ ICANN Intrigues - The Jonathan Cohen Interview - Part 2, DEMYS NEWS SERVICE, at http://www.demys.net/news/2002/10/02_oct_22_icann_intrigues.htm (Oct. 22, 2002).

corporation only pursuant to a congressional statute.⁶ Arguably, ICANN is not a government corporation; the executive branch did not establish it, nor does it control it.

Nevertheless, ICANN is strongly bound to the United States. It is a nonprofit corporation organized and governed under California state law, although a very strange type of nonprofit corporation indeed; it still exercises vague and semi-governmental powers. It is subject to the jurisdiction of the United States courts and the California Attorney General. In addition, although the Executive cannot control ICANN as a government corporation, the Executive may, under American law, contract with private sector corporations for the performance of services. The Department of Commerce has entered into such a contract with ICANN and with the actual operator of the root (Verisign). The Executive has discretion to change the operator and manager of the root by contract.⁷ Because the contracting party is the Department of Commerce, Congress has a measure of power to supervise the Department, and its activities, including the contractual arrangements that it has made with ICANN. Congress can also require the General Accounting Office to research and investigate such contract arrangements, and the Office has indeed done so upon request from Congress.⁸ Nonetheless, the U.S. government in fact has the ultimate power over the root. ICANN is "potentially in a position to say no [to requests by other countries] but the United States has its thumb fully on the group and if the United States says someone doesn't get on, then they don't get on."⁹

Initially, the U.S. government expressed an intention to relinquish its ties with ICANN after the first three-year contract with

⁶ See Government Corporation Control Act of 1945, 31 U.S.C. § 9102 (2000).

⁷ Memorandum of Understanding Between the U.S. Department of Commerce and Internet Corporation for Assigned Names and Numbers, at <http://www.ntia.doc.gov/ntiahome/domainname/icann-memorandum.htm> (last visited Aug. 24, 2004) (original agreement); National Telecommunications and Information Administration, U.S. Department of Commerce, Management of Internet Names and Addresses, at <http://www.ntia.doc.gov/ntiahome/domainname/icann.htm> (last visited Sept. 27, 2004) (listing subsequent amendments).

⁸ See 31 U.S.C. § 712 (2000) (granting Comptroller General power to investigate use of public money); 31 U.S.C. § 717 (2000) (granting Comptroller General power to evaluate programs and activities of United States government); 31 U.S.C. § 716(a) (2000) (requiring agencies to make information available to Comptroller General and granting Comptroller General power to inspect agency records). The Comptroller General has the power to delegate its duties to the General Accounting Office. 31 U.S.C. § 711(2) (2000).

⁹ *ICANN Intrigues- The Jonathan Cohen Interview- Part 2*, *supra* note 5.

ICANN had expired. However, when the time arrived, the U.S. government instead renewed the contract and shortened the contract period to one year. In September 2003, the government again renewed the contract, this time for three years.¹⁰ Today the United States has shown no inclination to fully relinquish its control of the root, as tenuous as that control may be. One can speculate about the reasons for this change in policy. Among them may be the fact that ICANN was expected to develop as a stand-alone semi-international government entity accountable to the actors in the infrastructure of the Internet, its servicers and its users. It was expected to develop legitimacy and stability as a governing body. That, however, did not happen. Perhaps as the importance of the naming system has risen, the possible disadvantages of relinquishing control over the system have risen as well. For these reasons, it seems that the United States would like to maintain the status quo, but reduce the tensions that have arisen as a result of its control.

An examination of the naming system's history and the history of other relationships among actors in the Internet infrastructure seems to reflect loose organizations, splinters, and further splinters. It is as if the organizations reflect the Internet's structure. This hybrid of organizations and loose relationships is not used in the business context. ICANN, however, is not a business organization. It is led by business interests but exercises functions that are part governing and part technical "policies," with which businesses are not familiar.

The multi-faceted nature of the issues is also extraordinary. For example, ccTLDs raise issues on various levels. One issue concerns the "ownership" of the names. This issue may relate to the trademark area and to the right of third parties to use the name. Another view of the names relates to the right to insert the names in the root. Only that appearance would allow Internet messages to reach their destinations. A third aspect of the names is the right to manage them, and that issue involves the right of the registries to appear in the root. Without such a right, the registries will not receive Internet messages for transfer.

In the last analysis, however, the existence of a country and the business of the registries of the ccTLDs depend on their ap-

¹⁰ Memorandum of Understanding Between the U.S. Department of Commerce and the Internet Corporation for Assigned Names and Numbers, Amendment 6, at <http://www.icann.org/general/amend6-jpamou-17sep03.htm> (Sept. 17, 2003).

pearance in the root. The party that has the power to decide which name will be inserted and which will be removed masters much power. It need not necessarily be the party that operates the root.¹¹ It is the one that makes the decision. However, even this power is not unlimited. It depends on the consensus of the other Internet infrastructure actors to look to the root as the authoritative address book. It also depends on the absence of any alternative system that can bypass the root and reach the same results. Although there may be some routes through others who are on the root, these roundabout ways are not preferred. Not everyone agrees with this statement. Some suggest the creation of a different root. Arguably, the registries of the ccTLDs can create their own coordinating entity and refrain from resorting to ICANN or the operator of the current main root. But this system does not seem to have attracted the registries.

B. *The Nature of the System's Power Structure*

To the extent that foreign governments wish to make changes in the root or in the identity of the registries that manage their ccTLDs, the governments must resort to ICANN. ICANN's decisions are likely to be influenced by the Department of Commerce's position, which may be influenced by Congress. All actors have constrained powers. Some constraints are self-imposed, like those of the United States Department of Commerce. The government of France commenced an antitrust action against ICANN, but decided to put the action in abeyance, at least for the time being. There is also a self-imposed limitation, but with greater discretion. The powers of all parties, however, are constrained by the potential powers of the other parties. This is not necessarily, however, a balance of power situation like the one found in most Western constitutions. The limitations that each party exercises on the powers of others are negotiable and not institutional. This distinction will be discussed later in more detail.

In sum, ICANN's power hangs on the thin reed of a short-term contract with the Department of Commerce. But the power is strongly supported by the desire of the U.S. government to maintain its hold on this thin reed. The other power holders, although

¹¹ This party need not have the authority to determine the trademark aspects of the names or even other aspects of the system, such as qualifications of the registries and registrars.

unhappy with U.S. dominance, are reluctant to cede control to any other power holder, and none are ready to terminate their connectivity with the Internet. Even China, a country that has a strong political drive to control the substance of the communications of its citizens through the Internet, maintains its existing channels to the Internet.¹²

The governance of the naming system is unique in its vagueness both with respect to the exercise of power and the substance of the policies that regulate the exercise of the power. This type of structure can best be described by the ad hoc limits that each party can impose on the others rather than by the areas reserved to each party by consensus, or by the functions that each party performs, or by rules which the majority of the stakeholders support.

The governance of the Internet naming system is at a crossroads, as it has been since its creation. An analogy to two familiar governance models shows that it fits neither. One model is a power structure prescribed by a general law and equally applicable to all members of defined classes of the governed as well as the governing bodies. The law can be changed only in accordance with a prescribed process that involves not only the lawmakers but also others to whom they are accountable. Although the system is operated in part by ICANN, which seems to be organized under a state corporate statute, the governance of the naming system as a whole does not fit this model. In addition, ICANN's organizational structure is evolving. The identity of the stakeholders is still subject to debate and continuous study. The ability of the recognized stakeholders to nominate governing bodies is not secure. In fact, the idea that ICANN should reflect a democracy, and especially that the democracy should include the users, has all but been abandoned as unworkable. There is too great a danger of capture by unacceptable elements and too great a danger of unacceptable nominees to the board and other governing bodies.

The latest attempt to find a way to democracy without these dangers is the establishment of delegates to nominating committees and the establishment of the board's own Governance Com-

¹² *China Steps Up Internet Control with Video Surveillance in*, CHANNEL NEWS ASIA, at http://www.channelnewsasia.com/stories/afp_asiapacific/view/81320/1.html (Apr. 22, 2004), (stating that although China is trying to reap the benefits of the Internet, it also attempts to control the content of the messages that reach China).

mittee.¹³ All these activities are legal in the sense that they are backed by ICANN's articles of association. The substance, however, commands further experimentation and study. That approach should be commended as truly cautious. Realistically, rather than a matter of utopia, however, the studies tend to lengthen and maintain the status quo.

As a matter of utopia, I would like to see some principles, standards, guidelines, and specified mechanisms to achieve them. These would have the effect of limiting discretion and a test by which to judge discretionary decisions. Since these are missing, I am basing my observations on reality as I see it. In addition, ICANN's articles have become increasingly flexible. Most of its constitutional provisions are in the bylaws and not in the articles of association. Not that it makes much difference in this case, since there are few other bodies that can voice their concerns and enforce their opinions on any changes. Bylaws, however, are determined by the board. Even though they are intended for limited purpose, such as process and organizational matters, these bylaws contain significant constitutional powers. The changes are therefore made whenever the board finds them desirable or wise, but with little input. To be sure, the board holds meetings on the changes at times and can then make the changes it likes. This reality renders the bylaws and ICANN's structure very flexible. ICANN reacts not within its structure and rules but by changing its structure and rules.

The other model, which the governance of the naming system resembles superficially, is the market. The parties use their power to strategically negotiate a division and balance of power, and the financing of governance activities. Parties may establish power relationships by private agreements and understandings. Usually such agreements affect only the parties, but there are cases in which they influence third parties.

Parties that agree with ICANN may divide and balance power relationships pursuant to contracts, which may contain "constitutional provisions" that seemingly affect only the parties – ICANN on the one hand and the other party on the other hand. These contracts, however, include a provision that requires parties to a

¹³ See Preliminary Report, at <http://www.icann.org/minutes/prelim-report-12mar03.htm> (Mar. 12, 2003) (nominating committees from academic organizations and ccTLDs and establishing a Board Governance Committee).

contract with ICANN to comply with ICANN's future policies.¹⁴ ICANN's policies will therefore be deemed the law of the naming system land, just as congressional laws apply to all without a condition of supporting consensus. The problem is that ICANN is not constituted like the Congress, and is subject to far fewer accountability measures than either a private sector or a public sector corporation. Moreover ICANN's powers are only vaguely defined and are subject to heated debates. Therefore, its freedom to design future policies would open the door to expansion of its powers. These policies can vest in ICANN's broad discretion not only with respect to the contract party but also with respect to its own powers vis-a-vis the contract party. The provision "gives ICANN a stranglehold over different [countries'] domains."¹⁵

It is not surprising that foreign countries and the registries of ccTLDs objected to the contract language. The more parties sign the contract, however, the more expanded ICANN's power can become. This pattern will seemingly continue, unless the contracting parties agree, at some future date, to enter the naming arena as competitors and restrain ICANN by taking it over, or by breaching their contracts and seeking its invalidation.

Thus, the current governance of the naming system seems to reflect the second model of a market more than the government of a private or public organization. To be sure, markets also function under a number of basic rules to which all players must subscribe. But these rules can be negotiated with greater freedom and flexibility. In the case of ICANN, the flexibility is even greater. The rules are established not between two parties to a bargain but between a ruler (monopolist) and the ruled (all the parties that interact with the monopolist). History seems to repeat itself. James I, the British King, granted "odious monopolies" that led to a public outcry and culminated in the Statute of Monopolies of 1624.¹⁶ Most importantly, the rules may end up affecting ICANN's power not only vis-a-vis the contracting parties but other third parties as well.

If the contract provisions are the same for all parties, the contracts form an unintended coalition among those who signed them.

¹⁴ Model ccTLD Sponsorship Agreement, § 5, at <http://www.icann.org/cctlds/model-tscsa-31jan02.htm> (Jan. 31, 2002).

¹⁵ Kieren McCarthy, *Kangaroo Domain Court*, THE REGISTER (London), Dec. 13, 2001, available at http://www.theregister.co.uk/2001/12/13/kangaroo_domain_Court/.

¹⁶ See DONALD S. CHISUM ET AL., PRINCIPLES OF PATENT LAW 13-14 (2d ed. 2001).

If the contracts differ, depending on the power relationship among the parties, the contracts can be analogized to "private laws." The market in which ICANN and other power holders operate is a market for rules.

Usually, rulers do not negotiate individual governance deals with their subjects, but seek to establish rules to which a majority of their subjects agree or reach consensus. But in the case of "private laws" some parties may fare better than others depending on their bargaining powers and depending on the support they receive from others. Thus, the rules are not predictable and leave broad discretion to the ruler. The contract format gives the false impression of a consensual "democratic" regime rather than a regime of rules imposed from above. In fact, the contract format is likely to open the door to corruption, as the history of corporate law and other laws demonstrates.

Legislatures granted corporate charters not on the basis of a general statute, but on the basis of private laws and legislator corruption.¹⁷ Scandals of corruption led to the general corporation laws that we have today. The government has no discretion to deny applicants a charter, except as defined in the law. Otherwise it must grant a charter. Further, the rules under which the charters are granted apply equally to all applicants. This does not mean that ICANN's method leads to similar corruption. It means that it could lead to such a problem and emulate history.

All participants in the governance structure of the naming system follow two principles, with which all seem to agree. First, all participants hold their power in trust for the well being of the Internet and its users worldwide. Second, country code registries are holding their power in trust for the citizens of the country whose name they service. But these general principles are not sufficient to create acceptable detailed rules by which all parties will use their power to achieve the common goal, or induce them to trust each other to implement the goal in the same way. Hence, the existence of the "private ordering" mechanism. There is, however, one rule or strong preference that constrains all players, and that is the preference to maintain, and be connected to, the Internet. This preference drives all players to cooperate.

¹⁷ LEWIS D. SOLOMON ET AL., *CORPORATIONS: LAW AND POLICIES: MATERIALS AND PROBLEMS* 5 (1982) (describing how legislative privilege of charter resulted in temptations and corruption). As incorporation became a "matter of economic necessity," it led to the passage of general corporate laws.

C. A Proposed Approach. Game Theory

How will ICANN's governance structure develop, and what form will it ultimately take? Assuming that no party is strong enough to dictate the answer to this question, how can the answer be predicted? In this Article, I propose a method that may lead to a way of thinking about it, rather than a plain prediction. I focus on the interaction among the main actors of the naming system and I attempt to discern patterns of behavior. If these patterns continue, then through them, a "habit" or "path dependence," as well as a consensus, may emerge, leading to rules that will form a more stable and predictable governance structure. This result, however, may merely constitute a hope. We may find that the parties' behavior is so strategic as to make future behavior and binding rules unpredictable.

For the purpose of this discussion, I assume that the structure of the Internet naming system remains the same, and that ICANN and its potential competitors will continue to "muddle through" under few rules to which all subscribe. Although it seems as though muddling through is entirely fortuitous, opportunistic, political, subjective, changing, and undisciplined, I believe that there are pointers towards more consistent trends.

That is where game theory can help. One type of game theory is a zero-sum game. In such a game, one party's gain is another party's loss. The calculation of such a game is relatively simple. But reality is usually more complex, and to reflect this complexity, there developed a non-zero-sum game theory. Under that theory, in most cases, both parties will either gain or lose unless they cooperate. More often, the pie must be sliced and shared or there will be no pie. This situation resembles that of the parties involved in the Internet naming system.

Game theorists use mathematical models to quantify results and control wayward ideas and assumptions. This paper does not use a mathematical model, and I do not have the knowledge to develop such a model. But the ideas outlined in this paper can be tested by a mathematical model and implemented with the use of available data. I do not purport to offer solutions to the various conflicts that arise between governments, the registries of their country code names and others, but the suggested method is helpful to provide a structure for a discussion on the current and unknown future issues.

I started by attempting to limit the subject to the interaction between governments and the registries of the countries' top-level domain names ("ccTLDs"). The relationship among these two parties is particularly interesting, not only because the relationship has not yet been settled, but also because the governments constitute the ultimate power holders in the market of the naming and numbering system. I quickly discovered, however, that this focus can only be a starting point. Like most interactions concerning the naming and numbering system, the interactions between the governments and the ccTLD registries involve ICANN, the United States, other governments, and other actors in the market for power over the Internet naming system. The relationships cannot be limited to these two parties without considering the others' potential and actual intervention. Those other power holders form the context and the environment in which the governments and the registries operate and relate.

In sum, the naming system today has not matured into a governance structure under predictable fixed rules. The main rules, especially in relation to the governments and their registries, are in a state of flux and at a stage of negotiation between ICANN on the one hand, and the governments and registries on the other hand. It may well be, however, that if the non-zero-sum game that the parties are currently playing could be modeled, the model would uncover latent patterns of governance to which all parties subscribe. This paper is a call to start this research process.

D. A Thumbnail Sketch of a Non-Zero-Sum Game Theory

Game theory is used to study conflict situations involving opposing party interests.¹⁸ In such situations, each player selects a strategy, or an action or set of actions, and the payoffs, or results to the parties, can be quantified and arranged on a matrix.¹⁹ A game is considered a "zero-sum game" if one party's loss is another party's gain, and the sum of all payoffs to all players, positive and negative, is zero.²⁰ An example of such a zero-sum game is a two-player poker game in which one player's winnings equal the other player's losses.²¹

¹⁸ See J.D. WILLIAMS, THE COMPLEAT STRATEGIST 2-3 (rev. ed. 1966).

¹⁹ *Id.* at 14-20.

²⁰ *Id.* at 15.

²¹ *Id.* at 14-15.

A game can also be a "non-zero-sum game," which is fundamentally different from a zero-sum game. In a non-zero-sum game, it is possible for all players to gain or for all of them to lose.²² In such a game, "there is no universally accepted solution . . . no single optimal strategy that is preferable to all others, nor is there a predictable outcome."²³ The players have both complementary and non-complementary interests. Therefore, their game includes elements of cooperation as well as competition. This game is more likely to reflect the reality that an optimal solution is neither automatic nor easily found.

One example, often used in literature, of a non-zero-sum game is the "battle of the sexes." Both a husband and wife have a very strong preference to spend the evening together, but she wishes to go to the boxing match while he wants to go to a ballet performance. Since both strongly desire to go together, if each has his or her way both lose more than they gain.²⁴ However, this leaves them in a quandary, in which a solution is neither automatic nor uniform.

A number of strategies are available to this couple, depending in part on their own preferences.²⁵ First, each party can change its own utility values, as well as that of the partner, by adding events. For example, if the wife buys two tickets to the boxing match, the couple would lose the value of the tickets if they go to the ballet event. The husband may value the loss of the ticket prices more than the discomfort of watching the boxing match.

Second, the couple may decide to forego both events altogether and to choose an event that is acceptable (but not as acceptable as the original choice) to both, such as the theater. To be more effective in seeking this solution each party may develop a "min-max" strategy. Each party can determine how far it will go either in its demands or in giving in to the demands of the other. Each party may make its strategy known to the other party. Consequently, each party may find a second-best choice that would be sufficiently satisfactory to both parties.

²² See *id.* at 15.

²³ Janet Chen et al., *Game Theory*, at <http://cse.stanford.edu/classes/sophomore-college/projects-98/game-theory/> (last visited Aug. 24, 2004).

²⁴ See MORTON D. DAVIS, GAME THEORY 88 (rev. ed. 1983).

²⁵ One strategy, which is inapplicable in our case, is when one or both parties refrain from communicating. If they do not communicate, they can neither threaten nor promise rewards to each other in the future.

Third, the parties can use threats and promises to induce the other to agree. A "threat" in a non-zero-sum game is a statement communicated to another player that the player would select a certain strategy, hoping to influence the behavior of the other player.²⁶ For example, in a buyer-seller situation, the seller could state that it would not sell the item for less than a certain price. The seller is hoping to encourage the buyer to agree to buy at the seller's desired price, knowing that if the sale is not made, the result will be adverse to both players.²⁷ Similarly, in the "battle of the sexes" situation, either player may threaten to attend his or her preferred event alone, if necessary, in an effort to influence the spouse to attend that event as well.²⁸

"A threat is effective only to the extent that it is plausible."²⁹ A threat is less plausible if the possible payoff to the threatening party is more adverse.³⁰ If the players cannot communicate, then neither can they threaten.³¹ Since a threat requires communication, a player that refuses to communicate with the other not only eliminates the possibility of a threat from the other player, but eliminates his own threat as well. Other threats and promises are possible as well. The husband may threaten to not accompany his wife to her favorite events in the future in light of the high utility that he has put on the current event. The parties may also use rewards. For example, the wife may agree to give the husband the book he liked or the trip he was hoping for. Exchanges may be arranged as well, such as "we alternate in going to events each party likes."

Fourth, a party dealing with numerous other parties may adopt the strategy of "divide and conquer," attempting to negotiate with each of the other parties separately. Even though the lone negotiator may reduce her costs when negotiating with a group rather than with an individual, she may confront a stronger opposing party and have less of an opportunity to gain from a disparity in bargaining power.

Fifth, the parties may agree to have their conflicts resolved with the help of a third party, such as a good friend or a psychia-

²⁶ See MORTON D. DAVIS, *GAME THEORY* 101 (rev. ed. 1983).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.* at 95.

trist, if in a family conflict, or an arbitrator or mediator if in a business conflict.

The example of the battle of the sexes represents everyday familiar relationships. But the example is surprisingly suitable to relationships in other contexts as well, including relationships within commercial and political organizations, and among market parties. I use the term "market" very broadly to denote non-organizational relationships, even though markets are also subject to rules and required patterns of behavior without which no interaction among parties can exist for very long.³²

The actors in the Internet naming system infrastructure play a "simultaneous game." A "simultaneous game" is one in which all players make decisions, or select a strategy, without precisely knowing the other players' strategies. Even though the decisions may be made at different points in time, the game is simultaneous because each player has no information about the decisions of others. Thus, it is as if the decisions are being made simultaneously.³³

A Nash equilibrium, named after mathematician John Nash, is a set of strategies, one for each player, such that no player has an incentive to unilaterally change its action. Players are in equilibrium if a change in strategies by any one of them would lead that player to earn less than if it remained with its current strategy. For games in which players randomize (i.e. use mixed strategies), the expected or average payoff must be at least as large as that obtainable by any other strategy.³⁴

A Nash bargaining scheme may be helpful in the ccTLDs scenario as well. This scheme suggests that the objective of a bargaining party is to make an agreement that is as favorable to it as possible and at the same time avoid demands that would put obstacles on making an agreement. A party that is willing to settle for terms that are only slightly more advantageous to it than not having an agreement is likely to make an agreement. A party that insists on favorable terms is less likely to make an agreement.

³² See Tamar Frankel, *The Legal Infrastructure of Markets: The Role of Contract and Property Law*, 73 B.U. L. REV. 389 (1993).

³³ Game Theory Dictionary, at <http://www.gametheory.net/Dictionary/Simultaneous-Game.html> (last visited Aug. 24, 2004). Simultaneous games are represented by the normal form and solved using the concept of a Nash equilibrium.

³⁴ Game Theory Dictionary, at <http://www.gametheory.net/Dictionary/NashEquilibrium.html> (last visited Aug. 24, 2004).

However, if one party knows the "break point" of the other, it would insist on that break point to its advantage. That is why parties act as if they are uninterested in agreements when they are desperate to reach one. This is also why parties refrain from naming their price or demand more than they are willing to accept when they do not know the price that the other party may be willing to accept.

This Article traces the activities of the registries of the ccTLDs, the governments and ICANN, to examine whether they reached equilibrium in their relationship, where they failed to reach such equilibrium, and the direction that they are taking after such failure.

E. *The Parties' Utility Function*

A "utility function" quantifies the players' preferences so that the payoffs will reflect the change in utility to the parties.³⁵ In a non-zero-sum game, the parties may have different preferences, and their choice of strategies may depend on their utility functions. In the battle of the sexes example, the husband may love ballet passionately and consider it the most important event of the year, or he might hate the boxing spectacle because of some childhood memory. Each player may have the same or a different intense feeling of altruistic satisfaction in "sacrificing" his or her wishes to the desires of others, or of "winning" and controlling the other, and these feelings may determine strategies. Each party may expect or know that the other will reciprocate (or not reciprocate) in the future in the same or other ways, which may also determine strategies.

Similarly, governments may put different values on Internet connectivity for their residents. For example, China values the commercial benefits of the connectivity, but puts a higher value on controlling the substance of the messages that its residents send abroad, even though this control slows the pace of the messages and reduces the efficiency of the Internet for China's residents. Further, the balance of power and dependence of the parties on each other may not be equal, in which case they may choose different strategies in negotiating with each other.

Not all strategies help reach a long-term solution that is satisfactory to both parties, or even to a single party. Reciprocity can

³⁵ See MORTON D. DAVIS, *GAME THEORY* 62-65 (rev. ed. 1983).

be negative as well as positive. Long-term memories of a party's resentment may backfire in a later situation when the "winner" is more vulnerable. It is not unusual for parties to reach an impasse and either go to their chosen event alone or not go to any event altogether, creating a lose-lose situation. These patterns of behavior can be modeled³⁶ to provide lessons for those who seek to learn how to behave in the future. The patterns may also help predict the future for those who are locked into their behavior and unlikely to change it.

F. *Governance by Contract Negotiations And the Actors' Positions*

Had the naming system been governed more by fixed rules and less by negotiations, game theory would not have been very helpful. The theory is useful because the naming system is currently governed mainly by negotiations. We will therefore discuss the negotiations that take place between governments, their registries, and ICANN. In each case, we will identify (1) the weight each party puts on particular demands (the utility function), and (2) the strategies the parties use to satisfy these demands.

As discussed earlier, the power infrastructure of the Internet naming system is composed mainly of governments, registries (and registrars), ICANN, the Internet Service Providers, and the technical community. ICANN's president outlined the "essential participants" in the system as Internet infrastructure providers, major users, the "relevant technical community," and national governments. If market pressures are deemed powerful, then large and small users of the Internet should be included in the list. It seems that governments hold significant power. But the United States government, through its Department of Commerce and the United States Congress, may hold even greater power, although it is exercised somewhat indirectly and discreetly. The root exists physically in Virginia and is operated by a private corporation, Verisign, under a contract with the Department of Commerce. The Department has also contracted with ICANN to operate the naming and numbering system, although the scope of ICANN's operational and policy powers are unclear.

³⁶ Elmer G. Wiens, *Operations Research-Game Theory*, at <http://www.egwald.com/operationsresearch/cooperative.php> (last visited Aug. 24, 2004).

G. *The Governments and ccTLD Registries*1. *Applying the Game to the Government-ccTLD Registry Relationship*

The relationship between the governments and their ccTLD registries is unique and varied. Like all other participants in this non-zero-sum game, a termination of the relationships between governments and ccTLDs will produce the worst result for both. Governments may not be able to remove registries and appoint others without ICANN's approval. To do so would be to risk possible termination of the connectivity of their country to the Internet. The registries of the ccTLDs will lose their business or their ability to impose their ideology on how the Internet naming system should be managed in their countries, or sustain losses for other reasons. I, therefore, conclude that, for different reasons, the worst scenario for both parties is the termination of the relationship and the endangering of their connectivity to the Internet.

2. *The Governments' Utility Function in Relation to the Country Code Name*

Most governments are likely to give their country's name a very high subjective value. They may view themselves as trustees of the name for their people. The country's name may represent to its people the identity of the country, its history and the legitimacy of its government. The full riches of patriotism may be compressed and packaged in the country's name. Giving the name, or control of the name, away may result in negative popular sentiment. A country's name can give a purported government the political legitimacy that it may otherwise lack or that may be hotly debated and fought over (e.g., Palestine).³⁷ Removing the name of a splinter opposition party, especially if it uses violence to make its objections known, can silence that party and strengthen the political position of the government. For example, the Spanish government

³⁷ 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.iana.org/reports/ps-report> (containing IANA's report and analysis which led to the recommendation to approve the redelegation). See also International Organization for Standardization, at English Country Names and Code Elements, <http://www.iso.org/iso/en/prods-services/iso3166ma/02iso-3166-code-lists/list-en1.html> (last visited Sept. 27, 2004) (stating the complete list of country names and ISO 3166-1 Alpha-2 code elements - the ISO country code used on the Internet).

sought the ban of a web site used by Basque militants. The site was registered by an Australian company, with the server in California, and administered in France.

In very few situations, a small country may view its name as a source of income and license it to commercial enterprises (e.g., the television industry). Some ccTLD names are valuable because they happen to form an expression, which would be desirable for companies to have as suffixes in their domain names. The smallest nation on earth, Tuvalu, has earned over \$20 million by licensing its ".tv" domain name to media enterprises.³⁸ Other countries have received desirable ccTLD names and some have sold such names.³⁹

In such a case, the government will identify with the business interests of the registries. Such a government's utility function is demonstrated by the following case, which was the first case to involve a ccTLD. In 2000, Expedia, Inc., a U.S. travel service, brought before the World Intellectual Property Organization ("WIPO") a complaint on trademark violation against Domain Network that registered the domain name "expedia.nu." ".nu" is a ccTLD of an island state of 2000 citizens managed by New Zealand. More than 60,000 ".nu" domain names have been registered in Niue, by .NU Domain Ltd., a Massachusetts-based firm that administered the domain on behalf of the Internet Users Society-Niue. The registry adopted ICANN's Uniform Domain Name Dispute Resolution Policy for all ".nu" registrations. .NU Domain says it has customers in dozens of countries throughout the world using its services to register ".nu" domain names, among them Coca-Cola and International Data Group. WIPO was ready to ap-

³⁸ Charles J. Hanley, *Internet Suffix Nets Cash, Concern for Pacific Nation*, COMMERCIAL APPEAL (Memphis, Tenn.), July 11, 2004, at A15.

³⁹ See *Domains .biz, .info Go Live*, INDUSTRY STANDARD.COM, June 27, 2001, LEXIS. News Library, AllNews File (noting that one registrar "offers simulated [top level domains] by using ccTLD names"); *NU Path Offered on Internet*, AUSTRALIAN, Nov. 25, 1997, at 22 (noting that Niue, a little-known island nation, is selling its ".nu" ccTLD name: ".nu" is pronounced the same as English word "new" and "nu" means "now" in some languages; because the country is little-known, "its [ccTLD] name carries little national identity outside its borders"); Nick Clayton, *Tonga - The Most Desirable Address?*, SCOTSMAN, July 16, 1997, at 2 (noting desirability of Tonga ccTLD ".to"); Joey G. Alarilla, *Infotech Use of Philippines' 'PH' Domain Name Draws Arguments*, PHILIPPINE DAILY INQUIRER, Mar. 12, 2001, at 17 (noting concerns about Philippines ccTLD administrator marketing ".ph" name to telephone companies; noting other desirable names including ".mu" (Maurius) ("music"); ".cc" (Cocos and Keeling Island) ("credit card"); ".md" (Moldova) ("health care"))).

ply to the dispute the same principles it applied to disputes concerning Top Level Domain Names.⁴⁰

It is worth noting that governments' utility functions with respect to country code names have been on the rise. This trend is evidenced by the activities of a government committee that advises, and greatly influences, but does not control, ICANN – the Government Advisory Committee ("GAC"). The membership of the GAC is one of the constituencies that could demand control of the root but does not, as long as the other members do not demand control.

In February 2000, this group recommended that the ownership of ccTLDs be explicitly given to the countries that they represent. The GAC's Principles for the Delegation and Administration of Country Code Top Level Domains, states that the managers of ccTLDs, known as delegees, must recognize that "ultimate public policy authority over the relevant ccTLD rests with the relevant government or public authority."⁴¹

This recommendation constituted a response to situations in which ccTLDs were managed by registries that acted independently of the governments whose names they managed.

For example, the .pn domain, which was designated for the Pitcairn Islands, until recently was run by a Channel Islands company, one of whose contacts for registration purposes was an island resident. Within a few months of the initial delegation in 1997, though, the island territorial government, along with the United Kingdom, had opposed that delegation, claiming that the domain was being used predominantly for registration of domain names to entities not affiliated with the territory, in exchange for a fee collected by the company.⁴²

The GAC did not necessarily require full control by the political governments, but proposed rules for the establishment and delegation of ccTLD non-government registries of the ccTLDs. Thus, the utility function of government can run broadly, from political to social to financial considerations. As the registries become more

financially profitable, the allocation of this exclusive business can be used for political and business purposes alike.

ICANN responded enthusiastically to the GAC's recommendations.

[T]he board of the Internet Corporation for Assigned Names and Numbers signaled its desire to resolve the issue of how much control governments will have over those who operate their country code top level domains, like .uk, sometime this spring. . . .

. . . ICANN also decided to give its staff authority to work with the managers of the ccTLDs, the Government Advisory Committee, and any other interested parties to develop a final proposal on how much control governments have over the ccTLDs. . . .

The GAC issued a recent report that asked for governments to be given control over who could manage a ccTLD. However, the GAC report did not specifically address the thorny question of what the relationship between ICANN and the ccTLD managers would be.⁴³

While the issue remains largely unresolved, and dealt with on a case-by-case basis, almost every country has now asserted some form of control over its domain name. Indeed, a recent study by the ITU found, to its surprise, that 43% of countries had ultimate control, with another 30% having taken steps toward gaining that control. Only 7% of the countries had no formal control and no plans to change that.⁴⁴

The demands of the GAC, and the actions of its members to take more control, reflect its utility functions. The Committee recommended a number of strong protective measures. For example:

[N]o private intellectual or other property rights should inhere in the ccTLD itself, nor accrue to the delegee . . . The delegee should work cooperatively with the relevant government or public authority of the country or territory for which the ccTLD has been established, within the framework and public policy objectives of such relevant government or public authority . . . The delegee, and the delegee's administrative contact, should be resident or incorporated in the territory and/or jurisdiction of

⁴³ Jennifer L. Alvey, *Internet May Have New .com-Type Domains Soon if Net Authority Acts on Schedule*, ELECTRONIC COM. & L. REP. (BNA), Mar. 15, 2000, at 253.

⁴⁴ Michael Geist, *Governments and Country-Code Top Level Domains: A Global Survey* (Feb. 2004), available at <http://www.itu.int/ITU-T/worksem/ccTLD/kualalumpur0704/contributions/ccTLD-KL-003.pdf>.

⁴⁰ Daniel Pruzin, *WIPO Receives First Request to Rule in Country Code Domain Name Dispute*, INT'L BUS. & FIN. DAILY (BNA), Mar. 29, 2000, LEXIS, BNA Library, BNABUS File.

⁴¹ Government Advisory Committee, ICANN, *Principles For the Delegation and Administration of Country Code Top Level Domains*, § 4.4 (Feb. 23, 2000), at <http://www.icann.org/Committees/gac/gac/ccTldprinciples-23feb00.htm>.

⁴² Jennifer L. Alvey, *Government Group Advising ICANN Wants Nations to Control Country Code Domains*, ELECTRONIC COM. & L. REP. (BNA), Mar. 8, 2000, at 232, 233.

the relevant government or public authority. Where the delegee . . . [is] not resident or incorporated in the territory and/or jurisdiction of the relevant government, it should nonetheless operate in a way that is consistent with the laws and public policy of that relevant government or public authority.⁴⁵

The GAC recommendations also called on ICANN to "act with the utmost promptness to reassign the delegation" of a ccTLD once a government tenders evidence that the current delegee does not have the support of the relevant government.⁴⁶ Also, ICANN should expect cooperation from the government of the relevant country if ICANN determines that the delegate is operating the ccTLD in a way that "threatens the stability" of the Internet or the domain name system.⁴⁷

This last proposal recognizes the dual obligation, established by the founder of the naming system, Dr. Jon Postel, of the registries both to the country whose name they manage and to the Internet in general to whose infrastructure they belong. Presumably, if a registry opposes the government's policy, for example, of using the Internet for developing a country's commerce, the government would have the power to remove the control of the registry.⁴⁸ If, in contrast, the government appoints an incompetent registry, the registry may object to the appointment, and ICANN may press to remove the registry.⁴⁹

⁴⁵ GAC Principles, *supra* note 41, at §§ 4.2-4.6.

⁴⁶ *Id.* at § 7.2.

⁴⁷ *Id.* at § 7.3.

⁴⁸ But if the government is oppressive, and the registry is outside the geographical boundaries of the country, a registry may object to transferring its functions for political reasons. Dr. Postel imposed a trust on the registry not for the benefit of the government but for the benefit of the people in the country. Who is to determine whether the government, recognized by other governments and the United Nations, is the representative and true trustee of the people? Under the proposed directives the government and its policies will trump the registry's political views. The policies, however, have not been adopted.

⁴⁹ Jennifer L. Alvey, *Government Group Advising ICANN Wants Nations to Control Country Code Domains*, ELECTRONIC COM. & L. REP. (BNA), Mar. 8, 2000, at 232-33.

The report also calls on all ccTLDs to have in place a dispute resolution policy. Such a policy should have several principles reflected in it, such as 'due regard' for internationally recognized intellectual property law and consumer protection. Alternative dispute resolution procedures should be conducted online, if possible, according to GAC, but should not preclude resort to courts. . . . The GAC's recommendations are available at <http://www.icann.org/gac/gac-ccTld-principles-23feb00.htm>. Background on the ccTLD delegation issue is available on ICANN's website at <http://www.icann.org/cairo2000/ccTld-topic.htm>.

Not all governments, however, have the same utility function in relation to their names. It may well be that the United States government will part ways with other Western countries. Thus, the Department of Commerce has been considering the possibility of opening the ".us" ccTLD space to the private sector. Compared to England, where the ccTLD is freely used by the private sector (e.g., britishtelecom.co.uk), the ".us" domain name is used almost exclusively by state and local governments. It may well be that the value of ".us" TLD for commercial interests is not as great as in other countries. Commercial interests do not use the ".us" domain, finding it "too cumbersome and complicated." But according to the Department of Commerce, expanded use of the ".us" TLD by the private sector "could alleviate some of the pressure for new generic TLDs and reduce conflicts between American companies and others vying for the same domain name."⁵⁰

Unlike other governments that seem to have a clear position, the United States seems to be ready to consider a broad array of possibilities. In its Request for Comment, the Department of Commerce during the Clinton Administration sought comments on a variety of policy matters relating to the future of the ".us" domain, including: whether ".us" should be treated as an unrestricted top-level domain like ".com;" how second-level domains should be allocated; what role states should play in the allocation and registration of their respective sub-domains; what procedures could be used to minimize trademark disputes within the ".us" domain, and; whether there is a particular kind of entity best suited to manage the ".us" domain.⁵¹

In addition to the importance of country codes for the respective governments, the names may gain enormous importance in electronic commerce for any country. Country codes have been considered as substitutes for designation of locations, and if that proposal is accepted, they will attain considerable added value.⁵²

3. The Utility Functions of the Registries of ccTLDs

In general, a government's value of the name is likely to be higher than the value that ccTLD registries attach to the name, if

⁵⁰ Commerce Seeks Input on .us Domain; Explores Expanded Private Sector Access, DAILY REP. FOR EXECUTIVES (BNA), Aug. 5, 1998, at A-25.

⁵¹ *Id.*

⁵² Anandashankar Mazumdar, *UNCITRAL Group to Begin Discussions on E-Contracting Treaty at March Meeting*, BANKING REP. (BNA), Jan. 21, 2002, at 3.

patriotism comes second to the value of the registries' business. Registries may manage another name and be as successful financially. Some registries, however, view themselves as agents of the state and have the same utility function as the governments, and at least one had a very high utility as a representative of an Internet free of government interference. It should be recognized that the sentiments of the governments with respect to their country's names are likely to be shared by most large governments. This leads to a modicum of a consensus.

H. *The Strategies: Assertions of Principles and Threats*

How do governments that derive higher utility from their domain names negotiate to support their claims both to the names and to control over the registries of their ccTLDs?

1. *To Cooperate or Defect?*

As stated, all participants in the power infrastructure of the Internet desire to maintain connectivity and ensure its continued viability. This desire drives the parties to cooperate. If a party does not cooperate, it stands to lose more than the others, since it would lose connectivity to all others while the others would lose connectivity only to one party. The only way in which all parties stand to gain is for all to cooperate fully and to unanimously agree on an alternative. It seems that such a move is far more costly to any of the parties than the status quo.

Another consideration driving the parties toward cooperation is the reduction of risk and uncertainty for the interacting parties. One of the Internet's salient features (and also its strength) is its openness to any change at a higher level. But for some parties, this feature can pose significant uncertainty. It can threaten other values that a party might cherish, such as political stability (as the government defines it). Under these circumstances, a cooperative agreement to reduce the uncertainty may be welcome among parties that share a similar resistance to the uncertainty.

Parties may weigh passive and active cooperation differently, depending on the value they assign. Thus, registries of ccTLDs value active cooperation by contract with ICANN less than ICANN values the cooperation by contract. In addition, the parties weigh the terms of the proposed or negotiated contracts differently. While ICANN is more eager to sign and receive power and funding, the registries are far less eager to actively cooperate.

Lastly, even though all parties would rather interconnect with the Internet via the main root, there are some alternatives to such interaction via other means. These alternative means are not as attractive and are more costly. The choice of such means may also lead to negative pressures by other parties. If registries of ccTLDs choose alternative means, at a higher cost to them, the cost of ICANN, for example, may be even higher. Not only will ICANN lose the opportunity to induce the parties to contract on its terms, but the defecting party may show the way to others, and start a movement towards the alternative.

2. *Legitimizing Claims by Principles-Based Actions*

Principles do not necessarily help cooperation. Principles, however, can clarify the real parties to the contract. Strong principles can be persuasive, especially to those who are like-minded. Here are a few principles that were used and the users who used them:

a. *Name ownership in rem.*

This principle conflicts with the asserted rights of others to use a country's name, and indirectly with ICANN's power to designate the names that appear in the root. Governments that place a very high value on the country's name have asserted that the name constitutes property, that this property belongs to them, and that the registries are the government's agents. Thus, the governments have asserted their dominion over their name and registries of the name. They have sued companies that have registered the country names as Internet addresses.⁵³ South Africa has gone further and enacted legislation that "provided for government control of domain administration, instead of government participation."⁵⁴ It asserted its rights to its domain name against the claims of a private business enterprise that had used the name in its business.⁵⁵ The GAC recommendations also propose clear ownership principles. These principles, however, have not been adopted by ICANN.

⁵³ *ICT and Telecom; Battle for SA Domain Caught in a Legal Web*, AFRICA NEWS, Jan. 10, 2003, LEXIS, News Library, AllNews File (noting litigation by South Africa and New Zealand governments).

⁵⁴ *Deadline for .za Domain Board Nominations Extended*, GLOBAL NEWS WIRE (South Africa), Nov. 21, 2002, LEXIS, News Library, AllNews File.

⁵⁵ *Virtual Countries, Inc. v. Republic of South Africa*, 148 F. Supp. 2d 256 (S.D.N.Y. 2001).

b. Power to appoint the registries.

This principle conflicts with ICANN's asserted power to designate the names that appear in the root, with the asserted rights of registries that were appointed by Jon Postel. The principle also conflicts with ICANN's asserted power to disqualify registries. Additionally, the principle may conflict with the assertion of registries that they were vested with their position by Jon Postel. A number of governments asserted their right to appoint the registries to their ccTLDs. These asserted rights conflict with ICANN's assertion of authority to approve or disapprove the "delegation" of the power to manage their ccTLDs. While governments derive their asserted right from the name, ICANN derives its asserted right from the management power of the root.

In the struggle, governments can exercise their power over their registries so long as the registries are within their physical jurisdiction, and so long as the identity of the registries does not change. In such cases the governments can control the registries by passing laws to this effect. However, when governments wish to change the identity of the registries and substitute one registry for another, ICANN, or rather the U.S., has the upper hand. The laws may be insufficient to formally effect a change without ICANN's consent. Unless a registry is designated in the database of the root, the transfer cannot be completed. ISPs will not recognize the new registry and will continue to recognize the old one. The laws, however, have powerful effects of threats, as discussed below.

Conflicts between a government and its existing registry can arise when the two disagree on the use of the Internet and the power of the government to designate another registry, as illustrated in the Australian example. The government was patient, but was not willing to give up its full priorities. It was a zero-sum game and the registry lost. The government did not choose the direct route of legislation to root out the registry, but rather approached ICANN to mediate and reach an agreement. The Australian government has been historically supportive of ICANN, since the use of ICANN suited its purposes and undermined the legitimacy of the registry that claimed entitlement to the function by the appointment of Jon Postel. Since ICANN is the offspring of Dr. Postel, the registry's claim to legitimacy was undermined by the advantage of the Australian government. I suggest, however, that

if ICANN had supported the registry, the Australian government could have passed a law to transfer the registry to its choice.

Underlying the relationship between governments and their ccTLD registries is a conflict of principle. While many, if not most, governments claim the name as their own, some registries (and ICANN) claim their right to manage the ccTLD, on behalf of the free enterprise of the Internet. This claim then leads through ICANN to the United States as the source of their entitlement. Ultimately, arguments of principle pit governments that assert property rights to their names against the United States. Therefore, the main non-zero-sum game is not only between the governments and their registries, but also between these governments and the United States government. In the last analysis, these conflicts led to disagreements between foreign countries and the United States through ICANN, or through the actions of Dr. Jon Postel. Both acted for the United States under contract, although Dr. Postel was controlled more closely by the U.S. than ICANN is.

These principles, however, are interesting in two respects. Their users wish to change the status quo with respect to the powers of the United States. The opposition, wishing to maintain the status quo, resorts to the past regime. Regardless of the merits, the relative power of both sides may guide the answer. The current holder of the power (the root) may have the upper hand for now. The weakness of the principles is noticeable when one party uses the opposite principle in other contexts. Thus, ICANN advocates change when it aims at formalizing relationships especially with the registries of the ccTLDs, while the latter seek refuge in the status quo and the past.

3. *The Bargains*

When a country seeks ICANN's approval to change its registry, ICANN might use the opportunity to extract benefits for its approval, such as added funds of which it is usually short. The benefits it can extract depend in part on the strength of the applying country. Small countries and their registries have succumbed to ICANN's demands, signed its contracts and are paying up. Australia is a prime example, although that country has long supported ICANN, and therefore may have found the terms of its contract more acceptable. In this context, the balance of power among the parties seems to dictate the outcome.

Agreements between ICANN and ccTLD registries are the products of long negotiations, and may have resulted in compromises. But the balance of the compromises is difficult to assess without further investigation of the processes. Because the negotiations are among few parties, and the contracts could affect third parties that did not take part in the negotiations, some of these contracts have been renegotiated after they were completed in light of the strong objection of the third parties. This process of renegotiation is the result of the one-to-one talks among a few parties when the subject matter of the contract is in fact a rule.

Two main issues have held up agreements between ICANN and ccTLD operators: power and money. Some ccTLDs would like to play "a greater role in ICANN's decision-making process."⁵⁶ The few recent agreements between ICANN and the ccTLD registries allowed "new or revised ICANN specifications and policies applicable to the [registry]" to "be established according to procedures that comply with ICANN's bylaws and articles of incorporation," although ccTLDs are allowed input into the development of these policies.⁵⁷

In addition, the ccTLDs "have clashed with ICANN on questions about their financial contributions to ICANN."⁵⁸ The agreements require ccTLDs to make financial contributions to ICANN "based on ICANN's total funding requirements . . . developed by ICANN on the basis of consensus."⁵⁹ Most registries are unwilling to fund ICANN's expanded operations without a stronger power position in the organization. Meanwhile, the registries of the ccTLDs have attempted to gain more power in ICANN's structure. That step may conflict with governments' assertion of full ownership and control over their country codes. Governments' involvement in ICANN's affairs is also limited in principle. Nonetheless, they are acquiring power increasingly. This renders weaker the registries that assert independence, and pits foreign governments against the United States when their interests conflict.

⁵⁶ ICANN Reaches Agreement with Operator of Japan's Country Code Top-Level Domain, INT'L BUS. & FIN. L. DAILY (BNA), Mar. 1, 2002, LEXIS, BNA library, BNABUS File.

⁵⁷ See, e.g., ICANN, ccTLD Sponsorship Agreement (.au), § 5, at <http://www.icann.org/cclds/au/sponsorship-agmt-25oct01.htm> (Oct. 25, 2001) [hereinafter ICANN].

⁵⁸ Dugie Standeford, *Names Council Cracks Down on Non-Dues-Paying Constituencies*, WASH. INTERNET DAILY, June 6, 2002, LEXIS, News Library, AllNews File.

⁵⁹ ICANN, *Principles For the Delegation and Administration of Country Code Top Level Domains*, *supra* note 41, at § 4.6.

4. Threats

A law is a powerful signal to ICANN (and indirectly to the Department of Commerce) that another government's demand for a change in the registry of a ccTLD is serious. It is a signal that, without weighty reason, such demand should be accepted. The government can contact the U.S. Department of State and, through its own channels, exert pressure on ICANN. The problem of the governments is that their own laws and changes of the registries – "delegees" – cannot have effect without ICANN's approval directly or indirectly by the Department of Commerce or the Congress. This is one of ICANN's powers, which the governments, in their recommendations, desired to eliminate.

In conflicts involving a government or governments, a larger country has more clout than a smaller country, because it can reduce the Internet population by a larger number (thereby preventing other countries from communicating with a large number of users) and yet maintain interconnectivity within the country. Yet, such a country is also more vulnerable if its population and its economy depend on communications with others through the Internet. Therefore, the number of Internet users in a country can be more important in determining a country's negotiation strength than its number of citizens. In addition, a greater impact on world commerce gives a country more power to make demands concerning the Internet. However, the impact of a limited Internet exposes a country to more risk if it needs not only internal interconnectivity but also connection to world commerce.

The impact of a party's threat is closely related to its accompanying conduct. The extent to which it binds itself to a demand signals to the other parties the weight of its utility function. For example, the European Union demanded recognition of its name ".eu," even though the Union is not a recognized country under the United Nations rules. In 2000, ICANN's reaction was negative, citing various problems that recognition of such a regional name would raise.⁶⁰ As the demands of the European Union continued, Congress reacted by proposing legislation, which, if passed, would have had the effect of precluding ICANN from recognizing ".eu" before it recognized another Top Level domain name (".kids"),

⁶⁰ Bruce A. McDonald, *International Intellectual Property Rights*, 35 INT'L LAW 465, n.45 (2001), LEXIS, News Library, AllNews File.

which would be used in the United States.⁶¹ However, during the same year, ICANN changed its position and stated the reasons why it might concede to the Union's demand. ICANN found a legitimizing rule that enabled it to accept ".eu" even though it was not on the primary United Nations list.⁶²

In April 2002, the European Union's Council of Telecommunications Ministers approved a new ".eu" domain to operate on the same level as ccTLDs. These government actions represent a strategy of a commitment to a position in the nature of a threat. The governments' claim to a name is as strong as their claim to the territory. The European Union that claimed a new ccTLD, however, did not comply with the definition of a country that ICANN has followed because the European Union is not a member of the United Nations. To show its commitment to back its demand, the European Union passed a directive declaring its new Internet name.⁶³ The actions have effect within the countries' geographical boundaries. But the actions also have effect on their gaming towards other registries and ICANN. The law supports the demand for recognition. This law is difficult to change, not only because of the process involved, but because of the loss of face and political requirement for explaining a retreat from the demand. Thus, a law allows the government to regulate the registry within its boundaries, but the law is also used to notify anyone who might have power to claim influence over the use of the name that the government is committed to asserting its rights to the name, and to the registry of the name. It is a threat to other parties involved, and it sets the price of the other party's attempt to disagree.

⁶¹ Kevin Murphy, *European Domain May be Scuppered by US .kids Bill*, COMPUTERWIRE, July 3, 2001, LEXIS, News Library, AllNews File. However, in December 2002 Congress instead passed legislation creating the new second-level domain "kids.us;" see also Laura Rohde, *Bush Signs Bid for Child-Safe Domain Names*, INFOWORLD DAILY NEWS, Dec. 5, 2002, LEXIS, News Library, AllNews File.

⁶² While the Internet Assigned Numbers Authority ("IANA") has a policy to create new ccTLDs only for codes on the ISO official list of two-letter country codes, the ISO has another list of codes for administrative subdivisions of these countries ("the ISO 3166-1 list"), and this list includes ".eu." ICANN directed IANA to delegate country codes not on the ISO 3166-1 list as ccTLDs "only where the ISO Maintenance Agency has reserved a slot on its exceptional reservation list that covers 'any application of ISO 3166-1 that needs a coded representation in the name of the country, territory, or area involved.'" For criticisms of ICANN's decision, see Dugie Standeford, *.EU Decision Stirs Criticism from TLD Applicants*, WASH. INTERNET DAILY, Oct. 16, 2000, LEXIS, News Library, AllNews File.

⁶³ *.eu Gets Go-Ahead: New Domain for Europe to Go Live in 2003*, INTERNET MAG., May 1, 2002, at 13, LEXIS, News Library, AllNews File.

The European Union showed its commitment to the name by passing a law. The United States agreed, but made the agreement provisional. We may expect the name to continue so long as the Union wishes, but we might see a longer period for a final recognition of the name to emerge, maybe after some formal request to ICANN or a diluted form of such a request. In addition, we may see some agreement on the part of the European Union to pay ICANN directly or through its registry, and that may be accompanied by a place for the European Union on the advisory committee of the governments.

The concessions may be predicted by an estimate of the value that each party will attach to it and by the irreversible commitment that it will make to its demand. However, so long as their demands are met, it seems that the governments are not as committed to alter the basic current arrangement. They may recognize that the ultimate say on the naming system is with the United States. The United States – both Congress and the administration – may recognize that the naming system is not theirs to control, manipulate, or use as they wish. They also must recognize that the dissatisfaction by other governments, or by some independent ccTLD registries, cannot be ignored and must be addressed.

The reaction of the United States to the demands of other countries to "internationalize" the Internet demonstrates a similar method. The United States bound itself under its own laws to reduce its control over ICANN by denying ICANN's status as a government corporation (established and controlled by the government) and reducing its power over the root by maintaining contractual control.

ICANN's adoption of this strategy is demonstrated in the following story. In the opinion of its staff, ICANN needs funding to perform its job effectively, and the ccTLD registries are a source of funding.⁶⁴ As long as they do not sign contracts with ICANN, their undertaking to pay is less assured. ICANN proposed to increase the involvement of the government in the organization so as to pressure the registries of the ccTLDs into signing contracts with ICANN, which would include an undertaking to pay. This move, which would increase governments' power, drew critics who were

⁶⁴ Juliana Gruenwald, *ICANN Plan for Restructuring Draws Fire from Various Groups*, DAILY REP. FOR EXECUTIVES (BNA), Feb. 26, 2002, at A-41 (ICANN's president argued for a \$4.8 million, current budget increase of 300 to 500 percent).

concerned with the possible reduced importance of other Internet constituencies,⁶⁵ and increased possible content control of the Internet.⁶⁶ Whether ICANN will raise its funding, however, is less clear, since even representatives of the government doubted the validity of the proposed expansion of ICANN's role in governing the Internet.⁶⁷ Thus, the use of governments to pressure the registries into signing the contracts did not seem to materialize. In fact, it may have backfired.

On the other hand, some highly dissatisfied registries threatened to leave ICANN altogether.⁶⁸ Others are examining the possibility of a new organization that would play a more active role in ICANN's governance, such as a Names Supporting Organization, which would be made up of representatives from the registries of the ccTLDs.⁶⁹

5. Divide and Conquer

For a number of years, ICANN has attempted to reach an agreement with the registries of the ccTLDs on a form contract that they would sign. The attempt failed for a number of reasons. First, some individual registries rejected the particular provisions of the contracts, including significant payment obligations, without commensurate influence on the way in which the payments will be used. This was the "taxation without representation" argument. Second, some governments may not have been pleased with ICANN's assertion of power over their ccTLDs, which the governments claimed to be their property. Other governments were not pleased with the assertion of ICANN's power over the registries of their country codes. Lastly, emotions and self-worth played a part.

⁶⁵ See *id.*

⁶⁶ See *id.*

⁶⁷ Juliana Gruenwald, *ICANN Board Meeting in Ghana to Focus on Structure as Private-Sector Driven Group*, DAILY REP. FOR EXECUTIVES (BNA), Mar. 13, 2002, at A-10 (concern expressed by "William Black, managing director of Nominet, which operates Britain's ccTLD, .uk, and chairman of a group of European ccTLD operators").

⁶⁸ Stephen Joyce, *Worried About ICANN Responsiveness, ccTLD Managers Form New Support Group*, INT'L BUS. & FIN. DAILY (BNA), June 5, 2001, LEXIS, BNA Library, BNABUS File.

⁶⁹ Juliana Gruenwald, *ICANN Board to Take Up Reform Plan Despite Concerns with Latest Proposal*, DAILY REP. FOR EXECUTIVES (BNA), June 25, 2002, at A-22. This possibility is now being considered by ICANN in its reorganization. The policy councils would include the address and numbering council, the generic top-level domain name policy council and the geographic top-level domain names council, including input from the ccTLD operators.

Registries did not seem to appreciate ICANN's letter to the government seeking assurance that the registries were qualified for the task.⁷⁰ Therefore, most registries did not sign.

ICANN then took the long road of negotiating with each registry separately. ICANN's President announced that agreements with operators of ccTLDs depend on the willingness of individual countries to accept ICANN's conditions. In other words, ICANN will not reduce its demands under the contracts. He conceded that the process will therefore take longer, but emphasized that ICANN is in no rush. "However, a member of the ccTLD Supporting Organization (ccTLD SO) told the board that relations between ICANN and the ccTLDs have not improved since he issued a warning about the problem at last year's annual meeting." "ICANN was insisting that ccTLDs agree that in the event of a change in registry, ccTLDs will facilitate the transfer to a successor nominated by ICANN [but] few countries would accept such a provision."⁷¹

The progress was indeed slow, but some progress was made. In 2002, ICANN reached an agreement with the registry of Japan's ccTLD. The registry agreed to recognize "ICANN's role in managing the Internet's domain name system" and to "provide financial support to ICANN and to operate the ccTLD in the 'interest of the Japanese community.'" ICANN promised to "ensure the stable and secure operation of the domain name system and to formally recognize the Japan Registry Service Corporation as the new operators of .jp."⁷²

Few registries have signed such contracts. All but twelve⁷³ are holding out for a greater role in the governance of the system, or lower fees and other more favorable conditions.⁷⁴ But they do not speak in one voice. "There are 240 ccTLDs, all of whom have different views . . . Some of them wanted to explore the option of

⁷⁰ *ICANN Intrigues - The Jonathan Cohen Interview - Part 2*, DEMYS NEWS SERVICE, Oct. 22, 2002, at http://www.demys.net/news/2002/10/02_oct_22_icann_intrigues.htm (Oct. 22, 2002).

⁷¹ Tom Gilroy, *ICANN Expects Progress on ccTLDs, but No Surge of Agreements, President Says*, DAILY REP. FOR EXECUTIVES (BNA), Nov. 19, 2001, at A-6.

⁷² *ICANN Reaches Agreement with Operator of Japan's Country Code Top-Level Domain*, DAILY REP. FOR EXECUTIVES (BNA), Mar. 1, 2002, at A-42.

⁷³ ICANN, *ccTLD Agreements*, at <http://www.icann.org/ccTLDs/agreements.html> (providing links to the twelve agreements that ccTLD registries have with ICANN) (last updated June 21, 2004).

⁷⁴ *Id.*

what would happen if ICANN failed, and some of the more extreme ccTLDs put it in terms of leaving ICANN . . . 'There's a whole lot of other end of the spectrum,' . . . including constructive input on how to build the Country Code Names Supporting Organization (ccNSO)."⁷⁵ ICANN's powers and functions and the balance of power among the various constituencies are not settled as yet. The structure of the organization has been reformed recently, and is being further negotiated. In sum, ICANN is using the "divide and conquer" strategy while the registries and the governments have not formed a unified approach, but are nonetheless very reluctant to submit to ICANN's demands.

6. Arbitration

WIPO is interested in becoming the standard setter (and perhaps bearer) on some of the issues concerning ccTLDs, and so are many governments. WIPO, urged on by Argentina, Canada, Denmark, France, the U.S. and the EU, has drawn up a code of "best practices" for use by ccTLD administrators to resolve domain name disputes,⁷⁶ and has been involved in resolving numerous such disputes.⁷⁷ Furthermore, dozens of countries have voluntary arrangements with WIPO to handle disputes using their country codes.⁷⁸ WIPO members such as the United States and the EU are keen to see "best practice" codes put into place for other countries to contain the scourge of cybersquatting. One school of thought is that now that there is this quick and effective procedure against cybersquatting in the gTLDs, a lot of cybersquatting activity will move to the ccTLDs.⁷⁹

Other international organizations, such as the ITU, are also vying for the position of a "negotiation platform manager." The ITU has been serving for many years in a similar capacity for pos-

⁷⁵ Cheryl Bolen, *ICANN Board Moves Forward on Reform, Setting Stage for Next Meeting*, Lynn Says, ANTITRUST & TRADE REG. DAILY (BNA), Nov. 1, 2002, LEXIS, BNA Library, BNABUS File.

⁷⁶ WIPO, *ccTLD Best Practices for the Prevention and Resolution of Intellectual Property Disputes* (June 20, 2001), at <http://arbiter.wipo.int/domains/cctld/bestpractices/best-practices.html>; Daniel Pruzin, *WIPO to Consider Consultations on Cyberquatting, Other Domain Abuses*, 17 INT'L TRADE REP. (BNA), July 13, 2000, at 1071.

⁷⁷ See WIPO, *WIPO UDRP Domain Name Cases*, at <http://arbiter.wipo.int/domains/cases/all-cctld.html> (last visited Aug. 5, 2004).

⁷⁸ See WIPO, *Domain Name Dispute Resolution Service for Country Code Top Level Domains (ccTLDs)*, at <http://arbiter.wipo.int/domains/cctld/index.html> (last visited Aug. 5, 2004).

⁷⁹ Pruzin, *supra* note 76.

tal services. Arguably, ICANN has not done better than any bureaucratic organization in terms of time, especially with respect to policy matters. In addition, the ITU serves as a mediator for standard setting rather than as a standard-setting power. This approach is in line with the rapidly evolving development of the Internet. However, the ITU does not enable the United States to maintain its current power position as the ICANN structure does. The role of the ITU may be shaped in the future, but it is not likely to play the same current role it plays in the postal service context.

7. *The Relationship Between the United States and ICANN Mirrors a Non-Zero-Sum Game*

Neither party wishes to sever the relationship. Although the United States, which in the final analysis controls ICANN by its contract with the Department of Commerce, desires to keep the final control over the root, it also desires the control to be in the form of monitoring rather than overt directives. United States law precludes the Department of Commerce from controlling ICANN, unless ICANN is reestablished by statute. However, the Department of Commerce does have the power to terminate ICANN's contract. The Department is sensitive to dissatisfactions with ICANN. It can therefore make additional demands on ICANN to correct its operations or shorten its contract term.

Further, like the couple in the hypothetical, we witness changes in events that tend to press for cooperation rather than competition. The United States, which had full control over the root, tied its own hands by avoiding the creation of an ICANN-type corporation under a statute. Had the United States chosen this route, it would have had the power to control and manage ICANN to a far greater degree. But by creating a non-government corporation, it has legally limited its own power to manage ICANN. Nonetheless, by contract, it has reserved the ultimate power to itself, and the ability to influence ICANN by possessing the power (threat) not to renew the contract. Today, the United States uses its power to avoid conflicts with other governments and powerful actors. Since the United States has changed its mind and no longer promises to release ICANN from its ties to the government, a consistent approach or sensitivity to the other governments is necessary to help gain the trust of other actors and establish a pattern of cooperation.

Whether this pattern will continue is unclear. It would seem that so long as this ambiguous status satisfies the interests of the United States and can be used to satisfy the interests and demands of other governments, ICANN will continue to exist. Changes will be made within ICANN in terms of balance of power, identity of actors and participants, and processes. The chances of creating a new structure altogether seem to be low unless the whole naming system finds another form.

Each of the players in the naming system may have established a "minimum-maximum strategy" that dictates how far the player will go either in its demands or in giving in to the demands of the other players. For example, it seems that the minimum demands of the United States are to control the geographical place of the root and the legal arrangement with the organizations that manage the root. The maximum demand is probably close to the minimum, and the range is minimal. For the United States the current flexible situation seems to be ideal. From the point of view of other governments, their minimum demands are further removed from their maximum demands. One main reason is the dependence on the United States' largess and fairness, or dependence on the United States no matter how fair it might behave. But as long as the United States has made it clear that it will not relinquish control, and as long as it accommodates the minimal strategic demands of the other governments, cooperation is likely to continue and the status quo will be changed only in small steps of "muddling through."

I. *The Platform For Negotiations: Why Are Governments Interested in ICANN As a Platform For Negotiation?*

ICANN can develop into a platform for negotiation. This platform can develop into a central power, slowly building a power base through negotiations that put it at the center as a pivotal necessary party, like the central pole in a carousel. The pole is useless by itself, but all other important parts are tied to it and depend on it for balance, support and function. However, if the crucial parties bypass ICANN, and if the distance between them is not great, ICANN may lose its pivotal power. For example, if the United States and representatives of governments negotiate directly within the government committee, then ICANN's staff and board would have to carry out the agreements among the governments, but would have little say in these agreements. Currently, it seems that

for many reasons that should be explored further, the governments prefer to go through ICANN's personnel and board, even though they also deal with each other directly and have the option of using other organizations to get in touch with each other, including the GAC appended to ICANN.

It seems that the registries of ccTLDs are being organized in order to have a special say in ICANN. For example, the Number Resource Organization ("NRO") formed in late 2003 to coordinate efforts by regional Internet registries in dealing with ICANN.⁸⁰ They may also become the voice of the governments whose countries they serve. It may be that each country will develop some partial naming system and, perhaps, that some countries may band together to create regional naming systems that would not impede the overall naming system but rather reduce its importance. Even though it seems that ICANN is going in that direction, I do not believe that ICANN will end up as a power center.

If ICANN evolves into a platform for negotiations to augment its power rather than to attain a consensus, a far more serious problem will arise both for ICANN, and indirectly for the United States. There are international organizations that are far more apt and have far more experience at reaching consensus. On the other hand, few organizations involved in ICANN's infrastructure, including governments and ccTLDs, are likely to participate in an authoritarian organization, unless they control it. As the conflicts between ccTLDs and ICANN sharpen, and given ICANN's unwillingness to police itself, there is a growing pressure to move to other actors. However, the United States has a stake in keeping ICANN, and its own control of ICANN, alive. Hence, it has pressured ICANN to become more transparent and has shortened its contract period.

J. *Lessons From the Bargains or Lack Thereof*

With respect to the weaker parties, such as some registries and many registrars, who are lower in the power hierarchy, ICANN has been successful in reaching agreements that fit its preferences. Whether or not these agreements fit the preferences of the weaker parties, the weaker parties likely concluded that they would be better off with these agreements than without them. Thus, the equilib-

⁸⁰ NRO, *The Number Resource Organization (NRO)* (Oct. 27, 2003), at <http://www.nro.net/docs/mou.html#doc> (proposed Memorandum of Understanding).

rium between ICANN and such parties has been established, and may be described as the rule for parties of this ilk. However, ICANN does not seem to consider these parties as a sufficient source of funding, nor as the foundation of power. Early on, ICANN attempted to impose a relatively small charge on each domain name holder. However, the negative reaction to this attempt from Congress and other significant competitors to ICANN's power caused a quick withdrawal of this proposal. Thus, these parties are not generally ICANN's power competitors. They are not organized and do not have the national or international clout necessary to induce ICANN to change its position. Therefore, it makes sense for ICANN to focus on the registries of the ccTLDs as a source of funding, and on the governments as a foundation of power or the source of funding or the party able to pressure the ccTLDs to be more generous with their payments.

ICANN was not successful in reaching an agreement with the organized group of ccTLD registries. They objected to the contract provision that bound them to future policy decisions, that is, to the assertion of power, and they did not consider ICANN's services sufficient consideration for the payments they were making and were required to make. In consideration for these two concessions, they demanded greater power of participation in the decisions that would affect them. ICANN did not agree to meet these demands and chose the strategy described above. The registries are also not of one mind, and the chances are that some will defect and sign a negotiated contract, while others will hold out for more.

The Department of Commerce has also initially reduced its support of ICANN by renewing its contract for a shorter period in 2002,⁸¹ while Congress held hearings that allowed criticisms of ICANN to be heard from witnesses, including the General Accounting Office, as well as members of the Congressional committee.

In September 2003, the Department of Commerce extended the agreement for another three years. The Department stated

⁸¹ *Internet Oversight Body Wins One More Year of Life*, DESERET NEWS (Salt Lake City, Utah), Sept. 21, 2002, at B10, LEXIS, News Library, AllNews File (noting that the Department granted a one-year renewal - until Sept. 30, 2003 - the third renewal of the contract). The Department expressed disappointment in ICANN's progress on the contract tasks but "consider[ed] the organization's recent broad reform efforts to be a substantial justification for affording ICANN a limited amount of time to achieve the [contract] tasks."

that "[w]hile numerous issues and substantial challenges confront ICANN, the organization has made notable progress toward achieving the goals of the [agreement] in the start-up phase of its existence," and noted that "the agreement included 'key' provisions to ensure that ICANN developed into an independent, stable and sustainable organization capable of technically managing the domain name system." The Department noted ICANN's recent reforms but said that "much work remains."⁸²

There is no strategic consensus among ICANN's main power holders: the governments, the ccTLD registries, the United States Department of Commerce and the Congressional committee in charge of monitoring the naming system. Not all believe that their strategy is optimal. However, there is another lack of equilibrium that strengthens ICANN's power - the disagreement between the United States and other foreign countries with respect to the control of the root. There is no consensus among the European Union, other countries, and the United States with respect to the "internationalization" of the root and the extent to which the United States should control the root.⁸³ Any fundamental change in ICANN's identity may allow for an open reconsideration of the power position of the United States. As long as ICANN's function as the guardian and manager of the root is not on the negotiation table, the United States' utility is met. That, however, allows the United States to negotiate, through ICANN, its behavior or processes or even the extent of its power. For example, there is no reason why ICANN should determine issues concerning control of information. There are other bodies, both in the United States and in other countries, that can determine these issues and there is no need for uniformity - at least no immediate need - on this score.

We can, therefore, expect the United States to continue to maintain ICANN, to be sensitive to the demands of the other countries, and to curb ICANN's ambitions. The United States can afford, and has the ability, by contract, to limit ICANN's desires to acquire centralized discretionary control over anything that might

⁸² *Agencies*, WASH. INTERNET DAILY, Sept. 18, 2003, LEXIS, News Library, AllNews File. The agreement includes "milestones" for ICANN, including a new strategic plan by the end of the year, a contract audit compliance program by June 30, and a contingency plan in the event of a severe disruption of its operations. ICANN also is required to continue seeking agreements with ccTLD operators and to implement, by December 31, 2004, an appropriate long-term strategy for selecting new TLDs.

⁸³ See, e.g., Monika Ermert, *Speakers Seek Full Internationalization of ICANN During WSIS Panel*, WASH. INTERNET DAILY, Mar. 5, 2004, LEXIS, News Library, AllNews File.

possibly relate to the Internet naming and numbering system, and to use this ever expanding control and operations as a source of ever expanding funding. To be sure, an idealistic view of ICANN is unrealistic. It does not make ICANN better and stronger. But then, there are some people and institutions that would not wish ICANN to be stronger. In their opinion the weaker it is, the better it will be.

The tension and the bargaining areas are likely to center not on finding alternatives to ICANN. They are likely to focus on defining ICANN's power, weakening its appetite for establishing policies, and limiting its budget. In that area, the United States and other countries may reach an agreement, which ICANN will be forced to follow. If, however, the United States and the other countries insist on their demands for controlling the root in terms of geography and services, they may be forced into the existing equilibrium and into far greater threats that would be far more costly to each in attempting to win.

One last possibility that looms in the background of this saga is the development of an alternative naming system that would be more suitable to the Internet of today and tomorrow. There are scientists that are working on such a system, and when this is achieved, the problems of the present will be those of the past; ICANN may become entirely obsolete, and new problems are likely to emerge. Unlike new fuel, whose introduction might require massive capital investments, and cause the obsolescence of an enormous amount of existing investments, a change in the naming system will involve very little of each in terms of money but much more, perhaps, in terms of knowledge. But if the knowledge can be acquired while the people in control remain in control, the transition may be far easier and more acceptable.

II. CONCLUSION

While ICANN was hailed as a new design, and to some extent it is, there is nothing fundamentally new about it, except that it has not yet matured. Every governance model contains flexibility as well as structure. From free markets⁸⁴ to the most rigid dictatorship, some actions are left to the actors and are not prescribed from above. It seems that even chaotic systems have some structures,

⁸⁴ Tamar Frankel, *The Legal Infrastructure of Markets: The Role of Contract and Property Law*, 73 B.U. L. Rev. 389 (1993).

such as fractals.⁸⁵ The governance of the Internet naming system has not yet found the balance between structure and flexibility, between principles upon which people negotiate and negotiations where "anything goes" depending on muscle and wile. There is no balance as yet between strategic techniques designed to gain advantages for the parties (usually short-term) and a long-term view of the ultimate goals of the organization. There is little balance between a self-limiting approach to power as opposed to a drive for expansion of power, between the imposition of uniformity and "best practices" and room for individual and organizational experiments.

Do the issues discussed in this paper indicate a potential for developing patterns of behavior that can materialize as rules governing all parties involved in the naming system, or even the rules governing the relationships between governments and their registries? As long as the parties depend on ICANN, and as long as their relationship with ICANN is established by contracts or by participation in some related organization, the odds of rules evolving are quite slim. Each of these forms allows for negotiations rather than consensus-building. Nonetheless, it seems that some conclusions can be reached with respect to the relationships between governments and their registries.

The governments and the registries are likely to agree on a relationship without much interference by ICANN. That is because ICANN's power over the relationships is limited to changes in the identity of the delegates who operate the ccTLDs. If the delegates are government organizations then the changes in personnel will hardly ever be subject to ICANN's interference. As between the parties, it is very likely that the emerging rules will grant the governments full power over the ccTLDs. The governments' stronger position at ICANN, their close relationships with the U. S. Department of State, and their deeper commitment to their country names, suggest that the registries would become legally, or in reality, the governments' agents. The Australian experience suggests that the registries' status as private professionals offering public service is giving way to a far more controlled status

⁸⁵ See, e.g., Michael J. Martinez, *Fractals Flowing Online*, at <http://abcnews.go.com/sections/tech/CuttingEdge/fractals990316.html> (last visited Feb. 13, 2003) (noting the identification of structures (fractals) within the chaotic system of the Internet information transfer and working on using these fractals to build mathematical models that would help predict the behavior of this chaotic system and gain efficiencies).

in the service of the countries' political and business interests. Unless the registries could organize and establish a countervailing power at ICANN, and perhaps even if they succeed in doing so, they will not be able to overcome the strong pressure of national governments to comply with the governments' policies.

The real conflict, which is currently relatively latent, will arise when the governments demand "internationalization" of the Internet in terms of language and staffing of ICANN. The real conflict seems to be between the governments and the United States. If the United States values the control of the root, it may have to reduce ICANN's powers over this task, and agree that other matters will be determined by one or more organizations. For example, the ITU could provide a platform for negotiations among governments and other constituencies, while technical organizations can perform the technical services that ICANN currently performs through the same organizations as independent contractors.

The important questions remain: will the current style of contract-negotiations for private laws lead to a more predictable governance structure? Will this system gain wide acceptance, legitimacy and respect? Or will this style lead to the production of "private laws" that depend on the power balance of the parties and the pressures of outside parties at the particular time?