

## S. Performance Measurements

*NeuStar is a responsible partner to the Department of Commerce, the usTLD community, and the Internet industry, and has a demonstrable record of providing the highest levels of quality in TLD registry Administration and Services – we will continue this record of performance.*

NeuStar is very proud of its history of performance while serving as the usTLD Administrator for the past six years. We have served the United States Internet Community with the highest levels on technical performance, and we will continue to excel if reselected as the usTLD Administrator. This section describes:

- **Our Performance Measurement Commitments** – NeuStar provides and will continue to provide the DoC with performance reports that track our performance against contractual performance specifications. These performance measurements (described below) and associated reporting serve as an accurate indicator of our progress and assessment of the technical services offered under the contract.
- **Past History of Performance** – NeuStar has a proven record of meeting or exceeding the stringent service level commitments related to usTLD.
- **Staffing for Performance** – NeuStar is the only Quoter able to claim a world-class team of registry administration professionals that *possess the requisite usTLD-specific skills sets* driven by the necessary and unique policies surrounding usTLD. This experience is crucial to delivering the highest levels of performance under the contract going forward.
- **Building and Managing for Performance** – NeuStar continually reviews and improves our administrative processes and technical architecture and infrastructure to maximize operational excellence and to ensure the continued reliability and stability for preserving the integrity of the usTLD.

### Highlights

- **During our tenure as the usTLD Administrator, NeuStar has, on average, exceeded each and every one of its stringent service level commitments.**
- **Since NeuStar is the current usTLD Administrator, all risks to performance associated with transition are eliminated**
- **NeuStar will continue to leverage its technical and administrative expertise as a well-respected TLD registry to ensure the highest levels of availability and reliability.**
- **NeuStar has extensive experience designing, deploying, and delivering industry critical services. We are held to stringent service levels in most of our existing contracts.**
- **Performance of this contract is regularly reported to the NeuStar Executive Committee and results against quality objectives and against customer satisfaction objectives are tied to compensation.**

## Performance Commitment Measurements

To properly measure the technical performance and progress of the usTLD, we will collect data on key essential operating metrics. These measurements are key indicators of the performance and



health of the registry. The following table summarizes the key we are committing to measure and meet. These requirements meet or exceed the industry standards for performance.

<b>usTLD Service Level Agreement Summary</b>	
<b>Registry Performance Area</b>	<b>Requirement Summary</b>
DNS	<ul style="list-style-type: none"> <li>• DNS availability of 100%</li> <li>• The DNS service does not have any planned unavailability</li> <li>• Of DNS query operations, 95% will complete in 1500 ms or less</li> </ul>
WHOIS	<ul style="list-style-type: none"> <li>• WHOIS availability of 99.95%</li> <li>• WHOIS has a maximum unplanned monthly unavailability of 20 minutes, representing an availability of 99.95%</li> <li>• Of Query operations, 95% will complete in 1500 milliseconds (ms) or less</li> </ul>
Dynamic update	<ul style="list-style-type: none"> <li>• For updates to the DNS, 95% of all updates will be applied in 15 minutes or less</li> <li>• For updates to the WHOIS, 95% of all updates will be applied in 15 minutes or less</li> </ul>
SRS	<ul style="list-style-type: none"> <li>• SRS availability of 99.9%.</li> <li>• Of SRS query operations, 95% will complete in 1500 ms or less.</li> <li>• Of SRS write operations, 95% will complete in 3000 ms or less.</li> </ul>
Unavailability defined for SRS	<ul style="list-style-type: none"> <li>• Planned unavailability of 8 hours per month</li> <li>• Planned unavailability can take place on Sunday between 0600-1400 UTC</li> <li>• Planned unavailability requires a minimum 3 day advance notice</li> <li>• Additionally, once per calendar quarter, an extended planned outage of up to 18 hours may be incurred for major upgrades.</li> <li>• Extended planned unavailability requires a minimum 28 day notice</li> <li>• Any unavailability that does not qualify as planned availability is considered unplanned unavailability</li> </ul>

NeuStar believes the performance measurements as so important to the proper functions of the usTLD Administrator that we have included detailed performance into our usTLD Administrator-Registrar Agreement (See Appendix E-2, Sub-section G). Not only have the measurements been included in the Agreements, but we have included significant service level credits to be paid to registrars if we fail to meet any of them. Please see Appendix E-2, Sub-section H for a detailed description of the service level credits.

In addition, NeuStar will include our performance measurements each month with our Periodic Progress Reports, as described in Section B, Sub-section D.1.



## Historical Performance

We are proud of our stellar performance track record. For six years now, we have met or exceeded our performance specifications. The following table provides a monthly average measurement of our performance in key areas over the course of our contract. It illustrates that NeuStar has exceeded the performance requirements.

<b>Table xx. Exceeding the Requirements</b>		
<b>Service Level Requirement</b>	<b>Requirement</b>	<b>Results</b>
Service Availability – SRS	99.9000%	99.9737%
Service Availability - Nameservers	99.9990%	100.0000%
Service Availability- WHOIS	99.9500%	100.0000%
Planned Outage Duration - SRS	8 hours or less	69% not used
Planned Outage Duration - Nameservers	None	None
Planned Outage Duration - WHOIS	8 hours or less	100% not used
Extended Planned Outage Duration - SRS	18 hours or less	97% not used
Extended Planned Outage Duration - Nameservers	None	None
Extended Planned Outage Duration - WHOIS	18 hours	100% not used
Processing Time - Add, Modify, Delete of all objects	3000ms for 95%	99.6993%
Processing Time - Query Domain	1500 ms for 95%	99.9676%
Processing Time - WHOIS Query	1500 ms for 95%	100.0000%
Processing Time - Nameserver Resolution	1500 ms for 95%	99.9999%
Update Frequency - Nameserver	15 minutes for 95%	98.1750%
Update Frequency - WHOIS	15 minutes for 95%	99.0213%

Our ability to commit and meet such high performance standards is a direct result of NeuStar's philosophy towards operational excellence. The following section provides an overview of key ways we ensure high levels of performance

## Staffing for Performance

Given the complexity of the usTLD space, it is imperative that the usTLD Administrator provide a staffing plan that includes individuals with very specific registry and responsible public resource administration experience. The usTLD team must understand the intricacies and complexities of the usTLD in order to avoid unnecessary and unacceptable risks to the performance and integrity of the space. NeuStar is the only Quoter able to offer such a team.

NeuStar's team is already in place and has vast experience working with the DoC, the usTLD, registrars, Delegated Managers, and registrants. These individuals have complete working

knowledge of the complex policies and requirements that govern the usTLD space. Additionally, they have the contextual and institutional knowledge of this unique space that allows NeuStar to perform at or above expectations. This vast knowledge pool is critical – and no other Quoter can offer such levels of experience and knowledge.

Detailed information on NeuStar's usTLD team has been presented in Proposal Section A and our corporate qualifications as a successful steward of public resources are presented in Proposal Section R.

## Building for Performance

NeuStar's solution was designed to meet or exceed the contractual service level requirements and, since the launch of the usTLD, we have worked to optimize and improve our platform and processes to continually provide the highest level of service. NeuStar's platform includes a variety of specific advantages that allow NeuStar to continually meet or exceed all service expectations.

These include:

- High Availability architecture configurations deployed at multiple geographically dispersed locations within the United States;
- Fully redundant system design to eliminate single-points of failure;
- Detailed disaster recovery and business continuity plans to ensure continuous operation in the event of failure or loss of system components;
- Documented and proven procedures and methodologies;
- 7x24x365 support services including a Network Operations Center that provides comprehensive monitoring of system performance; and
- Comprehensive monitoring, alarming, and reporting features.

## Managing for Performance

In addition to the robustness of our solution, NeuStar maintains a corporate-wide Quality Management System (QMS) as the framework for delivery of quality products and services, continuous improvement, and process effectiveness. Quality objectives are managed at all levels of the Quality Management System via our Operational Excellence Program ("OpX"). This program's key goals are to continuously improve operational performance and customer satisfaction. Main program components, all of which are based on industry best practices, include:

- A formal quality management system;
- A performance management system;
- A standard process improvement/management methodology; and
- A standard project management methodology.

The OpX program is managed by the Quality Board, which is a cross-functional team of Senior Vice President and Vice President-level executives. The Quality Board meets to oversee the OpX program and ensure its linkage to business objectives. The Quality Board approves NeuStar's Quality Policy and oversees its implementation.

The OpX Meeting is chaired by the Chief Operating Officer and includes all of the company's top operational management. Missed metrics (e.g. availability, performance, etc) are analyzed for root cause, and countermeasures are taken and tracked to completion. Effectiveness of countermeasures is evaluated by subsequent metrics reports. Action items are captured, distributed, and tracked by Service Management.

The Quality Board (QB) typically holds weekly Quality Management System Reviews to develop and implement the OpX Program. These reviews address the suitability of methodologies and processes and the adequacy of the quality management system to meet business goals and customer expectations. This meeting is the primary review, approval, and deployment point for quality programs, key quality system initiatives and projects. The agenda, presentation materials and minutes of these reviews are maintained and distributed by Quality Management. Day-to-day management of performance is the responsibility of functional executives and process owners and is aligned with OpX objectives.

The entire Quality Management System is built around satisfying the customer by meeting and exceeding customers' requirements. To ensure that superior performance remains a corporate focus, results against quality objectives and against customer satisfaction objectives are tied to compensation.

## **Additional Performance Measurements**

In addition to the above, during the term, we will submit a number of periodic reports to the DoC, including, reports covering major events, transition statistics, registration data, kids.us statistics, website statistics, and WHOIS Accuracy to name just a few. A detailed discussion of these and other reports can be found at Proposal Section B, Sub-section D.