7 July 2006

Contribution by the Internet Society on the Notice of Inquiry by the National
Telecommunications and Information Administration, US Department of Commerce, on Docket
No. 060519136-6136-01 - The Continued Transition of the Technical Coordination and
Management of the Internet Domain Name and Addressing System

The Internet Society (ISOC) is pleased to provide its response to the NTIA's request for
comments on the "progress to date of the transition of the technical coordination and
management of the Internet DNS to the private sector."

The success of the Internet lies in the fact that it is a "network of networks" characterized by
distributed management and a minimum of regulation.   Both operational and governance
mechanisms are implemented as locally and as redundantly as possible. This principle has not
only enabled the Internet to grow rapidly and to serve millions of users, it has also prevented any
one entity or government from "owning" or "controlling" the Internet. In contrast to many other
telecommunications networks, the Internet's technical architecture and distributed management
fosters competition, innovation, redundancy, and reliability, supporting the vision "the Internet is
for everyone".

The Internet has become a powerful, stable and versatile platform because its technological
architecture is developed in an open, global, freely accessible standards-setting process
supporting innovation and global problem solving.   The Internet's operations are substantially
managed at local and regional levels allowing input from local stakeholders (including
government) at both policy and operational levels. These principles are as important to the
success of the Internet as its architectural design. They enable the Internet to evolve quite
rapidly and stably in response to needs from across the globe, while maintaining its essential
nature; and they still serve as fundamental development and management principles today.

In addition, there will be advances in technology, changes to the underlying infrastructure, and
the development of new ways to navigate on the Internet that will mean that the role today's
Domain Name System plays will change over time.   The administration of DNS names and
numeric addresses is a notable exception to the principle of distributed management because the
current technology requires some central administration and coordination functions. The Internet
Society believes that navigation mechanisms that have less need for central administration and
coordination will be developed and deployed in the future, and hence oversight should be put in
place only to the extent that it is necessary (technically or otherwise).

In order to reflect this reality, ISOC suggests that the NTIA should add the principle of "technological evolution" to the time-tested principles laid out in the DNS White Paper, and ensure that any oversight or requirements that may be put on ICANN do not over-constrain natural and inevitable technological evolution.

ISOC has always supported the self-regulation model of the Internet, and we have always strongly supported ICANN and the role it plays in coordinating certain aspects of the "collaborative" Internet model. ICANN is an essential organization, one among many, that help manage and administer various functions of the Internet's development and management, and we continue to actively support them. Given its mission, ICANN will always face difficult policy issues, which will generate controversy and debate when addressed in such a diverse, international, constituency-based, multi-stakeholder environment. This should not be seen as a flaw; ICANN is far more open and responsive than many, more-established, international organizations, and differing opinions are to be expected.

We believe that in line with the original DNS White Paper, ICANN should remain focused on those functions that out of necessity need to be performed centrally at the global level and that are materially important to the continued success and smooth functioning of the Internet. All other functions, be they operational or governance should be performed as locally as possible in a distributed and redundant fashion.

By way of example, the current agreement between NTIA and ICANN obliges ICANN to seek operational authority over the DNS root name server system through formal arrangements with the root name server operators. ISOC believes this would eventually introduce risks that are not there today. The non-hierarchical distributed arrangements within the root name server system, and the diversity of software, hardware and operational procedures are key elements that contribute to a stable and secure root system. The current distributed and redundant root server model as operated by a dozen independent organizations has clearly been very successful. ISOC believes this model provides maximum stability and security and we see no benefit to centralizing management of the root name server operators. Two ISOC member briefings (available at http://www.isoc.org/briefings/019/ and http://www.isoc.org/briefings/020/) and the National Academies publication: *Signposts in Cyberspace: The Domain Name System and Internet Navigation* provide valuable background on this issue http://www7.nationalacademies.org/cstb/pub_dns.html

We have also noted the concerns expressed by the IAB on the expressions of control over the assignment of technical protocol parameter assignments, documented at: http://www.iab.org/documents/correspondence/IANA-2006/IAB-RFI-Input.pdf, and support their request to clarify that the operational control is provided by an IETF-ICANN MoU (http://www.ietf.org/rfc/rfc2860.txt). In addition, the IAB has submitted their own comments to this Notice: http://www.iab.org/documents/correspondence/2006-07-09-IAB-NTIA-NOI-Response-07072006.pdf and the Internet Society is fully supportive of their position.

There has been an ongoing discussion with regard to the role of governments in ICANN. ISOC is pleased to see that ICANN and the Governmental Advisory Committee (GAC) are taking steps to address the role the GAC can and should have in ICANN through the ICANN Board and ICANN Governmental Advisory Committee Working Group. This being said, we caution against

increasing the role of ICANN or of governments beyond what necessarily must be done centrally or what must be done to contribute to the stability and security of the Internet.

The Internet Society does not believe that increasing roles and responsibilities, or creating more structures, thereby effectively over-governing the Internet, will in any way contribute to the successful evolution of the Internet as it could inhibit the deployment of, inter alia, improved, more distributed "naming" technologies. The Internet Society believes that any moves that might restrict innovation or new technological improvements from coming to the marketplace must be avoided, this despite the fact that today we benefit from the current structure around the DNS through the .ORG registry.

ISOC encourages the US Government to take a more hands-off approach in its relationship to ICANN and believes this is fully consistent with the original intent when ICANN was launched. To a significant extent, we believe the calls for greater multi-lateral government control over ICANN are motivated by the current geo-political situation and in order to minimize future politicization of the management of the DNS and the allocation of IP addresses, the Internet Society encourages the US Government to give ICANN more freedom following the model the US Government and many other governments have helped nurture over the years.

The debate over the future of ICANN has been characterized as a choice between unilateral government control and multilateral government control. This is a false dichotomy; there is a third option—no centralized management or centralized control. This model has served the Internet very well in regards to Internet standards, scalability, new innovative services, good (and still improving) competition and many other aspects of the Internet. This model allows maximum participation nationally and regionally and so should not be characterized as preventing any entity from participating in the governance of the Internet. There are many, many models of international non-governmental organizations which provide international coordination and/or influence billion-dollar industries, such as the International Red Cross, the SWIFT system for international banking transfers, the International Air Transport Association, and even, from the world of sports, the International Olympic Committee and FIFA. Each can provide useful lessons and certainly prove the feasibility of such models.

Finally, we also encourage ICANN to be more responsive to the needs of its various constituencies, especially those of end users. ISOC encourages ICANN to work more closely with organizations that represent end-user interests, the Internet Community organizations, as well as others, to ensure that the views of a broad cross-section of individual users are taken into account in the ICANN decision-making processes. Many of these Internet Community organizations work with varied and significant end-user communities nationally and regionally, and this would be an excellent way to increase the diversity and variety of input into ICANN matters.

We thank you for this opportunity to comment.

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President and CEO, Internet Society

About the Internet Society

Founded in 1992, the **I**nternet **SOC**iety (ISOC) is a professional membership society with more than 100 organizations and over 20,000 individual members in over 180 countries. It provides leadership in addressing issues that confront the future of the Internet, and is the organization home for the groups responsible for Internet infrastructure standards, including the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB). In 2002, ISOC was given the privilege of operating the .ORG domain name as a result of a competitive open bid process conducted by ICANN; and a subsidiary organization, called Public Interest Registry (PIR), was established for this purpose.

The mission of ISOC is to promote the open development, evolution, and use of the Internet for the benefit of people throughout the world—to ensure that "The Internet is for Everyone".