Thousands-Block Pooling Administrator

Technical Requirements

May 3, 2012

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Section 1

Introduction

1.1 Background

Pooling of geographic telephone numbers in a number portability environment is a number administration and assignment process that allocates numbering resources to a shared industry inventory associated with a designated geographic rate center. In the United States, thousands-block number pooling involves the allocation of blocks of sequential North American Numbering Plan (NANP) telephone numbers within the same NPA/Central Office (CO) Code (CO Code or NXX) to different service providers, who serve customers within the same NPA rate center. All ten thousand numbers within each NPA/NXX continue to be assigned to one (1) rate center, but are allocated among multiple service providers at the thousands-block (NXX-X) level. The numbering resource is allocated from a shared industry inventory and is administered in blocks of one thousand numbers (NXX-X) for assignment to service providers participating in that rate center.

The assignment of numbers to service providers in blocks of one thousand (i.e., NXX-X) is expected to improve the utilization of number resources. Further, a pool of numbers, if available to all providers serving a defined area, need only be large enough to accommodate the collective needs of those providers.

In 2000, the FCC determined that thousands-block number pooling would significantly extend the life of the NANP and issued its first Numbering Resource Optimization order (FCC 00-104, released March 31, 2000) establishing a “national” pooling contractor. This technical requirements document describes the requirements for the “national” pooling contractor.

The following terminology is employed in this document: the “FCC” refers to the Federal Communications Commission or its authorized agents; an “auditor” is an FCC-designated auditor; “service providers” refers to telecommunications carriers that utilize numbering resources to provide or establish telecommunications services; “regulatory agencies” refers both to the FCC and the various state public utility commissions (PUCs); the “contractor” refers to the vendor selected to be the thousands-block pooling administrator; a “subcontractor” refers to an organization providing services to the contractor; a “user” is a service provider accessing the automated 1K block assignment system; a “constituent” is the most inclusive term and can include service providers, Number Portability Administration Center (NPAC) vendor, North American Numbering Plan Administrator (NANPA), Local

Exchange Routing Guide (LERG)-Traffic Routing Administration (TRA) vendor, regulatory agencies, the media and the general public.

The Routing Number Administrator (RNA) is responsible for administering non-dialable p-ANIs. This function was added to the Thousands-Block Pooling Administrator (PA) contract as a result of Change Order 19 through Contract Modification 16 on June 17, 2011. These resources are administered by the RNA using the industry-defined forms contained in the P-ANI Administration Guidelines created by the Industry Numbering Committee (INC). In addition to establishing the format of the forms, the industry has also prescribed a sequence of events for each request, and strict time limits during which these events must occur.

The RNA uses the RNA system (RNAS) to process p-ANI requests. The RNA system supports a web-based graphical user interface (GUI) to assist the RNA in administering p-ANIs; it is also used by service providers to request p-ANIs. The RNAS website is www.nationalpani.com.

Users of the RNA system may include: FCC, state commissions, 9-1-1 governing authorities, Public Safety Answering Points (PSAPs), 9-1-1 system service providers, service providers, service provider consultants, auditors, and the RNA.

1.2 Purpose

The purpose of this document is to define the technical and operational requirements, the system requirements, and the functions of the pooling administrator contractor. It also serves as an umbrella document for industry guidelines, FCC orders, technical standards and technical requirements that support thousands-block number pooling so that the contractor will be able to ascertain the full functionality required of the designated national contractor. Section 1 provides an overview of the document itself. Section 2 defines requirements for the contractor in performing the pooling administration function. Section 3 is dedicated to defining pooling administration system requirements. Section 4 outlines deliverables.

The technical requirements are contained in several documents. Should there be conflicts, the precedence of documents is as follows: (1) Reference 25, Code of Federal Regulations (CFR), Title 47, Volume 3, Parts 40-69, Telecommunications; (2) References 1 & 27, *FCC Orders*; (3) Section C of the Contract, Performance Work Statement/Technical Requirements; (4) Reference 2, *Industry Numbering Committee (INC) Thousands-Block (NXX-X) Pooling Administration Guidelines (TBPAG)*; (5) Reference 6, *Industry Numbering Committee (INC) North American Numbering Plan Forecast/Utilization Report (NRUF) Guidelines*, INC 00-0619-026; and (6) Reference 7, *Industry Numbering Committee (INC) Central Office Code*

(NXX) Assignment Guidelines (COCAG), INC 95-0407-008. See Appendix B for a list of these and other related documents.

This document includes detailed descriptions of the system, functions and services described in these requirements. This information will then be used to evaluate contractor responses to the administrative and assignment tasks and functions, as well as the system required for thousands-block number pooling. The contractor shall perform the duties of the PA for the designated term of administration. References to blocks, pools, or administrator throughout this document are specific to thousands-block (NXX-X) number pooling in the United States and Puerto Rico only, unless otherwise specified.

1.3 Scope

This document defines the PA technical, operational, and system requirements and describes the full functionality required of the designated PA. It also serves as a reference document to other resources, such as industry guidelines, FCC orders, technical standards, and technical requirements that support the NANP.

The contractor shall, at the FCC's discretion, perform the duties of the PA for up to a five (5)-year term from the date of award.

The contractor shall serve as the designated entity responsible for administering thousands-block number pools by assigning, managing, forecasting, reporting and processing data that will allow service providers in rate centers designated for thousands-block number pooling to receive telephone numbers in blocks of 1,000. The volume of data and real time access to that data by multiple users requires that the contractor obtain and maintain a system that houses pooling-related data. The pooling administration system shall have a web interface to facilitate access and data input capabilities, allow for generation of reports, and interface with all designated parties.

In addition, the contractor serves as RNA and is responsible for managing and assigning non-dialable p-ANIs (Pseudo-Automatic Identification Numbers) which are used to support the routing of wireless and VoIP 9-1-1 calls, out of the 211 NXX and 511 NXX on a national basis including Puerto Rico.

1.4 Attributes

The contractor shall be an independent, neutral third party (as defined in Section H.3) who shall be responsible for the fair and efficient overall administration of pooled NANP and p-ANI numbering resources. The contractor shall also ensure that domestic numbering administration shall be effective, while leveraging the expertise and innovation of industry to promote number conservation.

The contractor's role is to serve as the neutral block and p-ANI administrator. As stated in CFR 52.20 for Thousands-Block Pooling, the Pooling Administrator shall be a non-governmental entity that is impartial and not aligned with any particular telecommunication industry segment, and shall comply within the same neutrality requirements that the NANPA is subject under this part. Refer to Commission rule 52.12, 47 C.F.R. § 52.12 for the NANPA neutrality requirements.

1.5 Objectives

The main objectives of the contractor are to:

- Provide a standardized application of all administrative pooling guidelines
- Develop tools and implement a system containing both hardware and software to facilitate the assignment, tracking, and data reporting requirements
- Maintain interfaces with the NANPA, NPAC, service providers, industry forums (e.g., INC, NGIIF, CIGRR, etc.), and regulatory agencies
- Maintain and plan for adequate pool inventory numbering resources for the short and long term
- Manage and assign non-dialable p-ANIs out of the 211 NXX and 511 NXX to support the routing of wireless and VoIP 9-1-1 calls.

1.6 Responsibilities

The contractor shall perform the day-to-day number resource assignment and administrative activities with a long-term focus, as well as interact with the NANPA and the NPAC vendor. The contractor shall also provide and maintain a system to support all day-to-day and long- term pooling functions.

1.6.1 Management

The contractor shall implement a planned management approach utilizing effective forecasting and management skills in order to make the industry aware of the availability of numbering resources to meet the industry's current and future needs

and to support the NANPA's overall responsibility to promote the continued viability of the NANP resource.

1.6.2 Performance

The contractor shall be responsible for maintaining the security, reliability, performance, and flexibility of the pooling system. Performance specification may be found in the *FCC CYBER SECURITY PROGRAM*. The system shall be user friendly and not impose a burden on users. The system shall protect the sensitive nature of any information provided by service providers, NANPA or the NPAC vendor.

1.7 Interaction

The contractor, like the NANPA, shall be responsible for establishing and maintaining relationships with appropriate governmental and regulatory bodies, e.g., FCC and state regulatory agencies, and addressing policy directives from these bodies.

1.7.1 Relationships

These and other relationships require that the contractor have the necessary administrative staff to handle the legal, financial, technical, administrative, operational, industry, and regulatory issues relevant to the management of all pooled numbering resources.

1.7.2 Assets

The contractor shall have the necessary equipment, facilities, and proper billing arrangements to manage the pooled resources.

1.8 Policy Objectives

The contractor shall adhere to the following broad policy objectives:

- Shall seek to facilitate entry into the communications marketplace by making numbering resources available on an efficient and timely basis to communications service providers
- Shall not unduly favor or disadvantage any particular industry segment or group of consumers
- Shall not unduly favor one (1) technology over another.

1.8.1 Thousands-Block - NANP Context

At all times the contractor shall understand that:

- The functions of Central Office (CO) Code Administration, NPA Assignment, and Relief Planning are among the duties currently being performed by the NANPA
- Thousands-blocks (NXX-X) are North American Numbering Plan (NANP) resources
- Thousands-block pooling administration entails similar collateral responsibilities as does CO code administration, such as data collection, forecasting, data security, and reporting
- Existing obligations and agreements related to national numbering policy and administration in a CO (NXX) code environment shall also be applied in a similar manner when administering pooled (NXX-X) resources.

1.9 Reserved

Section 2

Pooling Administration Requirements

These functional requirements describe the administrative tasks and sub-components of the contractor's responsibilities and duties. This is not an all-inclusive list. The contractor should also refer to regulatory orders issued by the FCC, related industry guidelines, pooling administrator documentation, technical standards, and North American Numbering Council (NANC)-related NPAC documentation. Specific reference documentation is listed in Appendix B.
The contractor shall describe its commitment, as well as a description of how it will adhere, to these functional requirements.

2.1 Hours of Operation

The contractor shall be available a minimum of five (5) days a week (Monday-Friday), from 5 AM to 5 PM Pacific Time.

The phone number to be called and the areas that should use this number should be clearly identified by region (i.e. Alaska, Hawaii, Puerto Rico & Guam).

The contractor is required to give a 24-hour notice to the Industry on any exception to the above.

2.1.1 Contact

The contractor shall provide mechanisms; e.g., World Wide Web, voicemail, email, and facsimile, to be accessible on a 24-hour basis.

With email, the contractor shall have the capability of transmitting and receiving email messages with and without attached files. The contractor shall provide "firewall" protective screening of all incoming email messages and attachments based on a security profile established by the contractor and approved by the FCC. The contractor shall additionally provide virus protection software on all devices that receive/send email. The contractor shall be expected to maintain the most recently updated version of virus software as defined by the software provider. Any upgrades/changes that would cause incompatibility with the general industry will be communicated to the industry no less than 180 days prior to implementation.

With facsimile, the contractor shall provide the capability of transmitting and receiving International Telecommunications Union (ITU) G.3 and G.4 facsimiles.

2.1.2 Responsiveness

The contractor shall respond within one (1) business day to general inquiries or questions including those made outside the normal business hours. This will include emails, facsimiles and voicemails. All emails, facsimiles and voicemails, whether received or responded to outside the normal business hours will be subject to a performance metric and process to be approved by the FCC or its designee. All exceptions need to be noted and brought to the attention of management.

2.1.3 Holidays

The contractor shall observe U.S. holidays. The following is a list of holidays that the contractor shall observe:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Day after Thanksgiving*
- Christmas Day

*Not open for business, but the Help Desk shall be open and this shall be considered a business day for day counts on processing. Contractor shall be open for business on all other business days.

On an annual basis, the contractor shall post a list of the holidays observed and the calendar dates of those holidays on the PA web site.

2.2 Organization

The contractor shall ensure that the pooling administration organization shall not be impacted by other functions that may be performed by the contractor's company.

2.3 Staffing

Pooling administration staffing shall be at appropriate levels to ensure that the contractor can efficiently perform the functions as identified.

The contractor shall file an initial staffing report at the start of the contract which shall include numbers by labor category. Thereafter, the contractor will then advise the FCC as no change on a monthly basis. In the event of a change, the report shall show shortages and overages, and yearly turnover rate.

2.3.1 Availability

Staff shall be available a minimum of five (5) days a week, as defined in Section 2.1 of this document.

However, since block applicants and block holders are located in multiple time zones, the contractor shall provide a mechanism (*e.g.*, voicemail, email, facsimile) to be accessible on a 24-hour basis in order to meet the needs of all of its clients. The contractor is required to obtain prior approval from the FCC or its designee to any exception to the above.

2.3.2 Core Hours

Core business hours for the contractor shall fall between 8:00 am and 5:00 PM Monday through Friday local time, excluding recognized holidays.

However, if circumstances warrant, the contractor shall be available at other times to meet the needs of the industry.

2.3.3 Physical Location

The physical location of the administration facility shall be at the discretion of the contractor as long as it is located within the continental United States (CONUS).

2.3.4 Reserved

2.3.5 Travel

Contractor staff shall be able to travel, when necessary, to meet the needs of the industry (e.g., Industry Numbering Committee (INC), NANC, conduct pooling administration education meetings, NPA jeopardy situations).

2.3.6 Experience

The staff shall be trained or have equivalent experience in the areas of customer service and information technology, including, but not limited to:

- Email, web-based software applications and navigation tools, and Internet browsers
- Telephone and call tracking systems and tools
- Problem and change tracking systems and tools
- Ongoing training
- Sending and receiving facsimile communications
- Database retrieval.

2.3.7 Conflicts

Staff members of the contractor may not represent the interests of the contractor's parent company in any respect. See Appendix B, Reference 1, *FCC 00-104*, paragraph 154 and the conflicts provisions in Section H.3.

Conversely, neither representatives of the contractor's parent company nor any divisions or departments thereof that are not direct, 100% dedicated employees of the contractor, may represent the interests of the contractor.

2.4 Subcontractors

Subcontractors may be used to perform work under this contract. Subcontracting with small businesses will be in accordance with FAR 52.219-9, Small Business Subcontracting Plan.

2.4.1 Reserved

2.4.2 Responsibilities of the Contractor

The contractor shall provide the following information to the FCC Contracting Officer concerning each prospective subcontractor within five (5) business days of the date of official selection or within 30 calendar days of hiring any subcontractor:

- Complete name of the subcontractor
- Complete address of the subcontractor
- Type of work the subcontractor will be performing
- Percentage of the work that the subcontractor will be providing
- Evidence of the work the subcontractor will be providing
- A written statement, signed by each subcontractor, which clearly verifies that the subcontractor is committed to render the services required by the contract
- Evidence, as set out in relevant sections of this Request for Proposals (RFP), that the subcontractor meets all applicable neutrality requirements
- Written proof that the subcontractor has executed a non-disclosure agreement.

2.4.3 Reserved

2.4.4 Substitution

The substitution of one (1) subcontractor for another may be made only with the written consent of the FCC.

2.5 Environment

2.5.1 Regulatory

The FCC has authority over numbering within the United States. The other NANP member nations exercise similar regulatory jurisdiction.

The FCC has delegated specific authority to state regulatory agencies in the United States. All states have been delegated authority over NPA Relief. In addition, some states have been given authority to trial certain number conservation measures. They have also been granted authority to obtain data, reclaim resources, and establish and enforce number allocation standards.

In the future, State and/or Federal regulatory authorities may issue new rules, requirements or policy directives, which may increase, decrease or otherwise affect the functions to be performed by the contractor. Within ten calendar days of a regulatory directive the contractor shall provide to the FCC and the NANC its interpretation of the change, its impact upon service, the date the new change is

proposed to become effective, what steps in current procedures need to change and when any new forms or procedures will be required.

2.5.2 Federal Advisory Committee

The North American Numbering Council (NANC) is a Federal Advisory Committee established pursuant to the United States Federal Advisory Committee Act, 5 U.S.C., App. 2 (1988) (FACA). The NANC was established to advise the FCC on issues related to NANP Administration, and to advise the Commission on local number portability (LNP) administration issues. The NANC develops policy recommendations on numbering issues, initially resolves disputes, and provides guidance to the numbering administrators.

The NANC's charter under the FACA provides that, in carrying out its responsibilities, the NANC shall ensure that NANP Administration supports identified policy objectives. The NANC shall ensure that the contractor:

- Facilitates entry into the communications marketplace by making numbering resources available on an efficient, timely basis to communications service providers
- Does not unduly favor or disfavor any particular industry segment or group of consumers
- Does not unduly favor one (1) technology over another
- Gives consumers easy access to the public switched telephone network
- Ensures that the interests of all NANP member countries are addressed fairly and efficiently, fostering continued integration of the NANP across NANP member countries

2.5.3 Industry Activities

The industry develops number administration guidelines for the United States based on industry consensus and regulatory direction. The INC, operating under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS), is the industry forum established to develop such guidelines. The mission of the INC is to provide a forum to address and resolve industry-wide technical issues associated with the planning, administration, allocation, assignment and use of numbering resources and related dialing considerations for public telecommunications within the NANP area.

INC guidelines incorporate FCC requirements with technical and operational principles. The guidelines also recognize the existence of specific regulations in states where FCC-delegated authority has been granted.

Industry guidelines and regulatory directives are subject to change throughout the contractor's Term of Administration.

The contractor shall administer numbering resources in accordance with the guidelines and properly executed regulatory directives which take precedence over industry guidelines.

2.5.4 Modification of Guidelines

The contractor shall participate in the development and modification of guidelines and procedures, which may or may not affect the performance of the contractor functions. These changes may come from regulatory directives and/or industry-initiated modifications to guidelines. In addition, new guidelines may be developed as appropriate to comply with regulatory directives. The contractor shall implement any changes determined to be consistent with regulatory directives.

The contractor shall:

- Provide, in real time, technical guidance to ensure processes and procedures are effective in meeting the goals of the change.
- Provide issues and contributions, and be prepared to discuss at INC meetings how the proposed change promotes numbering policy and/or benefits the NANP and how the change will affect the PA's duties, obligations, and accountability.
- Assess and share in real time (i.e., during discussion) the cost implications and administrative impact of the change upon the PA's duties and responsibilities in sufficient detail as needed by the INC.

Within seven (7) business days of a change, the contractor shall provide its interpretation of the change, its impact upon service, the date the new change is proposed to become effective, what steps in current procedures need to change and when any new forms or procedures will be required. The contractor shall provide this information to the FCC and the NANC. When the INC places any changes to its guidelines in initial closure, the contractor shall submit an assessment regarding the impact of scope of work, time and costs to the INC, the NANC and the FCC within 30 days.

The contractor shall post changes in procedures on its web site prior to the change taking effect.

The NANC shall be consulted at the FCC's discretion regarding the suggested implementation date to determine the likely impact on service provider processes and systems (i.e., whether it would be unduly burdensome or would unfairly

disadvantage any service provider or group of service providers per the contractor's obligations and NANP administrative principles).

Specifically, the contractor shall:

- Notify all interested parties when guidelines have changed.
- Interpret guideline changes and impact upon processes.
- Identify implementation date or effective date.
- Provide notification of new forms or tools that may be required.
- Identify a Single Point of Contact (SPOC) within the contractor's staff to answer questions.
- Accept, process, and verify the accuracy of applications for blocks in accordance with regulatory requirements and industry guidelines.
- Contact code applicant as necessary to gain clarification or additional information in order to process the application when first submitted.
- Review entire application, identifying all errors and omissions when first submitted.
- Provide information or location of tools and contacts to assist applicants in properly completing applications for new numbering resources, changes and disconnects.

2.6 Reserved

2.7 Reserved

2.8 Requests for Pooling Information

The contractor shall, upon request, provide information and answer questions regarding thousands-block number pooling administration processes, procedures, interfaces, and services within one (1) business day. The contractor shall, upon request, provide new entrants and all other service providers with assistance in understanding how to implement the procedures and processes used by applicants to obtain and maintain numbering resources, report utilization and all other obligations required to be conducted by resource assignees.

2.8.1 Referrals

In addition, the contractor shall provide, within one (1) business day of receipt of a request, information on how to obtain documents related to pooling, including guidelines, by either referring the requestor to web sites where the information is available or by providing electronic copies of the information via e-mail to the requestor.

2.9 Dispute Resolution

Disputes may arise within industry numbering activities and the contractor shall participate in dispute resolution by providing guidance and/or historical data.

2.9.1 Responsibilities

The contractor shall, in all cases, follow the FCC rules and pooling guidelines that are in effect at the time that the dispute arises.

The contractor shall be responsible for expenses that are incurred in achieving compliance with any law, regulation, audit or contract requirements.

2.9.2 Sources of Dispute

These disputes could arise from a variety of sources including the performance of the NANP activities, from industry forum activities, from conflicting government or regulatory policy directives or directly from the FCC.

2.9.3 Involvement

The extent to which the contractor is involved in the resolution of disputes shall depend on the nature and origin of the dispute.

2.9.4 Process

If a performance problem is identified by a telecommunications industry participant, the contractor shall notify the FCC and the NANC, or its designated oversight committee, of the problem within one (1) business day. The contractor shall investigate the problem and report back within a period of not more than 10 business days from the date of the complaint, to the FCC, the NANC, and to the telecommunications industry participant on the results of such investigation and any corrective action taken or recommended to be taken.

2.9.5 Corrective Action

The contractor, in coordination with the FCC, shall take any necessary corrective action within 30 calendar days of the complaint.

2.10 Audits

The contractor and service providers shall be subject to audits to verify their compliance with guidelines and regulations relating to all applicable areas of number administration.

2.10.1 For Cause Audits of Service Providers

In the performance of its numbering administration duties and in meeting its responsibilities, the contractor may encounter situations that may alert it to a service provider's possible noncompliance with the industry guidelines. This noncompliance warrants the need for a "For Cause" audit.

In these situations, the contractor shall document its observations and forward relevant information to the FCC, service provider, and appropriate state commission. The contractor shall maintain the confidentiality of all requested information throughout the auditing process.

2.10.2 Other Audits of Service Providers

The contractor shall be required to provide specific data to an FCC or FCC designated auditor in order to facilitate the audit of a service provider.

2.10.3 Guideline Compliance Issues

The contractor may encounter situations in which a service provider, the LERG or the NANPA/NPAC that is not in compliance with FCC rules or orders or industry guidelines.

When a noncompliance situation is suspected, the contractor shall, prior to fulfilling an assignment request, request additional service provider information from other administrators, including the NANPA and/or the applicant or from other sources as necessary to determine if the service provider is compliant with industry guidelines and regulatory rules and directives. The contractor shall evaluate the information and document its determination if the assignment request should be granted or denied.

2.10.4 Contractor Audit Obligations

Note that the contractor has "service provider compliance verification obligations" in the same respect as does the NANPA. This means that they shall fulfill these obligations in a non-discriminatory fashion in connection with a service provider's

application for resources and, if necessary, verify compliance prior to fulfilling any block application request.

2.10.5 FCC-Designated Auditor

To facilitate the auditing of carrier compliance with FCC rules and orders and industry guidelines, the contractor shall provide access to the FCC-designated Auditor and/or the FCC or its designees to:

- Contractor's staff
- Books and records and supporting documentation as requested by the FCC or FCC-designated auditor.

2.10.6 Office Facilities

For a reasonable period of time, the contractor shall provide to the FCC-designated auditor office space, office furnishings, telephone and facsimile service, utilities, office-related equipment, and duplicating services that FCC-designated auditors may require to perform audits.

2.10.7 Additional Obligations

The contractor is subject to the contracts clauses provisions in Section I of the solicitation.

2.11 Data Security

Because of the proprietary and/or sensitive nature of some information that may be sent to the contractor, proper security measures shall be taken.

The contractor shall provide proposed pooling administration security measures. These measures shall be in conformance with Appendix B, Reference 16, *FCC Cyber Security Program*.

The contractor is additionally subject to the security provisions in Section H.

2.11.1 Secure Work Area

This includes the establishment of a secured work area with limited access and secured record retention practices.

2.11.2 Secure Systems

In addition, appropriate security shall be provided for any and all computer systems that contain number pooling assignment information and proprietary applicant information, including any system that is connected to any telecommunications network.

2.12 Reserved

2.12.1 Reserved

2.13 Number Portability Administration Center with Assigned States

The following list identifies each of the number portability NPAC regions. The list also contains the states that are associated with each of the seven (7) NPAC regions in the United States. There is one (1) Limited Liability Corporation (LLC) that manages the contractual relationship with the NPAC vendor, and it shall be contacted by the contractor to coordinate interfaces with the NPAC.

MID-ATLANTIC REGION: New Jersey, Pennsylvania, Maryland, Delaware, West Virginia, Virginia, District of Columbia

MIDWEST REGION: Illinois, Indiana, Ohio, Michigan, Wisconsin

SOUTHWEST REGION: Missouri, Oklahoma, Kansas, Texas, Arkansas

WEST COAST REGION: California, Nevada, Hawaii

WESTERN REGION: Washington, Oregon, Montana, Idaho, Utah, Arizona, Wyoming, Colorado, New Mexico, North Dakota, South Dakota, Nebraska, Minnesota, Iowa, Alaska

SOUTHEAST REGION: Kentucky, Tennessee, North Carolina, South Carolina, Louisiana, Mississippi, Alabama, Georgia, Florida, Puerto Rico

NORTHEAST REGION: Maine, New Hampshire, Vermont, Connecticut, Rhode Island, New York, Massachusetts

2.14 Industry Inventory Pool

The contractor shall be responsible for all activities associated with the industry inventory pool establishment and on-going maintenance. The objective of the

industry inventory pool shall be to maintain sufficient blocks of 1,000 numbers to ensure that all participating service providers' requirements can be met.

2.14.1 Pool Inventory Level

The quantity of thousand blocks that need to be maintained in the inventory pool should be determined using the following criteria:

- The anticipated assignment rate of thousand blocks from the inventory pool
- No more than a six (6)-month inventory level
- The contractor's analysis on all forecasts filed for each rate center inventory pool

The contractor should make every attempt to have a sufficient quantity of blocks available for assignment to satisfy demand.

2.15 Industry Inventory Pool Establishment Timeline

The contractor shall be responsible for developing the inventory pool implementation timeline in consultation with the industry, in conformance with applicable state or FCC order. This timeline contains all the steps and dates that participating service providers shall be required to meet in order to implement thousands-block number pooling in a designated pooling rate center.

2.15.1 Purpose

The timeline shall specifically define the rate centers that have not established thousands-block number pooling.

2.15.2 Activities

The timeline shall include the following activities:

- Designation of the pooling rollout schedule 90 calendar days prior to the start of pooling in a rate center
- First or Supplemental Implementation Meeting
- Forecast Report Date
- Block Protection Date
- Block Identification Date
- Date for completion of the industry inventory pool surplus or deficiency
- Block Donation Date
- Pool Start and Block Allocation Date
- Accounting for all blocks with ten percent or less contamination.

2.15.3 Additional Details

Additional details regarding requirements for establishing the industry inventory pool can be found in Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousands-Block (NXX-X) Pooling Administration Guidelines*

2.16 Block Assignments

Participating service providers shall submit application(s) for block assignment(s) to the contractor after the rate center inventory pool start date.
The contractor shall:

- Accept, process, and verify the accuracy of all applications for thousands-blocks and CO Codes in accordance with regulatory requirements and industry guidelines.
- Contact block/code applicant as necessary to gain clarification or additional information in order to process the application when first submitted.
- Review entire application, identifying all errors and omissions when first submitted.
- Provide information or location of tools and contacts to assist applicants in properly completing applications for new, change and disconnect requests.

2.16.1 Application Submittals

Block applications shall be transmittable through the Pooling Administration System (PAS) which can be found on the vendor's website, or via email.

2.16.2 Block Application Supporting Data

Service providers are required to furnish Months to Exhaust (MTE) worksheets with each growth application. The contractor shall be responsible for assessing the block applicant's application to verify that it meets all requirements in order to have a block(s) assigned.

At a minimum:

1. Block applicants shall be licensed or certified to operate in the rate center, and, if required, demonstrate that all applicable regulatory requirements have been met (e.g., facilities readiness criteria).

2. Block applicants shall submit a Months to Exhaust (MTE) worksheet for telephone numbers (TNs) with growth block applications.

3. Block applicants shall have filed a current NRUF for the associated requested rate center and/or NPA with the NANPA, and a current pooling forecast with the contractor.

4. Block applicants shall be confirmed by the contractor, with the NANPA, that the service provider is in good standing and that no known ineligibility conditions exist (or are under investigation) in the pooling area in which the service provider is seeking resources prior to assigning resources to that service provider.

2.16.3 Source

Applications shall be assigned from both contaminated (10% or less) and non-contaminated inventoried pooled blocks.

Contamination occurs when at least one (1) telephone number within a donated thousand block is not available for assignment to customers of the block holder.

2.16.4 Applicant Treatment

The contractor shall be responsible for ensuring that blocks are assigned in a fair and non-discriminatory manner. In addition, information requested from participating service providers should be kept to a minimum and should be uniform for all block applicants.

The contractor shall time-stamp all applications. All applications must be processed within seven (7) calendar days. If for any reason an application is suspended, the contractor shall detail the reasons for such suspension and provide the procedure for escalation to clear the suspension.

2.16.5 Inventory Pool

Block assignments shall be made from NPA-NXX codes assigned to a single rate center inventory pool. The inventory pool shall be comprised of a rate center boundary, which covers the same geographic area. Different geographic rate centers shall maintain separate inventory pools.

2.16.6 Rate Center Information

The contractor shall maintain a current listing of designated rate centers selected for pooling implementation. Therefore the pooling administration system shall be capable of implementing additional rate centers, modifying rate centers or their pooling status, or deleting rate centers.

2.16.7 Required Assignment Processing

After the contractor has made a block assignment, the contractor shall enter the necessary information into the Business Integrated Rating and Routing Database System (BIRRDS) to allow the service provider to build the necessary block record(s) in BIRRDS for LERG update.

The contractor's ability to interface with the BIRRDS database is dependent upon completing arrangements with Telcordia Technologies.

The LERG and BIRRDS are registered trademarks of Telcordia Technologies.

2.16.8 Problem Resolution Assistance

The contractor shall also use these and all other records available to the contractor to assist the NANPA, service providers and/or regulators in resolving customer complaints as the result of call completion failures, misrouting and/or service outages. Although proprietary data cannot be disclosed to other parties, the contractor will provide all other information and referral contacts to requesting parties within a timeframe that is agreed upon between the contractor and the requesting party based upon the urgency of the failure. The contractor may be asked to contact and/or provide proprietary information to the owner of the information if for example, the only way to contact or view the proprietary information was by the contractor contacting the party and asking them to call and/or cooperate with others who need information that they themselves can only provide for the purposes of resolving a failure.

2.16.9 Notification

The contractor shall notify the NPAC of all block assignments to ensure that the appropriate porting activity and industry notification occurs.

2.17 Management of the Pool Inventory

The contractor shall provide a mechanism for carriers to replenish the six (6)-month inventory pool for each rate center.

2.17.1 Forecast

The contractor shall use service providers' forecast data to size and manage each rate center pool and shall pass this data on to the NANPA.

Service providers participating in pooling shall submit forecasted demand reports semi-annually to the contractor. The contractor shall use this data to size and manage each rate center pool and shall pass this data on to the NANPA using Form 502.

2.17.2 Data Request Dates

The NRUF data request shall be consistent with the NRUF reporting dates. The NANPA shall receive at least semi-annually from the contractor pooling forecast data submitted by service providers pursuant to the INC Guidelines.

2.17.3 Forecast Analysis

The contractor shall use carrier forecasts to ensure that carriers are notified when there are insufficient blocks available to meet the expected applications from participating service providers in each rate center pool inventory

2.17.4 Reports

The contractor will provide aggregated block holder forecast data for each pool to the NANPA for consideration in NPA relief and NRUF reporting activities.

Regulatory authorities may request access to pool data.

2.18 Replenishment of the Pool Inventory

The contractor is responsible for monitoring each rate center pool and providing a mechanism for carriers to replenish and maintain a six (6)-month supply of assignable thousands-blocks (industry level inventory) in each rate center pool. The aggregate SP forecast submitted during each NRUF cycle, is to be used to determine the appropriate level of inventory.

When the contractor first realizes that the amount of inventory in each rate center pool may – in the future – fall below the projected six (6)-month forecast, the contractor will begin the replenishment process in accordance with the INC TBPAG.

The contractor's efforts will include, but shall not be limited to:

- Send emails to service providers in the affected rate center pool and request voluntary donations
- Check with service providers who have a forecast on file for the affected rate center to see if one is qualified to become a Code Holder – provided the

aggregated demand for blocks in the pool meets the MTE/utilization requirements.

2.19 Resource Reclamation

The contractor shall be responsible for initiating the reclamation of assigned blocks that have not met the required criteria to retain the assigned block.

2.19. 1 Criteria for Reclamation

Specific criteria for block reclamation can be found in the INC guidelines (Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousands-Block (NXX-X) Pooling Administration Guidelines)*
.

2.19.2 Administrative Responsibilities

At a minimum, the contractor shall be responsible for:

- Applying the criteria to any blocks subject to reclamation
- Clarifying any alleged non-use or misuse of an assigned block
- Notifying the service provider that a block is subject to reclamation using the form in Appendix B, Reference 2, *Thousands-Block (NXX-X) Pooling Administration Guidelines*, Attachment 5/Part 5, and that the block will be available shortly for reassignment
- Entering disconnect information into BIRRDS.
- Notification to the NPAC
- If appropriate, notify and coordinate reclamation efforts with the NANPA and appropriate regulatory bodies.

2.20 Interfaces with Service Providers, NANPA, NPAC Vendor, BIRRDS/LERG Vendor, Regulatory Agencies, and the Media

The contractor shall interact with the NANPA, the NPAC vendor, the LERG vendor, and with each service provider participating in thousands-block number pooling. The contractor also shall also interact with the news media, as well as state and federal regulatory bodies concerned with numbering matters. These interfaces are depicted in Figure 1.

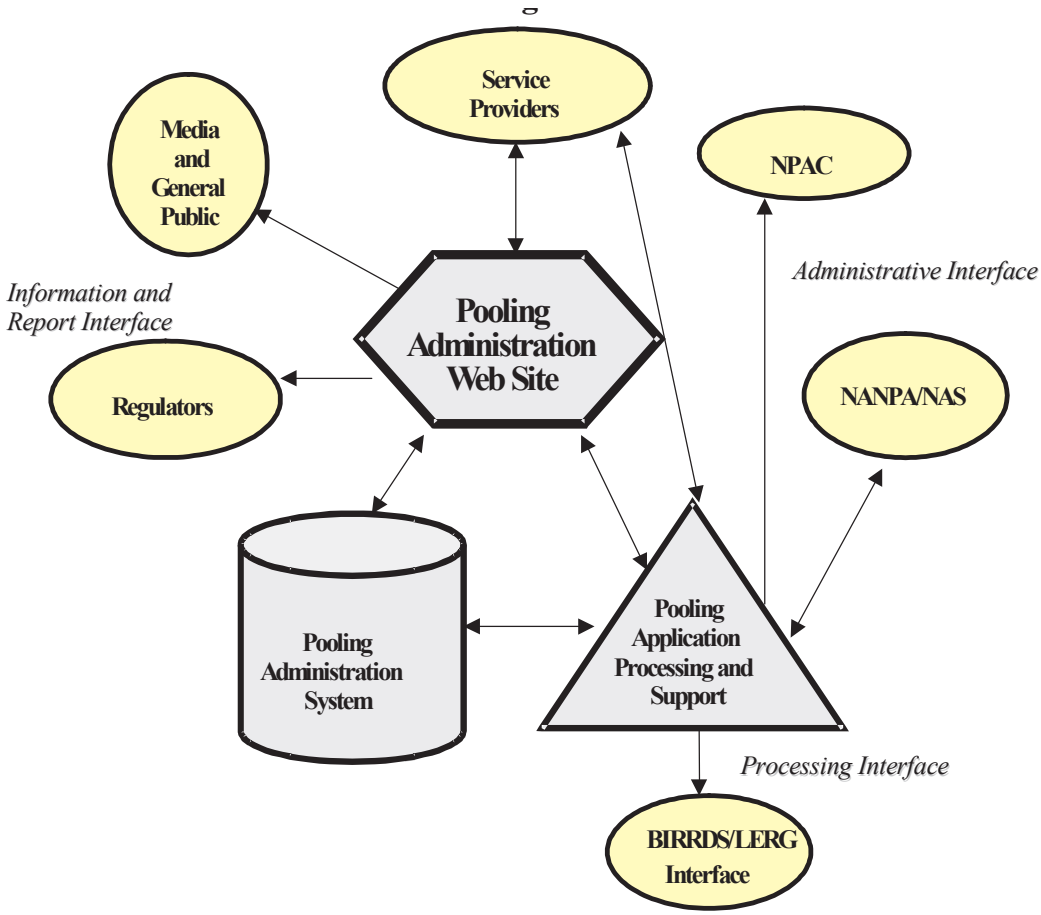
Information and data shared with the news media shall be factual and previously made known to the industry and regulators prior to disclosure.

Refer to Appendix C in this document for current contact information for the NANPA, NPAC and BIRRDS/LERG vendors.

The contractor shall provide the following constituency interfaces:

Constituent	**Interface**
Service providers	Web, email, facsimile
NPAC Vendor	Email, facsimile
NANPA	Email, facsimile, mechanized interface
BIRRDS/LERG Vendor	Web, dial-up, email
Regulatory agencies	Web, email, facsimile
Media & general public	Web, email, facsimile

More detailed discussion of the duties and interactions with other constituents can be found elsewhere in this document (Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousands-Block (NXX-X) Pooling Administration Guidelines)*



The arrows depict the Pooling Administrator's data flow arrangements.

Figure 1. Thousands-Block Pooling Interface Arrangements

2.20.1 Interface with NANPA

The interface will be between the PAS and NAS (See Section 3.1.5 for specific transitions this interface must provide). The interface will be used to forward service providers' NXX requests (and those made at the behest of the contractor) to NANPA, to receive NXX assignments consequently made by the NANPA, and to receive from NANPA the NRUF forecasting and utilization data for each pooled rate center based on information submitted by each pool participant.

2.20.2 Interface with the BIRRDS/LERG Vendor

The contractor shall have access to BIRRDS to perform its administrative functions. The BIRRDS' interface shall be web or dial-up modem access. The interface shall be used to enter data into the BIRRDS for pooled block assignments. (The LERG is the output product of data entered into BIRRDS.) This interface shall also be used to view NPA-XXX-X data, as needed. The contractor shall make arrangements directly with Telcordia for BIRRDS access and to also obtain the LERG.

2.20.3 Interface with the NPAC Vendor

The NPAC vendor interface shall be email, or any other interface which the contractor and NPAC Vendor shall agree upon and obtain approval on from the FCC. The interface shall be used to notify the NPAC vendor about blocks that are being assigned, and to receive acknowledgement from the NPAC vendor that the block assignment information has been received. It shall also be used to receive notification from the NPAC vendor that it has broadcast the block assignment data.

2.20.4 Interface with Service Providers

This interface shall have several forms. One interface shall be the same as the service provider/NANPA interface; it shall be used to receive NXX code requests and to send NXX assignments in a relay between the NANPA and a service provider.

Any or all of the following interfaces may also be necessary, depending on the particular service provider with which interaction is taking place and thus shall be made available: web, email, and facsimile. For example, these interfaces would be used to receive block requests and block donations from the service provider, to

send block assignments and requests for block recovery, to notify the service provider when it is to be a pooled NXX code holder or that a pooling related LERG update is completed.

See Figure 2 for the thousands-block application process.

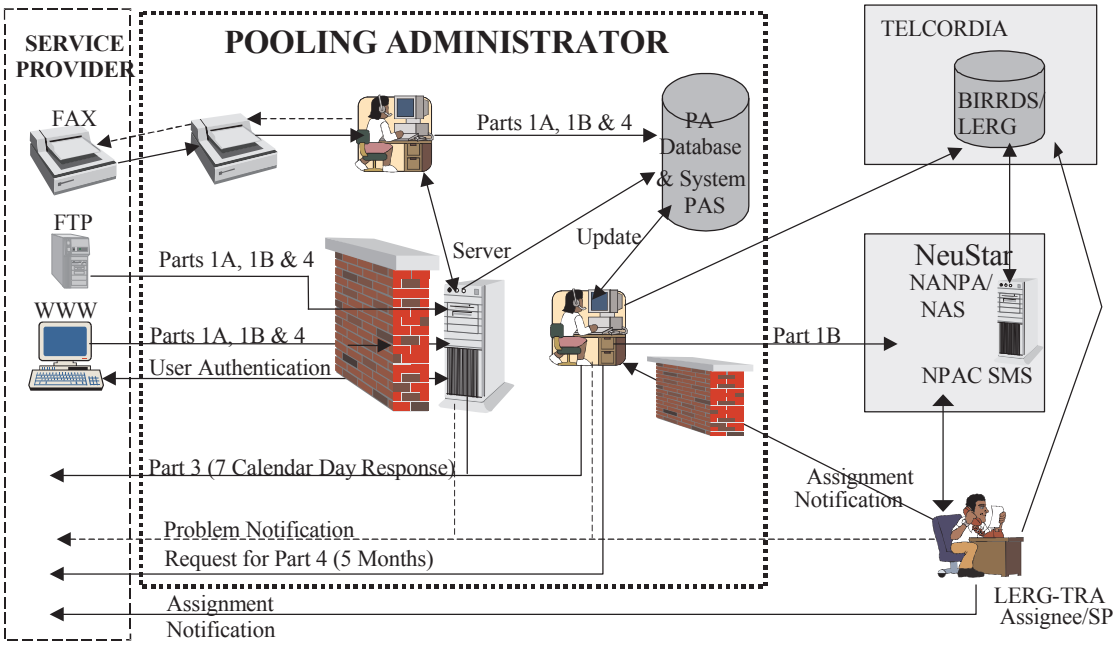


Figure 2. Thousands-Block Applications Process (Notational)

2.20.5 Interface with Regulatory Agencies

This interface shall be by web, email, voice, facsimile or U.S. mail. For example, the interface may be used to provide a regulator aggregated forecast and utilization data for a pooled area.

The contractor may also be called upon to testify in regulatory hearings. In these cases the contractor shall ensure that their testimony is specific to the scope and requirements of this contract.

2.20.6 Interface with the Media

The contractor shall prepare press releases and speak to the public in matters relating to thousands-block number pooling upon coordination with the FCC's Contracting Officer Representative (COR) (as defined in Section H). This shall include the creation and maintenance of a publicly available web site for this purpose. This requires that the contractor retain personnel with public relations

skills (e.g., the ability to explain complex number pooling issues to the media and the public consistent with industry positions on numbering issues).

2.21 Reports

The contractor shall provide a monthly report to the FCC on thousands-block pooling assignments. The report shall include for each rate center and NPA the number of assignments completed, the number of applications suspended in excess of seven (7) calendar days, the number of denials and the percentage of suspended applications.

The contractor shall provide semi-annual reports to the FCC and the NANPA on the status of each rate center inventory pool. These reports shall coincide with the NRUF reporting dates and shall contain sufficient forecast and utilization information for the FCC and the NANPA.

The contractor may also be called upon to produce aggregated NPA rate center pool status reports for various state and federal regulatory agencies.

2.21.1 Annual Report

The contractor shall provide an Annual Report that shall be published annually to report on the status of pooling and pooling administration. The annual report shall also be reviewed during the NANC annual performance review process.

The annual report shall contain at a minimum, but not be limited to:

- Brief Description of the PA
- Highlights/significant milestones reached during previous year
- Identification of existing and potential pooling areas
- Aggregated total by pool of the service providers participating in the pooled area
- Forecast results, as well as a review of forecasts vs. actual block activation in the past
- System and performance metrics
- Status of required transferable property
- Industry issue identification/feedback
- Volume of reports produced aggregated by regulatory agency, NANC, NANPA, and service providers
- Additional informational offerings.

The Annual Report shall also be made available on the PA web site.

2.21.2 Pooling Matrices Report

The contractor shall be required to complete a pooling matrices report that contains pooling information to be used in assessing the status of pooling by NPA/Rate Center. An illustration of such a matrix is included in Appendix D. This form and its content are subject to change and shall be completed by the contractor quarterly and forwarded to the FCC.

2.21.3 Report and Document Distribution

Requested information and reports for external distribution shall be distributed within three (3) business days after receipt of the request. The pooling administration system shall be capable of quick processing of raw data into report format to ensure timely disbursement.

2.22 Performance Measurements (Also see Required Performance Metrics in 5.0)

There are several ways that performance will be measured. Each derives input from different sources and, therefore, no single item should be considered of greater or lesser value than the others.

2.22.1 Assessment Period

On at least an annual basis, the FCC or its designee shall formally assess the performance of the contractor.

2.22.2 Remedial Action

The contractor shall be required to implement any remedial action to correct any identified performance problems within 30 calendar days.

2.22.3 Pooling Administration Quality Assurance (QA)

The performance monitoring process shall include, but not be limited to, internal, documented performance monitoring mechanisms to be developed and implemented by the contractor and made available to the industry through the FCC. The contractor's QA plan, required following contract award, shall follow the format, where applicable, of Appendix B, Reference 21, *IEEE Standard for Software Quality Assurance Plans*.

The contractor is required to have its representative(s) participate in a monthly call with the NANC or its designated oversight working group. The primary activities will

be to review (1) quality assurance performance monitoring metrics and measurements, (2) complaints, (3) new developments impacting the availability of resources (4) FCC and/or NANC reports formats and contents and (5) corrective action plans to resolve deficiencies in performance and/or complaints.

2.22.4 Contractor Performance Metrics

The following metrics are important to the industry and also ensure parity between requirements for the contractor and similar functions performed by other contractors for number administration.

2.22.4.1 Trouble Tickets/Outages

- Number Opened during the preceding month
- Number Closed during the preceding month
- Number under corrective action for over 30 calendar days.
- Number related to
    - System performance
    - Web site
    - Contractor ISP
- Total quantity of trouble tickets opened and closed for the month, with both the actual open time for each ticket and the average open time for all tickets.
- Quantity of System Outages Notifications to all participants and regulatory agencies

2.22.4.2 Change Order and PAS Notifications

- Changes initiated or modified Requiring Functional Impact Analysis
    - numbering resource plans administrative directives
    - assignment guidelines
    - other
- Written Notice of Changes Summarizing Potential Impact upon Service and Cost to be sent to Contracting Officer

2.22.4.3 Communications

- Phone Calls
    - Received
    - Not Returned by Next Business Day
- General inquiries or questions made outside the normal business hours Not Returned by Next Business Day

2.22.4.4 Forecasting data on a per-state basis

- Quantity of Rate Center Pools
- Quantity of NXXs Applied for by SPs for Pool Replenishment
- Quantity of Rate Centers with Less than a 6-month supply

2.22.4.5 Reporting

- Annual Report
- Quarterly Pooling matrices report
- Bi-annual Forecasted demand report.
- Rate center inventory pool report.
- Pooling matrices report.
- Monthly report to the FCC on thousands-block pooling assignments.
- Monthly report to the FCC on system performance.
- Monthly report to the FCC on staffing.
- Monthly report to the FCC on the number of ad hoc reports generated.

2.22.4.6 Application Processing on a monthly basis

- Total applications processed
- # of applications not processed in 7 calendar days
- # of block assignments made
- # of change requests to existing blocks
- # of requests to cancel
- # of block disconnect requests
- # of block requests denied
- # of blocks reclaimed
- # of block reservation requests

2.22.4.7 Reserved

2.22.4.8 Reserved

2.22.5 Events

Monitoring of contractor performance shall include performance of tasks in accordance with performance measurements established in this Requirements Document and any associated numbering resource assignment guidelines established by the INC and appropriate regulatory bodies.

2.22.6 Additional Input

The annual assessment process shall not preclude telecommunications industry participants from identifying performance problems to the contractor and the FCC as they occur, and from seeking resolution of such performance problems in an expeditious manner.

2.23 p-ANI Administration Requirements

The contractor shall serve as the Routing Number Authority (RNA) for pseudo Automatic Number Identification (p-ANI) codes used for routing emergency calls. A p-ANI code is a number, consisting of the same number of digits as Automatic Number Identification (ANI) that is not a North American Numbering Plan telephone directory number and may be used in place of an ANI to convey special meaning to the selective router, public safety answering point, and other elements of the 911 system. The contractor must perform the p-ANI administration function in accordance with Appendix B, Reference 3, *Industry Numbering Committee (INC) P-ANI Administration Guidelines.*

Section 3

Pooling System Requirements

3.1 Description

The contractor shall use and maintain the current PAS, which will be transitioned to the contractor. This system shall include appropriate security measures for confidential data and accessibility for all service providers to their own information through an appropriately secured mechanism. These security measures shall be described in the contractor's Security Plan.

The Pooling Administration system shall include:

- All thousand blocks contained in each industry inventory pool
- Block assignment and contamination status
- Whom Blocks are allocated to
- All rate centers per NPA
- Local and NPA specific dialing requirements
- Reclamation processing
- User Profiles and electronic signature verification
- Electronic application and document tracking.

3.1.1 Confidential Treatment

Per Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousand Block (NXX-X) Pooling Guidelines*, service provider specific data submitted to the contractor shall be treated as confidential.

Any data published by the contractor shall be aggregated for presentation.

3.1.2 Data Integrity

Furthermore, the contractor shall ensure that data/information shared publicly is factual in nature and findings and their underlying assumptions that are unexpected or significant are first reported to regulatory authorities and the NANC prior to public disclosure.

3.1.3 Automated Data Filing Capabilities

The contractor shall support legacy data filing protocols between service providers and the PA.

Except as noted, the pooling administration system shall offer a web interface and allow for automated data input for thousands-block/full NXX applications and other data needed for the processing of SP applications.

This automated capability shall permit service providers to forward pooled application data for the following forms from Appendix B**:** Reference 2, *INC TBPAG*

- Attachment 1 Part 1A General Application Information
- Attachment 2 Part 1B NPAC Block Holder Data
- Attachment 2a Part 2a Form 1 Thousands-Block (NXX-X) Assignment Request
- Attachment 3 Part 3 Pooling Administrator's Response/Confirmation
- Attachment 4 Part 4 Confirmation of NXX-X Block In Service
- Attachment 5 Part 5 Thousands-Block Reclamation Form
- Appendix 1 Thousands-Block Forecast Report
- Appendix 2 Thousands-Block Donation Form
- Appendix 3 Thousands-Block Months to Exhaust and Utilization Certification Worksheet - TN Level
- Appendix 4 Thousands-Block Months to Exhaust Certification Worksheet - 1000 Block Level
- Appendix 5 User Profile Application

- Appendix 6 Example of Pre-Planning Checklist with Required Fields Identified for Demonstration of Facilities Readiness for an Initial Block Request

3.1.4 Automated Data Output Capabilities

The contractor shall accommodate automated data output via File Transfer Protocol (FTP) to service providers when transmitting data from Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousands-Block (NXX-X) Pooling Administration Guidelines*, Attachment 3/Part 3, and other industry forms/data or reports.

The contractor shall ensure that the system is capable of the following items:

- Denied requests will generate a Part 3 with all of the information pertaining to the specific request listed and the reason for the denial in the remarks field of the Part 3.

- OCN names are current as published in the LERG. This will ensure that any changes due to merger/acquisition are reflected in the system automatically. service providers will not have to notify the PA of the changes.

- All request information is viewable on the screen when the service provider is submitting a request (e.g. fields should allow for all characters to be viewed on the working screen).

- Give service providers the option of requesting different effective dates on various blocks of a multiple block submission. This will help service providers when the Part 4s are due.

- For system generated emails on block submissions, include the PAS Tracking Number as part of the subject line. This will help service providers identify which request the email pertains to.

3.1.5 Automated System Interface with NANPA

The contractor shall maintain an automated system interface between the pooling administration system and the NANPA administration system.

The system interface shall, at a minimum, provide the following transactions:

- Non-pooled NXXs in pooling areas
- LRN/Code Holder
- NXX Voluntary Return/Abandoned Code Reassignment

- Part 1
- Part 3
- Part 4
- NANPA NRUF Forecast On File
- Red Light Rule daily listing
- Service provider status and eligibility to be assigned resources
- LRN Forecast
- Full NXX applications (see Section 3.1.3, Reference 3 above),
- Receipt by the PA of the NANPA Part 3 for full NXX assignments in pooling,
- Service provider forecast information provided to NANPA via the NRUF process,

3.1.6 Alternative Data Capabilities

The contractor shall support fax and email submissions related to thousands-block documentation (e.g., applications, forecast reports, etc.).

3.2 Characteristics

The pooling administration system shall utilize electronic commerce type functionality.

The system shall allow efficient user interaction and file transfer.

3.3 System Reliability, Availability, Capacity, and Performance

The pooling administration system shall possess high reliability and allow for economical and efficient system expansion.

The pooling system shall, at a minimum, adhere to the following availability and reliability requirements:

- Available 24 hours, seven (7) days a week
- Availability shall meet a minimum requirement of 99.9% of scheduled up-time
- Unscheduled maintenance downtime per calendar year interval shall be less than nine (9) hours
- The mean time to repair (MTTR) for all unscheduled downtime per any 12-month interval shall be less than one (1) hour during core business hours and four (4) hours for non-core business hours
- Scheduled maintenance downtime per 12-month interval shall be less than 24 hours.

The pooling administration system design shall, at a minimum, provide:

- Hardware fault tolerance that shall be transparent to users
- Duplexing of all major hardware components for continuous operation in the event of system hardware failure including loss of AC power up to eight (8) hours
- If the system becomes unavailable for normal operations due to any reason, including both scheduled and nonscheduled maintenance, service providers shall be notified of the system unavailability. Whenever possible, the notification shall be made via email. When this is not possible, the contractor shall notify users via website notification.

3.3.1 Reserved

3.4 System Location

The physical location of the pooling administration system facility shall be at the discretion of the contractor. The only limitation is that the facility shall be within the continental United States (CONUS).

3.5 System Facility

3.5.1 Facility Characteristics

If the pooling administration system is located within a larger facility, space allocated to the system shall have the following characteristics:

- Be dedicated entirely for pooling use
- Be a distinguishable area, separate from other parts of the facility by use of secure access points
- Be contiguous space so that all pooling administration system personnel are physically located within the same secure area
- Provide sufficient backup power to maintain operation through electrical outages of at least eight (8) hours.

3.5.2 Facility Planning

The facility specification shall include square footage and work space layouts for each pooling administration system staff member.

3.5.3 Reserved

3.6 System Maintenance

The details of a proposed system maintenance schedule will be provided in the contractor's Maintenance Plan.

3.7 System Security

The contractor shall maintain and enforce physical security procedures that conform to the requirement to maintain confidential and proprietary information.
The details will be provided in the contractor's Security Plan.

3.8 System Inspection

The FCC, with or without notice to the contractor, shall have the right to make visits to the pooling system to review safety/security requirements.

If any safety and physical security procedures related to the pooling administration system do not comply with those specified, the contractor shall correct such noncompliance within 10 business days. Failure to correct such deficiencies may result in termination of the contract.

The contractor shall: (i) implement corrective measures, and (ii) give notice of such implementation to the FCC and the FCC may make one (1) or more follow-up visits to the affected data center, as necessary, to confirm the deficiency has been rectified. The FCC's rights under this paragraph shall not in any way limit the FCC's to visit the data center for reasons other than a safety/security visit.

The system inspection shall include, but not be limited to, sub-contractor facilities, telecommuting employees of the contractor or subcontractor(s), contractor or subcontractor maintenance organizations or individuals on traveling status with access to the contractor's pooling system.

3.9 Web Site

The pooling administration system shall contain a web support design that simulates the design of the user profile, block application and forecast data reporting forms contained in Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousands-Block (NXX-X) Pooling Administration Guidelines*.

The web site shall contain help information consisting of, at a minimum, the following: application-specific help information, pooling Frequently Asked Questions (FAQs), and an email link to the contractor as well as contact information (including telephone numbers) for all appropriate staff members.

3.9.1 Availability and Access

The web site shall be available 24 hours per day, seven (7) days a week.
The web site shall be able to support up to 600 simultaneous users with an average holding time of 0.5 hours.

3.9.2 System Responsiveness

Rapid response shall be required when accessing the web site. The contractor shall provide a system such that a 56 KBPS modem-equipped user will be able to view the complete home page in less than eight (8) seconds 95% of the time over any 12 month period.

If a user is experiencing greater than 12 seconds to view the complete home page, the contractor system shall have the capability to sense this condition. The contractor shall open a trouble ticket to investigate whether the problem is between the web site and the Internet Service Provider (ISP) or is in the pooling system. If the user reports to the help desk a problem with accessing information on either the web site or the pooling system, and the contractor determines that a problem exists, the contractor shall open a trouble ticket to resolve the issue.

3.9.3 Out-of-Service

The pooling administration system and the associated web site shall be operational 99.9% of the time over any calendar year, excluding scheduled maintenance. The contractor's inability to deliver services to this level shall be deemed "out of service." This figure excludes problems due to the customer's network or equipment.

If any "out of service" condition exists cumulatively for two (2) hours (or more) in any 24-hour period, as evidenced by a user trouble report to the contractor, the contractor shall provide an out-of-service credit to the FCC in an amount equal to $1/30^{th}$ of the previous month's charge for the month in which the outage occurred.

All scheduled maintenance activities shall occur during non-core business hours, shall require prior approval of the FCC, and shall not exceed a four (4)-hour period unless approved by the FCC.

The contractor system shall be capable of pinging its ISP(s) every five (5) seconds to confirm that the round-trip latency is less than or equal to 10 milliseconds. If the latency is greater than 10 milliseconds, the connectivity between the web site and ISP(s) shall be considered out of service and a trouble ticket opened.

3.9.4 Out-of-Service Notification

The contractor shall be the point of contact for system recovery. The contractor shall be capable of distributing system status and outage reports to all registered users.

All scheduled maintenance activities shall be approved in advance by the FCC prior to commencing the activity. Once the FCC has approved the scheduled maintenance activity, the contractor shall provide notification to all registered users as to when the activity will begin and end, as well as the impact on the users. In addition, the contractor shall notify and report to all pool participants and regulatory agencies of an unscheduled system shutdown or failure.

3.9.5 Updates

The web site shall contain current information. The rate center inventory pool information should have no greater delay than 15 minutes between assignments and web site posting of updates.

3.9.6 Web Site Help

The pooling administration web site shall contain help screens consisting of, at a minimum, the following: pooling FAQs, search capability, an email link, and contact telephone number(s) for the help desk, voice and facsimile.

3.9.7 Support and Maintenance

The contractor shall maintain a web site with application-specific, help information that is constantly being improved, added to, and updated. This knowledge base and other pooling FAQs content for each web application shall be updated as needed.

3.10 Reserved

3.11 System Report Administration

The pooling administration system shall be capable of generating and distributing reports to all requesting users who are entitled to receive reports. The full set of reports will be described in the contractor's Management Reporting Plan.

3.11.1 System Reports

The system shall be capable of producing the following reports with flexible search functionality (i.e., independently by OCN, State, NPA or any combination of these data elements):

- Donated Block Report - detailing what a service provider has donated to pooling. Details will include NPA-NXX-X, status, rate center, service provider name, contaminated? (Y or N), Active and Portable? (Y or N), AOCN, Switch CLLI and the effective date of the donation.

- Part 1A Report – detailing block submissions including state, PAS Tracking Number, type of request, OCN, submission date, Part 3 issue date, disposition, and the NPA-NXX-X assigned.

- Part 4 Submitted Report – detailing what blocks (NPA-NXX-X) have been put in service by an SP. The details will include the PAS Tracking Number, the NPA-NXX-X assigned, disposition, the effective date, the in service date, OCN and rate center.

- Assignments Needing Part 4 Report – detailing what blocks (NPA-NXX-X) have not been put into service by service provider. The details will include the PAS Tracking Number, the NPA-NXX-X assigned, OCN, Part 4 due date, effective date.

3.11.2 System Report Validation

The system shall validate the accuracy of report contents prior to any distribution.

3.11.3 Help Desk

The contractor shall maintain a help desk that is accessible during the PA's regularly scheduled business hours.

The Help Desk shall be available to assist users with the input and the interpretation of system-generated reports.

The contractor shall:

- Report problems with the web site, facsimile, voice mail or e-mail; for each problem the Help Desk will open a trouble ticket.
- Report other problems that while not related to the web site, facsimile, voice mail or email, are likely to be visible and impacting to multiple users.
- Receive and transmit trouble tickets concerning communications problems with other vendors.

- Require that each trouble ticket be time stamped with minute accuracy and stored for recall for up to two (2) years.
- Require that once a trouble ticket is closed, the originator of the trouble ticket shall be notified of disposition of the problem.
- Summarize the quantity and type of trouble tickets opened and closed during the year in the annual report.
- Require the help desk to assist customers to fill out applications or reports or to gain access to other authorized FCC or industry information.
- Require that if out-of-service conditions exists, the time stamped on the trouble ticket shall be used as the time for the start of the out-of-service period; when the out-of-service condition has been cleared and the originator of the trouble ticket notified, the time stamped on the last update of the trouble ticket shall be used as the end of the out-of-service period.
- The contractor shall provide and maintain a help desk with a toll free phone number to assist with interpretation of any system problem or inquiries related to National Pooling.
- The contractor shall provide and maintain a help desk with a separate toll free phone number to assist with interpretation of any system problem or inquiries related to p-ANI.

3.11.4 Report Distribution

Reports generated by the pooling administration system shall be capable of being distributed and updated in a timely manner using an electronic mechanism so that distribution and any necessary notifications are automatic.

3.12 System Testing

The pooling administration system shall participate in any pooling test deemed appropriate by the FCC to ensure the efficacy of the national pooling guidelines, any standards that are referenced or cited in any of the documents in Section 1.2 of this document or any standards that are offered in contractor's proposal. For example: Internet Engineering Task Force (IETF) interface standards for IP, or numbering plan standards, like ITU E.164.

The testing will ensure the efficacy of the uniform pooling resource guidelines, interfaces and standards. The contractor shall develop and implement a System Acceptance Plan following the format, where applicable, of Appendix B, Reference 23, *IEEE Standard for Software Test Documentation*.

3.12.1 System Test Plan

Prior to implementation of a modification to the current pooling administration system or a full pooling administration system implementation, the contractor shall provide testing of the pooling administration system in anticipation of the system acceptance test. This testing shall contain a timeline and specific pooling administration system elements to be tested.

3.12.2 System Test Results

Upon completion of the pooling administration system acceptance test, the contractor shall inform the FCC of the results.

3.13 System Acceptance

Final approval of the system shall be dependent on successful execution of the System Acceptance Plan, which shall include a System Test Plan. The System Acceptance Plan shall be successfully completed within 90 calendar days of the contract award.

3.14 System Processing Acknowledgement

The pooling administration system shall be capable of generating an acknowledgement to the submitter with a 56 KBPS modem within eight (8) seconds 95% of the time over any 12 month period when a block application or other document and report has been submitted.

3.15 User Logon System

Upon receipt of an approved request form, the system shall be able to support access to certain pooling administration system data with a unique logon ID and password.

3.15.1 Logon System Access

Formal access shall be initiated upon receipt of a completed logon ID request form having the proper signature approvals from the requesting organization.

3.15.2 Logon System Approval

After access approval, the contractor shall assign a unique logon ID and password to the user.

3.15.3 Logon System Security Level

The user's security requirement sets the correct level of record access and system capabilities. For forms and reports requiring an applicant signature, a valid logon ID and password shall be considered tantamount to an applicant signature. (For facsimile submissions, actual signed documents must be submitted in parallel by U.S. mail.)

3.15.4 Reserved

3.15.5 Logon System Problems

Users experiencing problems in obtaining a logon ID shall contact the contractor for resolution. The contractor shall attempt to resolve all problems in real time.

3.15.6 User Access Permission Classes

The contractor, using the pooling administration system, shall be responsible for assigning new users the appropriate security permission class. The contractor shall exercise appropriate control over access to all records, and ensure that users are only allowed access to the appropriate data.

A system that establishes various classes of user access shall be developed by the contractor.

3.15.7 User Functionality

An authorized user shall be able to invoke, at a minimum, the following functionality to query the data contained in and data submitted to the pooling administration system:

- Rate center pool inventory data - Users shall be able to query data by rate center only, NPA only, or both rate center and NPA. These data queries shall allow the user to specify assigned blocks only, available blocks only, or both assigned and available blocks.
- Block applications - Forms shall be available. Users shall be permitted to save partially completed applications, and withdraw pending applications, which will be accessible during future system log-ins.
- Block reservations - Users shall be able to reserve block(s) pending regulatory approval of "safety valve" requests, and withdraw pending applications.
- Previously filed application materials pertaining to the specific user - Users shall have the ability to modify a pending request, provided the PA has not starting processing the request.

- System email responses to application requests shall clearly identify the response, and not contain generic “subject lines”.
- User profiles shall provide the ability for users to specify “carbon copies” on system responses to multiple users.
- Users shall be able to retrieve data on a read only basis, but shall have the ability to download query report data to Excel spreadsheets.

3.15.8 Reserved

3.16 Unauthorized System Access

In the event contractor becomes aware of an unauthorized access to the pooling administration system, or user data, the contractor shall immediately: (i) notify the FCC and the applicable user(s) by email; (ii) investigate the unauthorized access; and (iii) subject to reasonable access, security, and confidentiality requirements, provide the FCC, users, and their respective designees with reasonable access to all resources and information in the contractor’s possession as may be necessary to investigate the unauthorized access. The FCC shall have the right to conduct and control any investigation relating to unauthorized access as it determines is appropriate.

3.16.1 Data Security

Complete information describing the security mechanisms used to prevent unauthorized access to its computers and telecommunications equipment, including internal policies, procedures, training, hardware and software, etc., will be furnished in the contractor’s Security Plan.

3.17 System Disaster Recovery

A disaster recovery process shall be developed to restore the pooling administration system within two (2) business days.

A detailed Disaster/Continuity of Operations Plan, following the format, where applicable, of Appendix B, Reference 22, *NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs,* is required following contract award.

3.17.1 Recovery Costs

In the event of a disaster, the contractor shall cover all costs associated with rebuilding or recovering the applications systems, records, and related information that existed prior to the disaster.

3.17.2 System Backup

Backup files shall be stored off site and generated at least daily. Files shall be retained on line for two (2) years and archived for five (5) years.

3.17.3 System Outage Notification

The contractor shall notify all participants and regulatory agencies of all system outages and system changes that directly affect the support of pooling administration functions.

3.18 Non-Performance

Within 90 days of contract award, the contractor shall ensure that the pooling system will be compliant with the System Implementation Plan and System Documentation Plan, industry guidelines, and contractor duties enumerated herein, and other industry/regulatory documents.

3.18.1 Final Acceptance

Final acceptance of the system shall be dependent on successful execution of the System Acceptance Plan.

3.18.2 Reserved

3.18.3 Reserved

3.19 System Documentation

The Contractor shall, within 90 calendar days of the contract award, according to the System Documentation Plan, provide the FCC Contracting Officer for approval with copies of:

User documentation consistent with Appendix B, Reference 20, *IEEE Standard for Software User Documentation.*

System documentation in sufficient detail to guide normal operations, system and application software upgrades, application modifications, and host ports.

3.20 Pooling System and Equipment Transfer to Successor

The contractor shall transfer in the case of termination or at the expiration of the term of administration to the FCC or designee, all hardware and software used in conjunction with the pooling administration system. This means that everything transfers, including all items attached to the pooling administration system.

Any other equipment or contracts associated with the pooling administration day-to-day operation shall transfer. This shall include but is not limited to:

- The system and all its supporting documentation
- All software and intellectual property
- All hardware
- Computers and related equipment
- Other peripheral devices
- All pooling records both current and stored.
- Also see *Transition Plan.*

3.20.1 Transfer Efficiency

The transfer of such physical property shall be performed in a manner that shall ensure an efficient and orderly transition of the pooling administration system and associated equipment to a successor's environment in a fully operational state.

3.20.2 Reserved

3.20.3 Technical Support

After the period provided in the services continuity clause in section H (52.237-3), if requested, the contractor shall provide at least 15 working days, but up to 45 working days over a six (6)-month period, of technical support to ensure a smooth transition of the system.

3.20.4 Documentation

The contractor shall provide the FCC with copies of all documentation specified in the System Documentation Plan.

3.20.5 Transition Plan

Prior to contract termination and at the written request of the Contracting Officer, the contractor shall provide a detailed plan for an efficient and orderly transition. This transition plan shall follow the format, as applicable, of Appendix B, Reference 24, *Software Transition Plan (STrP)*. The Transition Plan shall be submitted within 90 days of receipt of request. The Transition plan is a 90-day plan with a possible 90-day extension. It is due no later than 180 days prior to the contract end.

3.20.6 Reserved

3.20.7 System and Equipment Ownership

The system and equipment shall transfer with lien-free title to the FCC or the FCC's designee, without charge.

3.21 System and Equipment Inventory

Inventory data (hardware model, serial numbers and descriptions) on equipment shall be reported as part of the contractor's annual reporting requirements, as well as any upgrades or replacements, including the license numbers of any Commercial Off-the-Shelf (COTS) software.

3.22 Reserved

Section 4

Contract Data Requirements List (CDRL) (Deliverables) - All CDRLs shall be approved by the FCC.

4.1 Reserved

4.2 Security Plan

The contractor shall furnish a Security Plan within 45 calendar days of contract award per Sections 3.1, 3.7, and 3.16.1.

4.3 System Documentation Plan

The contractor shall furnish a System Documentation Plan within 60 calendar days of contract award per Section 3.19.

4.4 Disaster/Continuity of Operations Plan

The contractor shall furnish a Disaster/Continuity of Operations Plan within 60 calendar days of contract award per Section 3.17.

4.5 Statistical Forecasting Plan

The contractor shall furnish a Forecasting Plan within 60 calendar days of contract award per Section 2.17.3.

4.6 Management Reporting Plan

The contractor shall furnish a Management Reporting Plan within 60 calendar days of contract award. Reports are required annually, semi-annually, quarterly, and monthly per Section 3.11. There are also "by request" reporting requirements per Section 2.21.2.

4.6.1 Annual

The contractor shall provide an Annual Report per Section 2.21.1.

4.6.2 Semi-Annual

4.6.2.1 Forecasted Demand
The contractor shall provide a forecasted demand report per Section 2.17.1.

4.6.2.2 Rate Center Inventory Pool Status
The contractor shall provide a rate center inventory pool report per Section 2.16.5.

4.6.3 Quarterly

4.6.3.1 Pooling Matrices

The contractor shall provide a pooling matrices report per Section 2.21.2.

4.6.4 Monthly

4.6.4.1 Thousands-Block Pooling

The contractor shall provide a monthly report to the FCC on thousands-block pooling assignments per Section 2.21.

4.6.4.2 System Performance

The contractor shall provide a monthly report to the FCC on system performance per Section 2.22.

4.6.4.3 Staffing

The contractor shall provide a monthly report to the FCC on staffing per Section 2.3.

4.6.5 By Request

The contractor shall, from time to time, be requested to provide ad hoc reports per Section 2.21.3.

4.7 System Acceptance Plan

The contractor shall furnish a System Acceptance Plan within 30 calendar days of contract award per Section 3.12.

4.8 QA Plan

The contractor shall furnish a QA Plan within 120 calendar days of contract award per Section 2.22.3.

4.9 Transition Plan

The contractor shall furnish a Transition Plan within 180 calendar days of contract termination per Section 3.20.5. The transition plan is a 90-day plan with a possible 90-day extension. It is due no later than 180 days prior to the contract end.

4.10 Maintenance Plan

The contractor shall furnish a Maintenance Plan within 150 calendar days of contract award per Section 3.6.

5.0 REQUIRED PERFORMANCE METRICS

REQUIRED PERFORMANCE METRICS (RPM) TABLE

Required Service	Performance Standards	Acceptable Quality Levels	Method Of Surveillance	Incentive (Negative) (Impact on Contractor Payments)
Process Applications (See PWS 2.20.4,2.22.4.6)	Applications processed within 7 calendar days	99%	Reports, customer, regulatory &/or industry complaints, inspections, and/or evaluations	Invoice deduction of $500 for each application processed late
Answer calls (See PWS 2.22.4.3)	Calls answered within 1 business day	100%	Industry evaluations and reports	Invoice deduction of $500 for each unanswered call
Submission of Deliverables (See PWS 4.2, 4.3, 4.4, 4.5, 4.6, 4.6.1, 4.6.2.1, 4.6.2.2, 4.6.3.1, 4.7, 4.8, 4.9, 4.10)	Deliverables submitted no later than the due dates	100%	Web site review; files review; customer, regulatory &/or industry complaints, inspections, and/or evaluations	Invoice deduction of $1,000 per day for each late report
Submission of Deliverables (See PWS 4.6.4.1, 4.6.4.2,	Deliverables submitted no later than the due dates	100%	Web site review; files review; customer, regulatory &/or industry complaints, inspections, and/or	Invoice deduction of $500 per day for each late report

4.6.4.3, 4.6.5,)			evaluations	
PAS Availability (See PWS 3.3)	Pooling Administration System is available	99.9%	Web site review, files review, complaints (customer, regulatory & industry), inspections	Invoice deduction of $1,000 per day of system unavailability
Maintenance (See PWS 3.3)	Unscheduled maintenance of the PAS is less than 9 hours in any 12 month period	100%	Web site review, files review, complaints (customer, regulatory & industry), inspections	Invoice deduction of 1% of price of contract
Maintenance (See PWS 3.3)	Scheduled maintenance of the PAS is less than 24 hours in any 12 month period	100%	Web site review, files review, complaints (customer, regulatory & industry), inspections	Invoice deduction of 1% of price of contract

Appendix A

Acronyms, Abbreviations and Definitions

Allocation Date	The allocation date is the date established by the pooling administrator (PA) when the PA officially makes the block assignment to a service provider (SP).
AOCN	Administrative Operating Company Number
Auditor	An auditor is a FCC-designated auditor.
ATIS	Alliance for Telecommunications Industry Solutions
Billing	The cost of pooling administration is a shared cost that is billed to all pooling and non-pooling service providers pursuant to the FCC's Number Optimization Order, FCC 00-104, dated March 31, 2000.
BIRRDS	Business Integrated Rating and Routing Database System
Block	A range of 1000 TNs within the NPA-NXX, beginning with a station of n000, and ending with n999, where n is a value between 0 and 9.
Block Donation Date	The deadline for SPs to donate their thousands-block(s) (Appendix B, Reference 1, FCC 00-014.)
Block Holder	The recipient service provider of a 1K Block from the code holder. Also defined as the NPA-NXX-X holder in the LERG.
CFR	Code of Federal Regulations
CO	Central Office
CO Codes	The sub-NPA code in a TN, i.e., digits D-E-F of a 10-digit NANP Area address. Central office codes are in the form "NXX", where N is a number from 2 to 9 and X is a number from 0 to 9. Central office codes may also be referred to as "NXX codes" (Appendix B, Reference 25, 47 C.F.R. § 52.7(c)).
CONUS	Continental United States
COTS	Commercial Off–The-Shelf
CDRL	Contract Data Requirements List
Code Holder	The code holder is the Code Holder of the NPA-NXX.
Effective Date	The date that is considered to be the "ownership switchover" date for the 1K Block from the code holder (NPA-NXX owning SP) to the block holder (NPA-NXX-X owning SP). This is the date published in the LERG, and is also used by the pooling administrator and the NPAC.
FAQ	Frequently Asked Question
FCC	Federal Communications Commission
FTP	File Transfer Protocol
IETF	Internet Engineering Task Force
INC	The Industry Numbering Committee (INC) is an industry forum operating under the auspices of the Alliance for Telecommunications Industry Solutions (ATIS). Their mission is to

	provide an open forum to address and resolve industry-wide issues associated with the planning, administration, allocation, assignment and use of numbering resources and related dialing considerations for public telecommunications within the NANP area.
ISP	Internet Service Provider
ITU	International Telecommunications Union
Knowledge base	A database provided on a support web site programmed with application-specific, self-help information that is constantly being improved, added-to, and updated based on information gathered from use of the application.
LERG	Telcordia LERG Routing Guide
LLC	Limited Liability Corporation
LNP	Local Number Portability
MSA	Metropolitan Statistical Area
MTE	Months to Exhaust
MTTR	Mean Time To Repair
NANC	The North America Numbering Council (NANC) is a Federal Advisory Committee established pursuant to the United States Federal Advisory Committee Act, 5 U.S.C., App. 2 (1988) (FACA). The NANC was established to advise the FCC and other NANP member countries on issues related to NANP administration, and to advise the Commission on local number portability administration issues in the United States.
NANP	North American Numbering Plan (NANP) is the basic numbering scheme for the public switched telecommunications networks in the following 19 countries (formerly known as World Zone 1): Anguilla, Antigua & Barbuda, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, Turks & Caicos Islands, and the United States (and it's territories). The format of the NANP is in compliance with ITU standards as detailed in Recommendation E.164.
NANPA	North American Numbering Plan Administration
NPA	Number Plan Area
NPAC	Number Portability Administration Center
NPA-NXX-X	A range of 1000 pooled TNs within the NPA-NXX, beginning with a station of n000, and ending with n999, where n is a value between 0 and 9.
NXX	Network Numbering Exchange
NRUF	Numbering Resource Utilization and Forecast
OCN	Operating Company Number
PA	Pooling Administrator
p-ANI	Pseudo Automatic Number Identification
PAS	Pooling Administration System
PUC	Public Utility Commission

PWS	Performance Work Statement (which is also the Technical Requirements Document)
QA	Quality Assurance
Rate Center	Denotes the smallest geographic area used to distinguish rate boundaries.
Reassignment	The process of reestablishing the assignment of a thousands-block, which was previously assigned to another SP or to a new SP.
RFP	Request for Proposal
SMS	Service Management System
Subcontractor	An organization providing services to the contractor.
Term of Administration	The contractor's contract shall be for a term of five (5) years.
TNs	Telephone Numbers
TRA	Traffic Routing Administration, Telcordia

Appendix B

Reference Documentation, Technical Standards and Regulatory Orders

1. Federal Communications Commission: *In the Matter of Number Resource Optimization, Report and Order and Further Notice of Proposed Rule Making,* CC Docket 99-200, FCC 00-104 (March 31, 2000). Available at: http://www.fcc.gov/searchtools.html.

2. Industry Numbering Committee (INC): *Thousand Block (NXX-X) Pooling Administration Guidelines*, ATIS-0300066 (use latest version at time of RFP), by the Alliance for Telecommunications Industry Solutions (ATIS) INC. Available at: http://www.atis.org/inc/incguides.asp.

3. Industry Numbering Committee (INC): *P-ANI Administration Guidelines*, ATIS-0300089, (September 30, 2011 or use latest version at time of RFP), by the Alliance for Telecommunications Industry Solutions (ATIS) INC. Available at: http://www.atis.org/inc/incguides.asp.

4. Committee T1: Thousand Block Number Pooling Using Number Portability, Technical Requirements No. 4, July 1999. Prepared by T1S1.6 Working Group on Number Portability a working group of Committee T1- Telecommunications, sponsored by ATIS. http://www.atis.org/docstore/product.aspx?id=8437

5. Reserved.

6. Industry Numbering Committee (INC): *North American Numbering Plan Numbering Resource Utilization/Forecast Reporting (NRUF) Guidelines*, ATIS-0300068,
(September 30, 2011 or use latest version at time of RFP), by Alliance for Telecommunications Industry Solutions (ATIS) INC. Available at: http://www.atis.org/inc/incguides.asp.

7. Industry Numbering Committee (INC): *Central Office Code (NXX) Assignment Guidelines*, ATIS-0300051 (January 20, 2012 or use latest version at time of RFP) by the Alliance for Telecommunications Industry Solutions (ATIS) INC . Available at: http://www.atis.org/inc/incguides.asp.

8. Reserved

9. Reserved

10. *Responses to Questions in the Numbering Resource Optimization Proceeding,* CC Docket 99-200, DA 00-1549 (rel. July 11, 2000). Available at: http://www.fcc.gov/ccb/Nanc/nancpubn.html.

11. Letter Agreement 1, FCC and Neustar, Inc. (Dated July 18, 2000)

12. Reserved.

13. *Administration of the North American Numbering Plan, Third Report and Order*, CC Docket 92-237 (re. Oct. 9, 1997). Available at: http://www.fcc.gov/searchtools.html.

14. Reserved

15. Number Portability Switching Systems (Report No.T1.TRQ.02-1999). http://www.atis.org/docstore/product.aspx?id=8436

16. *FCC Cyber Security Program*.

17. North American Numbering Council, Functional Requirements Specifications: Number Portability Administration Center (NPAC), Service Management System (SMS), Version 3.4 May 31, 2011. Available at: https://www.npac.com/the-npac/software-releases

18. Reserved.

19. Reserved.

20. IEEE Standards Board, *IEEE Standard for Software User Documentation*, February 4, 2002. Available at: http://standards.ieee.org/catalog/olis/index.html.

21. IEEE-SA Standards Board, *IEEE Standard for Software Quality Assurance Plans*, IEEE Std 730-2002, April 18, 2003. Available at: http://standards.ieee.org/catalog/olis/index.html.

22. National Fire Protection Association, *NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs,* 2004 Edition. Available at: http://www.nfpa.org/.

23. IEEE-SA Standards Board, *IEEE Standard for Software Test Documentation,* IEEE Std 829-1998, February 4, 2002. Available at: http://standards.ieee.org/catalog/olis/index.html.

24. Space and Naval Warfare Systems Command (SPAWAR), *Software Transition Plan (STrP),* DID- IPSC-81429A, 10 Jan 2000. Available at: http://www.ihsengineering.com/.

25. Code of Federal Regulations, Title 47, Volume 3, Parts 40-69, Telecommunications. Available at: http://www.access.gpo.gov/nara/cfr/cfr-table-search.html.

26. NPAC, Methods and Procedures for National Number Pooling, Prepared for Neustar, Inc. NPAC, Version 3.4, May 31, 2011. Available at:

http://www.npac.com (access and sign in to the NPAC secured website required).

27. Federal Communications Commission, *In the Matter of Numbering Resource Optimization, Petition for Declaratory Ruling and Request For Expedited Action on the July 15, 1997 Order of the Pennsylvania Public Utility Commission Regarding Area Codes 412, 610, 215, and 717, Second Report and Order, Order on Reconsideration in CC Docket No. 96-98 and CC Docket No. 99-200, and Second Further Notice of Proposed Rulemaking*, CC

Docket No. 99-200, FCC 00-429 (Adopted December 7, 2000). Available at: http://www.fcc.gov/searchtools.html.

Appendix C

Interface Contact Information

NANPA
John Manning
c/o Neustar, Inc.
21575 Ridgetop Circle
Sterling, VA 20166

Phone: 571-434-5770
Fax: 571-434-5502

NPAC
Neustar, Inc.
21575 Ridgetop Circle
Sterling, VA 20166

Phone: 571-434-5434
Fax: 571-434-5401

BIRRDS/LERG
Telcordia Routing Administration (TRA)
One Telcordia Drive
Room 4A738
Piscataway, NJ 08854-41567

Phone: 732-699-6700

Contact information is included to facilitate responses to this document by all potential contractors and is not intended to endorse the particular organizations listed.

Appendix D

Example Pooling Summary Report

Example: Pooling Summary Report
State: _____

Date of Report

Type of Information	NPA:	RATE CENTER
A. NPA Profile		
Block(s) Available for Assignment		
Block(s) Assigned		
Average blocks assigned per month in last 6 months		
Jeopardy condition?		
Current rationing?		
NPA relief plan?		
Quantity of currently LNP capable carriers (participating)		
Quantity of carriers with future LNP capability (non-participating)		
Quantity of carriers with no LNP mandated (non-participating)		
Quantity of rate centers		
Top 100 MSA?		
Other distinguishing characteristics?		
Projected Demand for Blocks		