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Introduction

Mr. Chairman, Members of the Subcommittee,

Thank you for the opportunity to testify today and comment on the mission and organization of the Internet Corporation for Assigned Names and Numbers, (“ICANN”). I appreciate this opportunity, Mr. Chairman, both because I testified on behalf of Verisign on this topic before another Subcommittee of the Commerce Committee about a year and a half ago and much has happened since then, and because I have worked with ICANN since it was first developed. With almost four years of experience with ICANN now behind us, Mr. Chairman, it seems both appropriate and timely to review its performance and outlook.

It is also appropriate for us to testify because VeriSign has been among ICANN’s major supporters. We have been the largest contributor of dues to ICANN and we have been among the largest—if not the largest—donor of voluntary contributions to the organization. In addition, few, if any, companies or

organizations anywhere have provided more support to ICANN to both help it organize and operate. We consider ourselves among ICANN's most important and active supporters.

VeriSign has contributed to ICANN because we support it as an important experiment in international, private sector-based, coordination of Internet technical functions. These functions are important because they are, in part, what make the Internet work. When asked for my assessment of ICANN during the Subcommittee hearings early last year, I indicated that ICANN was an experiment, and it was at that time simply too early to conclude whether ICANN had been a failure, a success, or something in between. Sixteen months later, and with almost four years of experience with ICANN behind us, I don't think we can avoid some important conclusions. Most of these relate to the mission and functions of ICANN, for it is absolutely essential to have a focused idea of ICANN's, or any organization's, mission and functions before its optimal structure and funding can be addressed.

Before summarizing our conclusions, Mr. Chairman, let me preface them by explaining that ICANN has been among the most complex organizational experiments ever undertaken by anyone. It includes elements of at least a dozen organizational models ranging from industry standards bodies to civic organizations to international organizations to trade associations. It brings together technical, legal, diplomatic, commercial and civic interests along with just about every industrial segment from content to hardware. And as a brand new organization, ICANN has been asked by someone at some time to help them with just about every imaginable problem.

So, I should begin by giving credit where it is due: namely to the hardworking staff and volunteer directors and council members of ICANN. They have been at the center of a lot of pressure and, in the midst of it all, have built an organization from scratch. In doing so, they have had both successes and failures, which I would like to discuss.

Summary Conclusions

In February of this year, Mr. Chairman, ICANN's President issued an important report calling for a major reform of ICANN. Since that time, we have been carefully and thoroughly evaluating the ICANN experiment in light of its accomplishments, focus, mission, structure and organization. Perhaps the easiest way to describe our summary conclusions is to refer to the framework that I used last year. I described ICANN as a table that was planned to have four legs as its foundation. These legs—each consisting of a set of contracts with a different and important segment of the Internet—would together provide the structural foundation on which ICANN's programs and funding would rest. These four legs, or segments, are: (1) the generic Top Level Domain industry, called "gTLDs", consisting of the registries and registrars for such generic domains as ".com" or ".biz"; (2) the country code Top-Level Domain industry, called "ccTLDs", consisting of registries/registrar for the 243 country code Top-Level Domains, such as ".uk" (United Kingdom) or ".de" (Deutschland or, in English, Germany); (3) the operators of the Internet's thirteen Root Servers, the network of Internet servers that distributes the authoritative directory of who controls which Top-Level Domain to the entire Internet; and (4) the operators of the Internet Protocol, or "IP" Numbering Registries, the registries that distribute IP numbers to the many thousands of network operators who then assign these numbers to individual Internet users to give them an identity on the Internet. When we examined the ICANN experiment last year, I reported that one of

the four legs of the ICANN table was in place, but that the other three were then still being pursued. That situation has changed a little over the past sixteen months. While some progress has been made on one of these legs (the numbering registries) on two of them—the ccTLDs and the Root Server operators—ICANN seems little closer to entering into contracts with them today than they were early last year. Under these circumstances, it is important and timely that the U.S. government, and this subcommittee, evaluate ICANN at this time.

Background

Before describing the conclusions that we have reached, Mr. Chairman, I would like to briefly review how we got to where we are today:

Prior to 1998, the management of the technical functions of the Internet, such as domain names and IP numbering addresses, was conducted under various contracts and cooperative agreements between and among the U.S. Government, the Information Sciences Institute of the University of Southern California, which acted under the program name Internet Assigned Numbering Authority (“IANA”) and Network Solutions, Inc. (“NSI”), which was acquired by SAIC, later taken public, and then acquired in 2001 by VeriSign.

In June of 1998, the U.S Department of Commerce (“DOC”), acting through the National Telecommunications and Information Administration (“NTIA”), published in the Federal Register a statement of policy, called the “White Paper” regarding the privatization of the domain name system. In its White Paper, DOC envisioned the creation of a private sector entity to which DOC would someday delegate the authority to manage and perform “a

specific set of functions related to coordination of the domain name system...” The four coordinated technical functions discussed in the Federal Register Notice/White Paper are: “(1) set policy for and direct allocation of IP number blocks...; (2) oversee operation of the authoritative Internet root server system; (3) oversee policy for determining the circumstances under which new TLDs are added to the root system; and (4) coordinate the assignment of other Internet technical parameters as needed to maintain universal connectivity on the Internet.” While the White Paper mentioned no other functions for the entity, it did not, perhaps mistakenly in retrospect, prohibit them either.

In November, 1998, DOC entered into a Memorandum of Understanding (“MOU”) with a new, non-profit, California-based, corporation, ICANN, under which the U.S. Government agreed to experiment until September, 2000 with a limited recognition of ICANN as a coordinator of the four functions described in the White Paper. This MOU, and thus this experiment, has been extended several times, most recently in September 2001, and it expires on September 30, 2002.

The MOU’s purpose is explained in the following way: “Before making a transition to private sector DNS, i.e., Domain Name System management, the DOC requires assurances that the private sector has the capability and resources to assume the important responsibilities related to the technical management of the DNS...the Parties will jointly design, develop and test the mechanisms, methods, and procedures that should be in place and the steps necessary to transition management responsibility for DNS functions now performed by, or on behalf of, the U.S. Government to a private-sector not-for-profit entity. Once testing is successfully completed, it is contemplated that management of the DNS will be transitioned to the mechanisms, methods, and procedures designed and developed in the DNS Project.” The DOC and ICANN also agreed that “If the DOC withdraws its recognition of ICANN or any

successor entity by terminating this MOU, ICANN agrees that it will assign to the DOC any rights that ICANN has in all existing contracts with the registries and registrars, including any data escrow agreement(s)..."

Thus, it is entirely appropriate, and even necessary, that the U.S. Government review ICANN's performance under the MOU and consider the most appropriate U.S. policy.

In this context, ICANN's President anticipated and opened the current discussion over the U.S. Government's review of its MOU with ICANN in a seminal report to the Internet community that was issued in February 2002. In this thirty six page report, ICANN's President makes many important points, the most important of which is captured by its title, The Case For Reform and the opening paragraph of its conclusion "For all of the reasons described above, if we stay on our current course the ICANN experiment is likely to fail. But properly reformed, I am convinced it can succeed."

VeriSign's Assessment

As a leading participant in, and supporter of, ICANN, VeriSign has studied closely ICANN's obligations under its MOU with the U.S. Government, its current structure and organization and its performance against its mission over the past three and a half years. We have participated in numerous group evaluations, both inside of the ICANN structure and outside of ICANN, and we have carefully evaluated changes to the environment within which ICANN has operated since the MOU was signed in 1998. We have reached five major conclusions, all of which have important implications for ICANN's future, its mission and structure, as well as the funding that it requires.

In brief, at present course and speed, we share the ICANN President's concerns for the viability of the

experiment. Although we have entirely different ideas about the reforms that are needed, we share both his optimism for the future of the experiment if reforms are implemented and his dedication to the need for ICANN reform.

Achieving success requires that we recognize the following, however:

The Internet, and most particularly, the domain name environment, has changed dramatically since 1998 and ICANN needs to change to reflect these environmental changes. When the DOC-ICANN MOU was negotiated and ICANN was designed at the beginning of 1998, the Internet was a very different place than it is today and the more time that passes, the more different it becomes. In the area of domain names, in early 1998, there were an estimated two and a half million domain names. Almost 90% of them were in the now-famous “.com”, “.net” and “.org” TLDs and over 75% of the global market was served by “.com” alone. All of the ccTLDs combined were estimated to have served little over 10% of the worldwide market; and there were no gTLDs of consequence other than “.com”, “.net” and “.org”. NSI was the sole registry and registrar for all three of them.

Today, according to estimates provided by ICANN in its May 15, 2002 budget report, “.com” serves less than half of the global domain name market, while “.de” serves the second largest and “.uk” the third largest shares of the market worldwide. ccTLDs as a group serve around a third of the market and a half dozen new gTLDs, such as “.biz”, “.info” and “.names” are active in the global markets and are serving growing shares of the market. More importantly, ICANN estimates that the thirty four largest ccTLDs grew over the past year at an average rate of almost 50%, while the rate of growth for all gTLDs was less than 20%, with “.com” growing at an even slower rate. While ICANN is not a market research firm, and its estimates were developed by them for budget planning, the trends cited by ICANN are exactly the same as those we see in the marketplace. Whether the ICANN estimates are accurate or

not—and our market research suggests that they may underestimate both the decline in “.com”’s market share and the rise in the market share served by ccTLDs—no one doubts that “.com” currently serves less than half the market and that its share is declining; or that the ccTLD segment of the market is rapidly growing. Moreover, many ccTLDs, such as “.us”, “.au” (Australia), “.cn” (China), “.eu” and others have recently been revitalized and can be expected to be even more aggressive in the market in the future than they have been in the past. At this estimated rate of growth, ccTLD registrations would exceed .com registrations sometime this year or next, soon after which, ccTLD registrations would exceed all gTLD registrations combined. Again, Mr. Chairman, whether or not these exact estimates are accurate, the trends are clear.

Even while the share of the domain name market served by “.com” has shrunk dramatically, the share of registrations within “.com” provided by the VeriSign Registrar (formerly the NSI Registrar) has itself also dropped dramatically. Whereas in 1998, 100% of all .com registrations were provided by the (NSI, now) VeriSign Registrar, today around one hundred registrars compete in the gTLD market and the VeriSign Registrar’s share is less than 35%, with less than 20% of new registrations being served by VeriSign.

The net of these changes in the marketplace, Mr. Chairman, has been an enormous increase in competition in all segments and at all levels; and a natural and healthy increase in competitive pressures in such areas as pricing and new services. In this respect, however, ICANN’s structure, focus, and programs have in many key areas hindered competition. Over the past four years, ICANN has developed an extensive set of contractually-based controls that it exercises over the gTLD segment of the market. These include ICANN’s regulation of the gTLD segment’s prices and services. In a manner reminiscent of the kind of controls exercised over the telephone or broadcast industries in

the 1960's, virtually every aspect of the services of the gTLD segment of the domain name industry is either regulated or subject to the regulation by ICANN – from prices to value-added services. A very large portion of ICANN management's attention and resources is dedicated to the negotiation and enforcement of service agreements with gTLD registries that permit ICANN to control everything from their budgets to employee information sharing.

While ICANN has done some useful things that support a competitive environment, such as the introduction of new gTLDs like “.biz” and “.info”, this attempt by ICANN to comprehensively regulate the gTLD segment has created an un-level playing field between the gTLD segment, which is subject to extensive ICANN contractual controls on its prices and services, and the fast-growing ccTLD segment, which is not. The effort to become a regulator has diverted significant resources that ICANN needs; discouraged innovation, particularly in the gTLD segment; replaced marketplace competition with competition among lobbyists to curry favor with ICANN; discouraged investment, particularly in the gTLD segment; and needlessly contributed to the growth of an alternate root movement, which proposes to offer an unregulated list of gTLDs that would in some respects compete with ICANN's heavily regulated list of gTLDs. Unfortunately, the growth of ICANN's efforts to expand into service and price regulation of the gTLD segment has been at the expense of its ability to perform its core mission of technical coordination.

ICANN's experiment with mandatory regulation of the gTLD segment of the domain name industry has been partially successful in one area but unsuccessful in most others and needs to be dramatically reformed. Although its delivery and follow up has been notably uneven, ICANN has been partially successful in one important area of the gTLD segment: Operators in the gTLD segment are nominally required to

adopt three useful procedures. None of the three has been fully pursued by ICANN, but all are important and, in some respects, working:

- Escrow, under which registries and registrars are required to escrow their registration data in the event that one of them fails. This is in place today for registries; and
- WHOIS, a pre-ICANN lookup service that often permits law enforcement and others with a legitimate need (and unfortunately some spammers without a legitimate need) to quickly find some information about the identity and location of a domain name registrant. Currently, some—but not all—registrars offer a WHOIS service; and
- UDRP (Uniform Dispute Resolution Procedure), a mandatory domain name dispute resolution procedure, designed by the UN’s World Intellectual Property Organization, that is available to anyone who believes that a domain name registrant is using their trademark without a legitimate right to do so. Under it, so-called “cybersquatters” with no rights to use a domain name that is, or closely resembles, someone else’s trademark, can have that domain name registration transferred or deleted.

The unfortunate facts about these three accomplishments, however, are that they have not been fully pursued and they apply only to one segment of the market. Nor are there any plans for them to apply to all market segments.

A fourth ICANN procedure is worth noting, because it may be constructive, although the particularly

intrusive approach taken to it by ICANN tends to offset any benefits. ICANN requires that each gTLD registry offer equal access to all gTLD registrars accredited by ICANN. On the one hand, this requirement benefits competition and confidence in the marketplace, although on the other, since only ICANN can accredit registrars and ICANN has established exceptionally low financial criteria for registrar accreditation, it has resulted in a large number of financially weak registrars that must be serviced by every gTLD registry. It has also imposed ICANN regulations onto the lowest level of the gTLD segment: service arrangements between gTLD registrars and their millions of customers; which is several steps removed from ICANN's intended role as a technical coordinator at the network management level.

More importantly, Mr. Chairman, outside of some important, but limited, successes, ICANN's efforts to serve as a regulator of the services and prices of some, but not all, of the domain name industry has created enormous problems for the ICANN experiment. Among them:

In its regulation of the gTLD segment's services and prices, ICANN has failed to provide due process. As a non-profit organization, ICANN has neither the resources nor the mandate to employ due process in its efforts to exercise control over the services and prices of the gTLD segment of the domain name industry. Moreover, many ICANN procedures involve a review of services and prices of one service provider by its competitors, hardly a practice that is likely to lead to procedural or substantive fairness. Perhaps the worst consequence of the absence of due process, Mr. Chairman, is the frequency with which arbitrary or inconsistent regulatory decisions are made. For those who might be tempted to consider permitting ICANN to evolve into some form of supra-national regulator over the domain name industry, by the way, it is important to keep in mind that any effort to regulate domain name prices

and services in a multinational environment with due process will require both government agreements and millions of dollars annually. In such areas as consistency, transparency, and independence, ICANN's track record as a regulator of the gTLD segment has not been successful. With its inherent limitations, ICANN's approach to regulation is rarely transparent, frequently arbitrary, and never incorporates due process.

ICANN's efforts over the past few years to extend its role to the regulation of services and prices in the gTLD segment of the domain name industry have not resulted in any reduction whatsoever of national governmental regulation of the gTLD industry segment. We know of not a single governmental regulatory agency anywhere that has indicated that it lacks regulatory authority over the gTLD segment of the domain name industry because ICANN asserts regulatory authority over that industry segment. The result is perhaps the most perverse consequence of the regulatory aspects of the ICANN experiment: the gTLD segment of the domain name industry --uniquely among all of the industries involved in the Internet-- has been subjected to two levels of regulation. First, governmental regulation, which under the best of circumstances is extremely complex in the global Internet environment; and second, ICANN regulation, which is in no way coordinated with the regulatory activities of government authorities. By singling out the gTLD segment of the domain name industry for two layers of regulation, ICANN has competitively disadvantaged the gTLD segment, compared with the fast-growing ccTLD segment, and created a confusing situation in which the gTLD segment is subjected to both national regulation and ICANN regulation.

By going beyond the technical coordination mission and functions originally set for it and attempting to expand its authority into regulation of the services and prices of the gTLD segment, ICANN has placed an enormous accountability burden on itself and generated great pressure for the public election of its Board. Citizens of all

countries normally see themselves as having a right to participate in the regulatory proceeding of their governments. As a non-profit organization whose mission and functions are to provide coordination for the technical functions of the Internet, ICANN would attract relatively modest public and media interest and relatively little pressure for a publicly elected board. However, if ICANN were permitted to evolve into a supra-national, regulator over the domain name industry, then ICANN would, and should, attract enormous public pressure for a publicly elected board. As ICANN was originally envisioned—with a narrow set of coordination functions—it should probably always have some public participation in its governance; if for no other reason than to ensure accountability. But if ICANN is allowed to expand into service and price regulation, then its accountability to the public should not be appreciably less than that of government regulatory agencies; with all of the costs and complications that are involved.

ICANN's attempts to evolve toward the role of regulator of the services and rates of the gTLD segment was not planned or anticipated when the original MOU with the DOC was entered into. In fact, as I noted earlier, the MOU cites four fairly exact and narrow functions for ICANN. For the most part, ICANN's effort to expand its responsibilities into regulation was an accident of circumstances, including the unusual market conditions in 1998, the personal ambitions of key people involved with ICANN and the effort of some entrepreneurs to turn what was supposed to have been an experiment in technical coordination into an experiment in the supra-national regulation of their competitors. Almost everyone involved in ICANN's effort to regulate the gTLD segment of the domain name industry --from those who support it because they think that they can manipulate the process for their own ends to those who oppose this ICANN mission creep-- sees it as a failed aspect of the ICANN experiment. No one has put forward a realistic plan for how ICANN could be made into an effective, supra-national regulator of the entire domain name industry, equally and fairly regulating all segments of the industry, because it cannot be done without enormous

expense and intergovernmental agreements.

The solution is not to eliminate ICANN. It is to simply recognize that ICANN was never created to be - nor should it attempt to be- a regulator of services or prices. ICANN has neither the authority nor the resources to regulate services, rates, competition, operators, end-users or anything else in the domain name industry; the ccTLD segment or the gTLD segment. Ideally, such regulation should be done by the marketplace, which causes the least political distortion and rewards value instead of lobbying. Where the markets do not work, regulation is the job of governments, which are accountable and have the authority and the resources to do the job using due process.

This conclusion, in our view, is not a criticism of ICANN. It is a reaffirmation of the importance and value of the ICANN that was envisioned and is still needed.

ICANN has un-intentionally slid into the role of a network service operator, which has both distracted it from its critical mission of coordination and further diverted scarce resources. When the DOC-ICANN MOU was negotiated, no one envisioned that ICANN might itself become a significant operator of Web server machines, since ICANN was created to provide technical coordination mostly among major operators of network facilities. And yet by 2002, ICANN has found itself operating a variety of important server machines, including serving as the registry operator for the “.int” and the “.arpa” TLDs; the operator of the “Internic” website; the operator of reverse lookup services; and the operator of one of the Internet’s 13, critically-important Root Zone Servers. Some assert that operating a variety of Internet server machines is a trivial task that consumes little of ICANN’s time or resources. But anyone involved in the operations side of the Internet knows better. The Internet

server machines operated by ICANN all provide critical functions for the entire Internet. Each of them needs to be operated in a reliable and secure environment with adequate support. Attempting to do so successfully diverts resources away from other technical coordination tasks. These Internet server machines should be operated and supported by organizations that are in the business of operating Internet servers. Any such organization, business or non-business, could easily integrate these machines into their large, on-going, secure infrastructures. These servers should not be operated by a small, non-profit organization whose mission is coordination. Based on our experience with other aspects of the Internet's infrastructure, we are confident that businesses like ours, that are involved in the large-scale operation of Internet servers, would be willing to manage and operate, under contractual controls, the servers currently operated by ICANN. This could easily be done at no charge to ICANN or the Internet community and with a significant increase in both security and quality of service. This would permit ICANN to focus its resources on its important, core mission of technical coordination.

After almost four years of attempting to do so, ICANN has made little progress in establishing relationships with the 243 country code domain name operators or the thirteen Internet Root Server Operators. First, ICANN cannot continue to regulate the services and prices of the gTLD segment of the domain name industry and not the ccTLD segment; and Second, creating a secure and predictable legal environment for the Internet's Root Servers is important for the security of the Internet. We do not believe that there is a viable plan in place for ICANN to do either.

To become fully established, ICANN must establish contractual relationships with the ccTLD segment of the domain name industry and with the operators of the 13 Internet Root Zone Servers, and thereby add two of the missing legs to the ICANN table. According to the ICANN President's February report on ICANN reform, "...most of the root name server operators...and the

majority of ccTLD registries—have not yet entered into agreements with ICANN...” The principal risk created by the ambiguous legal environment surrounding the Internet’s Root Servers is not necessarily at the operational level. (e.g. VeriSign operates two Root Servers, for example, and we do so at what we think is the highest possible level of security and reliability.) However, there is currently no legal environment that defines the security or other practices of the Internet Root Server Operators. The risk of this ambiguous Root Server legal environment is in confidence and predictability. ICANN can and should play a role in the coordination of the Internet’s Root Servers, but it is not likely that they will effectively do so at present course and speed. This may be an area where governments should take an increased interest.

As for ICANN’s failure to establish contractual relations with most of the ccTLD segment of the domain name industry, this is critically important because, as I noted earlier, the ccTLD segment of the industry is large, rapidly growing today, and likely to grow more rapidly for the foreseeable future. So an ICANN that has contractual relationships with, and exercises extensive controls over a shrinking gTLD segment and that has no contractual relationships at all with the fast-growing ccTLD segment, is just not viable. In our view, Mr. Chairman, the principal cause of ICANN’s failure to conclude agreements with the ccTLD segment of the industry lies in the same ICANN regulatory issue that I described earlier: By their own statements, leaders of the ccTLD segment are prepared to conclude agreements with ICANN that recognize a limited role for ICANN. Most of the operators in this fast-growing segment have asserted for four years, however, that they will not recognize ICANN as having regulatory authority over them. Most explain that, just like the gTLD segment, the ccTLD segment of the industry is already regulated by national governments and their local Internet communities. As best we can tell, ICANN has refused to accept a limited role of technical coordinator in its relationships with the ccTLD segment, giving rise to four years of

marginally-productive negotiations between ICANN and the ccTLD segment. At present course and speed, we do not see any successful conclusion in sight. The successful conclusion of the ICANN negotiations with the ccTLDs could be within reach, however, but that turns on the same approach to ICANN regulation that I described earlier: the principal regulator of the domain name industry should be the marketplace, which is highly competitive today and will be increasingly competitive in the future. Where the marketplace fails, governments already provide—and will continue to provide—effective regulation. Only if and when the marketplace and governments cannot adequately address an important need for Internet coordination should we turn to ICANN for that benefit. We have noted elsewhere that, for the gTLD segment, ICANN’s role in three areas should be continued and one should be carefully considered. For the ccTLD segment, ICANN should develop parallel voluntary programs that address UDRP, escrow, WHOIS and, perhaps, equal access.

ICANN needs to have a carefully and tightly defined mission and a set of safeguards to ensure that the organization is not led away from that mission. Many of the problems that are discussed in this testimony stem from the fact that ICANN’s mission, while it is often described as being “focused,” is in fact vaguely defined with no effective safeguards to prevent mission creep. And the proof of this is that the various documents that make up ICANN’s constitution, ranging from the MOU itself to ICANN’s many contracts with registries and registrars, both permit vastly different interpretations of ICANN’s fundamental function and generally do not prevent ICANN from extending its reach.

From the beginning, ICANN’s purpose and function has been among the most important of any organization dealing with the Internet: provide a central depository for information about, and provide coordination among those who operate, the technical infrastructure of the Internet, most notably in the domain name system. While

the DOC MOU was quite clear on what ICANN should do, it neither specified what ICANN could not do, nor did the MOU provide guidance to ICANN on how ICANN was to pursue its four authorized and narrow tasks. It's rededication to that mission and the establishment of safeguards will both place ICANN on a pathway toward success, and free it of the endless distractions, expenses, and controversies that have bogged it down so much during its first four years.

We firmly believe that after four years of struggle, ICANN sits at a crossroad between pursuit of a narrow set of achievable and important technical coordination objectives with ample resources to accomplish them on the one hand, and continued pursuit of unachievable and needless objectives that generate enormous expense, market distortions and endless systemic stress.

We hope that you will join us in placing ICANN on the pathway to success that is so important to the Internet's future.

Thank you.

