DENIC's Response to the NTIA's Inquiry
on "The Continued Transition of the Technical Coordination and Management of the Internet Domain Name and Addressing System"

It is with pleasure that DENIC, the registry for the German Top Level Domain .de, responds to the NTIA's inquiry on "The Continued Transition of the Technical Coordination and Management of the Internet Domain Name and Addressing System".

1. The DNS White Paper articulated principles (i.e., stability; competition; private, bottom-up coordination; and representation) necessary for guiding the transition to private sector management of the Internet DNS. Are these principles still relevant? Should additional principles be considered in light of: the advance in Internet technology; the expanded global reach of the Internet; the experience gained over the eight years since the Department of Commerce issued the DNS White Paper; and the international dialogue, including the discussions related to Internet governance at the United Nations World Summit on the Information Society (WSIS)?

Not only are the White Paper principles still relevant but they have gained additional relevance in the very light of the Internet's development since issuance of the White Paper.

Most notably, this concerns the technical stability of the DNS, given that the DNS (as well as the Internet as a whole) is, after all, a technical infrastructure, regardless of all political and legal implications that it might indeed carry or that might be attributed to it by interested parties. The farther the global reach of the Internet expands, and the more the world relies on the Internet, the more important the smooth functioning of the Internet in general and the DNS in particular becomes. Therefore, technical stability has to remain paramount in all considerations regarding DNS management and, for that matter, Internet governance.

The successful development of the Internet and the DNS to date has mostly been made possible not by top-down (governmental) regulation but by bottom-up, initially academic and later on private coordination. As also the Working Group on Internet Governance asserted, with respect to the Internet's practical management, "there is no specific weakness in the system", as is, in fact, not surprising for perhaps the most significant advantage of private coordination is its ability to swiftly adapt to the new technical developments and challenges (and

even the policy requirements) generated by the Internet. In view of this, it would be detrimental to the functioning of the DNS if attempts were made to fundamentally change the current system and shift responsibilities away from the private sector.

2. The DNS White Paper articulated a number of actions that should be taken in order for the U.S. Government to transition its Internet DNS technical coordination and management responsibilities to the private sector. These actions appear in the MOU as a series of core tasks and milestones. Has ICANN achieved sufficient progress in its tasks, as agreed in the MOU, for the transition to take place by September 30, 2006?

With respect to ccTLDs (different from gTLDs), ICANN's function is purely technical in that ICANN performs the IANA function, whereas policy decisions, in line with the nature of ccTLDs, have to be and are in fact being made locally, not globally.

As a ccTLD registry, DENIC therefore is mostly interested in how ICANN performs the IANA function whose smooth operation is of utmost importance for the stability, reliability, and efficiency of the DNS. In this instance, significant improvements have been achieved, yet further improvements, in particular with regard to automation of DNS root updates, are needed in order to ensure timely implementation of authenticated root updates. DENIC notes with pleasure that such further improvements are underway as demonstrated by ICANN's intention to adopt the e-IANA initiative (cf. http://www.icann.org/announcements/ announcement-05jul06.htm).

3. Are these core tasks and milestones still relevant to facilitate this transition and meet the goals outlined in the DNS White Paper and the U.S. Principles on the Internet's Domain Name and Addressing System? Should new or revised tasks/methods be considered in order for the transition to occur? And on what time frame and by what method should a transition occur?

It cannot be emphasized enough that the technical stability of the DNS has to be paramount, and, consequently, more important than observance of a certain time frame is the certainty that, after full transition of DNS management, the IANA function will be performed reliably, responsibly, and with a view to being accountable to the stakeholders that immediately rely on it (such as TLD and IP address registries (RIRs)).

In this instance, DENIC is pleased to have exchanged letters with ICANN as the organization performing the IANA function, describing DENIC's and ICANN's respective functions and responsibilities (cf. http://www.icann.org/cctlds/de/ denic-icann-letters-31may06.pdf). On this occasion, ICANN, in its letter to DENIC, has pledged to "implement on notification by DENIC changes to the domain name or IP address(es) of the name servers for .de as recorded in the Authoritative Root data for .de in the Authoritative Root database". DENIC feels

that this accurately describes the way how the IANA function should be run as a purely technical task.

4. The DNS White Paper listed several key stakeholder groups whose meaningful participation is necessary for effective technical coordination and management of the Internet DNS. Are all of these groups involved effectively in the ICANN process? If not, how could their involvement be improved? Are there key stakeholder groups not listed in the DNS White Paper, such as those with expertise in the area of Internet security or infrastructure technologies, that could provide valuable input into the technical coordination and management of the Internet DNS? If so, how could their involvement be facilitated?

The management of the DNS primarily requires participation of those stakeholders that are part of the DNS as a technical infrastructure, such as root server operators, RIRs, or TLD registries, and participation of these stakeholders is, in principle, provided for within the ICANN framework.

Besides, due to the ever increasing importance of the Internet for people's every day lives all over the world, many other stakeholder groups take an interest in matters relating to the Internet. On the global level, this is particularly the case with regard to gTLD issues as gTLDs, different from ccTLDs, do not relate to a certain country or territory but are truly global by nature. In this instance, ICANN provides a framework for broad participation in the creation of gTLD policies.

With respect to ccTLDs, on the other hand, as they are rooted in their respective local communities, participation of interested stakeholder groups should and does indeed take place foremost locally. Consequently, for ccTLDs, there is no need to centralize stakeholder participation at the global DNS root level, even less so as for cultural and language reasons, meaningful participation will often be much more efficient on the local level anyway.

5. The DNS White Paper listed principles and mechanisms for technical coordination and management of the Internet DNS to encourage meaningful participation and representation of key stakeholders. ICANN, in conjunction with many of these key stakeholders, has created various supporting organizations and committees to facilitate stakeholder participation in ICANN processes. Is participation in these organizations meeting the needs of key stakeholders and the Internet community? Are there ways to improve or expand participation in these organizations and committees?

In the course of ICANN's institutional reform three years ago, for the enhanced participation of ccTLDs, the ccNSO was created. While this undoubtedly was an encouraging step forward, the ccNSO has not yet attracted a sufficient number of members.

It appears that the main reason for ccTLD registries not to join the ccNSO lies in the fact that membership in the ccNSO comes with being subject to policy decisions of ICANN (prepared by the ccNSO) even though policy for ccTLDs

must be and is being created locally. Even though the recent amendments to the ICANN bylaws have remedied some of the concerns that in particular many European ccTLD registries (including DENIC) had with respect to the ccNSO, there are still quite a few issues remaining of which the most important one probably is the not yet clearly enough defined ccNSO scope (for a more detailed assessment, cf. http://forum.icann.org/lists/ccnso-bylaws-changes/ msg00000.html).

Regardless of this, it is important that ICANN, with regard to the IANA function, remains accountable and responsive to all ccTLD registries, irrespective of whether they are members of the ccNSO or not.

6. What methods and/or processes should be considered to encourage greater efficiency and responsiveness to governments and ccTLD managers in processing root management requests to address public policy and sovereignty concerns? Please keep in mind the need to preserve the security and stability of the Internet DNS and the goal of decision-making at the local level. Are there new technology tools available that could improve this process, such as automation of request processing?

The day-to-day management of the DNS root is a purely technical task that neither requires nor merits responsiveness to "public policy and sovereignty concerns". Managing the DNS root means nothing more than implementing changes of the addresses of nameservers or contact details for TLDs (not including, of course, replacement of the registry itself) on request by the concerned TLD registry, and it is hardly imaginable how such changes would raise or pertain to "public policy and sovereignty concerns".

In light of this, it is important that neither ICANN nor any other party (including any government) is being given the opportunity to delay or prevent such technical changes for non-technical reasons.

The whole concept of ccTLDs is to provide places in the DNS for local communities and with that cater to local cultural, political, and legal needs. This is the reason why the ccTLDs can be and are so diverse in any possible instance, including their government relationships. Different types and grades of governmental involvement have been developed locally according to the needs and necessities of the respective ccTLD. Also, governments follow different public policies and have different understandings of how national sovereignty might or might not be affected by the management of their respective country's ccTLD. Therefore, it would not be possible to apply a "one size fits all" model of addressing "public policy and sovereignty concerns" at the DNS root level. Instead, such concerns have to be addressed locally, within the legal framework of the respective country. In Germany, for example, the administration of domain names is, by a deliberate decision of the German federal government,

unregulated, and it would be inappropriate to thwart this decision by implementing means of governmental involvement at the root level.

Incidentally, even with regard to the "delegation" of new ccTLDs or the replacement of the registries for existing ones (other than in the case of gTLDs), a global policy is neither needed nor would it be appropriate. Since any current and future ccTLD is per se linked to a certain country or territory, the decision by whom the registry should be run can and should be made locally (with the IANA then merely implementing such local decision).

7. Many public and private organizations have various roles and responsibilities related to the Internet DNS, and more broadly, to Internet governance. How can information exchange, collaboration and enhanced cooperation among these organizations be achieved as called for by the WSIS?

The history of the Internet and the DNS clearly demonstrates that information exchange, collaboration, and enhanced cooperation automatically develop between those stakeholders that need to collaborate and cooperate to make the Internet work. Given that the Internet is a technical medium, this particularly applies to the technical community, as clearly demonstrated by the fact that the technical functioning of the Internet is based not on the enforcement of (legal) rules but on voluntary compliance with what makes sense technically. Therefore, in particular with respect to the DNS, it would be fallacious to assume that currently there was a lack of information exchange, collaboration and cooperation.

Nevertheless, there is no reason imaginable not to foster further improvement in this instance, and particularly increased information exchange will certainly be useful to ensure that all stakeholders better understand their respective needs and approaches as well as their limitations. However, any endeavors to enhanced cooperation must not obliterate the responsibilities and roles of each stakeholder or stakeholder group nor impair, by making it cumbersome or unwieldy, the stable management of the DNS as a technical task. Already in view of this, enhanced cooperation neither requires nor would it benefit from the creation of additional organizations.

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