

Solution Summary

NeuStar, the leading neutral third party administrator of critical public resources, possesses the experience, technical expertise, service capabilities, and integrity to ensure all the DOC's objectives for managing and enhancing the usTLD namespace are met.

The current United States top-level domain (usTLD) is greatly underutilized. The existing hierarchical structure, operational challenges, limited awareness, service level issues, and infrastructure needs have resulted in limited adoption and use by the U.S. community. A great opportunity exists to unlock the potential of the usTLD to the benefit of the American people. Widespread use of the usTLD for e-Gov, consumer, business, and public service applications has the potential to improve the ability of the American people to find information, access services, to communicate, and to transact business.

The new administrator must meet the critical needs identified by the Department of Commerce (DOC) in order for the U.S. Internet community to realize the full benefit of the usTLD. The administrator must:

1. Develop a more robust, certain, and reliable system.
2. Promote increased use of the usTLD.
3. Create a centrally administered and efficiently managed structure that ensures confidence and infrastructure stability.
4. Create a stable, flexible, and balanced environment within the usTLD that is conducive to innovation and that will meet the future demands of potential registrants.
5. Ensure continued stability of the domain name system as a whole and the usTLD in particular especially through the transition period from the current to the new management structure.
6. Manage the usTLD so it is consistent with the Internet Corporation for Assigned Names and Numbers' (ICANN) technical management of the domain name space (DNS).
7. Allow for the adequate protection of intellectual property in the usTLD.
8. Establish and maintain consistent communication between the Contracting Officer's Technical Representative (COTR), the Contractor, and ICANN.
9. Promote robust competition within the usTLD.

In order to meet its objectives, the DOC should seek an administrator that can meet the significant challenges outlined below:

- **Manage public resources in a responsible and neutral manner**—The usTLD Administrator will be a trustee of an important public resource. Undertaking the administration of any public resource, including the usTLD, means taking on an obligation to operate in a fair and even-handed manner, providing equal access and service levels to all.

HIGHLIGHTS

- **NeuStar has a legacy of managing public resources in a responsible and neutral manner**
- **NeuStar has the experience to transition mission critical infrastructure services**
- **NeuStar has proven experience implementing advanced technologies to increase the utility of public resources**
- **NeuStar has a legacy of facilitating policy processes in environments with multiple stakeholders**
- **NeuStar has the financial means and necessary commitment to build and operate mission critical resources**

- **Transition mission critical infrastructure services**—Since the existing usTLD space currently contains over 8,000 registrations, and the vast majority of these registrations support important public service and government applications, it is extremely important that a transition take place with zero impact to the existing usTLD community.
- **Implement advanced technologies to meet the needs of the public and private sectors**—In order to meet the current and future needs of the public and private sectors, the usTLD Administrator must be prepared to employ the advanced technologies necessary to meet the demands of a vital public resource. The technology must be highly reliable, scalable, and secure. The architecture must have attributes that provide for great flexibility in meeting the needs of both the private and public sectors.
- **Facilitate policy in an environment with multiple stakeholders**—The usTLD will serve a broad spectrum of users. Given that widespread acceptance and use of the usTLD is expected, the stakeholders in the usTLD collectively represent a group that is as diverse as the American people. The usTLD Administrator should have the experience necessary to work collaboratively with this diverse group in order to facilitate policy that reflects the needs of the community.
- **Ensure the financial commitment and means to build and operate mission critical resources**—The usTLD Administrator must have the necessary financial resources to build the required infrastructure and to sustain the business over the long term. Companies who lack the considerable financial resources required to build and operate the required infrastructure may have to “cut corners” in their implementation of the usTLD resulting in poor service and inhibiting their ability to introduce enhanced services.

NeuStar is amply qualified to meet these challenges and execute the solution highlighted in the following paragraphs. A chart describing NeuStar’s capabilities, qualifications, and experience is attached to the end of this section.

The NeuStar Solution

Integrity is the cornerstone of NeuStar’s solution for the usTLD namespace. Our long-term vision of the usTLD is to see it regarded as the world’s premier country code top-level domain (ccTLD), and that goal can only be achieved by ensuring that every aspect of its administration is managed with integrity. Integrity permeates every element of our solution and is fundamental to our corporate mission to lead and serve the industry as a neutral third party. We understand that this space is a ccTLD not a generic top-level domain (gTLD) and is exclusively available to serve the needs of U.S. constituents. Therefore, our solution for administering and enhancing the space is structured with that awareness. NeuStar will reach out to the industry and the U.S. public to ensure that the interests of all participants will be incorporated into the administration of the usTLD, and this important public resource will be managed in a manner designed to serve the public interest. Our active, ongoing involvement with the industry provides us with a perspective only experience can impart. We understand the needs and concerns of the industry for the usTLD namespace and this understanding clarifies our responsibility to develop operations and systems that address those needs while conducting ourselves in strict adherence to the principles of a neutral third party. If NeuStar did not firmly believe it could meet and exceed the DOC’s objectives for the usTLD, through innovation, dedication, excellence, and integrity, we would not be submitting this proposal. We are committed to managing extremely sensitive proprietary data in an atmosphere of high security and confidentiality and our goal is the equitable treatment of all participating industry players and stakeholders.

Our solution can be broken down into four primary components, each of which will be defined below.

NeuStar Service Administration

Every aspect of service administration for the usTLD space must be managed with integrity. NeuStar will do this by ensuring equal access of all industry players and stakeholders to our locality-based and expanded registry services through a thick registry architecture that operates at the highest levels of availability and security. We will coordinate disparate user communities under a stable, centralized umbrella and conduct a phased, customer-focused outreach program through public awareness campaigns, marketing initiatives, and defined, accessible public mechanisms to promote the space as a place for the U.S. and its citizens.

Integrity requires that the usTLD space be operated in a responsible manner. This includes ensuring there is open communication between the administrator and the DOC, seeking on-going feedback from users, and introducing various applications and services. In addition, NeuStar will establish an advisory council made up of parties representative of the multiple constituency interests involved in the space to provide guidance regarding the addition of new features and enhancements. Finally, integrity means ensuring that policies are being applied and followed appropriately. Our approach is a collaborative one through which we will work with industry players and stakeholders to conduct compliance investigations and develop reports. As the usTLD vendor, NeuStar understands that it has several roles to play including administrator, registry, and registrar for unallocated localities. Integrity requires that each of these positions be clearly defined and appropriately managed. NeuStar understands the definitions as well as the distinctions between the three and will serve each role in an independent and neutral manner. A brief summary of some features of our Service Administration follows. More details may be found in Proposal Section B and Sections B.1 through B.5.

- NeuStar will support competition and promote use of the usTLD by encouraging communication, ensuring equitable application of policies and procedures, and cultivating an environment conducive to innovation
- NeuStar will provide a comprehensive suite of core registry functions that take into account the needs of all our customers – delegated managers, registrars, and registrants.
- NeuStar will leverage our Centralized usTLD Database and Enhanced Shared Registration System (SRS) and implement automated registration processes, updates, and zone file generation to provide accurate, up-to-date information on demand.
- NeuStar's policies and processes will be designed to foster collaborative partnerships between the usTLD administrator and the usTLD community.
- NeuStar will develop policies to ensure our operations serve the public interest
- NeuStar will modernize the usTLD locality space by working with delegated managers to centralize all data currently managed by locality delegees and subdelegees.
- NeuStar's expanded usTLD registry will promote registrar competition and encourage registrations in the usTLD namespace.

Policy Framework

Integrity is essential when we establish policies to ensure they are created to serve the needs of the entire U.S. population, are applied in an even-handed fashion, protect intellectual property and the privacy of individuals, and yet, are not so restrictive as to discourage registrations. NeuStar will ensure, through its policies and processes, that the space is used appropriately as a ccTLD to serve the public interest. This is a unique opportunity to redefine the space, and it is essential that it be done properly. Some highlights of our proposed policy are below and more details about them may be found in Proposal Section B.3 Core Policy Requirements and Proposal Section J Registration Process.

- To address the complex problem of heavy registration traffic during the start-up, NeuStar will implement a Land Rush policy to provide an effective and fair method for ensuring stability during the initial registration period of the TLD.
- NeuStar will implement a Sunrise policy for owners of United States trademark applications and registrations which validates whether the claimed applications or registrations actually exist within the United States Patent and Trademark Office database, thus eliminating any need for a costly and time-consuming Sunrise dispute resolution mechanism
- NeuStar will develop a usTLD Dispute Resolution Policy (usDRP) modeled after ICANN's Uniform Dispute Resolution Policy to develop a set of policies and dispute resolution processes that are simple, effective, and provide a level of accountability for usTLD users.
- NeuStar will implement a Nexus Requirement that registrants in the usTLD must be citizens or permanent residents of the United States, an entity or organization that is incorporated within one of the states or territories of the United States, or an entity or organization with a bona fide presence in the United States.
- As a trustee for the usTLD, NeuStar will hold itself to a Code of Conduct exceeding traditional commercial standards. This code addresses issues such as confidentiality, equal access to administration services, non-disclosure of proprietary information and user data, as well as others to ensure DNS resources in the usTLD are administered in a fair and efficient manner that makes them available to all parties.
- NeuStar will develop a usTLD Policy Advisory Council as an advisory body for usTLD policy operations to ensure representative and unbiased policymaking. This body will interface with the public and provide an independent forum and mechanism for future development of the usTLD to address recognized public needs, enhancement of privacy protections, or enforcement of accreditation agreements with registrars.

Next Generation Technical Infrastructure

Integrity of our Technical Infrastructure implies several fundamental requirements. The system must work; the name must resolve. It must be robust, secure, dependable, and available on a consistent basis. In addition, it must enable enhanced services thereby enhancing the utility of the usTLD to service all U.S. constituencies. As with our approach for Service Administration, NeuStar will follow an inclusive and responsible process to introduce new uses and will set up mechanisms for feedback. In addition, we will provide documented, disciplined, systematic, quality processes for transition. As the space is operational, we will be introducing new functionality while commercially live and will ensure existing industry players and stakeholders experience a seamless transition. Below we describe some features of our technical infrastructure; detailed descriptions can be found in Proposal Section O.

- NeuStar's registry architecture is designed to be flexible, scalable, and highly available to virtually eliminate downtime while providing for smooth growth.
- NeuStar will provide support for the existing usTLD space as well as full registry support to all eligible registrars for the expanded usTLD space.
- NeuStar proposes the implementation of a centralized usTLD database that includes a Delegated Manager Database and a centralized Whois.
- NeuStar will implement co-active data centers and a number of nameserver data centers to create a resilient infrastructure protected against outages through redundancy, fault tolerance, and geographic dispersion.
- NeuStar will frequently arrange for data escrow of the usTLD registry to ensure continued operations and availability in the unlikely case of a catastrophic loss of data.
- NeuStar will implement near-real-time updates to the zone files and Whois database.

- NeuStar's high-availability cluster architecture will provide scalable processing throughout, dynamic load balancing between the two data centers, and multiple high-speed Internet connections.
- NeuStar will develop and deploy a new, streamlined registry-registrar protocol for the expanded usTLD space called the extensible registry protocol (XRP) that provides more features, functionality, and greater security than the existing registry/registrar interface.

Business Plan

Business Plan integrity implies that an administrator is financially stable and therefore dependable. NeuStar is financially stable. We are not a start-up company. We have a reputation for dependability and integrity. We have been in operation for over five years, have a fully funded business plan, and our original line of business is cash flow and net income positive. Furthermore, with respect to the usTLD space, NeuStar will allocate significant marketing funds to promote it. Another aspect of Business Plan integrity is developing consistent and equitable pricing strategies. In compliance with the RFQ, NeuStar will not charge the government, nor will we charge those who have existing usTLD name registries. For new players, we have highly competitive market rates for registry funding. Our for profit commercial enterprise is the right business model for providing stability and utilization to the namespace. Without profit as a motivator, there is no incentive to be creative or adhere to performance measurements. Risk and reward is an effective vehicle for delivering innovation into a competitive market. Detailed information about our Business Plan can be found in Proposal Sections L, M, and N. A summary of some of its features follows:

- NeuStar's financial stability ensures full funding of the usTLD administration
- Domain name registrations will be offered at highly competitive prices
- NeuStar will leverage its existing infrastructure and experience to reduce overall expenses
- NeuStar has a high confidence level in our expense estimates based on our five plus years of registry experience
- NeuStar will be responsible to ICANN for all ccTLD fees
- NeuStar's financial plan is based on a solid understanding of the costs to build and operate a highly stable, next generation registry and on a competitive pricing structure that will facilitate market adoption.

NeuStar^{3/4}Corporate Overview

NeuStar is particularly suited to be the administrator responsible for further developing and improving the usTLD. As the leading provider of mission critical infrastructure and services in North America, NeuStar has as its central purpose, the neutral provisioning of mission critical systems in support of important public resources.

Since its founding in 1996, NeuStar has been selected time and again by the industry in open competitive procurements to provide first-of-a-kind mission critical services. In this capacity, NeuStar designed, built, and manages the Number Portability Administration Center (NPAC), one of the largest databases in the world, and is the North American Numbering Plan Administrator (NANPA) whose duties include operating the public telephone numbering database for North America. Integrity and accuracy are the underpinnings of these services which affects virtually every telephone call placed within the United States and 18 other countries, including Canada. In addition, in a highly competitive bid for expansion of the Internet's Top Level Domains, NeuLevel, a subsidiary of NeuStar, was selected to serve as the registry operator for dot-biz.

The "Neu" in NeuStar refers to its trusted, neutral, third party role. All of its services are available to all service providers on non-discriminatory terms. Its entire staff is sworn to a corporate Code of Conduct and voluntarily subjects itself to independent quarterly audits, reported publicly, verifying its compliance to this Code. The critical nature of the industry functions with which NeuStar has been entrusted leads it to serve all stakeholders: regulators, standards bodies, industry and public interest groups, as well as all segments of the communications industry itself. It does so in a policy-neutral manner, providing important technical and operational subject matter expertise. Its mission is to remain the trusted, neutral third party that all these stakeholders have come to rely upon. The "Star" in NeuStar refers to its central role as a trusted clearinghouse, the hub to which communications networks connect. As the administrator, NeuStar will ensure the usTLD namespace is available to users on a neutral and equitable basis.

For all vendors, past performance is indicative of future accomplishment and NeuStar's serious, corporate commitment to the neutral, even-handed administration of communications resources is peerless. The following descriptions demonstrate our varied and rich experience in providing communications services. For each of our services, NeuStar created the necessary systems from scratch with the long-term interests of the industry in mind. We worked closely with the industry while developing these to ensure we met its initial and ongoing needs. We hope to enjoy that same productive working relationship with the DOC to ensure its evolving priorities and requirements to enhance the operation and utilization of the usTLD are also met.

NeuStar offers a diverse range of products and services for the communications industry that can be broken down into three main categories:

- Internet Protocol (IP) Services
- Numbering Services
- Operational Support Systems (OSS) Commercial Services

IP Services

"Next-Gen" Registry for dot-biz—NeuStar, through its majority owned NeuLevel joint venture, was recently selected in November, 2000, to operate the new top-level domain registry for dot-biz. The dot-biz registry will be successful because of the combined skill sets of both NeuLevel and NeuStar. NeuLevel is the ICANN accredited registry for dot-biz and provides the marketing, sales, and service delivery of dot-biz registrations. NeuStar, the majority owner of NeuLevel, has designed, is developing, and will implement, operate, and manage the technical infrastructure of the dot-biz "thick" registry platform. NeuStar also provides standards development, external affairs, and additional corporate support services to ensure the success of dot-biz. NeuLevel was selected by the Internet Corporation for Assigned Names and Numbers (ICANN) from over 40 respondents as the result of a worldwide, competitive procurement to develop the only top-level Internet domain created exclusively for business activity. This new TLD will be the place for businesses to establish their presence on the Internet. In addition, dot-biz will open the Internet to more businesses and support the introduction of new products and functionality that will provide increased services for the business community.

Convergence Directories—NeuStar is leading the development and introduction of a suite of Global Directory Services that include national and international ENUM administration, as well as next generation signaling standards that will bring intelligent network capabilities to IP based networks. Collectively, NeuStar's Global Directory Services will facilitate the convergence and interoperability of the Public Switched Telephone Network (PSTN) and IP based networks. As co-chair of the Internet Engineering Task Force Working Group (IETF WG) that has finalized the ENUM standard, NeuStar is a recognized leader in the development of technologies required for the introduction of next generation network services. NeuStar continues its leadership role by working closely with the communications industry, regulators,

and standards bodies to leverage the ENUM standard to efficiently connect networks and to enable a broad range of converged services.

Numbering Services

North American Numbering Plan Administration (NANPA)—NeuStar operates the telephone numbering registry for the North American Numbering Plan as a public resource, serving customers throughout the United States, Canada, Bermuda, and many of the Caribbean Islands. It is the centralized source for assigning all Number Plan Area (NPA) codes and central office codes, and coordinating NPA code relief as the demand for numbers increases. NeuStar became the NANPA on October 9, 1997 for a five-year period that began formally on February 21, 1998. The Federal Communications Commission (FCC) and the North American Numbering Council (NANC), an industry group advising the FCC on numbering issues, selected NeuStar through a competitive bidding process. NeuStar transitioned this responsibility from the original Regional Bell Operating Companies and the former Bellcore in a highly responsible manner, transparent to the public. As designated in NeuStar's agreement with the FCC and the NANC, NeuStar ensures timely, equitable, and efficient administration of the rapidly growing number of requests for NPA codes and central office codes by working with all industry stakeholders.

Number Portability Administration Center (NPAC)—In April 1996, NeuStar was chosen to serve as the Local Number Portability Administrator (LNPA) through 2003. The contract was recently extended until 2006. In that role, NeuStar operates the routing registry for North America that allows customers to keep their existing phone numbers when changing local service providers. NeuStar's development and operation of the NPAC in Chicago, Illinois, provides a master registry of routing information that interfaces with local carriers. Virtually all calls in North America query a copy of NeuStar's database to be properly routed. Through this center, NeuStar coordinates the porting of local telephone numbers between carriers in North America, serving more than 250 service providers daily and porting more than one million numbers each month.

Number Pooling Administration—As proven by NeuStar, number pooling has the potential to extend the North American Numbering Plan's (NANP) life well into the next century. NeuStar has been the Pooling Administrator for over two years for U.S. pooling trials in several states and number planning areas, and in June, 2001, NeuStar was selected as the National Number Pooling Administer by the FCC. Number pooling, also known as thousands-block pooling, allows for the disbursement of numbers to service providers in 1,000 number parcels. NeuStar worked with the telecommunications industry to develop the initial Pooling Administration guidelines in New York and Illinois in 1997-1998. The current guidelines are based upon those findings and have spurred the demand for pooling implementation in several other states. NeuStar continues to work with the Industry Numbering Council (INC) to suggest and modify changes to current pooling guidelines based upon NeuStar's actual experiences with pooling trials.

ETNS—In March 2001 the European Radiocommunications Office (ERO)—a permanent office of the European Committee on Telecommunications Regulatory Affairs of CEPT (European Conference of Postal and Telecommunications Administrations) and a center of expertise in the fields of licensing, numbering, and radiocommunications—selected NeuStar in a competitive bidding process to manage the establishment of the European Telephony Numbering Space (ETNS) to establish a single country code for all of Europe and assist in enhancing the availability of pan-European telecommunications services. A pan-European service is an international service that can be invoked from at least two European countries. The designation of a new European country code—388—allows European international companies, services, and individuals to obtain a single European Number for accessing their services. In this role, NeuStar will manage a pan-European numbering registry for the provisioning of critical public resources.

OSS Commercial Services

NeuStar's commercial services build on the company's strength as a neutral third-party in developing and managing complex database systems and network elements. New commercial services are designed to help the industry improve operational efficiencies while saving time and money.

CARE Clearinghouse—An industry solution for Customer Account Record Exchange (CARE), the CARE Clearinghouse simplifies the mechanized exchange of customer information between long distance and competitive local exchange carriers. NeuStar's CARE Clearinghouse service supports CARE industry standards. CARE Clearinghouse participants benefit from expedited CARE processing and reduced costs.

IdentiBaseSM—A solution to number registry problems resulting from deregulation, number portability, pooling, and local competition. With IdentiBaseSM, the Local Service Provider of any telephone number—ported, pooled, or not—can be identified whenever it is needed, in whatever format is desired. Information from IdentiBaseSM can help improve billing, provisioning, order entry, trouble management and universal emergency services. IdentiBaseSM's flexible, easy-to-query, timely data allows each department to better serve the customer base, increase revenue, decrease costs, and reduce customer churn.

NeuStar has rich experience in successfully building databases and establishing clearinghouse services that benefit the communications industry and has been widely recognized for this. Yet our expertise is not limited to systems development, and we are not merely a systems developer. We actually operate and support the systems we develop. We manage a complete start-to-finish solution. Working closely with our clients we design, develop, and create systems. We then implement and support them which allows us to understand first-hand any issues that arise and to address them quickly and intelligently. It also enables us to recognize and mitigate problems we encounter and readily adapt appropriate methods and procedures. We will assume direct accountability for the administration of the usTLD from beginning to end, because we provide services, not just systems or software.

In addition, NeuStar's corporate mission is to lead and serve the industry as a neutral third party. Neutrality for us is not a platitude; it is our identity, embodying the impeccable, high-quality, even-handed service essential to the central role we play in the industry. We are committed to impartiality and fairness, and our staff has a history of recognizing the importance of understanding and working successfully with the various industry participants and respecting their differing perspectives within the confines of regulatory environments. Our adherence to the tenets of neutrality does not come from a desire to please nor is it considered an obligation. Rather, it is what we were established to do. Neutrality is a belief we embrace and have embodied in the Code of Conduct available on NeuStar's Web site. We satisfy the strict criteria established for neutrality by the FCC and have been certified as a neutral third party in FCC order 99-346. To ensure our impartiality, we undergo a quarterly neutrality audit. We are committed to managing extremely sensitive proprietary data in an atmosphere of high security and confidentiality and our goal is the equitable treatment of all participating industry players.

Conclusion

NeuStar's believes that it is uniquely qualified to ensure the success of the usTLD. Our plan builds on our legacy of managing public resources in a responsible and neutral manner. NeuStar's proven experience in implementing advanced technologies to meet the needs of the public and private sectors will deliver a high level of service to usTLD registrants and enable the introduction of enhanced services. We are confident that we can transition the administration of the usTLD with zero impact to the current users of the usTLD and begin to enhance the services they currently receive. Widespread adoption and use within the new expanded space will be ensured by the execution of our comprehensive marketing program and



through the introduction of a competitive registrar model. NeuStar is committed to working collaboratively with the usTLD stakeholders to facilitate the development of policy that reflects the needs of the community. NeuStar’s registries are designed and administered to ensure all industry participants have equal access, its services are provided equitably to all service providers, and its corporate focus is on the industry as a whole. This, in combination with its reputation for integrity, experience, neutrality, and industry expertise makes NeuStar the ideal vendor to administer the usTLD.

The following table provides a detailed display of NeuStar’s capabilities, as evidenced by our current projects and past performance.

NeuStar’s Capabilities and Qualifications	
Vendor Qualification	NeuStar’s Experience
Administration of complex, mission-critical U.S. public resources	<ul style="list-style-type: none"> • NeuStar established processes working with the FCC and state commissions for reclamation of central office codes that have not been activated by service providers. • NeuStar developed databases for the tracking of central office code activity for the U.S. • In conjunction with the industry and FCC, NeuStar developed a new method for reporting utilization and forecasting of numbering resources (NRUF)
Successfully transitioning administration of mission-critical public resources	<ul style="list-style-type: none"> • Transitioned Telephone number administration from 10 companies with more than 100 local administrators across all 50 states to one central administrator • Transitioned telephone number inventory from more than 200 local databases to one central database • Have been contracted to transition telephone number inventory from thousands of local databases across all 50 states to one local database
Proven neutrality in all business operations	<ul style="list-style-type: none"> • In CC Docket No. 92-237, FCC 99-346, NeuStar was found to be in compliance with the neutrality requirements put forth in the NANP Administration Third Report and Order. • NeuStar undergoes a quarterly Neutrality audit performed by Ernst and Young, with a report forwarded to the FCC, NANC, and NAPM LLC. This report covers the findings of the audit regarding compliance with the NeuStar Code of Conduct and Neutrality Compliance Procedures. NeuStar asserts that it is neutral, and Ernst and Young has agreed in all audit reports.
Facilitation of controlled, systematic evolution, enhancement, and expansion of the space.	<ul style="list-style-type: none"> • NeuStar performs the change management administration function for the NPAC SMS on behalf of the telecommunications industry. This includes over 200 change orders resulting in 7 major software releases in 4 years. • NeuStar hosts quarterly NPAC operations forums, known as NPAC Cross regional meetings, where issues pertinent to the operation of the NPAC and its downstream systems are discussed and resolved. • NeuStar facilitated the transition of state number pooling trials to a national database focusing on a systematic evolution allowing for growth and future enhancements. • NeuStar works closely with industry and the FCC to develop enhancements to the existing NANPA



NeuStar’s Capabilities and Qualifications

Vendor Qualification	NeuStar’s Experience
Experience designing, building, and supporting robust databases	<p>process, including expansion of current functions.</p> <ul style="list-style-type: none"> • NeuStar designed, built, and expanded the NPAC database from inception to its current support of 17 million ported telephone numbers in the database. The growth rate of the database is currently increasing, having surpassed 1 million additional records per month earlier this year. • NeuStar designed and built the pooling administration system to leverage the existing portability infrastructure. An existing NPAC database was adapted and scaled to support number pooling. • NeuStar developed various NANPA-related databases to enhance functionality and streamline work efforts associated with number administration. This allows for real-time tracking of number assignment, utilization, and forecasting data. • Leveraging its experience with high-availability, mission critical system in the telecommunications industry, NeuStar is developing the next generation DNS architecture for the .biz registry.
Experience that ensures real-time access to multiple users with a minimum of system outages and downtime	<ul style="list-style-type: none"> • NPAC offers a Low Tech Interface (LTI) dialup access. This capability currently supports over 700 clients, allowing for simultaneous access by over 200 users. This access method is also fully scalable. • While fully scalable, the NPAC currently supports over 500 dedicated accesses by various service providers.
Manage a high availability system to contractual service levels	<ul style="list-style-type: none"> • The NPAC SMS has 29 contractual service level requirements, developed jointly with the industry, which are reported on monthly. • The .biz registry has SLAs with several major Channel Partners covering limited system downtime and system performance measures.
Comprehensive understanding of the usTLD’s evolution	<ul style="list-style-type: none"> • NeuStar has monitored proceedings on the usTLD and associated DOC activities. • NeuStar has subject matter experts on staff who were involved with the original development of the usTLD. • NeuStar is an active participant in various Internet-related forums such as the IETF and ICANN
Strong working relationships with stakeholders	<ul style="list-style-type: none"> • NeuStar holds quarterly cross-regional meetings with LNPA stakeholders. • NeuStar holds weekly conference calls with LNP LLCs, the NPAC contracting parties, in addition to holding monthly face-to-face meetings to discuss operational issues. • NeuStar actively participates in various industry forums, including LNPA WG, NOWG, IETF, ICANN, and ITU. • NeuStar provides assistance to both the telecommunications industry and regulators in an effort to resolve difficulties in the area of number assignment, reporting, etc.
Facilitation of progress in a political and competitive environment	<ul style="list-style-type: none"> • NeuStar acted as interim pooling administrator in several states prior to being selected as National



NeuStar’s Capabilities and Qualifications

Vendor Qualification

NeuStar’s Experience

Pooling Administrator.

- NeuStar facilitates NPA relief planning meetings, resulting in a relief plan which meets the needs of the industry and the regulators.
- NeuStar provided objective information and assistance to the LNPA WG in an effort to resolve issues facing the entire telecommunications industry.

Ability to address long-term management issues

- Developed Number Resource Utilization Forecasting tool, ensuring that appropriate detailed carrier information is collected, stored, analyzed, and properly distributed to appropriate regulatory authorities
- Work closely with INC, NANC, and LNPA WGs to ensure that long term Number Resource Optimization needs are and will continue to be achieved
- Developed long term strategic view of the needs of telecommunication service providers and regulators

Experience in building scalable databases that ensure security of personal data

- NeuStar developed, deployed, and supports the Customer Account Management Exchange database, which contains highly proprietary service provider information.
- NeuStar developed, deployed, and maintains the Number Portability Administration Center, which contains routing information for all calls placed in the US and Canada.
- NeuStar maintains physical biometric facility security, with fulltime monitoring, strong physical security, and token authentication for dial-up access.

Ability to understand, develop, and manage all associated policy issues

- NeuStar has an in-depth understanding all federal and state policy issues regarding number administration, in addition to meeting requirements developed by the industry which are seen to be the guidelines under which NANPA operates
- NeuStar’s experience in the policy rich telecommunications regulatory environment provides it with significant insight into the proper means for policy identification and coordination for the Internet.
- NeuStar is active in ICANN, the IETF and other Internet-related policy and standards bodies. NeuStar has a staff of experts on Internet policy and technical matters. NeuStar policy and legal experts participate heavily in ICANN constituencies’ activities.
- NeuStar has an in-depth understanding of federal and state regulatory processes that are likely to be of prominent importance to Internet policy in the future.

Support and drive important technology standards

- NeuStar is an active participant at the IETF where important internet technology protocols are developed. We are currently co-chairs of two IETF WGs including the Whois WG.
- NeuStar has authored important IETF draft standards documents including one for a registry-registrar protocol.



NeuStar’s Capabilities and Qualifications

Vendor Qualification

NeuStar’s Experience

<p>Proven reputation for fair, impartial policy management</p>	<ul style="list-style-type: none"> • NeuStar developed and patented the call processing technology used to enable telephone number portability. We patented the technology and made it freely available.
<p>Strong financial performance and stability</p>	<ul style="list-style-type: none"> • NeuStar has extended its LNPA contract for an additional 3 years over its existing 5-year contract without going through the competitive bid process, with approval by the FCC. • NeuStar was selected by various service providers to provide Customer Account Record Exchange service via an in-house-developed database system. • Through its audit activities regarding NeuStar, Ernst & Young has consistently reported positive compliance to the Code of Conduct and Neutrality Compliance Procedures as approved by the FCC.
	<ul style="list-style-type: none"> • NeuStar's existing lines of business are net income and cash flow positive • NeuStar's recent round of equity financing fully funded our business plan; if additional capital is required, our investment partner, Warburg Pincus, stands prepared to fund all NeuStar initiatives. • Redacted