

B.1 Statement of Purpose

NeuStar's solution for managing the usTLD namespace amply meets the objectives defined by the DOC and will both enhance its utility and drive its widespread adoption.

The usTLD was created to provide a locus for registration of domain names to serve the Internet community of the United States, and is available to a wide range of registrants. However, it has not attracted high levels of registration and utilization when compared with other ccTLDs in part because of its hierarchical nature. Because the usTLD has been underutilized and underdeveloped, the DOC now seeks proposals to centralize management and coordination of the existing usTLD space while expanding and enhancing it to encourage use and

HIGHLIGHTS

- NeuStar's administration will encourage communication, ensure equitable application of policies and procedures, and cultivate an environment conducive to innovation
- Our technical infrastructure will provide a secure, robust, reliable system that will ensure the stability of the DNS and inspire consumer confidence
- NeuStar's solution will encourage robust competition and promote the use of the usTLD

innovation. NeuStar's solution, discussed below and in the subsections to follow, has been carefully designed to meet all the DOC's objectives for the space.

NeuStar will develop a more robust, certain, and reliable system as a framework of accountability for the delegation and the administration of the usTLD.

NeuStar believes that the importance of expanding the scope and quality of core registry functions for the usTLD cannot be stressed enough and that the expanded usTLD services should follow, in large part, the registry/registrar model that has become commonplace in the industry. Not only will this approach allow the development of a feature rich domain space, it also will establish a level of consumer familiarity that will help ensure a successful roll-out of an enhanced usTLD. Therefore, the administrator must develop a robust shared registry system (SRS) comparable to those being built for the new generic TLDs that have been established by ICANN.

The development of a secure, functional and robust SRS is not a trivial task. In developing such an SRS, NeuStar believes that a number of key elements must be implemented to handle delegation based TLD registration. In particular, Whois functionality should be centralized in the registry operator following the "thick registry" model. A "thick registry" centralizes registration data with the TLD registry, rather than placing most of the storage burden on each registrar (or delegee). This centralization increases security, functionality, and stability. NeuStar submits that existing usTLD delegation operators should be required to transition to a "thick registry" model. Other important aspects of a robust, trusted infrastructure will include:

- Geographically diverse, redundant data centers with a high level of physical security and appropriate environmental conditions
- Equal network access for registrars
- Open source advanced system interface for registrars
- Enhanced security for the registrars and the information that is transmitted to the provider
- Enhanced privacy protections for registrant data



Enhanced functionality for both delegations and direct registrations

For example, currently the usTLD does not provide a comprehensive Whois service. This has a serious, negative impact on resolving some network operations problems. NeuStar will address this and other issues in the required compliance report on the usTLD space and will implement such a service with enhanced privacy protections.

Please see Proposal Sections B.3, Core Policy Requirements and O, Proposed Technical Plan, for more detailed information.

NeuStar will promote increased use of the usTLD by the Internet community of the United States by:

- Creating a stable, flexible, and balanced environment within the usTLD that is conducive to innovation and will meet the future demands of potential registrants.
- Promoting robust competition within the usTLD, and in particular, registration services that will lead to greater choice, new, and better services for users.

NeuStar's mission is to enhance the operation and utilization of the usTLD by bringing to bear the strengths and innovation of the next generation registry systems currently being deployed in the generic TLD space. As the usTLD Administrator, NeuStar will work with the Internet Community, the DOC, and ICANN to expand significantly the use and value of the current usTLD space by permitting direct registration of non-hierarchical names while centralizing and coordinating the management of the current usTLD delegations. This community-based, expanded approach will allow NeuStar to develop effective policies and procedures to ensure that current uses of the usTLD not only are protected and enhanced but also that this important public resource is managed in a manner designed to serve the public interest. To accomplish this goal, NeuStar proposes to analyze concerns with existing usTLD delegations as contemplated by the RFQ. NeuStar will then develop policies and procedures to ensure maximum utility of the existing delegations and registrations.

The complexity of the usTLD hierarchical namespace may discourage some Internet users from registering a name under the TLD. NeuStar, therefore, supports the expansion of the usTLD to allow direct second-level registrations and potentially new, concept-based hierarchies targeted to specific communities or for specific purposes. Moreover, NeuStar believes that by developing additional services to enhance the utility of the usTLD for its registrants, the usTLD's popularity and utility can be made to rival the existing generic TLDs.

In developing services, NeuStar's approach will be to work collaboratively with registrars and end users. Registrars and domain name registrants be encouraged to provide constant feedback and will have access to discussion lists and feedback forms. This feedback will be compiled and carefully considered in determining the ongoing development of the registry's systems, procedures, and services.

By improving the level of service and degree of coordination of the existing delegated space, NeuStar believes that there will be increased use of that space. For many functions, there is an inherent value in the kind of geographic categorization developed in RFC 1480. Administered properly, the delegated space in the usTLD could become as valuable and highly used as the expanded space is assumed to be.



Please see Proposal Section B.4, Locality-Based usTLD Structure Functions; Section D, Enhanced Services; and Section L, Funding for usTLD for more detailed information.

NeuStar will create a centrally administered and efficiently managed structure that ensures registrant/consumer confidence as well as infrastructure stability.

NeuStar expects to tighten significantly the operation of the delegated usTLD space. It will achieve this as discussed above, by centralizing administration and operation of the usTLD, except where decentralization is required. For all delegees there will be operational and technical standards. The centralized service will be offered for those delegees primarily interested in addressing the "policy" function of the delegation. In addition, the usTLD will follow the "thick registry" model for the enhanced space, whereby primary registrant data are kept with the registry, rather than the registrar. These measures will increase dramatically the usTLD Administrator's ability to ensure that the promise of the usTLD is realized.

Please see Proposal Sections B.2, Core Registry Functions and F, usTLD Centralized Database and Enhanced SRS. for more detailed information.

NeuStar's solution will ensure continued stability of the usTLD and of the domain name system as a whole.

Citizens, businesses, consumers, and even governments depend on the Internet for communication and commerce. Key to this dependence is the domain name system (DNS). The Internet community simply cannot afford a DNS that shows any type of unreliability. An unstable DNS has disastrous effects. It prevents communication among many thousands of organizations, hinders trade between businesses and customers, and prohibits individuals from communicating with each other or contacting their government. NeuStar is acutely aware of the immense responsibility attached to the administration of such a significant public resource and will undertake all measures required to ensure its success, reliability, and security. NeuStar will utilize existing DNS infrastructure developed for the dot-biz TLD to ensure the enhanced operation and stability of the usTLD. We will do so in several ways:

By providing a stable and secure zone file distribution network—NeuStar's usTLD registry will not impact operation of the existing DNS root. Publication and distribution of usTLD zone files will be entirely compatible with existing DNS standards and procedures. Our zone file distribution network will operate in parallel with the existing root server network and will employ accepted, modern, strong, encryption-based procedures. The root servers for the network will be protected by special software and hardware mechanisms. NeuStar's system will be developed and tested to scale seamlessly into the future for TLD name service.

By preserving the unique global domain name system—The NeuStar design has been developed on the principle of maintaining consistency and interoperability through existing standards such as RFC 1034, RFC 1123, RFC 1480, and their successors. In addition, NeuStar is committed to working closely with the Internet Engineering Task Force (IETF) and other relevant organizations to ensure the stable evolution of the domain name service technologies. NeuStar is supportive of implementing policy restrictions where necessary to protect important Internet and ICANN policies and, thus, is committed to the administration of the usTLD in a manner that preserves the current system's strengths and acknowledges it as a critical public resource.

By acting in accordance with sound business practices and operational management—NeuStar is founded on principles of strong management, a tight user-oriented



focus, and a clear vision. Market analysis and an understanding of the usTLD community is at all times the driver for NeuStar solutions. The NeuStar executive team brings an abundance of experience in designing, implementing, and maintaining technology-based services especially in an Internet environment.

The NeuStar usTLD registry solution will provide exceptional services. We are acutely conscious that support for domain names extends far beyond the initial registration or delegation for the entire life of the domain name. By providing effective, long term operational solutions, the domain space will thrive ensuring its own stability and encouraging the improvement of service levels within existing domain spaces.

By providing dedicated and responsive channel management—The NeuStar usTLD registry will deliver its solutions in the enhanced space via the registrar community. In this context, NeuStar understands the importance of providing an absolutely neutral third party registry service to facilitate the advancement of effective relationships in an extremely competitive environment. In this way, customer needs will drive the registry.

By developing an enhanced, community-based mechanism for maintaining and developing the existing usTLD space—The existing usTLD space has suffered from a lack of coordination and technical innovation since its inception. NeuStar will develop a strong community-based mechanism for managing existing delegations. Steps to improve the space will include analysis of delegee compliance with usTLD policies, quality of service improvement, establishment of a comprehensive centralized Whois service, development of minimum technical standards, and provision of outsourced technical services for delegees. These and other measures will ensure the continued viability and improvement of existing usTLD services.

Please see Proposal Section A, usTLD Organiztion; Section B.2, Core Registry Functions; Section B.3, Core Policy Requirements; Section F, usTLD Centralized Database and Enhanced SRS; and Section O, Proposed Technical Plan for more detailed information.

NeuStar's management of the usTLD will be consistent with the Internet Corporation for Assigned Names and Number's (ICANN) technical management of the DNS.

Since the DOC, through the National Telecommunications and Information Administration (NTIA), issued the statement of policy on the management of Internet names and addresses, the Internet community has expended significant effort in the development of policies and mechanisms for the governance of the Internet DNS, as well as enhancement of existing TLDs and the introduction of new TLDs. These efforts have resulted in development of a workable shared registry model that encourages competition and Internet stability, as well as protects the rights of individual Internet users. NeuStar has, where appropriate, modeled its solutions to be entirely consistent with ICANN policies and DNS management principles.

Please see Proposal Sections F, usTLD Centralized Database and Enhanced SRS, and O, Proposed Technical Plan, for more detailed information.

NeuStar will allow for the adequate protection of intellectual property in the usTLD.

NeuStar recognizes and supports the need for appropriate protection of intellectual property. NeuStar will implement a "sunrise" trademark program patterned after the "daybreak" proposal of the ICANN Intellectual Property Constituency. This program will allow registered US trademark holders and applicants a priority opportunity to register their marks within the



usTLD. NeuStar also will implement appropriate dispute resolution mechanisms designed specifically for the usTLD but consistent and compatible with the ICANN Universal Dispute Resolution Policy (UDRP). Finally, NeuStar will explore additional policy and mechanisms as needed to address all manners of intellectual property issues in the usTLD.

Please see Proposal Sections B.3, Core Policy Requirements and I, Start-up Phase Policies, for more detailed information.

NeuStar will establish and maintain consistent communication between the Contracting Officer's Technical Representative (COTR), the Contracting Officer, and ICANN.

As part of its role as a neutral provider of mission critical infrastructure and services for important public resources, NeuStar has a history of coordinating and working with numerous agencies and industry participants in performing its functions. For example, as the NANPA, NeuStar works with the FCC, the North American Numbering Council, and industry forums as well as with individual telecommunications carriers. NeuStar has been highly successful in these endeavors and will bring these same communications abilities to the management of the usTLD. In particular, NeuStar will identify dedicated liaison officers with the organization to ensure consistent communication between it and the Contracting Officer, the COTR, and ICANN. Moreover, NeuStar will develop outreach programs for the usTLD community including registrants and delegees, to ensure that the developing TLD meets the needs of its users.

Please see Proposal Sections B.2.7, Industry Representation/Compliance, and B.3.5, Additional, Alternative, or Supplemental Policies, for more detailed information.

NeuStar's solutions will address each of the DOC concerns. Indeed, because NeuStar's experience in the provision of mission critical public interest functions to US industry is unmatched, the proposed solution significantly exceeds these requirements and will result in a usTLD that will serve as the model for the ccTLD community.