ICANN GOVERNANCE

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

FEBRUARY 14, 2001

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COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

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ICANN GOVERNANCE

WEDNESDAY, FEBRUARY 14, 2001

U.S. Senate,
Subcommittee on Communications,
Committee on Commerce, Science, and Transportation,
Washington, DC

The Subcommittee met, pursuant to notice, at 9:30 a.m. in room SR–253, Russell Senate Office Building, Hon. Conrad Burns, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF HON. CONRAD BURNS, U.S. SENATOR FROM MONTANA

Senator Burns. We will call this hearing to order. We have some other members coming, but I like to get started pretty close to on time, and we will hear the testimony of the ones at the table this morning and then try to start a dialog on this important situation.

We are familiar by now with the explosive growths in the use of the Internet in recent years and how it has transformed our lives. Most of us know very little, however, about how it began, how it evolved, and how it operates today We have come to take the existence and operation of the Internet for granted, except for the occasional intrusion by hackers, and then that makes big headlines.

The Internet has become important to our Nation's well-being. We in Congress need to become better informed about its operation. We may still choose to legislate, but at least have the choice before us should we deem it important to this country. This is particularly true in the crucial area such as the domain named system which is highly technical in nature.

While today's topic is one that might tend to make the eyes glaze over, we are, in fact, dealing with the very foundation of the Internet's information superstructure.

While terms such as top-level domains and Internet protocol addresses might seem to be part of a foreign language, understanding how the Internet works and who controls it is critical to the economic, cultural, and educational destiny of this Nation.

With that in mind, this Subcommittee takes its oversight capacity very seriously. I believe it is essential that the Subcommittee thoroughly examine ICANN and how it was created, the procedure it has created and followed, and the implications for the consumers and competition.

Today's hearing is necessary only as a first step of conducting that examination. There are several issues that I would like the Subcommittee to consider during these hearings.

Many of them involve the delegation of control over the domain name system from the Department of Commerce to the Internet Corporation for Assigned Names and Numbers. That is, ICANN.

The formation of ICANN originated with the so-called Green and White Papers of the Clinton Administration in 1998 that proposed

the privatization of the domain name system.

The White Paper called for the creation of the new not-for-profit corporation formed by private sector Internet stockholders to administer policy for the Internet name and address system and declared that the U.S. Government should end its role in the Internet number and name address system.

Soon thereafter, ICANN was created and the Commerce Department began to delegate certain functions of the Internet domain name system to it. In the eyes of many, this delegation has happened far too swiftly. While ICANN is supposed to function by a consensus of the Internet community, its operations have often

been controversial and shrouded in mystery.

Serious questions arise about the very legitimacy of ICANN as an organization. Professor A. Michael Fromkin, who will testify before us today, makes a powerful argument that the entire delegation of authority from the Commerce Department to ICANN is either a violation of the Administration Procedures Act or a violation of the non-delegation doctrine of the United States Constitution. I look forward to hearing his testimony.

In short, three serious and troubling questions surround ICANN. First, is the delegation of authority over the domain name sys-

tem from the Commerce Department to ICANN legal?

Second, is ICANN an appropriate organization to manage the domain name system? Are they technically competent, and have they built the required trust for the organization to operate?

Third, how can ICANN perform so far, or how has ICON performed so far? Have their processes, for example, with the selection of the new generic top-level domain names been open, fair, and

democratic?

I'm certain that the answers we hear to these questions will vary, and they will raise new questions as the dialog continues. The issues are complicated, but the stakes are very high. My greatest fear is that the administration of the Internet will be changed in foolish, even disastrous ways while very few people are watching. We simply cannot afford to let that happen.

I welcome our witnesses, and I look forward to hearing their testimony. I would like to specifically mention that a witness on our second panel, Brian Cartmell, represents the eNIC Corporation whose president, Jim Trevino, hails from Calispell, Montana, and

we welcome all those folks today.

So we will start with testimony this morning. We welcome Mr. Auerbach, and we look forward to your testimony.

STATEMENT OF KARL AUERBACH, MEMBER, ICANN BOARD OF DIRECTORS

Mr. AUERBACH. Good morning, Mr. Chairman, distinguished Senators. Thank you for giving me the opportunity to appear.

I have been involved in the Internet since 1974. I am a computer engineer. I work in the Advanced Internet Architectures Group at

Cisco Systems. I neither represent nor speak for Cisco. My opinions are my own.

I am a member of the ICANN Board of Directors. I am the only person on ICANN's Board of Directors who obtained his seat through an open election of the Internet community in North America.

The Internet is seductive. Because the Internet is new and technical, there is much room to dissemble public policy as technology. Because the Internet recognizes few borders, it is easy for subtle controls to have a broad impact, and the Internet is unclaimed territory upon which an administrative agency may plant its flag and extend its regulatory powers.

I support the continued existence of ICANN. ICANN is a valuable institution. Its roles as a technical coordinator are quite properly needed for the smooth functioning of the Internet. However, ICANN is ill-designed, has been ill-operated, has brought upon itself significant ill-will within the Internet community, and has greatly exceeded its proper scope. I believe that significant restructuring of ICANN is needed so that the corporation can fulfill its purposes and fulfill its obligations toward its stated beneficiaries.

My primary focus within ICANN is on limiting ICANN's scope of authority, creating well-defined procedures for fair decisionmaking, and establishing solid business practices.

These are conservative and reasonable goals. ICANN is a secretive entity. Even as a director, I have difficulty discovering what ICANN is doing. There are parts of ICANN to which I am denied access. ICANN has a strong aversion to democratic principles.

ICANN has been obligated from the outset to create an at-large membership. ICANN assured Congress that such a membership would be in place, and then proceeded to back-track, pare, and equivocate on that assurance. The election we had last fall was for only a portion of the Board's seats that were promised.

Those few of us who were elected have received seats of reduced duration, as compared to those of the non-elected directors, and now the existence of that at-large membership is at risk. Indeed, ICANN staff has gone so far as to declare that the at-large membership no longer exists.

There are lessons to be drawn from ICANN. ICANN has shown us that governmental powers ought not to be delegated to private bodies unless there is an equal obligation for full public participation and public accountability. ICANN has shown us that a public benefit and tax-exempt corporation may be readily captured by those who think of the public less as something to be benefited than as a body of consumers from whom profit may be made. The role of the U.S. Department of Commerce in ICANN has shown us that the Internet may be used as a camouflage under which administrative agencies may quietly expand their powers without statutory authorization from Congress or the Executive Branch.

Thank you very much for this opportunity to speak. I will be happy to answer any questions you may have at this time.

[The prepared statement of Mr. Auerbach follows:]

PREPARED STATEMENT OF KARL AUERBACH, MEMBER, ICANN BOARD OF DIRECTORS

Good morning. I have been involved in the Internet since 1974 and have actively participated in the transition of its administration to the private sector for the past

years.

I am a computer engineer—I do research pertaining to ways of making the Internet more reliable and efficient in the Advanced Internet Architectures Group of Cisco Systems in San Jose, California. I am also working on a joint Cisco-University of California research project on advanced control and provisioning mechanisms for the net.

With respect to my service on the board of ICANN and for all the opinions I am expressing here today I neither represent nor speak for Cisco. My opinions are my

I am also an attorney. I graduated cum laude in 1978 from Loyola of Los Angeles specializing in commercial, international, and administrative law. Although I maintain my status as the member of the California Bar and the Intellectual Property

Section of the California Bar, I am not engaged in active practice.

I have been a founder, principal, or first employee in several Internet related startup companies. These include Epilogue Technology Corporation (now part of Wind River Systems); Empirical Tools and Technologies Corporation; Precept Software (now part of Cisco Systems); and InterWorking Labs, Inc. These have provided me with a broad base of experience in commerce and technology. I have direct experience with the needs and obligations of Internet related businesses. I am sympathetic to the needs of Intellectual Property owners. I own copyrights, I have owned federally registered trademarks, and I have filed for patents.

I have been active in the core design and standardization body of the Internet, the Internet Engineering Task Force (IETF), since the mid-1980s. And I have been a member of the Internet Society (ISOC) since its formation.

I have been deeply involved during the last several years with the evolution and activities of what has become ICANN. I am a founding member of the Boston Working Group, one of the groups that submitted organizational proposals to NTIA in 1998 in response to the so-called "White Paper." I am a member of the ICANN Board of Directors. I was elected to represent North American Internet users. Four others were elected at the same time to represent other regions of the world.

I was elected to my seat. I was not appointed.

I was elected to represent the Internet users of North America in an election in which I ran against six other highly qualified candidates: the Chancellor of the University System of Maryland, the Chief Scientist of BBN Technologies, the President of the Information Technology Association of America, the former President of the Association for Computing Machinery (ACM), a Professor of Business at the University of Texas, and the former holder of the Berkman Chair at the Harvard School of Law.

I am the only person on ICANN's Board of Directors who was elected by the Inter-

net users of North America.

I have only been on ICANN's Board of Directors for a few months—my term started shortly after the well-publicized and controversial selection of a mere seven new

Top Level Domains (TLDs).

However, despite the short time I have been a Director, I have already learned much to confirm my fears that ICANN is suffering from a lack of public process, lack of accountability, mission creep, poor communication, excessive delegation of policymaking to staff, and poor business practices. As a Director it is my job to work to correct these weaknesses. But I despair at the immensity of the task.

My primary focus within ICANN is on limiting ICANN's scope of authority, creating well defined procedures for fair decisionmaking, and establishing solid busi-

ness practices. These are conservative and reasonable goals.

As both an engineer and an attorney with long experience in other Internet governance organizations I have a solid grasp of the issues ICANN has sought to ad-

ICANN should be based on viable real-world ideas and processes, not on some abstract notion that suggests that ICANN can somehow fly above technical, economic,

and political realities.

Those who use the Internet ought to have a voice in the running of the Internet. I do not subscribe to the notion that people can be properly represented by pre-defined, one-size-fits-all "constituency" structures such as are found in much of ICANN's present structure.

I support the continued existence of ICANN. ICANN is a valuable institution; its roles as a technical coordinator are quite properly needed for the smooth functioning

of the Internet. However, ICANN is ill designed, has been ill operated, has brought upon itself significant ill will within the Internet community, and has greatly exceeded its proper scope. I believe that significant restructuring of ICANN is needed so that the corporation can fulfill its purposes 1 and fulfill its obligations toward its stated beneficiaries.2

I would like to discuss the following matters:

What kind of entity is ICANN?
 How can ICANN obtain acceptance and legitimacy?

3. ICANN's obligation to have meaningful public participation in decisionmaking. 4. Specific things Congress, the U.S. Department of Commerce, and ICANN ought to do.

WHAT KIND OF ENTITY IS ICANN?

ICANN is Internet governance.

ICANN is far more than mere technical coordination.

ICANN is about policies for the allocation of Internet resources.

ICANN is responsible to no one other than the Attorney General of the State of California.

ICANN's policies have an economic impact that is potentially measured in billions of dollars. The impact of decisions in the Domain Name System (DNS) space have been well noted elsewhere and were illustrated last week in hearings before the House Subcommittee on Telecommunications.

There are those who say that ICANN is merely a technical body. I am a technologist. Yet I have a difficult time understanding how any of ICANN's decisions concerned with the Domain Name System have any technical content at all

One must wonder where the technical component might be in ICANN's Uniform Dispute Resolution Policy—a policy that expands the protection of trademarks to an extent not granted by any national legislature. And one must also wonder where the technical component might be in ICANN's preservation, indeed in ICANN's extension, of the hegemony of Network Solutions over the naming systems of the Internet.

In other words, ICANN is very much a regulatory body. And it is a regulatory body that has been flung into existence with the support and aid of the U.S. Department of Commerce. As if to underscore that ICANN is a fruit that has fallen not far from the administrative agency that engendered it, ICANN was created with the express purpose of "lessening the burdens of government." 1

But unlike regulatory bodies that are part of the government, ICANN is a private corporation 2 and is not obligated to undertake any of those troublesome constitutional Due Process burdens imposed on governmental administrative bodies. ICANN is not subject to the burden of judicial review or the Federal Administrative Procedures Act. ICANN is not required to make it possible for those affected by its deci-

gaging in any other related lawful activity in furtherance of items (i) through (iv).

The beneficiaries of ICANN's operations are described in paragraph 4 of ICANN's Articles of Incorporation. Emphasis has been added: 4. The Corporation shall operate for the benefit of the Internet community as a whole, carrying out its activities in conformity with relevant prin-ciples of international law and applicable international conventions and local law and, to the extent appropriate and consistent with these Articles and its bylaws, through open and transparent processes that enable competition and open entry in Internet-related markets. To this effect, the Corporation shall cooperate as appropriate with relevant international organizations.

¹ICANN's purposes are stated in its paragraph 3 of its Articles of Incorporation. Emphasis has been added to highlight those parts mentioned in the text above: 3. This Corporation is a nonprofit public benefit corporation and is not organized for the private gain of any person. It is organized under the California Nonprofit Public Benefit Corporation Law for charitable and public purposes. The Corporation is organized, and will be operated, exclusively for charitable, educational, and scientific purposes within the meaning of §501 (c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"), or the corresponding provision of any future United States tax code. Any reference in these Articles to the Code shall include the corresponding provisions of any further United States tax code. In furtherance of the foregoing purposes, and in recognition of the fact that the Internet is an international network of networks, owned by no single nation, individual or organization, the Corporation shall, except as limited by Article 5 hereof, pursue the charitable and public purposes of lessening the burdens of government and promoting the global public interest in the operational stability of the Internet by (i) coordinating the assignment of Internet technical parameters as needed to maintain universal connectivity on the Internet; (ii) performing and overseeing functions related to the coordination of the Internet Protocol ("IP") address space; (iii) performing and overseeing functions related to the coordination ¹ICANN's purposes are stated in its paragraph 3 of its Articles of Incorporation. Emphasis Internet; (ii) performing and overseeing functions related to the coordination of the Internet Protocol ("IP") address space; (iii) performing and overseeing functions related to the coordination of the Internet domain name system ("DNS"), including the development of policies for determining the circumstances under which new top-level domains are added to the DNS root system; (iv) overseeing operation of the authoritative Internet DNS root server system; and (v) en-

sions to participate in the making of those decisions. And there is no mechanism to compel a truly independent review of ICANN's actions.

ICANN's internal mechanisms for review are moribund or exist only as paper placeholders. I have had one request for independent review pending for nearly a year because ICANN has been too busy galloping off doing mission-expanding policy development, leaving it no time to pay attention to the implementation of fair procedures for review.

And until a viable at-large mechanism is created and full rights of membership accorded, ICANN has no external entity to which it is accountable other than the Attorney General of the State of California.

ICANN has gone so far as to assert in amicus briefs that ICANN believes that it, not the courts, should be the forum for resolution of disputes.

ICANN is the result of a strange brew of governmental powers and private lack of accountability.

ICANN, despite its claims to the contrary, is extremely secretive. We know more about how the College of Cardinals in Rome elects a Pope than we do about how ICANN makes its decisions. As a member of the ICANN board I have been surprised at how often I learn of ICANN actions from outside third parties. And I have perceived a very strong resistance on the part of ICANN's staff to opening its activities even to members of ICANN's Roard of Directors

ties, even to members of ICANN's Board of Directors.

ICANN has several internal committees and organizations that have no distinct legal existence apart from ICANN. As a Director I am responsible for the assets, liabilities, and actions of these bodies. Yet some of these bodies act as completely autonomous, independent, and often very secretive entities. At least one of these entities maintains distinct financial records that seem not to be incorporated into ICANN's overall financial statements. Another refuses to allow Directors to inspect its activities or meetings.

I have a hard time reconciling ICANN's opaque processes and structures with the obligation in its bylaws that "[t]he Corporation and its subordinate entities shall operate to the maximum extent feasible in an open and transparent manner and consistent with procedures designed to ensure fairness." (ICANN bylaws, Article III, Section 1.)

ICANN has an organizational structure that is truly Byzantine. ICANN has so many "committees", "organizations", "working groups", "councils", and "assemblies" that one's mind goes numb simply looking at the fully detailed organizational chart. An older version of the org chart, one that lacks many of ICANN's newer elements, may be seen at http://www.icannwatch.org/images/orgchart.gif. Gilbert and Sullivan could easily write a sequel to The Mikado with ICANN as its subject.

The ever-ramifying complexity of ICANN's organization makes it exceedingly difficult for any but the most determined, or well financed, to penetrate past even the outer layers. This has made ICANN very much the province of professional business advocates and has deterred the participation of the average citizen

advocates and has deterred the participation of the average citizen.

It is frequently overlooked that ICANN in addition to its role over DNS, also regulates the allocation of Internet Protocol (IP) addresses. Address allocation policies will have a very significant impact on the future growth of the Internet and more particularly on what data carriers survive and dominate and which will fall by the wayside. It is likely that over the long term ICANN's IP address allocation policies will have a much greater economic impact than ICANN's Domain Name policies.

will have a much greater economic impact than ICANN's Domain Name policies.

The very real technical need for IP addresses to be allocated and then sub-allocated in accord with the present day topology of the Internet creates a situation that tends to create a preferential lock-in for those who are currently at the top of the address allocation hierarchy and a discriminatory lock-out for those who may aspire to that role in the future. Address allocation is an area of substantial and subtle interaction between technical, economic, and social policies. In this area ICANN is for the moment leaving the task to the three worldwide regional address registries that were already doing the job before ICANN was formed.

HOW CAN ICANN OBTAIN ACCEPTANCE AND LEGITIMACY?

ICANN aspires to transcend national borders. ICANN conceives of itself as a supra-national body that may act in ways that no single nation can, and equally, ICANN harbors a hope that it ought to be above the reach of the laws of any single nation.

And indeed it is true that ICANN has powers that supersede those of any single nation. For instance, ICANN's Uniform Dispute Resolution Policy (UDRP) amounts to a worldwide law, a law that is distinct and different from that enacted by any national legislature.

ICANN's UDRP is applied via a cascading contractual scheme. But because of ICANN's position as the sole gatekeeper of the Domain Name System, those who wish to have domain names have no choice but to submit to ICANN's will.

Under ICANN's UDRP trademarks are expansively interpreted at the expense of non-commercial uses of names and even traditionally acceptable nominative and free speech uses of trademarks. Suffice it to say, ICANN has created a new law of trademarks that as a practical matter overrides in many regards the trademark laws enacted by the Congress of the United States.

ICANN's decisions as to who does and who does not get a Top Level Domain (TLD) have transformed ICANN into an intrusive worldwide zoning board issuing licenses that determine who gets the privilege to set up a lucrative name-service shop on the Internet Boulevard.

Apart from the merits of the UDRP, this supranational scope is necessary—the Internet is supranational and ICANN's decisions as to its resources necessarily have supranational impact.

supranational impact.

The real question is not whether ICANN ought to have this power but rather how ICANN's possession of that power obtains acceptance and legitimacy from the nations of the world and the users of the Internet.

My own answer is very simple: If ICANN makes good decisions using sound proce-

dures, it will come to be accepted as reasonable and legitimate.

As a Director I am very concerned that ICANN's rejection of public participation, its structural bias in favor of certain commercial interests, and its poorly defined and applied procedures will harm its long-term prospects for achieving such acceptance and legitimacy.

ICANN was given two distinct tasks by the U.S. National Telecommunications and Information Administration (NTIA) when ICANN was formed. The first of these tasks was to deal with domain name issues. The second was to achieve public acceptance of this new thing under the sun. ICANN leapt into the first task—deciding DNS policy—while it slept on the second—achieving the public participatory structures that would provide a foundation upon which that DNS policy might be erected.

Until ICANN reforms its procedures and until it starts allowing meaningful public participation in its decisionmaking, ICANN's policy decisions will be perceived as leaning toward special-interest concerns and thus undermine ICANN's long term hope of general acceptance and legitimacy.

ICANN'S OBLIGATION TO HAVE MEANINGFUL PUBLIC PARTICIPATION IN ${\tt DECISIONMAKING}$

As mentioned above, ICANN's hopes for acceptance and legitimacy depend to a large extent on there being a perception that ICANN is responsive to all not just to some small set of business interests. To this end, a viable and believable means by which the public can participate in ICANN is essential.

ICANN is obligated to have a well-formed mechanism through which the public may meaningfully participate in ICANN's policymaking. However, ICANN has a history of impeding the creation of such a public role. Even today the public has obtained only a partial position—it elects only about one half of its nominated quota of Directors—and that partial position is at risk of being eroded or eliminated.

The "Executive Committee" of ICANN's Board of Directors appears to be increas-

The "Executive Committee" of ICANN's Board of Directors appears to be increasingly active. The Executive Committee acts in lieu of the full Board, thus effectively eliminating any role for those Directors not on the Committee. The Executive Committee contains only one Director elected by the at-large membership. The impact of this is to dilute the role of the public by diluting the role of its elected representatives

ICANN is explicitly required by its Articles of Incorporation to "operate for the benefit of the Internet community as a whole." ³

ICANN has made several promises to have a body in which the general public may fully participate in ICANN's policymaking. That promise remains unfulfilled. In 1998 during ICANN's formative period, NTIA obligated ICANN to discuss var-

In 1998 during ICANN's formative period, NTIA obligated ICANN to discuss various matters, including public participation in ICANN, with groups such as the Boston Working Group.

³The beneficiaries of ICANN's operations are described in paragraph 4 of ICANN's Articles of Incorporation. Emphasis has been added: 4. The Corporation shall operate for the benefit of the Internet community as a whole, carrying out its activities in conformity with relevant principles of international law and applicable international conventions and local law and, to the extent appropriate and consistent with these Articles and its bylaws, through open and transparent processes that enable competition and open entry in Internet-related markets. To this effect, the Corporation shall cooperate as appropriate with relevant international organizations.

In 1999 ICANN formed a Membership Advisory Committee. This body issued its report in spring of 1999. The report was reasonably detailed and complete—and it favored the creation of a public "at-large" body that would elect Directors.

In July 1999, ICANN's chairman promised a subcommittee of the U.S. House of Representatives that nine board seats would be filled by public election by the fall of the year 2000.4 That promise was made to Congress 18 months ago. Although we did in fact have an election, it was for a mere five of the nine seats. Furthermore ICANN is now taking the position that the entire at-large body, including its quota of Directors, may be eliminated altogether.

Moreover, this election was not held until 2 years after ICANN's formation and well after many of ICANN's fundamental and important decisions had been made

and put into effect.

The remaining four seats continue to be occupied by unelected people who were chosen, somehow, back in 1998 for 1 year terms. Those terms have now been extended to be at least 4 years. This extension is so long that my own term, and the term of all five of the Board members who were actually elected, will expire before

ICANN has initiated a "clean sheet" study to reconsider even the existence of the "at-large" membership and the election of board members by the public. I personally consider this study to be unnecessary as it does little more than revisit the ground already covered by ICANN nearly 2 years ago. I also consider this study to be overbroad because it explicitly places at risk even the bare existence of any public participation in the selection of ICANN's Board of Directors. This risk is not idle conjecture—within the last few weeks, ICANN executives have declared that the at-

large membership no longer exists under ICANN's bylaws.

Even if ICANN eventually implements a full quota of seats for the at-large, there will not be an election until fall of 2002—four years after ICANN's inception. And in those 4 years, ICANN and time will have poured large amounts of metaphorical concrete around its prior decisions, making them essentially irreversible and forcing the public simply to accept that which was done while they were locked outside of

ICANN's primary decisionmaking body.

Changing the subject slightly—that election of the fall of 1999 had some strange characteristics and failures

Many voters were denied the ability to register to vote, or if registered, were not

given sufficient information and pass codes in order to cast their vote.

Neither candidates nor voters were allowed access by ICANN to the voter lists. This made it nearly impossible for the voters to discuss matters except via the limited channels provided by ICANN. This limitation made it virtually impossible for the voters to form coalitions or parties, to otherwise organize their votes, or to promote their favored candidates. In the long term, this will damage the ability of ICANN's voters to evolve into a well-structured and principled institution. Moreover, ICANN's denial of the voter lists was arguably in contravention to the Corporations Code of the State of California under which ICANN is incorporated.

I was elected by the at-large voters. But because of ICANN's restrictive controls over the voter rolls, ICANN has made it impossible for me to speak to my constitu-

ents or to solicit their advice.

⁴ Esther Dyson, Chairman ICANN, made the following statements on July 22, 1999 before the House Committee on Commerce Subcommittee on Oversight and Investigations. (Emphasis has been added.)

Elected Board members. ICANN's elected Directors will join the Board in two waves: the first wave will consist of nine Directors chosen by ICANN's Supporting Organizations; the second wave will be elected by an At-Large membership consisting of individual Internet users. The Board expects the first wave to be completed by November 1999, and the second wave as soon as possible following that. In any event, the process of creating a fully elected Board must be

ompleted by September 2000.

As to the first wave of elected Board members, ICANN expects that the nine Directors to be elected by its three Supporting Organizations (the Domain Name Supporting Organization, the Address Supporting Organization, and the Protocol Supporting Organization) will be selected and seated in time for ICANN's annual meeting in November in Los Angeles.

As to the second wave, it is ICANN's highest priority to complete the work necessary to imple-

ment a workable At-Large membership structure and to conduct elections for the nine At-Large Directors that must be chosen by the membership. ICANN has been working diligently to accomplish this objective as soon as possible. The Initial Board has received a comprehensive set of recommendations from ICANN's Membership Advisory Committee, and expects to begin the implementation process at its August meeting in Santiago. ICANN's goal is to replace each and every one of the current Initial Board members as soon as possible, consistent with creating a process that minimizes the risk of capture or election fraud, and that will lead to a truly representative Poord resentative Board.

This denial of the voter lists is justified by ICANN on the basis of privacy. Yet, the California legislature has determined that in corporate elections, the integrity of the election process requires that voters and candidates have means to communicate with one another outside of the view and potentially manipulative control of corporate management. If ICANN has a problem with the enactments of the California legislature, ICANN ought to take it up with the legislature rather than unilaterally undermining the viability of public participation in ICANN.

ICANN's structure, whether taken piecemeal or as a whole, seems designed to include selected business interests—particularly those of trademark owners and DNS name registry/registrars-and to exclude Internet users. Deployment of a fully empowered at-large membership, with its full quota of Directors would go a long way

toward redressing this imbalance.

SPECIFIC THINGS CONGRESS, THE U.S. DEPARTMENT OF COMMERCE, AND ICANN OUGHT TO DO

It is my desire to improve ICANN. To that end let me make some specific suggestions.

1. Congress should take care that the Internet does not serve as a means by which Federal administrative agencies slip their leash and assume unwarranted and undelegated powers

2. Congress should take care that Federal administrative agencies do not try to do an end-run around their limited powers by outsourcing jobs to private bodies

such as ICANN.

3. The Department of Commerce should exercise its independent judgment when dealing with recommendations coming from ICANN even if this may mean that the

Department has to engage in hearings or other procedures.

4. The Department of Commerce should make it clear to ICANN that it expects ICANN to remember the obligations imposed on ICANN during its creation and thus improve its procedures and quickly create a fully formed vehicle for meaningful public participation in all of ICANN's decisions.

5. ICANN should be made accountable to someone more than just the Attorney

General of the State of California.

- 6. ICANN should return to its mission and focus on technical coordination, leaving the public policy decisions to institutions better designed to accommodate public policy debate.
 7. ICANN should fully adhere to the ideas of open access to all interested persons,
- transparent decisionmaking processes, and accountable decisionmakers. No ICANN process or body should be closed except when dealing with personnel, contract negotiations, litigation, or other expressly enumerated matters.

 8. ICANN should emphasize implementation and deployment of good, fair proce-

dures, such as its internal review mechanisms, even at the risk of delaying sub-

stantive policy decisions.

9. ICANN should follow the procedures written into its bylaws and avoid ad hoc processes. In particular, this means more delegation of issues to the ICANN's specialized "supporting organizations."

10. ICANN should take steps to remedy the apparent capture by certain industry segments of ICANN's Domain Name Supporting Organization (DNSO).

11. ICANN should remove policymaking discretion from "staff" and sharply reduce

- 12. ICANN should drop the "clean sheet" study of the at-large membership and simply get on with the job of filling all nine of the Board seats long promised to the public. At the same time ICANN should fully recognize the rights of at-large members as provided for under the California Corporations Code.

 13. ICANN should rid itself of its excessively complex organizational structure.

14. ICANN should not have embedded entities that have no distinct legal status

but which block review by members of the Board of Directors or the public.

15. ICANN should adopt better procedures for internal decisionmaking. In particular it should mandate semi-formalized procedures and rules of order for use by its numerous organizational entities.

Senator Burns. Thank you very much. It is nice to start off with a critic.

[Laughter.]

Senator Burns. We welcome today and we have been joined with the distinguished Senator from California. Do you have a statement? Would you like to make a statement at this time?

STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR FROM CALIFORNIA

Senator BOXER. I would appreciate it.

Senator Burns. Turn your microphone on there.

Senator BOXER. I would like to keep it to 5 minutes though, Mr. Chairman. Please do let me know, and then I will submit it for the record.

Senator Burns. I will start warning at 4, how is that?

Senator BOXER. That sounds good.

Senator Burns. Good.

Senator BOXER. Mr. Chairman, you and I have worked on Internet issues and encryption, and I am just delighted now to be on the Subcommittee and to be able to participate more fully. This is the first hearing that I have been at before the Communications Subcommittee, and I am looking forward to working with you on many more.

I am also very pleased, Mr. Chairman, that you are holding this hearing. I thank you for examining this very timely issue and providing us with a chance not only to learn more about how the ICANN selection process worked, but also to learn more about how ICANN plans to move forward with the seven new top-level domain registry operators.

I have heard from a great many businesses in California who are concerned, and therefore this is a very important matter. Although some would consider it very technical or arcane, for our people in California—I know that you know this, Mr. Chairman—it is a very

important one.

American industry has given us the incredible growth of the Internet. I am certainly proud of my State. It is the home of some of the most innovative and successful companies responsible for this explosion. I do see that California is well-represented on the panels today. I certainly want to thank you for that and extend a special welcome to the witnesses on the first panel from ICANN, which is based in California, Michael Roberts and Karl Auerbach, and also to Roger Cochetti on the second panel, who works for the California-based company, VeriSign.

I would like to bring to the panel's attention that I myself have been a victim of identity theft in the domain name context. Now, I know that is not the prime focus of today's hearing, but I want to share with you what happened to me. I did not speak out about it until now, because—well, you will see why, but during the last election somebody took the name BarbaraBoxer.org. When you type in BarbaraBoxer.org, it will take you to an anti-Dianne Feinstein website, my friend and my colleague whom I work with proudly.

When I found out about this I was stunned. I had taken BarbaraBoxer.com so that no one could take that, but had overlooked BarbaraBoxer.org. It is extremely disturbing to me that someone in a way can steal my identity and put up something like this. I mean, it would be bad enough if it was something I agreed with, if it was a pro-Dianne Feinstein site, but it is still nothing to do with me.

So, I am hoping that the panelists might address this, if you can, because to me we have a problem with identity theft. This is a

clear example of identity theft on the Internet, which is extremely disturbing, to say the least.

I am interested to see where we go from here now that we have selected these new generic top-level domains. What actions need to be taken to ensure the reliability, the safety, and the security of the Internet? What can ICANN do to make sure that my constituents are able to reach their intended destinations in cyberspace?

These are very important questions, and I know they are not easily answered. For that reason, I believe it is vital we move forward thoughtfully and deliberatively, and make sure that all actions are aimed at guaranteeing the continued growth and the stability of the Internet.

Thank you, Mr. Chairman, for holding this hearing.

Senator Burns. Thank you, Senator.

Now we will continue with the testimony now of the CEO from ICANN, Michael Roberts, and welcome to the hearing this morning.

STATEMENT OF MICHAEL M. ROBERTS, CEO, INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

Mr. ROBERTS. Thank you, Mr. Chairman, and members of the Subcommittee. I appreciate this opportunity to appear here today and offer a status report on the Internet Corporation for Assigned Names and Numbers, ICANN, which I have served as president and chief executive officer since its formation in November 1998.

Before I report to you on ICANN, I would like to take just a minute to set some context. The reason why there is a need for an ICANN-like organization today is directly traceable to the enormous worldwide success of the Internet.

The Internet's success, in turn, is the product of a sustained commitment by the U.S. Government over many years to a public-private partnership among Federal research agencies, our preeminent researching universities, and the energy and entrepreneurial ingenuity of American high technology companies.

Beginning with the Federal sponsorship of the original basic research, those of us involved in this process have had at every key point in the evolution of Internet technology, infrastructure, and commercial deployment, the kind of U.S. Government support that was needed. At the same time, however, we should also recognize the many contributions of our international partners which have

been essential to the worldwide development and deployment of the network.

Indeed, if the Internet was not based on a solid foundation of international partnership, many of the opportunities which it offers for trade, economic development, enhancement of national security, and the growth of democratic institutions, would not be possible.

The important role of Congress should also be acknowledged. It is notable that the High Performance Computing and Communications Act which President Bush signed in 1991, and which for the first time established a Federal mandate and funding for advanced networking, originated in this Subcommittee.

ICANN itself is a unique entity, but it follows a great American tradition of finding and using practical means to address problems that stand in the way of progress. Several years ago, the U.S. Gov-

ernment was confronted with the fact that its agency assignments for coordination of Internet activities were seriously lagging the rate at which the Internet was growing, especially in areas related to commercial use.

To very much shorten an interesting story, the resulting scrutiny of the issues involved was a judgment that the most appropriate solution was to entrust the management of a small set of key technical infrastructure coordination responsibilities to the private sector.

ICANN was reorganized by the U.S. Government in November 1998 by means of a memorandum of understanding between the Department of Commerce and ICANN. ICANN and its stakeholders are required to earn the trust of the citizens and nations of the world and their governments by demonstrating the private sector consensus management of these functions works efficiently and serves the public interest while promoting opportunities for businesses to engage in the research, development, and delivery of network services.

Although we have really been operational for only about 14 months, I think it is fair to say that much has already been accomplished. Indeed, more than some imagined could be done, either in that time, or by this entity. For example, there has been a dramatic transformation of the domain name registration market from a monopoly to an extremely competitive market.

We also now have a well-functioning global dispute resolution system for certain of the most common domain name disputes, a system that one recent commentator stated was widely used as a model of dispute resolution for the 21st Century, and we are on the verge of introducing real competition at the domain registry level.

But these achievements, real and important as they are, are only part of the story. We have certainly not yet accomplished ICANN's ultimate goal, to become a truly effective consensus development body for the entire Internet community in the areas for which ICANN is responsible. All the necessary parts are not yet in place.

I am frequently asked, why is there so much noise around ICANN? How can you get any work done over there? My response is that ICANN is noisy by design. We are intended to be the forum in which interested parties, some might characterize them as combatants, have the opportunity to advance multiple futures for the domain name and address system and have those competing and frequently contradictory futures merged into one satisfactory solution.

By definition, it will be noisy. It will be messy, and sometimes slow, and frequently contentious, but if it works—and the jury is still out, although I am reasonably optimistic—it may well be a useful model for other global issue resolution mechanisms.

Thank you for the opportunity to appear, and I will be glad to answer any questions.

[The prepared statement of Mr. Roberts follows:]

PREPARED STATEMENT OF MICHAEL M. ROBERTS, CEO, INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

I. INTRODUCTION

Mr. Chairman and members of the subcommittee, I appreciate the opportunity to appear here today and offer a status report on the Internet Corporation for Assigned Names and Numbers (ICANN), which I have served as President and Chief Executive Officer since its formation in November 1998. I am also happy to report that the "only a few months" assignment, as it was described when I came out of retirement to take it on a little over 2 years ago, will finally come to an end next month, when I will retire once more, and Stuart Lynn will take over this challenging but interesting task.

Before I report to you on ICANN, I would like to take just a minute to set some context. The reason why there is a need for an ICANN-like organization today is directly traceable to the enormous, worldwide success of the Internet. The Internet's success, in turn, is a product of a sustained commitment by the U.S. Government over many years to a public-private partnership among Federal research agencies, our pre-eminent research universities, and the energy and entrepreneurial ingenuity

of American high technology companies.

Beginning with the Defense Department's sponsorship of the original basic research, and moving through the participation of other agencies such as Energy, NASA, and particularly the National Science Foundation, those of us involved in this process have had at every key point in the evolution of Internet technology, infrastructure, and commercial deployment the kind of U.S. Government support that was needed. However, we should also recognize the many contributions of our international partners, which have been essential to the worldwide development and deployment of the network. Indeed, if the Internet was not based on a solid foundation of international partnership, many of the opportunities which it offers for trade, economic development, enhancement of national security and the growth of democratic institutions would not be possible.

The important role of Congress should also be acknowledged. It was my privilege

The important role of Congress should also be acknowledged. It was my privilege in my former role as a technology policy advocate for higher education to work closely with Mr. Boehlert and Mr. Brown and other members of the House Science Committee in the middle 1980s on legislative programs for support of broader use of the Internet in research and education. It is notable that the High Performance Computing and Communications Act, which President Bush signed in 1991, originated in this Committee. Hearings such as this, and the recent hearing in the House, continue the constructive tradition of the Congress of encouraging the continued development of a stable, secure and open infrastructure for global commerce and communications.

nication.

ICANN itself is a unique entity, but it follows a great tradition of finding and using practical means to address problems that stand in the way of progress. Several years ago, the U.S. Government was confronted with the fact that its agency assignments for coordination of Internet activities were seriously lagging the rate at which the Internet was growing, especially in areas related to commercial use. To very much shorten an interesting story, the result of scrutiny of the issues involved was a judgment that the most appropriate solution was to entrust the management of a small set of key technical infrastructure management and coordination responsibilities to the private sector. ICANN was the response of the Internet community to the call for the creation of a private sector, non-profit, global consensus development entity to take over these functions.

In an important sense, the strenuous effort that resulted in the creation of ICANN was the last public service by Dr. Jon Postel, who sadly is no longer with us. His almost thirty-year stewardship of the Domain Name System has left us with a remarkable legacy of selfless devotion to the public interest, along with a basic framework for ICANN's functions that is of important and continuing value.

ICANN was recognized by the U.S. Government in November, 1998, by means of a Memorandum of Understanding between the Department of Commerce and ICANN. It was and still is the case that ICANN and its stakeholders are required to earn the trust of the citizens and nations of the world and their governments by demonstrating that private sector consensus management of these functions works efficiently and serves the public interest while promoting opportunities for businesses to engage in the research, development and delivery of network services.

Although ICANN was formed in 1998, we have really been operational for only about 14 months. I think it is fair to say that much has already been accomplished—indeed, more than some imagined could be done, either in that time or by this entity. For example, there has been a dramatic transformation in the domain

name registration market, from a monopoly to an extremely competitive market, with predictably positive impacts on consumers—including cutting the average price for registration in half. We now have a well-functioning global dispute resolution system for certain of the most common domain name disputes—a system that one recent commentator stated was "widely viewed as a model of dispute resolution for the 21st Century." And we are on the verge of introducing real competition at the domain name registry level, a goal that has been fiercely debated and energetically pursued for much of the last decade, but for various reasons never able to be accomplished until the creation of ICANN.

But these achievements, real and important as they are, are only part of the story. We have certainly not yet accomplished ICANN's ultimate goal—to become a truly effective consensus development body for the entire Internet community in the areas for which ICANN is responsible. We have been forced by events and the speed of Internet time to undertake some complex operational tasks, even though we are still working to complete the basic organizational architecture of ICANN. All the necessary parts are not yet in place. We have certainly not solved the very difficult problem of how to create a global process that is, on the one hand, broadly viewed as fair and effective, but on the other hand, does not erect a procedural, political and legal thicket that makes it impossible to achieve the kind of consensus decisionmaking that ICANN was created to accomplish.

As a result, no one is really satisfied with the current State of affairs, and rightly so. As it turns out—and this will be no surprise to any member of this Committee—achieving global consensus is a difficult task, especially on issues as complex and important as those which prompted the creation of ICANN. There are important parts of the Internet community—country code registry operators, address registry operators, root server operators, and the general user community—where we have not completed the discussions that will formalize their relationships with or within ICANN. Even those elements of the construction that appear to have been completed, such as ICANN's three Supporting Organizations, need refinements of various kinds; any structure that is, as ICANN was, the product of a series of compromises is not likely to be perfect at first creation.

ICANN. Even those elements of the construction that appear to have been completed, such as ICANN's three Supporting Organizations, need refinements of various kinds; any structure that is, as ICANN was, the product of a series of compromises is not likely to be perfect at first creation.

And so, while we have attempted to be responsive to the important operational objectives that formed much of the impetus for the creation of ICANN, we have also worked very hard—and we continue to work hard—to assemble a complete working organization for the development of global consensus on these issues, and to ensure that all the stakeholders in the Internet community have an appropriate place in, and the oblibit the large them is the ICANN presents.

and the ability to have their voices heard in, the ICANN process.

I am frequently asked, "Why is there so much noise around ICANN? How can you get any work done over there?" My response is that ICANN is noisy by design. We are intended to be the forum in which interested parties—some might characterize them as combatants—have the opportunity to advance multiple futures for the domain name and address system, and have those competing and frequently contradictory futures merged into one satisfactory solution. By definition, it will be noisy, and messy, and sometimes slow, and frequently contentious, but if it works—and the jury is still out, although I am reasonably optimistic—it may well be a useful model for other global issue resolution mechanisms.

II. BACKGROUND

For much of its formal history, which begins in 1973 with roots stretching into the 1960s, the functions of ICANN were performed by one computer scientist, Jon Postel, under a research contract to the U.S. Defense Advanced Research Projects Agency (DARPA). During the mid 1990s, as the Internet emerged as a potent commercial force in the telecommunications environment, it became clear that such functions needed to be institutionalized. Dr. Postel participated in attempts to achieve that goal beginning as far back as 1995. In the midst of the effort in the late 1990s that led to the creation of ICANN, Dr. Postel unexpectedly passed away. ICANN was formed to privatize, institutionalize and internationalize the functions that Dr. Postel performed so ably for so long.

A. The Formation of ICANN

ICANN is a non-profit private sector organization with a 19-member international volunteer Board of Directors ¹ drawn from a set of specialized technical and policy advisory groups, and from an online voting process of Internet users worldwide. Through a series of Supporting Organizations, Advisory Committees and Working

 $^{^1{\}rm Short}$ biographies of the directors can be found at http://www.icann.org/general/abouticann.htm.

Groups,2 it functions as a consensus development body for certain technical and administrative management issues related to the name and address functions of the

ICANN is the end result of an extensive policy development process, both within the U.S. Government and within the global Internet community. During 1997 and 1998, under the leadership of the U.S. Department of Commerce, a framework for private sector management of the Internet's Domain Name System (DNS) and Address System was developed and put into writing in the form of a policy document

known as the White Paper.3

The White Paper, which was issued in June 1998, proposed that the private sector undertake management of these functions through the formation of a private, nonprofit corporation, and it outlined the substantive responsibilities of the new organization and a number of guiding principles for its work. Following several months of public meetings and dialog in the summer of 1998, during which the White Paper framework was turned into a specific charter and set of Bylaws, ICANN was incorporated in September of that year, and was recognized by the U.S. Government in November 1998, in the form of a 2-year Memorandum of Understanding/Joint Project Agreement between the Commerce Department and ICANN. The MOU has subsequently been amended twice and currently has a term expiring on September 30, 2001.4

B. ICANN Responsibilities

The White Paper identified four principal areas of responsibility for the new private sector consensus organization: Coordination of the Internet Domain Name System; Overseeing operation of the authoritative root server system; Coordination of the Internet Protocol (IP) Address space; Coordinating the assignment of Internet technical parameters

As recognized in the White Paper, these four functions were broadly seen by the global Internet community as requiring coordinated action to assure the smooth and

reliable operation of the Internet

C. Guiding Principles for ICANN

The White Paper identified four principles that it described as critical to the success of an entity such as ICANN: stability; competition; private, bottom-up coordination; and representation.

1. Stability is perhaps the easiest to understand. The U.S. Government was seeking to extract itself from what it had concluded was no longer a proper role for the U.S. Government—the funding of private contractors by research agencies to manage important technical aspects of the global Internet name and number address system—but only in a way that did not threaten the stability of the Internet. As the White Paper said, and as seems obvious, "the stability of the Internet should be the first priority of any DNS management system." If the DNS does not work, then for all practical purposes for most people, the Internet does not work. That is an unacceptable outcome, and thus everything that ICANN does is guided by, and

tested against, this primary directive.

2. Competition was also an important goal set forth in the White Paper, which stated that "[w]here possible, market mechanisms that support competition and consumer choice should drive the management of the Internet because they will lower costs, promote innovation, encourage diversity, and enhance user choice and satisfaction." Competition in the registration of domain names is theoretically possible at both the registry (or wholesale) level, and at the registrar (or retail) level. Increasing competition at the retail level involves only allowing multiple providers of registration services to add domain name registrations to registry data bases; as a result, that objective can be accomplished without major stability concerns. For this reason, adding new competition at the retail level was the first substantive goal that ICANN quickly accomplished after its formation. By contrast, the introduction of competition at the new registry (or wholesale) level requires the introduction of additional Top Level Domains into the namespace, and thus does raise potential stability issues of various kinds. As a result, and given its prime directive to protect stability, ICANN has moved forward in this area in a prudent and cautious way, consistent with recommendations from many constituencies with a stake in the Internet.

3. A third White Paper principle was private sector, bottom-up consensus development, and the entirety of ICANN's processes are organized around this principle. ICANN is a private-sector body, and its participants draw from the full range of Internet stakeholder organizations, from business entities to non-profit organizations to academic institutions to individual Internet users. Its policies are the result of the complex, sometimes cumbersome interaction of all these actors in an open, transparent, sometimes slow and sometimes contentious progression from individuals and particular entities through the ICANN working groups and Supporting Organizations to ICANN's Board, which under its bylaws has the principal role of recognizing consensus as developed below, rather than imposing it from above. Like democracy, consensus is far from a perfect system, but it is an attempt, and the best way we have yet been able to devise, to achieve globally acceptable policies without the coercive power of governments.

4. Finally, the fourth core principle on which ICANN rests is representation. A body such as ICANN can only plausibly claim to operate as a consensus-development organization for the Internet community if it is truly representative of that community. The White Paper called for ICANN to "reflect the functional and geographic diversity of the Internet and its users," and to "ensure international participation in decisionmaking." To satisfy these objectives, all of ICANN's structures are required to be geographically diverse, and the structures have been designed to, in the aggregate, to provide opportunities for input from all manner of Internet stake-holders. This is an extremely complicated task, and we are not yet finished with the construction phase; indeed, we have just initiated a Study Committee chaired by Carl Bildt, the former Prime Minister of Sweden, to oversee a new effort to find a consensus approach to obtaining input from and providing accountability to the general Internet user community, which might not otherwise be involved in or even knowledgeable about ICANN and its activities. This is a formidable challenge, given that there are an estimated 400 million Internet users around the world in over 200 countries—a number that has been growing at 100 percent per year since 1988.

We have also undertaken a number of other organizational tasks necessary to ensure that ICANN is fully representative of the entirety of the Internet community.

This is hard work, and there is more to do to get it done right.

III. ICANN ACCOMPLISHMENTS TO DATE

The tasks assumed by ICANN in the Memorandum of Understanding were of two general kinds. The first were related to completion of its organizational structure, particularly its three specialized Supporting Organizations (for domain names, technical protocols, and IP Addresses—the numeric identifiers used in Internet routing), and its fourth component, known as "At Large" (which is intended to provide a vehicle for input and participation by the full range of Internet users in ICANN's work). The second set of tasks were related to specific problems that had arisen as a result of the rapid growth and commercialization of the Internet in the middle 1990s.

Obviously, ICANN is still a work in progress. Nevertheless, it has already made remarkable progress in the short span of little more than 2 years.⁵ In the following portions of the testimony, I describe our work on four specific tasks—the enhancement of the Internet's Root Server System; introduction of retail competition in domain name registrations for .com, .net, and .org; adoption of a non-judicial mechanism for resolving certain disputes over the registration of domain names; and introduction of new Top Level Domain Name Registries to provide "wholesale" competition. Because staff has indicated that the Committee has a special interest in the Root Server System, I will begin with that subject.

A. Enhancement of the Security and Reliability of the Root Server System

A.1 Functioning of the Domain Name System. In recent years, the domain-name system (DNS) has become a vital part of the Internet. The function of the domain name system is to provide a means for converting easy to remember mnemonic domain names into the numeric addresses that are required for sending and receiving information on the Internet. The DNS provides a translation service that permits Internet users to locate Internet sites by convenient names (e.g., http://www.senate.gov) rather than being required to use the unique numbers (e.g., 156.33.195.33) that are assigned to each computer on the Internet.

⁵ For the first two annual summaries of progress provided to the Department of Commerce, see First Status Report at http://www.icann.org/general/statusreport-15june99.htm; Second Status Report at http://www.icann.org/general/statusreport-jun00.htm.

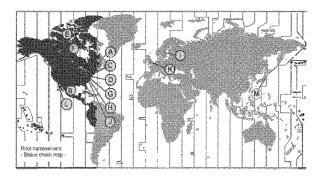
The Internet engineering community devised the DNS in the early 1980s.⁶ One of the Internet's prominent engineers, Dr. Jon Postel (the creator of the IANA function that preceded ICANN, and the principal force behind the creation of ICANN) took on responsibility for coordinating a decentralized system of computers throughout the Internet to implement the DNS. These computers are organized in a hierarchical manner, with "root nameservers" at the highest level that point to nameservers for top-level domains (e.g., .gov), that in turn point to nameservers for second-level domains (e.g., senate.gov), and so on. In all there are 253 top level domains, of which the greatest number are assigned to the national, or "country code," top level domains.

Upon the deployment of this new system in 1985, Internet users worldwide could point their computers to the root nameservers, and use them to receive the translation services (i.e. from names to numbers) that the DNS provides. The system is highly redundant and decentralized, consisting of almost 100,000 nameservers arranged in a topologically and geographically distributed system. It has repeatedly demonstrated its technical resilience and robustness, including during last year's Y2K event during which the system functioned smoothly without interruntion

Y2K event during which the system functioned smoothly without interruption.

As a first step in deploying the DNS nameserver system, Dr. Postel arranged for voluntary operation of the root nameservers by a group of expert and trusted individuals and organizations throughout the world, who each volunteered to operate a root nameserver. This group now numbers nine organizations, plus the U.S. Government; they operate the 13 root nameservers on a completely voluntary, free-of-charge, and public interest basis. The following map and chart show the identities and locations of the organizations operating the DNS root servers:

Map of the Root Servers



⁶The DNS replaced an earlier, smaller capacity translation mechanism known as the "hosts.txt" system.

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List of the Root Servers

Name	Org	City	Туре
a	NSI	Herndon, VA, U.S	com
b	USC-ISI	Marina del Rey, CA, U.S	edu
C	PSInet	Herndon, VA, U.S	com
d	U of Maryland College Park, MD, U.S	edu.	
e	NASA	Mt View, CA, U.S	usg
f	Internet Software C	Palo Alto, CA, U.S	com
g	DISA	Vienna, VA, U.S	usg
h	ARL	Aberdeen, MD, U.S	usg
i	NORDUnet	Stockholm, SE	int
j	NSI (TBD)	Herndon, VA, U.S	(com)
k	RIPE	London, UK	int
I	ICANN	Marina del Rey, CA, U.S	org
m	WIDE	Tokyo, JP	edu

At lower levels in the DNS hierarchy (for example .com), the operators of the nameservers and the associated registries have received compensation, first by governmental subsidies in the late 1980s and early 1990s and then, beginning in the mid-1990s, by charging those who wished to register domain names within the system. The root nameserver system itself, however, has always been operated on a voluntary basis and without user fee (or even government subsidy, though the U.S. Government does contribute by operating some of the 13 root nameservers). As a result, the system has become broadly accepted by Internet users worldwide as an integral feature of the Internet.

A.2 U.S. Government Policy Concerning the Root Server System. As the Internet has evolved from a system for research conducted under U.S. Government sponsorship to an essential medium for global commerce, the need for a secure, stable, and reliable DNS root nameserver system coordinated according to the needs of the Internet community has also grown. The White Paper reflected a broad consensus within the Internet community when it said, "coordination of the root server network is necessary if the whole system is to work smoothly. While day-to-day operational tasks, such as the actual operation and maintenance of the Internet root servers, can be dispersed, overall policy guidance and control of the TLDs and the Internet root server system should be vested in a single organization that is representative of Internet users around the globe."

In the ICANN MOU, the U.S. Government represented that it would "undertake, in cooperation with IANA, NSI, the IAB, and other relevant organizations from the public and private sector, a review of the root server system to recommend means to increase the security and assure professional management of the system. The recommendations of the study should be implemented as part of the transition process; and the new corporation should develop a comprehensive security strategy for DNS management and operations."

Subsequently, one of the first Advisory Committees established by ICANN was the Root Server System Advisory Committee (RSSAC), chaired by ICANN Board member Jun Murai of Keio University in Japan. Professor Murai is also responsible for the operation of the root nameserver located in Tokyo. All root nameserver operators are members of the RSSAC, which also includes technical experts from the Internet Engigneering Task Force (IETF).

The RSSAC has been working diligently since ICANN's creation to evaluate and improve where necessary the security and reliability of the root nameservers. In its last report, at ICANN's public meeting in Yokohama in July of last year, it described the results of its efforts, which basically involve the evolution in the near future of the current root nameserver system structure to one in which a "dedicated primary" server, rather than one of the 13 operational root servers, is responsible for distributing updated root zone files to the publicly accessible root nameservers in a secure, reliable and robust system transparent to users. When implemented, this will be a major improvement in the security and reliability of the root nameserver system, and therefore of the DNS and the Internet.

A.3. Formalization of Arrangements for Operation of the Root Nameservers. In addition, ICANN has been working on formalizing the legal relationships under which the various organizations have operated the individual DNS root nameservers. As described above, since the initial deployment of the DNS the root nameservers have been operated under the voluntary arrangements originally made by Dr. Jon Postel. After ICANN was established, some additional formality was introduced by the par-

ticipation of the operators in the RSSAC, and in mid-1999, ICANN and the National Institute of Standards and Technology entered into a Cooperative Research and Development Agreement under which the U.S. Government is participating in the RSSAC's work toward enhancing the stability and security of the root nameserver system. As part of this effort, ICANN is near the completion of agreements with the organizations operating the individual root nameservers, with the goal of mutually recognizing in an appropriate way each other's obligations and responsibilities to protect the stability of the DNS and the Internet. We are well along in those discussions and I expect they will be completed in the near future.

A.4 Administration of Changes to the Root Server System. There has been, and continues to be, some confusion about the current and proposed procedures for coordination and administration of changes to the files contained in the root server

computers.

Currently, the root nameserver operators follow the convention that one of the operators, Network Solutions, Inc. (NSI), is responsible for implementing edits to the "root zone" file that designates the top-level domains in the DNS. Under agreements among ICANN, the U.S. Government, and NSI, ICANN (through IANA, now absorbed into ICANN), sends documentation for needed changes to the root zone file to the U.S. Department of Commerce, which directs Network Solutions to implement them by editing the authoritative root zone file. By convention among the RSSAC's root nameserver operators, that file is loaded twice daily into all 13 DNS root nameservers.

ICANN, through the RSSAC and through its soon-to-be-completed agreements with the root server operators, is already playing an important role in facilitating a more structured understanding among these most critical participants in the DNS. As a result, the very informal arrangements that have served us well in the past are in the process of a transition to a more transparent but still collegial and consensus-based structure that we believe will continue this outstanding record of service into the future.

B. The Introduction of Retail Competition

A very important impetus for the formation of ICANN was the perception that the name registration market was not competitive, and as noted above, the introduction of competition was an important goal outlined in the White Paper. Thus, as one of its very first actions, ICANN created an accreditation system for competitive registrars and, pursuant to its agreements with NSI, gave those new competitors access

to the NSIoperated registries (specifically, .com, .net and .org).

When ICANN was formed, there was only a single registrar (NSI) for .com, .net. org, and everyone had to pay the single price for the single domain name product that sole registrar offered: \$70 for a 2-year registration. There are now over 180 accredited registrars, with more than half of those actively operating, and you can now register a domain name in the .com, .net, and .org registries for a wide range of prices and terms—some will charge zero for the name if you buy other services, while others will sell you a ten-year registration for significantly less than the \$350 it would have cost pre-ICANN (even if it had been available, which it was not). While there are no precise statistics, in part because the market is so diverse, a good estimate of the average retail price today of a 1-year domain name registration in the NSI registries is probably \$10-15—or less than half the retail price just 18 months ago.

As another illustration of the dramatic changes over the last year, NSI's share of the registration market for the .com, .net and .org TLDs has fallen from 100 percent at the time of ICANN's creation to less than 40 percent of new registrations in those TLDs today—a market share drop of more than half in just over a year.

in those TLDs today—a market share drop of more than half in just over a year. There are still issues that must be dealt with in this area; some registrars appear not to have not lived up to their contractual commitments, and ICANN needs to ensure that they do. And indeed, there may be more registrars than the market will support in the long term; 94 percent of all registrations come from the 10 largest registrars, with the other 80 or 90 active registrars sharing the other 6 percent. Name registration is quickly becoming a commodity business, and a commodity business, with commodity margins, will probably not support 100 vigorous competitors. We are already starting to see some companies wishing to leave the business, and we need to make as sure as we can that those departures do not impair the ability of consumers and businesses to rely on names they have registered, and that departures or even failures do not generate unreliability or other forms of instability in the namespace itself. While these issues must be dealt with, I think it is widely recognized that ICANN has been very successful in changing the retail name registration market from a monopoly market to a highly competitive market.

C. Creation of a Cost-Effective, Efficient Dispute Resolution System

Another significant accomplishment has been the creation of the Uniform Dispute Resolution Policy (UDRP), a way to quickly and cheaply arbitrate certain domain name disputes. While domain names themselves cannot be trademarked, it is certainly possible for domain names to be confusingly similar to a trademarked name, or in other ways to be inappropriately used by someone for illegitimate means. Since trademark and other intellectual property rules differ from country to country, enforcing those rights is complex and expensive.

One of the policies that was generated from the ICANN bottom-up process early on was the need for a simple procedure to resolve the clearest and most egregious violations on a global basis. The result, after considerable work in a variety of ICANN forums, is the UDRP, which one commentator recently noted is "widely viewed as a model of dispute resolution for the 21st Century." The UDRP is limited to certain very specific claims, is intended to require only about \$1,500 in costs and 45 days to invoke, and is required to be included in all name registration contracts by all ICANN-accredited registrars, thus providing the basis for global uniformity in the resolution of this particular class of domain name disputes. Even though the UDRP is non-binding (either party may take the dispute to court after an unfavorable UDRP decision), it appears that has happened in only a few dozen cases out of over 2,000 decisions to date.

The UDRP is, I would submit, another very positive accomplishment of ICANN during its short existence to date. As of this writing, parties interested in further refinement of the UDRP are already studying its design for possible revisions.

D. The Introduction of New TLDs

D.1 Background. This brings us to the current effort to introduce competition at the registry (or wholesale) level of the domain name market. ICANN was able to create retail competition relatively quickly after its creation, and this has produced the expected benefits-lower prices, more consumer choice, and innovation. But the introduction of wholesale competition, because it involves actually expanding the structure of the namespace, presented and continues to present more risks. While most Internet engineers believe that some number of additional TLDs can be added without serious risks of instability, there is considerable uncertainty about how many could be added without adverse side effects, and very few engineers have been willing to absolutely guarantee that there was zero risk of instability. Given the increasingly critical role the Internet now plays in everyday commercial and personal life, the almost uniform consensus in the community was to be cautious and prudent in this process.

For example, the White Paper asserted that "expansion of gTLDs [should] proceed at a deliberate and controlled pace to allow for evaluation of the impact of the new gTLDs and well-reasoned evaluation of the domain space." In addition to concerns about the technical stability of the Internet, many were concerned about potential costs that rapid expansion of the TLD space might impose on business and consumers. The World Intellectual Property Organization, which conducted a study of intellectual property issues in connection with the DNS at the request of the U.S. Government, concluded that new gTLDs could be introduced if done "in a slow and controlled manner that takes into account the efficacy of the proposed measures in reducing existing problems." The Protocol Supporting Organization of ICANN (made up of the Internet Engineering Task Force and other Internet engineering and communications protocol development bodies) said it saw no technical problems with the introduction of a "relatively small" number of new TLDs.

In fact, every entity or organization without an economic stake in the answer that has examined this question has recommended the same thing: a "small" or "limited" or "prudent" number of new TLDs should be tried first, as a sort of proof of concept or experiment. Once this "limited" number of new TLDs was introduced—and the suggested numbers roughly ranged from 1 to 10—and assuming there were no adverse side effects, then additional TLDs could be introduced if there was consumer demand for them.

D.2 ICANN Process. Because ICANN is a consensus development body that relies on bottom-up policy development, the issues of whether and how to introduce new gTLDs were first taken up by the Domain Name Supporting Organization (DNSO), the ICANN constituent body responsible for name policy issues. The DNSO organized a Working Group, which recommended that a small number (6-10) of TLDs be initially introduced, and that the effects of that introduction be evaluated before proceeding further. That recommendation was forwarded to the Names Council, the executive body of the DNSO, which reviewed the Working Group recommendation and public comments on it, and recommended to the ICANN Board that it establish a "policy for the introduction of new gTLDs in a measured and responsible way.

The Names Council suggested that "a limited number of new top-level domains be introduced initially and that the future introduction of additional top-level domains be done only after careful evaluation of the initial introduction.'

Consistent with the ICANN bylaws, the ICANN Board accepts the recommendations of Supporting Organizations if the recommendations meet certain minimal standards designed to ensure that they truly represent a consensus position. Thus, the Names Council recommendation was published for public comments, and following the receipt of numerous public comments, the ICANN staff in June 2000 issued a Discussion Draft seeking public comments on a series of questions intended to lead to the adoption of principles and procedures to be followed in a "measured and responsible introduction" of a limited number of new TLDs.7 Following several thousand additional public comments, and considerable discussion at a public meeting in Yokohama in July 2000, the ICANN Board adopted a series of resolutions instructing its staff to begin the process of accepting applications for a "proof of concept" for the introduction of new TLDs.8

D.3 Criteria for Evaluating Applications. In early August, ICANN posted a detailed discussion of the new TLD process it proposed to follow,9 and in mid-August a detailed set of Criteria for Assessing TLD Proposals.10 These nine criteria have been constant throughout this process. and so they bear repeating here: issued a Discussion Draft seeking public comments on a series of questions intended

been constant throughout this process, and so they bear repeating here:

a. The need to maintain the Internet's stability. This speaks for itself. ICANN's overriding obligation is to protect the stability of the Internet, and all other objectives are subordinate to that. Thus, any proposal that could be shown to threaten this stability (other than any risk inherent in any new TLD introduction) was obvi-

ously unacceptable.

b. The extent to which selection of the proposal would lead to an effective "proof of concept" concerning the introduction of toplevel domains in the future. This too is largely self-explanatory. The effort here was not to find the "best" application, however that might be measured, but to ask the community to offer up a set of options from which ICANN could select a limited number that, taken in the aggregate, would satisfy the evaluation objectives of this proof of concept. This is exactly the same approach that ICANN had previously taken in the introduction of competitive registrars, and which had worked so well there. The addition of multiple registrars to the NSI registries required the creation of new interface software, since before this time only one registrar had been able to direct new entries in those registries. Thus, there was some experimental effort required to make sure that the software was ready for use by a larger number of simultaneous registrars. ICANN first created a "test-bed," asked for expressions of interest from the community, and accredited only five new registrars for a period of a few months, while they and NSI worked out the bugs in the interface software. As soon as the test-bed was completed, ICANN accredited larger numbers of registrars, now exceeding 180.

Here, the concept is similar: from options offered up from the community, create a limited number of new TLDs to ensure that the DNS can accept, both technically and practically, these additions without impairing stability in any way. Once that is proven, additional TLDs can be created as appropriate.

c. The enhancement of competition for registration services. Obviously, this is the principal reason for adding new TLDs, so one criterion for determining which applications to accept initially is how effective they are likely to be in creating new competition for the NSI registries. Of course, competition takes many forms; here, one form would be analogous to .com—a global, unrestricted registry focusing on business. To compete in this way requires not only desire, but the capacity to effectively compete with a market participant that already has high brand awareness, a very significant marketing budget, and a large installed base of registered names which will produce some level of renewals more or less automatically. To compete successfully on a global basis under these circumstances requires a significant capital investment, very significant technical expertise (running a data base of several million names that gets hundreds of queries every second is a complicated matter), and a substantial marketing budget to build the kind of brand equity that will be necessary to compete effectively with, for example, .com.

⁷ See generally ICANN Yokohama Meeting Topic: Introduction of New Top-Level Domains, at http://www.icann.org/yokohama/new-tld-topic.htm.
8 See Resolutions of the ICANN Board on New TLDs, at http://www.icann.org/tlds/new-tldresolutions-16jul00.htm.
9 See New TLD Application Process Overview, at http://www.icann.org/tlds/

application process Overview, at http://www.icann.org/tlds/applicationprocess-03aug00.htm.

10 See Criteria for Assessing TLD Proposals, at http://www.icann.org/tlds/tld-criteria-15aug00.htm.

Another way to introduce competition into the wholesale part of the market is to offer a different kind of product—not a global unrestricted domain, but various kinds of limited or restricted registries that might appeal to specific different sectors of the market. To use a television analogy: narrowcasting instead of broadcasting. Here, capital and marketing expenses may be lower, but other kinds of service characteristics may be more important.

ICANN's purpose with this criterion was to invite a broad range of competitive options, from which it could select a menu that, taken as a whole, would offer a number of different competitive alternatives to consumers of domain name services.

d. The enhancement of the utility of the DNS. In addition to competition, one must reasonably consider the practical effects of the introduction of new TLDs. The names registered in the DNS are intended to be used by people, and sound engineering requires that human factors be taken into account, so that confusion, recognition difficulties, and the like do not impair the DNS's ease of use.

e. The extent to which the proposal would meet previously unmet types of needs. If it is assumed that the DNS should meet a diversity of needs, it would be a positive value if a proposed TLD appeared to meet any previously unmet needs of the

Internet community.

f. The extent to which the proposal would enhance the diversity of the DNS and of registration services generally. Here, what was sought was diversity of all kinds, in the hopes of creating the broadest possible—and thus most instructive—experiment within the limitations recommended (i.e., a small number of new top level domains). So, the published criteria encouraged the submission of proposals for different kinds of TLDs (open or closed, noncommercial or commercial, personal or business-oriented, etc.) The criteria also sought diverse business models and proposals from different geographic regions, for the same reasons.

posals from different geographic regions, for the same reasons.

g. The evaluation of delegation of policy-formulation functions for special-purpose TLDs to appropriate organizations. For those proposals that envisioned restricted or special-purpose TLDs, this criterion recognized that development of policies for the TLD would best be done by a "sponsoring organization" that could demonstrate that it would include representative participation of all segments of the communities that would be most affected by the TLD. Thus, with this class of application, the representativeness of the sponsoring organization was a very important criterion in the

evaluation process.

h. Appropriate protections of rights of others in connection with the operation of the TLD. Any new TLD is likely to have an initial "land rush" when it first starts operations as people seek the most desirable names. In addition, every new TLD offers the potential opportunity for cybersquatting and other inappropriate name registration practices. This criterion sought information about how the applicant proposed to deal with these issues, and also how it proposed to provide appropriate

mechanisms to resolve domain name disputes.

i. The completeness of the proposals submitted and the extent to which they demonstrate realistic business, financial, technical, and operational plans and sound analysis of market needs. Finally, this criterion simply emphasized that, since the effort was a "proof of concept," the soundness and completeness of the application and the business plan would be important elements of the selection process. This was not intended to be an experiment in how well the DNS or the Internet could survive the business failure of a new TLD operator, nor how businesses and consumers might suffer from a failure. It was also not intended to be clairvoyant with regard to the outcome of any particular proposal. Thus, to the extent possible and consistent with other goals, the Board favored those applications that appeared to have the soundest business plans, and were based on the most realistic estimates of likely outcomes.

D.4 The Application Process and Fee. The application process required the filing of a detailed proposal speaking to all the criteria outlined above. It recommended that applicants retain professional assistance from technical, financial and management advisers, and lawyers. And perhaps most controversially, it required a non-refundable application fee of \$50,000. A brief explanation of this particular require-

ment may be useful.

ICANN is a self-funding organization. It has no capital, and no shareholders from which to raise capital. It must recover its costs from the various constituent units that benefit from ICANN's processes and procedures; today, those costs are borne by address registries, name registries, and registrars. Its annual expenditures to date have been in the \$4-5 million range, covering employee salaries and expenses (there are now 14 employees), and a wide range of other expenditures associated with operating in a global setting in an open, transparent, bottom-up consensus based manner.

Thus, there was no ready source of funds to pay for the process of introducing new TLDs, and the ICANN Board determined that this, like all other ICANN activities, should be a self-funded effort, with the costs of the process borne by those seeking the new TLDs. At that point, ICANN estimated the potential costs of this process, including the retention of technical and financial advisers, legal advice, the location of the process of the process of this process, including the retention of technical and financial advisers, legal advice, the location of the process of the gistics of the process, and the potential cost of litigation pursued by those not satisfied with the process or the results. While obviously all these elements were highly uncertain, based on its best judgment of how many applications were likely to come in and what the likely costs would be, ICANN established a \$50,000 fee.

As it turns out, there were more applications than expected, and thus the absolute costs of processing and reviewing them were higher than expected; about half the application revenues have already been used to cover costs of the process to date, with considerable work left to do and still with the potential for litigation at the end of the process. To date, it appears that the fact of more applications and higher costs of review and evaluation than expected have canceled each other out, and so it appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face adopted were about it is appears that the face and the face and the face and the face about the face and th it appears that the fees adopted were about right in creating the funds necessary

to carry out this process.

I know there have been complaints by some that they were foreclosed from this process because they simply could not afford the \$50,000 application fee, and I am sympathetic to these concerns. But there are three practical responses that, in my view, make it clear that this is not a fair criticism of the process. First, the process view, make it clear that this is not a fair criticism of the process. First, the process had to be self-funding; there simply was no other option, since ICANN has no general source of funds. Based on costs to date and those projected, it certainly does not seem that the fee was set too high. While there are still application fee receipts that remain unspent, the process is not over, and it has already consumed half of the fees collected. Second, and as importantly, it is highly unlikely that any individual or entity that could not afford the application fee would have the resources to be able to operate a successful and scalable TLD registry. The capital and operating costs of even a small registry are considerable, and especially if the goal is to operate a registry that charges low or no fees for name registrations (many of the persons and entities advancing this particular complaint are popprofit or public the persons and entities advancing this particular complaint are nonprofit or public interest bodies), those fees would not likely cover the costs of operation, much less the necessary startup and capital costs. Of course, it is possible that, if an organization that would otherwise have difficulty managing the costs of operating a TLD registry were in fact awarded a new TLD, it might be able to raise the funds through subsequent contributions or grants or the like, but this leads us directly to the third point.

This effort was not a contest to find the most qualified, or the most worthy, or the most attractive for any reason of the various applicants. ICANN should not be in the business of making value judgments. What ICANN is about is protecting the stability of the Internet and, to the extent consistent with that goal, increasing competition and competitive options for consumers of domain name services. Thus, what ICANN was doing here was an experiment, a proof of concept, an attempt to find a limited number of appropriate applicants to test what happens when new TLDs of various kinds are added to the namespace today—a namespace that is vastly different in size and in application than that which existed more than 15 years ago

when the first seven global TLDs were created.

Because this was a proof of concept, the emphasis was on diverse business models, technical capacity, and diversity of geography and focus—and not on some weighing of the relative merits, however measured, of the applicants. Indeed, a serious attempt was made to avoid otherwise normal business risks, such as limits on capital or other resources, so that forseeably likely business failures did not interfere with the data collection and evaluation process of this experiment. Thus, it would have been impossible to accept any application which relied on the mere hope of obtaining funding if an application was accepted, and indeed, several of the applicants were not selected in the evaluation process at least in part on just on that point.

Under these circumstances, it was not appropriate to encourage applications by those with limited resources, since those limitations would almost certainly result in their not being selected. Thus, setting the fee to recover expected costs, without regard to the effect it had on applications, seemed then (and seems today) the logical approach. Once this experiment is over, and assuming it demonstrates that adding new TLDs in a measured way does not threaten the stability of the DNS or the Internet, I would hope that processes could be developed to both expedite and significantly reduce the cost of new TLD applications or, at a minimum, to deal with special cases of TLDs with very limited scope, scale and cost.

D.5 The Evaluation Procedure. Forty-seven applications were submitted by the deadline established; three of those were withdrawn for various reasons, and the remaining 44 were then published on ICANN's website, open to public comments, and subjected to an extensive evaluation, applying the criteria set forth in the various materials previously published by ICANN. More than 4,000 public comments were received. The applications and the public comments were carefully reviewed by technical, financial and legal experts, and the result of that evaluation—a 326-page staff report summarizing the public comments and the staff evaluation—was itself posted on the ICANN website for public comment and review by the Board of Directors of ICANN. Another 1,000 public comments were received on the staff report. The Board, of course, had access to the applications and the public comments as they were filed, and was kept generally informed as to the process of the evaluation.

were nied, and was kept generally informed as to the process of the evaluation. There has been some criticism of the fact that the full staff evaluation was not available to the public—and thus to the applicants—until November 10, only days before the actual Board meeting. Obviously, it would have been much better to produce this earlier, and we tried to do so. But in fact the timing of the release of the staff report was largely the product of the bottom-up process that ICANN follows to generate consensus. An important ingredient in the staff evaluations was the substance of the voluminous public comments produced in the month after the applications were posted. ICANN's job is to identify consensus, and thus input from the community is a critical part of any Board decision. Getting that community input, considering it, and completing the technical and financial evaluations was a massive job.

In one sense, it would have been preferable to have issued the staff report earlier. But on the other hand, doing that would have required shortening the period that the public had to make comments that would be summarized in the report. In fact, in the 6 days between the posting of the report and the Board meeting, ICANN received more than 1,000 additional public comments on the staff report, many from the applicants responding to the evaluation of their particular application. The ultimate question is whether the Board got sufficient timely information on which to base its selection decisions, bearing in mind the objective of the exercise. I believe it did

At its Annual Meeting in Los Angeles in November 2000, the ICANN Board devoted nearly all of the standard public forum day immediately preceding the Board meeting to the new TLD issue, with presentations by the staff of their findings, public comments, and short presentations from the applicants. Another point of criticism by some has been the short time—three minutes—allowed during this public forum for presentations by each of the applicants, but oral presentations were never intended to be the sole or primary source of information for the Board. Voluminous applications (with many hundreds of pages) had been filed by each applicant; many of them had received and answered clarifying questions from the staff; and many of them had provided additional material by filing material on the ICANN public comment page (every one of the 5,000 comments was read by ICANN staff). The Board had access to the applications and to the staff evaluations well ahead of the public Board meeting at which the applications were reviewed. The opportunity to make a presentation at the public forum was simply the final step in an extensive process, available so that any last-minute questions could be asked or points made. Since there were 44 applicants, nearly all of whom wished to speak, and since the

Since there were 44 applicants, nearly all of whom wished to speak, and since the time available for the applicants (given the other parts of the community who also wished to be heard) was limited to about 2 hours, 3 minutes was simply all the time available. Most used it wisely, pointing out the particular strengths of their applications.

Some disappointed applicants have also complained that ICANN staff refused to talk with them, or let them respond to concerns raised by their applications. This is not accurate; what ICANN staff refused to do is have private conversations with the applicants, and this derives from the very nature of ICANN as an entity. ICANN is a consensus development body, not a regulatory agency; its decisions are intended to reflect consensus in the Internet community, not simply the policy preferences of those who happen to sit on its Board at any given moment. For this process to work, the vast bulk of ICANN's work must be transparent to the public, and so with very rare exceptions (such as matters dealing with personnel issues), everything ICANN does it does in public. (In fact, one applicant withdrew its application because of its unwillingness to allow significant material in the application to be posted on ICANN's website.) If the public was going to have a real opportunity to comment on the applications, the applications themselves needed to be public, and any substantive discussion of them had to be public as well.

In an effort to help this process, and still get questions answered, ICANN staff frequently took email or other private questions, reformulated them to make them more generically useful, and then posted them on the website as FAQs. In addition,

¹¹ See Report on New TLD Applications, at http://www.icann.org/tlds/report.

staff encouraged applicants to post any information they wished on the public comment pages, where it would be read by ICANN staff, the ICANN Board and also by any interested observer. What staff would not do, and this was evidently very frustrating to many of the applicants that had not previously had any experience with the open structure and operations of ICANN, was to have private substantive discussions with the applicants.

It is easy to understand this frustration, especially for those disappointed applicants who had not previously participated in the ICANN process and, as a result, did not understand what ICANN is and how it operates and thus were surprised at the transparency of the entire process. Still, it is hard to see how any other process could have been followed consistent with ICANN's consensus development process. Without public access to the entirety of the information about each applicant and each application that was available to the Board, the Board would not have had the benefit of public comments on some (often significant) factors, and it would have been hard to justify its selections as deriving from a consensus development process.

been hard to justify its selections as deriving from a consensus development process. D.6 The Selection Process. To understand the selection process, we must go back to first principles. The goal here was not to have a contest and pick winners; it was not to decide who "deserved" to have a new TLD; it was not even to attempt to predict the kind or type of TLDs that might get public acceptance. The goal, articulated plainly from the beginning of the process more than a year ago, was to identify from suggestions by the community a limited number of diverse TLDs that could be introduced into the namespace in a prudent and controlled manner so that the world could test whether the addition of new global TLDs was feasible without destabilizing the DNS or producing other bad consequences.

could test whether the addition of new global TLDs was feasible without destabilizing the DNS or producing other bad consequences.

This was not a race, with the swiftest automatically the winner. It was a process that was intended to enable an experiment, a proof of concept, in which private entities were invited to participate if they chose to do so—and those who did choose to participate did so voluntarily, knowing that the odds of being selected were not high, 12 that the criteria for being included in this experiment were in some measure subjective, and that the goal was the production of experimental information that could be evaluated. Of course, when many more applications were received than anyone had suggested should be prudently introduced at this stage, some evaluation was necessary to attempt to identify those suggestions that might best fit the experimental parameters that had been laid down. But this was never a process in which the absolute or relative merit of the particular application was determinative.

Many applications with likely merit were necessarily not going to be selected, since the goal was a small number (remember, the entire range of responsible suggestions for introducing new TLDs was from one to 10 new ones). And since one objective was diversity—of business model, of geography, of type of registry—it was highly likely that some qualified applications would not be selected—both because prudence required the addition of only a small number of TLDs, and because our proof of concept required data from a diverse set of new TLDs. This was especially true of those applications seeking open, global TLDs; while two were selected, about half of the 44 applications sought such a charter. But it was also true of others; geo received a very positive evaluation from the staff, but the Board felt that, at this proof of concept stage, there were in fact potential risks to the operation of the DNS that could not be fully evaluated without consultation with the technical support organizations associated with ICANN.

Thus, the Board considered every one of the 44 remaining applications at its meeting on November 16, 2000, measuring them against their collective judgment about how well they would serve to carry out the experiment. Although some suggest that the decision process was somehow hidden, in fact all of this consideration was conducted in a public meeting, in full view of the assembled audience and of hundreds of users observing the webcast. In a meeting that lasted more than 6 hours, the Board methodically reviewed, and either set aside or retained for further evaluation, application after application, until it was left with approximately 10 applications that seemed to have broad consensus support. After further, more focused discussion, that number was pared to the seven that were ultimately selected, and which had almost unanimous Board support: .biz, .info, .pro, .aero, .coop, .museum,

 $^{^{12}}$ In the application instructions, each applicant was told: "The requirements for sponsoring or operating a new TLD are very stringent. Only a limited number to TLDs will be established in this round of applications, and it is likely that only applications with very high qualifications will be accepted." http://www.icann.org/tlds/new-tld-application-instructions-15aug00.htm#12. To make doubly sure there was no misundeerstanding, every applicant was required to acknowledge in writing: "The applicant understands and acknowledges that ICANN has the right to reject all applications for new top-level domains that it receives and that there is no assurance that any additional top-level domain will ever be created in the future." http://www.icann.org/tlds/eld-app-unsponsored-transmittal-15au00.htm#B6.

and .name. 13 In the aggregate, the Board concluded that this group provided enough diversity of business models and other relevant considerations so as to form an ac-

ceptable test bed or proof of concept.

The various TLDs have very different intended purposes, and that is the strength of the group in the aggregate. Two—.biz and .info—were advanced as essentially alternatives to .com—global, business-oriented registries aimed at capturing millions of registered names around the world. In order to compete with .com-which has a recognized brand, a large installed base that produces a regular stream of renewals, and a very substantial marketing budget—these particular applicants assumed they would need a significant investment in both capital equipment and marketing. The Board felt that these applicants seemed most capable of bringing the necessary resources to bear to test whether anyone can effectively compete with .com after the latter's significant head start.

Two other TLDs—.pro and .name—were aimed at individuals rather than businesses, but in very different ways. .pro was aimed at licensed professionals, while .name was aimed at any individual. The other three—aero (aerospace industry), .coop (for cooperatives), and .museum (for museums)—were all restricted TLDs, aimed at an industry or a business method or a type of entity, and added to the

diversity of this experimental collection of TLDs.

ICANN's objectives and, we believe, the objectives of the general Internet community, were to introduce a small number of various kinds of new TLDs into the namespace in a prudent fashion, see what happened, and then, if appropriate, based on those results, move forward with additional new TLDs. It is certainly conceivable that some different subset of the applications it had before it would have met that objective as well as those chosen, but the real question is whether the choices were reasonable, and likely to produce the necessary information on which future introductions could be based. It is also possible, as some of those not selected have complained, that those selected will have a head start (to the extent that matters) over plained, that those selected will have a head start (to the extent that matters) over future TLD applicants, but this would be an inevitable consequence of any selection of less than all applicants. Those who were not selected, no matter who they are, were predictably going to be dissatisfied, and those who were selected were predictably going to be glad, but neither was an ICANN goal. ICANN's goal, and its responsibility, was to find a limited collection of diverse new TLDs that could be prudently added to the namespace while minimizing any risk of instability. While time will tall set this point we believe we foithfully covered out that responsibility.

will tell, at this point we believe we faithfully carried out that responsibility.

D.7 The Post-Selection Process. Since November, we have been in the process of drafting and negotiating agreements with the selected applicants. Since these agreements will hopefully be templates for future agreements, we are taking great care to make sure that the structure and terms are replicable in different environments. Since these agreements will contain the promises and commitments under which the applicants will have to live for some time, the applicants are being very careful. The result is slow progress, but progress. We are hopeful that we will be able to complete the first draft agreements within a few weeks. The Board will then be asked to assess whether the agreements reflect the proposals that were selected and, if so, to approve the agreements. Shortly thereafter, this great experiment will

begin. We are all looking forward to that time

Of course, it cannot be stressed enough that no one knows for sure what the effects of this experiment will be. Since there have been no new global TLDs introduced for more than a decade, the Internet is a vastly different space than it was the last time this happened. (There have been a number of country code TLDs introduced over that period, and some of those have recently begun to function in a way quite analogous to a global TLD. These have only achieved relatively small numbers of registrations, so that they do little to test whether the stability of the DNS by large TLDs competitive with .com.) But there has never been an introduction of as many as seven new global TLDs simultaneously, with the possibility of a land rush that is inherent in that fact. There has never been a highly visible introduction of multiple new TLDs in the context of an Internet that has become a principal global medium for commerce and communication. We do not know whether the introduction of a number of new TLDs—especially combined with the relatively new phenomenon of the use of ccTLDs in a fashion never intended (after all, .tv stands for Tuvalu, not television, no matter what its marketers say)—will create consumer confusion, or will impair the functioning of various kinds of software that has been written to assume that .com is the most likely domain for any address.

In short, it is not absolutely clear what effects these introductions will have on the stability of the DNS or how to introduce new TLDs in a way that minimizes

¹³ See http://www.icann.org/minutes/prelim-report-16nov00.htm#00.89.

harmful sideeffects, and that is precisely why we are conducting this experiment. The results will guide our future actions.

IV. IMPORTANT OUTSTANDING ISSUES

A. Country Code Top Level Domain (ccTLD) Relationships. This is certainly one of the most complex parts of the ICANN structural process that remains to be resolved. While there are many moving parts, the key issues are the proper relationships between governments, current ccTLD operators, and ICANN.

To properly understand how we got to where we are, we need to look back to the early days of the DNS, when Jon Postel and others were seeking primarily to expand connectivity throughout the globe. In order to have a truly global network, and for all of the world's population to enjoy the benefits of that network, worldwide connectivity is a crucial first step. After the creation of the original seven generic TLDs in the mid-1980s, Dr. Postel (in his IANA role) delegated what he described as "country code" or "cc" TLDs to persons (often academic researchers) willing to operate those registries for the benefit of the residents of that particular geographic area.

area. While in general these delegations were made on a national boundary basis, Dr. Postel also made delegations to persons willing to take on this commitment in isolated geographies, such as island groups, even though they might be part of an already existing national cc delegation. Typically, each ccTLD was operated by a designated individual. Since the goal was to expand connectivity, and since there was in fact very little interest in this subject on the part of most national governments at the time, there was clearly less care and precision about the specifics of those delegations than might seem desirable today.

Over time, the standards and criteria for such delegations grew more rigorous, and were eventually described in a document known as RFC 1591.¹⁴ It became the practice to only create new delegations for those nations or geographic areas included on a list maintained by the Organization for International Standardization (ISO) on behalf of the United Nations Statistics Office, which maintains two-letter codes for nations and various external territories. But the legacy of those early days still remains in some instances, and so there are separate ccTLDs for locations such as the Cocos (Keeling) Islands (.cc) and Christmas Island (.cx), both territories of Australia, as well as various French overseas departments and territories (e.g., Guadeloupe (.gp) and Mayotte (.yt)) and miscellaneous others (e.g., American Samoa (.as) and Pitcairn Island (.pn)).

The 244 ccTLDs are quite diverse. Some, like .de (Germany) or .uk (Great Britain) are large and active registries; some, like .aq (Antarctica), have almost no registrations at all; and some are completely inactive. In addition, the way the ccTLDs are operated varies enormously. Some are highly restricted to residents or citizens of the particular country, while others are completely unrestricted. Some are limited to particular kinds of registrations, while others allow registrations of almost any string of letters. Some are operated as non-profit cooperatives, while others are highly entrepreneurial businesses.

A few delegees have decided to essentially license the marketing of the ccTLD to a commercial enterprise for various forms of compensation, and that has produced out-of-territory marketing campaigns for such ccTLDs as .tv (Tuvalu), .md (Moldova), .nu (Niue), and .cc (Coccs Islands). This practice, of course, is a distortion of the original intended use of the ccTLDs by Jon Postel: opening up the Internet to all parts of the globe, allowing it to accommodate diversity in linguistic, cultural, economic, political, and legal circumstances. Dr. Postel was seeking stewards for the local community's interest in being part of this growing global network we now call the Internet. He was looking for, and generally found, volunteers who were willing to take what he (and they, in the vast majority of cases) viewed as a public trust for the Internet community of which the person or entity receiving the delegation was a part.

But Dr. Postel, while a genius in his field, was no more prescient than anyone else about what the Internet would become, and in any event did not insist upon written contracts and legal agreements as a condition of a delegation. He relied, as did all involved at the time, on the good faith and interest in serving the public of all involved. The Internet we see today—a global medium for commerce and communication that presents enormous opportunities for profit—is vastly different than the infant network that he was trying to nurture to adolescence. And it is this evolution

¹⁴ "Requests for Comments" (RFCs") are standards and other related documents developed and published under the auspices of the Internet Engineering Task Force.

that is the principal reason that Dr. Postel and the great majority of the Internet community concluded that something like ICANN needed to be created.

Unfortunately, the task that ICANN inherited with respect to the ccTLDs is com-

plicated greatly by the fact that much water has passed under the bridge since most of the original delegations. In some countries, the national government is intimately involved in oversight of the ccTLD delegated for that country. In other countries, the national government has shown little or no interest in these issues. And in some countries or geographic areas, the operation of the ccTLDs have run strongly counter to governmental preferences and, in several cases, legislation. As we have seen, in some of those situations, where a private entrepreneur has obtained an agreement to market a ccTLD from the original delegee, that entrepreneur has interests that are completely unrelated to the original goals of the delegation, and may have a significant economic interest in maintaining the status quo, without re-

gard to the interests of the global or local Internet communities.

One of the great changes over the last two decades is the involvement and interest of many of the world's governments in the Internet. For many reasons, national governments and even multi-national bodies now see the Internet as an important vehicle or tool for economic development, for communication, for cultural preserva-tion or many other objectives. Since ICANN is a private sector entity, governments or government officials cannot directly participate in the governance or operations of ICANN. But since the interests of national governments are obviously important elements of the global Internet community, and certainly have to be taken account of in the creation of any meaningful global consensus, ICANN created its Governmental Advisory Committee (GAC) to serve as a device for sharing information and concerns between national governments and recognized geographic areas, on the one hand, and the private sector participants in ICANN on the other. The GAC meets (at least) quarterly, in conjunction with the quarterly ICANN meetings, and has developed the tradition of issuing a public communique following each such meeting. ICANN's bylaws provide that it will receive advice from the GAC, and deal with it as it sees fit, but any such advice is always given the serious consideration that it deserves, since it comes from those chosen as representatives of populations that make up much of the Internet community.

The GAC has a particular interest in the relationships between ccTLD delegees and ICANN, since it and its members believe that nations have a sovereign interest in the ccTLD that has been created to represent the interests of the citizens of those nations. On the other hand, while ICANN has recognized and accepted that sovereign interest, ¹⁵ ICANN's prime directive—the stability of the Internet—cannot be sacrificed or ignored because of it. And finally, there are commercial relationships that have been created over the years, and investments made in reliance on those relationships, that should not be ignored either, both as a matter of common equity and because to do so could adversely affect the very stability that ICANN (and the Internet community it represents) seeks. Thus, finding the correct articulation of the appropriate relationships between (1) the government and the ccTLD administrator; 2) the ccTLD administrator and ICANN; and (3) ICANN and the government is in-

herently complex.

We have worked hard, but we don't have this part of the ICANN construction project done yet. We have just hired the former ccTLD administrator for Austria, Herbert Vitzthum, to help bring this particular set of conversations to a conclusion

as soon as possible.

B. At-Large (or general user) Participation in ICANN. The original ICANN pro-B. At-Large (or general user) Participation in ICANN. The original ICANN proposal to the Department of Commerce to be recognized as the Internet community private sector consensus entity called for by the White Paper proposed that nine of the 19 members of the ICANN Board would be selected with the participation of the general user community, "if feasible." The reason for the qualification was purely practical; there was a clear consensus that users should have some appropriate way to participate in the ICANN consensus development process, but there was no consensus—and indeed no good ideas—about how that could be accomplished with-out risking the very ability of ICANN to carry out its principal mission. There were loud voices calling for global online elections—one-person (or one-domain name, or one email address), one vote. But there were other equally loud voices raising concerns about the possibility that such elections could be easily captured by determined minorities—business, geographic, ethnic, religious, philosophical or other—and even if that did not happen, having half the Board of an organization whose principal mission was technical stability of the Internet selected by an electorate that almost certainly would know almost nothing about the subject was unwise. No

¹⁵The White Paper summarized this interest as follows: "Of course, national governments now have, and will continue to have, authority to manage or establish policy for their own ccTLDs."

one had come up with a scheme for accomplishing the objective while eliminating the obvious risks, and so the original proposal promised only to do what was fea-

The Clinton Administration, in the form of Ira Magaziner, who had been delegated the lead responsibility in this area, took the position that it would not recognize ICANN unless it committed to user participation (comprising at least nomination) in the process of selecting nine Board members—presumably on the basis that, without that commitment, it would not accept that ICANN truly represented a consensus of the Internet community. Whatever the merits of that point of view, the ICANN organizers acquiesced, and thus began 18 months of searching for a method to accomplish this goal that could achieve consensus support. We have not yet found that needle in the haystack, and this failure has been a constant source of criticism from a portion of the Internet community and from various academics and interest groups who feel strongly about the issue. An appropriate solution for the At Large issue is necessary if ICANN is to truly be an effective consensus development body for the entire Internet community

Because all other attempts had failed, the ICANN Board last year determined that it would, on an interim basis, conduct a global online selection process for five members of the ICANN Board, which would be followed with a new study effort to find the consensus that has eluded the community so far on this issue. Those selections were held last fall, and selected one Director from each of the five ICANN regions—North America, Europe, Asia-Pacific, Latin America, and Africa. The reason for selecting five rather than nine was to obtain support for this interim compromise from those who oppose direct online selections; with five directors selected by online voting, those directors in the aggregate (even in the event of a total capture of the selection process by some determined minority) would still amount to one director less than one-third of the Board. The Board would still be able to act, even where a two-thirds majority was required, even if all five (in this hypothetical) "captured" directors voted as a block. To assure that nine At Large seats continued to be occupied, four of the original interim directors agreed to serve beyond their original 2 year commitment

In fact, the online selection process was unsatisfactory in a variety of ways, but it does not appear that there was any "capture" of the five selected directors as a group. They have taken their Board seats and are functioning in every way as ICANN directors today. The At Large Study Committee is in the process of being established, with Carl Bildt, the former prime minister of Sweden as its Chair, and Charles Costello, an elections expert from the Carter Center, and Pindar Wong, a well-known Internet technologist from Hong Kong, as Vice-Chairs. The remainder of the Committee will be named soon, and its goal is to find that consensus solution to this problem that has gone undiscovered to date.

V. CONCLUSION

I trust that this description of the background and current status of the most important ICANN initiatives will be helpful to the Committee, and we stand ready to provide any other information that the Committee might find useful.

Senator Burns. Thank you, Mr. Roberts, for your statement.

I want to start off with the situation on the dispute resolution. In that, and I have not studied that end of it, and you will have to enlighten me, does that also include due process?

Mr. Roberts. The history of dispute resolution over domain names goes back several years, involves a good deal of activity and, as you know, the Senate decided that it needed to enact a cyber-

squatting statute, which it did.

In addition to that, there has long been a demand for a non-judicial way of resolving these disputes, particularly because going to court is a significant burden to many small businesses whose domain names may be involved in an infringement action of one kind or another.

So with a worldwide process that involved hearings in many countries, in the U.S. and elsewhere, we worked with the stakeholders that are particularly interested in this area to come up with something that's called the Uniform Dispute Resolution Policy. That policy was adopted by the Board a little bit over a year ago, and we selected several companies that are completely independent of ICANN to administer that policy and those procedures

on a worldwide basis, starting last January.

In the course of the subsequent 12 or 13 months, there have been some 2,000 disputes that have been resolved. We do not claim perfection for that. In fact, the Board specifically said when it adopted the policy that, after a period of experience with it, it would conduct a review of the policy, and the pluses and the minuses, and any mid-course corrections that needed to be made in dealing with the outcomes of those actions and those reviews.

Senator Burns. You have been critical of this, Mr. Auerbach.

Would you like to respond to that?

Mr. ÅUERBACH. Yes, I would. The UDRP, Uniform Dispute Resolution Policy, amounts to an international law. It is a law refining the relationship of trademarks over other uses of a name and, because it is international, it is actually superior to a law which you, the Senators, along with Congress, can pass. It is stronger than that. It supersedes that.

It is also a policy which favors trademark intellectual property interests over other users of names. It is only available to those who have trademarks. That is a condition precedent to bringing an action under the UDRP. If my name, if Senator Boxer's name is being misused by anyone else, neither of us could bring a claim on the UDRP because neither of us has a trademark in our name,

which is a precondition to bringing it.

The UDRP is very, very flawed. There has been some research on it at the University of Syracuse New York, by Professor Milton Mueller, and I can bring that to the attention of the Subcommittee if you would like.

Senator Burns. The process of resolving these disputes, Mr. Roberts, are they laid out specifically in the MOU? Did the MOU ad-

dress that situation at all?

Mr. Roberts. The Administration was very much involved as a member state of the WIPO compact in attempting to find a way to allay the concerns of the trademark community, worldwide trademark community, and there was a specific mandate in the White Paper that said that non-profit entity that was organized was to take up this issue and work with the community to see what could be devised. The Congress has already held hearings on this, and there is testimony in the record from last fall with regard to the issues.

Senator Burns. When those negotiations were going on, and from the Commerce Department in developing the MOU and the setting up of ICANN, was there any reference made that it might take congressional action to make it legal?

Mr. ROBERTS. Are you referring specifically to the UDRP?

Senator Burns. Yes.

Mr. ROBERTS. The Administration invited the World Intellectual Property Organization to conduct a process leading to a report, and that report came out in the spring of 1999 and was referred to ICANN and to its Board to work with the stakeholders to see what parts of that report might be pertinent to a process that ICANN could deal with.

ICANN's powers in this area are extremely limited. I would just like to point out that the way that this process works, it is only available to domain name registrants. It is completely non-judicial, and it does not affect the opportunity of any party to such a dispute to seek judicial relief under applicable law.

Senator BURNS. Would you care to comment, Mr. Auerbach?

Mr. AUERBACH. I am just wondering under what section of the Constitution the Department of Commerce obtains the authority to delegate this power to ICANN. I have not seen such a section, and I would like to be educated.

Senator Burns. I have got a couple of other questions, and I yield to my good friend from California.

Senator BOXER. Would you prefer to finish your set?

Senator Burns. No.

Senator BOXER. Thank you, Mr. Chairman.

Senator BURNS. I think there will be a lot of rounds with this panel, I have a feeling.

Senator BOXER. It is interesting.

Mr. Auerbach, I get the sense from your statement and your comments that you do not think there is a need to do anything in this arena. Am I right?

Mr. AUERBACH. I am not sure what you mean.

Senator BOXER. I mean, you seem very critical of where things are going.

Mr. AUERBACH. I am very critical.

Senator Boxer. What would you suggest?

Mr. AUERBACH. OK, in terms of concrete, ICANN is needed. There are certain network resources. There is the domain name space, and we should not forget the IP address space, which is actually the 9/10ths of the iceberg under ICANN which everybody forgets, that need some degree of central coordination.

Senator BOXER. IP meaning?

Mr. Auerbach. Internet protocol addresses.

Senator BOXER. Thank you.

Mr. AUERBACH. They are the numbers that actually represent your machine. They are the things that actually make packets move around the network.

If you think about it, the domain name service is actually a layered-on service. If we compare it to your telephone system, the ability to make a phone call is the primary service. The ability to call 411 and look in a phone book is a layered-on service. DNS is a layered-on service.

Anyway, as far as ICANN goes, we need an ICANN. We need something, and the real question in my mind is, ICANN in the end game has to be something that is pretty much a fairly independent, international type body that is really beyond any particular nation's control. The question is really how do we go from here, which is, we have a California corporation in the United States, and how do we get to this new kind of entity which is sort of free-floating?

To my mind it really requires at least two major components. One is, it has to have public participation, because unless we get acceptance of ICANN by those who are in the Internet who are affected by its decisions, it will not have legitimacy.

The second point is, to the extent that ICANN has to be released from United States control, I believe it's going to take some action on the part of Congress, painful as it may be, to possibly slightly relinquish a little bit of United States sovereignty. It is going to be difficult. It is going to be painful. I do not know details of how we can achieve it. I see a very fuzzy road in front of us, but I know we need congressional help to do this.

Senator BOXER. Well, if I might ask Mr. Roberts to comment, because I look at America as the cutting edge here, and at this stage if we don't take the ball and run with it, so to speak, I do not know what would happen. Could you perhaps comment on Mr Auerbach's

statement.

Mr. Roberts. I do not believe it is appropriate at this time to consider any country relinquishing any national sovereignty in connection with ICANN. I do not believe that the private contracts, which are the source of the mutual obligations which our stakeholders assumed as a result of our policy deliberations, should go any further at this time.

If the world evolves to the point where we can have a genuine transnational community of nations, that time will arrive. ICANN absolutely wishes to stay out of that. Our authorities have been very clearly set forth by the White Paper and by agreements with the Commerce Department, and we stick very closely to them.

Senator BOXER. Let me go back to my first point about this identity theft issue, Mr. Roberts, and see if you can help me out here. Last August, California passed a new law to protect personal names. It goes further, Mr. Chairman, than what we did, because, as I understand, the cyber-squatting legislation we passed said that if you are going to be liable for using someone's name, you have to profit from it.

In other words, if you're going to profit from it, then we can go after you, but if they just steal your name to do something other than that, such as what I showed you, which is cynical and misleading at best, and harmful at worst—I found it to be extremely

harmful and disturbing—you cannot do anything.

Mr. Roberts, I wonder if you think we ought to take a look at that California law, because there you are liable if you take someone's name for a bad faith purpose. I wonder whether you think we ought to take a look at our legislation and see if we can strengthen it to protect people from having this happen to them.

it to protect people from having this happen to them.

Mr. ROBERTS. Senator, you have put your finger on a very difficult situation that I know is of personal concern to Senator Hatch, because he himself has had exactly the same difficulty that you

have, as well as other members of the Congress have had.

On the other hand, we are dealing with a rather tricky area of the law. I am not a lawyer or a legal scholar. Professor Froomkin has worked with WIPO very extensively, and he may have com-

ments on the next panel.

The issue of the extent, and how statutory authority to control what everyone says in a common-sense way, as you have, that this is wrong, without compromising constitutional rights, is a difficult one, and it needs your scrutiny, and I should point out that this is not an area in which ICANN has any competence or any desire to be involved.

Our procedures under UR—UDRP, pardon me, I stumble on my own acronyms. The procedures are to deal with a non-judicial settlement of abusive registration tactics.

Senator BOXER. Well, I think it is abusive to take somebody's name and put up a false site, so I hope you will rethink it, because

I think it would be a very helpful thing.

Mr. ROBERTS. Well, of course, there are always remedies available to you for defamation and libel, but as I think every member of the Congress is aware, a public figure is severely disadvantaged.

Senator BOXER. Well, that is not available to us.

Mr. Roberts. Right.

Senator BOXER. That is not available to us as public figures.

Mr. Auerbach, did you want to comment, or do you have any comment?

Mr. AUERBACH. I was just going to reiterate that yes, the standard court laws, there are such things, misappropriation of identity, but ICANN should not be a legislature. You do a much better job of it than we do.

Senator BOXER. We hope so.

Senator Burns. There are times, however—

[Laughter.]

Senator BOXER. There are times, and there are times.

Mr. Chairman, I have another question, but why don't I wait till after your next round.

Senator Burns. Mr. Auerbach, you said in your opening testimony that you as an individual have been denied access to some

areas of ICANN. Can you give me an example of that?

Mr. AUERBACH. There is a group called the Government Advisory Committee. It is formally part of ICANN. There is no legal distinct existence. It is part of ICANN, yet they lock the doors and they keep directors out. I am not allowed in the meetings. I do not know what goes on in the meetings. I do not know whether they are violating any particular laws. It is a secret to me.

There is another part. There is a domain name supporting organization, which again is legally part of ICANN. I am responsible for its assets. I am responsible for its debts, as director. I am responsible for its actions. Its assets and liabilities were not, as far as I can tell, on the annual statement. I do not know where that

money is.

Senator Burns. Do you believe that every part of ICANN should

be open for scrutiny and public scrutiny?

Mr. AUERBACH. To gain acceptance and legitimacy so it can make the transition to being more than a mere California corporation I believe is going to require that, but also, what has it got to hide?

Other than personnel matters, contract negotiations, and litigation, part of the premise of its existence would be that it would be open and transparent. Part of its bylaws are that it shall operate in an open and transparent manner to the maximum extent possible, yet I have been an outsider for several years, and I can tell you it is not open and transparent, and even as an insider it is not open and transparent.

I learn more about what goes on inside ICANN from people who are part of my community outside of ICANN who watch it very

closely, reading tea leaves, than I do from internally.

Senator Burns. Mr. Roberts, do you want to comment on that? Mr. Roberts. I would just make two brief comments. One is that our fiduciary responsibilities that are incumbent upon directors and management of a non-profit corporation are set forth in the California statute. Our books are audited. We comply religiously with all the legal requirements in the corporation. We publish our financial statements, and if Mr. Auerbach has any unresolved questions I would be delighted to have him sit down with our auditors.

With regard to the issue of openness of the actions of some of our committees, the Board of Directors is obliged by the portion of the bylaws dealing with open and transparent procedures to conduct all of its policy activities in the open and publicly, and it does so.

On the other hand, the stakeholder activities that were designed in the White Paper to provide a compartmented voice for the specialized technical areas of the Internet that represent the expertise that feeds to our Board, when the Board undertakes a policy thing, the chairs of those bodies and those committees are given considerable latitude to conduct their affairs, which frequently are on a worldwide basis, by electronic mail and telephone calls, and quarterly public meetings, in the manner that they think facilitates carrying out their part of the charter of ICANN.

It is, in fact, the delegated responsibility of the chair of the Government Advisory Committee, who is a Government official, to ensure that his committee, whose recommendations to the ICANN Board are purely advisory, gets its work done in the most efficient manner that its members believe it should energt a under

manner that its members believe it should operate under.

It is, I think, of note that my reports to the Government Advisory Committee and reports of certain other non-GAC members are

made in public session.

We have been feeling our way along with this. I think you are aware that on a worldwide basis, practice about how to get these kind of stakeholder activities done varies considerably, and we take our openness and transparency responsibilities very literally, and on the other hand, we have to adapt to the manner in which people around the world are used to getting things done. We have an international board of directors. A substantial number of the members of our supporting organization councils and their subordinate organizations are non-U.S.

Senator Burns. I am very much interested to note that the election of the five at-large, in quotes, Board members of ICANN took place over the Internet. However, I have also heard reports that there are many technical difficulties in this process, along with

other problems.

Mr. Roberts, can you comment on how the procedure for this election was created, and Mr. Auerbach, what are your views of

that process, as you were a candidate?

Mr. ROBERTS. The story of the at-large, which I have a substantial amount of narrative in my prepared testimony, goes back to the beginning of ICANN. The first thing that the Board did back at the beginning of 1999 was to appoint a committee from around the world of knowledgeable individuals to attempt to fashion a set of rules for how to do the first worldwide electronic election of individuals who would be able to participate in and assist the Board in carrying out its technical management responsibilities.

Throughout 1999, this topic was the subject of committee hearings, of reports to the ICANN Board, and the adoption of resolutions, beginning to converge to a solutions base. To shorten my remarks, at the quarterly meeting in Cairo in the first quarter of 2000, the Board was confronted with a cacophony of voices disputing the decisions it had made the previous November at its annual meeting in California.

The result of what is now known, and there is considerable backup to this, as the Cairo compromise, is the Board could not find consensus about how to proceed on at-large. It had attempted to do so. It had had several meetings on it, lots of discussion, hours and hours of public testimony on the matter, and the end result of

that was violent disagreement about what to do.

As a result of that, what the Board decided to do was to hold an election using a system that was under development for somewhat another purpose, of five directors, of five at-large directors in 2000 and then, having seated those directors, to completely reexamine how a worldwide at-large component of ICANN might usefully contribute to the work of the corporation and its responsibilities.

We held that election. We elected those five individuals. We have publicly stated here and in my testimony and elsewhere that it was a traumatic learning experience for many people, including the candidates, and that when we have the work of the study committee, which Mr. Karl Bilt, former Prime Minister of Sweden, is just putting into operation as I speak, that we will look real hard at how to do this better the next time.

Senator Burns. Mr. Auerbach, would you like to make a comment?

Mr. Auerbach. Oh, certainly. There was no compromise. There was a choice in Cairo between having no viable election whatsoever and a minimal election. It was the kind of compromise one makes with a starving person who will pay any price for food. That is why we have an election that is only electing a portion of the half of the ICANN Board that should be elected by the public.

As far as the election process itself goes, first of all, the ballot itself was stuffed by ICANN hand-picked candidates. There are only a subportion of those candidates who were actually nominated by the public. The second part was, ICANN controlled every communication channel between the electors, between the voters.

Imagine campaigning if you were in your own State and you could not get the names of the people on your voter rolls. How would you reach them? How would you communicate with them? How would you discuss issues? How would they talk to one another to form parties? How would they give you funds? How would they support you? We had none of that opportunity with ICANN. ICANN controlled every communication channel. It withheld the address list, in my mind in violation of California law, which says those lists shall be made public to the voters.

Then the election itself, the technology was somewhat flawed. Yes, there were more people signing up than were anticipated. Many people could not sign up. Many people did not get the pass codes for the election. That was explained because 158,000 people

signed up.

Now, if you compute that over the period of the sign-up period, that worked out to between three and four transactions per minute, and I do not know of any computer that slow these days, so we are talking about a system that overloaded under extremely low transaction rates.

This election was a success in the fact that it actually occurred. It was a failure in the fact that there were an extraordinary number of obstacles put in the way of candidates.

Senator Burns. Can you comment, Mr. Roberts, on the ICANN funds, how you gain your funds and how you do your activities? Also, specifically refer to the \$50,000 application fee charged to applicants for new top-level domains, how this number was arrived at, and is it fair.

Mr. Roberts. Thank you. The White Paper suggested, I think it is the right term, that the appropriate source of funds for the new private sector corporation and, of course, since this was not a government corporation or a government-controlled corporation, it was totally required that the stakeholders provide all of the funding for it, including all of the startup funding.

This was a substantial challenge to me when I took over as the startup CEO in October 1998. We took the guidance of the White Paper and sat down with what are known as the registry companies, the operators of the domain name and address registries, and over the past couple of years we have begun to fashion the written agreements and the commitments to provide financial support to ICANN.

It was intended that the community do this in a self-supporting manner. We have, I would say, at the current state of affairs, that we're about half-way through there. We have an extremely diverse array of worldwide registries and registrars, in the several hundreds, and at the present time about 60 percent of our funding base is confirmed by written agreement, and the balance remains to be so confirmed.

With respect to the \$50,000, this was a process, of course, that had to be entirely self-supporting. It had never been done before. In fact, it was taking place after 5 years of violent argument about even whether it should be done, much less how it should be done, and so we believe that the \$50,000 represented a reasonable sum under the circumstances as we knew them going into this.

As the Board's policy process and its' structure for soliciting applications was developed, as it has turned out at the end of January, we have expended about \$1,022,000 out of a total of \$2.2 million that has been received, and we still have a substantial negotiations of the seven contracts that take place, and we also, of course, have implementation of valuation and some hazard from those non-selected of pursuing their case in the courts, which, of course, is a hazard that we were aware of from the very beginning of the process

Senator Burns. I guess the most visible that we read about was the .travel, and if you would comment on that, why were applications for seemingly reasonable new TLDs, such as .travel, for instance, they were rejected, while more obscure new TLDs such as .museum was accepted? The \$50,000 was kept after the application was paid for.

Mr. Roberts. Well, let me make very brief comments about that. First of all, the process was to lead to a proof-of-concept selection of a diverse group of registry operators who could demonstrate to the community whether the assumptions on which we were going

forward were, in fact, valid.

The bottom line of what is going to happen here is a determination by the marketplace that expansion of the name space in this manner is appropriate, it's safe for the Internet, it's stable with regard to the economics of what these companies are going to do, and that they won't fail. There is a lock-in hazard here that someone who registers in these new companies, if it goes bankrupt, there will be disruption. There will be people whose business plans will be broken, and so we have had all along, for that reason and other reasons, considerable caution about doing this.

So I think the travel situation reflected an analysis of the record and of the evaluation and of a substantial number of public comments calling into question, since this was a sponsored proposal, this was a proposal on behalf of a specific community, that the

community support for the proposal was not all there.

Senator Burns. Now, my eyes glazed over, but if you wanted to establish a .travel, I guess, why would you be concerned the companies that join and do business in that particular area?

Mr. ROBERTS. Well, the Board's structure for the proof of concept

introduction of new TLDs have two main categories.

One was unsponsored, and one was sponsored. Sponsored basically were people who thought that they were equipped to go into competition with .com on a worldwide basis, and they were evaluated on the basis of their technical business and financial ability to, in fact, do that.

to, in fact, do that.

Those applicants who were seeking a sponsored top-level domain were required to demonstrate, to be very particular about what community they were representing, and how they were confident they were going to represent that community in the registration of

domain names to the members of that community.

For instance, the .museum, which I think you're aware is very widely internationally supported and supported in California by the Getty Museum and the Getty Foundation, is four museums, and it is intended to enable the worldwide museum community to extend their educational and other kinds of outreach via the Internet, and so in these sponsored proposals it is necessary that you take a good look at the people who have developed the proposal.

In fact, do they have the confidence of the community that they are purported to support? For instance, you would not want organizations that were not museums getting a domain name in .museum and undertaking some sort of consumer—creating a consumer prob-

lem and a consumer confidence problem.

Senator Burns. Senator Boxer. Senator Boxer. Thank you.

Mr. Roberts, this is new territory for all of us, so if we ask very

basic questions, please understand.

Now, I understand before these new top-level domain names become operational, ICANN must negotiate with these new seven, or with these players, as to how they plan to protect trademark holders. It is important that before this flood of new addresses hit the

market, that trademark holders have the chance to protect their existing trademarks, and I understand that there is a sunrise scheme that would do that.

As I understand it, even these new seven top-level domains are required to establish a protocol on intellectual property protection before ICANN will sign a contract with them. I understand that .info, and I think also .pro, that they are working on a so-called sunrise period that requires pre-registration, a holding period, and preferences for trademark holders on a first-come, first-served basis.

It seems to me this sunrise scheme, which I look at as sort of a waiting period where you can make sure everyone is protected, would go a long way toward protecting trademark holders. Now, do I understand what this sunrise period is? Have I described it correctly?

Mr. ROBERTS. Yes, you have.

Senator BOXER. And is this going to be applied to all of the new

names, or just those two domains?

Mr. Roberts. Let's talk about the principle we're trying to deal with here. The principle is that a legitimate holder of a trademark does not have that trademark infringed by the registration of domain name transactions, and we have lots of evidence from the difficulties with Network Solutions that this not only happened, but it was extremely difficult to remedy, and so one of the things that the community and the stakeholders have told us, emphatically told us, is, don't introduce these new top-level domains in a way that takes us down that path again.

So as you might imagine, what will happen here if there is an infringement action, it will not be an action against ICANN. It will be an action against the registry operator. The registry operator, after all, now has a business plan that they have staked several millions of dollars, because the problem you are pointing out is mostly in the worldwide commercial area and not in, for instance,

.museum, where there really is not this kind of problem.

They have to gain the confidence of the market that they are a viable entity and that they will conduct their affairs in a reasonable way, and so we are not trying to put anybody in a straitjacket about this. What we want is to see evidence that, in fact, the companies are knowledgeable about the problem, that they are talking to people that are involved here, the trademark holders and others, and that they intend to see that the right thing is done, and that is our bottom line.

Senator BOXER. Before I ask you, Mr. Auerbach, because I see you want to put your word in, I just want to make sure that I understand. This sunrise scheme, which sounds to me is the right way to go, is only going to apply to two of the seven top-level domains, or more than that?

Mr. ROBERTS. Well, in theory it applies to any top-level domain registry, but as a practical matter, where you have a highly restricted registry, there is very little room for that particular type of abuse.

Senator BOXER. What minimum standards will you require from these new applicants before you sign the contract? Can you lay that out? Mr. Roberts. Well, our registry accreditation agreements, which were developed a year-and-a-half ago in connection with our duties under what was known at the time as Amendment 11 of the Cooperative Agreement between the Government and Network Solutions—we were the instrumentality by which competition was introduced into the .com, .org, and .net registry—have provisions in this area. The basic provision that was in those agreements was, if ICANN, through its policy process adopts a dispute resolution process, then you as a registrar are obligated to include that process in your agreements with the people who register domain names, which they have now done, and something similar to that will occur with regard to the new registries.

Senator BOXER. Well, could you put in writing the minimum standards ICANN will require for these new applicants before you

sign the contracts?

Mr. ROBERTS. I would be delighted to send you a letter about that.

Senator BOXER. That would be very important. Thank you.

How do you plan to ensure, or can you ensure, that when these new TLDs are open for business we are not faced with a flood of new cyber-squatters?

Mr. ROBERTS. Well, first of all, since we have had this very painful experience over the past 5 years, everyone is extremely—all of our stakeholders and all of the parties to this are very aware of the

problem.

It was much discussed. It was part of the proceedings of the working group and the domain name support organization that forwarded its recommendations about the manner in which new TLDs should be introduced to the Board, so I am trying to distinguish here between the principle that guides how the things are to be done versus the specific implementation.

It is not up to us to get down into the trenches on the implementation, so long as the result of that is fairness and adherence to the

policiés.

Senator BOXER. So your point is that one of the minimum requirements will be that they are held liable if, in fact, they are cyber-squatting, so that they are actually going to sign something to that effect. Then you step out of the picture and let other people

go at it. Is that what you are saying?

Mr. Roberts. The only qualification to that is to go back and remind you again that our authority and our responsibility is with private contracts, with registry operators and registrars that are limited to the scope under which a private contract is enforceable. We do not have any statutory authority, and there are some classes, some potential classes of a problem that you describe that would require judicial remedy of some kind, for instance. Some of those are already dealt with in the U.S. cyber-squatting statute.

Senator BOXER. So basically what you are trying to do, as I see it, is to have some document signed which would hold people accountable if they do the wrong thing, but the actual enforcement would be outside your jurisdiction.

Mr. Roberts. That is correct.

Senator BOXER. Mr. Auerbach, you have been shaking your head vigorously. Why don't you give us your side of this?

Mr. AUERBACH. First of all, until now I did not realize I was on the Board of Directors of an insurance company that is insuring that these new TLD operators will stay in business. To my mind, a TLD can perfectly well go out of business. If I am a customer of that TLD, I have the ability to pay them more money. Standard, Adam Smith kind of control. I can pay them more money to put in better infrastructures, rather than having a new regulatory body with governmental dedicated powers to do this. I think the standard economic methods will work here.

Senator BOXER. So you do not support the idea of these agree-

ments, signed by people saying that they are not going to infringe? Mr. AUERBACH. That is a different subject. I said that ICANN should not be looking at the business plans, the business finances, the personnel, the management, whatever, of these TLD operators. ICANN should let these operators go out of business if they are bad business people.

Senator BOXER. Before you continue, I did not hear you say that that is exactly what you are doing. Could you comment on that,

Mr. Roberts?

Mr. ROBERTS. I think that the judgment of the community, and it has been repeated several times, and, in fact, it is even contained in a White Paper language, is that the introduction of new TLDs ought to be done in a cautious manner which allows the community to learn to crawl before it walks about this.

As I have already stated earlier in my testimony, ultimately the market will provide the verdict on the success of these companies. I think on the other hand, ICANN, on behalf of its stakeholders, it has been told it has a responsibility to exercise caution with regard to the integrity and the ordinary prudence of the business plans and operational plans that have been submitted to us by the applicants.

Senator BOXER. Mr. Auerbach.

Mr. AUERBACH. Stakeholders, that is a code word that means insiders. We're talking about intellectual property interest and other registrars. Of course, they do not want more TLDs for the trademark people. That means more space for them to search for the registrars. That means more competitors. They have a built-in interest against new competitors. The notion of stakeholders in ICANN has been used to select who is in ICANN, who can make decisions.

There is no participation by the community. I was not permitted to participate in this TLD selection process, because there were shortened periods for comment. The decision was accelerated so that I could not participate. The community, the elected representatives did not participate in this, so when Mr. Roberts says community, he's really talking about the intellectual property community and the registrars, both of whom do not want new TLDs.

Mr. Roberts. I think the fact that we received 5,000 public comments in the 6 weeks we are talking about is a substantial verdict

on the side of openness.

Senator BOXER. Did you use the web to let people know what you were doing?

Mr. ROBERTS. We did, at every step of this process over a period of 18 months, and thousands of pages of the applications were posted for community scrutiny, and as I just said, we received over 5,000 comments in response to those postings.

Senator BOXER. What is your website?

Mr. Roberts. It is ICANN.org.

Senator BOXER. Well, Mr. Chairman, I think those are my questions for this panel. I will hold for the next panel.

Senator Burns. Well, thank you very much, Senator.

I think I hear you saying two different things, Mr. Roberts, and correct me if I am wrong. In other words, I do not understand, on the domain—let us go back to the .travel and the .museum again, OK?

You are saying that if a commercial operator was assigned into the domain of .museums, or had requested that, and that was kind of against the rules that you have set up for .museum, because that was set up for education, and without commercial exploitation I would imagine, and you say if you made that assignment and it was a mistake, then you have no liability in that mistake? You are absolved from any liability of a misassignment?

Mr. ROBERTS. Well, Senator, the applications were evaluated on nine different criteria. My submitted testimony goes into that.

Senator Burns. I will have to read that, and I will probably glaze over again.

[Laughter.]

Mr. Roberts. I think the bottom line of the question you are asking me is, does the record show that the staff evaluation and the result of the public comments and the Board's public deliberations and the Board's board meeting deliberations, which extended over some 14 or 15 hours, does the record show that these applicants were evaluated on those criteria, and that appropriate judgments were made to engage in a proof of concept limited introduction, and I believe the record supports that.

Senator Burns. OK. Now, let us go over on the travel side of it now. I run a travel business, and I kind of like the idea of a .travel, maybe it is an industry-type thing, or maybe it is people that would go to that site seeking information on travel that was denied

because you did not think there was substantial support.

Now, what is your expense of setting up that domain if there are maybe one or maybe two of us that are the only two people that are active in that domain?

Mr. Roberts. First of all, let me point out that the application was—

Senator BURNS. And I am learning here.

Mr. ROBERTS. The application was not denied. The application was not selected for a proof of concept ground, and I understand that it may sound like a thin distinction, but it was a very important distinction to the Board. The Board does not know how many more new TLDs there ought to be, but there is obviously, from the record of this hearing and of last week's hearing, considerable sentiment that it should, provided that the evaluation of what happens with the seven supports that.

But going more to your point, we had a category of applications where the applicants could, on behalf of a defined group of sponsoring groups, say, we wish to apply for the delegation of a top-level domain that reflects the business sector we are in, and that

we will be the domain nameholders in, and we will serve the public

through those domains in the following ways.

The assumption was, and in fact, one of the stated requirements was, of the applications, that the applicant or the applying organization had to demonstrate it had very substantial support of all of the people in the sponsoring group.

Now, the worldwide travel agency business is a very, very com-

plicated and very highly distributed business.

Senator Burns. It is competitive.

Mr. ROBERTS. The applying organization had difficulty demonstrating it had substantial support and, in fact, our public record

is full of a large number of complaints that they did not.

Senator BURNS. I have no further questions for this panel. I know there are going to be some questions arise on your comments here by other Senators and, if you would, if you are asked to make comment on their questions, if you would submit that to the individual Senator and to the Subcommittee we will leave this record open for the time being.

I want to thank you very much for coming this morning and offering your testimony. Now we go the second panel, and thank you.

This panel is excused.

We have Brian Cartmell, Chairman and CEO of eNIC Corporation out of Seattle, Washington; A. Michael Froomkin, Professor of Law at University of Miami School of Law in Coral Gables, Florida; Roger Cochetti, Senior Vice President, Policy, at VeriSign Network Solutions; and Kenneth Hansen, Director of Corporate Development at NeuStar here in Washington, DC.

Gentlemen, we welcome you to the hearing this morning. We look forward to your testimony.

Mr. Cartmell, we will start with you.

STATEMENT OF BRIAN R. CARTMELL, CHAIRMAN AND CEO, eNIC CORPORATION

Mr. CARTMELL. Good morning, Mr. Chairman, members of the Subcommittee.

Senator BURNS. You might want to pull the microphone up there.

You are a little soft.

Mr. CARTMELL. Good morning, Mr. Chairman, members of the Subcommittee. My name is Brian Cartmell, and I am Chairman and CEO of eNIC Corporation, a privately-held company based in Seattle, Washington. I thank the Subcommittee for its invitation to participate in the hearing this morning. I welcome this opportunity to provide the Subcommittee with eNIC's views on the Internet Corporation for Assigned Names and Numbers, generally referred to as ICANN.

My perspective of ICANN and the issues being addressed by this Subcommittee is a result of extensive experience in and knowledge of the domain name system. My involvement began even before the creation of ICANN, when I submitted an application to the Internet Assigned Numbers Authority, IANA, to manage and operate the .cc top-level domain, which is associated with the Cocos-Killian Islands. That application was approved on October 12, 1997, and we commenced our name domain registrations a couple of weeks thereafter.

Since that time, we have grown to be the second largest domain registry in the United States, second only to VeriSign, with approximately 400,000 domain names registered, including nearly 300,000 in the United States alone. We have invested literally millions of dollars to develop a globally diverse and robust infrastructure that we believe rivals any in the industry. .cc registers a cross-section of Internet users, and among them small and medium-sized businesses, educational organizations, and public interest groups.

You received a lot of information today, so I will just make five

points.

One, despite a lot of suggestions to the contrary, there is no shortage of domain name space for customers looking for domain names. They can choose from the existing generic top-level domains, or from more than 240 top-level domains such as .cc or .TV. Since very few top-level domains have more than 15,000 registrations, there is still room for literally billions of domain names.

Two, while ICANN has definitely made some mistakes, we should recognize the importance and difficulty of what they are trying to do, all without any statutory or regulatory guidance, or regularized source of funding. No one has ever tried what they are attempting, to guide, if not manage, the world's largest marketplace. Since its actions involve the very architecture of the Internet, ICANN affects millions of consumers and businesses.

Three, we are concerned about proposals that have been made to confer national sovereignty over country code top-level domains. That idea, I believe, would lead to a fractured Internet where national regulatory schemes and privacy rules apply to different pieces, creating uncertainty for businesses and confusion for customers.

Four, as you know, ICANN does not control the domain name system. Rather, the ultimate authority rests with the U.S. Government, namely the Department of Commerce, which is under the jurisdiction of this Committee. As stated recently by ICANN's general counsel, ICANN has no legal authority to authorize the issuance of new top-level domains or change the delegation of existing top-level domains. The legal authority to make these decisions rests with the Department of Commerce.

Five, ICANN should not take further actions involving the policy or the architecture of the domain system until Congress or a congressionally-mandated commission first conducts a comprehensive study of critical policies and legal questions. As more fully de-

scribed in my written testimony, these include:

What should ICANN's mission be, if any? What is the appropriate scope of its authority?

What role should foreign national governments play?

What tools and resources are needed for the governing body?

What is the effect of this initiative on U.S. national consumer and business interest?

The answer to these and many other questions need to be fully and publicly explored.

Mr. Chairman, I would like to thank you and the Subcommittee for your time, and interest in these important issues. I welcome any Subcommittee questions you might have.

[The prepared statement of Mr. Cartmell follows:]

PREPARED STATEMENT OF BRIAN R. CARTMELL, CHAIRMAN AND CEO, ENIC CORPORATION

I thank the Committee for its invitation to participate in the hearing this morning and welcome this opportunity to provide the Committee with eNIC's views on the Internet Corporation for Assigned Names and Numbers, generally referred to as ICANN

I commend the Committee for recognizing the importance of the matters being discussed here today. Indeed, under review is the governance and control of the underlying architecture of the Internet, the super-highway that is quickly emerging as the world's largest marketplace and a primary forum for exchanging information and ideas. Much like the human body which is dependent on the heart for life, the Internet is dependent on a properly functioning, stable, and secure Domain Name System. Without it, the important Internet-related issues being debated in these halls, issues such as Internet privacy, consumer protection and security, literally would become moot. If the Domain Name System fails, an exchange or transmission of information across the Internet would not be possible. Consumers would not be able to access websites to look up information. Businesses would not be able transact business with their customers.

OVERVIEW OF ENIC CORPORATION

My perspective of ICANN and the issues being addressed by this Committee is the result of my extensive experience in and knowledge of the Domain Name System. My involvement began even before the creation of ICANN when, in conjunction with an associate, I submitted an application, on September 25, 1997, to the Internet Assigned Numbers Authority ("IANA"), an agency contracted by the U.S. Department of Commerce, to operate and manage the Dot-CC top level domain. The application was approved on October 13, 1997, and we commenced domain name registration operations a couple of weeks thereafter. The Dot-CC domain is associated with the Cocos Islands, a group of islands in the Indian Ocean that, at the time we submitted our application, were privately owned, but today are a territory of Australia.

Since that time, we have grown to be the second largest domain name registry in the United States, second only to VeriSign Global Registry, with approximately 400,000 domain names registered. We employ 40 people and have invested literally millions of dollars to develop a globally diverse and robust infrastructure that we believe rivals any in the industry. Our Dot-CC registrants are located in all parts of the world, including nearly 300,000 in the United States alone, a scenario which is quite different from the widespread perception that correlates "country code top level domain" registrants to a particular geographical area. Dot-CC registrants are a varied cross-section of Internet users, among them individuals, small- and medium-sized businesses, educational organizations, and public interest groups. Our internal monitoring systems indicate that Dot-CC sites are accessed millions of times daily around the world, indicating a widespread use and adoption of the Dot-CC top level domain by both registrants and consumers. Incidentally, my engineers tell me we have 43,893 customers in Florida but, given recent events, I have asked for a recount.

I speak today as an active participant in the process, both prior to and after ICANN's founding in November 1998. In that regard, I have attended and participated in almost every quarterly ICANN meeting and have had countless discussions with ICANN executives. I also speak as a representative of a U.S.-based organization that has made tremendous commitments and expended significant resources to promote the long-term viability of the Internet as a whole, while also advancing the interests of eNIC Corporation, its employees, customers and those we serve.

A RECIPE FOR ERROR FROM ITS INCEPTION

In his testimony on February 8, 2001 before the House Energy & Commerce Committee's Telecommunications Subcommittee, Mr. Vinton Cerf, Chairman of ICANN, likened the process of establishing ICANN to "building a restaurant and starting to serve customers while the kitchen is still under construction; it is possible, but may occasionally produce cold food." Mr. Cerf further characterized ICANN as a "young, and still maturing organization," while acknowledging that it has made mistakes and is still a "work in progress." As a representative of an organization that is vitally interested in the workings of the Domain Name System and which has invested millions of dollars to establish a world-class technological infrastructure and maintains obligations to several hundred thousand consumers in the Dot-CC domain sphere, I consider such admissions both disconcerting and alarming.

Looking back at the genesis of ICANN, it appears that the situation described by Mr. Cerf was inevitable. ICANN launched into uncharted waters without a prior, meaningful, thorough analysis of crucial issues involved, or of the far-reaching ramifications of the ICANN initiative, including how to protect the interests of the U.S. in this critical asset and those of U.S. businesses who would be directly affected by

ICANN's decisions.

Upon reflection, I am amazed. In my relatively short life, I am aware of millions of dollars being spent on governmental commissions studying the construction of single highways connecting two points. I find it ironic that in the case of perhaps the most important "super-highway" of my generation, the "information super-highway" we know as the Internet, the U.S. Government has not commissioned even one such study. Rather, much like the development of the Internet itself, the principles for its governance have simply been viewed as a developing, "adapt as we go" experience. Absent is any enabling legislation or other road map other than the general principles stated in the "White Paper." Please allow me to enumerate some to the critical issues to which I refer and which have yet to be analyzed in any meaningful

1. To What Extent Does the Department of Commerce have authority over the root server system or to delegate powers to ICANN? One need only review the findings of the General Accounting Office, set forth in a report dated July 7, 2000 delivered to this Committee and a corresponding committee in the House, as an example of the Department of Commerce's failure to conduct even the most basic inquiries before it took the ICANN "plunge." On page 27 of its report, the GAO noted that the Department of Commerce did not even know whether it had the legal authority to delegate the control of the authoritative root server to ICANN as contemplated by the seminal "White Paper." Indeed, the General Counsel of the Department of Commerce acknowledged to the GAO that in the "absence of such plans [to transfer the "A" root server], we have not devoted the possibly substantial resources that would be necessary to develop a legal opinion as to whether legislation would be necessary to do so." Obviously, this issue is a cornerstone of any analysis and must be answered before any decisions should be made on the proper course of action.

2. Is a private, non-profit organization the proper structure to govern such crucial functions of the Internet? One of the most frequent arguments of ICANN's defenders is effectively stated by simply asking the question, "can you identify a better alternative? On the surface, such an argument is compelling and makes a great deal of sense, as "privatizing" the Internet functions seems to be preferable to government control thereof. In reality, however, it is premature to ask such a question as no meaningful study has been conducted to discover viable alternatives or, considering critical U.S. interests, even the desirability of such a non-profit entity handling governance responsibilities. For example, even now ICANN is faced with the dilemma of deciding what safeguards it can implement to shield its assets and operations from potential liabilities that will inevitably materialize and which, in the worst case, could threaten ICANN's very existence. While administrative agencies of government benefit from certain immunities for their rulemaking functions, ICANN cannot claim such immunities without appropriate governmental action.

cannot claim such immunities without appropriate governmental action.

3. What effect does the transfer to ICANN of the governance of the Domain Name System have on current and future U.S. interests, including those of its consumers and businesses? Much like the GPS network, the Internet was primarily a U.S., based initiative, with significant taxpayer funds expended in its development. With the explosion of commercial growth on the Internet, the interests of U.S. based businesses and the global economy are increasingly dependent on the Internet, its stability and robustness. What effect, if any, will such a transfer have on matters of national security or governmental operations in the ".mil" and ".gov" top level domains? Can security be assured on a go-forward basis under the ICANN structure?

In sum, an important question is whether the transfer of those crucial functions to a private, non-profit corporation which is exposed to liability claims, in reality, advances and protects U.S. interests or, to the contrary, exposes them to unnecessary or unwarranted threats. Incidentally, it is my position that it is the role and responsibility of the U.S. Congress, not ICANN or even the Department of Commerce, to decide what U.S. assets should be "gifted" to the world or exposed in some way, and that such a decision should be based on complete information garnered from appropriate inquiry and investigation. Unfortunately, to date, Congress has not been included in, nor been involved with, this important decision.

4. Is ICANN being established exclusively as a technical standards body or should it be delegated policy and rulemaking powers as well? Mr. Cerf and other officers of ICANN continually stress that, rather than being a policymaking entity, ICANN's main role is as a "consensus"-building organization charged with making decisions in accordance with the will of the "international Internet community." Oddly, no one

has yet defined what the term "international Internet community" really means. I would submit that without clear definition, the term has no meaning at all because, as we have seen through history, even illegitimate governments claim to be governed by the "consensus" of the "people." Without clear standards for measurement, unfettered democratic processes, and uncompromising transparency, a "consensus' can either be manipulated, or a mirage created by, those in power.

In reality, ICANN's assertions are somewhat simplistic and ignore the tremendous governance function that ICANN has assumed, either rightfully or in excess of its charter. One only needs to review (a) the recent decisions relating to the approval of new "generic" top level domains, or (b) ICANN's requirements imposing the uniform dispute resolution process ("UDRP"), as evidence that ICANN is exerting tremendous and wide-ranging policy powers over the Domain Name System. Indeed, the power to give and take away rights equates to the power to govern, and extends well beyond the "consensus" building function championed by ICANN.

5. To whom, if anyone, should ICANN be accountable? A key element of any governing body is the idea of effective accountability, including the question of due process that has been raised by several observers. Yet in the present situation, the question of the accountability of ICANN has not been addressed in any meaningful way. To whom will ICANN be accountable on an on-going basis once the privatiza-tion of the Domain Name System is complete? ICANN proponents suggest that it will be accountable to the "international Internet community." As discussed previously, such a standard has never been defined or evaluated. Consequently, for purposes of governance, it is virtually meaningless and equates to no accountability whatsoever in the real sense of the word. Perhaps a more important question is what mechanism or standard for accountability is in the best interests of the U.S? Such a question is for Congress to address, not ICANN or other interest groups.

6. What interests should foreign governments or sovereigns have over the Domain Name System and Internet governance? This issue is of particular importance to eNIC Corporation, and its worldwide customer base because Dot-CC is officially a "country code top level domain." Our administration of, and interest in. the Dot-CC top level domain arises from a delegation from IANA in October 1997, more than a year before ICANN was established. Since that time we have expended literally millions of dollars establishing a state-of-the-art system of servers worldwide, marketing the Dot-CC top level domain around the world, and serving our customers and others. We have spent nearly \$2 million on projects that benefit the people of the Cocos (Keeling) Islands, something that we have voluntarily undertaken to fulfill our charge to act for the "benefit" of the local Internet community on the Cocos (Keeling) Islands under RFC 1591.

From the beginning, the country code TLDs have not been based on country names and abbreviations but rather on a list known as ISO 3166-1. This listing is a compilation of names and codes developed by the International Organization for a compilation of names and codes developed by the International Organization for Standardization for various statistical purposes and includes country names as well as names of territories, such as Puerto Rico, the Netherlands Antilles and the Cocos Islands. In the paper establishing the Domain Name System, RFC 1591, March 1994, Jonathan Postel, head of IANA (the predecessor to ICANN), stated: "The IANA is not in the business of deciding what is and what is not a country. The selection of the ISO 3166 list as a basis for country code top-level domain names was made with the knowledge that ISO has a procedure for determining which entities should be and should not be on that list."

should be and should not be on that list."

Neither IANA nor ICANN has ever deviated from this position. In an affidavit in November 2000, Mr. Louis Touton, ICANN's general counsel, stated that foreign governments have no ownership interest in or rights to control any country code TLD. Rather, he specified "[c]ountry code TLDs are administered by appointed ccTLD managers, who act as trustees performing a service on behalf of the Internet community, both globally and in the country or territory designated by the country code." In his February 8, 2001 testimony, ICANN's chairman, Dr. Vinton Cerf, again confirmed this. "Operation of the registries for these ccTLDs was delegated to a wide variety of people or entities, with the primary consideration being a willingness to agree to operate them for the benefit of the citizens of that geography." As discussed, eNIC has operated the Dot-CC top level domain both for the benefit of the local Internet Community on the Cocos Islands and for the broader Internet community by registering top level domains on a worldwide basis.

Unfortunately, recent statements by some have implied that governments of foreign countries may be given more control over important policy issues, including the operation of country code TLDs. Any such attempted delegation of authority would have significant ramifications, both for the Internet as a whole and for U.S. national interests, those of its consumers and U.S. businesses such as eNIC Corporation. In my view, Congress, rather than ICANN, is the appropriate body to make policy re-

garding such critical issues.

7. Are additional top level domains necessary? The issue of the approval of new "generic" top level domains, and ICANN's process for approving them, has generated heated and rather divisive debate since September of last year. I would suggest that there is no real "shortage" of domain name space using existing top level domains, that are already root recognized. In fact, with over 240 existing top level domains, many of which are "open" to worldwide registrations and most of which are dramatically underutilized (less than 15,000 domain registrations in them), there is plenty

of room for literally billions of domain names without the creation of new top level domains. In other words, there is no "shortage" as has been so widely publicized.

8. What is the proper way to fund the governance of the Internet? Until last fall when it received U.S. \$50,000 from each of the applicants for new top level domains, ICANN was under-funded and "boot-strapping" its operations. The non-refundable application fee has subjected ICANN to widespread criticism and controversy as many have suggested that the fee was nothing more that a funding mechanism. Clearly, any governing body of the Internet needs proper, reliable funding sources in order to fulfill its mission. Unfortunately, this rather critical issue had not been addressed at the time ICANN was launched.

CALL FOR A COMPREHENSIVE CONGRESSIONALLY-MANDATED STUDY

Looking back, it is abundantly clear that the turmoil surrounding ICANN, the questions regarding its international legitimacy, the growing doubts about its decisionmaking processes and structure, and the lingering skepticism relating to its longevity can be traced directly to the *lack* of any meaningful analysis or study of material issues prior to its establishment. Such a study would have identified (1) the legality of such an endeavor, and its effect on important U.S. national interests or those of consumers and U.S. businesses, (2) alternatives for Internet governance that might prove to be superior to the establishment of a California non-profit corporation to assume the tasks, (3) the tools and liability protections that such an organization would need to succeed, (4) the specific interests of the nations in the international community, (5) a clear definition of ICANN's mission, the boundaries of its authority, well-delineated guidelines for the exercise of its powers, and a road map for Congress to enact such legislation as would be necessary to carry out that mission. Instead, ICANN was given only broad statements regarding the objectives of such a governing body.

The good news is that there is still time for Congress to exercise its rightful oversight and legislative roles. If the U.S. is going to give the Internet to the world through privatization, at a minimum it should be the result of a fully informed decision. The bad news is that the a failure to act will likely lead only to an escalation of the turmoil, a fracturing and destabilization of the Domain Name System, an increased regulation of the Internet by foreign sovereigns, and the further denigration of U.S. national interests and those of its consumers and U.S. businesses such as

eNIC Corporation.

While my instincts tell me that the Internet should move forward with minimal governmental intervention, the questions that have been raised are so important, with ramifications so far-reaching, I am convinced that a comprehensive study should be conducted immediately to avoid long-lasting mistakes. eNIC Corporation respectfully submits that the Senate take the following actions:

(1) In conjunction with the House of Representatives, commission a panel of exof the Internet and, in particular, the Domain Name System; and
(2) Pending the delivery of the conclusions of the appointed Congressional com-

mission, direct the Department of Commerce to refrain from taking further actions to expand the role of ICANN, including the (a) turn-over of the authoritative root servers, (b) recognition of new generic top level domains, or (c) recognition of rights of foreign sovereigns over top level domains (except to the extent the foreign sovereigns have been delegated a country code top level domain by IANA or the designated country code top level domain manager has already entered into an agreement with the applicable foreign sovereign relative to the operation of a particular country code top level domain).

CONCLUSION

While ICANN has made mistakes, it should be recognized that it has been undertaking an immensely important and difficult job without any statutory or regulatory guidance, or regularized source of funding. It is time to fully analyze the situation and, if merited, give ICANN the tools and guidance that it needs to succeed. Like a developing child, it cannot be expected to run before it has been instructed on how to walk. At the same time, if it is ultimately decided that the ICANN form of governance is unsuitable for the task at hand, then steps should be taken as soon as possible to implement a proper governmental form, before it is too late.

In conclusion, I once again express my appreciation for your inviting me to participate in these hearings. I will gladly lend any assistance that this Committee may require to fully and fairly address the important issues presented today. I welcome any questions that you may have.

Senator Burns. I appreciate your testimony this morning.

A. Michael Froomkin, Professor of Law, Miami University. Thank you for coming this morning, and welcome.

STATEMENT OF A. MICHAEL FROOMKIN, PROFESSOR OF LAW, UNIVERSITY OF MIAMI SCHOOL OF LAW

Mr. Froomkin. Thank you, Mr. Chairman and members of the Subcommittee. My name is Michael Froomkin. I would like to thank you very much for holding this hearing and for inviting me here. As you know, I am a Law Professor at the University of Miami. I have published a lot of articles in this area, including one you were kind enough to mention, a 168-page study of the legality of ICANN's relationship with the Department of Commerce.

Now, both legally and politically, ICANN is not a unique creation. It was dreamed up, as you know, by Ira Magaziner in the so-called DNS White Paper. Eventually the Department of Commerce delegated to ICANN powers of worldwide significance, yet it did so without congressional authorization. In fact, it did it without even a rulemaking.

All that the Department of Commerce and Magaziner issued was a so-called policy statement, which is legally binding. Since then, Commerce has entered into an MOU with ICANN, a zero-dollar procurement contract—that is an unusual one—and a contract for ICANN to do a study on the DNS, but it is a study in which ICANN studies by actually regulating the DNS, not one in which it produces reports or standards.

What is worse is that the system that the Magaziner White Paper set into motion is almost as Byzantine as his health care proposals. I include a simplified—and, believe me, this is a simplified chart—organizational chart of my prepared testimony. It has got lines and dashes all over it, and it does not even fit on the page. There is more on the back, and that is not the whole story.

The consequence of this Rube Goldberg system has been lack of accountability and lack of due process. ICANN says it is a technical standards body, but so far, at least on the whole, it is not acting as one, nor is it a technical coordination body. Rules about arbitration, domain name disputes, rules about what jurisdiction you can sue if you lose an arbitration are not the sort of technical standards for which we ordinarily consult network engineers, and I have got to say that, at least in my opinion in the forthcoming article, I am going to argue that this arbitration system is anything but a good model.

It lacks due process. Plaintiffs get to choose the forum. They pay the arbitrators. There are all kinds of issues, unequal access to judicial review, a whole bunch of problems that make it anything but a model. Now, more recently ICANN justified its very tentative approach to new gTLDs by saying it is engaged in a proof of concept. You just heard a lot of that this morning. Unfortunately, it has not really told us what is this concept it is trying to prove. It has not told us when the tests will be evaluated, or what constitutes success.

The concept cannot be gTLD creation itself. We know how to do that, and we have been doing it over and over again over the past few years. You just type in a few lines of code into one computer in Northern Virginia and through the magic of the Internet it propagates within a week. We created a new domain for .Palestine.PS a few weeks ago, and the Internet did not come grinding to a halt.

In fact, the shortage of new domain names today, the perceived shortage, is entirely artificial and easily curable. Experts agree there is no technical obstacle to at least thousands, maybe tens of thousands or millions of new top-level domain. Nobody is quite sure where the line is, but it is nowhere near where we are. There are financial and political questions involved, but the only real technical issue is sequencing, keeping them from all happening at once and messing things up.

Now, we just had this big gTLD creation process, but one story captures just how arbitrary it was. ICANN rejected a proposed TLD called .III, and the reason they did was that somebody on the Board thought that was hard to pronounce. It seems to have passed all the other tests, but at the last minute they invented a new one

that had never been mentioned before and it flunked.

Another example of arbitrary behavior goes back to 1999. In fact, to the creation of ICANN, when they promised that half the Board seats would be elected at-large. In July 1999, then-Board Chairman Esther Dyson came into House committee and reiterated that promise and said it was their highest priority. But they did not do it. They reneged and said they decided, as you heard, they would have just five, and now they are going to have another study, maybe take the five away, zero-base it, think it over—who knows.

Meanwhile, they amended their timetables to rush the selection of new gTLDs so that decisions would be made before even the five elected members got to be at the table. It's not surprising, therefore, that when ICANN says it has got a consensus, it is really talking about the views of the people who get to be at ICANN's table, and that leaves out a lot of groups. I guess I am not a stakeholder.

Now, why is ICANN acting in this arbitrary fashion? Why did they put a limit on new gTLDs? Why did it rush? I think it is really just not acting as a proper standards body. It is not coordinating anything. It is not casting its net widely enough for consensus.

In my Duke Law Review article I explained in some detail why the Department of Commerce must act in conformity with the Administrative Procedures Act and the Constitution, otherwise if you say ICANN is private, there is a violation of the non-delegation doctrine. If you say it is public, the APA ought to apply directly.

In my opinion, IČANN is a state actor and is fundamentally acting as a regulator of the registries and maybe the registrars. Now, there is no question that if a Federal agency acted like ICANN it would have a lot of trouble with judicial review and, given that, I

think if nothing else it would be unreasonable for Commerce to

rubber-stamp its decisions.

Let me make a couple of positive suggestions about what ICANN ought to do. It seems to me that with gTLDs, the right thing for ICANN to do to maximize competition and be fair is to accept all gTLD applicants who meet a preannounced, open, neutral and objective standard of competence. You can define that in lots of interesting ways. Maybe it includes financial, but it ought to be open and above-board and a priori, not on the fly.

Once a name is allocated, instead of ICANN spending months

Once a name is allocated, instead of ICANN spending months and maybe piles of money secretly negotiating the contracts like they're doing right now, they ought to be doing that in the open, or maybe have standard forms to sign in advance, and say you pick

column A, column B, column C, whichever.

In my last minute, let me suggest one other sort of idealistic alternative, one that would really enhance competition and be truly international and borrow from major league sports. Maybe what ICANN ought to do is take a leaf from the Internet, which was designed to avoid single points of failure. When it comes to policy

right now, ICANN is a single point of failure.

If you could take the policy function out and distribute that to other people, so that ICANN just kept a master list and avoided collisions so it was doing true technical coordination, ICANN could have an annual TLD draft. They could pick a bunch of policy partners from around the world, both governmental, non-governmental civil society, public-private, and give them all draft choices. Some of them might get more than one.

You would then run the draft either randomly or by some other process, and when your number came up you would pick a name and that other body would set the policy. The U.S. Government might do some, you might do some, civil liberties groups might do some, and so on, and then ICANN would just make sure that no

two people got the same name.

Now, whatever model we end up with, however, I am concerned that we are not going to get the right one, and necessary changes will not come to ICANN without outside pressure, so I think this hearing is a wonderfully useful step, and I commend you all enormously for doing this and for making it one of your top seven tech issues for the coming year.

Thank you very much.

[The prepared statement of Mr. Froomkin follows:]

PREPARED STATEMENT OF A. MICHAEL FROOMKIN, PROFESSOR OF LAW, UNIVERSITY OF MIAMI SCHOOL OF LAW

Mr. Chairman and members of the Subcommittee, my name is Michael Froomkin. I would like to thank the Subcommittee for inviting me to appear today at this hearing on ICANN governance. I commend the Subcommittee for its wisdom and foresight in recognizing the importance of this issue.

sight in recognizing the importance of this issue.

I believe it is useful to separate this complex issue into three parts: (1) ICANN's mission or, if you will, ICANN's "jurisdiction"; (2) ICANN's internal organization; (3) The extent to which ICANN is subject to oversight by the Commerce Department,

the U.S. Congress, or any other outside forces.

These three issues are intertwined. The nature and extent of ICANN's powers over the Internet and over Internet users that determines the type of internal governance structures which are appropriate for it. Similarly, the nature and quality of both ICANN's powers and its internal representativeness, not to mention checks and balances, determines the extent to which it needs to be subjected to searching

external oversight. In particular, it is appropriate for this committee to enquire into the nature of the workings of the relationship between the Department of Commerce and ICANN.

SUMMARY OF TESTIMONY

ICANN's go-very-slow policy on new gTLDs had no technical basis. Why then would ICANN adopt such a policy? The reason is that ICANN's policies are a product of an internal deliberative process that under-weighs the interests of the public at-large and in so doing tends toward anti-competitive, or competitively weak, out-comes skewed by special interests ICANN routinely claims to be either a technical standards body or a technical coordination body. If this were correct, then it might be proper for the Department of Commerce to defer to ICANN's presumed technical expertise and rely on ICANN's standards or allocation decisions without undertaking independent Administrative Procedure Act (APA)-compliant processes of its own. When, however, ICANN acts as policymaking rather than a standard-making body, then due to ICANN's unrepresentative nature its decisions do not carry any presumption of regularity or correctness and the U.S. Government cannot rubberstamp its decisions without additional independent fact-finding and deliberation.

We would all be better off if ICANN could confine itself to true standards issues, or to true technical coordination. If ICANN cannot, then ICANN needs to be sub-

jected to constant scrutiny.

Terminological note: A "registrar" is a firm that contracts with clients ("reg. istrants") to collect their information and payment in order to make a definitive and unique entry into a database containing all domain names registered in a top-level domain (TLD). This database is maintained by a "registry." Top-level domains are sometimes grouped into "generic TLDs" (gTLDs), which are currently three- or fourletter transnational domains, and "country code TLDs" (ccTLDs) which are currently two-letter TLDs. The "root" is the master file containing the authoritative list of which TLDs exist, and where to find the authoritative registries that have the data for those TLDs. Registrants typically register second-level myname.com), but sometimes are limited to third-level domains myname.genericword.com).

I. ICANN'S MISSION

ICANN's processes little resemble either standard-making or technical coordination. To date, ICANN's "standard making" has produced no standards. ICANN's "technical coordination" has been neither technical nor has it coordinated anything. Rather, in its initial foray into the creation of new gTLDs, ICANN has acted like a very badly organized administrative agency. Instead of engaging in standards work, ICANN is instead engaged in recapitulating the procedural early errors of Federal administrative agencies such as the Federal Communications Commission

What real standard-making would look like. A standard-based (or, at least, standardized) approach to gTLD creation would required ICANN to craft a pre-announced, open, neutral, and objective standard of competence rather than to pick and choose among the applicants on the basis of the ICANN Board's vague and inand thoose allong the applicants on the basis of the ICAMN boards vague and inconsistent ideas of aesthetic merit, market appeal, capitalization, or experience. All applicants meeting that standard would be accepted, unless there were so many that the number threatened to destabilize the Internet (as noted below, if there is such a number, it is very large). ICANN might also put in reasonable limits on the number of TLDs per applicant, and on sequencing, in order to keep all of them going online the same day, week, or month.

Under a standards-based approach ICANN would have tried to answer these questions in the abstract, before trying to hold comparative hearings in which it attempted to decide to which of specific applicants it should allocate a new gTLD registry

• What is the minimum standard of competence (technical, financial, whatever) to be found qualified to run a registry for a given type of TLD?

· What open, neutral, and objective means should be used to decide among competing applicants when two or more would-be registries seek the same TLD string? What are the technical limits on the number of new TLDs that can reasonably

be created in an orderly fashion per year?

 What open, neutral, and objective means should be used to decide among competing applicants, or to sequence applicants, if the number of applicants meeting the qualification threshold exceeds the number of gTLDs being created in a given year?

Today, reasonable people could no doubt disagree on the fine details of some of these questions, and perhaps on almost every aspect of others. Resolving these

issues in the abstract would not necessarily be easy. It would, however, be valuable and appropriate work for an Internet standards body, and would greatly enhance competition in all the affected markets.

Once armed with a set of standards and definitions, ICANN or any other allocation body, would be on strong ground to reject technically incompetent or otherwise abusive applications for new gTLDs, such as those seeking an unreasonably large number of TLDs. A thoughtful answer would inevitably resolve a number of difficult questions, not least the terms on which a marriage might be made between the Department of Commerce's "legacy" root and the so-called "alternate" roots.

what technical coordination would look like. An alternate approach to gTLD creation, one that would most certainly enhance competition, would take its inspiration from the fundamental design of the Internet itself and from major league sports. The Internet was designed to continue to function even if large parts of the network sustained damage. Internet network design avoids, whenever possible, the creation of single points of failure. When it comes to policy, however, ICANN is currently a single point of failure for the network. A solution to this problem would be to share out part of ICANN's current functions to a variety of institutions.

In this scenario, ICANN would become a true technical coordination body, coordinating the activities of a large number of gTLD policy partners. ICANN's functions would be: (1) to keep a master list of TLDs, (2) to ensure that there were no "name collisions"—two registries attempting to mange the same TLD string; (3) to fix an annual courts of naw gTLDs; (4) to suppose a name of TLD draft; (5) to coordinate the annual quota of new gTLDs; (4) to run an annual gTLD draft; (5) to coordinate the gTLD creation process so that new gTLDs came on stream in an orderly fashion in-

stead of all at once.

Each of ICANN's policy partners would be assigned one or more draft choices, and then ICANN would randomly (or, perhaps, otherwise) assign each one their draft picks. As each policy partner's turn came up, it would be entitled to select a registry—imposing whatever conditions it wished—to manage any gTLD that had not yet been claimed on ICANN's master list. In keeping with the transnational and public/private nature of the Internet, ICANN's policy partners could be a highly diverse mix of international, national, and private "civil society" bodies.

While I think this alternate solution would best achieve the ends of internationalization, competition, and diversity, it might well require legislation since it is unclear if the Department of Commerce has the will (or the authority) to implement such a plan, and we have seen no sign that ICANN is about to divest itself of any

policy authority unless forced to do so.

What ICANN actually did: select an arbitrarily small number of gTLDs based on arbitrary appraisals of aesthetic merit, market appeal, capitalization, and experience. Rather than adopt either a standards or a technical coordination approach, ICANN instead adopted an arbitrary approach. First it set an arbitrarily low ceiling on the number of TLDs, then it allocated most but not all of that quota based on its arbitrary appraisals of the applicants aesthetic merit, market appeal, capitalization, and

experience.

ICANN's decision to impose an arbitrary limit on the number of new gTLDs. The closest thing to technical standards work that ICANN has done to date was to adopt an artificially low limit on the number of gTLDs it would recommend the Commerce Department create under the guise of a so-called "proof of concept." The grounds on which ICANN based this arbitrarily low limit on the number of new gTLDs demonstrate as clearly as anything else that ICANN is not making technical decisions but instead making policy choices on the basis a wholly inadequate an unrepresentative structure.

sentative structure.

ICANN has never claimed that the technical stability of the DNS would in any way be threatened by the introduction of a very large number of new gTLDs. Indeed, it could not easily make this claim, since all the technical evidence is to the contrary. Rather, the dangers that ICANN seems concerned about are social—potential consumer confusion, and a potential "land rush" mentality due to the enormous pent-up demand. (In my opinion, however, ICANN has selected a policy that maximizes the risk of a "land rush." Panic buying happens when consumers fear a shortage. Here, ICANN is proposing the creation of a very small number of gTLDs, with no assurances as to when if ever the next batch will be created. This gets it exactly backwards: the way to avoid a land rush would be to have a very predictable path for new gTLDs so that everyone understands that there's no need to panic since plenty of names will always be available.)

I am not an expert on Internet engineering. However, my understanding is that while experts do not agree on precisely how many gTLDs could be created without adverse consequences to DNS response time, there appears to be a technical consensus that we are nowhere near even the lowest possible limit. ICANN At-Large Director Karl Auerbach, himself a technical expert, has suggested that the smallest

technically mandated upper level for the number of gTLDs might be as high as a million.¹ Persons with long experience in DNS matters, including BIND author Paul Vixie, apparently agree.² Others have performed tests loading the entire .com file as if it were a root file, and found that it works. In principle, this is not surprising, as there is no technical difference between the root file containing the information about TLDs and a second-level domain file. Given that there are currently about 16 million registrations in .com, if this argument is right, then the maximum number of TLDs may be *very* high.³ Some experts worry, however, that a very large number of new TLDs, such as a million, might affect DNS response time.⁴ If so, that still means that with fewer than 300 TLDs in operation today (gTLDs + ccTLDs), we can afford to create tens of thousands, and probably hundreds of thousands, more.

It is an article of faith among Internet entrepreneurs that possession of a good domain name is a necessity for an Internet startup. Many traditional firms also consider the acquisition of a memorable or short domain name to be of strategic importance. Recently, for Internet startups, possession of a "good" name was seen as a

major asset—reputedly enough in some cases to secure venture financing.

For some time now, however, it has also been an article of faith in the Internet community that "all the good names are taken" Recently it has seemed as if simply all the names that were a single word were taken. This apparent shortage, especially in .com, has driven firms seeking catchy names into the aftermarket. There does appear to be a reasonably large stock of names in the existing gTLDs being held by domain name brokers for resale in the aftermarket. Prices are very variable. Although few firms paid millions of dollars like the purchasers of business.com, and loans.com, it appears that at least until the .com bubble burst, the shortage of attractive names in .com, and the resulting need to purchase them at high markups in the aftermarket created what amounted to a substantial "startup tax" on new businesses.

ICANN justifies its very tentative initial foray into gTLD creation as a "proof of concept" but it has not disclosed the concept that is believes it is trying to prove, nor described how one tells if the test is successful, nor even when one might expect ICANN to do the evaluation. The "concept" cannot be gTLD creation itself: There is no rocket science to the mechanics of creating a new gTLD. From a technical perspective, creating a new gTLD is exactly like creating a new ccTLD, and creating new ccTLDs is quite routine. Indeed, .ps, a TLD for Palestine, was created less than a year ago with no noticeable effect on the Internet at all. 5

In fairness, ICANN is not originally responsible for the gridlock in gTLD creation policy, which in fact long predates it. Indeed the Department of Commerce—which currently has the power to create new gTLDs—called ICANN into being because it wanted to find a politically feasible way to create new TLDs in the face of difficult political obstacles, not least a belief in the intellectual property rights holders community that new TLDs might add to the risk of customer confusion and trademark dilution.

This political fear, more than any mythical technical consideration requiring a "test" or "proof of concept", explains why ICANN imposed a needlessly low limit on the number of new gTLDs it would recommend the Department of Commerce create in this first round, and why ICANN has as yet not been able to consider when if ever it will contemplate future rounds of gTLD recommendations. It does not explain, however, why ICANN persists in falsely claiming consensus for its artificially low number of TLDs, nor why went about selecting its seven finalists in the manner it did. Indeed, as described below, ICANN's gTLD selection procedures were characterized by substantial failures.

Nevertheless, it might seem that despite any procedural irregularities, ICANN's recommendation that the Department of Commerce create a small number of new gTLDs can only be good for competition as it will increase supply and thus drive down prices. And indeed, supply will increase. Unfortunately, of the new gTLDs, only .biz and maybe .info are likely to be of attractive to the majority of startups

¹Posting of Karl Auerbach, karl@CaveBear.com, http://www.dnso.org/wgroups/wg-c/Arc01/

[&]quot;10sting of Nati Autebath, National Research Coll., http://www.dnso.org/wgroups/wg-c/Arc01/msg00203.html.

2 E-mail from Paul Vixie, BIND 8 Primary Author, to Eric Brunner (Dec. 15, 1999) ("A million names under '.' isn't fundamentally harder to write code or operate computers for than are a million names under 'COM.'"), http://www.dnso.org/wgroups/wg-c/Arc01/msg00203.html.

3 See Quickstats at http://www.dotcom.com/facts/quickstats.html (reporting 20 million registrations of which 80 pageons are in com)

[&]quot;See Quickstats at http://www.dotcom.com/facts/quickstats.html (reporting 20 million registrations, of which 80 percent are in .com).

4 See, e.g., E-mail from Paul V. Mockapetris, BIND Author, to Paul Vixie, BIND 8 Primary Author, & Eric Brunner (Dec. 15, 1999) (querying whether one million new TLDs would impose performance costs on DNS), http://www.dnso.org/wgroups/wg-c/Arc01/msg00202.html.

5 See IANA Report on Request for Delegation of the .ps Top-Level Domain at http://www.icann.org/general/ps-report-mar00.htm (Mar. 22, 2000).

and other Internet newcomers. Because there are only two such domains, and because there is no easily foreseeable date at which additional gTLDs might become available, there is a substantial risk of a speculative frenzy in which domain name available, there is a substantial risk of a speculative frenzy in which domain name brokers, cybersquatters, and amateur arbitragers all seek to register the catchy names that have not already been snapped up by trademark holders who took advantage of their pre-registration period. I am concerned that the faction which controls ICANN will use this very predictable speculative frenzy as "evidence" that new gTLDs are a bad idea, or that the number must be kept down in the future.

The surest way to drive down and keep down the price of domain names, thus eliminating the "startup tax" and enhancing the ability of new firms to enter new markets and incidentally greatly reducing, perhaps even almost eliminating, cybersquatting, is to create healthy expectations. As soon as participants in the market understand that a steady supply of new domain names in attractive gTLDs

will continue to become available on a predictable schedule, the bottom will fall out of the after-market, and the incentive (albeit not the opportunities) for cybersquatting will be greatly reduced, thus helping e-commerce by making attractive names available on reasonable terms to a much greater number, and wider variety, of persons and firms.

selection of gTLDs. In ICANN's recent gTLD process, ICANN acted not as a standards or coordination body, but as if it were allocating scarce broadcast spectrum is some kind of comparative hearing process. ICANN created no standard. It "coordinated" no projects with running code being deployed by outside parties. Rather, ICANN acted like a foundation grant committee, trying to pick "winners." In practice, ICANN's exercise of its gatekeeper committee role contributes to the artificial shortage of gTLDs. Worse, the selection processes ICANN employed were amateurish and arbitrary. teurish and arbitrary.

Although all applicants were charged the same non-refundable \$50,000 fee, a sum Atthough all applicants were charged the same non-refundable \$50,000 fee, a sum that immediately skewed the process toward commercial uses and away from non-profit or experimental uses, it appears not all applicants received equal treatment. During the Los Angeles ICANN Board Meeting, it transpired that the staff had not subjected all the proposals to the same level of analysis. Thus, when Board members sought more detailed information about proposals that interested them, but which the staff had relegated to the second tier, that information sometimes did not exist,

the staff had relegated to the second tier, that information sometimes did not exist, although it existed for the staff's preferred picks.

ICANN then attempted to hold a 1-day comparative hearing between more than 40 applicants, each of whom had complex applications that referenced multiple possible gTLDs. During this process, each applicant was given 3 minutes to speak.

Both before and during the 1-day Board meeting, both the staff and the Board seemed excessively concerned with avoiding risk. Although true competition in a

fully competitive market requires that participants be allowed to fail if they deserve to do so, there are reasonable arguments as to why it makes sense to have a body like ICANN require potential registry operators to meet some minimum standard of technical competence. One can even make a case for requiring a showing of some financial resources, and for requiring the advance preparation of basic registry policy documents spelling out who will be allowed to register names and under what terms. Perhaps there are other neutral criteria that should also be required and assessed. This is a far cry from ICANN's apparent tendency to tend to prefer established institutions and big corporations, and to downplay the value of experience in running code. If in 1985 the Internet itself had been a proposal placed before a committee that behaved as ICANN did in 2000, the Internet would have been rejected as too risky. Risk aversion of this type is antithetical to entrepreneurship and com-

petition.

Worst of all, ICANN applied its criteria arbitrarily, even making them up as it went along. The striking arbitrariness of the ICANN decisionmaking process is illustrated by the rejection of the "union" proposal based on unfounded last-minute speculation by an ICANN board member that the international labor organizations proposing the gTLD were somehow undernocratic. (That this same Board member was at the time required from the process only adds to the strangeness.) The process was at the time recused from the process only adds to the strangeness.) The procedures ICANN designed gave the applicants no opportunity to reply to unfounded accusations. ICANN then rejected ".iii" because someone on the Board was concerned that the name was difficult to pronounce, even though the ability to pronounce a proposed gTLD had never before been mentioned as a decision criterion. I am not in a position to vouch for the accuracy of each of the claims of error made by the firms that filed reconsideration requests after the Los Angeles meeting (available at http://www.icann.org/committees/reconsideration/index.html) but as a group these make for very sobering reading.

If ICANN were to limit itself to either standard making or technical coordination

it would have approached its mission very differently from the arbitrary and ama-

teurish procedures it used. It is critical to note that the relevant standards of comparison for ICANN's decisionmaking are not the private sector. As a non-profit standards body contracting with the U.S. Government, ICANN should either be held to standards of openness, professionalism, and neutrality appropriate for standardmaking or, if making political and social choices, be treated as a state actor and expected to act in conformity with fundamental norms of due process. Suggestions heard from some victorious gTLD applicants that ICANN's processes compare favorably with those used for procurement in the private sector are both erroneous and irrelevant. ICANN is not engaged in procurement. It is not "buying" anything. And ICANN paid almost no attention to the prices proposed by would-be registries.

II. INTERNAL ORGANIZATION

ICANN's go-very-slow policy on new gTLDs had no technical basis. Why then would ICANN adopt such a policy? The reason is that it is a product of an internal deliberative process that under-weighs the interests of the public at-large and in so doing tends toward anti-competitive, or competitively weak, outcomes skewed by

special interests.

The source of this predisposition is the distribution of decisionmaking authority on the ICANN Board, and in ICANN's subsidiary institutions, which have been manipulated to neuter the public voice, and the role of individuals, non-profits, and civil society groups. Originally, half of ICANN's governing Board would have been elected by at-large members of ICANN. Instead, ICANN has worked at every turn

to prevent this.

In July, 1999, ICANN Chair Esther Dyson told the House Commerce Committee's Subcommittee on Oversight and Investigation that ICANN's "highest priority" was to elect nine at-large Board members, exactly as ICANN had committed to do as an original condition of being approved by the Department of Commerce. Instead, ICANN reneged on its commitment to the United States Government, and to the public, that half its Board would be elected by an at-large membership. Thus, today:

• Instead of half (nine) of the Board members being elected at-large, as promised to NTIA and to Congress, ICANN amended its bylaws to allow only five members

to be elected at-large;

 Instead of all the self-appointed nine original directors leaving office as they promised Congress and the public they would do, four remain in office;

• Instead of allowing the five elected at-large members to participate in the selection of the new gTLDs, ICANN amended its bylaws to seat them at the close of a meeting, instead of at the start (the process used for all previous new directors). Then ICANN rushed its processes so that it could make the final decisions minutes before the new directors took office.

 In a move that risks further neutering the five elected at-large members, ICANN announced that their jobs would all be abolished at the end of their 2-year terms, unless a majority of the full Board voted (after a "clean sheet study") to re-establish elected at-large Board seats. [Note that under the current bylaws, the un-

elected directors apparently get to keep their jobs indefinitely.]

• The internal institutions that ICANN created to take the lead in domain name policy—the seven constituencies in the "Domain Name Supporting Organization" (DNŠO)—were designed from the start to exclude individuals from membership. The very engineers who built the Internet are not represented in their personal capac-

-only if their employers choose to send them.

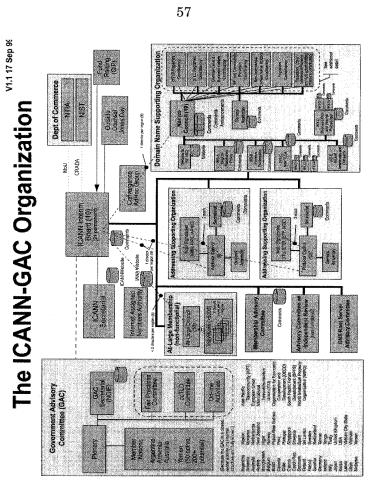
• All non-commercial groups, including all universities, all consumer groups, all political groups throughout the world are shoehorned a single DNSO constituency. They are, in the main, ineligible for full voting membership of any of the other six constituencies. Meanwhile, many businesses such as Internet first-movers and others who have an interest in reducing on-line competition for established firms are eligible to be in two, three, or even four of the seven constituencies, thus allowing them multiple votes—and a certain majority.

The interest groups that acquired a voting majority in those institutions have shown relatively little interest in the rights and needs of small businesses, non-commercial entities, or individuals. They have shown considerably more interest in securing special protections for trademarks, above and beyond what is provided by statute, than they have in maximizing the liberty-enhancing and competitive poten-

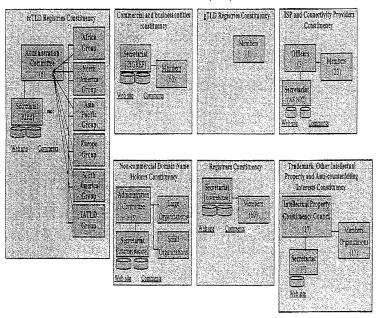
tial of the Internet.

⁶Testimony of Esther Dyson, Chair, ICANN, before the House Commerce Committee, Subcommittee on Oversight and Investigations, July 22, 1999, http://www.icann.org/dyson-testimony-22july99.htm.

ICANN is a highly complex organization (see attached charts, prepared by Tony Rutkowski). It is simply impossible for anyone to keep track of what is happening in all the different pieces, except an organization capable of deploying a fleet of lawyers. Similarly, because ICANN sees its mission as global, it meets four times a year on four different continents. Next month's meeting, for example, is in Australia. The result of this laudable attempt at internationalization is that only interests wealthy enough to attend all these meetings—with several representatives—can achieve the continuity of participation required to influence ICANN's decisions in any sort of a consistent manner. The result tends to be a "consensus" of those with the necessary expense accounts.



DNSO Constituencies (Detail)



III. EXTERNAL CHECKS ON ICANN

I do not deny that one can identify potentially serious social issues that might be caused as side effects of the creation of new gTLDs. I do submit that ICANN has no competence to deal with them, and that its actions have to date in creating special domain name registration rights for trademark holders, well in excess of the rights granted to them by Congress, have been anti-competitive, unfair, and counterproductive.

ICANN's mandate and its competence is, at most, for technical matters. Social policy issues such as the intellectual property consequences of new gTLDs, the number of days a person should have to respond to an arbitration over a domain name, or issues of content management, should not be decided by engineers or by the peo-ple who happen to have seized control of ICANN. Rather, they should be decided via the means we traditionally use for making social policy choices—markets and

representative democracy.

Since ICANN's decisions as to its gTLD recommendations were not based on purely technical criteria, as a formal matter ICANN is making social policy choices, not just acting as a standards body. It is therefore right that ICANN's decisions are subject to external checks. Indeed, as I argue in my article Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution, 50 Duke L.J. 17 (2000), available online http://www.law.miami.edu/froomkin/articles/icann.pdf, as a matter of law ICANN as currently constituted amounts to a state actor, and thus is subject to the same Due Process constraints as apply to any Federal agency. Accordingly, its arbitrary and capricious decisions violate both the APA and the Due Process Clause of the Constitution.

ICANN and the U.S. Department of Commerce dispute this characterization. They prefer to rely on form over reality, and insist that ICANN is legally private despite the fact that ICANN derives all of its authority and revenue from Commerce's loan to ICANN of authority over the root. It follows, however, that if this characterization of ICANN as a purely private body is correct, then there are strict limits on the extent to which the Department of Commerce can implement ICANN's recommendations without violating the Administrative Procedures Act, or the Constitution's Due Process clause.

Once ICANN makes its formal recommendations, the Department of Commerce will have to decide how to proceed. Rubber-stamping of ICANN's decisions by the Department of Commerce would amount to adopting ICANN's arbitrary and capri-

cious choices, since the U.S. Government would essentially endorse both ICANN's

practices and its conclusions.

The Department of Commerce has maintained that its relations with ICANN are not subject to the APA, or indeed to any legal constraint other than those relating to relations with a government contractor and/or a participant in a cooperative research agreement. But whatever the legal arguments, when contemplating decisions which will shape the very nature of the Internet naming system, Commerce should proceed with deliberation, and act only on the basis of reliable information. The need for reliable information, proper public participation, and transparent and accountable decisionmaking is even stronger when Commerce contemplates making the sort of social policy choices—as opposed to mere technical standard-setting—embodied in creating new gTLDs and imposing conditions on their use. Basic requirements of fairness, due process, and the need to make reasonable decisions counsel in favor of notice, public access, the making of an official record, and deliberation.

There is no question but that if a Federal agency had acted as the ICANN Board did, its decisions would not satisfy even cursory judicial review. In the circumstances, therefore, it would be unreasonable and a denial of due process for Commerce to rely on the outcome of such a flawed process without conducting its

ICANN faces a choice: On one path it becomes a true standards body, or a true technical coordination body, and leaves the social policy choices to those—like Congress-who have the legitimacy to make them. On the other path, the one it currently seems to be following, it is a state actor. In that case, its actions to date have been far too arbitrary to survive judicial review.

Senator Burns. Thank you very much. Roger Cochetti, Senior Vice President, Policy, VeriSign Network Solutions, here in Washington.

STATEMENT OF ROGER J. COCHETTI, SENIOR VICE PRESIDENT, POLICY, VeriSign NETWORK SOLUTIONS

Mr. Cochetti. Thank you, Mr. Chairman, and thank you, members of the Subcommittee. I am, as you indicated, Senior Vice President for Policy at VeriSign Corporation, which merged last year with Network Solutions. Before joining VeriSign in 1999, I had been with IBM Corporation, where I coordinated many of their electronic commerce policies, including this area, which has given me some perspective in the subject of today's hearings.

I have a prepared statement, as you know, Mr. Chairman, and ask that it be entered into the record in its entirety.

Let me begin if I may, Mr. Chairman, by commending you for your leadership in highlighting the tech seven issues that are starting, the first of which is being highlighted in today's hearing, and for your work in the previous Congress in highlighting the digital dozen issues.

Like many companies that are fully involved in electronic commerce, we look forward to working with you and the Subcommittee as you work your way through these issues in the coming months.

I have three points I would like to make in my testimony, Mr. Chairman. The first is that, as a major provider of services that make up the logical infrastructure of the Internet, VeriSign is both deeply interested in and uniquely qualified to comment on the topic of today's hearing.

Second, ICANN is an experiment in its early stages, with many of its most important challenges still ahead. Consequently, we believe it is too early to reach many meaningful conclusions about

ICANN.

Third, we are hopeful about ICANN's future, and committed to helping it become successful.

Mr. Chairman, VeriSign is an American company with major operations in California and Virginia and in other States that is a leading e-commerce enabler, providing such essential e-commerce services as authentication, often called digital signature, domain name registrations, web merchant payments, security, and others. These e-commerce utility functions are often described as the logical infrastructure of the Internet.

More to the point of today's hearing, VeriSign has operated the authoritative registry for .com, .net, and .org since 1991. The registry is the central database that permits resolution for .com, .net,

and .org domain names.

There are around 28 million registrations in .com, .net, and .org today, and that number grew last year by around 50,000 new registrations each day, distributed to servers around the world for access by every Internet network operator and end user. On a typical day, our databases experience over 2 billion queries. That number has been doubling every 6 months, incidentally.

VeriSign is active in providing end user registration services as well, one part of which is our registrar business. We operate one of about 80 competing registrars for .com, .net, and .org registrations. Prior to 1999, our registrar, called the NSI registrar, under a mandate from the National Science Foundation, was the only

provider of direct registration in .com, .net, and .org.

Following the introduction of registrar competition in 1999, the NSI registrars' market share of new registrations has declined to below 50 percent by the end of 2000. A whole new industry of com-

peting registrars has emerged.

Under the direction of the U.S. Commerce Department, VeriSign maintains the Internet's primary route server, or what is called the "A" server, sometimes called the heart of the Internet. This server originates the authoritative directory of all of the Internet's toplevel domains, everything from .com to .gov to .uk.

Also at the request of the Department, we operate as a public service and at no charge, the registries for .us and .edu, and we provide the registrar services for colleges that use .edu at no

charge to the colleges.

Mr. Chairman, to my second point, ICANN is intended to be the principal provider of technical coordination services for the Internet, particularly in the area of domain names and numerical Internet addresses, and we believe we are the principal provider of corresponding operational services for the Internet, particularly in the area of domain name registrations.

ICANN grew out of two fundamental goals, first to create a nongovernmental structure that coordinates by way of consensus among those that are affected certain international functions, domain name and IP addressing, and second to do so in a way that is globally acceptable. I believe, Mr. Chairman, that ICANN is a bold experiment still in an early stage. It is premised not on regulation by governments, but on consensus and voluntary contracts.

Private sector technical coordination is not new, but rarely has it been attempted on a global scale. International technical coordination is not new, either, but it has never been attempted by a completely new organization for a medium that affects a diverse

global community of hundreds of millions of users.

Finally, Mr. Chairman, if ICANN is a bold experiment, we should not make the mistake of thinking that the experiment is concluded, or that this has either failed or succeeded. Many of ICANN's most important challenges lie ahead. These include the establishment of stable relationships with all of the operational groups that provide domain name and Internet numbering services.

While ICANN has stable relationships with both .com, .net, and .org registrants, and registrars, most notably us, it has not yet established stable relationships with the operators of the country

code top level domain registries and registrars.

These registries, such as those who operate .uk or .fr, are responsible for about a third of all domain name registrations in the world today, and no ICANN system would be complete without

their stable participation in it.

Similarly, ICANN needs to establish stable relationships with the operators of the Internet address numbering registries which provide the essential Internet numbering that makes the Internet work, as Carl described earlier, identifies and connects the machines on the Internet.

Finally, ICANN needs to establish stable relationships with the operators of the route servers, the 12 other operators of the route servers other than VeriSign that distribute the route that we originate of the Internet.

Internally, we believe that the organization is still in a formative period in its budget processes and the procedures by which its councils and Board are selected, and even the voting members are selected, as well as in the procedures that it uses to make fundamental decisions. VeriSign is committed to making ICANN a success.

We are by far the largest contributor of funds to ICANN. We have probably voluntarily donated more money, beyond our dues, to ICANN than has anyone else. Last year, for example, we announced a \$100,000 matching donation to ICANN's domain name supporting organization to support hiring its own staff.

Mr. Chairman, we look forward to the opportunity to work with both the Subcommittee and with ICANN in helping move this organization forward to what we believe and hope will be a successful

future. Thank you again for inviting us to participate. [The prepared statement of Mr. Cochetti follows:]

PREPARED STATEMENT OF ROGER J. COCHETTI, SENIOR VICE PRESIDENT, POLICY, VERISIGN NETWORK SOLUTIONS

INTRODUCTION

Mr. Chairman, Members of the Subcommittee, thank you for the opportunity to testify before today's hearing on the Internet Corporation for Assigned Names and Numbers or ICANN. This is the first in an important series of Internet-related hearings being conducted by the Subcommittee and we commend you and your colleagues for taking this initiative. My name is Roger Cochetti and I am Senior Vice-President for Policy of VeriSign Corporation, which merged with Network Solutions, Inc. (NSI) last year. Before joining VeriSign, I was with IBM Corporation for several years, where I coordinated many of IBM's Internet policies, including their approach to ICANN. This has given me some perspective on this important experiment in international cooperation.

VeriSign today is the largest and, we believe, the most important company any-

where to provide trusted services that make the Internet work.

VeriSign has been a global pioneer, and a primary force, in developing the technology and the market for Internet domain names and public key infrastructure

(PKI)-based digital certificates—commonly called digital signatures. We're also a leader in providing Web merchants with automated payments tools and services, as well as with a growing array of utility services that enable electronic commerce. These include Website hosting, e-mail, Website design, domain name search and resale, and other services.

Mr. Chairman, VeriSign is not a phone company, a retail Internet startup, an Internet Service Provider or an Online Service Provider. We don't make computers, routers or other hardware. But we do make e-commerce possible by enabling merchants and enterprises to take advantage of the full potential of the Internet by providing services that are essential to electronic commerce, such as security, identity, payments, and authentication. Together, these services are key components of what is increasingly called the "logical infrastructure of the Internet." As such, we believe that we are a great example of an American company that is entirely Internet focused and is brigging the benefits of a commerce to people everywhere in the world

that we are a great example of an American company that is entirely Internet focused, and is bringing the benefits of e-commerce to people everywhere in the world. More to the point of these hearings, Mr. Chairman, VeriSign today operates, and has operated since 1991, the global registries—that is the central databases that permit what is called "resolution"—for .com, .net, and .org. "Resolution" is what happens when one inputs a URL in text form, such as "verisign.com," and is connected over the Internet to the machine that hosts the proper Website; in this example, our own. We're proud to say that these databases sustain enormous volumes of daily use, deflect frequent cyber-attacks, and operate with very nearly no service interruptions. In fact, our .com, .net, and .org servers, which are located in 12 sites around the world, respond to upwards of 12 billion queries a day; a number that has historically doubled every 6 months. Due to our efforts, anyone from essentially any country anywhere in the world can sign up, on-line, for a ".com" registration in a matter of minutes. We've got over 28 million .com, .net, and .org registrations in our databases today and the number grew by an average of about 50,000 registrations a day last year.

In addition, in the highly competitive market for .com, .net, and .org end-user registration services, we operate one of the largest and most advanced registrars. Since the introduction of competition in the .com, .net, and .org registrar marketplace in 1999, the market share of the VeriSign registrar—called the NSI Registrar—has dropped from around 100 percent to less than half of all new registrations today, while a whole new industry of almost 80 competing registrars has grown up.

Just as important, at the request of the U.S. Commerce Department, we have operated for quite some time what is called the "A" Root Server. This remarkable facility is frequently called "the heart of the Internet" because it is the single point of integration of all the Internet's domain name services. In this server, we maintain the authoritative list of the Internet's top-level domains—everything from ".com" to ".gov" to ".uk"—and who is responsible for operating each of them. This list is called "The Root"; and from our server, it is distributed to a global network of secondary servers, which host identical copies of the files that we generate, and who themselves distribute the data to every network connected to the Internet around the world.

Finally, also at the request of the U.S. Commerce Department, we operate at no charge, the domain name registries for ".us" and ".edu", as well as provide the registrar services for the thousands of colleges that use ".edu". We're pleased and proud to provide these as a public service, with the same high quality as our commercial services, until such time as they are spun out to permanent registries and registrars by the Commerce Department.

Because of our decade of commitment to these and related domain name services, the subject of today's hearing is very important to us. But it is also important to everyone who is using the Internet or thinking about using it in the future. Along with the competent operation of the registry and registrar services that make the Internet actually function, the technical coordination of these services (which is what ICANN addresses) is central to the smooth and stable operation of the medium. As it is structured today, the Internet requires both a central mechanism for technical coordination and the competent performance of the operational functions. ICANN is the leading provider of Internet technical coordination, particularly as it relates to domain names and Internet Protocol addresses; and we believe that we are the leading provider of Internet operational services, particularly in the area of domain name registration services.

Thus, we think it is appropriate for the Subcommittee to examine the role of ICANN in the Internet and we are pleased to share our thoughts on the subject with you. Mr. Chairman, as you and the Subcommittee members no doubt know, ICANN grew out of two fundamental goals: First, to create a non-governmental structure to coordinate Internet domain name and IP addressing functions; and see

ond, to do so in a way that is globally viable. We are committed to both of these

To achieve these twin goals, a non-profit organization was envisioned in 1998 that would operate on the principle of consensus of those affected, and bring together the diverse community of interests called "the Internet community." By using procedures that are designed to ensure something akin to due process and the protection of the rights of service providers and users alike, ICANN is organized to bring many diverse communities into a single conversation about where domain name and IP address services are headed, and with them the Internet itself.

Mr. Chairman, I believe that ICANN is a bold experiment. Although it is sometimes done by governments, technical coordination by the private sector is not new, but rarely has it been attempted on a global scale. International technical coordination of this sort is not new either, but it has never been attempted by a completely new organization for a medium that effects the daily lives of hundreds of millions of users. Finally, rarely in the history of private sector-based international technical coordination has the community of interested parties been either as diverse or as large as we have seen with ICANN and the domain name system.

But if ICANN is a bold experiment, we should not make the mistake of thinking that this experiment has concluded; or that it has been either successful or failed. We are early in the process of this experiment and we need more results before we can reach many useful conclusions. For example, of the five groups of service providers with whom ICANN must establish stable relationships for its coordination to work as planned, it has successfully done so with two: the operator of the generic Top-Level Domain registries (The VeriSign Registry); and the operators of the generic Top-Level Domain registrars (The NSI Registrar and its competitors.)

ICANN still has before it the establishment of stable relationships with the opera-

tors of the country code Top-Level Domain registries and registrars (such as ".uk" or ".fr") who today issue around a third of all domain names globally. It also has before it the establishment of stable relationships with the operators of the IP address registries, which issue the number blocks that are used to assign Internet numbers to networks and machines on the Internet. And finally, ICANN has yet to establish stable relationships with the operators of the system of secondary root servers, described above, that distribute the root of the Internet around the world.

In addition, we think it is fair to say that ICANN is still in a formative period in the development of both its budget process, the procedures by which its Councils and Board are selected, and the procedures that it uses to make fundamental decisions. Until we see a lot more about how these processes and procedures come to-

gether, it would, in or view, be premature to reach many conclusions.

For our part, we are committed to ICANN's success. VeriSign is by far the largest contributor of funds to ICANN and I believe that we have voluntarily donated more money, above our dues, to ICANN than has anyone else. Recently, for example, we announced a new, \$100,000 matching donation to the ICANN Domain Names Supporting Organization that will help that ICANN body hire its own professional staff. We intend to do more and we do not intend to sit on the sidelines just watching to see if ICANN can become a success.

Mr. Chairman, we thank you for your involvement in this important area and appreciate the Subcommittee's continued interest in ICANN. We look forward to the opportunity to work with both you and ICANN in helping move this organization forward to what we believe, and hope, will be a successful future.

Thank you.

Senator Burns. Thank you, Mr. Cochetti. We appreciate your testimony.

Kenneth Hansen, Director, Corporate Development, NeuStar, Inc.

STATEMENT OF KENNETH M. HANSEN, DIRECTOR, CORPORATE DEVELOPMENT, NeuStar, INC.

Mr. Hansen. Good morning, Mr. Chairman. My name is Ken Hansen. I am the Director of Corporate Development for NeuStar. I am a neutral third-party provider of clearinghouse and database administration services. NeuStar serves as a number plan administrator and local number portability administrator for North America.

Our joint venture with Melbourne IT, a Melbourne, Australiabased provider of domain name services, was recently selected by ICANN to operate the registry for the top-level domain name .biz. During the application process, the joint venture was referred to as JVTeam, and is now known as NewLevel.

I appreciate the opportunity to appear before the Subcommittee to discuss the ICANN selection process. NeuStar has been following the potential introduction of new TLDs and attending ICANN meetings for over 2 years prior to the issuance of the Au-

gust 2000 RFP.

NewLevel was one of the seven selected to operate registries for new top-level domains. The criteria and objectives utilized in the selection process represented the culmination of many years of well-publicized industry debate and consensus-building concerning the introduction of new top-level domains, and were not solely the result of the recent ICANN process.

Having been directly involved in over 100 requests for proposal processes during my 15 years in the communications industry, I can say with confidence in terms of openness and transparency that the manner in which ICANN conducted the application process far exceeds measures taken by private companies in conducting

procurement activities for services of similar complexity.

I would like to direct your attention to the attached exhibit, which contrasts these differences. Although the process was not perfect, the procurement was more open and transparent than

most government procurements as well.

It is important to note that it is the open and transparent nature of the ICANN process that invites public scrutiny and debate. Had the process not been quite so open, we might not even be here today. That is not to say that the bar should be lowered in that

regard.

The open process described in the exhibit represents a process in which all competitors had equal access to information and an equal opportunity to prepare their responses and compete with other applicants. We believe that the TLDs selected are a direct reflection of the situation criteria identified by ICANN and communicated to all applicants and the public in advance on the ICANN website.

The criteria is as follows:

Maintain the stability of the Internet, the number one priority. Demonstrate an effective proof of concept concerning the introduction of new top-level domains.

Enhance competition for registry services.

Enhance the utility of the Internet.

Meet currently unmet needs.

Enhance diversity of the Internet.

Evaluate the delegation of policy formulation functions for special purpose TLDs.

Ensure the appropriate protections of the rights of others, and

require completeness of proposals.

ICANN stated clearly its intent was to select a limited number of TLDs initially and to proceed carefully in order to ensure the stability of the Internet was maintained.

In the new TLD application process overview, which was posted through the ICANN website, ICANN stated that, and I quote: it is anticipated that only a few of the applications that are received will be selected for further negotiations toward suitable contracts with ICANN.

This statement was consistent with the resolution of the ICANN Board on new TLDs, in which the Board, quote, adopted the Names Council recommendation that a policy be established for the introduction of top-level domains in a measured and responsible manner.

The selected TLDs were also consistent with ICANN's desire to create diversity. Specifically, ICANN stated that the diversity the proposal would bring to the program would be considered when selecting new TLDs.

The criteria for assessing the TLD proposals document described in detail the elements of diversity that would be considered. Although some qualified TLDs were not selected for this very reason, ICANN made it clear that additional TLDs were likely to be introduced in the future.

The ICANN process described above will create competition where none exists today. Competition will create new choices for individuals, organizations, and businesses in terms of name availability, pricing, and functionality. The ICANN evaluation criteria and objective in introducing new TLDs was the result of an open, public debate and widespread Internet community consensus. In other words, the market participants played a significant role in the creation of the ICANN process.

Although it can be argued for subjective reasons that other selections would or would not have been optimal, the ICANN process resulted in TLD and registry operator selections that are consistent with the communicated criteria and objectives. It is therefore in the interests of the Internet community as a whole for the introduction of the selected new TLDs to proceed while other applicants who have chosen to do so make use of the ICANN request for consideration mechanism which appropriately supports such appeals.

Thank you very much.

[The prepared statement of Mr. Hansen follows:]

PREPARED STATEMENT OF KENNETH M. HANSEN, DIRECTOR, CORPORATE DEVELOPMENT, NEUSTAR, INC.

Good morning, my name is Ken Hansen, and I am the Director of Corporate Development for NeuStar, Inc., a neutral third party provider of clearinghouse and database administration services. NeuStar serves as the Number Plan administrator and the Local Number Portability administrator for North America. Our joint venture with Melbourne IT, Ltd (MIT), a Melbourne, Australia-based provider of domain name services was recently selected by the Internet Corporation for Assigned Names and Numbers to operate the Registry for the Top-Level Domain Name ".biz". During the application process the joint venture was referred to as "JVTeam" and is now known as "NeuLevel."

I appreciate the opportunity to appear before the Subcommittee to discuss the ICANN selection process. NeuStar has been following the potential introduction of new TLDs and attending ICANN meetings for over 2 years prior to issuance of the August 2000 RFP.

NeuLevel was one of seven selected to operate Registries for the new Top-Level Domains (TLDs). The criteria and objectives utilized in the selection process represented the culmination of many years of well-publicized industry debate and consensus-building concerning the introduction of new TLDs, and were not solely the result of the most recent ICANN application process.

Having been directly involved in over one hundred Request for Proposal processes during my 15 years in the communications industry, I can say with confidence, in

terms of openness and transparency that the manner in which ICANN conducted the application process far exceeds measures taken by private companies in conducting procurement activities for services of similar complexity. I would like to direct your attention to the attached exhibit, which contrasts these differences. Although the process was not perfect, the procurement was more open and transparent than most government procurements as well. It is important to note that it is the open and transparent nature of the ICANN process that invites public scrutiny and debate. Had the process not been quite so open, we might not be here

today. That is not to say that the bar should be lowered in that regard.

The open process described in the Exhibit represents a process in which all competitors had equal access to information, and an equal opportunity to prepare their responses and compete with other applicants. We believe that the TLDs selected are a direct reflection of the evaluation criteria identified by ICANN and communicated to all applicants and the public in advance on the ICANN website. The criteria is

Maintain the stability of the Internet, the No. 1 priority.

- Demonstrate an effective proof of concept concerning the introduction of new top level domains.
 - Enhance competition for registry services.

Enhance utility of the DNS

Meet currently unmet needs.

Enhance diversity of the Internet.

- Evaluate the delegation of policy formulation functions for special purpose TLDs.
 - · Ensure the appropriate protections of the rights of others, and

• Require completeness of proposals.

ICANN stated clearly that its intent was to select a limited number of new TLDs initially and to proceed carefully in order to ensure that the stability of the Internet was maintained. In the New TLD Application Process Overview (which was posted to the ICANN website) ICANN stated that, "It is anticipated that only a few of the applications that are received will be selected for further negotiations toward suitable contracts with ICANN."

This statement was consistent with the Resolution of the ICANN Board on New TLDs, in which the Board "adopted the Names Council's recommendation that a policy be established for the introduction of new TLDs in a measured and responsible

manner.

The selected TLDs are also consistent with ICANN's desire of creating diversity. Specifically, ICANN stated that, "the diversity the proposal would bring to the program" would be considered in selecting the new TLDs. The Criteria for Assessing TLD Proposals document described in detail the elements of diversity that would be considered as the considered of the considered and the considered as the considered of the considered as the considered of the considered as the considered of the consider be considered. Although some qualified TLDs were not selected for this reason, ICANN made it clear that additional TLDs were likely to be introduced in the fu-

The ICANN process described above will create effective competition where none exists today. Competition will create new choices for individuals, organizations and

businesses in terms of name availability, pricing and functionality.

The ICANN evaluation criteria and objectives in introducing new TLDs were the result of an open public debate and widespread Internet community consensus. In other words, the market participants played a significant role in the creation of the ICANN process. Although it can be argued for subjective reasons that other selections would or would not have been optimal, the ICANN process resulted in TLD and Registry Operator selections that are consistent with the communicated criteria and objectives.

It is, therefore, in the interest of the Internet community as a whole for the introduction of selected new TLDs to proceed while other applicants who have chosen to do so, make use of the ICANN Request for Reconsideration mechanism, which

appropriately supports such appeals.

I thank the subcommittee for giving me the opportunity to testify.

Exhibit—Typical Private Company RFP Process vs. ICANN Process

	• •	
Description	Typical Private Company RFP Process (for complex service or system)	ICANN Process
Announcement of RFP	Potential bidders selected and notified directly. No public notice	Notice posted to the Internet for public viewing. Expressions of interest requested, but not
		required.
Who can submit a bid?	Limited number of selected companies	Any company permitted to submit an application.
	Those bidders the company feels are qualified and can meet needs. Number of bidders limited. Typically 3–5 proposals accepted.	Forty-seven complete applications received.
Publication of the RFP	Sent directly to limited number of qualified bidders.	Posted to the Internet for public viewing.
Public posting of proposals	None	Posted to the Internet for public viewing.
Confidential information	Proposal considered confidential document	Posted to the Internet for public viewing.
	Not to be disclosed	Confidential information not to be considered by evaluators.
Public comment	None	Comment forum on the ICANN site. Public able to submit a comments.
		Applicants able to comment on competitors proposals.
		All comments published on the web for viewing.
Questions concerning responses.	Private correspondence with bidders	ICANN questions and Applicant answers posted to the ICANN site.
•	Private meetings with bidders.	
Evaluation results	Not shared with the bidders or any outside party.	Written evaluation posted to the web for viewing by bidders and the public.
	No opportunity to respond or comment.	
Decisionmaking process	Private decisionmaking process No involvement or access by bidders	Board deliberation with access to the public. Live broadcast on the Internet. Transcripts
Decision announcement	Bidders privately notified by phone	published on ICANN site. Announced during public meeting Broadcast on the Internet Published on the ICANN site.

Senator Burns. Thank you, Mr. Hansen.

I want to go to Mr. Froomkin, since you were a little bit critical on the structure of ICANN. I keep going back to these domains, as you well know, and I still do not understand the process there. I just now got a copy of the memorandum.

What would you propose that the action of Congress now—in light of this MOU, and in light of some complaints, and some being founded and some being theoretical, what would you propose?

Mr. Froomkin. Well, I think, Senator, the most important issue is not setting a precedent by which a department, like the Department of Commerce, can really end run the Administrative Procedures Act.

That is an issue that is frankly bigger than the Internet, and so the global concern here is not just in this process, and that if you accept that this is a way in which agencies can bypass ordinary procedures to create a privately organized regulator in all but name, that uses control over a federally-dominated resource to make people sign contracts with it, pay it money, and do what it says, and then not be subject to due process, not be subject to ordinary court challenge, not be subject to ordinary oversight, that is really cutting Congress, and cutting the American people out of the regulatory process.

So while in this case you might have got an outcome which was better than no decision at all—I have nothing against any of the winners here. I have no reason to believe any of them are bad, or imperfect, and for all I know we would be all better off if they were all put on the route, and lots of others, too—it seems to me there is a sort of good Government issue, to use the term, that is pretty serious here, and someone needs to hold Commerce's feet to the fire on that one.

Senator Burns. Senator Boxer.

Senator BOXER. Mr. Cartmell, I wanted to ask you about the way you conduct your business in one particular area, which is the "WHOIS" database, and I wanted to get your answer to it. The "WHOIS" database allows Internet users to type in a given domain name and receive contact information for the person or company that holds that domain name registration.

A public web-based availability of "WHOIS" information, I believe, is critically important for intellectual property holders in investigating possible infringement of their trademark rights and copyrights as well as for law enforcement authorities that use "WHOIS" to investigate possible crimes.

In addition, in my example that I held up before, we are able to find out the individual who did this, perpetrated this fraud on my colleague and on me, and so it is a help. Whether I can stop it is another question that we have to deal with, but I can find out.

Now, further, ICANN's Uniform Dispute Resolution Policy is a convenient, low-cost procedure that resolves disputes arising from the bad faith registration of domain names, or cyber-squatting. Now, I am concerned and troubled by the fact that .cc, a domain that markets itself as an alternative to .com, does not even have an adequate public "WHOIS" database. I am concerned that by failing to provide "WHOIS" information, .cc will become a haven for those who might wish to defraud my constituents, or a Senator's constituents here.

I understand, in fact, that your company charges users up to \$50 to obtain contact information for domain name registered in .cc. Further, I understand that .cc does not offer a convenient mechanism, such as UDRP, to settle cyber-squatting disputes. I hope I did not misstate this. This is the information that I have gotten, and I wonder if I am correct on this, if these facts are true. Could you explain why this is, and if you plan to implement what I would consider to be more responsible policies such as that of Mr. Cochetti's organization?

Mr. Cartmell. Certainly, Senator. .cc "WHOIS" information is provided at a cost of around \$15. The way we provide that information is via postal information to the requester, and at the same time we alert the registrant of the domain name that someone has requested that information and provide the registrant with the information of the requester. We do that so that we not only protect our customer database, but protect the identity of the user. It is available. Some people wish that information to be public, some do not, so the information is available.

As far as the UDRP, we have not been required to sign on to that as we have no agreement with ICANN or any other organization that has come forward. We would be willing to enter into some sort of dispute resolution policy. My organization does not necessarily endorse the UDRP. It favors trademark holders over other holders,

and supersedes our U.S. trademark laws.

Under U.S. trademark, there are multiple holders of the same word mark under different categories, so there is not necessarily the same translation to the domain name system, so I think once ICANN stated that they would go back and investigate the UDRP and maybe further define it, we might be willing to accept it in the future.

Senator BOXER. Well, I do not think it is right to have to spend \$15 and wait to find out who is perhaps committing a crime.

Mr. Cartmell. If law enforcement officers contact our organiza-

tion, we provide that information to them at no charge.

Senator BOXER. I do not mean just law enforcement and criminal activity, I mean a crime of someone stealing your identity or intel-

lectual property.

I come from a State where intellectual property is the same as any other property, so if you steal someone's car, that is a theft, and you would waive the \$15. If you steal someone's idea you do not look at it the same way.

Mr. Cochetti, could you comment on the policy of your company in terms of being able to find out very quickly, without a charge,

who may be stealing your property?

Mr. Cochetti. Yes, Senator Boxer. First, if I may comment on the issue you raised earlier, when your staff first notified us of a problem that had occurred, we investigated it and discovered that unfortunately it was not our—or fortunately—it was not our registrar that was involved, but we have, as you may know, used our good offices to try to help resolve it.

I think the answer you need to hear in problems like that, however, is not that somebody is using their good offices to help resolve it, because not everybody is a United States Senator, and not ev-

erybody gets that kind of assistance.

The answer you need to hear is that this is the procedure you use and these are the rights that you have. You may win or lose, but you ought not hear someone say, gee, I never thought about that, and who cares, so we are working and would be happy to work with your staff to see if there is a long-term, fair and equitable way to deal with this question of individual names.

On the question of intellectual property, and the misuse of intellectual property in domain name registrations, we, of course, are full participants in and are pleased to say that we helped design

the UDRP and have been fully supportive of it.

The VeriSign registry today supports about 30 million "WHOIS" inquiries each day. In other words, each registrar where somebody is doing a "WHOIS" inquiry routes it to the VeriSign registry, and

we support them.

The NSI registrar fully supports and complies with the procedures of the UDRP, which is to say, if a claim is made and referred to arbitration, the arbitrator makes a decision in a relatively short time, renders that decision back to the registrar, and if we are the registrar it is implemented by the registrar swiftly.

We think this is a reasonable and fair way to deal with the question, because the criteria that the arbitration uses is, does the reg-

istrant have any rights to the name, or is it a situation where they simply do not have rights to it, and so we are supporters of and help design the UDRP and are interested and willing to sort of work in ways to improve both it and other rights of protection on the domain name system.

Senator Boxer. Well, Mr. Cartmell, do you make a lot of money

from charging the \$15?

Mr. CARTMELL. No, we do not.

Senator BOXER. Then do not charge it.

[Laughter.]

Senator BOXER. If this is not a big money-maker deal for you, then you could do a lot better with your public relations, at least from my standpoint, if the service was offered at no charge. I do not speak for anyone else, but it just seems to me to be wrong if somebody—and especially when you get into a State where you think someone is stealing your property, you want to know who the heck is that person, and now you have to send money and a credit card. How long does it take you before you get the \$15? How do you do that?

Mr. Cartmell. It is online, so we accept credit card payment, and then immediately that same day the information is sent out via U.S. postal. The reason we have implemented this is because we are a relatively new registry, and the "WHOIS" information was never publicized or published on our site. We have consumers that are concerned about their own privacy and being released. In addition to that, we feel that we have some intellectual property rights of our customer database itself, and do not generally have to pro-

vide our customer database to the public.

Senator BOXER. So your people are concerned about privacy, but you sell their privacy for \$15? Either you protect their privacy, or

you do not protect their privacy.

Mr. CARTMELL. At the time of the request of the "WHOIS" information they also receive the information of the person who requested their information, so they knew who has received their private information.

Senator BOXER. So you do not respect anybody's privacy in the end. I just do not get it, and also you are now going to send this information via snail mail, so you are not sending it that fast. It just seems to me that when I look at Mr. Cochetti's policy there, it just seems like the right thing.

If somebody is going up on the Internet, they have got to know they are going up on the Internet. People are going to want to know who they are. If you do not want to have people know who

you are, do not go up on the Internet. It is pretty simple.

Believe me, I want to protect what people do once they are up on the Internet, but the bottom line is, if they are taking a site and somebody thinks they are stealing their intellectual property, I think that person ought to be able to know who it is.

Mr. Froomkin, you wanted to comment. Mr. Froomkin. Yes. Thank you, Senator. You made a lot of valid points. I just wanted to point out some of the reasons that the other version of the policy makes some sense, the version which does not automatically release information online about registrants.

Senator BOXER. In other words, Mr. Cartmell's?

Mr. Fromkin. Or something like it. I am not going to go into the \$15 issue, and I know of at least two cases of people who were stalked who had home offices and who gave their home address in the "WHOIS" and were stalked as a result of that information being public, so I think people do have some legitimate reasons to not want it to be automatically available to everybody and to want to delay to know who is asking so they can take the appropriate safety measures if necessary.

The second is, when you say people ought to know if you are on-line it is publicly available, I do not think people say that about unlisted phone numbers, and I always think of the Internet as being a lot like telephone, so I wonder if people really ought to know just as a condition to having a domain name you need to make your address and phone number available for every marketer and spammer and phone salesperson out there in the world. I am

not sure I am entirely comfortable with that.

Senator BOXER. You are saying if someone goes up on the Internet and they steal your property, you should not ever be able to find out who they are?

Mr. Froomkin. There should be a way. I said it does not nec-

essarily have to be instant and automatically available.

Maybe you ought to write a letter that says who you are and why you are asking. Maybe that is not asking too much. What I am concerned about is the spillover effects of making it automatic and easy is there are other people who you do not necessarily want to have that information also get it. I think your points are absolutely valid, of course.

Senator BOXER. Mr. Cochetti, how do you respond to that? Have

you had problems of stalking and so forth?

Mr. Cochetti. Senator, I honestly do not know the answer to whether we have had experienced problems with stalking. It is obvious to us, though, that there is an important need not just for trademark holders, by the way, but for law enforcement and net-

work operators to have access to registration information.

What we do today is provide that instantaneously and, by the way, one of the issues that I think the colloquy that just took place sort of highlights that has not been paid attention to is that doing this is not easy and not inexpensive. 30 million inquiries a day is a substantial expense and a substantial operational burden for anyone to carry, but we do it because we think there is an important need among trademark holders, among law enforcement and among network operators to get this information.

Senator BOXER. But you do not necessarily have to put your

home phone number there, do you?

Mr. Cochetti. The registration information requests telephone numbers as well as address.

Senator BOXER. For your home phone?

Mr. Cochetti. It is not home telephone. It is the registrant's information.

Senator BOXER. That is a legitimate concern that Mr. Froomkin raises, but I do not think you necessarily should have to put a home phone and a home address. You could put your business, which you would do in any event.

In any case, those are my questions. Thank you.

Senator BURNS. I have a feeling we are just touching the tip of the iceberg in this discussion here today, and this is going to go much further.

I have got just a crazy question, Mr. Cartmell. What do you think has taken so long for this thing to finally bubble up in Washington, DC.?

Mr. Cartmell. That is an interesting question. I think the public's perception that ICANN was a de facto organization that

was given the powers and everyone just accepted it.

Recently even Microsoft, when their DNS went out a few weeks ago, blamed ICANN for the situation, even though ICANN is not

running the route server system today.

Senator Burns. And Mr. Froomkin, with your question from Senator Boxer and the way you answered it, it boils down to who should ultimately control the route server. In your opinion, who should control that?

Mr. Fromkin. Right now, Senator, that is a terribly hard ques-

tion, of course. You asked the perfect question.

Right now, the U.S. Government has de facto control. I have to confess, and it is not politically correct to say this and my European friends do not like to hear it. At the moment, I am more comfortable with the U.S. Government, with its constitutional guarantees of due process, First Amendment rights, and fair play, than I am with some cost of international experiences.

am with some sort of international organization.

My experience with international organizations has been they are not representative. They are not democratic. Representatives of democracies have to negotiate with representatives of despots, so that although there is a great imperfection, and to some extent, understandably in the eyes of the Europeans, unfairness at having ultimate control being in the U.S., it seems to me that ultimately, in the short term at least, gives us the kind of democratic and fair play guarantees we need.

So until ICANN demonstrates that it can narrow its jurisdiction to truly technical matters, I guess I kind of like the status quo.

Senator Burns. You described somewhat of an alternative approach involving a draft system, involving numerous interest groups to create new top-level domain names. Would you recommend legislation and, if so, I guess should we be clarifying some of these ares like due process and this type of thing, and Mr. Hansen, would you like to comment on that? You have got a very positive statement on that, and maybe both of you, and anybody could comment on that.

Mr. Hansen. Well, the positive nature of my comments has to do with the open and transparent manner in which the selection process was carried out. I think that we are here today, and the question was asked why did this take so long to bubble up and become the topic of discussion here.

Well, the selection process itself, and the open and transparent manner in which it was conducted leads to public scrutiny, which I assume landed us here today, and rightly so for those with con-

cerns and questions, to hear those concerns discussed.

Senator Burns. Do you want to address the initial question of legislation?

Mr. Froomkin. Senator, I think that ICANN could choose to do it itself, in which case that would short-circuit the question, but if it did not, then I think it would be appropriate to consider legislation authorizing the appropriate rulemaking by Commerce, or whoever, to create such a system in which it would be truly international, open-ended, and let policy be made.

I mean, the critical point to satisfy international concerns is not all the choices be made in one country. You distribute the policy-making choices around the world. We make some here, they make some there, and you just keep the master list at ICANN to prevent the collisions that the technical people are worried about.

Senator Burns. Mr. Cartmell, why are you so opposed to the transfer of the authority of the route server to ICANN?

Mr. CARTMELL. I am not necessarily opposed.

Senator Burns. And what is your worst-case scenario? Give me

something that us fourth graders can understand here.

Mr. Cartmell. I am not necessarily opposed to the transfer of the route service system to ICANN. I think it is premature, the transfer to ICANN, at this time. The worst-case possible scenario is simply the Internet domain name system does not function any longer. You go to your computer and type in www some address, and it does not go anywhere. That would be the worst-case possible scenario.

Senator Burns. I have that problem now.

[Laughter.]

Senator Burns. But I do not spell too good, either.

[Laughter.]

Senator Burns. We can leave it there.

Senator Boxer, do you have any more questions?

Senator BOXER. I have so many, and I am like you, I am just sort of feeling my way.

Mr. Froomkin, on the issue of the Government taking over some more responsibilities, you have mentioned the international community. It is my understanding, and correct me if I am wrong, that the international community has stated that it would prefer an independent non-profit group to do that, and so you have sort of answered that in your first comment by saying, well, if we—the American Government—just did XY&Z, and another government did AB&C, and another did DE&F, but it is my sense that there is an expectation that we would have this non-profit, independent agency.

Am I wrong on that? Would that not cause an outcry if we, let us say, introduced legislation to take the responsibility of ICANN and take it back into the Government?

Mr. Froomkin. Senator, I was told you must never tell a Senator they are wrong.

Senator BOXER. No, I appreciate your candor, because I would be the first to tell you if I thought you were wrong.

Mr. Froomkin. This is not about the Government taking over something, because the Government has it now. It has it now, so it has got it.

Senator BOXER. But the managing of it.

Mr. Froomkin. Effectively it has the power over that, too, because it keeps ICANN on such a short leash and tells it what to do.

Now, you are absolutely correct to say that a lot of our allies have bought into the ICANN idea as a way of distancing the U.S. Government, so you have got two different tracks. One is the domestic U.S. law consequences of the jerry-rigged system they built to try to do that, and the other is, how you sort of honor—

Senator BOXER. Jerry-rigged meaning?

Mr. Froomkin. The system where Commerce enters into all these peculiar agreements with ICANN, supervises, nudges and winks, gets a letter asking—you know, it is going to get a letter in a few months saying, here are the names you would like entered in the route. It has to decide what kind of process it does, or if it just rubber-stamps. These are not under the Administrative Processes Act.

Senator BOXER. Do you think we ought to look at that? Do you think Senator Burns ought to call a hearing and look at that relationship and how it works?

Mr. Froomkin. I do.

Senator BOXER. So to make it more transparent, to make it more transparent?

Mr. Fromkin. That was really the point of my statement.

Senator Burns. Mr. Hansen, do you want to comment on that? Mr. Hansen. Yes. Let me just make a statement concerning whether legislation is required. I believe legislation at this point would be a mistake.

Senator BOXER. I did not say a legislation. I said a hearing to

look at the relationship, but go ahead.

Mr. HANSEN. Well, I am certainly in favor of hearings, and today's hearing has already, I am sure, enlightened a number of people concerning the issues, but the ICANN itself, as Mike Roberts pointed out earlier, is somewhat of an experiment. It is a 14month-old experiment.

There have been significant accomplishments, I think more good done than harm done by ICANN in the 14 months it has been operational, things like the UDRP for dispute resolution, the introduction of competition for registrars. It is new, so it has not been perfect. It needs to be given an opportunity to work, and hearings like this one and other oversight hearings are the appropriate mechanism to support the continued internationalization of the Internet and the continued support for grassroots consensus policymaking and operation of the DNS.

Senator Burns. I think I agree with that statement in some areas, because when we start dealing with legislation on this thing it has been the result of the past. We have not helped the situation for it to grow and to let it become an even larger part of our life than it already is. I have got a couple of other questions.

I think we are going to have another hearing on this, because there are questions out there yet, and once we have gone through your information and the testimony that we have heard here today—I am concerned about redress and due process. I am concerned, and I want to go through this MOU so that I am a little more enlightened on the situation between Commerce, and was that transfer made? Was it made legal?

Maybe we might do it that way, not necessarily getting into the operation of ICANN, but let us make sure that the parties understand that it is laid out a little bit better where there is due process and some of those things I think are important in the business world. Before the technology can reach its full potential, I think the users have to be confident that they are being protected.

Mr. Cochetti, you had a comment?

Mr. COCHETTI. Thank you, Mr. Chairman. I did want to lend one comment to the discussion that took place a moment ago, which is to say that as I indicated in my testimony we view ICANN as an experiment that is in its early stages. We have taken no issue with the procedures used by the Commerce Department. They were investigated by the GAO. We found nothing constitutionally wrong with them.

On the other hand, a great deal depends on how the organization develops, and we are at such an early stage in sort of evaluating that that we find it very difficult to say conclusively it has been a success or it has been a failure. A lot depends on how this organization evolves over time.

Thank you.

Senator Burns. Any other comments?

Senator BOXER. Yes. I just want to make a couple of closing comments. I again want to thank you. This is a learning experience for some of us, and I have learned a lot.

Mr. Chairman, I would like to tell you just a couple of things that I hope you can continue to lead us on. One is the relationship between Commerce and ICANN. I think it would be good. I do not know much about how it actually works.

I think it would be helpful—I am a believer, and I know you are, in transparency and openness, and I have some concerns about that, and there may be some reasons why we may not be seeing this openness, or maybe those claims that it is closed are exaggerated. I think I need to know more. I cannot make a conclusion.

I continue to be concerned about the ability to protect identities and to protect intellectual property rights. I do not want to do a thing that is going to in any way dampen this whole arena, because sometimes we put our hands on it and stifle it, and that is certainly not what I want, nor is it what my people in California want. I think I need to know more, so I want to just close by thanking you for this. You can see by the attendance it is not an area that people say, this is the most exciting thing we have ever dealt with, but in essence, it is the future.

I also wanted to say thank you for your choice of witnesses, because I think every one of them has really added on both sides. I look forward to future hearings and getting to be a little more knowledgeable so I can be more helpful than I can be at this point.

Senator Burns. Well, I think you are exactly right, it is a continuing education, and I wish I had had the opportunity to visit with John Postale, who was really the man with the vision, I think, of what he wanted to happen, and I wish I had had that opportunity. We do not, however, as he has gone to a bigger Internet, so to speak.

I want to thank you for the expertise you have brought to the table. We are going to continue to interact with you as we have questions. I know we will have some more, and we are going to leave the record open for a couple more weeks if you have comments that you have heard here that you want to comment on to enlighten us, because we are looking for information, and we know that there are some serious doubts out there and, like I say, oversight is to bring problems to the table and solve those problems before they become so large and impossible that we cannot solve them.

So I appreciate that very much. This afternoon at 5 p.m. you are all invited to the Internet Caucus under Senator Leahy, and we will welcome the new Chairman of the FCC this afternoon. He will speak around 5:30. That is up in Hart 902, upstairs, those of you who would want to, and that is a very active caucus, by the way, and I am glad we have enjoyed the leadership of Senator Leahy and several other folks here in the Senate, and that was put together for continuing education on the things that are happening on the Internet, and items just such as this that I think are terribly important to the American people.

So thank you again, and this hearing is closed.

[Whereupon, at 11:25 a.m., the hearing was adjourned.]

APPENDIX

PREPARED STATEMENT OF ELANA BROITMAN, DIRECTOR, POLICY AND PUBLIC AFFAIRS, REGISTER.COM

INTRODUCTION

Mr. Chairman, Members of the Committee, Thank you for inviting me to appear before you today. I commend the Committee for holding this hearing. Your role is important to continuing the stability and innovative growth of the Internet.

I am here representing register.com, an equity partner in RegistryPro. RegistryPro, as you know, is one of the new registries that was selected by the Internet Corporation for Assigned Names and Numbers (ICANN) to operate a new global Top Level Domain (TLD). RegistryPro is a new company formed by register.com, one of the leading registrars on the Internet today, and Virtual Internet Ltd. a top European registrar.

I am here to provide the perspective of a company that was awarded a new TLD, pro. Building on the restricted model of .gov, .edu, and .mil, the .pro TLD focuses on professional registrants—such as doctors, lawyers, and accountants. I can also offer the perspective of a registrar. Based on our 2 years' experience, register.com believes consumers will benefit significantly from the introduction of new TLDs.

INDUSTRY OVERVIEW

To fully answer the question about the new TLDs, please allow me to briefly review the structure and growth of the domain name market.

Securing a domain name, or Internet address, is the first and fundamental step for businesses, individuals, and organizations that are building a presence on the web. Before setting up a website or launching e-commerce, a consumer contacts a registrar, such as register.com, to secure a domain name, such as www.house.gov. Registrars maintain contact with the consumer, invoice the customer, handle all customer services, and act as the technical interface to the registry on behalf of the customer.

A registry, such as VeriSign Global Registry Services for .com, .net and .org, maintains the list of available domain names within its TLD and allocates those names on a first-come, first-served basis. Registrars get the domain names for the consumer by purchasing them from the registry that manages that TLD.

sumer by purchasing them from the registry that manages that TLD.

As this Committee knows, the Internet, and the domain name market in particular, has grown and expanded at a rapid pace. From 1993 to as recently as 2 years ago, a single company, Network Solutions ("NSI"), today owned by VeriSign, was both the only registry and the sole registrar for .com, .net, and .org TLDs. Presently, these TLDs are the only globally available generic domain addresses.

In determining the best manner to introduce competition and courses the description.

In determining the best manner to introduce competition and oversee the domain name system, the Department of Commerce called for the creation of a not-for-profit corporation ICANN was recognized to fill that role

corporation. ICANN was recognized to fill that role.

To introduce competition, ICANN has taken two major steps. First in April 1999, ICANN launched a test bed of five registrars. Register.com was the first registrar to go "live" and register .com, .net, and .org names. Although NETWORK SOLUTIONS remained the sole registry for the com, .net, and .org TLDs, today there are over 140 accredited registrars. Consumers have benefited from the competition in prices and services.

In November 2000, ICANN took the second step toward competition by approving the introduction of seven new global TLDs to generate competition in the registry business. RegistryPro was selected to manage the .pro TLD, which is restricted to the professional business sector. Other new TLDs include unrestricted, personal, and non-profit domain name sectors.

¹A TLD is the domain name address, such as .com, .net, and .org. The new TLDs would be .pro, .info, .biz, .name, .aero, .museum, and .coop.

The domain name market has grown to about 29 million .com, .net, and .org domain names, and growth has increased dramatically since the days that Network Solutions was the sole registrar, from 8-9 million in 1999, to more than 20 million in 2000, the first full year of competition. This market is projected to grow to over 140 million registrations over the next 4 years. This growth is fundamental not only to the health and competitiveness of the registrar business community, but the introduction of new TLDs will also expand the opportunity for other Internet-related businesses.

COMPETITION AMONG REGISTRIES

This Committee has endorsed competition in this sector, knowing that it would deliver value to consumers. It has been proven right. Competition among registrars has improved technology and customer support, introduced price competition, and fostered innovative new products to better serve the needs of domain name holders and Internet businesses.

Competition among registries will similarly deliver value. First, consumers will have a choice among competitive TLDs and registries, leading to improved services. For example, alternative registries may accelerate the launch of websites and make them more secure. Second, consumers can register for the web address of their choice, as the best addresses, in many cases, are already taken in the .com, .net and .org TLDs. Third, consumers will be able to distinguish their web address based on the TLD they chose—we believe, for example, lawyers would prefer .law.pro and accountants, .cpa.pro.

Conversely, delay in launching new TLDs serves to protect the sole global TLD registry and deny consumer choice.

DO NOT DELAY LAUNCH OF NEW TLDS

While registry competition will not exist until these new TLDs are operational, this will take months of preparation and significant resources. Substantial technological facilities must be built, engineering protocols and software applications written and tested, and highly skilled personnel located and retained. In fact, substantial resources have already been spent and committed—both during the application process and since then.

Not only is competition going to improve the registry sector, it is fundamental to future innovation. New technology is on its way—if new registries are not introduced rapidly, there will be only one company in a position to operate the new technologies and determine the course of their evolution. For example, VeriSign launched the worldwide test beds with respect to two recent developments—multilingual domain names, and eNUM, a convergence of telephony and domain names. There were no other competitive registries in place to create an alternative environment

Moving expeditiously to add these new TLDs to the domain name system is critical.

REGISTRYPRO'S EXPERIENCE WITH THE PROCESS

As for the process, we believe it achieved the fundamental goals of determining whether an applicant had what it takes to run a successful TLD, and balancing the interest in new TLDs with the imperative to preserve the stability of the Internet.

While notice of its plans to authorize competitor registries has been publicly available for about 2 years, ICANN posted a set of criteria for assessing new TLD proposals on August 15, 2000:

1. The need to maintain the Internet's stability. ICANN analyzed: (a) the prospects for the continued and unimpaired operation of the TLD; (b) provisions to minimize unscheduled outages due to technical failures or malicious activity of others; (c) provisions to ensure consistent compliance with technical requirements; (d) the effect of the new TLD on the operation of the DNS and the root-server system; (e) measures to promote rapid correction of potential technical difficulties; (f) the protection of domain name holders from the effects of registry or registration system failure; and (g) provisions for orderly and reliable assignment of domain names during the initial period of TLD operation.

2. The extent to which selection of the proposal would lead to an effective "proof of concept" concerning the introduction of top-level domains in the future. Proposals were to be examined for their ability to promote effective evaluation of: (a) the feasibility and utility of different types of new TLDs; (b) the effectiveness of different procedures for launching new TLDs; (c) different policies under which the TLDs can be administered in the longer term, different operational models for the registry and registrar functions; (d) different business and economic models under which TLDs

can be operated; (e) the market demand for different types of TLDs and DNS services; and (f) different institutional structures for the formulation of registration and operation policies within the TLD.

3. The enhancement of competition for registration services. ICANN noted that though the market will be the ultimate arbiter of competitive merit, the proposals were to be evaluated with regard to whether they enhanced the general goal of com-

petition at both the registry and registrar levels.

4. The enhancement of the utility of DNS. Under this factor, TLDs were to be evaluated as to whether they added to the existing DNS hierarchy without adding confusion. For example does the TLD's name suggest its purpose, or in the case of a restricted TLD, would the restriction assist users in remembering or locating domain names within the TLD?

5. The extent to which the proposal would meet previously unmet needs. Close examination was to be given to whether submitted proposals exhibit a well-conceived plan, backed by sufficient resources, to meet presently unmet needs of the Internet community.

6. The extent to which the proposal would enhance the diversity of the DNS and of registration services generally.
7. The evaluation of delegation of policy-formulation functions for special-purpose

TLDs to appropriate organizations.

8. Appropriate protections of rights of others in connection with the operation of the TLD. The types of protections that an application was to address included: (a) A plan for allocation of names during the startup phase of the TLD; (b) A reasonably accessible and efficient mechanism for resolving domain-name disputes; (c) Intellectual property or other protections for third-party interests; (d) Adequate provision for Whois service that balances personal privacy and public access to information regarding domain-name registrations; and (e) Policies to discourage abusive registration practices.

REGISTRYPRO MET ICANN REQUIREMENTS

We worked hard to meet these requirements. We prepared a detailed description of innovative state-of-the-art technology, which would enhance the usefulness and dependability of the .pro websites. The RegistryPro technology would: Allow for near real time posting of websites (as opposed to today's 48-hour waiting period); Diminish the potential for system crashes; Protect consumers against potential registrar failures; and Provide better tools to protect against potential cyber squatters or pro-

We proposed an innovative TLD that would add diversity to the current domain name space and address the needs of the marketplace. Based on our surveys of consumers and professionals, we determined that consumers were looking for a trusted way to identify professionals on the Internet, and professionals would be more in-

clined to register domain names if they had a designated address.

In devising that trusted addressing system, we have reached out to professional associations, to work out the mechanisms for verifying professional credentials.

We also outlined a set of policies to address the needs of various constituencies. We also outlined a set of policies to address the needs of various constituencies. We balanced intellectual property protections, which earned us one of the highest ratings by the intellectual property constituency, with personal privacy concerns. We also guaranteed a level playing field for all accredited registrars.

We invested hundreds of thousands of dollars—including in market research, legal drafting, and financial analysis—to prepare the application. The build out and operation of a stable and secure registry requires a commitment of millions more. We believe that our application, like others, received substantial scrutiny—by the independent panels of international experts in technology, law and finance; by ICANN staff by the public during several public comment periods; and ultimately

ICANN staff, by the public during several public comment periods; and ultimately by significant independent deliberation by the ICANN Board. There was an opportunity for applicants to clarify their documents, on the public record. While no process is perfect, we believe a genuine effort was made by ICANN to provide notice, transparency and due process.

ULTIMATE GOAL ACCOMPLISHED

ICANN accomplished the ultimate goal of launching new global TLDs while protecting the security of the Internet. These new TLDs offer a variety of business models and domain name addresses-from generic to non-profit. Incremental growth will protect stability and pave the way for future development.

As the Chairman had noted in the last hearing on this topic, ICANN is responsible for introducing competition into the registration of domain names. We hope that the Committee's conclusion today is an endorsement of an expeditious launch of these new TLDs, so that consumers can benefit from the resulting innovation and the availability of new domain names.

Mr. Chairman, Members of the Committee—it has been my pleasure to testify today. Thank you for the opportunity.

REGISTRYPRO, Feb. 16, 2001.

Hon. BARBARA BOXER,

Hart Senate Office Building, Washington, DC

Dear SENATOR BOXER, Please allow us to congratulate you on your joining the Senate Communications Subcommittee and to commend you on the Subcommittee's informative hearing on ICANN Governance on February 14, 2001.

Among your remarks and questions at the hearing, you made some very astute observations regarding protection of intellectual property rights (IPR) by the new registries. We appreciate your citing .pro, the top level domain awarded to RegistryPro, as a positive example of IPR protection and wanted to supplement your remarks on this issue.

RegistryPro's mission is to create a reliable, sustainable registry for professionals, such as doctors, accountants, and lawyers. With the proliferation of Internet usage, consumers are experiencing increasing levels of uncertainty on the Internet, particularly in searching for legitimate professional sites. By coupling concrete registration qualifications with authentication, and working with professional associations, RegistryPro would establish a verifiable global directory on professional websites. In addition, RegistryPro will focus on providing reliable and robust technology, which will not only improve the service available via .pro, but also raise the standards of reliability, responsiveness and world-class intellectual property protections for all registries.

For further detail regarding intellectual property policies in the .pro domain, we respectfully request that you would insert in the record a description of RegistryPro's IPR protection policies.

Please let us know if we can provide you or your staff with any additional information or clarification about RegistryPro and the pro top level domain.

Best regards,

ELANA BROITMAN.

REGISTRYPRO'S INTELLECTUAL PROPERTY PROTECTIONS

RegistryPro is committed to protecting intellectual property rights.

Restricted Class. By its very nature, .pro will provide fewer opportunities for cyber-squatting.

First, it would be restricted, and thus impose an additional screen against potential cyber-squatters.

Second, a significant percentage of .pro websites would be used by professional individuals, who do not trademark their names.

Third, the target business sector is a trusted professional class, members of which are subject to professional ethics standards and are far less likely to engage in cyber-squatting, particularly as they would not want to compromise their professional relationships and reputations.

UDRP. The Uniform Dispute Resolution Policy (UDRP) will fully apply to this registry and registrars will have to comply with the UDRP and all applicable laws of their respective jurisdictions.

Sunrise Protection. RegistryPro adopted the IP Constituency's proposal for a sunrise period. Holders of trademarks and service marks having been registered prior to the creation of .pro will be able to pre-register their marks as a domain name in the .pro suffix.

Moreover, the requirement that the sunrise registrants also qualify as professionals would further screen out cyber-squatters.

The registry would set up an enforcement mechanism to ensure that the pre-registration period is used only for trademark protection: Registrants would be required to provide the registration number, date, and jurisdiction for their trade or service mark. In order to limit cyber-squatters and any abuse of this sunrise period, there will be an opportunity to challenge the registrations through the UDRP.

Centralized WHOIS. Additionally, the complete domain name records of all .pro registrants will be housed at the registry level, rather than scattered among various

registrants, as is the case today in .com. IPR owners could turn to a single place

to police and protect their rights.

Enhanced Searchability. To support intellectual property holders' ability to defend their rights, RegistryPro would build the capability to make certain information accessible via searches by appropriate parties. At the same time, the registry must respect the different jurisdictions' laws and regulations, such as those protecting data privacy. Therefore, the search capability would be focused to accommodate legitimate interests, such of intellectual property holders and law enforcement, while protecting consumers from misuse of their data.

protecting consumers from misuse of their data.

Best Practices for Registrars. RegistryPro would require all registrars to agree to the registry policies and to comply with ICANN policies in order to participate in the .pro TLD. Compliance with the terms and conditions of the registry-registrar agreement will be enforced via a trusted independent arbitration mechanism, including the providers approved to provide UDRP services.

PREPARED STATEMENT OF LEAH GALLEGOS, PRESIDENT. ATLANTICROOT NETWORK, INC.

SUMMARY OF TESTIMONY

The public has demanded, and the government has recognized, the need for more Top Level Domains (TLDs) to be entered into the USG root that is controlled by the Department of Commerce (DoC). ICANN has been tasked with determining which TLDs should be chosen. Unfortunately, their process for making the determination has been discriminatory and damaging to our small business that is dependent upon domain name registrations in our TLD. ICANN's apparent choice is BIZ TLD, thus duplicating it and creating chaos. ICANN refuses to acknowledge any entity outside its own framework, creating a platform from which to rule the Internet and crush a free market industry in its infancy. If ICANN succeeds now, it portends the destruction of more such businesses in the future.
In addition, ICANN has ventured well beyond its scope of a technical administra-

tion body for the DNS and has attempted to become a world governing body for the

Internet.

MAIN POINTS OF TESTIMONY

1. ICANN fails to acknowledge legitimate businesses of TLDs and root systems existing outside its framework.

a. They claim separate name space when DNS is ONE name space, and use it as an excuse to usurp our product.

- 2. ICANN has chosen to co-opt our product and award it to a competitor.
 3. ICANN ignored dot BIZ while recognizing the pre-existence of dot WEB.
 4. ICANN's application process discriminates against small business and non-profits.
- 5. ICANN's duplication of pre-existing TLDs now will open the door to do even more harm to business.
 6. ICANN has violated its agreement with the government that mandates they

will not do harm to existing entities.

7. ICANN's Board of Directors still consists mainly of the original interim Board which was to have been replaced by an elected Board within months of its creation.

8. ICANN is supposed to be a bottom-up, open and transparent organization. It is not. The evaluation of applications for new TLDs is a prime example.

TESTIMONY

My name is Leah Gallegos, President of AtlanticRoot Network, Inc. (ARNI) The BIZ TLD Registry is an entity of AtlanticRoot Network, Inc. I am the manager of the dot BIZ TLD. This Top Level Domain resolves in several of the "inclusive name space" roots, which many people refer to as alternative or alternate roots. The inclusive name space roots are root server systems that operate in the same manner, but independently of the DoC root system (the "USG" root hereinafter). They each have a master root server and a group of slave servers which obtain Information from their master. Each root also includes all the TLDs found in the USG root for the benefit of users and also additional TLDs. Users have the choice of "pointing" their computers to any of the roots, and Internet Service Providers (ISPs) have the same choice. There has been dramatic growth in the number of ISPs and users pointing to the inclusive name space roots in order to see the rest of the Internet. (See Exhibit C, Page 8 of this document)

As a citizen of this country, I am fortunate to be able to defend my right to have a small business and to not have my product taken away from me arbitrarily by a covetous entity under agreement with the government. I thank this Subcommittee for providing a forum to present our reasons for believing that ICANN's process for selecting new TLDs to enter into the USG root is detrimental to our survival and

to the continued survival of all the TLDs outside the auspices of ICANN.

ICANN has selected seven TLD strings to enter into the USG root that is controlled by the Department of Commerce. The process used for this selection was ill advised, badly handled and ignored the very premise for which ICANN was established.

lished—to preserve the stability of the Internet and do no harm to existing entities. How can fair competition be accomplished with ICANN's co-opting of dot BIZ from ARNI, thus "taking away" its product? Under ICANN's policy, a competitor can pay a \$50,000 fee to have ICANN "take away" our business, or any other, at their whim.

As I said earlier, ARNI is a small company. Our entire business at this time is based upon domain name registrations. With the announcement by ICANN that dot BIZ was to be handed over to JVTeam, e-mail began pouring in asking if we were going to be closed by ICANN or if ICANN was going to take our TLD. Others asked if there were going to be duplicates of each name and who would be the legitimate registrants. Even more asked if their names would even resolve if ICANN "took" the TLD. The public has indicated that they are afraid now to register names with us and we are losing business merely on the mistaken assumption that ICANN has the

right to take it from us.

Why didn't we opt for the \$50,000 application to be included in the ICANN proc-

the same of the sa refundable fee. \$50,000 could be much better spent on development and infrastructure as opposed to a lottery—worse than a lottery. There was bias with this one. It is obvious that the large dollar monopolies were favored. In fact, they are the ones who were selected. CORE, NEUSTAR, MELBOURNE IT, AFILIAS. We would not have had a chance.

As it turned out, several Board members recused themselves, leaving less than the required number to legitimately vote on this issue. The remaining members

voted anyway.

It is also interesting to note that the Board members (except one) waited for this recusal until after the deliberations had been made regarding qualifications, business models, etc. They had definite conflicts of interest, yet they stayed in a position to render opinions on which applicants would "make the cut." Dr. Cerf stated in testimony given at the recent House Telecommunications Subcommittee hearing that the recusals were based on "thin" criteria. This is not the case. Some Board members had been involved in the preparation of applications for TLDs, or were involved with the companies making application. That is a direct conflict of interest. Those Board members should have recused themselves from the selection process before it began, that is, before selection criteria were decided and before selection made. As it stands now, new gTLDs have been awarded to companies in which ICANN Board and DNSO members are involved. These persons are giving business to them-

selves, while taking away mine.

2. Why should we have to apply to keep a business that is already ours? It was well known that the Board considers our registrants to be illegitimate and registrations to be pre-registrations even though they are live registrations, many with published commercial websites. The comments made by Esther Dyson and others at past meetings and interviews made that very clear. At the Yokohama and MDR meetings are projections were proved correct and emphasized by Mr. Krasijanbrijak meetings, our projections were proven correct and emphasized by Mr. Kraaijanbrink and Mr. Fitzsimmons, especially, and by other members in general (see quotes from MDR transcript later in this document). Dr. Cerf also made it clear in his testimony that ICANN does not feel responsible for duplication of TLD strings in the name space and that they are concerned only with the USG root. ICANN is, therefore, setting a precedent for harming any business using any TLD strings outside that one root. The result of this attitude will be chaos in the DNS. It is obvious that the in-

tent is to control the world's Internet communications medium.

Additionally, ICANN's processes, policymaking and lack of cooperation with the rest of the world has resulted in its alienating many countries to the point where further fragmenting of the Internet is plausible and even likely. China is furious because ICANN's contracted registry-Network Solutions, Inc.-has claimed authority over the Chinese-language name space, and as a result mainland China has formed a partnership with Taiwan (a first!) to oppose ICANN & NSI, and is threatening to form its own root. (See http://www.Cookreport.com). On November 17 in an article headlined "Beijing Moves to Control Domain Names," (http://www.techweb.com/wire/story/reuters/REU20001117S0001) CMP Tech Web reported: "The Chinese government has mandated that only a handful of domestic companies may assign Chinese-language Internet addresses, striking a blow to the registration service launched last week by VeriSign.

Likewise, some ccTLDs that have been treated unfairly, like .cx (ICANN refuses to change the .cx name servers to the new ones run by the current registry) (http:/

/australianit.news.com.au/common/storyPage/0,3811,1589302

percent5e1285,00.html), are being forced to think of operating outside the ICANN

'monopoly root.

An independent, legitimate, and existing registry such as ARNI's and others saw no reason to apply to ICANN for "permission" to participate in the process of a coordinating body that does not have the authority to determine the legitimacy of a registry by virtue of acknowledging it. We (ARNI) already existed as a legitimate commercial registry under our own legitimate terms and conditions and were supported by a commercial root system that supported our TLDs globally, making these TLDs universally available to anyone on the Internet. We are a private, commercial entity and are only asking that we be respected as such. We are provided resolution by a commercial network offering root-level services to the global community univerone of the owners of the Internet to engage in its commercial operations—operations that predate the existence of ICANN by more than a decade.

3. There was no need to go through the ICANN process to prove what has already

been proven, that the registries are open to the public, they work, and the roots that

do recognize them have also proven themselves for well over 5 years.

4. Just as visible was the obvious lack of understanding of the basis for adding new TLDs and the content of the applications themselves. ICANN continues to claim that they have the consensus of the Internet community. This claim was repeated by Dr. Cerf in his testimony at the House Telecommunications Sub-committee. If that community consists mainly of the special interests—mega corporations and monopolies in the domain name business, and excludes the users, then they are correct. If that community is supposed to include ALL the stake-

holders, then they do not have consensus at all.

And last, the new at-large directors had no input in the selection of these TLDs. This is important since those directors are inclined to be more objective and are more concerned with domain name holders and small businesses. If they were included, we might have seen something closer to consensus. ICANN pressed the timetable for introducing the new TLDs so that the elected Board members would have no voice in those deliberations. Karl Auerbach stated quite adamantly that had he been involved those deliberations, and there were a conflict between two TLD claimants, that "first demonstrated use on the Internet would prevail." (See video segment from the plenary meeting at MDR, November 15, 2000, first 3 minutes (http://cyber.law.harvard.edu/scripts/

rammaker.asp?s=cyber&dir=icann&file=icann-111500&start=10-31-30).

This Board member also uses the inclusive name space roots and has advocated

It is crucial to understand, at this point, just what the status of ICANN is versus the rest of the Internet with regard to TLDs. ICANN, at the direction of DoC, is tasked with monitoring three TLDs at present—dot com, dot net and dot org. They are under an agreement with the government to make recommendations to the root manager, the Department of Commerce, regarding the entry of new TLDs to the

By comparison, ARNI is the manager of some TLDs (including dot BIZ) that are homed in an inclusive name space (or alternative) root managed by another entity. The inclusive name space roots were first facilitated by IANA. If ARNI wishes to enter more TLDs into that root, then it must petition that root manager. If there are no conflicts (pre-existing TLDs) and technical standards have been met, the root manager will then most likely enter the requested new ones. Both the root manager(s) and the TLD operators cooperate in determining the existence of any conflicting TLD strings. A prime factor in the DNS is avoidance of collisions. If the requested TLD string is found to exist in another root, then the prospective TLD manager could negotiate with the existing one or withdraw the request. Often, the root manager(s) will assist in facilitating potential negotiations. There is no charge to the potential TLD operator to make this determination. With the WHEREIS TLD Finder tool, it is not difficult to ascertain whether there are conflicts with a new TLD request. This tool can be found at http://www.pccf.net/cgi-bin/root-servers/whereis-tld. Requests for the entry of new TLDs are accepted on a first-come, first-served

In addition to the DoC TLDs that ICANN monitors, there are in excess of 240 ccTLDs that are included in the root, but managed by other entities and under dif-

In other roots, there are TLDs included which are not homed in those roots, but included in order to allow users to see all known, non-colliding TLDs. Therefore, ICANN could, and should, do the same thing and include all existing non-colliding TLDs for the benefit of users worldwide and still add new ones that could be included under their specific management. Technically, it is a simple task that has been proven with the addition of the ccTLDs in the USG root and over 150 TLDs

in the inclusive name space roots. There is absolutely no need to duplicate, and in fact, compelling reason not to duplicate what is already in place.

The dot BIZ TLD was created in 1995 and resolved in the eDNS and later in ORSC the (Open Root Server Confederation) and PacificRoot. We are recognized in all the major roots, except, of course, the USG root. We were delegated the management of dot BIZ in 2000 and re-opened for public registration in the spring. We had an automated registration system in beta at that time, but were able to provide registrations manually until the launch of the automated web-based system. That system was publicly launched in October. Registrations increased from a few hundred to over 3,000. Total registrations in the TLDs serviced by the registration system have topped 10,500 since that launch. The re-delegation was made and the registry was open well prior to any announcement of applications for the character string (BIZ) with ICANN. Again, dot BIZ has been in existence at least as long as dot WEB.

The moment the applications to ICANN were lodged, we e-mailed every applicant for our string and notified them, using the contacts listed on the ICANN website, that dot BIZ already existed and asked why they would choose an existing TLD. We also posted numerous comments on the ICANN Board, since they would accept no communication in another form regarding TLDs. We also posted to many public mail lists questioning why ICANN would consider duplicating existing TLDs, especially dot BIZ. We received no responses from anyone. We were ignored by all recipirate.

ARNI was doing just fine with dot BIZ registrations prior to the selection process for new TLDs by ICANN. There were no conflicts. We are now faced with a substantial loss due to ICANN's refusal to recognize that we exist. It is baffling because they obviously recognize that IOD's dot WEB exists and decided not to award that string to Afilias as a result. Current Chairman Vint Cerf stated his discomfort and reaffirmed later saying, "I continue to harbor some concern and discomfort with assigning dot web to Afilias, notwithstanding the market analysis that they did, which I internally understand and appreciate. I would be personally a lot more comfortable if we were to select a different string for them and to reserve dot web." (See Appendix A, 2:17). Without his intervention, the Board would have handed dot WEB over to IOD's competitor, Afilias, another 900-pound gorilla, and IOD would be making the same arguments I am making today. The Board did "the right" thing with dot WEB, but has ignored dot BIZ.

The video clip maintained at the Berkman Center (http://cyber.law.harvard.edu/ scripts/rammaker.asp?s=cyber&dir=icann&file=icann-111600&start-6-16-00) clearly illustrates the reluctance of Vint Cerf to award the TLD to any entity other than its current operator. It also illustrates the unreasonable attitude typical of most of the Board to deliberately ignore any entity that is not within the ICANN framework. The video would be entertaining if it were not so important an issue at stake. In that sense, it is rather sad, and very frustrating to hear the ping-pong ball going

back and forth with people's futures at stake. Why, then, has ICANN decided that it would not take away IOD's dot WEB, but would do so with our dot BIZ?

Mr. Kraaijanbrink's outburst (Exhibit A 3:3): "Well, I would not. I believe that we have discussed them considerably. The Afilias on .web. And, from their proposal, and from the discussions, I believe that we should award dot web KNOWING that IOD has been in operation as an alternative root with dot web for some time. But I am reminded, and I fully support what Frank Fitzsimmons said a few minutes ago that taking account of alternatives should open an unwanted root to pre-registration of domain names and domains. So I am fully aware of what I am doing

in voting in support for Afilias dot web.'

Note that this Board member refuses to recognize not only the legitimacy of IOD's TLD registry, but even considers their registrants to be illegitimate, calling them pre-registrations. There are no pre-registrations in any of our TLDs or in IOD's dot WEB. They are live and resolve. It is this very attitude that has prevailed throughout ICANN's deliberations and decisions regarding the selection and adoption of new TLDs. It is also due to this posture that ICANN will irreparably harm our business and that of any other TLD operator whose product it chooses to "take away." At these meetings in Marina del Ray, while attending via webcast, I posted questions to the ICANN Board of Directors, raising the issue of duplication and was ignored, even though one of the questions was read aloud to them. At the Board meeting, the issue was never addressed at all. I did receive an acknowledgment from Board member, Vint Cerf, saying he would pass the message along. Others had been faxing him regarding this issue steadily during those meetings. If they did not "know" that dot BIZ existed, even after the postings and email, something is wrong. They are supposed to "coordinate technical parameters" and they haven't even found the technical parameters yet.

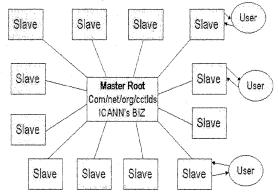
It is important to note that while ICANN insists that it has its name space and we all have ours, that there is truly only ONE name space and that we all must work within it. This has always been the prime directive for stability of the Internet. Dr. Cerf has made mention of this aspect of the DNS. In fact, he made a point of it in his testimony on February 8, 2001. Unfortunately, he reversed it to sound as though it is we who will cause this collision, rather than ICANN/DoC. Dot BIZ has been in existence for many years. It is ICANN who will cause the duplication and threaten stability. If ICANN is successful in duplicating a TLD string in its root, there will be duplicate domain names—many thousands of them. No one will know which they will see when keying an address into a browser because more and more ISPs are choosing to point to inclusive name space roots. Hundreds of thousands of users will be affected. One TLD operator has indicated an increase of 30 percent per month in the use of one of his servers, which happens to be one of the ORSC root servers.

EXHIBIT C—ATLANTICROOT NETWORK, INC.

The DoC root is just one root system. Others are in service and have been for many years. Any user, including ISPs can, and do, point to whichever root they desire. All roots include the TLDs found in the DoC root plus additional non-colliding TLDs. Now, however, we are faced with a collision in THE name space—ICANN's duplicate dot BIZ.

Root Server System - DoC

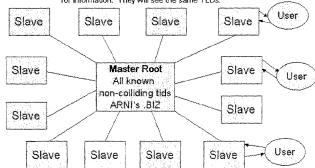
Each slave server obtains updated information from the master



Root Server System Number Two

Provides the same information as the ICANN Root + MORE

It does not matter which inclusive name space system a user (ISP or end user) selects for information. They will see the same TLDs.



The problem here is that now there is a collider - ICANN has a different dot BIZ

The choice to point elsewhere could be compared to a choice of television cable and satellite companies. Each company offers essentially the same basic channels, but some offer many more. Users have a choice of a variety of cable companies and satellite dishes. It is their best interests to offer as much as possible.

The major difference is that with the Internet there are no spectrum limitations. Users and ISPs have the choice to point anywhere in the world where there is connectivity.

If DoC enters a duplicate dot BIZ into their root, users will not know which version they will see, since ISPs may be pointing to any of them. Only the DoC root will be different. Users are confused, businesses harmed.

With a distributed system of several roots, there is no single point of failure. An entire system could be destroyed and the Internet would still be live.

ICANN's refusal to respect our presence in a free market is harming our business and depriving users of their choice of vendors in addition to causing mass confusion. The "taking away" of our business product offends the MOU signed by ICANN and the DoC. This precedent threatens to harm all other TLD operators in the inclusive name space and associated businesses owned by domain name holders within those TLDs. At present there are over 150 TLDs and thousands of domain names registered. Hundreds of thousands of dollars have been invested in networks and registry systems. As the accredited registrar for dot BIZ, PacificRoot has invested over \$200,000 and continues to invest in upgrades and scaling.

As an analogy, consider what would happen if AT&T summarily took New York's 212 number space away from Verizon. That would be considered an anti-competitive move, putting Verizon out of business. Certainly no one would consider suggesting that AT&T and Verizon issue mirror 212 phone numbers to different customers. The phone system wouldn't work! It would be just as foolish to suggest that ICANN and AtlanticRoot issue mirror dot BIZ names to different customers.

How can this not harm us? Our TLD has been in existence for over 5 years. Our registrants have e-commerce businesses operating using dot BIZ domains. We have over 3,000 registrants and growing daily, albeit at a much slower pace due to the confusion generated by ICANN. Those businesses will be destroyed because of the fracture ICANN will cause with this duplication. In addition, if ICANN is allowed to "take away" our business product now, what will happen to all the other TLDs when ICANN decides to add more in the future? We will then be talking about hundreds of thousands of domain name holders and thousands of businesses and organizations being disenfranchised—ruined.

Why do the inclusive name space roots not duplicate dot com, net or org? They could. They do not for a couple of reasons. One is that it is understood that duplication in the name space is not in the best interests of the Internet or its users. As a matter of fact doing so is detrimental. It is a cooperative effort to keep the name space uniform and consistent. The second is that they all recognize the prior existence of the USG and ccTLDs and include them in their roots. So why is ICANN doing the opposite? It is quite deliberate, as is noted in Mr. Kraaijenbrink's outburst at MDR.

If there were over one hundred TLDs available to the public and included in the USG root, we would see not only a competitive free market, but the disappearance of many of the disputes and speculation present today. The so-called scarcity of domain names has been created by the delay in entering more TLDs into the USG root. The simplest solution is to recognize the existing TLDs before entering new ones. There is no reason why there cannot be new TLDs added to the roots, but there is ample reason not to duplicate existing ones. It is not a function of the government to deliberately destroy existing businesses, nor is it a function of ICANN to facilitate that destruction. It is also not a function of ICANN to determine what business models should be allowed to exist or to compete, any more than any other root dictates policies of TLD managers, or indeed, other roots. The market will decide which will succeed and which will fail.

ICANN has overstepped its mandate in determining subjectively which business

models and character strings are worthy of inclusion in their root. They are supposed to be a technical body, not a policymaker for the world's Internet.

The Internet is almost entirely a private commercial operation, owned by private companies such as The PacificRoot, SPRINT, Verizon, WorldCom, Qwest, Verio, etc., traffic is permitted to traverse from one network to the next by contractual agreements, and traffic is prevented from passing through our networks if those entities ments, and traffic is prevented from passing through our networks it those enquies don't like it—for a myriad of reasons. The Internet is not publicly owned or controlled. What little and relatively insignificant portions (percentage wise) of the Internet are government controlled are primarily dedicated to public services such as libraries, public schools, or archives, and of course MILnet functions that are really better defined as Intranets with gateways to the Internet. There are other government owned sections too, but almost without exception, those government controlled sections are using privately owned infrastructure belonging to private sector entities like The PacificRoot, Verizon, UUnet, etc., and almost without exception, these government-controlled portions must pay for, and have permission (implied. these government-controlled portions must pay for, and have permission (implied, explicit, or otherwise) to pass over the copper, and fiber, and routers and other parts

of the Internet owned by us—the private sector.

The MOU between ICANN and the government clearly states in its prohibitions, Section V:D:2. "Neither Party, either in the DNS Project or in any act related to the DNS Project, shall act unjustifiably or arbitrarily to injure particular persons

or entities or particular categories of persons or entities."

ICANN has acted both arbitrarily and unjustifiably in deliberately ignoring our existence as a viable registry offering legitimate, resolving domain names to the

Whether ICANN/DoC chooses to include the pre-existing TLDs in the USG root or not is one thing. Whether they choose to ignore their existence and threaten them

with destruction via abuse of power is another.

By moving ahead with their process they have created dissension, confusion and harm to our business and our registrants. They are eliminating true competition by assuming authority over the world's name space rather than remaining focused on their own narrow responsibility. They have shown no respect for our existence or that of all the other TLD operators who have the right to operate their businesses that of all the other TLD operators who have the right to operate their businesses or organizations, and they threaten, by their actions to date, to crush them as they appear to intend to crush us. We must also consider the effect this situation is having on countries around the world. More and more of them are considering alternatives to the USG root and some have already moved to create them or use the existing roots; all because ICANN will not recognize the fact that they manage just one set of TLDs in one root.

Because ICANN currently enjoys the largest market share in terms of those "pointing" to the USG root, it has a commensurate responsibility to ensure fairness in a free market. It was the government that determined the Internet should be privatized, yet it has allowed ICANN to assume a governmental attitude toward the Internet. It was formed at the order of the government, and remains under the oversight of the government, yet it competes against small business in what should be a free market, with the power to "take away" the businesses it is competing against, without due process. It has invited applicants to do so. It answers to no one and is not bound by the APA even though its oversight is the responsibility of the government and the government has final authority over additions or changes to the root. ICANN should be either a government contractor and bound by the APA or it should be private and liable for its actions. This is a dilemma because the root is controlled by the government and cannot simply be handed over to a private entity without due process and compensation to us, the taxpayers. There seems to be a circular problem here.

With regard to their so-called "new" TLDs, ICANN threatens not only small businesses, but, as a result of their arrogant, ill conceived actions, actually threatens

the world's economy and the stability of the Internet—in direct conflict with the agreement they signed with the United States Government.

We feel that ICANN, under the oversight of DoC, has acted completely irresponding the complete of sibly. DoC will do the same and has stated it will most likely rubber stamp any decisions made by ICANN. We feel they have breached their agreement by harming our business and will potentially do so with any other duplications of existing TLDs placed in the USG root. In addition, we believe that DoC will, and ICANN has, abused their power and that this issue falls under the Administrative Procedures Act (APA). We have filed a Petition for a Rulemaking with the NTIA, which is attached as Exhibit B.

In terms of Internet Governance, there is a violation of ICANN's mandate in the use of that term. ICANN was formed to administer the DNS in the USG root. It was never intended to govern the world's Internet. The Internet is in its infancy and should be allowed to grow and evolve in freedom and in a free market. To allow this body that was formed to coordinate the technical aspects of the DNS the power to "govern" for the world is a grave error. ICANN has already overstepped its mandate in several ways

First, the initial Board was to have been replaced by an elected Board within months of its formation. Two-and-a-half years later, that Board is still not elected,

except for five at-large directors.

Second, there were to be nine at-large directors elected by the at-large membership. The unelected Board decided to not only limit that election to five and re-appoint four existing Board members to those seats, but to effectively disenfranchise at-large membership by manipulating the by-laws.

Third, the Board has instituted a "clean sheet study" of the at-large to determine

if there should even be such a membership.

Fourth, it has changed the bylaws to define the at-large members as not being statutory members under California law.

In other words, it has effectively cutoff membership at the individual level.

Fifth, individuals and small businesses are not represented on the Board and have no voice.

Sixth, many decisions and deliberations are conducted by staff behind closed doors. There is still no open and transparent organization. The handling of TLD applications is a prime example.

Fourth, ICANN should have nothing whatever to do with legal or policy issues.

It should stay within technical issues only.

Fifth, ICANN must function within the single name space and act as the coordinator of the one root's TLDs as well as cooperate with the rest of the world's root systems in avoiding collisions. Multiple distributed roots, as described on Exhibit C (page six) of this document is desirable and prevents having a single point of failure. It is our hope that this committee will intervene to ensure that there is fair play

and consideration for existing businesses; that the entry of duplicate TLDs in the USG root will not be permitted and that ICANN be directed to elect its Board immediately and adhere to the technical coordination of the USG root cooperating with the rest of the world rather than perform as an uncontrolled quasi-governmental body answerable to no one.

ATTACHMENTS-EXHIBIT B

Re: ICANN Recommended Internet Top Level Domain Names/Petition for Hear-

ing:
On behalf of Atlantic Root Network, Inc., a private registry for the ".biz" Top
Level Domain Name ("TLD"), we hereby petition the National Telecommunications
and Information Agency ("NTIA") and the Department of Commerce ("DoC") to hold
a public hearing pursuant to the Administrative Procedures Act ("APA") (5 U.S.C.A. Sec. 551, et. seq.) prior to consideration and approval of the ICANN recommended TLDs. The approval of the ICANN recommended ".biz" TLD would impair the rights of Atlantic Root Network, Inc., and would violate the U.S. Constitution, Federal statute, and the common law. The approval of the ".biz" TLD would also violate the Memorandum of Understanding between ICANN and the DoC.

BACKGROUND

Interest of Atlantic Root Network, Inc.

Atlantic Root Network, Inc. ("ARNI") is a Georgia corporation that has been delegated maintenance and operation of the ".biz" TLD in the Open Root Server Confederation ("ORSC"), the PacificRoot, and the North American Root Server Confederation ("NARSC") Internet root server systems. MCSNet established the ".biz" TLD in 1996, and began accepting registrations in 1996. ARNI acquired authority to operate the ".biz" TLD in May of 2000, and has been accepting domain name registrations through PacificRoot.com pursuant to a contractual arrangement. ARNI currently manages over 1,000 Internet domain names actively using the ".biz" TLD. ARNI and the PacificRoot have expended considerable capital and effort in maintaining the ".biz" TLD.

The ORSC is a public, viable "inclusive name space" root server system that oper-

The ORSC is a public, viable "inclusive name space" root server system that operates in parallel with, and complements, the ICANN/DoC root server system. Established as an alternative root server system to the NSF/NSI operated system in 1995, the public can readily obtain access to ORSC (or other inclusive name space root servers such as the PacificRoot and Superroot). This is done by merely "pointing" their computer to them, or requesting their Internet Service Provider to designate the alternative root server. In turn, the inclusive name space root managers accommodate communication with the ICANN/DoC managed root server, including the "A" root server, by incorporating the DOC root TLDs in their root system as "baseline" TLDs. Specifically, to ensure universal Internet name space compatibility, the inclusive name space root server managers imprint on their system and carry all of the recognized ICANN/DoC TLDs (.com/.net/.org/.edu/.us), as well as, the country code (cc) TLDs as a complementary set. The TLDs that are approved and then activated on their systems thus complement and augment the "baseline" ICANN/DoC TLDs. In this way the interests of the Internet public in choice and convenience are advanced, while governmental interests in competition and efficiency are preserved.

Obviously, the functioning of the entire Internet name space system—ICANN/DoC's 13 root servers, and the alternative root servers—would be compromised were ICANN/DoC to commission new TLDs, which collided with existing TLDs in the greater Internet name space system. It is just this collision, however, that is threatened by the recent announcement of ICANN that it will recommend for approval the proposed ".biz" TLD for inclusion in the ICANN/DoC root server system.

ICANN TLD Proceedings

In conformance with the general mandate conveyed in the "White Paper" (63 FR 31741-01 (June 10, 1998), and in its Memorandum of Understanding with DoC, ICANN commenced a process in approximately August 2000 to solicit, evaluate, and approve new TLDs. This process is well documented in the ICANN website (icann.org). The process culminated in an ICANN announcement that "on 16 November 2000, the ICANN Board selected seven new top-level domains (TLDs) for negotiation of agreements." (See, ICANN web page, Announcements). Furthermore, ICANN is now apparently engaging in deliberations with the chosen TLD applicants to negotiate operating agreements. ICANN states that it anticipates that final agreements will be secured in the near future. Thus, if these TLDs are approved by DoC and implemented, including the ".biz" TLD, the rights of ARNI in the ".biz" TLD will be immediately compromised.

PETITION FOR HEARING

ARNI asserts that ICANN has no inherent authority to approve new TLDs (Indeed, even ICANN's authority to operate is questionable as matter of law. See Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution (Duke Law Journal 50:17 (Prof. M. Froomkin, October 2000)). The Government Accounting Office ("GAO") has affirmed that ICANN can make no authoritative decision concerning Domain Name administration without express approval from the DoC. In its definitive July 7, 2000 letter/report to Congress ("Department of Commerce: Relationship with the Internet Corporation for Assigned Names and Numbers") the GAO was emphatic that final authority over the root server and its administration rests with DoC. GAO interpreted the November 25, 1998 Memorandum of Understanding between ICANN and DoC as a "joint project agreement" for the domain name system management, including "the policy for determining the circumstances under which new top-level domains would be added to the system." Report at page 16. The GAO made it clear that the transfer of decisionmaking to ICANN would constitute a transfer of property, which would be unlawful under the doctrine of subdelegation. See National Parks and Conservation Association v. Stanton, 54 F. Supp. 2d. 7, 18-19 (D.D.C. 1999). Finally, the GAO noted that such a violation of law is not implicated in light of the language included in Amendment 11 to the Cooperative Agreement with Network Solutions, Inc. Pursuant to Amendment 11, the GAO states, "Network Solutions, Inc. must receive written authorization from a Department official before making or rejecting any modifications, additions, or deletions to the root zone file." Further, citing to the November 1999 agreements among ICANN, Network Solutions, and the DoC, the GAO found that collectively, these agreements "make clear that the Department retains final policy authoriza-

tion over the "A" root server." Report page 30. This includes, of course, final decisionmaking on the entry of new TLDs to the "A" root server.

ICANN itself clearly agrees with the GAO legal analysis. In recent litigation, Eco-

nomic Solutions, Inc. v. Internet Corporation for Assigned Names and Numbers (U.S. District Court, Eastern District of Missouri (No. 4:00CV1785-DJS)) ICANN sub-District Court, Eastern District of Missouri (No. 4:00CV1785-DJS)) ICANN submitted the Declaration of its officer and general counsel, Louis Touton, in opposition to the Motion for a Preliminary Injunction filed by Economic Solutions, Inc. Mr. Touton explicitly states in this Declaration that only the DoC can make a decision regarding new TLDs, and that ICANN has no inherent power to do so. The Federal district court, in reliance on this Declaration, denied the motion holding: "ICANN represents that it has no authority to implement TLDs, and that instead, it merely makes recommendations to the Commerce Department, which has the ultimate authority to make such a decision." Based on these authorities, and the elemental application of constitutional and statutory law it is clear that the DoC will shortly thority to make such a decision." Based on these authorities, and the elemental application of constitutional and statutory law, it is clear that the DoC will shortly be tasked with the responsibility for considering ruling on the ICANN recommended TLDs. Based on this legal premise, ARNI hereby petitions NTIA to implement a Rulemaking pursuant to the provisions of Sections 556, 557, and 558 of the APA. Given the abundance of case law authority, it can not be denied that the approval of TLDs constitutes either a "rule" or "license" within the meaning of the APA. Once this is established it is mandatory under the APA for the NTIA to conduct a Rulemaking. This in turn, requires a statement of the proposed rule, a request for public comment, and a studied consideration of these comments. In particular, NTIA will be required to consider not only the rationale and criteria developed by ICANN, but more broadly the competitive impact of the recommended TLDs on Internet name more broadly, the competitive impact of the recommended TLDs on Internet name space, the interests of efficiency, the legal ramification of approval, and the avail-

space, the interests of efficiency, the legal ramification of approval, and the availability of alternate TLDs.

ARNI petitions for this Rulemaking fully convinced that when NTIA carefully evaluates all of the factors it must consider as an executive agency of the U.S. Government it must reject the ICANN recommended ".biz" TLD. In particular, ARNI believes that the ".biz" TDL violates ARNI's constitutional safeguards, conflicts with a number of statutory requirements, undermines ARNI's property rights, and offends the Memorandum of Understanding between ICANN and Doc. Indeed, the essence of these safeguards is captured in the Memorandum of Understanding which states under paragraph D(2) "Prohibitions" that "Neither Party, either in the DNS Project, or in any act related to the DNS Project, shall act unjustifiably or arbitrarily to injure particular persons or entities or particular categories of persons or trarily to injure particular persons or entities or particular categories of persons or entities." The adoption of the ".biz" TLD would violate this provision with respect

to ARNI and threatens the viability of inclusive name space providers.

CONCLUSION

Only the NTIA/DoC may authorize and commission new, "A" root TLDs; ICANN can not. The new TLDs recommended by ICANN must be subject to formal Rulemaking under the Administrative Procedures Act. Such a rulemaking will reveal the legal infirmity of the contemplated ".biz" TLD.

PREPARED STATEMENT OF BART P. MACKAY, VICE PRESIDENT AND GENERAL COUNSEL, ENIC CORPORATION

My name is Bart P. Mackay, and I am the Senior Vice President and General Counsel for eNIC Corporation. I am providing a supplemental statement to Mr. Cartmell's testimony in order to respond to certain issues raised in the hearing before the Subcommittee on February 14. Specifically, those issues were eNIC's reluctance to adopt the Uniform Dispute Resolution Procedures (UDRP), and our charg-

ing a nominal fee for WHOIS information.

Briefly as to my background, I have been practicing law for nearly 16 years, with a primary focus on corporate finance, commercial transactions, and intellectual property issues. My experience in intellectual property issues includes working directly with many companies and trade associations, including such notables as Mr. Eric Smith of the International Intellectual Property Alliance, the Business Software Alliance, the Motion Picture Association, the Recording Industry Association, and the International Trademark Association, in developing and pushing legislative and regulatory reforms for copyright, trademark and other intellectual property protections in the former Soviet Union.

As an initial matter, eNIC Corporation wishes to offer one point of correction to the written testimony of Brian R. Cartmell submitted in conjunction with the Subcommittee's hearing held on February 14, 2001, addressing the governance of the Internet Domain Name System by the Internet Corporation for Assigned Names and Numbers. The last sentence of the first paragraph of the subsection entitled "Overview of eNIC Corporation," erroneously states that "[T]he Dot-CC domain is associated with the Cocos Islands, a group of islands in the Indian Ocean that, at the time we submitted our application, were privately owned, but today are an external territory of Australia." In fact, the Cocos (Keeling) Islands are a group of islands in the Indian Ocean that at the time it appeared on the ISO-3166-1 list (referred to in section 6 of Mr. Cartmell's written testimony) were privately owned, but today are a territory of Australia.

The primary purpose of this supplemental written testimony is to respond more fully to Senator Barbara Boxer's questions posed during the Subcommittee's hearing. This opportunity is particularly important to us as Senator Boxer's inquiry and comments raised questions about our reluctance to adopt the Uniform Dispute Resolution Policy and our WHOIS procedures. I want to assure the Subcommittee that we have adopted these business practices only after long and careful consideration of the alternatives, and we hope that this full explanation of those practices will prove the merit of our position.

1. UNIFORM DISPUTE RESOLUTION POLICY

eNIC's position on the UDRP is straightforward. While we definitely favor an accelerated dispute resolution procedure much like the UDRP, we have been unwilling to adopt the UDRP system in its present form. As discussed by Professor Froomkin and Mr. Auerbach at the Committee's hearing, and acknowledged by ICANN's President, Mr. Mike Roberts, the existing UDRP needs to undergo a complete re-evaluation to address certain aspects that have proven deficient. To date, few of the nearly 250 existing top-level domains have adopted the UDRP or any other alternative dispute resolution mechanism. Thus, eNIC is not alone in its doubts about the UDRP. eNIC has consistently said that we will adopt such a dispute resolution mechanism when we find or develop one that meets traditional and acceptable notions of fairness, due process, and equitable application.

It should be noted that eNIC is not simply waiting for ICANN to make badly needed changes to the UDRP before it acts. Instead, eNIC has undertaken the development of a new dispute resolution policy and mechanism that we believe: (a) addresses the material deficiencies of the UDRP; (b) provides fairness, due process and an even playing field to all participants; (c) contains detailed standards and substantive guidelines for dispute resolution proceedings that more closely follow existing trademark laws; and (d) eliminates the "forum" shopping abuses prevalent under the UDRP. This initiative, which commenced approximately 4 months ago, is being undertaken by outside legal counsel and at significant expense to eNIC. We expect that a preliminary draft will be completed before the March 2001 ICANN meeting in Melbourne. It will be circulated to a broad range of interest groups for comment and then revised accordingly. We hope to implement the dispute resolution procedure during 2001. In the meantime, eNIC will continue to readily abide by the decisions of the courts relative to cyber-squatting and other domain name matters. We also intend to offer the new dispute resolution mechanism as a model for dispute resolution that can be adopted by other top-level domain managers as well.

A final point on this issue: Over the past year, I personally have had numerous conversations regarding UDRP issues with individual trademark attorneys as well as representatives of several intellectual property organizations including the International Intellectual Property Alliance, the Motion Picture Association, the International Trademark Association and the Business Software Alliance. Inevitably, each begins the conversation claiming that eNIC is a "safe haven" for cyber-squatters and infringers, and each insists that eNIC adopt the UDRP to remedy the situation. Notably, none has offered any specific evidence or data to substantiate or document their claims against eNIC or which would correlate the adoption of the UDRP to any meaningful reduction in cyber-squatting or infringement. Let me be clear: eNIC is not a haven for infringers or cybersquatters. We take very seriously our obligation to our customers and the Internet community. Our concerns about the UDRP should not be confused with indifference to property rights.

2. ENIC'S WHOIS PROCEDURE

eNIC Corporation's existing WHOIS disclosure policy is the result of a careful balancing of competing factors and interests in the disclosure of Dot-CC registrant information. These factors and interests can be grouped into three general categories which include (a) the fiscal and intellectual property interests of eNIC Corporation, (b) the disclosure interests of trademark owners and others in the identity of Dot-CC registrants, and (c) the privacy interests of Dot-CC registrants. Permit me to briefly discuss these three categories.

(a) Initially, it should be noted that eNIC Corporation is one of the few top-level domain managers that even offers a WHOIS function. Any registry offering the WHOIS function can do so only by significant, on-going monetary expense and dedicating substantial technical resources to its development and maintenance, a fact cating substantial resources to its development and maintenance, a lact confirmed by Mr. Roger Cochetti of VeriSign in response to questioning from Senator Boxer. As Mr. Cartmell pointed out during oral testimony, eNIC does not generate substantial revenues from assessing the \$15.00 fee. In fact, the fee does not recoup eNIC's costs of maintaining the WHOIS function. If eNIC desired to "profit" from its WHOIS function, or protect cyber-squatters and infringers, certainly the price for the WHOIS report would have been set at a higher price than \$15.00.

As explained below, the nominal \$15.00 fee acts to limit frivolous inquiries and adds a measure of privacy protection for Dot-CC registrants, while at the same time making the registrant information affordable and available to trademark owners and others who have a legitimate interest in discovering registrant information. It also serves to compensate eNIC, albeit only in part, for operating the WHOIS system. Few businesses are expected to disclose the identity, address and other such information of their clients at all. (Few other Internet registries do at all.) After all,

such information is considered proprietary and extremely valuable.

(b) eNIC recognizes that trademark owners and others have a clear interest in discovering the identities, contact information and other information of Dot-CC registrants. That is one of the primary reasons eNIC incurs the significant expense of maintaining a WHOIS function, unlike most top-level domain registries. eNIC has also consistently responded to inquiries of law enforcement agencies in a prompt and efficient manner, without charge. Consequently, those important interests are not at issue. However, eNIC has witnessed the abuses of the dot-com WHOIS function that the VeriSign Global Registry is compelled to maintain (rather than voluntarily maintain) under its agreement with ICANN and the Department of Commerce. The two primary reasons for the existence of our fee are (i) the unauthorized "data mining" that readily occurs as a result of the "open" structure of the dot-com WHOIS function, and (ii) the privacy interests of the Dot-CC registrants as discussed in subsection (c) below.

eNIC has and maintains a strict policy against "spam" (e.g. unsolicited bulk electronic mail) and consistently takes action against those Dot-CC registrants that we determine are involved in such activities. We can state unequivocally that eNIC Corporation has never undertaken any "spam" activities, nor have we sold our database to marketers. In our view, the "open" WHOIS requirement in the dot-com, dot-net, and dot-org domains is a primary contributor to the unsavory "spam" activities con-

ducted on the Internet.

Indeed, the "open" nature of the WHOIS function in those top level domains leaves few access barriers to the "data mining" activities of numerous automated programs that collect registrant identities, e-mail addresses, and other registrant information. The "mined" information is then used for many purposes, including illicit formation. The "mined" information is then used for many purposes, including illicit "spamming" activities. By limiting the WHOIS function, including charging a nominal fee for WHOIS data access, eNIC is able to limit the access of automated programs to Dot-CC registrant data by making such access uneconomical, thus substantially reducing spamming activities on Dot-CC registrants. The result is that, instead of being a "haven" for spammers, eNIC is an active participant in the fight against illicit "spam." In sum, the "open" WHOIS encourages "spam," while limiting access to WHOIS data actually deters illicit "spam."

(c) A primary consideration of eNIC Corporation is the privacy interests of its Dot-CC registrants, although those interests must be balanced with the interests of

CC registrants, although those interests must be balanced with the interests of trademark owners and others. As indicated by Professor Fromkin, an "open" WHOIS function provides tremendous opportunities for misuse of registrant information. While registries such as VeriSign Global Registry and eNIC cannot monitor websites or control the use of registrant data derived from their databases, news accounts abound with examples of stalking, spamming, and other illicit uses of registrant information in the dot-com domain space. Unfortunately, we do not live in "Mr. Rogers' neighborhood" and people with access to addresses, telephone numbers, e-mail addresses and other registrant information do not always use such information for honorable purposes. Consequently, the privacy concerns of domain registrants are critical and are best served by a "restricted" WHOIS function.

As with virtually all compromises, eNIC's position on the WHOIS database is like-

ly imperfect and does not fully satisfy the demands or wishes of any one party. However, after careful and thorough consideration of the issues, taking into account and balancing the varied competing interests involved, eNIC believes that its decision strikes an appropriate balance and ultimately promotes the best interests of the

Internet community as a whole.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY ICANN TO MIKE ROBERTS

Question 1. One of the applicants for a new top level domain names was Image On-line Design. Despite having over 23,000 dot.web registrations and thousands of letters of support for application, ICANN chose not to accept Image On-line Design. Can you explain why ICANN chose not to grant the application especially in light that ICANN is a consensus driven organization?

Answer: That Image On-line Design application had deficiencies that were cited by technical and financial teams that did the analysis.

Followup: Image On-line Design submitted corrections to numerous inaccuracies.

Followup: Image On-line Design submitted corrections to numerous inaccuracies presented by the review and those corrections were not properly noted. Additionally Image On-line Design and eight others applicants filed requests for re-consideration. What is the status? Will the deficiencies by the people seeking reconsideration still be taken into account? Is that fair when so many of the inaccuracies cited by so many of the applicants in the application process.

> BRIDGE INTERNATIONAL HOLDINGS, INC. St. Simons Island, GA, Feb. 12, 2001.

Hon. Burns, Communications Committee.

Dear Senator Burns, I have just learned that your committee will be holding hearings on the choices and choice making methods of ICANN with regard to the "new' TLDs (Top Level Domain) in the DOC Root of the Internet.

As you must know, the Internet has come a long way since its early days of exclusively DoD and research responsibilities. Among the myriad evolutions since those days has been the birth of numerous robust root systems to compliment the original. Most of these were established and running smoothly BEFORE the creation of ICANN just a few years ago. Operating on these root systems are many and varied TLDs not represented on the DoC root. The earliest of these was .nomad, started by Bradley Thornton, now of the Pacific Root Network, but way back in the 1980s, long before anyone ever even conceived of conflict over domain names and perceived shortages of them. It was started, not to compete with ICANN, for ICANN did not exist, it was created as a private initiative in keeping with the free market economy and initiative this country likes to pride itself for. Since that pioneer, others have followed, and with few exceptions, have worked very civilly and professionally with each other so that no conflicting TLDs would be developed and the integrity of the Internet naming and numbering system would be preserved. About 5 years ago, one such entry to the field was a .biz TLD. It is now under different control than the original, but has been in continuous operation since creation. The Atlantic Root Network, Inc., in close cooperation with online registration and DNS services of the Pacific Root Network are now not only taking live registrations for .biz domain names but have active and functioning commercial sites ongoing.

Atlantic Root Network, Inc. is a small and relatively new company. We do not

want to get into prolonged court battles for our obvious right to pursue our business as we had before ICANN chose to knowingly usurp our entire business line of doas we had before ICANN chose to knowingly usurp our entire business line of domain registration by claiming this .biz string as their own and assigning it to one of their "applicants" (contributors). Given the over-riding rule ICANN is to respect and create respect for, that the stability of the Internet be maintained at all costs, it is simply appalling that they would consciously create a "colliding" (duplicate) TLD in the general namespace that is the Internet. That they have, should be recognized as a swipe against small business in general, and more specifically a serious blow to the internet of the naming and unphasing system of the Internet. blow to the future integrity of the naming and numbering system of the Internet. There is a small but growing number of Internet Service Providers (ISPs) that have learned to respect the first established TLDs of any particular string and will show the Atlantic Root Network, Inc. ".biz" rather than the ICANN designated one. This will cause an addressing problem such as we have never seen before. (*I.e.* What if two separate companies were to assign telephone numbers and service for the 212 area code in New York. What assurance of getting the desired party could there ever be. It would not be a momentary problem that would work itself out, either.) As long as there are two independent and non-cooperating systems in one number space, chaos would reign. It is much the same in Internet addressing. By ICANN's decision to institute a second operator for .biz in the same overall scheme of things, they not only contradict their responsibility to foster independent business involvement in the Internet as dictated by the DoC upon their creation, but they will also be creating utter chaos within the Internet.

Even before final approval of the new .biz, several companies have sprung up to pre-register" these domain names. This is most confusing to our current customers who see .biz already functioning just fine in the inclusive namespace, but even more confusing to potential new customers. Thus it is already serving as a disruptor of our business, all because ICANN failed to respect one of the Internet's golden rules.

ICANN is a poor steward of a very important resource and must be harshly reprimanded and mistakes corrected, or be simply replaced by some group that understands the meaning of representative government, living within one's means and using authority wisely and judiciously.

It can not be allowed to continue to run roughshod over anyone they deem not big enough to sue them. Remember, ICANN, while private, is doing its business as the DoC's right hand and whatever they are allowed to get away with reflects badly on the DoC, those who oversee them and on our Nation as a whole.

Please do your part to fix this blotch on the American business landscape.

Sincerely yours,

KARL E. PETERS, President & CEO.

P.S. Bridge International Holdings, Inc, is 50 percent owner of the Atlantic Root Network, Inc.

PREPARED STATEMENT OF KENT CRISPIN, COMPUTER SCIENTIST, LIVERMORE NATIONAL LABORATORY

Honored Committee Chairpersons and Members, during the hearing you will doubtless hear a great deal from well-meaning, passionate witnesses who are deeply concerned about freedom of speech and other civil liberties issues.

These issues are, of course, extremely important, and as responsible, patriotic Americans we cannot help but take them very seriously. However, I would like to suggest that in this case these concerns are largely misplaced, and are based on fundamental misconceptions about the Internet, the nature of ICANN, and the domain name registration business.

While the U.S. Government funded much of the basic research that started the Internet, for perhaps the last 10 years the Internet has been in the realm of private business. Private investment at this point completely dwarfs the contribution by the U.S. Government. The U.S. Government should be justifiably proud of the Internet as a child of research it funded, but that child has long ago grown up.

The Internet is largely decentralized; there are only a very few core services that require central coordination. ICANN is intended to fill that role. ICANN is a *private organization* coordinating the activities of *private* businesses. Such an organization does require oversight, but in the normal case oversight from Anti-Trust authorities is deemed sufficient: unlike some other governments, the U.S. Government does not lightly interfere with the economic engine of private enterprise.

When viewed from the perspective of private enterprise, the concerns of freedom of speech and civil liberties take a much different appearance. Domain name registries are independent businesses offering services to customers, just as publishing houses offer their services to customers. The freedom of the registry and the freedom of the customers is the freedom of the private transaction: The U.S. Government does not tell the customer what names they can register; neither does it tell the registries which names they must offer. If a registry wishes to disallow domain names that are dirty words, that is the right of that registry.

The U.S. Government does not tell newspaper publishers what stories they must accept from private citizens; we have confidence in the fact that there is a tremendous market for free speech to guarantee that there will be newspaper publishers of every conceivable perspective. Likewise, the U.S. Government does not need to worry about freedom of speech in domain name registrations—in only needs to be sure that there is adequate competition in the domain name registry business.

There is an important caveat: domain names are not a publishing medium in any conventional sense of the word. They are intended as a means of addressing particular machines on a network, and they are active objects, interpreted by computer software for a technical purpose. This technical purpose is fundamental to domain names; and consequently the opinion of the technical community must be given priority in ICANN's processes. ICANN has no choice but to listen to the best technical opinions; when the Internet Architecture Board, for example, makes a formal statement that "alternate roots" are technically unsound, ICANN has no real choice but to accept that judgment. When the weight of opinion from experienced operators of networks says that ICANN should go slow in the introduction of new names, ICANN has no choice but to listen.

These technical constraints on ICANN mean that oversight of ICANN is a very complex affair, and will require careful monitoring by anti-trust authorities. The De-

partments of Commerce and Justice are closely monitoring the progress of ICANN,

and I believe that oversight is adequate.

The activities of private enterprise are not perfect, by any means. We can expect ICANN to make numerous mistakes as it takes its own road. This is normal, and should be expected. Free enterprise necessarily involves the freedom to make mistakes, and the freedom to correct those mistakes without the paternalistic direction of Uncle Sam.

Thank you very much for your consideration.

PREPARD STATEMENT OF RAY FASSETT, THINK RIGHT COMPANY

I wish to take the opportunity to thank your Subcommittee for reviewing ICANN governance. I desire to have this written testimony focus only upon such governance as it relates to the expansion of the Top Level Domain space, or new TLDs.

As your Subcommittee is probably aware, there is widespread opinion that the recent selection process was quite arbitrary in its selections and, perhaps, even unfair, involving various conflicts of interest. I wish to only focus upon the former issue, rather than the latter at this point in time.

It is important, in moving forward, that the subjective nature in which TLD applications are accepted be removed and that the ICANN be clearly accountable for

such removal.

This can be very easily accomplished (vs. the round of applications) by: (1) Mandating to the ICANN to define the technical criteria necessary for the applicant to achieve acceptance to the A-root zone; and (2) Mandating the ICANN to accept applications that meet such pre-defined criteria.

A by-product of these mandates would be that the ICANN would be further removed from a body that is governing policy (subject to Congressional review) to one

that is applying its technical expertise.

I am a small business operator that has a desire to file with the ICANN in the second round of applications. I can raise the necessary funding to scale my existing Internet infrastructure to meet the technical requirements for admittance to the Aroot zone if the ICANN would define what these criteria are.

As long as arbitrary and subjective decisionmaking on the part of the ICANN remain part of the application process, small businesses—such as mine—will be competitively disadvantaged in relation to larger corporations with the resources to withstand a "turned down" application only to file again in the next round (or the round after that).

My business cannot move forward, for example, in scaling up its infrastructure for the second round of applications not knowing that, even if all technical criteria are met, my application could be subjectively turned down. Without mandating against this, small business will be largely removed from the application playing field. No bank would support my business expansion based upon "hope" of acceptance. Some feel the application process is this way by design, though I am not ready to fully draw this conclusion as yet.

I respectfully request your Subcommittee to stand behind small business by mandating the ICANN to clearly define technical criteria for admittance and to adhere to these criteria in their selection process.

Thank you for accepting my stated views on the subject matter and I sincerely appreciate your attention to my concerns.

PREPARED STATEMENT OF PAUL STAHURA, PRESIDENT, GROUP ONE REGISTRY, INC.

Mr. Chairman and Members of the Subcommittee, my name is Paul Stahura. I am the President of Group One Registry, Inc. I want to take this opportunity to share with you a vision for the future of the Internet and to express my views about the process used by the Internet Corporation for Assigned Names and Numbers (ICANN) to select new top level domains.

THE CREATION OF GROUP ONE REGISTRY

I have been involved in the business of registering domain names for several years. As President of eNom, an accredited domain name registrar, I conceived of the Group One concept in response to a fundamental realization. The practical reality is that with the explosive growth of the Internet into consumer products there will have to be a domain name for every new consumer device connected to the World Wide Web (the Web).

To implement my idea, I worked with WebVision, the Internet consulting and hosting company that is the parent of eNom, and Internet Computer Bureau, an experienced operator of country code top level domains. We formed Group One to apply for and operate the new top level domain .ONE.

Our goal was that .ONE would serve as the domain for Internet-connected devices like game players PDAs sequently company profigerant on and minder the contract of the contract o

like game players, PDAs, security cameras, refrigerators, and wireless phones. The domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain names would consist of digits, making them easier to access from a limited domain name of the limited domain names which is the limited domain names keyboard, using the name space more efficiently, and eliminating most of the intellectual property concerns raised by character-based domain names. A substantial additional benefit to the .ONE concept is that our system would eliminate many of the growing Internet privacy concerns that have developed since the last TLD selection process. Ours is a unique proposal in response to a practical reality.

NEW TLDS AND ICANN'S ROLE

As new applications for Internet services continue to develop, we will bring the Internet to consumers in new and exciting ways. This growth in the practical utilization of the Internet requires that we add new top level domains (TLDs). More TLDs will reduce the crowding in .com addresses and the thoughtful addition of new TLDs will increase competition in operating the Internet's technical services.

In the time since the last new TLDs were introduced, the Internet has grown be-

yond most expectations and also has become a critical medium of international commerce. Businesses and individuals now regularly rely on the Web for their daily activities. Changes in the Web's operation can create-or destroy-businesses, con-

sumer services, and jobs.

The process by which we select the most appropriate TLDs requires consideration of a number of factors. Adding new TLDs can introduce the risk of technical failure and requires thorough consideration and oversight. Some TLD requests or applications are simply inappropriate for our contemporary commercial or social values. The allocation of new top level domains is more than a technical function. Social, economic, and political judgments on an international scale are required. ICANN has been carefully structured to receive input from a broad range of constituencies around the world. I support ICANN as the institution necessary to make decisions about new TLDs. However, the process used by ICANN must recognize the significance and complexity of the decisions and its processes for decisionmaking should reflect the critical nature of its function.

ICANN'S NEW TLD PROCESS

Despite the critical nature of TLD decision, the process followed by ICANN in the most recent selection of TLDs was, in many respects, deeply flawed. Rather than acknowledge that selecting new TLDs inherently involves value judgments and building a process to make those judgments as fair as possible, ICANN pretended those judgments didn't exist. ICANN has a history of creating "test beds" whose parameters. those judgments didn't exist. ICANN has a history of creating "test beds" whose participants attain large profits and secure entrenched positions. The new TLD selection cannot be written off as a mere experiment; it, too, is an economically important act and should be made on the merits of the applications.

There were three main problems with ICANN's process: the time allowed was too short, ICANN selectively held discussions with some applicants but not others, and the process produced no clear record of the basis for the decision.

ICANN did not allow itself enough time to consider the applications. The initial schedule apparently was created based on the expectation that only 15 to 20 applications would be submitted. When far more arrived ICANN should have extended

cations would be submitted. When far more arrived, ICANN should have extended the timeframe to allow for more careful consideration. Precisely because this was the first selection of new TLDs, the structure of the process was of paramount concern. ICANN seemed to value finishing the process on schedule above doing it right.

As events transpired, there were only 6 weeks from the application due date to the date of Board action on 44 applications totaling thousands of pages. The ICANN staff analysis (300-plus pages in length) was published only 6 days before the Board voted on the applications. This did not give adequate time for the Board members to review the analysis, or for applicants to respond to it. The 3 minutes allocated to each applicant for presentations to the Board were not a meaningful opportunity for response and comment, and it was unreasonable to believe that the Board members would review the vast amount of material on the public comment site. The only reasonable conclusion to be drawn was that Board members relied on something other than the written materials to make their decision.

During the application review process, ICANN instructed applicants not to contact the Board or staff. However, ICANN contacted several applicants to request addi-tional information or seek answers to questions. This provided opportunities for only

a select group of applicants to clarify, explain, or augment their applications. The applicants who were not contacted were clearly put at a competitive disadvantage in the process. While applicants were free to post additional material on the public comment site, only those who received questions from ICANN knew what additional material would be helpful or informative. It appeared that ICANN asked questions of applicants it had already decided to select. This method of decisionmaking, sug-

gests Board pre-selection, and undermines the credibility of the process.

The ICANN procedures need to be standardized and all potential applicants need to be advised of the procedures in advance of submitting their applications. In addition, all applicants should play and be judged by the same set of rules. Although the application process produced voluminous public documents and comment, there was no statement of the basis for the Board's decisions. Absent such a statement, it is unclear how the stated criteria were applied and how the Board distinguished among the applications. The only extant record evidencing Board intent is the brief discussion at the public Board meeting. For example, ICANN stated that elements such as the staff evaluation and public comments were only part of the process and not the full basis for the final decision. However, it is unclear whether these factors were considered at all and if so, what weight was attributed to them. This lack of clarity regarding the process itself as well as the absence of a clear record of review leaves applicants unsure whether they were treated fairly. Furthermore, it gives future applicants little guidance about the criteria upon which they will be judged.

To its credit, ICANN has in place a process to reconsider Board decisions. However, that process clearly was not designed for decisions as significant and complex as TLD allocations. The reconsideration process suffers from many of the same flaws as the initial consideration process, and once again does not provide applicants with

a meaningful assurance of fair and equal treatment.

Finally, ICANN has insulated itself from accountability for its decisions by forcing applicants to sign a broad waiver as a condition to submitting an application. If these waivers are upheld, they permit ICANN to make arbitrary decisions without explanation—and leave aggrieved parties with no appeal or recourse. The assumption of such final and absolute power is contrary to ICANN's ideals as an open, fair, and accountable body.

GROUP ONE AS A CASE STUDY

Group One's experience illustrates many of the problems described above. The ONE application is technically sound and is backed by substantial financial resources. Our solution is innovative, and promises to increase competition in Internet registries while providing new services to consumers. On its merits, the ONE application is very strong.

The first hint that ICANN was not inclined to approve the Group One application, despite its clear merit, was that we were not among the applicants contacted by ICANN during the review process. A second indication came when the staff analysis was released on the Friday before the Board meeting. The publication of the staff analysis was the first indication Group One received that ICANN considered its application "telephony related." Three days after the analysis was released, Group One sent a letter to ICANN and raised several of the concerns about the ICANN process that I bring to your attention today. We also asked ICANN to remove ONE from the "telephony-related" category and to keep the application open for 3 months to provide time to consider the complicated issues presented by ENUM and the International Telecommunication Union (ITU). ICANN summarily refused this request.

When the Board considered Group One's application Board members consistently spoke favorably of it. Nonetheless, the concerns raised about the "telephony" aspects caused the Board to decide there was "enough uncertainty" not to proceed. The source of ICANN's confusion appears to be a belief that .ONE would conflict with the ongoing ENUM project by the ITU and others to integrate the telephone numbering system with the domain name system. Given the opportunity, we could have explained that .ONE is not targeted at telephones and telephony applications. In fact, many of the devices that might be served by .ONE would never be served by a telephony numbering system. In addition, we could have pointed out that ENUM's proposal raises substantial privacy concerns which .ONE avoids. Indeed, .ONE could be used in conjunction with ENUM to eliminate the problem that a phone number as a domain name means that one's phone number is published to the world. Unfortunately, we were not given any meaningful opportunity to present these points to the Board, and Group One's very strong application was rejected.

CONCLUSION

It is not settled whether ICANN is or should be subject to the Administrative Procedures Act that governs decisionmaking by government bodies. However, to secure its credibility and exercise its authority responsibly, ICANN should carefully consider the spirit of the APA when it makes decisions on broad policy issues like the allocation of new TLDs. It is not enough for ICANN to say that it seeks consensus, for in contested processes like the granting of TLDs there always will be disputes. ICANN should instead follow a process that allows its decisions to be scrutinized and, if unfair or improper, corrected.

PREPARED STATEMENT OF PAUL GERRIN, FOUNDER/CEO, NAME.SPACE, INC.

EXAMINING GOVERNANCE AND ICANN

With respect to governance, the government that governs least governs best. The government that listens to the will of the people can best serve the needs of the people.

ICANN does neither. ICANN has morphed from its intended role as the coordinator of Internet names and numbers into a private, corporate world government over the Internet that deliberates in secret and ignores the will of the people, while "hiding" behind a facade of slogans like "openness and transparency." Their words and deeds prove to be anything but open or transparent.

"hiding" behind a facade of slogans like "openness and transparency." Their words and deeds prove to be anything but open or transparent.

As ICANN Director Dr. Vint Cerf admitted before the House Commerce Subcommittee on Telecommunications on February 8, 2001, the selections of 7 new companies to act as Top Level Domain (TLD) registries by ICANN was "subjective." The ICANN board's selection of dominant industry players at the exclusion of entrepreneurs and small businesses also ignored the voices of the only publicly-elected members of its board who were denied a vote in the TLD selection process.

Privatization of government services may act as a way to streamline government efficiency and provide opportunities to the private sector, but it should not act as a replacement of government. Certain aspects of government that are essential to the functioning of civil society are those that protect the rights of its citizens by rule of law. When those elements are privatized there must be adequate measures taken to assure no Constitutional protections are lost.

The ROOT domain of the Internet, the "invisible" dot AFTER the "dot-com" is the heart of the Internet, the "master list" that identifies which TLDs such as ".com" or ".uk" or even ".art" or ".politics" appear to all the users of the Internet "by default." One could say that the ROOT domain is the "gateway" by which all content is made visible to the entire Internet. Only TLDs included in that "master list" can be accessed by the entire Internet, and anything excluded cannot.

Presently, the U.S. Government holds the authority over the ROOT domain through its agency the National Telecommunications and Infrastructure Agency (NTIA) under the Department of Commerce. The NTIA has entered into an agreement with ICANN to oversee the assignment of TLDs to operators who will provide services for those TLDs and to recommend their inclusion into the ROOT domain so they will be visible to the entire Internet. ICANN at its own admission had acted arbitrarily and capriciously in selecting 7 TLDs and their operators. The beneficiaries of the TLD selections include the dominant industry players, and companies whose principals resided on the ICANN board. Although some of the board members recused themselves from the actual vote on the TLD selections, they inevitably made their impression on the other board members who voted unanimously in their favor. The exclusion other qualified applicants, and more than 130 new and expressive TLDs by the ICANN board not only reeks of favoritism, but is an ominous sign of things to come should ICANN gain control of the ROOT domain. Some have argued that the restricted number of TLDs selected by ICANN is meant to "preserve stability of the Internet." In reality, since the addition of hundreds, thousands, even millions of TLDs would have no adverse technical impact on the Internet, the artificial limitation of TLDs is in fact a form of censorship imposed through pressure by the trademark and intellectual property special interests who place the value of "brand" above free speech and who wish to profit by creating monopolies and artificially limiting supply in order to control the market, and in this case, access and free speech.

Should the NTIA move forward to fully privatize the ROOT domain to ICANN, U.S. Citizens would stand to lose their First Amendment Rights with respect to the Domain Name System that enables them to access, publish and express over the Internet. It would be a great tragedy to our society to see the First Amendment replaced by the Lanham Act! Should First Amendment rights with respect to the Domain Countries of the second countries of th

main Name System become lost, the Internet would become a world in which trade-

mark rights supercede and even chill free expression and speech.

I respectfully urge this Committee to intervene if necessary to assure that the ROOT domain remain under the authority of the U.S. Government, and that any "outsourcing" of services to manage it technically or administratively be limited so as to protect the rights of U.S. citizens under the U.S. Constitution.

Thank you for your time and for the opportunity to present my views to this Com-

mittee. I would be pleased to answer any of your questions to the best of my ability.

PREPARED STATEMENT OF INTERNATIONAL CONGRESS OF Independent Internet Users (ICIIU)

The International Congress of Independent Internet Users ICIIU) thanks this Subcommittee for an opportunity to present its views on ICANN and the so-called Internet privatization process in charge of the U.S. Department of Commerce.

In addition to the comments presented here, the ICIIU has made a formal complaint to the U.S. Government regarding what we believe to be the illicit creation

of ICANN by special interests and its ongoing catering to those interests. The complaint can be read at the ICIIU website (http://www.iciiu.org/Protest.htm), and a news article on the complaint at http://www.internetnews.com/ec-news/article/0,4-315131,00.html.

Senators, we users of Internet domain names presently number in the millions. We are not a small group of special interests like some of the other stakeholders involved in the Internet. We belong to all sectors of society, in every country on

We users of Internet domain name registration services should be free to choose with whom and on what terms we contract for those services. But we are being restricted to registration of our domain names with so-called ICANN-accredited registrars, which are companies that have signed an agreement with ICANN in which they have promised to impose many unfair conditions on user-registrants, including the condition that we agree that our domain name can be revoked, suspended, or canceled by the registrar, the registry (NSI), or ICANN upon the decision of any one of these to do so, without any show of cause, and with no provision for review

This is the essence of anti-competitive and anti-consumer behavior. ICANN, NSI, and the "accredited" registrars comprise a combine, a trust, that has conspired to deprive companies offering a better service and fairer terms from doing so, and to deprive registrants of due and democratic process, with a perpetual threat of discontinuance of service of our domain name, on which our website and our business depend.

In its contractual relationship with the accredited registrars and with NSI-the-registry (this last giving ICANN power to enforce domain name registrations to its accredited registrars), ICANN has made the businesses of domain name holders, which depend on continuous domain name service, subject to the whim of ICANN, registry, and registrar. This makes it extremely precarious to invest time and money in a website, which can disappear overnight if the domain name which makes the website visible to the world is removed from the root domain name database, controlled by NSI under the aegis of ICANN.

According to the provisions of the registrar/registrant agreement (the contract of adhesion between registrant and registrar) and the UDRP, ICANN, registry, and registrar may revoke a domain name for any reason, or without a reason. There is no due process, there is no administrative process controlled by law, there is no judicial review, because ICANN is an administrative agency masquerading as a private non-profit corporation which believes it cannot be made to answer either for violations of the Admin. Proc. Act, on the one hand, or the antitrust violations of a private for-profit corporation, on the other. Yet ICANN, NSI, and the registrars are, in fact, a cartel illicitly (that is, without the requisite legislation and in restraint of free trade) regulating interstate and international commerce.

ICANN itself has been formed, not by the meeting and consensus of all stakeholders-of which we users are a very considerable part-called for by the White Paper issued by the Department of Commerce (http://www.ntia.doc.gov/ntiahome/ domainname / 6-5-98dns.htm), but by a secret process that has never been revealed (see "The Domain Name System: Hearings Before the Joint Subcommittees of the House of Representatives Committee on Science and Technology—1998," Congressional Record, U.S. Gov't Printing Office).

The initial Board of ICANN, which still runs it after over 2 years of existence without a membership, and which is determining all of its policies on domain name usage, was chosen by a small group of persons representing an alliance of big businesses that includes IBM, MCI, and AT&T (see http://www.cookreport.com/08.10.shtml [lower part], and http://www.cookreport.com/icannregulate.shtml).

No end-user of the Internet, no individual, no small business, nor non-commercial user, has been permitted by ICANN to participate in its policymaking. When individual and independent domain name holders or their spokesmen like the ICIIU, IDNO, CPT, etc., have demanded participation in policymaking committee meetings, we have been thrown out, disconnected, and refused admission. (The ICIIU has first-hand evidence, in the form of a tape recording of a teleconference of the Names Council, the central committee of the Domain Name Supporting Organization of ICANN from which all domain name-related policy is supposed to originate, of persons and organizations being disconnected and excluded, even though these people had a perfect right to participate as domain name registrants and Internet stakeholders.) ICANN knows that, if our participation were permitted, the anti-competitive and anti-consumer contracts and agreements it has engineered with its registrars and with the monopolist registry NSI could not have been effected.

The Constituencies and Names Council of the DNSO of ICANN have all been cap-

The Constituencies and Names Council of the DNSO of ICANN have all been captured, through the use of undemocratic tactics, by members of CORE, a trade association of registrars illegaly incorporated in Switzerland (a complaint in this regard has been filed with the Swiss Department of Justice), or by members of ISOC, the so-called Internet Society, whose officers are predominantly employees of IBM, MCI, AT&T, or other large infrastructure corporations, and which is funded by those corporations (see http://www.isoc.org/orgs/orgsbylevel.shtml and http://www.isoc.org/orgs/orgsbylevel.shtml and http://www.isoc.org/orgsbylevel.shtml and http://wwww.isoc.org/orgsbylevel.shtml and <a href="http://www.is

www.cookreport.com/isoccontrol.shtml).

In September, 1999, ICANN signed contracts with NSI and the ICANN-accredited registrars, establishing the commercial and regulatory relationship between them (http://www.icann.org/nsi/nsi-agreements.htm). These Agreements constitute a per se violation of the antitrust laws, since they are, in effect, an arrangement between a producer (NSI), the wholesaler (ICANN), and the retailers (the registrars) to restrain trade.

No consumer representative nor spokesperson of domain name users was permitted to be present at the negotiations of the above Agreements. They were authorized by Beckwith Burr in the name of the Department of Commerce; Ms. Burr was given the job of representing the DOC through lobbying pressure from IBM, MCI, AT&T, and others; sheis IBM's operative in the DOC. And IBM, together with its combine partners, is funding ICANN: http://www.icann.org/correspondence/ibm-letter-24sept99.htm (\$100,000 contribution from IBM—letter from John Patrick, IBM VP for Internet).

The ICIIU asks this Committee to investigate ICANN, its creation and operations, and, if it finds, as we have no doubt it will, that ICANN has not been created in accordance with law and democratic procedure, and is not conducting its policy decisionmaking for the benefit of all alike, to dissolve ICANN and in its place create a new and proper Internet regulator, responsive to the needs of the millions of Internet domain name users, who petition this Committee to intervene and redress our grievances.

PREPARED STATEMENT OF THE DOMAIN NAME RIGHTS COALITION AND COMPUTER PROFESSIONALS FOR SOCIAL RESPONSIBILITY

INTRODUCTION

Thanks to the Committee for providing the opportunity to provide feedback to the Senate regarding the role of ICANN and the Commerce Department in the ongoing battle for Internet governance. Although you have received letters from others who attempt to downplay ICANN's role, make no mistake; it goes far beyond that of technical management and enters the realm of a regulatory body. ICANN's policy will affect commerce, freedom of expression, and likely stifle the very medium it seeks to regulate. ICANN has not provided an accurate picture of the Internet world to the Committee. We felt it was necessary to correct and explain much of what they reported to you in response to your questions.

ABOUT DNRC AND CPSR

The Domain Name Rights Coalition has participated in the ongoing debates concerning Internet management as a member of the Boston Working Group, a member of the Open Root Server Confederation, former steering committee member of the IFWP (International Forum on the White Paper.) DNRC submitted comments on the Green Paper, use of the .US domain, testified before Congress, submitted com-

ments to the World Intellectual Property Organization, and has dissented in the formation of ICANN's Uniform Dispute Resolution Policy.

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As technical experts, CPSR members provide the public and policymakers with realistic assessments of the power, promise, and limitations of computer technology. As concerned citizens, we direct public attention to critical choices concerning the applications of computing and how those choices affect society.

SUMMARY

ICANN continues to execute fundamental Internet policies beyond its mandate as "technical coordinator," and without creating the participatory structures that would allow its decisions to be accepted and trusted by a broad spectrum of stakeholders. The sad fact is that ICANN has been "captured" from the beginning. Special interest groups have dictated the direction of ICANN, and have morphed it into an Internet Governance body with none of the protections afforded by governments.

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Governmental safeguards to American ideals such as Free Speech and other civil liberties, must be codified in ICANN, as well as other quasi-governmental corporations in the protection of the protections afforded by governments.

tions in the private sector.

There is no technical reason to refuse any applicant for a top level domain. Instead, policy reasons were substituted for technical reasons, resulting in limiting

competition, not enhancing it.

By maintaining a false artificial scarcity, ICANN is risking an increasingly fragmented and incoherent Internet system. By their own statements ICANN claims to be concerned with stability above all. However, ICANN has now actively sought to cause domain names already registered by existing businesses (.web, .biz, .museum, .pro, .info and others) to be registered to potentially different parties at another. Rather than taking the opportunity to strengthen the domain name system, ICANN is risking the single predictable factor of the Internet. They are, in effect, ensuring that current domain names maintain their scarcity, and thus, value. The Department of Commerce hopefully did not contemplate that ICANN would become the Federal Reserve Board of domain names.

Domain name registrars who have proven technical competence beyond a doubt by registering domain names for years as well as providing their own alternative roots were refused permission, not on technical grounds, but purely on policy grounds. TLD registries should be allowed to set policy independently of ICANN and that no registry be excluded from TLD operator status if its policy differs from that

The burden of proof should be placed on ICANN to refuse to admit competition. Potential competitors should not prevented from entering the market, and force to prove to ICANN that they are worthy of an artificiality small number of slots.

ICANN further claims to honor intellectual property law. Yet the fundamental basis of a natural right of property is that one earns property by the sweat of the brow. The ICANN uniform dispute resolution protocol (called a protocol to falsely deny that it is clearly a policy document, with negligible technical content) does not acknowledge any sweat of the brow argument. In multiple cases (for example, etoys and workingwomen) entrepreneurs entered the risky world on on-line commerce and sweat over their domain names to create value. The UDRP policy does not acknowledge that risk-taking or investment even over such generic words and phrases as "toys" and "working women." The UDRP appears to have nothing to do with law. For example the published procedural rules used by one registered UDRP provider are in clear violation of any standard of procedural due process.

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As currently constituted ICANN has failed on all charges. It has moved slowly; been unrepresentative; acted to limit competition; and failed to offer useful, fair, coherent policies, or even policies which encourage investment in virtual property.

ICANN is a policy experiment that has failed.

HISTORY

The Domain Name Rights Coalition was formed in 1995 directly because of the NSI domain name dispute policy which we thought stifled the rights of individuals and small businesses to choose domain names. The development and growth of the World Wide Web brought with it a significant interest by the business community. It soon became clear that IANA, a US government contractor run by Dr. Jon Postel, would be unable to continue its management of domain names and numbers without significant help. The first attempt to transfer control occurred in 1994 when Dr.

Postel attempted to place IANA under the Internet Society (ISOC.) This failed, but something else grew from that union. The IAHC (International Ad Hoc Committee) was created, and tried to take over Internet governance via a document called the gTLD-MOU. Comments were solicited by the IAHC from the Internet community, but the responses were largely ignored. It is not coincidental that many of the members of CORE, POC (the Policy Oversight Committee), ISOC (an original IAHC advocate), WIPO, and the ITU are now heavily involved with the ICANN process, and

have in a sense "captured" that process.

The gTLD-MOU was stopped by the Internet community when it became clear that the process was closed, unaccountable, and non-transparent. Various people appealed to the Department of Commerce and the State Department for help. Through pealed to the Department of Commerce and the State Department for help. Through significant work and effort, the IAHC plans were thwarted, and the Commerce Department produced the "Green Paper" as a roadmap for technical management of names and numbers. The Green Paper was truly a pro-competitive solution, one that was hotly contested by many European governments, and the previous supporters of the MoU. In fact, it was right around this time, that Jon Postel redirected over half of the worldwide root servers to his server in California. While we may never know, this combination of events apparently derailed the Green Paper, and

started the process that resulted in the White Paper.

Thousands of comments were submitted by a large cross section of the Internet community, although many questioned (and still question) under what authority the Department of Commerce was taking control of Internet functions. Many of these comments were incorporated in the "White Paper" which provided a framework for considering these issues. Using the White Paper as a foundation, the IFWP (International Forum on the White Paper) was created in 1998 to discuss these issues and attempt to reach the consensus that was required to move forward with the plans envisioned in the White Paper for an open, transparent and accountable organization, Newco, to manage domain names and numbers. Please note that even with the White Paper, significant numbers of people still ask under what authority Commerce is operating in choosing one company over another, mandating that company's bylaws, mandating that company to be non-profit, and assisting in choosing the unelected board members of that company.

The IFWP steering committee consisted of members of the Internet community

who were involved with not-for-profit enterprises. These included CORE, the Commercial Internet Exchange (CIX), Educause, the Domain Name Rights Coalition (DNRC), and various other groups. It was chaired by Tamar Frankel, a respected law professor and expert on corporate structure and process from Boston University. The IFWP held meetings around the world, and worked to come to consensus on various issues. In the midst of this process, Joe Sims, attorney for Dr. Postel, prommulgated a set of bylaws for Newco. He did this in closed meetings with no public input. These bylaws were presented to the IFWP, but did not gain consensus, largely because the points on which the IFWP had already garnered agreement were not included. Various further drafts followed, but still none of them achieved

consensus.

In late August 1998 after the final IFWP meetings, the steering committee met telephonically to plan the final or "wrap-up" meeting in which the consensus points would be memorialized, and further concessions would be provided by all sides. Although there had been multiple votes already taken that clearly supported a wrapup meeting, yet another vote was called at that time. Mike Roberts vehemently opposed a wrap-up meeting, and was supported in this by Barbara Dooley of the CIX. There is speculation that Mr. Roberts had already been contacted at that time rearready been contacted at that time regarding serving with the ICANN board in some capacity. Further, around the time of the wrap-up meeting, Esther Dyson says that she was approached by Roger Cochetti of IBM and Ira Magaziner in Aspen, Colorado and asked if she would be interested in joining the ICANN Board. The IFWP wrap-up was finally completely derailed by ICANN's refusal to participate in the meeting.

Some of the members of IFWP continued their work to create an open, trans-

parent and accountable Newco. Two major groups, the Open Root Server Confederation (ORSC) and the Boston Working Group (BWG) promulgated bylaws for Newco through open process. Three sets of bylaws were provided in a timely manner to the Department of Commerce. Although the Commerce Department had long stated that they would not choose one set of bylaws over any other, they chose the

ICANN's bylaws as a starting point.

The Commerce Department directed ICANN to consult with the BWG and the ORSC regarding areas of concern to Commerce but there was little reason for them to do so since their bylaws and structure had already been chosen. ICANN did meet telephonically with BWG and ORSC, but failed to make substantive changes in its bylaws to accommodate the diversity of opinions toward fundamental issues such as openness of board meetings, voting on the record, voices for individuals and noncommercial entities, limitations on ICANN's powers to strictly technical issues, etc. Both BWG and ORSC warned that the concept of constituencies would lead to capture by corporate interests at the expense of expression. BWG wanted to do away with constituencies altogether. ORSC wanted constituencies structured so that everyone would have a voice. The ICANN constituency structure has, as predicted, become the catalyst for capture by the old gTLD-MOU crowd, and a large and powerful group of trademark interests. These trademark interests are currently pressing non-legislative expansion of rights for trademark holders, at the expense of free speech and expression.

COMPETITION

It is ironic in that in the midst of all the controversy over competition, ICANN has hesitated to take the single step that would introduce the most competition: creating objective technical guidelines for choosing new TLD registries. Although ICANN has indeed chosen 7 new gTLDs, no guidelines have been established that would allow for future expansion. There are no roadmaps by which prospective registries can turn to structure their technical business plans.

THE PROCESS OF CONSENSUS DEVELOPMENT AND IMPLEMENTATION

ICANN is correct in that its formation was an unprecedented experiment in private sector consensus decisionmaking. Unfortunately, that experiment is in the process of failure. ICANN's claim of "openness and transparency, based on Internet community consensus, bottom-up in its orientation and globally representative" is far from the reality of the situation. ICANN is the classic top-down organizational structure without accountability. When its bylaws are inconvenient, they are changed without discussion.

BOARD OF DIRECTORS

Currently, the 9 seats that were to be elected from the Internet stakeholders, the so called "at-large" directors, were whittled down to 5. The other 4 seats have been held by "Board Squatters," those who were appointed and not elected. Despite calls for elections to replace the squatters, and calls for their resignations, no movement has occurred.

Instead, the Board has responded with a "clean sheet" study that could, conceivably, dismantle the entire at-large process altogether. Leaving ICANN controlled solely by special interest groups.

ICANN STAFF

ICANN's staff seems, by all outside examination, to be driving all policy decisions. The non-elected staff, submits reports to the Board which are normally accepted verbatim, with no indication to the Internet community of what criteria was used to reach the conclusions contained therein. These policy decisions, often clearly outside the reach of a "technical management" organization, are then presented as a "fait accompli" with no accountability or transparency, and no input from the Internet community that they affect.

CONCLUSION

The Internet is the single most significant communications medium ever created. Its power goes well beyond that of shopping malls and e-commerce, and empowers individuals in a way never before imagined. It is thus a national as well as an international resource. The ability to control important aspects of this technology cannot be underestimated. It is up to all of us to remain vigilant when organizations are given special privilege by a branch of the U.S. Government to control this vast means of expression. Safeguards must be put into place whereby individuals, nonprofit entities, churches, tribal governments, and other disenfranchised groups may provide unencumbered input and opinion to an open, transparent and accountable entity. This entity is, unfortunately, not ICANN in its current form.

ICANN must be restructured. We suggest the following changes: (1) ICANN must limit itself to technical coordination only. This limitation must be irrevocably codified in ICANN's bylaws, and must be enforced by the Commerce Department and/

(2) All policy decisions, including the new selection of gTLDs must be clearly documented as to what objective criteria was used to select them. Any decisions without such objective, clearly stated criteria should be rescinded and revisited after such objective criteria are put in place.

(3) ICANN's current constituency structure must be restructured to allow for more inclusion by Internet stakeholders, including individuals, educational entities, reli-

inclusion by Internet stakeholders, including individuals, educational entities, religious entities, consumer protection groups, civil libertarians, and others. The current practice of lumping all of these groups into one constituency, while leaving 6 others who all represent overlapping business interests, must change.

(4) ICANN must not be used as the arm of government to circumvent constitutional rights and liberties. An example is the "takings" clause. Several gTLDs are being operated currently that will essentially be "taken" if ICANN puts the identical strings in their root system. Another example is ICANN's non-accountability under the Federal Administrative Procedures Act.

(5) ICANN must not be allowed to pick and choose provisions of its mandate that

(5) ICANN must not be allowed to pick and choose provisions of its mandate that it will accept and others that it will ignore. The most glaring example is its lack of codifying the at-large group into an irrevocable part of the bylaws. Second to this is ICANN's failure to recognize a place for individuals to participate on an equal footing with business interests. Third, is ICANN's continued failure to constitute a membership in accordance with the White Paper, as well as California public policy under which it is organized.

under which it is organized.

(6) Fundamental rights of American citizens, such as free speech must trump intellectual property rights of businesses. ICANN's Uniform Dispute Resolution Policy gives trademark and intellectual propertyholders a means to limit and silence legitimate speech without recourse. If ICANN is allowed to continue to use this policy, a balance must be struck whereby speech rights are protected and abuses by intellectual propertyholders are curtailed.

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