Section J: Thousands-Block Pooling Contractor

Technical Requirements

July 27, 2005

Table of Contents

Section	Page
Introduction	1
1.1 Background	1
1.2 Purpose	2
1.3 Scope	2
1.4 Attributes	3
1.6 Responsibilities	3
1.6.1 Management 1.6.2 Performance	4 4
1.7 Interaction	4
1.7.1 Relationships1.7.2 Assets	4 4
1.8 Policy Objectives	4
1.8.1 Thousands-Block - NANP Context	4
Pooling Administration Requirements	6
2.1 Hours of Operation	6
2.1.1 Contact	6
2.1.2 Responsiveness	6
2.1.3 Holidays	7
2.2 Organization	7
2.3 Staffing	7
2.3.1 Availability	7
2.3.2 Core Hours	7
2.3.3 Physical Location	7
2.3.4 Reserved 2.3.5 Travel	8
2.3.6 Experience	8
2.5.0 Experience	0

v

2.3.7 Conflicts	8
2.4 Subcontractors	8
2.4.1 Reserved2.4.2 Responsibilities of the Contractor2.4.3 Reserved2.4.4 Substitution	8 8 9 9
2.5 Environment	9
2.5.1 Regulatory	9
2.5.2 Federal Advisory Committee	9
2.5.3 Industry Activities	10
2.5.4 Modification of Guidelines	10
2.8 Requests for Pooling Information	11
2.8.1 Referrals	11
2.9 Dispute Resolution	12
 2.9.1 Responsibilities 2.9.2 Sources of Dispute 2.9.3 Involvement 2.9.4 Process 2.9.5 Corrective Action 	12 12 12 12 12 12
2.10 Audits	12
 2.10.1 Audits in General 2.10.2 Audits of Service Providers 2.10.3 Guideline Compliance Issues 2.10.4 Contractor Audit Obligations 2.10.5 FCC-Designated Auditor 2.10.6 Office Facilities 2.10.7 Additional Obligations 	12 13 13 13 13 13 13 14
2.11 Data Security	14
2.11.1 Secure Work Area2.11.2 Secure Systems	14 14
2.12 Reserved	14
2.12.1 Reserved	14

2.13 Number Portability Administration Center with Assigned States	14
2.14 Industry Inventory Pool	15
2.14.1 Pool Inventory Level	15
2.15 Industry Inventory Pool Establishment Timeline	15
2.15.1 Purpose2.15.2 Activities2.15.3 Additional Details	15 15 16
2.16 Block Assignments	16
 2.16.1 Application Submittals 2.16.2 Block Application Supporting Data 2.16.3 Source 2.16.4 Applicant Treatment 2.16.5 Inventory Pool 2.16.6 Rate Area Information 2.16.7 Required Assignment Processing 2.16.8 Problem Resolution Assistance 2.16.9 Notification 	16 16 17 17 17 18 18 18 18
2.17 Management of the Pool Inventory	18
2.17.1 Forecast2.17.2 Data Request Dates2.17.3 Forecast Analysis2.17.4 Reports	18 19 19 19
2.18 Replenishment of the Pool Inventory	19
2.19 Resource Reclamation	19
2.19. 1 Criteria for Reclamation2.19. 2 Administrative Responsibilities	20 20
2.20 Interfaces with Service Providers, NANPA, NPAC Vendor, BIRRDS/LERG Vendor, Regulatory Agencies, and the Media	20
 2.20.1 Interface with NANPA 2.20.2 Interface with the BIRRDS/LERG Vendor 2.20.3 Interface with the NPAC Vendor 2.20.4 Interface with Service Providers 2.20.5 Interface with Regulatory Agencies 2.20.6 Interface with the Media 	21 22 22 22 23 23

2.21 Reports	24
2.21. 1 Annual Report	24
2.21. 2 Pooling Matrices Report	25
2.21. 3 Report and Document Distribution	25
2.22 Performance Measurements	25
2.22.1 Assessment Period	25
2.22. 2 Remedial Action	25
2.22.3 Pooling Administration Quality Assurance (QA)	25
2.22.4 Contractor Performance Metrics	26
2.22.4.1 Trouble Tickets/Outages	26
2.22.4.2 Change Order and PAS Notifications	26
2.22.4.3 Communications	26
2.22.4.4 Forecasting data on a per-state basis 2.22. 4.5 Reporting	26 26
2.22.4.5 Reporting 2.22.4.6 Application Processing on a monthly basis	20
2.22.4.7 Reserved	27
2.22.4.8 Reserved	27
2.22.5 Events	27
2.22.6 Additional Input	27
2.23 Term of Administration	27
Pooling System Requirements	29
3.1 Description	29
3.1.1 Confidential Treatment	29
3.1.2 Data Integrity	29
3.1.3 Automated Data Filing Capabilities	29
3.1.4 Automated Data Output Capabilities	30
3.1.5 Mechanized Interface with NANPA	31
3.1.6 Alternative Data Capabilities	32
3.2 Characteristics	32
3.3 System Reliability, Availability, Capacity, and Performance	32
3.3.1 Reserved	33
3.4 System Location	33
3.5 System Facility	33
3.5.1 Facility Characteristics	33

	3.5.2 Facility Planning3.5.3 Reserved	33 33
3.6	System Maintenance	33
3.7	System Security	34
3.8	System Inspection	34
3.9	Web Site	34
	 3.9.1 Availability and Access 3.9.2 System Responsiveness 3.9.3 Out-of-Service 3.9.4 Out-of-Service Notification 3.9.5 Updates 3.9.6 Web Site Help 3.9.7 Support and Maintenance 	34 35 35 35 36 36 36
3.1	0 Reserved	36
3.1	1 System Report Administration	36
	3.11.1 System Reports3.11.2 System Report Validation3.11.3 Help Desk3.11.4 Report Distribution	36 37 37 37
3.12	2 System Testing	37
	3.12.1 System Test Plan3.12.2 System Test Results	38 38
3.1.	3 System Acceptance	38
3.14	4 System Processing Acknowledgement	38
3.1	5 User Logon System	38
	 3.15.1 Logon System Access 3.15.2 Logon System Approval 3.15.3 Logon System Security Level 3.15.4 Reserved. 3.15.5 Logon System Problems 3.15.6 User Access Permission Classes 3.15.7 User Functionality 	38 38 39 39 39 39 39 39

3.15.8 Reserved.	40
3.16 Unauthorized System Access	40
3.16.1 Data Security	40
3.17 System Disaster Recovery	40
3.17.1 Recovery Costs3.17.2 System Backup3.17.3 System Outage Notification	40 40 40
3.18 Non-Performance	41
3.18.1 Final Acceptance3.18.2 Reserved3.18.3 Reserved	41 41 41
3.19 System Documentation	41
3.20 Pooling System Transfer to Successor	41
 3.20.1 Transfer Efficiency 3.20.2 Reserved 3.20.3 Technical Support 3.20.4 Documentation 3.20.5 Transition Plan 3.20.6 Reserved 3.20.7 System and Equipment Ownership 	42 42 42 42 42 42 42 42 42
3.21 System and Equipment Inventory	42
3.22 Reserved	42
Contract Data Requirements List (CDRL)	43
4.1 Reserved	43
4.2 Security Plan	43
4.3 System Documentation Plan	43
4.4 Disaster/Continuity of Operations Plan	43
4.5 Statistical Forecasting Plan	43
4.6 Management Reporting Plan	43

х

4.6.1 Annual	43
4.6.2 Semi-Annual	43
4.6.2.1 Forecasted Demand	43
4.6.2.2 Rate Area Inventory Pool Status	43
4.6.3 Quarterly	44
4.6.3.1 Pooling Matrices	44
4.6.4 Monthly	44
4.6.4.1 Thousands-Block Pooling	44
4.6.4.2 System Performance	44
4.6.4.3 Staffing	44
4.6.5 By Request	44
4.7 System Acceptance Plan	44
4.8 QA Plan	44
4.9 Transition Plan	44
4.10 Maintenance Plan	44
Acronyms, Abbreviations and Definitions	45
Allocation Date	45
Reference Documentation, Technical Standards and Regulatory Orders	49
Interface Contact Information	52
Example Pooling Summary Report	53

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 area. 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 area. All ten thousand numbers within each NPA/NXX continue to be assigned to one rate area, 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 area.

The assignment of numbers to service providers in blocks of one thousand (i.e., NPA-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 contractor¹. 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

¹ FCC 00-104, ¶ 154

Exchange Routing Guide (LERG²)-Traffic Routing Administration (TRA) vendor, regulatory agencies, the media and the general public.

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.

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 J: Thousands Block Pooling Contractor Technical Requirements Document; (4) Reference 2, Industry Numbering Committee (INC) Thousand 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 selected contractor shall perform the duties of the national Pooling Administrator (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

The contractor shall serve as the designated entity responsible for administering thousandsblock number pools by assigning, managing, forecasting, reporting and processing data that

² Telcordia TM LERG TM Routing Guide, Telcordia and LERG Routing Guides are trademarks of Telcordia Technologies, Inc.

will allow service providers in rate areas 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.

1.4 Attributes

The contractor shall be an independent, neutral third party (as defined in Section H) who shall be responsible for the fair and efficient overall administration of pooled NANP 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 administrator. As stated in CFR 52.20 for Thousand 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 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, NRRIC, etc.) and regulatory agencies
- Maintain and plan for adequate pool inventory numbering resources for the short and long term.

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. Detailed performance specifications are provided in Appendix B, Reference 2, *Industry Numbering Committee (INC) Thousand Block (NXX-X) Pooling Guidelines*. 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 broad policy objectives for the NANPA:

- 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 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 days a week, eight core business hours (8 AM to 5 PM) a day in all Metropolitan Statistical Areas (MSAs) covered by the NANP where thousands-block number pooling has been implemented.

The PA 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., 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 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 the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

On an annual basis, the contractor shall post a list of recognized holiday dates on their 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 provide a monthly report to the FCC on contractor staffing status. The report shall include numbers by labor category, shortages and overages, and yearly turnover rate.

2.3.1 Availability

Staff should be available a minimum of five days a week, eight hours a day for each respective pooling time zone as defined in Section 2.1 of this document.

Pooling administration hours of operation shall allow block applicants and block holders in all time zones access during the majority of the client's core business hours.

The PA 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 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 system 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. For guidance, see Appendix B, Reference 1, *FCC 00-104*, paragraph 154 and the conflicts provisions in Section H.

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, or subsequent, Terms of Administration.

2.4.1 Reserved

2.4.2 Responsibilities of the Contractor

The contractor shall provide the following information to the FCC Contracting Office concerning each prospective subcontractor within five 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 subcontractor for another may be made only at the discretion 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 PA. Within seven calendar days of a regulatory directive the PA 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 PA shall provide this information to the FCC and the NANC within seven calendar days.

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 PA:

- 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 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 Industry Numbering Committee (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 principals. 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 PA's Term of Administration.

The PA will 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 PA shall participate in the development and modification of guidelines and procedures, which may or may not affect the performance of the PA 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 PA shall implement any changes determined to be consistent with regulatory directives.

The PA 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.

When the INC places any changes to its guidelines in initial closure, the PA shall submit an assessment regarding the impact of scope of work, time and costs to the INC, the NANC and the FCC within 15 calendar days. The PA shall post changes in procedures on its web site prior to the change taking effect.

Specifically, the PA 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 PA to answer questions.

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 PA's obligations and NANP administrative principles).

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 business day. The contractor shall, upon request, provide new entrants and all other SPs 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 hour 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 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

2.10.1 Audits in General

In the performance of its numbering administration duties and in meeting its responsibilities, the contractor may encounter situations that alert it to possible carrier noncompliance with FCC rules and orders or the industry guidelines that it believes warrants the need for an audit.

In these situations, the contractor shall document its observations and forward relevant information, which contains the details of the possible infraction, to the FCC or FCC-designated auditor for disposition.

2.10.2 Audits of Service Providers

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

The contractor shall describe the process to be used to assist the auditor, if requested.

2.10.3 Guideline Compliance Issues

The contractor may encounter 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 audits and records provisions in Section 1.

2.11 Data Security

Because of the proprietary and/or sensitive nature of some information that maybe 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 Computer Security Program* (FCC INST 1071.1).

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 NPAC regions in the United States. There is one 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.

<u>MID-ATLANTIC REGION</u>: 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

<u>SOUTHEAST REGION:</u> Kentucky, Tennessee, North Carolina, South Carolina, Louisiana, Mississippi; Alabama; Georgia, Florida

<u>NORTHEAST REGION:</u> 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-month inventory level

Specifically, the PA must ensure each rate area pool has sufficient quantity of blocks available for assignment to satisfy the anticipated demand. The anticipated demand shall be determined by the most recent aggregate NRUF demand. In between bi-annual NRUF submissions, the PA may adjust the inventory level if the actual pool supply of blocks appears to be insufficient, or if additional information is received, e.g., updated NRUFs.

2.15 Industry Inventory Pool Establishment Timeline

The contractor shall be responsible for developing the inventory pool implementation timeline in consultation with the industry. 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 area.

2.15.1 Purpose

The timeline shall specifically define the rate areas 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 area
- 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) TBPAG*.

2.16 Block Assignments

Participating service providers shall submit application(s) for block assignment(s) to the contractor after the rate area 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.

In addition, the contractor shall be capable of supporting block application(s) by facsimile.

2.16.2 Block Application Supporting Data

Service providers are required to furnish 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 area, and, if required, demonstrate that all applicable regulatory requirements have been met (e.g., facilities readiness criteria).

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

3. Block applicants shall all have filed a current NRUF for the associated requested rate area and/or NPA with the NANPA.

4. Block applicants shall be confirmed by the PA 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 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 nondiscriminatory 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 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 area inventory pool. The inventory pool shall be comprised of a rate area boundary, which covers the same geographic area. Different geographic rate areas shall maintain separate inventory pools.

2.16.6 Rate Area Information

The contractor shall maintain a current listing of designated rate areas selected for pooling implementation. Therefore the pooling administration system shall be capable of implementing additional rate areas.

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 SP to build the necessary block record(s) 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 products by Telcordia Technologies.

2.16.8 Problem Resolution Assistance

The contractor shall also use these and all other records available to the PA to assist the NANPA, service providers and/or regulators in resolving some customer complaints as the result of call completion failures, misroutings and/or service outages. Although proprietary data can not be disclosed to other parties, the PA will provide all other information and referral contacts to requesting parties within a timeframe that is agreed upon between the PA and the requesting party based upon the urgency of the failure. The PA 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 PA 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 maintain a six-month inventory pool for each rate area in order to meet the forecasted resource needs of participating service providers.

2.17.1 Forecast

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

Service providers participating in pooling shall submit forecasted demand semi-annually via the NRUF reporting procedures with the NANPA. NANPA will then forward the service

providers' aggregated forecast to the contractor via the interface with NANPA (see Section 2.20.1).

2.17.2 Data Request Dates

The NRUF data request shall be consistent with the NRUF reporting dates. The contractor shall request at least semi-annually from the NANPA number resource utilization and forecast NRUF data submitted by service providers pursuant to the FCC's mandatory reporting requirement.

2.17. 3 Forecast Analysis

The contractor shall perform an analysis on all forecasts filed for each rate area inventory pool.

This analysis shall be used by the Pool Administrator to ensure that there are adequate blocks available to meet the expected applications from participating service providers in each rate area 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 area pool and maintaining no more than a six-month supply of assignable thousands-blocks (industry level inventory) in each rate area pool. The aggregate SP forecast submitted during each NRUF cycle is to be used to determine the appropriate level.

When the contractor first realizes that the amount of inventory in each rate area pool may – in the future – fall below the project six month forecast, the contractor will begin the Replenishment Process in accordance with the INC TBPAG.

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

- Send emails to SPs in the affected rate area pool and request voluntary donations
- Check with SPs who have a forecast on file for the affected rate area to see if one is qualified to become a LERG Assignee 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) TBPAG*).

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, *TBPAG*, Attachment 5/Part 5, and that the block will be available shortly for reassignment
- Entering disconnect information into BIRRDS.
- Notification to the NPAC
- Reserved
- 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 for current contact information for the NANPA, NPAC and BIRRDS/LERG vendors.

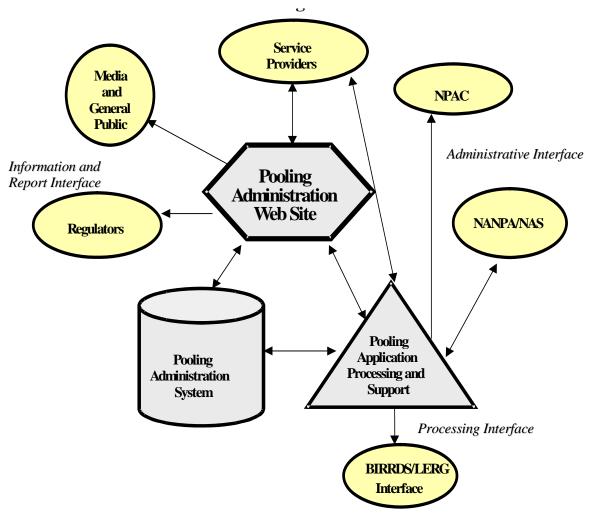
The contractor shall provide the following constituency interfaces:

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)* TBPAG.)



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

Figure 1. Thousands-Block Pooling Interface Arrangements

2.20.1 Interface with NANPA

This interface shall be the same as that planned for service providers. The interface will be between the PAS and NAS. 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 area 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, which 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.

(See Appendix B, Reference 17, Functional Requirements Specification: Number Portability Administration Center (NPAC), Service Management System (SMS)).

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.

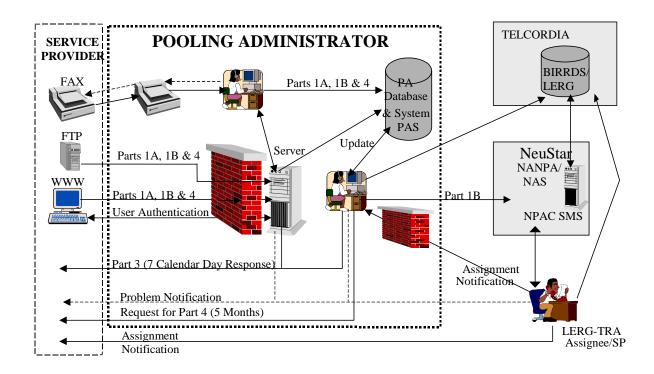


Figure 2. Thousands-Block Applications Process (Notational)

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 (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 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 area inventory pool. These reports should include explanations for rate areas where there are no numbering resources in the inventory pools. 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 area 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 Area. 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 one business day 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

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. This information shall be posted on the vendor web site because it does not contain any proprietary confidential statistics.

2.22.4.1 Trouble Tickets/Outages

- Quantity Filed Opened
- Quantity Resolved Closed
 - Quantity Due to SP Deficiency/Misunderstanding
- Quantity Opened Due to PA Deficiency
 - Quantity Opened by SPs related to System Performance
 - Quantity Under Corrective Action Older than 30 calendar days.
 - Quantity due to User problem with accessing information
 - Due to Web Site
 - Due to Pooling System
 - Due to 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
 - o numbering resource plans administrative directives
 - assignment guidelines
- Written Notice of Changes Summarizing Potential Impact upon Service and Cost to be sent to Contracting Officer

2.22.4.3 Communications

- Phone Calls
 - o 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 metrics report
- Bi-annual Forecasted demand report.
- Rate area 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.
- Provide ad hoc reports as requested.

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 Term of Administration

The contractor's contract shall be in place for a term of five years (one year plus four option years).

Section 3 Pooling System Requirements

3.1 Description

The contractor shall build and maintain a pooling administration system. 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 areas 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, the NANC, and the industry prior to public disclosure.

3.1.3 Automated Data Filing Capabilities

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

Except as noted, the pooling administration system shall offer a web interface and allow for automated data input for thousand 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, including General Application Information
- The Part 1A will include a section for remarks/comments so that an SP can include any pertinent information that is not listed anywhere else on the form.
- Any Block Transfer request will have the Attachment 2/Part 1B available online for the SP to complete with the transfer request.
- Any request for a full NXX does not need to have the Attachment 2/Part 1B associated with the request since no Location Routing Number (LRN) is needed for a full NXX.
- Attachment 2/Part 1B NPAC Block Holder Data
- Attachment 4/Part 4 Confirmation of NXX-X Block In Service
- Appendix 1 Thousand Block Forecast Report
- Appendix 2 Thousand Block Donation Report
- Appendix 3 Thousand Block Months to Exhaust (MTE) Certification Worksheets TN Level (MTE for TN) Worksheet
- Appendix 4 Thousand Block Number Pooling Months to Exhaust (MTE) Certification 1000 Block Level (MTE for Block) Worksheet

Reference 7, INC COCAG

- Part 1 Request for NXX Code Assignment
- Part 3 Administrator's Response/Confirmation
- Part 4 PA Confirmation of Code In Service (Submitted by the Pooling Administrator)

3.1.4 Automated Data Output Capabilities

The contractor shall also accommodate automated data output via File Transfer Protocol (FTP) to service providers when transmitting data from Appendix B, Reference 2, *INC TBPAG*, 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. SPs will not have to notify the PA of the changes.
- All request information is viewable on the screen when the SP is submitting a request (e.g., fields should allow for all characters to be viewed on the working screen)..
- Give SPs the option of requesting different effective dates on various blocks of a multiple block submission. This will help SPs 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 SPs identify which request the email pertains to.

3.1.5 Mechanized Interface with NANPA

The contractor will work with the NANPA to establish within six months from the beginning of the term of this contract, a functional mechanize interface between the two administration systems, PAS & CAS, that allows for the passing of information between the two administration systems and where appropriate, from SPs to the NANPA via the PA administration system and visa versa.

The interface shall at least provide individually for each of the following transactions:

- non-pooled NXXs in pooling areas
- LRN/LERG Assignee
- NXX Voluntary Return/Abandoned Code Reassignment
- Part 3
- Part 4
- NRUF "pooling" Forecast
- Aggregate pool MTE/Util
- Red Light Rule daily listing
- SP 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,
- SP forecast information provide to NANPA via the NRUF process,
- receipt by the PA of the "Red Light Rule" listing on a daily basis,
- PA forecast assessments, etc.

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, 7 days a week
- Availability shall meet or exceed 99.9% of scheduled up time
- Unscheduled maintenance downtime per any 12-month 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 hour during core business hours and 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 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- except for the mechanized interface with NANPA which will be system to system as necessary. When this is not possible, the contractor shall notify users via facsimile broadcast.

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 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 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, INC TBPAG.

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, 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 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, a trouble ticket shall be initiated to determine if an "out of service" condition exists.

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 12-month period, 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 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 $1/30^{\text{th}}$ 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-hour period unless approved by the FCC.

The contractor system shall be capable of pinging its ISP(s) every five 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 should always contain current information. The rate area 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 at least weekly.

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 an SP has donated to pooling. Details will include NPA-NXX-X, status, rate area, SP 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 area.

• Assignments Needing Part 4 Report – detailing what blocks (NPA-NXX-X) have not been put into service by an SP. 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 provide a help desk and phone number to assist with interpretation of any system problem.

The contractor shall: (1) report problems with the web site, facsimile, voice mail or email; for each problem the help desk will open a trouble ticket; (2) receive and transmit trouble tickets concerning communications problems with NANPA, NPAC vendor or the LERG vendor; (3) require that each trouble ticket be time stamped with a minute accuracy and stored for recall for up to two years; (4) require that once a trouble ticket is closed, the originator of the trouble ticket shall be notified of disposition of the problem; (5) summarize the quantity and type of trouble tickets opened and closed during the year in the annual report; (6) require the help desk to assist customers to fill out applications or reports or to gain access to other authorized FCC or industry information; (7) 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.

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. This distribution system shall also support and maintain an exploder list that provides automatic signup for notification distribution.

Reports shall be distributed by paper and facsimile when requested.

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 full pooling administration system implementation and turn up, the contractor shall provide interim testing of the pooling administration in anticipation of the system acceptance test. This testing shall contain the selection criteria for service providers to be selected to participate in pooling administration system testing and the 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 publish the results of said test. These results shall be readily available to all interested parties.

3.13 System Acceptance

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

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 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 area pool inventory data Users shall be able to query data by Rate area only, NPA only, or both Rate area 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, 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.
- 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 polices, 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 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 years and archived for five 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

The contractor must deliver a fully functional and operational thousands-block pooling system no later than nine months after contract award. The 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 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 contracts used in conjunction with the pooling administration system. This means that everything transfers, including all items attached to the pooling administration system.

This pooling system transfer is additionally subject to the termination and continuity provisions in Section H.

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.

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-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

The contractor shall, 180 calendar days prior to contract termination, 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)*.

3.20.6 Reserved

3.20.7 System and Equipment Ownership

Should the system equipment not be leased, it 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)

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 Statistical 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 Area Inventory Pool Status

The contractor shall provide a rate area 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 75 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.

4.10 Maintenance Plan

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

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).	
Aging	Aging numbers are disconnected numbers that are not available for assignment to another end user or customer for a specified period of time. Numbers previously assigned to residential customers may be aged for no more than 90 days. Numbers previously assigned to business customers may be aged for no more than 365 days. (47CFR52.15). An aging interval includes any announcement treatment period, as well as the vacant telephone number intercept period. A number is disconnected when it is no longer used to route calls to equipment owned or leased by the disconnecting subscriber of record.	
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.	
Billing and Collection Agent	The designated vendor responsible for managing the pooling administration financial arrangements between the industry and pooling administration vendor.	
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, <i>FCC 00-014</i> .)	
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	
СО	Central Office	
CO Codes	The sub-NPA code in a TN, i.e., digits D-E-F of a 10-digit NANP Area	

CONUS	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)). Continental United States	
COTS	Commercial Off–The-Shelf	
CDRL	Contract Data Requirements List	
Code Holder	The code holder is the LERG Assignee of the NPA-NXX.	
Contaminated Number	An unavailable number (e.g., working), within a 1K Block, at the time the 1K Block is donated to the pooling administrator. A telephone number is "not available for assignment" if it is classified as administrative, aging, assigned, intermediate, or reserved as defined in FCC rules.	
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.	
Enterprise Services	Functions performed by the administrator that are outside of the requirements and responsibilities detailed within this proposal and associated industry guidelines and regulatory orders.	
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.	
IP	Internet Protocol	
ISP	Internet Services 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 gather from use of the application.		
LERG	Telcordia TM LERG TM 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		
PA	Pooling Administrator		

PUC	Public Utility Commission	
QA	Quality Assurance	
Rate Area	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	
SCP	Service Control Points	
SMS	Service Management System	
SP	Service Provider	
Subcontractor	An organization providing services to the contractor.	
Term of Administration	The contractor's contract shall be for a term of five years.	
TN	Telephone Number	
TRA	Traffic Routing Administration, Telcordia	
Vacant Number	A non-working number.	
Vacant Number Treatment	A recorded announcement played to the calling party, when the NPA- NXX of the TN they have dialed is valid, but the 10-digit TN is not a working number.	

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: *Industry Numbering Committee (INC) Thousand Block (NXX-X) Pooling Guidelines,* INC 99-0127-023, (July 29, 2005 or use latest version at time of RFP), by the Industry Numbering Committee sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: http://www.atis.org/inc/docs.asp.

3. Reserved

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. Available at: http://www.atis.org/docstore/searchform.asp.

5. Reserved.

6. Industry Numbering Committee: *Industry Numbering Committee (INC) North American Numbering Plan Forecast/Utilization Report (NRUF) Guidelines*, INC 00-0619-026 (March 23, 2004 or use latest version at time of RFP), by the Industry Numbering Committee sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: http://www.atis.org/inc/docs.asp.

7. Industry Numbering Committee: *Industry Numbering Committee (INC) Central Office Code (NXX) Assignment Guidelines*, INC 95-0407-008 (July 29, 2005 or use latest version at time of RFP) by the Industry Numbering Committee sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). Available at: http://www.atis.org/inc/docs.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). Available at: http://www.atis/docstore/searchform.asp.

16. FCC Computer Security Program Directive, FCC INST 1071.1.

17. North American Numbering Council, *Functional Requirements Specification: Number Portability Administration Center (NPAC), Service Management System (SMS), Version 3.0,* June 6, 2000. Available at: http://www.npac.com/documents.htm. (Waiting on response from Paula Jordan)

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, <u>Methods and Procedures for National Number Pooling</u>, Prepared for NeuStar, Inc. NPAC, October 12, 2000, Version 1.0. (Waiting to hear from Paula Jordan)

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

John Manning NANPA 46000 Center Oak Plaza Sterling, VA 20166 Phone: 571-434-5770 Fax: 571-434-5502

NPAC

46000 Center Oak Plaza Sterling, VA 20166 Phone: 571-434-5400 Fax: 571-434-5401

BIRRDS/LERG

Telcordia Technologies Traffic Routing Administration 8 Corporate Pl. 3N141 Piscataway NJ 08854-4156 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 areas		
Top 100 MSA?		
Other distinguishing characteristics?		
Projected Demand for Blocks		