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The Honorable Judd Gregg
Chairman
The Honorable Ernest F. Hollings
Ranking Minority Member
Subcommittee on Commerce, Justice, State,
and the Judiciary
Committee on Appropriations
United States Senate

The Honorable Harold Rogers
Chairman
The Honorable Jose' Serrano
Ranking Minority Member
Subcommittee on Commerce, Justice, State,
and the Judiciary, and Related Agencies
Committee on Appropriations
House of Representatives

Subject: Department of Commerce: Relationship with the Internet Corporation for Assigned Names and Numbers

The conference report (H. R. Conf. Rep. No. 106-479) accompanying the Consolidated Appropriations Act for fiscal year 2000 (which incorporates the fiscal year 2000 appropriation for the Department of Commerce) requested that the General Accounting Office review the relationship between the Department of Commerce (Department) and the Internet Corporation for Assigned Names and Numbers (ICANN). The Department selected ICANN, a California not-for-profit corporation, to administer policy for the domain name system, which links the series of numbers that identify servers connected to the Internet to easy-to-remember addresses such as www.gao.gov. On November 25, 1998, the Department and ICANN agreed to jointly design, develop, and test the mechanisms, methods, and procedures that should be in place and the steps necessary to transfer the management responsibility for domain name system functions now performed by, or on behalf of, the United States government to a private sector not-for-profit entity. As agreed, we have addressed the issues in the conference report by answering the following questions:

1. whether the formation of ICANN was in accordance with the Administrative Procedure Act and the Government Corporation Control Act;
2. how ICANN's interim board was selected and what role the Department played in the selection of board members;
3. whether the Department has the authority to enter into agreements with ICANN and to participate in ICANN activities;
4. what the legal basis is for the expenditures of funds by the Department for its participation in ICANN proceedings;
5. whether, under Office of Management and Budget Circular A-25, ICANN, as a “project partner” with the Department, has authority to impose fees on Internet users to cover ICANN’s operating costs; and
6. whether the Department has the legal authority to transfer control of the authoritative root server to ICANN.¹

In order to answer these questions, we requested and received the written views of the Department on these issues. Additionally, we interviewed a number of other government officials and legal and policy experts and we researched applicable law. (A complete detailing of our objectives, scope, and methodology is in Enclosure I, along with the list of the experts with whom we spoke.)

RESULTS IN BRIEF

ICANN was formed by private parties in response to a policy statement issued by the Department advising the public that the U.S. government was prepared to enter into an agreement with a new not-for-profit corporation formed by private sector Internet stakeholders to administer the domain name system. Before issuing the policy statement, the Department had indicated that the privatizing of the domain name

¹ GAO also was asked to review two other matters: (1) the roles of the National Telecommunications and Information Administration and the National Institute of Standards and Technology in managing and/or monitoring U.S. participation in ICANN, and (2) the adequacy of security arrangements under existing Department agreements with ICANN and Network Solutions, Inc. As agreed, these questions will be addressed separately.

system management would be conducted under a rulemaking proceeding subject to the notice and comment procedures of the Administrative Procedure Act (APA). However, the Department ultimately chose to issue a policy statement rather than continue with a rulemaking on privatizing the domain name system. The policy statement only advised the public of the manner in which the Department planned to transfer the domain name system, and was not subject to the notice and comment procedures of the APA. Also, the Department did not establish or acquire ICANN, and therefore, the Government Corporation Control Act, which delineates an agency's authority to do so, does not govern the formation of ICANN.

According to ICANN, the late Dr. Jon Postel was primarily responsible for the selection of ICANN's interim board. Dr. Postel was the director of the Computer Networks Division of the Information Sciences Institute at the University of Southern California and administered the Internet Assigned Numbers Authority (IANA), whose functions included coordination of the assignment of numerical addresses to Internet users. He advocated transforming IANA into the new entity called for under the Department's policy statement. The selections were made after Dr. Postel, acting for IANA, invited and considered suggestions from the Internet community. According to Department officials, the Department did not participate in the consideration or selection of proposed ICANN interim board members.

The agreements that the Department has entered into with ICANN, as the Department has noted, are congressionally authorized mechanisms for entering into agreements with third parties. The Department has entered into three major agreements with ICANN: (1) the memorandum of understanding for a joint domain name system project, (2) a cooperative research and development agreement, and (3) a sole source contract to perform certain technical functions relating to the coordination of the domain name system. Both the memorandum of understanding and the sole source contract are scheduled to end by September 2000, and the cooperative research and development agreement has a proposed completion date of September 2000. However, the Department contemplates extending these agreements to the extent that the tasks set forth in the various agreements are not complete. In carrying out the President's directive to privatize the management of the domain name system, the Department participates in ICANN's activities by sending officials to ICANN's public meetings and representing the United States on ICANN's Governmental Advisory Committee.

Although the coordination of the domain name system has largely been done by or subject to agreements with agencies of the U.S. government, there is no explicit legislation requiring that the government exercise oversight over the domain name system. According to the Department, its authority to support the privatization of the domain name system stems from its broad general authority to foster, promote, and develop foreign and domestic commerce, 15 U.S.C. § 1512, as well as the National Telecommunications and Information Administration's specific authority to

coordinate the telecommunications activities of the executive branch, 47 U.S.C. § 902(b)(2)(H). Regarding the cost of its involvement with ICANN, the Department reports that during the period October 1998 through April 2000 it spent just under \$250,000 on salaries and expenses arising from this relationship.

Office of Management and Budget Circular A-25, which relates to cost recovery through user charges by federal government agencies, is not applicable to a nongovernmental entity such as ICANN. However, ICANN is a project partner with the Department under the memorandum of understanding, and it is the Department's policy to allow project partners to recover only actual project costs. Thus, fees are not prohibited, but ICANN is limited to recovering only actual costs. We note, however, that the memorandum of understanding does not address the issue of fees.

The question of whether the Department has the authority to transfer control of the authoritative root server to ICANN is a difficult one to answer. Although control over the authoritative root server is not based on any statute or international agreement, the government has long been instrumental in supporting and developing the Internet and the domain name system. The Department has no specific statutory obligations to manage the domain name system or to control the authoritative root server. It is uncertain whether transferring control would also include transfer of government property to a private entity. Determining whether there is government property may be difficult. To the extent that transition of the management control to a private entity would involve the transfer of government property, it is unclear if the Department has the requisite authority to effect such a transfer. Since the Department states that it has no plans to transfer the root server system, it has not examined these issues. Currently, under the cooperative agreement with Network Solutions, the Department has reserved final policy control over the authoritative root server.

BACKGROUND

The Internet is an international computer "network of networks" linking governments, schools, libraries, corporations, individuals, and others. Today's Internet has its origins in a network, called the ARPANET, which the Department of Defense (DOD) launched in 1969 and which another federally developed network, NSFNET of the National Science Foundation (NSF), superceded in 1990.² The U.S. government has been instrumental in supporting and funding the development of the

² Other federal agencies also played a role. In 1991, NSF announced it would phase out federal support for NSFNET and transfer ownership and responsibility of these networks, which became known as the Internet backbone, to private companies on a for-profit basis.

Internet and the domain name system. (For a detailed account of the U.S. government's role in the Internet and the domain name system, see Enclosure II.)

As the Internet has grown, the method for allocating and assigning domain names has become more controversial. In the beginning, working under a DOD contract, Dr. Postel maintained the list of assigned Internet numbers and names. He also published a list of technical parameters that had been assigned for use by protocol developers. Eventually, these functions collectively became known as the Internet Assigned Numbers Authority (IANA). Under IANA, decisions about the domain name system continued to be made by consensus of the Internet community and many important tasks were delegated to individuals. In the mid-1980's, IANA announced a new hierarchical naming approach for associating names with Internet Protocol numbers on the Internet called the domain name system.³

The domain name system is a series of computer databases that "resolve" or link Internet Protocol addresses, which are like phone numbers, with an alphanumeric "domain name." This allows the user to type the domain name instead of the harder-to-remember Internet Protocol number. Domain names are divided into hierarchical fields separated by a period. The field to the farthest right is the top-level domain. In the domain name of the General Accounting Office, [.gao.gov](http://gao.gov), the .gov is the top-level domain and the field to the left of the top-level domain is the second-level domain. Top-level domains are either "generic" or country specific. There are seven generic top-level domains, including ".com".⁴ There are also over 200 country code top-level domains. The United States country code is ".us," for instance.

³ Requests for Comments (RFC) 1034. RFCs are memoranda addressing the various protocols that facilitate the functioning of the Internet. The Internet community developed RFCs as a mechanism for the generation of consensus on various engineering, technical, and other protocols in the early days of the Internet's history. RFCs were previously edited by the late Dr. Postel as part of his IANA functions.

⁴ The seven generic top-level domains are ".com" (for commercial uses), ".edu" (for 4-year, degree-granting educational institutions), ".net" (for computers associated with network providers), ".org" (for organizations, such as nonprofit and professional organizations, that do not fit into .com, .edu, or .net categories), ".int" (for international uses, such as international treaty organizations), ".gov" (for agencies of the United States federal government), and ".mil" (for United States military services and agencies). See Ellen Rony & Peter Rony, *The Domain Name Handbook* 45-48 (1998). According to Network Solutions, the .com, .net, and .org generic top-level domains have been open to all registrants for the last 2 or 3 years, such that now there is no distinction between them. In 1997, responsibility for .gov was transferred to the General Services Administration.

At the top of the domain name system is the “root zone file,” which directs Internet Protocol number queries to other domain name system databases called top-level domain zone files. Because of the large volume of requests to link domain names with Internet Protocol numbers, both root zone files and top-level domain zone files are replicated on a number of different computers, thus ensuring both speed and consistency. The master root server is called the “authoritative root server” or the “A” root server.⁵ There are 12 other root servers located worldwide, and each receives updated information daily from the “A” root server regarding the contents of the root zone file and the top-level domain zone files.

In 1993, NSF signed a cooperative agreement under which Network Solutions, Inc. was given the job of registering second-level domain names.⁶ Under the cooperative agreement, Network Solutions became the registrar for the .com, .org, .net, .edu, and .gov top-level domains; IANA continued its role as overseer of the allocation of Internet Protocol numbers and domain name registrations. When Network Solutions was allowed to charge for registering second-level domain names in 1995,⁷ criticism arose over its sole control over registration. The number of trademark disputes rose with the enormous growth of registrations in the .com domain,⁸ and concern grew over who had authority over the domain name system.⁹ There was also a call for more permanence to ensure the stability of the Internet and the domain name system as more commercial interests began to rely on the Internet.

⁵ Currently, the authoritative root server is operated by Network Solutions, Inc. under a cooperative agreement with the Department.

⁶ In 1992, the Congress allowed commercial activity on the NSF’s network, one of the networks that became the Internet and permitted NSFNET to interconnect with commercial networks. Scientific and Advanced-Technology Act of 1992, 42 U.S.C. § 1862(g).

⁷ On September 13, 1995, NSF and Network Solutions entered into Amendment 4 of the cooperative agreement, which permitted Network Solutions to charge for the registration and maintenance of domain names.

⁸ The Domain Name Handbook chronicles more than four dozen name disputes. Ellen Rony & Peter Rony, The Domain Name Handbook 299-457 (1998). The Domain Name Handbook website cites Network Solutions figures that Network Solutions invoked its domain name dispute policy 166 times from late July 1995 to the end of 1995, 745 times in 1996, 905 times in 1997, and 838 times in 1998. (<<http://www.domainhandbook.com/dd.html>> (visited May 18, 2000)).

⁹ See PGMedia, Inc. v. Network Solutions, Inc., 51 F.Supp.2d 389, 392-94 (S.D.N.Y. 1999), aff’d sub. nom. Name.Space, Inc. v. Network Solutions, Inc., 202 F.3d 573 (2d Cir. 2000) (discussing IANA, Network Solutions, and NSF responsibilities and stating “[t]he issue at the heart of this case is who handles the registration of new domain names and places the information regarding new registrations on the A root server each day.”).

These concerns prompted actions by Dr. Postel's IANA, other groups, and the Clinton administration. In 1996, IANA and the Internet Society and other groups organized the International Ad Hoc Committee. (See Enclosure III for a listing of key organizations.) The International Ad Hoc Committee proposed to add a new registry containing seven new generic top-level domains to the domain name system. Under the proposal, an international consortium of competing registrars, headquartered in Switzerland, would run the new registry on a not-for-profit basis. On July 1, 1997, the Clinton administration issued a report on electronic commerce, "A Framework for Global Electronic Commerce." Among other things, the report supported private efforts to address Internet governance and made the Department of Commerce the lead agency on this initiative. Accompanying the report was a presidential directive that called on the Department to "support efforts to make the governance of the domain name system private and competitive and to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis." To carry out this mission, the Department first issued a Request for Comment on domain names system administration, and then on February 20, 1998, it published a notice of proposed rulemaking, also known as the Green Paper.

After receiving more than 650 comments, the Department ended the proposed rulemaking and instead published on June 10, 1998, a policy statement, also known as the White Paper. In this policy statement, the Department said it was prepared to enter into agreement with a new not-for-profit corporation formed by private sector Internet stakeholders to administer policy for the Internet name and address system. The policy statement said the nonprofit organization's plan should offer stability; competition; private, bottom-up coordination; and representation. The corporation would be able to set policy for and direct the allocation of number blocks to regional number registries for the assignment of Internet addresses. The corporation would also be able to oversee the operation of an authoritative root server system, oversee policy for determining the circumstances under which new top-level domains are added to the root system, and coordinate the assignment of the Internet technical parameters as needed to maintain universal connectivity on the Internet.

The Department hoped the transition would begin as soon as possible, with the goal of having the new corporation carry out operational responsibilities by October 1998. The transition was to take place gradually, with September 30, 2000, considered an outside date for completion. At least two efforts were initiated in response to the Department's policy statement, including one that involved IANA, and one initiated by Network Solutions, among others. The latter group, called the International Forum for the White Paper, held a series of public meetings throughout the summer of 1998 in Reston (Virginia), as well as Geneva, Singapore, and Buenos Aires.

In September 1998, the Department entered into a memorandum of agreement with the National Science Foundation (NSF) that transferred the responsibilities for the

cooperative agreement with Network Solutions to the Department. The Department amended the agreement to specify that Network Solutions operates the authoritative root server under the direction of the Department.

On October 2, 1998, Dr. Postel submitted ICANN's organizational documents to the Department. The Department also received four other proposals.¹⁰ All proposals were posted for comment for a 10-day period and on November 25, 1998, the National Telecommunications and Information Administration (NTIA) entered into a memorandum of understanding with ICANN. The memorandum of understanding called on ICANN to design, develop, and test the mechanisms, methods, and procedures necessary to transfer domain name system management responsibilities to the private sector. Subsequently, the Department and ICANN entered into a cooperative research and development agreement to study the root server system and a sole source contract to perform the technical IANA functions.

Although the U.S. government has supported and funded the development of the domain name system, Congress has not chosen to legislate specifically in this area, nor has it designated an agency to be responsible for it.¹¹ DOD, NSF, and now the Department have undertaken their activities under their general authorities. For example, one court recently noted that NSF had clear authority to manage the domain name system. The court noted that the registration of domain names and control of the domain name system are activities within the mandate of NSF's organic act to "foster and support the development and use of computer . . . methods and technology," 42 U.S.C. § 1862(a)(4), especially "considering the NSF's central role in the development of the Internet from its earliest stages."¹² The Department has identified three statutory sources for authorizing it to enter into an agreement with ICANN. Section 1512 of title 15, United States Code, authorizes the Department to

¹⁰ Proposals were submitted by: (1) Dr. Postel on behalf of ICANN, (2) the Boston Working Group, (3) Einar Stefferud on behalf of the Open Root Server Confederation (Open-RSC), (4) Ronda Hauben, and (5) Jeffrey A. Williams on behalf of INEG. Inc. See <<http://www.ntia.doc.gov/ntiahome/domainname/>> (visited May 18, 2000). The Boston Working Group and the Open-RSC were groups formed after a wrap-up meeting of the International Forum on the White Paper failed to take place.

¹¹In the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act for fiscal year 1999, Congress prohibited the NSF from spending any funds "to enter into or extend a grant, contract, or cooperative agreement for the support of administering the domain name and numbering system of the Internet after September 30, 1998." Pub. L. No. 105-276, 112 Stat. 2461, 2505 (1998). See also Pub. L. No. 106-74, 113 Stat. 1047, 1090 (1999) (repeating this language for fiscal year 2000 appropriations).

¹² See PGMedia, Inc. v. Network Solutions, Inc., 51 F.Supp.2d 389, 403 (S.D.N.Y. 1999).

“foster, promote, and develop foreign and domestic commerce.” The Secretary of Commerce also has the authority under 15 U.S.C. § 1525 to engage in joint projects on matters of mutual interest with nonprofit organizations. Finally, 47 U.S.C. § 902(b)(2)(H) authorizes NTIA, an agency within the Department, to provide for the “coordination of the telecommunications activities of the executive branch.”

THE ADMINISTRATIVE PROCEDURE ACT AND THE GOVERNMENT CORPORATION CONTROL ACT ARE INAPPLICABLE TO ICANN'S FORMATION

The Department's efforts to privatize the domain name system began under a rulemaking process subject to the Administrative Procedure Act (APA). However, the Department did not violate the APA when it chose to issue a policy statement instead of a rule since the Department responded to public comments by eliminating the substantive regulatory requirements of the original proposed rule. In addition, the Department was not under any legal obligation to make available for comment the various proposals that private parties submitted in response to the policy statement. Also, the Government Corporation Control Act was inapplicable to the formation of ICANN since the Department did not acquire or establish ICANN.

Administrative Procedure Act Notice and Comment Requirements Are Not Applicable to the Department's Policy Statement

On June 10, 1998, the Department published a policy statement (called the White Paper) in the Federal Register announcing that the government would be willing to recognize, and enter into agreements with, a new, not-for-profit corporation established by the private sector to administer the domain name system. Prior to the policy statement, the Department had indicated that the privatization of domain name system management would be under “a rulemaking proceeding subject to the provisions of the [APA] until such time as the proceeding” was closed.¹³ To this end, the Department had issued a request for comment and a notice of proposed rulemaking.

The Administrative Procedure Act specifies the procedures that agencies must follow when promulgating rules. The APA defines a rule as “the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency. . . .” 5 U.S.C. § 551(4). The Department's White Paper clearly prescribed “policy,” and thus was not a rule under

¹³ Letter from Larry Irving, former Administrator, NTIA, to Representative Tom Bliley, Chairman, House Comm. on Commerce (May 6, 1998).

the APA definition. Some rules must be developed through an APA process which calls for notice and comment, including publication of the proposed rule in the Federal Register, opportunity for the public to comment, consideration of the comments, and publication of the final rules with a statement explaining their basis and purpose. This notice and comment process does not apply to general statements of policy and therefore, in our opinion, does not apply to the White Paper.

The Attorney General's Manual on the APA provides the following definitions to distinguish between general policy statements and substantive rules:

“Substantive Rules--rules, other than organizational or procedural . . . issued by an agency pursuant to statutory authority and which implement the statute Such rules have the force and effect of law.

“Policy Statements--statements issued by an agency to advise the public prospectively of the manner in which the agency proposes to exercise a discretionary power.”¹⁴

Distinguishing between a rule subject to the APA notice and comment requirements and a policy statement is often difficult.¹⁵ An agency's classification of a document as a policy statement is entitled to some deference. However, courts generally do not find an agency's own label to be dispositive. Chamber of Commerce v. Occupational Safety and Health Administration, 636 F.2d 464, 468 (D.C. Cir. 1980). Some have suggested that the courts' reluctance to defer to the agency may stem from the possibility that an agency may classify its action as a policy statement to avoid pre-enforcement judicial review¹⁶ or to circumvent required notice and comment.¹⁷

¹⁴ See U.S. Department of Justice, Attorney General's Manual on the Administrative Procedure Act 30 n.3 (1947).

¹⁵ See Orengo Caraballo v. Reich, 11 F.3d 186, 194 (D.C. Cir. 1993) (distinction between rules or statements which are subject to the notice and comment requirements of the Administrative Procedure Act and rules or statements which are exempt from those procedures is notoriously “hazy”), quoting American Hospital Ass'n v. Bowen, 834 F.2d 1037, 1045 (D.C. Cir. 1987); General Motors Corp. v. Ruckelshaus, 742 F.2d 1561, 1565 (D.C. Cir. 1984) (distinction between legislative and nonlegislative rules has been described as “enshrouded in considerable smog”), quoting Noel v. Chapman, 508 F.2d 1023, 1030 (2d Cir. 1975), cert. denied, 471 U.S. 1074 (1985)).

¹⁶ The distinction between a rule and a policy statement is relevant to reviewability. See Limerick Ecology Action, Inc. v. U.S. Nuclear Regulatory Commission, 869 F.2d 719, 735-736 (3d Cir. 1989) (“General policy statements, because they are ineffective except as applied and defended in specific proceedings, are often insulated from judicial review at the time of issuance.”).

Generally, for a policy statement to be exempt, the statement must be tentative and not intended to be binding. Hudson v. Federal Aviation Administration, 192 F.3d 1031 (D.C. Cir. 1999).

The Department's February 20, 1998, notice requested public comment on proposed substantive regulatory provisions, including a variety of specific requirements for membership in the new corporation that would manage the domain name system. In response to comments it received, the Department said it eliminated the substantive regulatory requirements of the original proposed rule. In light of this change, the Department said it was appropriate to issue its general framework for privatizing domain name system management as a policy statement since the statement established no substantive regulatory regime. In the Department's view, the policy statement only advised the public of the manner in which the Department would prospectively undertake the transition. Thus, the Department contends that the policy statement was not a substantive rule, did not contain any mandatory provisions, did not have the force and effect of law, and was, therefore, in full compliance with the APA.

The Department also concludes that it was under no legal obligation to make available for comment the various proposals submitted in response to the policy statement. In a November 5, 1998, letter to the House Commerce Committee Chairman, the Department's Chief Counsel for Special Matters said these proposals were not rulemakings subject to the notice and comment requirements of the APA or other statutes. Further, the Department stated that to continue in the spirit of openness and transparency, it posted all submissions and provided a 10-day comment period. The Department thought the 10-day comment period balanced its desire to receive public input and to promote transparency with the need to move expeditiously.

We agree with the Department that the policy statement provided the public only with a general framework on how the Department intended to proceed with the transition. A number of important elements were left for private sector determination. These elements included the makeup of the new corporation, the establishment of the new corporation's board, and trademark dispute resolution. Thus, we concur that the Department properly labeled its action as a policy statement. We also agree that the Department was not obligated to follow the APA process in reviewing the submissions sent in response to the policy statement.

(...continued)

¹⁷ Jeffrey S. Lubbers, American Bar Association, A Guide To Federal Agency Rulemaking 61 (3d ed. 1998).

The Department may have created an expectation that there would be a more open process for selecting the corporation to manage the domain name system by beginning the transition process pursuant to the APA's notice and comment process. Several experts we spoke with expressed concerns with the process used to select ICANN. One expert asserted that the group led by Dr. Postel was preselected. Another stated that he had been misled into believing that, if more than one set of bylaws were submitted, all parties would have to reach consensus. On the other hand, at least one commentator has noted the difficulty of achieving consensus in the ever-expanding Internet community.¹⁸ The Department contends that the process it used struck a reasonable balance between involving the public in a transparent process and moving the process forward. It also noted that it did not make a determination that the ICANN proposal, as revised, represented a consensus view of the Internet community. Rather, the Department concluded that ICANN represented the best possible partner in the domain name system joint project.

Establishment of ICANN Was Not Subject to the Government Corporation Control Act

The Government Corporation Control Act provides that “[a]n agency may establish or acquire a corporation to act as an agency only by or under a law of the United States specifically authorizing the action.” 31 U.S.C. § 9102. Although the Department’s policy statement clearly contemplated the creation of a new private, not-for-profit corporation, the Department did not establish or acquire ICANN. Thus, the Government Corporation Control Act does not apply.

ICANN was established by Dr. Postel and others who sought to transform IANA into a new corporate structure. The Department had no direct role in the drafting of ICANN’s corporate bylaws or the selection of its interim board of directors. The Department also does not involve itself in the internal governance of ICANN or oversee the corporation’s daily operation. The Department states that its relationship with ICANN is limited to its various agreements with the corporation and that its oversight of the corporation is restricted to whether these agreements are being met.

We note that a similar situation was presented in Varicon International v. Office of Personnel Management, 934 F. Supp. 440 (D.D.C. 1996). There, a federal district court in the context of a request for a preliminary injunction considered whether the Office of Personnel Management (OPM) violated the Control Act when it created a new corporation, United States Investigative Services (USIS), to provide certain personnel investigative services previously performed directly by OPM. After noting

¹⁸ Joseph P. Liu, Legitimacy and Authority in Internet Coordination: A Domain Name Case Study, 74 Ind. L. J. 587, 613-14 (1999).

that the government would have no control over the USIS board of directors, management, or employees, except as provided for by government contract, the court determined that USIS appeared to be a private corporation and not a government corporation. We believe that ICANN presents a similar situation and that the establishment of ICANN did not violate the Government Corporation Control Act.¹⁹

ICANN'S INTERIM BOARD WAS SELECTED PRIMARILY BY ONE INDIVIDUAL AND NOT THE DEPARTMENT

According to ICANN, the late Dr. Postel selected the interim board. Dr. Postel, a pioneer of the domain name system, was the leading advocate for transforming IANA into the new entity called for under the Department's policy statement. The selections were made after Dr. Postel, acting for IANA, invited and considered suggestions from the Internet community. Although ICANN officials and representatives of foreign governments consulted Department officials, it does not appear that the Department either selected or nominated particular persons for ICANN's interim board.

Many questions surround the selection of ICANN's interim board. Some in the Internet community characterize the selection process as mysterious. Others note that they do not know on what basis individuals were selected to serve on the interim board. For example, an expert we spoke with mentioned that he had provided Dr. Postel with suggestions for the board but that none of his nominees had been selected. ICANN officials state that while input from the community was important, it was up to ICANN organizers to make the final selection.

According to congressional testimony by Dr. Postel, IANA could only devise one workable method for creating an interim board.²⁰ This method was to invite suggestions from everyone, to consider and seek reactions to those suggestions, and finally to come up with a proposed board able to command the consensus support of

¹⁹ This contrasts with the actions of the Federal Communications Commission which we found violated the Government Corporation Control Act by directing the creation of two corporations to administer the universal service programs authorized under the Telecommunications Act of 1996. See Letter to the Honorable Ted Stevens, B-278820, Feb. 10, 1998.

²⁰ Transferring Domain Name System to Private Sector: Hearings Before the Subcomm. on Basic Research of the House Comm. on Science, 105th Cong., 2d Sess. (1998) (statement of Dr. Jon Postel, Director, Computer Networks Division, Information Sciences Institute, University of Southern California).

the Internet community. But the subsequent difficulties of reaching consensus regarding representatives of the various Internet stakeholders called for a different approach. Dr. Postel stated that IANA focused instead on choosing people of outstanding credentials and reputations who had not been engaged in the domain name system debates and whom the Internet community would recognize and support as qualified and neutral. In a letter dated July 1999 to the House Commerce Committee Chairman, ICANN explained that Dr. Postel made the final decisions on who would be invited, after considering advice and recommendations and coming to a judgment that this group of individuals was likely to receive consensus support from the Internet community.²¹

On behalf of ICANN, Dr. Postel submitted to the Department on October 2, 1998, a proposal that included an interim board. Although ICANN had been formally incorporated in California, it had not yet elected a board of directors or adopted bylaws. Dr. Postel indicated that such action would not be taken until the Department had completed its review of ICANN's proposal. However, Dr. Postel died before the end of the process. Shortly afterwards, on October 25, 1998, the nominees to the ICANN board met in person and by telephone and decided the most prudent course, in view of Dr. Postel's death, was for the interim board to be officially constituted. This would allow the process begun by Dr. Postel and others to go forward.²²

Department officials state that the Department's personnel were not involved in the consideration or selection of proposed ICANN interim board members. However, Department officials acknowledge that various private sector and governmental interests did seek guidance from Department personnel during this process. According to Department officials, they informed those seeking their views that the U.S. government had no position as to possible candidates for an interim board. Moreover, Department officials say they referred callers from foreign governments to appropriate parties, such as Dr. Postel.

²¹ Letter from ICANN to Representative Tom Bliley, Chairman, House Comm. on Commerce (July 8, 1999) (located at <<http://www.icann.org/correspondence/bliley-response-08july99.htm>> (visited May 18, 2000)).

²² ICANN has not yet completed the process to elect its board of directors. See Enclosure IV.

THE DEPARTMENT HAS THE AUTHORITY TO ENTER INTO AGREEMENTS WITH THIRD PARTIES AND TO PARTICIPATE IN CERTAIN ICANN ACTIVITIES

The Department has authority to enter into its three major agreements with ICANN: (1) the memorandum of understanding for a joint domain name system project, (2) a cooperative research and development agreement to study the root server system, and (3) a sole source contract to perform certain technical functions relating to the coordination of the domain name system. The Department also has authority, in order to carry out the President's directive, to send participants to ICANN's public meetings and to represent the government on ICANN's Governmental Advisory Committee.

The Department Has Authority to Enter Into Agreements With Third Parties

The Department states that ICANN has undertaken certain specified management functions on behalf of the U.S. government under the three agreements it has with ICANN. Currently, the Department has entered into three major agreements with ICANN: (1) the memorandum of understanding, (2) the cooperative research and development agreement, and (3) the sole source contract. Moreover, the Department states that no government functions or property have been transferred under these agreements. The Department notes that the agreements are congressionally approved mechanisms used by federal agencies to enter into agreements with third parties.

The Department has the authority under 15 U.S.C. § 1525 to enter into agreements with nonprofit entities, such as ICANN, to conduct joint projects on matters of mutual interest. Additionally, the Department, through the National Institute of Standards and Technology (NIST) laboratory, has the authority to enter into cooperative research and development agreements. A cooperative research and development agreement is an agreement between one or more federal laboratories and one or more nonfederal parties. Under such an agreement, NIST provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to nonfederal parties) and the nonfederal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the mission of the laboratory. 15 U.S.C. § 3710a(d)(1). The Department has authority to enter into sole source contracts with private parties under certain conditions. 41 U.S.C. § 253(c)(1). Each agreement is discussed in turn below.

Memorandum of Understanding for a Domain Name System Joint Project

The Department and ICANN entered into a memorandum of understanding on November 25, 1998. The Department considers the memorandum of understanding to be a joint project agreement. The purpose of the agreement is to ensure that the private sector has the capabilities and resources to assume technical management of the domain name system before it is transferred from the government. Thus, the agreement specifies that the parties would collaborate in a domain name system project to “jointly design, develop, and test the mechanisms, methods, and procedures that should be in place and the steps necessary to transition management responsibility for domain name system functions . . . to a private-sector not-for-profit entity.” The parties agreed to prepare a joint domain name system project report to document conclusions of the design, development, and testing.

The domain name system management functions include:

- establishment of policy for and direction of the allocation of Internet Protocol number blocks;
- oversight of the operation of the authoritative root server system;
- oversight of the policy for determining the circumstances under which new top-level domains would be added to the root system;
- coordination of the assignment of other Internet technical parameters as needed to maintain universal connectivity on the Internet; and
- other activities necessary to coordinate the specified domain name system management functions, as agreed by the parties.

The agreement prohibits ICANN from acting as a domain name registry or registrar or Internet Protocol address registry.²³ However, this prohibition was not intended to prevent either ICANN or the government from taking reasonable steps to protect the operational stability of the Internet in the event of the financial failure of a registry or registrar or other emergency.²⁴ The agreement is scheduled to terminate on September 30, 2000, but may be amended at any time by mutual agreement of the parties.

²³ Internet Protocol registries allocate Internet Protocol address space to Internet Service Providers and end users. An Internet Protocol address is the numerical address by which a location in the Internet is identified.

²⁴ However, the Department stated it “has no legal relationship with any domain name registrar other than Network Solutions, Inc. (NSI). Thus, the Department believes that it would not be liable in the event of a financial failure of a registrar.” Letter from Andrew J. Pincus, General Counsel, Department of Commerce, to Michael R. Volpe, Assistant General Counsel, General Accounting Office (Mar. 3, 2000) (footnote omitted).

Cooperative Research and Development Agreement to Study the Management of the Root Server System

In June 1999, the Department and ICANN entered into a cooperative research and development agreement (root server study agreement) to collaborate on a study and process for making the management of the root server system more “robust and secure.” The root server system is composed of 13 file servers containing copies of the root zone file databases listing all domain names. Its operation ensures the consistent resolution of domain name queries.

The root server study agreement addresses three issues. The first is the operational requirements of root name servers, including host hardware capacities, operating system and name server software versions, network connectivity, and physical environment. The second involves examination of the security aspects of the root name server system and review of number, location, and distribution of root name servers. The third is the development of procedures for the root system, including formalization of contractual relationships under which root servers throughout the world operate.

The Department stated that, in this and other cooperative research and development agreements, although the collaborative activity will transfer technology from the federal laboratory to the nonfederal partner, the first order of business is often the creation of the knowledge and technology to be transferred. ICANN will work with NIST and NTIA to address the technical management of the entire root server system.

The root server study agreement includes a proposed duration and anticipates that an interim report would be submitted by December 31, 1999, and a final report by September 30, 2000. As of June 1, 2000, the interim report had not been submitted. However, the Department states that it expects to receive a report from the non-Commerce Department collaborators, which will summarize the activities of the ICANN’s DNS Root Server System Advisory Committee to date, by the end of June.

Sole Source Contract Transferring the IANA Functions to ICANN

A complicated history underlies the sole source contract between ICANN and the Department under which ICANN performs the IANA functions formerly performed by the University of Southern California. The IANA functions include coordination of the assignment of technical protocol parameters, allocation of Internet Protocol address blocks, and administrative functions associated with root management. These functions were previously performed pursuant to the Teranode Network

Technology contract, which the Department of Defense (DOD) awarded to the Information Sciences Institute of the University of Southern California.²⁵ This contract is still ongoing. However, according to the university, the government no longer funds the performance of these IANA functions under this contract.²⁶

In December 1998, ICANN entered into a transition agreement with the University of Southern California, asserting the authorization of NTIA, under which the university relinquished and ICANN assumed the performance of the chief functions previously performed as the IANA project under the DOD contract.²⁷ However, the Department states it did not participate in the negotiation of the transition agreement. Under this agreement, the university transferred to ICANN certain roles, responsibilities, assets, and personnel associated with the performance of the IANA functions. ICANN assumed responsibility for all IANA-related operating expenses after the date of the agreement.

Shortly after ICANN entered into the transition agreement, the Department announced its intention to issue a sole source contract to ICANN to perform the IANA functions.²⁸ Under its justification for other than full and open competition, the Department noted that only one responsible source was available.²⁹ Several months

²⁵ According to an attorney for the University of Southern California, prior to the Teranode Network Technology contract, the university had been performing the IANA functions since 1977 under previous contracts with DOD.

²⁶ The Department notes that it is in the process of identifying funds and a mechanism for transferring such funds to DOD to cover a portion of the costs for the final 15 months of the university contract with DOD for IANA functions.

²⁷ According to an attorney for the University of Southern California, the U.S. government did not formally approve the transition agreement. This approval was provided under the Department's sole source contract with ICANN to undertake the IANA functions.

²⁸ The synopsis of NIST's intent to enter into a sole source contract with ICANN was published in Commerce Business Daily on January 4, 1999, and amended on February 9, 1999.

²⁹ Five protests were submitted to the General Accounting Office in response to the January 6, 1999, posting of the CBD notice. In response to the Department's amendment of the CBD notice and the incorporation of note 22 which invites parties to identify their interest and capabilities to an agency within 45 days after publication of a sole-source synopsis for the agency's consideration in determining whether to proceed on the intended basis, these protests were dismissed. Subsequent to the amended CBD notice, two additional protests were filed. These were dismissed because where a CBD notice references note 22, we require a protester to submit a timely expression of interest and receive a negative agency response as a prerequisite to filing a protest challenging the agency's sole source decision.

later, in February 2000, the Department modified the contracting vehicle (changing from a request for proposal to a request for quotation) and entered into a purchase order contract with ICANN for performance of the IANA functions.

The Department said it contracted with ICANN “[b]ecause the IANA functions continue to be vital to the stability and smooth functioning of the Internet . . .” In this regard, the administrative functions to be performed under the contract include responsibility for receiving country code top-level domain delegation and redelegation requests, investigating these requests, and making recommendations to the Department. For example, ICANN recently considered the request for delegation of “.ps” to the Government Computer Center operating in the Occupied Palestinian Territory. After reviewing ICANN’s report, the Department approved the necessary changes in the authoritative root.

The contract is to be performed at no cost to the United States government. The contract permits ICANN to establish and collect fees from third parties for the performance of the IANA functions. The fee levels are to be approved by the Department and are not to exceed the cost of providing the service. According to the Department, the estimated value of the purchase order is less than \$10,000. The period of performance for the contract is through September 30, 2000, and a performance progress report is required every three months. A final performance report is also required. So far, ICANN has not submitted any progress reports. The Department states that it expects to receive the first performance report by the end of June 2000. That report will cover the period from February 8, 2000, through May 9, 2000. The Department will post the report on NTIA’s website and also expects that this report will be posted on ICANN’s website.

The Department Is Contemplating Extending the Agreements

The domain name system project and the sole source contract are scheduled to end on September 30, 2000, and the cooperative research and development agreement has a proposed completion date of September 2000. The Department states that it is contemplating extending these agreements and is currently assessing the progress of these activities, what tasks remain to be completed, and what extension will be necessary. Further, the Department notes that it also may enter into future additional agreements with ICANN for other domain name system management responsibilities.

A number of the experts we spoke with expressed concern that the Department would prematurely withdraw from its role in the domain name system. They felt that the Department’s role provides stability and that responsibility for managing the domain name system should not be handed off until there is assurance the private entity can do a satisfactory job. At least one commentator has agreed that some

continuing background government presence may be necessary “in order to maintain both the operative degree of legitimacy and control over” the coordination functions performed by ICANN.³⁰ However, others expressed concerns that foreign governments would object if the Department continued control.

Although the agreements may expire soon, a number of important tasks still remain, including the election of the entire ICANN board of directors, the addition of new generic top-level domains, and the creation of policies connected with country code top-level domain administration.

The Department Has Authority to Participate in ICANN’s Open Meetings and on ICANN’s Governmental Advisory Committee

In order to carry out the President’s directive to support efforts to privatize the domain name system, the Department has authority under Executive Order 12046 and NTIA’s statutory authority to participate in ICANN’s open meetings and on ICANN’s Governmental Advisory Committee. ICANN public forums and open board of directors meetings take place three to four times per year. According to the Department, it does not participate in ICANN decision-making at these meetings. The Department also participates on ICANN’s Governmental Advisory Committee.³¹ Under ICANN’s bylaws, the Governmental Advisory Committee considers and provides nonbinding advice on ICANN activities that may relate to concerns of governments, particularly where there may be an interaction between ICANN’s policies and laws or international agreements. The committee currently consists of more than 50 governments and multinational treaty organizations. Not all members are active participants.

The Department notes that the Governmental Advisory Committee typically meets in conjunction with the ICANN board meeting. At the end of its meeting, the committee

³⁰ See Joseph P. Liu, Legitimacy and Authority in Internet Coordination: A Domain Name Case Study, 74 Ind. L. J. 587, 618-25 (1999).

³¹ The Governmental Advisory Committee is not subject to the Federal Advisory Committee Act. The Federal Advisory Committee Act imposes a number of requirements on agencies that establish or utilize a committee or similar group in the interest of obtaining advice or recommendations. 5 U.S.C. App. 2. However, these requirements do not apply to ICANN’s use of its own committees to obtain advice on carrying out its responsibilities. See Food Chemical News v. Young, 900 F.2d 328 (D.C. Cir. 1990), cert. denied, 498 U.S. 846 (1990) (holding that an expert panel established by a private contractor to assist the Food and Drug Administration was not an advisory committee within the meaning of the Federal Advisory Committee Act).

issues a report to the public that summarizes its discussions and indicates the time and place of the next committee meeting. An agenda is made available on both the committee website and the ICANN website prior to the meeting. Minutes of each committee meeting are posted on these sites. A portion of each committee meeting is set aside for public questions and answers, and many portions of its regular meetings are open to the public.

According to the Department, two officials from the Department serve as the United States representative and advisor and participate in meetings and deliberations of the committee. The Department states that the Secretary of Commerce gave NTIA lead responsibility for the Department's efforts to privatize domain name system management. Thus, NTIA personnel generally serve on the Department's behalf on ICANN's Governmental Advisory Committee. Also, from time to time, staff of the Department's Patent and Trademark Office participate in the committee meetings. In the Department's view, with which we agree, its participation is consistent with Executive Order 12046³² and NTIA's statutory authority as the executive branch's principal adviser on domestic and international telecommunications and information policy issues.³³ Executive Order 12046 relates in part to the transfer of telecommunications functions to the Secretary of Commerce. Congress subsequently assigned these functions to the NTIA.³⁴ Attending international telecommunication meetings and serving on an international advisory committee is consistent with these authorities.

Under Executive Order 12046, the Secretary of Commerce is to coordinate preparations for United States participation in international telecommunications conferences and negotiations. The Secretary is also responsible for providing advice and assistance to the Secretary of State on international telecommunications policies to strengthen the position and serve the best interests of the United States, in support of the Secretary of State's responsibility for the conduct of foreign affairs. Exec. Order No. 12046, § 2-404. The executive order also provides that the Secretary of State shall exercise primary authority for the conduct of foreign policy, including the determination of United States positions and the conduct of United States participation in negotiation with foreign governments and international bodies. Exec. Order No. 12046, § 5-201.

³² 43 Fed. Reg. 13,349 (1978).

³³ The National Telecommunications and Information Administration Organization Act, as amended, 47 U.S.C. § 901(c)(3), sets forth NTIA's responsibility for "facilitating and contributing to the full development of competition, efficiency, and free flow of commerce in domestic and international telecommunications markets."

³⁴ Section 902(b) of title 47, United States Code, assigns to the Assistant Secretary and NTIA the Secretary of Commerce's domestic and international communications and information functions under Executive Order 12046.

According to the Department, the Governmental Advisory Committee is not an international negotiating body nor are the recommendations of the committee binding on any government. The Department states, however, that NTIA does seek input from and will report back to other executive branch agencies through an interagency working group on the domain name system that includes State Department personnel. NTIA personnel also consult with State Department personnel informally on matters involving the expertise of that agency.

THE DEPARTMENT IS AUTHORIZED TO EXPEND FUNDS TO PARTICIPATE IN ICANN'S PROCEEDINGS AND ACTIVITIES

In the discussion in the previous sections, we noted that the Department has authority to enter into various agreements, to attend ICANN's public forums and board of directors meetings, and to participate in ICANN's Governmental Advisory Committee. It follows then that the Department has the authority to expend funds to carry out these activities. Data from the Department indicates that it spent just under \$250,000 in the period October 1998 through April 2000 on salaries and expenses arising from the Department's relationship with ICANN. The Department said that sum includes \$177,361, which arises from agreements between ICANN and the Department and Network Solutions; \$40,028, due to congressional oversight of Department activities in domain name system privatization; \$15,899 for travel to participate in ICANN; and \$13,357 for travel for participation in ICANN's Governmental Advisory Committee. These sums total \$246,645, exclusive of incidental expenses such as copying and secretarial support.

In reporting its costs for participation in agreements with ICANN, the Department noted that the memorandum of understanding with ICANN specifies that "each party shall bear the cost of its own activities under the agreement." The attachment estimates a "six-month budget for Department of Commerce expenses (subject to change) of \$250,000-\$350,000." Regarding the cooperative research and development agreement, the Department said this agreement does not allow it to contribute to ICANN and no costs are attributable to the Department on this score. As for the cost of the IANA functions, the Department said these functions currently are provided under a no-cost contract.

OFFICE OF MANAGEMENT AND BUDGET CIRCULAR A-25 DOES NOT APPLY TO ICANN

ICANN initially proposed a yearly user fee of \$1 per domain name registered, but has since eliminated this fee. Office of Management and Budget Circular A-25 (Circular A-25), which relates to cost recovery through user charges by federal government agencies, is not applicable to a nongovernmental entity such as ICANN. ICANN, however, is a project partner under the memorandum of understanding. In keeping

with Circular A-25, which is applicable to the Department, it is the Department's policy to allow project partners only to recover actual project costs, thus limiting the amount of potential fees, but not prohibiting their imposition. We note, however, that the memorandum of understanding does not address the issue of fees or limiting fees to recovery of actual project costs.

ICANN's Proposed User Fee

In calling for a new not-for-profit corporation, the Department stated that Internet stakeholders, including registries and registrars, should fund the new corporation. ICANN concluded that it should initially finance its operations through a payment by registrars of a user fee of \$1 per year per domain name registered. On February 8, 1999, ICANN posted advance copies of the registrar accreditation guidelines, including the draft accreditation agreement with this payment obligation for public comment.

ICANN's proposed fee was the subject of criticism.³⁵ Although the Department believed that ICANN was legally authorized to impose the fee, it stated that ICANN should eliminate the \$1 fee due to its controversial nature. The Department also requested a delay in adoption of a permanent financing method for ICANN until ICANN's elected board members were in place. The Department sent a letter to ICANN outlining these recommendations. On July 19, 1999, ICANN responded that it would defer collection of the \$1 fee, but expressed concern regarding its ability to recover costs in absence of a fee arrangement.³⁶

Circular A-25 Provides No Affirmative Authority for ICANN to Impose User Fees

Circular A-25, which relates to cost recovery by federal government agencies, provides no affirmative authority to a nongovernmental entity such as ICANN to impose fees. Circular A-25 provisions are applicable to federal agencies in determining user fees under the Independent Offices Appropriations Act, 31 U.S.C. § 9701 (1983). Under the act, unless Congress expressly delegates user-fee authority to a particular executive agency, user fees imposed by an agency for a governmental or government-controlled service must be imposed by regulation and must not

³⁵ Several groups, including the Americans for Tax Reform, criticized the \$1 charge as being an illegal tax on domain name holders.

³⁶ Since eliminating the \$1 yearly fees, funding has been a source of concern for ICANN. See Enclosure V for a discussion of ICANN's funding situation and current budget.

exceed the cost of providing the service.³⁷ The act, however, only applies to a “service or thing of value provided by [an] agency.” 31 U.S.C. § 9701(b). As a nongovernmental entity, ICANN is not within the scope of the Independent Offices Appropriations Act and Circular A-25.

The application of the Independent Offices Appropriations Act to the domain name registration process was discussed in Thomas v. Network Solutions, Inc., 176 F.3d 500, 511 (D.C. Cir. 1999), cert. denied, 120 S. Ct. 934 (2000). In finding that domain name registration is not a government service under the act, the court discussed several aspects of domain name registration. First, the court noted that no federal agency is under a statutory duty to register domain names. Moreover, the court stated that although domain name registration may serve the public, this does not make domain name registration a governmental service.³⁸ Finally, the court concluded that the Independent Offices Appropriations Act applies to moneys bound for the federal treasury, but not to fees paid to nongovernmental entities.³⁹

As noted above, ICANN would not be within the scope of the Independent Offices Appropriations Act and Circular A-25. However, the Department stated that its policy is to hold project partners to the same standards applicable to the Department, allowing only for ICANN’s recovery of actual project costs. This policy would limit the amount of potential fees, but not prohibit their imposition. While the Department states that ICANN is not imposing fees on Internet users to recover ICANN’s costs, the memorandum of understanding does not address the Department policy nor prohibit the imposition of fees. According to the Department, the memorandum of understanding did not address the Department’s policy because ICANN’s budget for the first 6 months of the project did not contemplate a user fee. The Department states that had ICANN proposed a user fee to recover costs for memorandum of understanding tasks, then the Department would have reviewed the proposed fee to assure that it complied with the Department’s policy.

³⁷ The Supreme Court interpreted the predecessor statute to the Independent Offices Appropriations Act as prohibiting an agency from collecting nearly any payment that exceeds the agency’s cost. See National Cable Television Association, Inc. v. United States, 415 U.S. 336, 343 (1974).

³⁸ See San Francisco Arts & Athletics, Inc. v. United States Olympic Comm., 483 U.S. 522, 543-44 (1987) (stating that although a private entity may perform a function serving the public, this does not make its acts governmental).

³⁹ Thomas, 176 F.3d at 510-11.

THE DEPARTMENT'S AUTHORITY TO TRANSFER CONTROL OF THE AUTHORITATIVE ROOT SERVER IS UNCLEAR BUT THE DEPARTMENT HAS NO CURRENT PLANS TO EFFECT SUCH A TRANSFER

It is unclear whether the Department has the authority to transfer control of the authoritative root server to ICANN. Although control over the authoritative root server is not based on any statute or international agreement, the government has long been instrumental in supporting and developing the Internet and the domain name system. The Department has no specific statutory obligations to manage the domain name system or to control the authoritative root server. It is uncertain whether transferring control would involve the transfer of government property to a private entity. However, to the extent it would, it is unclear if the Department has the requisite authority to effect such a transfer. Determining whether there is government property involved may be difficult. Since the Department states that it has no plans to transfer policy control of the authoritative root server, it has not examined these issues. Currently, under the cooperative agreement with Network Solutions, the Department has reserved final policy control over the authoritative root server.

The Department's Authority to Transfer Control Is Unclear

The question of whether the Department has the authority to transfer control of the authoritative root server to ICANN is a difficult one to answer. There are no statutory authorities or international agreements governing the management and operation of the domain name system and the authoritative root server, although several federal entities have facilitated and funded its development. As we noted earlier, Congress has not chosen to legislate in this area.⁴⁰ The government has long been instrumental in supporting and funding the Internet and the domain name system. Major components of the domain name system were developed by, or under, agreements with agencies of the U.S. government. As part of the development of ARPANET, Dr. Postel first deployed the root server system pursuant to a contract between the Department of Defense and the University of Southern California's Information Sciences Institute. Since 1993, Network Solutions has been responsible

⁴⁰ The NSF Appropriations Act for fiscal year 1999 prohibited the agency from spending any funds to support administering the domain name system. Pub. L. No. 105-276, 112 Stat. 2461, 2505 (1998). The House Report accompanying this legislation explained that this language was "to make it clear that NSF will no longer have the governmental responsibility to administer the domain name and numbering system of the Internet. While NSF may have appeared to be a logical choice to have such a mission several years ago, the overwhelming growth and maturity of the Internet clearly point to other agencies of government, such as the Commerce Department, as the better candidates to oversee the system." H. R. Rep. No. 610, 105th Cong., 2d Sess. 101 (1998).

for administering additions and deletions to the authoritative root server database in accordance with the cooperative agreement it had with the NSF and now has with the Department.

In its 1998 policy statement, the Department announced that the U.S. government was prepared to enter into agreements with a new not-for profit corporation to administer policy for the domain name system. The policy statement also stated that “overall policy guidance and control of the [top level domains] and the Internet root server system should be vested in a single organization that is representative of Internet users around the globe.”

In its policy statement, the Department was announcing that it planned to phase out its management role over the domain name system, a role that the government had assumed when the ARPANET was first developed. Since it is a role not specifically required by statute, the Department was not delegating or transferring a statutory duty when it proposed to transition administrative control over the domain name system to a private entity.⁴¹ The Department undertook its domain name system management responsibilities to carry out the President’s directive to support efforts to privatize the domain name system.⁴² Under these circumstances, neither the Department nor any other federal agency is under an explicit statutory obligation to manage the domain name system including control over the authoritative root server.

It is also unclear whether such a transition will involve a transfer of government property to a private entity. If so, the transfer would have to be consistent with federal property laws.⁴³ It may be difficult to determine the government’s property interests connected with the root server system since the government’s involvement in the development of the Internet stems from government contracts and other

⁴¹ The delegation from an agency to a private party is sometimes referred to as the doctrine of subdelegation, with the original delegation between Congress and the agency. In a delegation challenge, the relevant inquiry is whether Congress intended to permit the agency to delegate the authority conferred by Congress and the issue is whether the federal agency retains final reviewing authority. See National Parks and Conservation Ass’n v. Stanton, 54 F.Supp.2d 7, 18-19 (D.D.C. 1999) (citations omitted). Here, Congress has never delegated responsibility to manage the domain name system to any federal agency.

⁴² The Department assumed this responsibility under its general authority to foster, promote, and develop foreign and domestic commerce, 15 U.S.C. § 1512, and in its capacity to coordinate the telecommunications activities of the executive branch, 47 U.S.C. § 902.

⁴³ Under the Property Clause of the Constitution disposal of government property requires statutory authority. U.S. Constitution, Art. IV, § 3, cl. 2.

agreements and the language and practices under them over a 30-year period. The Department has not determined whether the transition will entail the transfer of such property and so it is unclear if the Department has the requisite authority to effect such a transfer.

The Department states that to date it has not transferred any government property to ICANN under the agreements it currently has with the corporation nor does it plan to do so. The Department also states that it has no current plans to transfer policy authority for the authoritative root server to ICANN, and therefore it has not developed a scenario or set of circumstances under which such control would be transferred. Thus, it remains unclear whether a transfer of policy control would involve the transfer of government property. Specifically, in response to our question regarding its legal authority to transfer control over the authoritative root server to ICANN or the necessity for legislation to do so, the Department's general counsel advised us by letter dated June 7, 2000:

“In the absence of such plans, we have not devoted the possibly substantial staff resources that would be necessary to develop a legal opinion as to whether legislation would be necessary to do so. In the absence of the underlying legal analysis, we decline to speculate about such an important issue.”

The Department Has No Plans to Transfer Control of the Authoritative Root Server

The Department reserved final policy control over the authoritative root server by amending the cooperative agreement the government had with Network Solutions. The first step to achieving this was to transfer the responsibilities for the cooperative agreement from NSF to the Department. This occurred in September 1998 under a memorandum of agreement between the two agencies. This agreement noted that to ensure the seamless and stable transition from the existing Internet administration to a private sector management governance structure, it was in the mutual interest of both agencies to transfer authority to administer the cooperative agreement with Network Solutions to the Department and to cooperate in negotiating the terms of the “ramp down” of the cooperative agreement.⁴⁴ The principal purpose of the agreement was to assist the Department in carrying out the President's directive.

⁴⁴ The objective of the “ramp down” was to introduce competition into the domain name space. Under the ramp down Network Solutions was expected to take specific action that would permit the development of competition in domain name registration and what would be expected in the presence of marketplace competition. It was also anticipated that Network Solutions would recognize the role of the new corporation that would be managing the domain name system.

Shortly after the responsibilities for the cooperative agreement were transferred to the Department, the Department and Network Solutions entered into “Amendment 11” to the agreement. The purpose of this amendment was to facilitate the stable evolution of the Internet domain name system in accordance with the Department’s policy statement. Among other things, the amendment authorized Network Solutions’ continued operation of the “A” root server and clarified that this root server would be operated at the direction of the Department. Under this amendment, Network Solutions must receive written authorization from a Department official before making or rejecting any modifications, additions, or deletions to the root zone file.⁴⁵

The Department’s authority under Amendment 11 was noted in a recent court decision regarding Network Solution’s operation of the “A” root server.⁴⁶ In 1996 a private corporation, PGMedia, established a registry to compete with Network Solutions and began to accept domain name registration under hundreds of new generic top level domains. PGMedia later requested that Network Solutions add the new generic top level domains to the “A” root server, and after Network Solutions declined to do so, PGMedia filed suit against Network Solutions charging antitrust violations.

PGMedia claimed that Network Solutions had monopoly control of an essential facility and had denied use of that facility to PGMedia in violation of antitrust laws. Network Solutions argued that because it had a contract with a federal agency—NSF and then the Department—the actions it took to comply with this contract were entitled to antitrust immunity. The court found that NSF had clear authority to manage the domain name system and that the cooperative agreement was valid under the Federal Grant and Cooperative Agreement Act.⁴⁷ Further, the court found that NSF had the discretion to add new top level domains and had given that authority to Network Solutions but that under Amendment 11 the Department had taken the

⁴⁵ Specifically, Amendment 11 to the cooperative agreement provides “While Network Solutions continues to operate the primary root server, it shall request written direction from an authorized [Department] official before making or rejecting any modifications, additions or deletions to the root zone file. Such direction will be provided within ten (10) working days and it may instruct Network Solutions to process any such changes directly by [ICANN] when submitted to Network Solutions in conformity with written procedures established by [ICANN] and recognized by the [Department].” located at <<http://www.ntia.doc.gov/ntiahome/domainname/proposals/docnsi100698.htm>> (visited May 18, 2000).

⁴⁶ See PGMedia, Inc. v. Network Solutions, Inc., 51 F.Supp.2d 389 (S.D.N.Y. 1999).

⁴⁷ See 42 U.S.C. §§ 1870(c), 1862(a)(4), and 1862(g).

authority back.⁴⁸ The court stated that both NSF and the Department would have had antitrust immunity had they run the domain name system and the “A” root server themselves, and found that Network Solutions had immunity for its actions taken pursuant to a valid cooperative agreement.⁴⁹ Further, the court noted

“The Government, having been instrumental in supporting and fostering the development of the Internet and the Domain Name System, now has adopted a clearly articulated policy of getting out of the way in the future and letting the consensus of the Internet community, as articulated through the new ICANN, govern this powerful yet fragile technology. Since it is not entirely clear how the policy will be implemented, it would be inappropriate for this Court to take any action which might interfere with the future steps the [Department] may or may not take.” PGMedia, at 406.

In the fall of 1999, the Department signed agreements with ICANN and Network Solutions that included extending the Department’s cooperative agreement with Network Solutions for four years, and in certain circumstances, for an additional four years. Under these agreements, Network Solutions recognized ICANN and agreed to operate the registry for the .com, .net, and .org domains in accordance with provisions of the registry agreement between ICANN and Network Solutions and the policies established by ICANN in accordance with the terms of that agreement. The Department’s approval is required for the transfer of Network Solutions registry operations and for the designation of a successor registry by ICANN. The agreements also provided that ICANN’s authority to set policy for the registry may be terminated if ICANN breaches the registry agreement and fails to remedy that breach, the Department withdraws its recognition of ICANN, or the Department concludes that ICANN has not made sufficient progress towards entering into agreements with other registries and Network Solutions is competitively disadvantaged. Further, the agreements provided that if ICANN’s authority were terminated, the Department would assume the policy-setting function.

⁴⁸ Plaintiff did not challenge the validity of Amendment 11 or the memorandum of agreement between NSF and the Department.

⁴⁹ PGMedia, Inc. v. Network Solutions, Inc., 51 F.Supp.2d 389, 405 (S.D.N.Y. 1999), aff’d sub. nom. Name.Space, Inc. v. Network Solutions, Inc., 202 F.3d 573 (2d Cir. 2000) (noting that Network Solutions was entitled to implied antitrust immunity for the conduct at issue in the case, as such conduct was expressly directed by the government, and the terms of the cooperative agreement, and because it was in furtherance of the government’s policy with respect to the management of the domain name system).

The agreements make clear that the Department retains final policy authority over the “A” root server. A fact sheet on the agreements contained the following statement with respect to the management of the authoritative root server:

“Nothing in these agreements affects the current arrangements regarding management of the authoritative root server. [Network Solutions] will continue to manage the authoritative root server in accordance with the direction of the Department of Commerce. The Department of Commerce expects to receive a technical proposal from ICANN for management of the authoritative root and this management responsibility may be transferred to ICANN at some point in the future. The Department of Commerce has no plans to transfer to any entity its policy authority to direct the authoritative root server.”⁵⁰

Since the signing of these agreements, the Department and ICANN have entered into a sole source contract. This contract involves the performance by ICANN of administrative functions associated with root management. The contract states

“This [administrative] function, however, does not include authorizing modifications, additions, or deletions to the root zone file or associated information that constitute delegation or redelegation of top-level domains. The purchase order will not alter root system responsibility defined in amendment 11 of the Cooperative Agreement.”

According to the Department, it has no current plans to transfer policy authority for the authoritative root server to ICANN, nor has it developed a scenario or set of circumstances under which such control would be transferred.

AGENCY COMMENTS

We provided a draft of the report to the Departments of Commerce and Justice, the National Science Foundation, the National Security Agency, and the Defense Advanced Research Projects Agency, as well as ICANN and Network Solutions, Inc. for their review and comment. The Department of Commerce provided technical and editorial comments which we incorporated in the report. The Department's written comments appear in Enclosure VI. The National Science Foundation and ICANN

⁵⁰ Fact Sheet on Tentative Agreements Among ICANN, the U.S. Department of Commerce, and Network Solutions, Inc. located at <<http://www.icann.org/nsi/factsheet.htm>> (visited May 18, 2000).

provided technical and editorial comments which we incorporated as appropriate. The other agencies and Network Solutions, Inc. did not provide comments.

We are sending copies of this report to The Honorable William M. Daley, Secretary of Commerce; The Honorable Janet F. Reno, Attorney General; The Honorable Dr. Rita R. Colwell, Director, National Science Foundation; Lieutenant General Michael V. Hayden, USAF, Director, National Security Agency; and The Honorable Dr. Frank Fernandez, Director, Defense Advanced Research Projects Agency. We will also make copies available upon request and we will place this correspondence on GAO's website.

If you have any questions about this report, please contact me at (202) 512-5400 or Susan A. Poling, Associate General Counsel, at (202) 512-2667. Major contributors to this report were Thomas Farrell, Paul Jordan, Michael Volpe, Kimberly Walton, Edward Warner, Amy Webbink, and Mindi Weisenbloom.



Robert P. Murphy
General Counsel

Enclosures - 6

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ABBREVIATIONS

APA	Administrative Procedure Act
ARPA	Advanced Research Projects Agency
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
DOD	Department of Defense
NSF	National Science Foundation
NTIA	National Telecommunications and Information Administration
NIST	National Institute of Standards and Technology

Objectives, Scope and Methodology

Responding to a conference report directing us to examine the relationship between the Department of Commerce and ICANN, we took several actions. We interviewed a broad range of experts, including federal government officials, ICANN officials, and those with specialized knowledge of the domain name system (see list below). We reviewed relevant laws and regulations. We also wrote the Department asking for their views on the legal issues present.

We also reviewed government, industry, and academic documents on the development of the domain name system, and we examined the agreements between the Department and ICANN. We reviewed federal contracts entered into for domain name management and for provision of functions relating to the domain name system. We considered as well the statements made by individuals during testimony before congressional committees, and we culled information from the web pages of the various organizations involved in the domain name system and in Internet-related decision-making more generally.

Our method in this research was to describe the roles of the Department of Commerce, the National Science Foundation, and the Department of Defense in administering the domain name system. We also wished to describe the creation of ICANN and the process of its selection by the Department of Commerce, as well as the relevant laws and rules that would affect this process. We also sought to determine whether the assets had been or will be transferred to ICANN. We determined the sum the Department reported as having spent in its relationship with ICANN.

We engaged in several legal analyses, including an examination of whether the Department of Commerce acted in accord with the Administrative Procedure Act and the Government Corporation Control Act. We also looked at whether the Department had the authority to transfer the authoritative root server to ICANN. In addition, we analyzed whether Office of Management and Budget Circular A-25 would apply to ICANN.

ICANN Interviews

A. Government

1. Clinton administration (Mr. Ira Magaziner, former Senior Advisor to the President)
2. Advanced Research Projects Agency
3. Department of Commerce
4. Department of Justice

5. Federal Communications Commission (David Farber, Chief Technologist)
6. National Security Agency
7. National Science Foundation
8. Small Business Administration Office of Advocacy (Jere Glover, chief counsel)

B. Nongovernmental Organizations

1. American Registry for Internet Numbers – Ms. Kim Hubbard, former president
2. Council of Registrars – Mr. Kenyon Stubbs, chairman, executive committee
3. Internet Corporation for Assigned Names and Numbers – Michael Roberts, president; Joe Sims, outside counsel; Louis Touton, general counsel
4. Network Solutions Inc. – Mr. Don Telage, executive advisor, global Internet strategy; Mr. Anthony Rutkowski, vice president
5. University of Southern California Information Sciences Institute – Ms. Joyce Reynolds, Internet services manager

C. Experts

1. Mr. Karl Auerbach – member, Boston Working Group
2. Ms. Mikki Barry – president, Domain Name Rights Coalition; founder, Internet Policy Consultants
3. Mr. Vinton Cerf – developer of TCP/IP; senior vice president for Internet architecture and engineering, MCI Worldcom
4. Mr. Tod Cohen – attorney for eBay, Inc.
5. Mr. Jay Fenello – founder of Iperdome.com
6. Prof. Tamar Frankel – Boston University School of Law
7. Prof. Michael Froomkin – University of Miami Law School
8. Mr. Edgardo Gerck – CEO, SafeVote
9. Ms. Ronda Hauben – author, provided proposal on domain name system to Department of Commerce
10. Ms. Kathryn Kleiman – attorney, co-founder of Domain Name Rights Coalition
11. Mr. John Klensin – member of the Internet Architecture Board; vice president for Internet architecture, AT&T Labs
12. Prof. Mark Lemley – University of Texas School of Law
13. Prof. Lawrence Lessig – Stanford University Law School
14. Mr. Steven Metalitz – general counsel, International Intellectual Property Alliance
15. Mr. Paul Mockapetris – co-developer of domain name system, chief technology officer at Urban Media
16. Mr. Milton Mueller – associate professor, Syracuse University School of Information Studies
17. Mr. Michael Nelson, director, Internet technology and strategy, IBM. Former White House special assistant for information technology
18. Prof. David Post – Temple University Law School
19. Mr. Stephen Ryan – attorney; former general counsel, Senate Governmental Affairs Committee
20. Prof. Jonathan Weinberg – Wayne State University Law School
21. Asst. Prof. Jonathan Zittrain – Harvard Law School

The Government and the Domain Name System

The Internet has its origins in a network, called the ARPANET, which the Department of Defense (DOD) launched in 1969 and in another federally developed network, NSFNET of the National Science Foundation (NSF), which superseded ARPANET in 1990. By 1992, NSF was also overseeing domain name registration for the nonmilitary portion of both national networks. Those networks were notable for their use of packet-switched communications, which speed the transmission of data, and for their ability to be connected to other packet-switched computer networks.

In the beginning, working under a DOD contract, Dr. Jon Postel, of the Information Sciences Institute at the University of Southern California, maintained the list of assigned Internet numbers and names. He also published a list of technical parameters that had been assigned for use by protocol developers. Eventually, these functions collectively became known as the Internet Assigned Numbers Authority (IANA).

IANA was just one of several informal bodies that did much of the technical and policy decision-making for the Internet. Others included the Internet Engineering Task Force and the Internet Society. “The legal authority of any of these bodies is unclear” as is “the degree to which an existing body can lay claim to representing the Internet community . . .” the Federal Communications Commission observed in an early 1997 policy paper. That paper recognized the U.S. government’s contribution to developing the Internet, but said the government “has not, however, defined whether it retains authority over Internet management functions or whether these responsibilities have been delegated to the private sector.”

The NSF has statutory authority for supporting and strengthening basic scientific research, engineering, and educational activities in the United States. This included the maintenance of computer networks to connect research and educational institutions. Beginning in 1987, IBM, MCI, and Merit developed NSFNET, a national high-speed network under an NSF award. By 1990, ARPANET was completely phased out. In 1992, NSF announced it would phase out federal support for NSFNET and transfer ownership and responsibilities of these networks, which came to be known as the Internet backbone, to private companies on a for-profit basis. Additional Internet backbone has been constructed since then to support the growth of the Internet as it evolved from a government and academic research tool to a public and commercial communications medium.

On December 3, 1992, NSF entered into a cooperative agreement with Network Solutions, Inc. for domain name registration services. Since that time, Network

Solutions has managed key registration, coordination, and maintenance functions of the Internet domain name system, including operation of the authoritative database of Internet registration. In 1992, NSF was authorized to allow commercial activity on the Internet.⁵¹ This paved the way for today's Internet.

As the Internet grew in scale, concerns arose over the proper distribution of domain names and the largely informal mechanisms that have governed the domain name system. In addition, there was widespread dissatisfaction about the absence of competition in domain name registration, as well as growing conflicts between trademark holders and domain name holders. Moreover, there was a growing recognition of the global nature of the Internet.

In May 1996, Dr. Postel proposed the creation of multiple, exclusive, competing top-level domain name registries. After considerable debate of this proposal, IANA and the Internet Society organized the International Ad Hoc Committee (IAHC), which included representatives of such Internet standard-setting bodies as the Internet Society and the Internet Engineering Task Force, as well as intellectual property organizations such as the International Trademark Association, and the World Intellectual Property Organization, plus other interested parties. The Policy Oversight Committee later replaced IAHC. However, IAHC's initial efforts led to a memorandum of understanding on generic top-level domain names, and the establishment under Swiss law of a Council of Registrars to create a shared registry of generic top-level domain names. Under that memorandum of understanding, and related documents, the domain name system would have been transformed from one backed by the U.S. government to one that would be private and international.⁵²

On July 1, 1997, the administration issued a report on electronic commerce, "A Framework for Global Electronic Commerce." Among other things, the report supported private efforts to address Internet governance and named the Department of Commerce as the lead agency on this initiative. The report said the Department would consult with interested private sector, consumer, professional, congressional, and state government, and international groups regarding how the government might contribute to the development of a global, competitive, market-based system to register Internet domain names. The presidential directive accompanying the report also called on the Department to "support efforts to make the governance of the domain names system private and competitive and to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis." The Department responded with a Request for Comments that sought the public's views. It received over 430 comments.

⁵¹ Scientific and Advanced-Technology Act of 1992, 42 U.S.C. § 1862(g).

⁵² See Ron N. Dreben and Johanna L. Werbach, Domain Name Lawsuits Trigger Plans for Reform, Nat'l L. J., Jan. 26, 1998, at C14.

On February 20, 1998, the Department's National Telecommunications and Information Administration (NTIA) published a proposed rule and Request for Comments, "Improvement of Technical Management of Internet Names and Addresses," generally referred to as the Green Paper. Here, NTIA proposed the creation of a private, not-for-profit corporation to manage the coordinated functions of the domain name system in a stable and open framework. More than 650 comments were filed.

On June 10, 1998, NTIA published a policy statement on "Management of Internet Names and Addresses," commonly referred to as the White Paper. Here, NTIA stated that the U.S. government was prepared to enter into agreement with a new nonprofit corporation formed by private sector Internet stakeholders to administer policy for the Internet name and address system. In deciding to enter into an agreement, the policy statement stated that the U.S. government would be guided by the proposed entity's commitment to the following principles: (1) stability; (2) competition; (3) private, bottom-up coordination; and (4) representation. The new corporation would have the authority to set policy for and direct the allocation of the Internet Protocol numbers that underlie each domain name. It would oversee the operation of an authoritative root server system, set the policy for determining how new top-level domains are added to the root system, and coordinate the assignment of the Internet technical parameters as needed to maintain universal connectivity on the Internet.

The policy statement called for the transition to begin as soon as possible, with the goal of having the new corporation carry out operational responsibilities by October 1998. It was expected that the transition would be complete before the year 2000, with September 30, 2000, being considered an outside date.

At least two different efforts were initiated to respond to the Department's policy statement. One was started by IANA, Dr. Postel's group. The other process was called the International Forum for the White Paper (IFWP) and was initiated by Network Solutions and a number of other companies and organizations. The IANA effort included establishment of a mailing list to solicit views and negotiations with various groups on five successive drafts of proposed bylaws for the new corporation. The IFWP process consisted of a series of public meetings held throughout the summer of 1998 in Reston (Virginia), Geneva, Singapore, and Buenos Aires. The process produced no organizational documents and a proposed wrap-up meeting to work out a consensual constitution for the new corporation was never held.

ICANN was legally incorporated in September 1998 and in mid-September, representatives of this group indicated to the Department that they would seek to become the new corporation to manage the domain name system. NTIA announced ICANN's intentions in a press release and noted it expected to receive submissions from other groups as well. NTIA indicated that all submissions would be posted on

its website and that public comments would be accepted for a 10-day period. On October 2, 1998, Dr. Postel submitted ICANN's organizational documents to the Department. The Department also received four other proposals.⁵³ The Open Root Server Confederation proposal also included its incorporation documents and two of the other proposals included variations on the ICANN organizational documents. The Department did not negotiate an agreement with any other submitting entity. However, the Department notes that its personnel did participate in several conference calls with these other groups to develop a better understanding of their submissions, as well as their concerns with the ICANN submission.

On October 20, 1998, NTIA sent a letter to IANA, which was made public, saying the ICANN submission was a significant step forward, but noting that some of those who commented had expressed concerns about ICANN's substantive and operational aspects. NTIA requested that ICANN work with the Internet community to resolve these concerns, but said that if the concerns can be resolved "we would then like to begin work on a transition agreement between the United States and ICANN."

Dr. Postel died before the process was complete and ICANN officially constituted its interim board on October 25, 1998. On November 6, 1998, the board's interim chairman wrote to the Department to say ICANN was "pleased to have been recognized by the Department" and to specify how ICANN intended to respond to the concerns. These revisions included amending the bylaws to make clear that ICANN would create a membership structure that would elect the At Large directors and ensuring more fiscal accountability.

On November 14, 1998, ICANN held its first open meeting and in a November 23, 1998, letter it requested U.S. government recognition. The letter highlighted additional changes to ICANN's organizational documents. On November 25, 1998, NTIA entered into a memorandum of understanding with ICANN to design, develop, and test the mechanisms, methods, and procedures necessary to transfer domain name system management responsibilities to the private sector. Subsequently, the Department has entered into other agreements with ICANN.

⁵³ Proposals were submitted by (1) Dr. Jon Postel on behalf of ICANN, (2) the Boston Working Group, (3) Einar Stefferud on behalf of the Open Root Server Confederation (Open-RSC), (4) Ronda Hauben, and (5) Jeffrey A. Williams on behalf of INEG. Inc.

Key Organizations Regarding the Domain Name System

International Ad Hoc Committee (IAHC) (<http://www.iahc.org/>): IAHC aimed to formalize domain name system decision-making and to create seven new top level domain names. The IAHC, which has since dissolved, proposed a **Council of Registrars** (<http://www.corenic.org/>) to manage the domain name system.

International Forum on the White Paper (IFWP) (<http://www.ifwp.org/>): A group of organizations that came together to formulate a response to the Department of Commerce White Paper policy statement on the domain name system. The IFWP held several meetings around the world, but never held a final meeting or produced a proposal for the Department. However, those who wanted to continue the IFWP's work formed the **Boston Working Group** (<http://www.cavebear.com/bwg/index.html>), which did provide a proposal to the Department.

Internet Assigned Numbers Authority (IANA) (<http://www.iana.org/>): Formerly located at the Information Sciences Institute of the University of Southern California, IANA oversees Internet Protocol address allocation.

Internet Corporation for Assigned Names and Numbers (ICANN) (<http://www.icann.com/>): A California-based nonprofit, ICANN has been chosen by the Department of Commerce to manage the domain name system, Internet Protocol address space allocation, and root server system management.

Internet Society (ISOC) (<http://www.isoc.org/>): The international organization of Internet experts that encompasses the **Internet Engineering Task Force** (<http://www.ietf.org/>), which does protocol engineering and development. ISOC has over 150 organizational members, including companies and government agencies, and 6,000 individual members.

National Institute of Standards and Technology (NIST) (<http://www.nist.gov/>): An agency of the Department of Commerce's Technology Administration, NIST works with industry to develop and apply technology, measurements, and standards.

National Science Foundation (NSF) (<http://www.nsf.gov/>): An independent U.S. government agency, the NSF advances its mission of promoting the progress of science by issuing research contracts and grants, among other means.

Network Solutions, Inc. (Network Solutions) (<http://www.networksolutions.com/>): Founded in 1979, Network Solutions is a Herndon, Va., company that registers Internet domain names and has provided 10 million so far.

National Telecommunications and Information Administration (NTIA) (<http://www.ntia.doc.gov/>): A Department of Commerce agency, the NTIA is responsible for telecommunications and information policy issues, and is the President's principal adviser on those matters.

Regional Internet Registries (RIR): The organizations distribute Internet Protocol numbers to Internet Service Providers in their regions of the world. Currently, there are three RIRs: The **American Registry for Internet Numbers** (<http://www.arin.net/>), the **Asia Pacific Network Information Centre** (<http://www.apnic.net/>), and the **Réseaux IP Européens Network Coordination Centre** (<http://www.ripe.net/>), which serves Europe.

World Wide Web Consortium (W3C) (<http://www.w3c.org/>): A 400-member group, the W3C develops common protocols for the Web. The group has developed over 20 technical specifications and is hosted by research institutions in the United States, Europe, and Japan.

The Election of ICANN's Board of Directors

The Department's policy statement proposed that organizational documents of the new domain name system corporation direct its interim board to establish a system for electing a board of directors. This system was to reflect the geographical and functional diversity of the Internet and be sufficiently flexible to permit evolution to reflect changes in the constituency of Internet stakeholders. The ICANN bylaws reflect the need for geographic diversity and provide for a 19-member board of directors from four main organization units and an ex officio voting chief executive officer. Nine of these are appointed by ICANN's "supporting organizations," which are designed to provide specific mechanisms for the participation of business and technical interests in the policy development and consensus mechanisms of ICANN. The three supporting organizations are

1. The Address Supporting Organization, which is concerned with the system of Internet Protocol addresses that uniquely identify the Internet's networked computers;
2. The Domain Name Supporting Organization, which is concerned with the domain name system; and
3. The Protocol Supporting Organization, which is concerned with the assignment of unique parameters for Internet Protocols, the technical standards that let computers exchange information and manage communications over the Internet.

Each of the supporting organizations has elected three directors to the ICANN board.

The fourth unit is an At Large membership designed to ensure adequate representation, on a worldwide basis, of the interests of Internet users. The At Large membership elects nine directors to the board. Initially, the ICANN directors adopted an indirect representation mechanism in which an At Large membership would elect an At Large council composed of up to 18 members. However, this plan came under considerable criticism. As a result, the board changed course at its latest meeting and resolved to select five At Large directors (one each representing each ICANN region)⁵⁴ by a direct ballot of each region's qualified ICANN members by no later than November 1, 2000, with the others to be elected at a later time.

⁵⁴ The ICANN regions are Europe, Asia/Australia/Pacific, Latin America/Caribbean Islands, Africa, and North America.

On May 9, 2000, ICANN announced the appointment of an election committee and a nominating committee.⁵⁵ The nominating committee will nominate a set of At Large candidates. The nominating committee is expected to complete work by the end of July, after which the election process will proceed to the petition, campaign, and voting phase. The election committee will solicit and select an outside vendor for the online voting system. The committee will also complete detailed recommendations for ICANN's campaign and voting procedures, including independent oversight and monitoring. The recommendations of the election committee are expected prior to ICANN's next meeting in July. After the At Large membership elects five initial board members, ICANN will review the election process and determine how to elect the remaining four At Large members.

The appointment of the election and nominating committees has raised some concern in the Internet community. Some have criticized the appointments because they were done without a public comment period.⁵⁶ This concern is similar to that raised over the selection of the interim board.

⁵⁵ On May 19, 2000, ICANN staff posted proposed rules for self-nomination. On May 22, 2000, ICANN's nominating committee posted a call for recommendations and expression of interest to identify candidates for the At Large election.

⁵⁶ See Bret A. Fausett, Want to Create a Secret Committee? It's Easy. Violate Your Bylaws, May 10, 2000 (located at <<http://www.lextext.com/21days.html>> (visited May 18, 2000)).

ICANN's Funding and Current Budget Proposal

Since withdrawing the proposed \$1 per year per domain name registration fee, funding has been a source of concern for ICANN. In response to the Department's letter calling for ICANN to eliminate the \$1 yearly fees, the ICANN interim board unanimously adopted a resolution directing the ICANN president to convene a task force on funding at its teleconference meeting on July 26, 1999. The task force is composed of representatives of domain name and address registries and registrars, with the objective of reviewing ICANN budgetary needs and making recommendations to the board. The board then discussed the need to secure short-term funding to allow ICANN to meet its immediate responsibilities.

Because voluntary contributions were insufficient to fund ongoing activities, ICANN was relying on the willingness of its creditors to defer payment demands. To temporarily meet ICANN's expenses until permanent funding is secured, the board passed a resolution authorizing ICANN to borrow up to \$2,000,000 from various lenders selected by the interim president and chief executive officer on an unsecured basis for a 1-year term at interest of 7 percent or below. ICANN has received unsecured loans in the amount of \$500,000 from MCI Worldcom, \$150,000 from Cisco Systems, \$175,000 from 3Com Corp., and \$100,000 from IBM.

On August 23, 1999, the task force held its initial meeting in Santiago, Chile, in connection with the quarterly public meetings of the board. The task force discussed various revenue mechanisms that, while incorporating an aspect of proportionality, would not include a specific amount per domain name assigned. The task force also discussed methods of allocating fractions of the total revenue budget to the three major stakeholder groups—Internet Protocol registries, country code top-level domain name registries/registrars, and generic top-level domain name registry/registrars—and the potential contributions of these groups.

After additional teleconferences, a final draft of the task force report was posted on the ICANN website on October 30, 1999. The task force recommended that Internet Protocol address registries, domain name registries, and registrars support the basic funding needs of ICANN. The task force also recommended that the annual revenue budget for continuing expenses be allocated proportionally among the three major groupings of Internet Protocol address registries, domain name registries, and domain name registrars. The task force suggested that the proportions for the transitional budget year, beginning July 1, 1999, and ending June 30, 2000, be 55 percent to generic top-level domain registrars/registry, 35 percent to country code top-level domain registries, and 10 percent to Internet Protocol address registries.

The ICANN board adopted the task force recommendations at its Los Angeles meeting on November 4, 1999.

In November 1999, ICANN executed a series of agreements with the United States Department of Commerce and with Network Solutions. As part of these agreements, ICANN receives specified payments from the Network Solutions-operated registry for the .com, .net, and .org domains, and from Network Solutions acting as a competitive registrar in those same domains. These payments are projected to reach a total of \$2,250,000 this year.

ICANN's budget for fiscal year 2000-2001 was approved by its Board of Directors on June 6, 2000. A draft budget was posted on the ICANN website on March 6, 2000, and discussed shortly thereafter at the ICANN public meeting in Cairo on March 9, 2000. The ICANN board discussed the proposed budget at its monthly meeting on May 4 and approved posting it for public comment. The amounts and proportionate shares of income for continuing expenses from among the three major income sources are as follows: (1) \$2,390,000 from generic top-level domain name registries/registrars; (2) \$1,496,000 from country code top-level domain registries/registrars; and (3) \$428,000 from Internet Protocol address registries. The remaining \$710,000 in income will come from accreditation fees, contributions, special project grants, and other sources.

Despite progress in the budgetary process, ICANN has experienced continued difficulties in securing a stable funding mechanism. According to one news source, ICANN currently is having trouble collecting the approximately \$1.5 million in funds from the country code top-level domain registries/registrars of 250 nations.⁵⁷ Some officials of a group representing 30 nations, mostly in Europe, are encouraging members to disregard invoices. South Africa, in an email indicating that it cannot afford to pay its \$17,520 share, stated that the charge amounts to an "arbitrary tax." ICANN cannot cut off Internet access to a nation's domain; thus, ICANN lacks a method of enforcing payment of these funds. In response to the news source, ICANN voiced optimism that the funds will be received and stated that collection difficulties do not endanger the organization's future. However, these funding difficulties put ICANN's budget at risk and again raise questions regarding ICANN's self-sufficiency.

⁵⁷ Ted Bridis, Internet Body Finds Problems Collecting Funds from Nations, Wall St. J., June 1, 2000, at B12.

Department Comments

**GENERAL COUNSEL OF THE
UNITED STATES DEPARTMENT OF COMMERCE**
Washington, D.C. 20230

JUN 30 2000

Mr. Robert P. Murphy
General Counsel
United States General Accounting Office
441 G Street, N.W.
Washington, DC 20548

Dear Mr. Murphy:

Thank you for your letter of June 23, 2000, to Secretary of Commerce William M. Daley giving the Department an opportunity to review and comment on the General Accounting Office's proposed report, Department of Commerce: Relationship with the Internet Corporation for Assigned Names and Numbers (GAO/OGC-00-33R). We appreciate the opportunity to provide comments on the report, and in fact, did provide minor, technical edits directly to your staff earlier this week.

We recognize the difficulties you faced in meeting the short deadline you had for this very complicated task, and I would like to thank you and your staff for the professional and collegial manner in which this project was handled.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew J. Runcus".

Andrew J. Runcus

[996227]