



P. Past Performance

NeuStar has the requisite and proven capability, administrative and technical experience, and professional integrity to responsibly administer the usTLD to best serve the public interest while simultaneously enhancing its operation and usage.

The usTLD is a critical public resource that is seriously underutilized under its current administration. The United States is one of the world’s technological leaders, and its namespace should be positively perceived by the Internet community and highly regarded among Americans and the rest of the world. In fact, it should be the model of a successful, widely used ccTLD. Instead, it is regarded as cumbersome and overly hierarchical. In releasing the previous RFCs and this RFQ, the Department of Commerce has shown its desire to significantly improve the usTLD by bringing it into the global Internet infrastructure while dramatically improving the awareness, utility, and value of the usTLD for its users. The DOC needs to select a responsible administrator who will meet these objectives while maintaining and promoting the integrity of the usTLD and the Internet as a whole. All of these objectives can be met only by a vendor that has a proven ability to neutrally administer complex, mission-critical systems while facilitating competition and progress in a competitive environment. Specifically, the DOC must select a vendor that has, among others, the following technical and administrative qualifications:

HIGHLIGHTS

- **Leading neutral third-party provider of mission-critical, U.S. public resource administration services for the communications industry since 1996**
- **Proven experience developing innovative solutions beneficial to the industry as a whole in a highly competitive environment**
- **A unique combination of world-class DNS registry and critical infrastructure operations expertise**
- **Strong corporate commitment and sound financial position**
- **Recipient of Supercomm Award for excellence in OSSs for the design and delivery of the NPAC SMS database**

- A proven ability to administer complex, mission-critical U.S. public resources in a neutral, even-handed manner;
- The ability to facilitate controlled, systematic evolution, enhancement, and expansion of the space while preserving the rights of the current namespace users and ensuring the protection of intellectual property and privacy;
- Strong working relationships with all stakeholders and experience facilitating progress in an extremely political and competitive environment;
- A comprehensive understanding of the space’s evolution to date and the ability to address the long-term management issues associated with servicing and enhancing its use;
- Experience designing, building, and supporting a robust database that requires extensive software development and infrastructure management capacity while ensuring the security of personal contact data and license holder information;
- The ability to design and build a database that can scale seamlessly in response to anticipated growth;



- Experience which ensures that data can be accessed by multiple users in real-time, that access to data is not hampered by system outages or unnecessary downtime, and that a secure physical infrastructure is maintained to support all of its operations;
- The ability to understand, develop, and manage the associated policy issues to protect intellectual property, establish and maintain effective communication with stakeholders, and promote healthy, robust competition;
- A proven reputation for fair, impartial policy management equitably supporting all stakeholders to ensure there is no bias or perception of bias; and
- Strong financial performance and stability.

NeuStar is that vendor. Since 1996, NeuStar has successfully provided such mission-critical services to the U.S. communications industry. NeuStar possesses the strong management, technical capabilities, strong financial performance, and depth of experience vital for the successful administration of 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



NeuStar’s Capabilities and Qualifications

Vendor Qualification

NeuStar’s Experience

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 process, including expansion of current functions.

Experience designing, building, and supporting robust databases

- 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

- 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

- 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

- 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

- 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



NeuStar’s Capabilities and Qualifications

Vendor Qualification	NeuStar’s Experience
Facilitation of progress in a political and competitive environment	<p>resolve difficulties in the area of number assignment, reporting, etc.</p> <ul style="list-style-type: none"> • NeuStar acted as interim pooling administrator in several states prior to being selected as National 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 developed and patented the call processing technology used to enable telephone number portability. We patented the technology and made it freely available.



NeuStar’s Capabilities and Qualifications

Vendor Qualification	NeuStar’s Experience
Proven reputation for fair, impartial policy management	<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.
Strong financial performance and stability	<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. • NeuStar has experienced strong revenue growth, from \$6M in 1997 to \$67M in 2000.

P.1 Registry, Database, and Internet Experience

NeuStar combines comprehensive registry operations experience with extensive DNS knowledge to effectively administer the usTLD.

Effective, responsible administration of the usTLD requires that its operator understand the fluid, innovative environment of the Internet and demonstrate proven ability to build and manage a registry. The usTLD registry operator must have substantial experience and proven credentials in managing a significant public database, the ability to facilitate discussions about standards development and technical issues between competing parties, and a commitment to the security of proprietary data to ensure competition. In addition, the registry operator must have demonstrable evidence of its ability to design, build, and maintain a robust, responsive, scalable, and secure database to ensure the highest levels of quality and flexibility in the changing world of global communications. As an administrator, that operator must also have the ability to develop and manage policy issues, maintain strong working relationships with stakeholders, and control the systematic evolution, enhancement, and expansion of the usTLD space.

NeuStar is a leader and innovator in these areas and has been instrumental in the effective management, solution development, and policy guidelines for managing critical public resources. Our administrative roles, as the North American Numbering Plan Administrator, Local Number Portability Administrator, and Pooling Administrator, directly qualify us for a similar role as the usTLD Administrator. In all of these roles, we provide mission-critical resources to U.S.-based public resources. Furthermore, in all of these roles, we designed a transition plan that allowed us to smoothly transition and begin operations, either on time or ahead of schedule.

NeuStar has extensive experience in transitioning the administration of mission-critical public resources from multiple geographically dispersed entities to one central administrator. Our transition of the North American Numbering Plan Administration (NANPA) from the legacy



operators to NeuStar is a particularly relevant example. In 1997, NeuStar was awarded the responsibility of administrating telephone numbers for the North American Numbering Plan. Prior to NeuStar's administration, ten large phone companies administered phone numbers across all fifty states. Each company had multiple local number administrators in each state. Part of NeuStar's responsibility was to transition the administration from over a hundred local administrators. This required an intensely coordinated effort involving site visits, coordination meetings, and progress reports. It was not uncommon to have to sift through file cabinets to find current and historical inventories. In many cases, the existing administrators could provide little support because they were new to the job or did not have historical data. Despite the difficulty involved, NeuStar was able to transition the administration well ahead of schedule. The NANPA registry of telephone number assignments is now a critical element of the U.S. telecommunications infrastructure.

A second example involves the transition of telephone number inventory from hundreds of telephone companies with hundreds of different databases to one central database. NeuStar has won number pooling administration contracts in over 12 different states. Number pooling involves transitioning unused telephone numbers from multiple telephone companies to one central administrator. The unused numbers can then be redistributed to other telephone companies. This is a very difficult process, because it involves hundreds of phone companies with multiple administrators and different databases. There is also a public outreach effort that involves assisting the phone companies in taking inventory, and evaluating the inventory for usable numbers. NeuStar has to advise the individual companies on the format of the data and the process they need to undertake to transition the numbers to us. Once NeuStar has transitioned the inventory, we are responsible for redistributing it in a neutral, even-handed, yet conservative manner. Recently, NeuStar was awarded the contract to take on this responsibility on a federal level for all 50 states. This will involve over 3,000 different entities.

One of the most significant benefits of a domain name is its portability and free movement between Internet Service Providers. The registry systems developed by NeuStar to administer telephone numbering are directly analogous to a domain name registry, and parallels exist between the DNS and telephone number portability. For example, the telephone numbering system in North America is broken down by area codes and a second set of three digits referred to as the NXX or prefix component of a telephone number. It is a hierarchical delegation system similar to the DNS. Prior to 1996, consumers were unable to enjoy the benefits of telephone number portability because of the monopoly environment at the Local Service Provider (LSP) level. In April 1996, NeuStar was selected by the Illinois Commerce Commission SMS/RFP Subcommittee to develop a Number Portability Administration Center (NPAC) and provide turnkey and operational NPAC services initially within Chicago. The Number Portability Administration Center (NPAC) Service Management System (SMS) is a master registry of routing information that interfaces with the local carrier's administration systems. The NPAC SMS interfaces directly to Local Exchange Carriers' key operational systems and operation processes. The NPAC SMS developed and maintained by NeuStar coordinates the porting of telephone numbers between carriers and downloads routing information to carriers' local systems, which in turn update local databases.

Since the introduction of the NPAC, Local Number Portability has revolutionized the U.S. telecommunications industry. Through competitive procurement processes, NeuStar was selected to provide telephone number registry services for a five-year term in four regions of the United States. The competing vendor was selected in the three remaining U.S. regions and Canada. In early March 1998, the other three regions—Southeast, Western, and West



Coast—terminated their vendor contracts due to poor performance and executed contracts with NeuStar for NPAC SMS services, with Canada following soon after. Consequently, NeuStar now provides telephone number portability services to all of the United States and Canada, processing in excess of tens of millions of transactions per day, and serving more than 4,000 service providers across North America. As the operator of the NPAC master telephone registry, NeuStar:

- Facilitates technical discussions and standards development between competing carriers,
- Safeguards sensitive information,
- Ensures equal and fair access to vital network routing data,
- Provides impartial data measurement and analysis,
- Coordinates Local Number Portability implementation and testing,
- Provides independent and impartial certification of systems and databases,
- Provides impartial opinions (technical, policy, and schedule) to industry regulators,
- Provides services under industry agreed-upon guidelines and performance standards, and
- Provides full billing and collections services to more than 4,000 service providers.

All of these qualifications are directly applicable to the administration of the usTLD. While the NPAC registry perhaps most clearly demonstrates NeuStar's experience in developing and administering a registry, we have developed similar systems for the management of the North American Numbering Plan, European Telephony Numbering Space, Number Pooling, and the .biz TLD. In short, NeuStar provides a level of skill and experience in registry operations in the United States that simply cannot be matched.

P.2 Technical Capabilities

NeuStar offers comprehensive technical capabilities in the areas of registry operation, software development, database management, and standards development. These abilities are founded on expansive experience in all areas related to technical service provision for a critical public resource. NeuStar is the best choice to design, deliver, and maintain the next-generation domain name registry for the usTLD.

Any top-level domain registry operator must be capable of improving the reliability and effectiveness of domain name registration, contribute responsibly to a competitive environment, and preserve the Internet's continuing stability. In addition, the registry operator must bring the technical know-how to specify and design a solution that ensures the continuing evolution of the domain name system.

There are many complexities within the DNS and registry environment that require a detailed understanding of the issues and their implications on the technical solution. For instance, a minor change in policy can have far-reaching implications on how a database needs to behave in order to ensure the integrity and efficiency of domain name registration and administration. But the usTLD space presents even more complexity because it must accommodate both the current hierarchical locality structure while allowing second-level registrations in the new, expanded space. Management of the usTLD registry also brings with it an immense responsibility in the secure administration of personal and business contact information. The public sees a country code domain as having the highest level of integrity, and it is essential that



the registry operator understands this and stores all registry data with the highest levels of security. It is vital for the success of the usTLD that the registry operator understands the entire operating environment and has the experience and ability to deliver a solution that benefits all relevant stakeholders. NeuStar has the technical capabilities to deliver that solution.

NeuStar specializes in developing and operating unique support services for the Internet and communications industries by using innovative solutions employing the highest standards and practices and by providing services in an impeccably evenhanded fashion as a trusted third party.

As the North American Numbering Plan Administrator, NeuStar operates the telephone numbering registry for the North American Numbering Plan as a public numbering resource. NeuStar is also the Local Number Portability Administrator for the United States and Canada, operating the telephone number routing registry for North America. The integrity and accuracy of these services are essential for virtually every call placed in North America.

The Number Portability Administration Center Service Management System hosts the routing registry that is used to track network and call routing, SS7 signaling, and billing information for all telephone numbers in North America. We provide, directly or indirectly, highly secure host-to-host administrative transaction interfaces to this registry for all 5,000 service providers in North America. The service providers' operational support systems (OSSs) require the highest availability standards of our service to manage and operate their networks.

Consequently, we operate this service to 29 monthly service level requirements (SLRs), including availability (99.99%), transaction response time, throughput, and help desk telephone call answer times, and we pay financial penalties for missing any of these levels. Between our data centers, we provide real-time database replication and server failover/recovery functions and fully redundant enterprise networking facilities. Our data centers are owned and operated by NeuStar, are staffed 24 x 7 by our own network operations center personnel, are physically located in the United States, and are secured by both card key and palm print readers.

NeuStar operates its services, including the NPAC SMS, from a unique world-class Internet Protocol network and server infrastructure housed in our own diverse, redundant data centers. We operate highly secure, quad redundant enterprise IP network application servers and support servers (e.g., DNS, NNTP, and RADIUS/SecurID) that provide dedicated access directly to more than 300 communication service providers and indirectly to all 5,000 service providers in North America. At approximately 900 Mbps of aggregate capacity, our IP network provides diverse BGP-4 routed links to external service provider OSSs and network elements. In addition, we support more than 1,000 dial-up or secured Internet users from our customers to access our services via Web-based interfaces. In case of failure of a service provider's OSS, they may log directly into our Web-based NPAC GUI to provide critical network management functions. All dial-up users (internal or external) must use a NeuStar-issued SecurID for strong authentication.

Each data center has a completely redundant, hardened, switched VLAN backbone and a redundant set of network access servers and firewalls. All critical application and database servers are dual-homed to each of these site-based backbones, using a virtual-IP address assigned to each host that is reachable through either NIC port on that host through either backbone. Each NIC port and backbone link is assigned a 4-IP address subnet to ensure quick detection of NIC/link/port failures and maintain full reachability of that server without impacting established internal or external communication associations. Certain key services



(such as NPAC SMS application and database servers) are implemented using approximately 64 Lucent (Stratus) hardware fault tolerant HP-UX servers.

The NeuStar network is structured into a series of security rings to provide firewall isolation of traffic from various sources and applications. All Internet-reachable systems are placed onto one of a series of bastion subnets (bracketed by firewalls) to ensure security of the core network in the unlikely case of a server breach on the bastion network. All external data network links employ extensive BGP-4 route filtering to ensure that only appropriate internal routes are advertised and that routes to other service providers' networks are not advertised or reachable.

While extensively using standard, well-known, protocols (e.g., BGP-4), we also employ certain relatively unusual protocols, such as CMIP over IP, which are common in OSS applications. The NPAC service employs this protocol to provide a distributed, bi-directional, object-oriented application framework for interacting with the registry. Strong authentication is employed for accepting CMIP associations from service providers' OSSs, with an extensive administrative key management infrastructure to support. Each service provider system is assigned a list of keys, each at least 660 bits in length. Each and every CMIP provisioning transaction is individually signed to provide the highest in authentication and non-repudiation, given the potential operational and financial impacts one service provider could cause another. Given the millions of transactions we process every day, we have employed extensive hardware-based crypto accelerators to ensure the highest performance levels without sacrificing security. Given the industry critical nature of the NPAC service, standardizing access to it from service providers' OSSs was essential. In 1996 we developed the CMIP interface standards for the NPAC and subsequently placed them in the public domain. They are now managed under the auspices of a specific industry standards body (the NANC LNPA WG) to whom we provide ongoing secretarial and change management support for maintenance of the standards.

These levels of standards are highly relevant and appropriate for a DNS registry provider, given the importance of the DOC's usTLD initiatives and the vital need to do so while enhancing the value of the usTLD and maintaining the stability of the Internet. They exemplify our fluency with both the technical operational security and overall business standards with which industry-critical services of this kind must be provided in the interest of all industry stakeholders.

NeuStar's technical capabilities have extended even further since taking on the role of .biz registry operator. NeuStar's advanced TLD registration system uses a high-performance and highly scalable 3-tier architecture. The tiers include a Web/protocol server tier, an application server tier, and a back-end server tier (e.g., database, billing, credit card payments, and registry server). The registration system has been developed with a custom-built application server and associated infrastructure. Security has been a priority throughout both the software architecture and network design.

The infrastructure has built-in redundancy with multiple servers in the Web/protocol, application, and database tiers and has been engineered for high fault tolerance. In addition, network devices such as routers, firewalls, and load-balancers have been deployed in a fully redundant configuration. Each tier is configured as a cluster, with failed servers being automatically removed from the cluster. Capacity planning has been done to scale throughout the environment so that there is plenty of room for future growth.

Because we operate through a channel partner network, we have experience providing integration protocols including http Post, XML, and e-mail templates and using security mechanisms such as SSL and PGP. NeuStar's research group was an active leader in the



development of new industry standards and has participated in the development of an XML-based domain name registration protocol which has been deployed in our .biz operation.

The scope of NeuStar's experience includes design and development of secure, real-time resource management systems; implementation of high-transaction, high-availability database solutions; design and management of transcontinental IP networks; and the effective and timely delivery of technical solutions within highly regulated environments. For all of these reasons, NeuStar is the best choice for developing and delivering a responsible and stable solution for the usTLD registry.

P.3 Past Performance References

NeuStar's solid customer contact references are a reflection of the high regard in which NeuStar is held and are directly attributable to our commitment to integrity.

Some vendors without extensive experience in developing and administering large-scale registry operations might not have the customer contact references needed to successfully meet the DOC's requirements for the usTLD. Other vendors may have all the necessary references but will lack the neutral third-party component necessary to ensure that all users are dealt with in an equitable manner and that a broad industry-wide approach to resolving the issues is taken. NeuStar has both. We are proud of our work and the relationships we have with our current customers and respectfully submit the following past performance references for you to contact at your discretion. Further, we would welcome a site visit by the DOC Contracting Officer and COTR.



Past Performance References Information

Required Information	NeuStar Response
Type of Work	Local Number Portability Administration
Contract Number or Purchase Order Number	Redacted
Duration of the Contract or Purchase Order	1996–2006
Dollar value of the Contract or Purchase Order	Redacted
Type of Contract or Purchase Order	Transaction Based with Minimum
Name and Address of Customer Organization	NAPM LLC, see below for addresses
Technical Point of Contact at Customer Organization for the Contract or Purchase Order	Redacted
Information for an Alternative Customer Organization Point of Contact	Same as above
Detailed Description of the Effort Performed by the Contractor/Subcontractor under the Contract or Purchase Order	<ul style="list-style-type: none"> • NeuStar operates the master database that contains the call and signaling/routing registry for North America allowing customers to keep their existing phone numbers when changing local service providers. • NeuStar coordinates the porting of local telephone numbers between carriers in North America serving more than 250 service providers daily and porting more than 700,000 numbers each month. • NeuStar provides, directly or indirectly, secure host-to-host administration transaction interfaces to the registry for 5,000 service providers. • NeuStar operates the service to 29 monthly service level agreements including availability (99.99%), transaction response time, throughput, and help desk telephone call answer times. We pay financial penalties for missing any of these levels.



Past Performance References Information

Required Information	NeuStar Response
Type of Work	North American Numbering Plan Administration
Contract Number or Purchase Order Number	Redacted
Duration of the Contract or Purchase Order	November 1997-November 2002
Dollar value of the Contract or Purchase Order	Redacted
Type of Contract or Purchase Order	Fixed Price
Name and Address of Customer Organization	FCC 445 12 th St., SW Washington, DC 20005
Technical Point of Contact at Customer Organization for the Contract or Purchase Order	Redacted
Information for an Alternative Customer Organization Point of Contact	Same as above
Detailed Description of the Effort Performed by the Contractor/Subcontractor under the Contract or Purchase Order	<ul style="list-style-type: none"> • NeuStar operates the telephone numbering registry for the North American Numbering Plan as a vital national public numbering resource. • Primary functions include the assignment and administration of Numbering Plan Area (NPA) codes, central office codes, Carrier Identification Codes (CIC), and other numbering resources. In addition, NANPA provides area relief planning services and collects utilization and forecast data for projecting the exhaust of NPAs and the NANP.



Past Performance References Information

Required Information	NeuStar Response
Type of Work	.biz Registry Operations
Contract Number or Purchase Order Number	Redacted
Duration of the Contract or Purchase Order	Base: 5 years from commencement of operation (expected 4Q01)
Dollar value of the Contract or Purchase Order	Redacted
Type of Contract or Purchase Order	Transaction Based
Name and Address of Customer Organization	ICANN 4676 Admiralty Way, Suite 330 Marina del Ray, CA 90292 TN: 310-823-9358 Fax: 310-823-8649 e-mail: icann@icann.org
Technical Point of Contact at Customer Organization for the Contract or Purchase Order	Redacted
Information for an Alternative Customer Organization Point of Contact	N/A
Detailed Description of the Effort Performed by the Contractor/Subcontractor under the Contract or Purchase Order	<ul style="list-style-type: none"> • .biz gTLD ICANN registry operator. • Process registrations for domain names. • Manages registry databases that facilitate navigation to .biz addresses. • Creates centralized zone files. • Manages Sunrise and Landrush policies. • Addresses intellectual property disputes through mediation. • Manages .biz space in accordance with ICANN policies. • Works closely with all industry participants.



Past Performance References Information

Required Information	NeuStar Response
Type of Work	National Pooling Administration
Contract Number or Purchase Order Number	Redacted
Duration of the Contract or Purchase Order	6/15/01-6/15/02, with four additional one-year options
Dollar value of the Contract or Purchase Order	Redacted
Type of Contract or Purchase Order	Cost-plus-award-fee
Name and Address of Customer Organization	FCC/Contracts and Purchasing Center 445 12 th St., SW Washington, DC 20005
Technical Point of Contact at Customer Organization for the Contract or Purchase Order	Redacted
Information for an Alternative Customer Organization Point of Contact	N/A
Detailed Description of the Effort Performed by the Contractor/Subcontractor under the Contract or Purchase Order	<ul style="list-style-type: none"> • Pooling Administrator manages the number administration and assignment processes that allocate numbering resources to a shared industry inventory associated with a designated geographic area. • Allocates telephone numbers in 1000 number parcels. • NeuStar works with the industry to suggest changes and modifications to pooling guidelines and administers number pooling in accordance with industry guidelines. • Actively participates in industry forums. • Provides help desk support to users.



Past Performance References Information

Required Information	NeuStar Response
Type of Work	European Telephony Numbering Space (ETNS) Administration
Contract Number or Purchase Order Number	Redacted
Duration of the Contract or Purchase Order	5 years from first Turnup date 3-1-01
Dollar value of the Contract or Purchase Order	Redacted
Type of Contract or Purchase Order	Transaction Based
Name and Address of Customer Organization	European RadioCommunication Office (ERO) Midtermolen 1 DK 2100 Copenhagen
Technical Point of Contact at Customer Organization for the Contract or Purchase Order	Redacted
Information for an Alternative Customer Organization Point of Contact	Same as above
Detailed Description of the Effort Performed by the Contractor/Subcontractor under the Contract or Purchase Order	<ul style="list-style-type: none"> • Administrator for European Telephony Numbering Space Service for 43 European Conference of Postal and Telecommunications Administrations (CEPT) countries. • Maintains a registry of all ETNS numbers. • Provides help desk support to users. • Tracks and coordinates service providers and serving networks.