

# **COMBINED NANPA/PA TECHNICAL REQUIREMENTS DOCUMENT**

**Description/Specifications**  
**September 24, 2018**

# **Combined NANPA/PA Technical Requirements Document (TRD)**

## **Section 1: Introduction**

### **1.1 Purpose**

This document defines the North American Numbering Plan (NANP) Administrator's technical, operational, and system requirements, and describes the full functionality and services required of the designated North American Numbering Plan Administrator (NANPA) in fulfilling the contract requirements. The functionality of the NANPA will also include the Pooling Administrator function (*i.e.*, the administration of thousands-block number pooling and p-ANI resources) and references throughout this document to "Numbering Resources<sup>1</sup>" includes thousands-blocks and p-ANIs, as well as all other NANP resources administered by the NANPA. The selected contractor shall, at the Federal Communications Commission's (FCC's) discretion, perform the duties of the NANPA for the term determined by the FCC. The "contractor" in this document refers to the vendor selected to be the NANPA.

This document serves as an umbrella and reference document to other resources, such as industry guidelines (*i.e.*, any guidelines referenced in Section 16), United States Federal Communications Commission (FCC or Commission) orders, technical standards, and technical requirements that support the NANP.

The technical requirements are contained in several documents. Should there be conflicts between or among these documents, the order of precedence is:

1. Code of Federal Regulations (CFR), Title 47, Volume 3, Parts 40-69, Telecommunications (Reference 42);
2. FCC Orders (References 1, 2, 3, 4, 32, 33, 37, 43 and 44);
3. The Statement of Work in the awarded Contract;
4. Any Change Orders that have been approved by the FCC and implemented by the contractor;
5. This document;
6. The relevant industry guidelines for the Numbering Resource being administered;
7. Other related documents listed in Section 16.

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 NANP Numbering Resource administration.

### **1.2 Scope**

This document describes the technical responsibilities of the contractor selected by the FCC to serve as the NANPA. The primary scope of this document is to define the NANPA's performance within the United States.<sup>2</sup> The NANPA's role in the United States includes the following functional areas: overall NANP Administration, Central Office (CO) Code Administration, Thousands-Block Pooling Administration, p-ANI administration, Numbering Plan Area (NPA) relief planning, collection and analysis of utilization and forecast data, report generation, and all other related NANP Administration and other Numbering Resource functions.

Each of the Numbering Resources and functions of the NANPA's roles are described further in this document.

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<sup>1</sup> See definition of Numbering Resources in Appendix A.

<sup>2</sup> United States means the United States and its territories.

The contractor shall deploy a system that houses all Numbering Resource-related data, accommodates the actual volume of data, and provides real time access to that data by multiple users. The system also shall have a web interface to facilitate access and data input capabilities, allows for generation of reports, and interfaces with all designated parties.

### 1.3 Background

The NANP is the basic numbering scheme for the telecommunications networks (*e.g.*, Public Switched Telephone Network (PSTN)) located in Anguilla, Antigua & Barbuda, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, Sint Maarten, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, Turks & Caicos Islands, and the United States (including Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands and American Samoa).<sup>3</sup> The format of the NANP is consistent with International Telecommunication Union (ITU) Recommendation E.164 “The International Public Telecommunication Numbering Plan” and follows a 10-digit telephone number format. Each digit in a telephone number is identified by an alphabetical character in the order ABC-DEF-GHIJ, consisting of a 3-digit NPA (ABC), a 3-digit CO Code (DEF), and a 4-digit Line Number (GHIJ). This is in the format NXX-NXX-XXXX, where: N = digits 2 to 9 and X = digits 0 to 9 (*e.g.*, 613 is the NPA code in the NANP number 613-555-0100).

In 1995, the FCC determined that a neutral non-governmental entity not closely associated with any particular industry segment should serve as the North American Numbering Plan Administrator (NANPA). This was to ensure that NANP resources are used efficiently and to ensure that service providers have access to the Numbering Resources they need to compete in the telecommunications marketplace. In 1997, the FCC selected a contractor to perform that function through a competitive bidding process, and periodic bidding processes have been conducted since then.

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, Reference 1) establishing a “national” pooling contractor (*i.e.*, the Pooling Administrator or PA). In the United States, thousands-block number pooling involves the allocation of blocks of 1,000 sequential telephone numbers within the same 10,000 number Central Office (CO) Code (CO Code or NXX) to multiple service providers, who serve customers within the same NPA rate center. Thousands-blocks are allocated from a shared industry inventory, and thousands-block pooling improves the utilization of Numbering Resources.

In 2011, the FCC determined that the Routing Number Administrator (RNA) function would be administered by the Pooling Administrator (PA). The RNA is responsible for administering non-dialable pseudo-Automatic Number Identification numbers (p-ANIs) used for routing emergency calls. A p-ANI is a number, consisting of the same number of digits as an Automatic Number Identification (ANI), which is not a North American Numbering Plan telephone directory number and may be used in place of an ANI to convey special meaning to the selective router, public safety answering point (PSAP), and other elements of the 911 system.

In 2018, the FCC issued an order (Reference 44) directing the North American Numbering Council (NANC) to develop a technical requirements document for review by the FCC, containing a single, unified set of functional and interface requirements for a combined NANPA and PA entity. This combined NANPA/PA Technical Requirements Document is the response to that order.

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<sup>3</sup> 47 CFR §52.5 (d).

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 or other assignees 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 NANPA; a “subcontractor” refers to an organization providing services to the contractor; a “user” is a service provider or other applicant accessing the NANP administration system; a “constituent” is the most inclusive term and can include service providers and applicants, service provider consultants, the Number Portability Administration Center (NPAC) vendor, , the LERG™ Routing Guide<sup>4</sup> vendor, Public Safety Answering Points (PSAPs), 9-1-1 system service providers, 9-1-1 governing authorities and other regulatory agencies, the media and the general public.

#### **1.4 Mission and Attributes**

The NANPA’s role is to serve as the neutral numbering (including thousands-block pooling and p-ANIs) administrator for the United States and its territories, and to coordinate with other NANP member nations as needed. The NANPA must comply with the statutory requirements for neutrality and meet the FCC’s neutrality requirements, set forth in 47 CFR §52.12 and 47 CFR §52.20.

Offerors must demonstrate that they meet the FCC’s neutrality requirements through submission of a certificate signed by a Chief Executive Officer or President that explicitly certifies the offeror meets each requirement. The successful offeror will be required to re-certify to its compliance at the time of award. Offerors shall be prepared to provide any other documentation verifying compliance as may be requested by the FCC.

The entity selected to be the NANPA must adhere to all FCC neutrality requirements, orders, and policies throughout the term of the contract. In this regard, to avoid potential disruption of national numbering administration, the successful offeror will be required to apprise the FCC of any proposed changes that may affect its neutrality sufficiently in advance to permit review of the proposed changes and FCC determination as to whether any mitigation is available or necessary to ensure NANPA neutrality. Such mitigation may include, but is not limited to, changes to organizational or ownership structure, investors, and Board of Directors.

The NANPA is the designated independent, neutral entity responsible for assigning and administering NANP Numbering Resources in an efficient, effective, fair, unbiased, and non-discriminatory manner consistent with regulatory directives and industry guidelines, and is required to comply with state regulatory decisions, rules and orders, as applicable, as long as they are not in conflict with FCC decisions, orders, and rules.

The NANPA shall also ensure that Numbering Resources administration in the United States is effective, while using the expertise and innovation of industry to promote number optimization. It also shall support efforts to accommodate current and future numbering needs and shall advise the industry and regulators on significant numbering issues (*e.g.*, potential resource exhaust).

#### **1.5 Objectives**

The main objectives of the NANPA include:

- Provide a standardized application of each type of administrative Numbering Resource function and associated guidelines
- Develop and implement a single system to facilitate all activities of the NANPA and the assignment, tracking, and data reporting requirements for all Numbering Resources

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<sup>4</sup> LERG™ Routing Guide is a trademark and the Intellectual Property of Telcordia Technologies, Inc. dba iconectiv®.

- Maintain and plan for an adequate inventory pool of Numbering Resources for the short and long term
- Develop, implement, and maintain mechanized interfaces with the NPAC, service providers and applicants, BIRRDS, FCC (Red Light) and other identified sources
- Develop and maintain interfaces with industry forums (*e.g.*, Industry Numbering Committee (INC), Emergency Services Interconnection Forum (ESIF), Common Interest Group for Routing and Rating (CIGRR), etc.), and regulatory agencies

## **1.6 Responsibilities**

The NANPA shall:

- Perform all day-to-day number resource assignment, and administrative activities, as well as interact with the NPAC vendor, the BIRRDS vendor, the FCC, and other regulatory agencies
- Provide and maintain a system to support all day-to-day and long-term NANPA functions

### **1.6.1 Management**

The NANPA 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 Numbering Resources and to meet the industry's current and future needs.

### **1.6.2 Performance**

The NANPA shall be responsible for maintaining the security, reliability, performance, and flexibility of the NANP administration system. Performance instructions may be found in the *FCC Cyber Security Program* (Reference 23), including guidelines and policies referenced therein. The system shall be user-friendly and not impose a burden on users. The system shall protect from unauthorized disclosure sensitive information provided by service providers, applicants and service provider consultants, Numbering Resource assignees and applicants, Public Safety Answering Points (PSAPs), 9-1-1 system providers or the NPAC vendor.

## **1.7 Certain Obligations Bearing on Responsibility**

### **1.7.1 Interaction with Governmental Entities**

The NANPA, shall be responsible for establishing and maintaining effective and business-like relationships with appropriate governmental and regulatory bodies (*e.g.*, FCC and state regulatory agencies) and addressing policy directives from these bodies.

### **1.7.2 Organizational Capacity**

The NANPA shall maintain the necessary administrative and other staff to handle the legal, financial, technical, administrative, operational, industry, and regulatory issues relevant to the management of all Numbering Resources and shall maintain the necessary equipment, facilities, proper billing arrangements, and other assets to manage the Numbering Resources.

## **1.8 Policy Objectives and Context**

The NANPA shall adhere to the following broad policy objectives. 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 (1) technology over another<sup>5</sup>

At all times the NANPA shall understand and agree that:

- The functions of CO code administration, NPA assignment, relief planning, thousands-block pooling, and p-ANI administration are among some of the duties to be performed, as well as all other Numbering Resources administration
- Administration responsibilities entail collateral responsibilities such as data collection, forecasting, reclamation, 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) and p-ANI resources, as well as other Numbering Resources (as applicable)

## **1.9 Environment**

### **1.9.3 Regulatory**

The FCC has authority over numbering within the United States. The other NANP member nations exercise similar regulatory jurisdiction for other geographic areas. The FCC has delegated certain specific numbering authority to state regulatory agencies in the United States. All states have been delegated authority over Numbering Plan Area (NPA) Relief. In addition, some states have been given authority to conduct trials of certain number conservation measures. They have also been granted authority to obtain data, reclaim resources, and enforce number allocation standards. In the future, regulatory authorities of diverse kinds may issue rules, requirements or policy directives, which may increase, decrease or otherwise affect the functions to be performed by the NANPA.

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 NANPA. Within ten (10) calendar days of a regulatory directive, the NANPA shall provide to the FCC and the NANC or its designee 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.

### **1.9.4 North American Numbering Council Oversight**

The NANC is a Federal Advisory Committee established in 1995 pursuant to the Federal Advisory Committee Act (FACA) as amended, 5 U.S.C. App 2. The purpose of the NANC is to advise the FCC and make recommendations that foster efficient and impartial NANP administration. The NANC advises the FCC on numbering policy and technical issues in areas of responsibility the FCC has entrusted to the NANC, with a focus on examining numbering in the changing, modern world of communications.

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

- Facilitating entry into the communications marketplace by making numbering resources available on an efficient, timely basis to communications service providers;
- Not unduly favoring or disfavoring any particular industry segment or group of consumers;
- Not unduly favoring or disfavoring one technology over another;
- Providing consumers with ready access to telecommunications networks; and
- Ensuring that the interests of all NANP member countries are addressed fairly and efficiently, fostering continued integration of the NANP across NANP member countries.

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<sup>5</sup> See 47 CFR §52.9.

The general duties of the NANC are to gather and discuss information necessary to develop recommendations to the FCC related to the objectives stated above. Under the direction of the FCC, the NANC will provide oversight of matters relating to numbering administration, including the development of industry guidelines. To aid the FCC in its oversight responsibilities, the NANC will also prepare periodic and final reports for the FCC. The NANC serves the FCC in an advisory capacity only.

### **1.95 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 federal regulatory requirements with technical and operational principles. The guidelines also recognize the existence of specific regulations in states where FCC-delegated authority has been granted. Industry guidelines and regulatory directives are subject to change throughout the contractor's Term of Administration as the NANPA. The NANPA shall administer Numbering Resources in accordance with the industry guidelines unless they are in conflict with regulatory directives or the awarded contract, in which case the regulation or contract will apply.



## **Section 2: General Requirements**

This document describes the functional requirements, administrative tasks, responsibilities, and duties of the NANPA. This section describes basic functions to be performed by the NANPA, which includes by reference any functions or obligations of the NANPA and the Pooling Administrator described in related FCC rules, orders, or directives and the related rules, orders, or directives promulgated by states with FCC-delegated authority, including applicable industry guidelines, technical standards, and NANC-related documentation referenced in the rules, orders or directives of the FCC or by states with FCC-delegated authority, and in Section 16 in this document (which is a non-exhaustive reference list of applicable regulatory items, guidelines, and standards).

The Offeror shall describe its commitment, as well as a description of how it will adhere, to these functional requirements.

### **2.9 High-Level Requirements**

The four (4) high-level requirements of the NANPA are indicated below.

#### **2.9.6 Assigning and Administering NANP Resources**

In accordance with 47 CFR §52.9, §52.13 (b) and §52.20 (d), the NANPA shall assign and administer NANP Numbering Resources in an efficient, effective, fair, unbiased, and non-discriminatory manner consistent with FCC regulations and industry-developed guidelines.

#### **2.9.7 Accommodating Current and Future Numbering Needs**

The NANPA shall participate in industry efforts to accommodate current and future numbering needs at the NPA and NANP level. The NANPA shall advise the regulators and industry relative to numbering issues, potential resource exhaust, and all routing and rating issues that may affect service to users.

In addition to its many day-to-day Numbering Resource assignment and administrative activities, the NANPA shall provide sufficient focus on long-term planning to ensure the continued viability of the NANP. The NANPA shall update its processes, procedures, systems, and forms to reflect regulatory orders, rules, and directives, and ensure its system is flexible so that such updates can be made easily and quickly with minimal need for change orders. The NANPA shall implement a planned approach utilizing effective forecasting and management tools in order to make governmental and business stakeholders aware of the availability of Numbering Resources to meet current and future needs. Critical components of NANP Administration include NPA relief planning and providing systems and tools for managing Numbering Resource administration.

#### **2.9.8 Administrative Resources for Legal, Financial, and Technical Responsibilities**

The NANPA shall maintain necessary administrative resources to handle the legal, financial, and technical responsibilities required to manage all Numbering Resources.

#### **2.9.9 Supervision for All Services and Responsibility for Achieving Performance Objectives**

The NANPA shall provide management supervision for all of the services it provides, including responsibility for achieving performance objectives. The establishment of these objectives is a collaborative effort among the NANPA, the FCC, state commissions, the NANC, and the INC.

## **2.10 Relationships**

### **2.10.10 United States**

The NANPA shall establish and maintain relationships within the United States with entities such as the FCC, other federal agencies, and state regulatory authorities or other state governing bodies, as appropriate. The NANPA shall cooperate with and actively participate in policy and technical numbering bodies and industry forums, such as the NANC and its subtending groups, the INC and ESIF.

### **2.10.11 International**

The NANPA shall develop and maintain communications with all other NANP member countries to ensure that their numbering needs are met.

The NANPA shall attend U.S. Department of State Study Group A meetings.<sup>6</sup> In addition, the NANPA shall maintain a working knowledge of ITU Study Group 2 activities for the benefit of the U.S. telecommunications industry. Attendance at international meetings is not covered by the scope of this contract.

## **2.11 Administration and Management**

The NANPA shall manage the NANP Numbering Resources in accordance with the most current applicable rules, orders, directives, and published industry guidelines and technical standards. Occasions may arise where decisions and interpretations are required on issues that have not yet been addressed. The NANPA shall have the knowledge and capability to recognize these instances and refer them to the appropriate body for resolution.

The NANPA shall perform as the steward of the Numbering Resources. In this capacity, the NANPA shall monitor the status of resources in all areas of the NANP and take appropriate action to ensure the timely availability of Numbering Resources.

The contractor selected to fulfill the NANPA function shall ensure that its other contracts and business arrangements, and those of any subcontractor, do not adversely impact the NANPA organization, or resources it establishes and employs to meet these technical requirements.

### **2.11.12 Requests for Numbering Resources**

Applications for Numbering Resources shall be electronically submitted to the NANPA through the newly developed NANP administration system (NAS), or via email, to be available as an alternative submission, if submission through NAS is not technically possible at the time the applicant chooses to submit the application. The NANPA shall use a standard electronic format for application transmissions. All applications received by the NANPA shall, in turn, generate a confirmation back to the submitting applicant.

The NANPA shall review requests for Numbering Resources for accuracy and appropriateness under applicable rules, orders, directives, industry guidelines, and technical standards. The NANPA shall:

- Accept, process, and verify the accuracy of applications for Numbering Resources in accordance with regulatory requirements and industry guidelines
- Review the entire application, identifying all errors and omissions when first submitted
- Contact an applicant as necessary to gain clarification or additional information in order to process the application when first submitted

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<sup>6</sup> 47 CFR §52.13

- Provide information or location of tools and contacts to assist applicants in properly completing applications for new Numbering Resources, modifications or changes to existing resources, and return or disconnect of existing resources

### **2.11.13 Service Provider and Regulator Support**

The NANPA shall serve as the information resource for regulatory bodies and the industry concerning Numbering Resources issues related to NANP Administration (*e.g.*, ITU Recommendation E.164, NANP, NANP Administration, regulatory issues affecting numbering, Numbering Resource assignment guidelines, CO Code and thousands-block administration, p-ANI administration, relief planning and relevant international numbering issues). The NANPA shall offer and provide periodic educational sessions for service providers and state regulators, as well as provide training videos on various topics that may be downloaded in various formats on its web site.

The NANPA shall respond to inquiries about the numbering plan. The NANPA shall provide, upon request, information on how to obtain current documents and forms related to NANP Administration (including application for automated access to its system and all other materials needed to properly request the assignment or disconnect of Numbering Resources, or change of numbering data) by referring to specific NANPA web pages where requesters may download electronic copies or other sources as appropriate (*e.g.*, to the FCC, state commissions, the INC). The NANPA shall provide copies of documents it generates by email, facsimile, or U.S. Mail if the document is not available via the Internet. A list of documents related to NANP Administration is provided in the List of References in Section 16 of this document.

### **2.11.14 Numbering Resource Optimization**

The NANPA shall provide assistance to users of Numbering Resources and suggest alternatives, when possible, that shall optimize Numbering Resource utilization.

The NANPA shall coordinate its Numbering Resource activities with the Canadian Number Administrator ([www.cnac.ca](http://www.cnac.ca)) and other NANP member countries' administrators to ensure efficient and effective management of NANP Numbering Resources.

The NANPA shall be knowledgeable regarding Numbering Resource optimization methods (*e.g.*, rate center consolidation, thousands-block number pooling) and the potential impact upon the NANP itself. The NANPA shall remain completely neutral and shall not take a position that favors one Numbering Resource optimization method over another, but it shall, where necessary or desirable, provide its views to the FCC.

The NANPA shall not take independent action with respect to adoption of optimization methods that are not within existing guidelines or regulatory directives. However, the NANPA shall recognize optimization opportunities and bring this information to the attention of the appropriate body for consideration. The NANPA shall remain cognizant of its obligation to remain neutral.

## **2.12 Cost Allocation**

The Billing and Collection Agent shall determine the final allocation methodology for sharing costs between NANP countries in accordance with the Billing and Collection Agent Requirements Document, or appropriate regulatory documentation. Should cost allocation disputes arise, the Billing and Collection Agent shall request FCC guidance. In no circumstances shall the NANPA decide on its own the cost methodology or allocation between and among NANP member countries.

### **2.13 Staffing**

The NANPA shall maintain the necessary staffing levels to support industry and regulatory work relevant to the management of all NANP Numbering Resources.

The NANPA shall file an initial staffing report at the start of the contract, which shall include staffing numbers by labor category. Thereafter, the NANPA shall report to the FCC on a monthly basis that there has been no change in staffing or, in the event of a change, the report shall show shortages and overages, and yearly turnover rate.

The NANPA shall maintain necessary administrative resources to handle the legal, financial, and technical responsibilities connected with the management of all Numbering Resources. Because the NANPA shall also interface with the media and the public (see Section 2.14.1), the NANPA shall retain personnel that can create and maintain a publicly available web site for this purpose, and retain personnel with public relations skills (*e.g.*, the ability to explain complex numbering administration issues to the media and the public).

The NANPA shall maintain the necessary equipment (*e.g.*, inventory systems, facilities, and proper billing arrangements associated with day-to-day management of Numbering Resources) to support this staff.

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

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

All employees and subcontractors of the NANPA who have access to a service provider's or an applicant's confidential information shall be U.S.-based and shall execute a non-disclosure agreement that remains in effect following the termination of employment.

Subcontractors may be used by the NANPA to perform work, but responsibility for matters contracted remains with the NANPA, which shall exercise appropriate surveillance of subcontractors to ensure effective management of its responsibilities under this contract.

### **2.5.15 Availability**

Staff shall be available a minimum of five (5) days a week, as defined in Section 2.5 of this document. The NANPA is required to obtain prior approval from the FCC or its designee to any exception to this.

### **2.5.16 Core Hours**

Core business hours for the NANPA shall fall between 8:00 am and 5:00 pm Monday through Friday local time, excluding recognized holidays. However, if circumstances warrant, the NANPA shall be available at other times to meet the needs of the industry.

### **2.5.17 Physical Location**

The physical location of the NANPA facility(s) is at the discretion of the contractor but shall be within the continental United States. The NANPA shall notify clients and the public, by appropriate means, prior to any facility relocation or telephone number change.

If the facility in which the NANPA facility(s) is housed serves other purposes, space allocated to shall:

- Be dedicated entirely for NANPA use
- Be a distinguishable area, separate from other parts of the facility by use of secure access points
- Be contiguous space so that all NANPA personnel are physically located within the same secure area
- Provide sufficient backup power to maintain operation through electrical outages of at least eight (8) hours
- Include square footage and work space layouts for each NANPA staff member

### **2.5.4 Travel**

NANPA staff shall travel, when necessary, to meet the requirements of the NANPA, the industry and regulators (*e.g.*, to NANC meetings, INC and ESIF meetings, CIGRR meetings, NPA relief planning or NPA jeopardy meetings, pooling administration education meetings, or other meetings as otherwise necessary to comply with FCC requirements). The NANPA shall maintain staff that is readily available to perform such necessary travel.

### **2.5.5 Conflicts**

Staff members of the NANPA may not represent the interests of the parent company contracted as the NANPA in any respect. See FCC 00-104, paragraph 154 (Reference 1) and the conflicts and neutrality provisions in the awarded contract.

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

### **2.5.6 Subcontractors**

Subcontractors may be used to perform work under the awarded contract. Subcontracting with small businesses will be in accordance with *Federal Acquisition Regulation (FAR) Section 52.219-9, Small Business Subcontracting Plan* (Reference 46).

#### **2.5.6.1 Subcontractor Responsibilities of the NANPA**

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

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

### **2.5.6.2 Substitution of Subcontractors**

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

### **2.6 Telecommunications Requirements**

The NANPA shall have voice and data capabilities in order to communicate with all clients and the public concerning NANP Administration. Each NANPA staff member who has responsibilities for interfacing with clients shall have a direct dial number that allows direct telephone access to the staff member and the ability to leave a voice message for the staff member if he or she is unavailable.

The NANPA shall maintain read/write access to routing and rating databases.<sup>7</sup> This can be accomplished through a graphical user interface (GUI) and a mechanized interface. The NANPA shall also have access to the information contained in the LERG<sup>TM</sup> Routing Guide<sup>8</sup> or an equivalent.

The NANPA shall maintain a direct and mechanized interface to the Number Portability Administration Center (NPAC) to transmit and access data that the NANPA needs to perform its responsibilities. The data shall be obtained from the NPAC administrator per the details defined by the North American Portability Management, Limited Liability Corporation (NAPM LLC) that oversees the vendor of the local number portability systems and administration or as otherwise provided by FCC requirements.

### **2.7 Hours and Daily Operations**

The NANPA shall be available a minimum of five (5) business days per week (*i.e.*, Monday through Friday), eight hours per day during the business hours of its clients. However, since the NANP service area covers multiple time zones, the NANPA shall provide a mechanism (*e.g.*, voicemail, e-mail, facsimile) to be accessible on a 24-hour basis in order to meet the needs of all of its clients. Contact information shall be readily available on the NANPA web sites ([www.nationalnanpa.com](http://www.nationalnanpa.com) and [www.nanpa.com](http://www.nanpa.com)).

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

The NANPA shall maintain a log of all client contacts for review by the Auditor and other parties as designated by the FCC.

#### **2.7.18 Inquiry Response**

The NANPA shall respond within one (1) business day (to be defined in the time zone where the inquiry was originated) to general inquiries or questions, including those made outside normal business hours, whether made by email, voicemails, or any other method. All emails 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 shall be noted and brought to the attention of NANPA management.

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<sup>7</sup> The Business Integrated Routing and Rating Database System, BIRRRDS, is an iconectiv® system that the industry uses to provide input access to the LERG<sup>TM</sup> Routing Guide which contains the routing and rating information for assigned CO Codes and thousands-blocks.

<sup>8</sup> Common Language®, Telcordia® and iconectiv® are registered trademarks and CLLI<sup>TM</sup>, and LERG<sup>TM</sup> Routing Guide are trademarks and the Intellectual Property of Telcordia Technologies, Inc. dba iconectiv®.

The NANPA shall monitor and report on its customer response rates. This report shall be furnished to the FCC upon request and used to review the NANPA's customer service activities per the annual performance review process.<sup>9</sup>

### **2.7.2 Requests for Information and Referrals**

The NANPA shall, upon request, provide information and answer questions regarding NANPA and numbering administration processes, procedures, interfaces, and services within one (1) business day. The NANPA shall, upon request, provide new entrants and all other service providers or applicants 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 Numbering Resource assignees.

In addition, the NANPA shall provide, within one (1) business day of receipt of a request, information on how to obtain documents related Numbering Resource administration, including industry 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.

### **2.7.3 Emergency Notifications**

In emergencies, the NANPA shall be called upon to provide industry notification outside of the accepted timeframes defined in industry guidelines. These notifications shall be issued as appropriate and necessary depending on the circumstances.

### **2.7.4 Holidays**

The NANPA shall observe the following holidays: New Year's Day, Memorial Day, US Independence Day, Labor Day, Thanksgiving Day, Day after Thanksgiving<sup>10</sup>, and Christmas Day. NANPA shall be open for business on all other days that are neither a Saturday nor a Sunday. In all but the most exigent circumstances, emergency closures must first be discussed with the FCC's Contracting Officer Representative (COR).

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

### **2.7.5 Contact**

The NANPA shall provide mechanisms (*e.g.*, internet, voicemail, email, facsimile), to be accessible on a 24-hour basis.

The NANPA shall have the capability of transmitting and receiving email messages with and without attached files. The NANPA shall provide "firewall" protective screening of all incoming email messages and attachments based on a security profile established by the NANPA and approved by the FCC. The NANPA shall additionally provide virus protection software on all devices that receive/send email. The NANPA shall 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.

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<sup>9</sup> See 47 CFR §52.11 and §52.12.

<sup>10</sup> Not open for business, but the Help Desk shall be open and this shall be considered a business day for day counts on processing.

## 2.8 Modification of Guidelines

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

The NANPA 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 NANPA'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 NANPA's duties and responsibilities in sufficient detail as needed by the INC
- Provide contributions, describing how the change benefits the NANP and how the change shall affect the NANPA's duties, obligations or accountability

Within seven (7) business days of a change, the NANPA 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 NANPA shall provide this information to the FCC and the NANC or its designee. When the INC places any changes to its guidelines in initial closure, the NANPA shall submit an assessment (*i.e.*, a Change Order) regarding the impact of scope of work, time and costs to the INC, the NANC and the FCC within 30 days.

The NANPA shall post changes in procedures on its web site(s) prior to the change taking effect, and shall notify the industry of such posting.

The NANC shall be consulted at the FCC's discretion regarding the suggested implementation date of such changes to determine the likely impact on service provider or other assignee 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 NANPA's obligations and NANP administrative principles).

Specifically, the NANPA shall:

- Notify all interested parties when INC guidelines have changed and provide a short description of the changes.
- Interpret guideline changes and impact upon processes.
- Identify the implementation date or effective date of such changes.
- Provide notification of new forms or tools that may be required.
- Identify a Single Point of Contact (SPOC) within the NANPA's staff to answer questions.

## 2.9 Dispute Resolution

The NANPA shall resolve disputes and participate in dispute resolution as necessary. These disputes could arise from the performance of NANPA activities, from industry forum activities, or from conflicting government or regulatory policy directives. The extent of involvement of the NANPA in the resolution of disputes shall depend on the nature and origin of the dispute. The Dispute Resolution process, established by the NANC, shall be followed for determination of the controversy.



The NANPA shall assign Numbering Resources based on regulatory directives and industry guidelines. A disagreement may arise when the NANPA is assigning or denying the assignment of a resource, and the NANPA shall be required, based on the relevant regulatory directives, assignment guidelines, and the NANC Dispute Resolution process, to address and, if possible, resolve the disagreement. In addition, disputes may arise between regulatory authorities of NANP member countries and the NANPA may be required to participate in the resolution of the issue between the countries involved.

The NANPA shall interpret and apply relevant guidelines, directives, and Orders, including those listed in the *Index to the Binder of Decisional Principles* (Appendix C), to resolve a disagreement when assigning or denying the assignment of a Numbering Resource. The NANPA shall, in all cases, follow FCC rules and the relevant guidelines that are in effect at the time that the dispute arises.

Disputes may also arise within industry numbering activities. When this occurs, the NANPA may be requested to participate in dispute resolution by providing guidance and/or historical data. The NANPA shall abide by the NANC Dispute Resolution process. The NANPA shall provide any information it has relative to the dispute to the appropriate group responsible for resolving the dispute. The NANPA shall investigate the problem and report back within ten (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.

For all disputes, concerns, complaints, and issues raised by clients, oral or written, the NANPA shall prepare a document that contains:

- Description of the dispute, concern, complaint, or issue (recorded within one (1) business day)
- Plan of action (recorded within one (1) business day)
- The resolution and reasoning (recorded within one (1) business day of resolution)
- Number of business days passing before referred to appropriate state or federal regulators
- Number of business days passing before resolution accepted by complainant

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

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

## **2.10 Data Security**

Because of the proprietary and/or sensitive nature of some information that may be sent to the NANPA proper security measures shall be taken. The NANPA shall be responsible for maintaining the security, reliability, performance and flexibility of the NANP administration system. The system shall protect the sensitive information provided by service providers, Numbering Resource assignees or applicants, or any other source of proprietary, confidential, or private information.

The NANPA shall protect any service provider-specific or assignee-specific data designated as confidential, unless otherwise directed by that service provider or assignee, or the FCC. These measures shall conform to *FCC Cyber Security Program* (Reference 23), including guidelines and policies referenced therein.

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

The NANPA is also subject to security provisions in other sections of this document.

#### **2.10.19 Secure Work Area**

All work areas shall have limited access and secured record retention practices to ensure that service provider-specific and assignee-specific data is afforded the level of security required to maintain its designated security status. The NANP administration system shall have, at a minimum, security measures that are in conformance with the *FCC Cyber Security Program* (Reference 23). Systems shall include appropriate security measures for confidential data and accessibility for all service providers and assignees to their own information through an appropriately secured mechanism.

#### **2.10.20 Physical Security**

The NANPA shall provide suitable security for any and all computer systems that contain Numbering Resource assignment information and proprietary applicant information. This includes any system that is connected to any telecommunications network. The NANPA shall maintain and enforce physical security procedures that conform to the requirement to maintain confidential and proprietary information. The NANPA also shall be responsible for the activities of any subcontractors to ensure the security of all systems and data, including requiring all subcontractors to execute a nondisclosure agreement. The NANPA shall ensure that any data requested by a governmental non-NANP entity is protected as confidential by that entity through applicable law or another documented nondisclosure mechanism.

#### **2.10.21 Site Visits**

The FCC, with or without notice to the NANPA, shall have the right to make visits to the NANPA facilities to review safety/security requirements. If the safety and physical security procedures do not comply with those specified, the NANPA shall correct such noncompliance within ten (10) business days. In the event of noncompliance, the NANPA shall implement corrective measures and give notice of such implementation to the FCC, and the FCC may make one or more follow-up visits to the affected site, as necessary, to confirm that the deficiency has been rectified. The FCC's rights under this paragraph shall not in any way limit the FCC's ability to visit any site for reasons other than a safety/security visit.

Inspections shall include, but not be limited to, the facilities of subcontractors, NANPA or subcontractor maintenance organizations, and remote workstations used to process NANPA data.

#### **2.10.22 Data Accessibility**

The NANP administration system, and any other NANPA systems containing Numbering Resource administration data, shall have logon ID and password access. Formal access shall be initiated upon receipt of a completed logon ID request form having the proper written approvals from the requesting organization. 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 or use of an API key (as described in Section 2.14.5) shall be considered tantamount to an applicant signature. The NANPA shall provide state commission limited, password-protected access to the numbering administration database for applicable resources (*e.g.*, geographic CO codes, thousands-blocks).

#### **2.10.23 Unauthorized Access**

In the event that the NANPA becomes aware of an unauthorized access to its systems or user, service provider or assignee data, the NANPA shall immediately: (1) notify the FCC and the applicable user(s) by e-mail, (2) investigate the unauthorized access, and (3) subject to reasonable access, security and confidentiality requirements, provide the FCC, users, and their designees with reasonable access to all resources and information in the NANPA'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 that it determines is appropriate.

### **2.11 Implementation Plan**

The contractor shall provide an Implementation Plan to the FCC within 30 days of contract award, and an update of the Implementation Plan 30 days prior to the takeover of NANP Administration and Pooling Administration. The objective of this Implementation Plan shall be to achieve a seamless continuance of all NANPA and Pooling Administration services across Terms of Administration.

### **2.12 NANPA Transition to Successor**

There shall be a transition from the current administrator to the new administrator should the NANPA responsibility be awarded to a new party. 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, software, web sites and rights to software contracts and other intellectual property as outlined in the Transition Plan.<sup>11</sup>

This NANPA transition is additionally subject to the termination and continuity provisions in the solicitation. All bidders shall identify transition-related costs separately, including costs for transition from its predecessor and costs for transition to a successor.

Any other equipment or contracts associated with NANPA day-to-day operations shall transfer. This shall include but is not limited to:

- NAS and all its accounts and supporting documentation
- Approved cloud hosting services and cloud-based applications
- Computers and related equipment and software
- Other peripheral devices
- All NANPA and Numbering Resource records, both current and stored
- Web site URLs ([www.nationalnanpa.com](http://www.nationalnanpa.com) and [www.nanpa.com](http://www.nanpa.com))
- Also see the Transition Plan

#### **2.12.24 Transfer Efficiency**

The transfer of all property shall be performed in a manner that ensures an efficient and orderly transition of the NANP Administration System and associated equipment to a successor's environment in a fully operational state.

#### **2.12.25 Technical Support**

The contractor shall provide at least 15 business days, but up to 45 business days over a six (6)-month period, if required, of technical support to ensure a smooth transition of the system.

#### **2.12.26 Documentation**

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

#### **2.13.27 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 the *Software Transition Plan (STrP)* (Reference 26).

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<sup>11</sup> See also 47 CFR §52.13

## 2.14 Term of Administration

The contractor shall serve for a period determined by the FCC.

## 2.15 Interaction and Interfaces

The NANPA shall interact with the NPAC, the BIRRDs/LErG™ Routing Guide vendor, state regulatory authorities, federal and NANP member country regulatory authorities, media, as well as with service providers and assignees, PSAPs and 9-1-1 system providers.

The NANPA shall provide the following constituency interfaces:

<u>Constituent</u>	<u>Interface</u>
Service providers	Web, email, FTP, RESTful API
Applicants, assignees	Web, email, FTP, RESTful API
NPAC Vendor	Email, mechanized interface
BIRRDs/LErG™ Vendor	Web, email, mechanized interface
Regulatory agencies	Web, email
Media & general public	Web, email
PSAPs	Web, email
9-1-1 system providers	Web, email

At this writing, Telcordia Technologies, Inc. dba iconectiv® is the NPAC vendor. iconectiv® also maintains BIRRDs (Business Integrated Routing and Rating Database System) and the LErG™ Routing Guide. Service providers and assignees, federal and state regulators, and NANP member countries are responsible for establishing mutually-agreed upon communication interfaces with the NANPA that meet their individual equipment requirements.

Refer to Appendix B in this document for current contact information for the NPAC and BIRRDs/LErG™ vendors.

More detailed discussion of the duties and interactions with these constituents can be found in the following sections and the applicable industry guidelines.

### 2.14.1 Interface with the Media

The NANPA shall be required to communicate with the media to the extent permitted by the FCC, as well as state and federal regulatory bodies concerned with numbering matters. The NANPA shall prepare press releases and speak to the public on matters relating to all aspects of administration and management of NANP resources. In situations where its contractor status is not obvious to third parties, while making representations to the public, industry, and others, the NANPA shall identify itself in such a way as to avoid creating an impression in the minds of members of the public that it is a government official. The NANPA must also ensure that all documents or reports produced by it are suitably marked as NANPA products or that NANPA participation is appropriately disclosed. Information and data shared with the news media shall be factual in nature, publicly available and previously made known to the industry and regulators prior to media disclosure.

### 2.14.28 Interface with BIRRDs and LErG™ Routing Guide

The NANPA shall maintain access to iconectiv®'s BIRRDs and the LErG™ Routing Guide<sup>12</sup> to perform both its administrative functions and the required Enterprise Service. The BIRRDs interface

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<sup>12</sup> iconectiv® maintains the BIRRDs database, which is used to produce the LErG™ Routing Guide.

consists of a web-based GUI interface. The GUI interface shall be used to enter data into BIRRDS for central office code and thousands-block assignments. The NANPA shall arrange directly with iconectiv® for BIRRDS and LERG™ Routing Guide access. In addition to the GUI interface, the NANPA shall work with iconectiv® to develop a mechanized interface to handle all numbering resource assignments and returns performed by NANPA and required to be entered into BIRRDS, based upon INC guidelines.

#### **2.15.29 Interface with the Number Portability Administration Center (NPAC)**

The NANPA shall maintain an NPAC vendor email and mechanized interface (or any other interface which the NANPA and NPAC Vendor shall agree upon and obtain approval on from the FCC). The mechanized interface shall be used to notify the NPAC vendor about thousands-blocks that are being assigned or disconnected, and to receive acknowledgement from the NPAC vendor that the thousands-block assignment/disconnect information has been received. It shall also be used to receive notification from the NPAC vendor that the NPAC vendor has broadcast the thousands-block assignment or disconnect data.

The interface with the NPAC vendor also shall be used to request information from the NPAC about central office codes (also referred to as NXXs) and thousands-blocks that are about to be reclaimed by NANPA to ensure that there are no ported Telephone Numbers (TNs) contained within the NXX or thousands-block targeted for reclamation. If the NANPA finds that there are ported TNs within the targeted NXX or the thousands-block is more than 10% contaminated, the NANPA shall refer to the appropriate guidelines for alternative reclamation processing steps (*e.g.*, solicit a new code holder from those service providers with ported TNs within the targeted NXX or solicit a new block holder from those service providers with ported TNs within the targeted thousands-block).

The following list identifies each of the seven (7) NPAC regions and the states that are associated with each NPAC region in the United States. The North American Portability Management LLC (NAPM LLC) manages the contractual relationship with the NPAC vendor, and the NANPA shall contact the NAPM LLC to coordinate interfaces with the NPAC for the purposes of central office code and pooling administration.

- Mid-Atlantic Region: Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia
- Midwest Region: Illinois, Indiana, Michigan, Ohio, Wisconsin
- Northeast Region: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont
- Southeast Region: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee
- Southwest Region: Arkansas, Kansas, Missouri, Oklahoma, Texas
- West Coast Region: California, Hawaii, Nevada
- Western Region: Alaska, Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming

#### **2.14.4 Interface with IAC (Interexchange Access Customer) Database**

The NANPA shall maintain read-only access to the IAC (Interexchange Access Customer) database, which is administered by iconectiv® as the maintenance agent for the American National Standards Institute (ANSI). The IAC is also referred to as the Access Customer Name Abbreviation (ACNA) in the *Carrier Identification Code (CIC) Assignment Guidelines* (Reference 15). NANPA is responsible for verifying the ACNA in the assignment and administration of Carrier Identification Codes (CICs). The NANPA shall arrange directly with iconectiv® for this read-only access.

#### **2.15.5 Interface with the Service Providers, Numbering Resource Assignees and Applicants**

The NANPA shall maintain a Service Provider (SP) and Numbering Resource assignee/applicant interface to be used to receive NANP resource applications and to send assignments, in a relay between the NANPA and an applicant or assignee. Any or all of the following interfaces also may be necessary, depending on the particular applicant or assignee with which interaction is taking place or the Numbering Resource being requested, and thus, shall be made available by the NANPA: system-to-system (FTP and RESTful API), web site, and e-mail (with facsimile to be used only if other methods are not technically available). For example, these interfaces shall be used to receive Numbering Resource requests and to send assignments, and to receive Numbering Resource returns/disconnects and to send confirmations of such. These interfaces are also used for Numbering Resource Utilization and Forecast (NRUF) report submissions and to return a confirmation receipt to the service provider after an application and/or form has been accepted by the system for processing. The interfaces also shall be used to communicate information to Numbering Resource assignees (*e.g.*, NANP Notification System (NNS) notices, solicitations for new code holders or block holders, reminders for report filings, etc.). NANPA is responsible for ensuring the availability of these interfaces. All activities facilitated in the newly combined NAS system including but not limited to creating, modifying, deleting and checking the status of block requests, block modifications, block disconnections, CO code requests, CO code modifications, CO code disconnections, PSTN activation notifications, Part 4 block notifications, forecasts, and p-ANI requests shall be supported via a RESTful system-to-system (*i.e.*, API) interface. Authentication and authorization for this API shall be done using an API key, which can be created and revoked by users via a web interface (API key management). Furthermore, this API shall support uploading documents and referencing previously uploaded documents in subsequent programmatic requests.

#### **2.15.6 Interface with the FCC**

This interface shall be used to obtain the information necessary to conform to the FCC rule found at 47 CFR §1.1910 and commonly referred to as the “Red Light Rule.” This rule provides that anyone filing an application or seeking a benefit from the FCC or one of its components (including the Universal Service Administrative Corporation, Telecommunications Relay Service, or the NANPA) who is delinquent in debts owed to the FCC will be barred from receiving a license or other benefit until the delinquency has been resolved. Under this rule, when an application or request for benefit is filed, the FCC Registration Number (FRN) will be checked to determine if the entity or person is delinquent on a debt owed to the FCC. NANPA shall upload into the NAS the latest Red Light List made available by the FCC each business day. NANPA shall track what time each Red Light List was uploaded to the NAS so that information is available to assist applicants trying to clear themselves from the list, as necessary. NAS compares the FRNs appearing on the FCC Red Light list with the FRNs appearing in NAS NRUF data for the current reporting cycle, and then creates a file of OCNs with their associated FRNs which have been identified as delinquent. If the NANPA finds that the applicant’s FRN appears on the FCC’s Red Light List, the NANPA will withhold assigning Numbering Resources to that entity.

### **2.15.7 Interface with the State Regulatory Agencies**

The NANPA shall interface with regulatory agencies by web, email, voice, or U.S. mail. This interface shall support state regulatory access as appropriate to forms and applications filed by service providers, Numbering Resource assignees and applicants. It may also be necessary to fulfill a data request by other means, such as voice or facsimile. For example, the interface shall be used to provide a regulator NRUF forecast and utilization data for an NPA within its jurisdiction.

The NANPA may be called upon to testify in regulatory hearings. In these cases, the NANPA shall ensure that its testimony is factual, specific to the scope and requirements of this contract. Testimony in regulatory hearings shall be treated as an Enterprise Service (see Section 15).

The NANPA also shall be responsible for interfacing with regulatory authorities in person, when requested by such authority. The nature of these meetings may be educational or informational, depending on the circumstances and issues identified.

### **2.14.8 Interface with the ITU Technical Standards Bureau**

The NANPA shall interface with the ITU-Technical Standards Bureau (TSB) when required to provide information regarding the NANP. This information shall consist of the latest web links, contact individuals and timely information on the NANP, and any changes to the NANP (*e.g.*, the introduction of new NPAs) as required from national numbering administrators per ITU Recommendations.

### **2.15.9 Interface with the Study Group A and ITU Study Group 2**

The NANPA shall interface with the U.S. State Department and participating service providers through its attendance at Study Group A and ITU Study Group 2 meetings and activities.<sup>13</sup> Study Group A advises the State Department, through the United States Telecommunications Advisory Committee, on issues related to U.S. policy, standardization, regulatory, and competitive aspects of the operations and tariffs of telecommunications services. The NANPA's role shall be to advise the participants as to whether international issues and conflicts shall have an impact on the management and availability of NANP resources.

### **2.16 Interface with the MBI Administrator**

The NANPA shall be required to work with the neutral third party Mobile Identification Number (MIN) Block Identifier (MBI) administrator, for the administration and assignment of MBIs to MIN-based wireless providers in the United States and its territories. Upon request, the NANPA shall make available to the MBI Administrator information on the resources that are available as assignable MBIs.

### **2.15 Technical Requirements Document Maintenance**

The NANPA shall be required to review and update this Technical Requirements Document semi-annually and upon the implementation of any change order, and provide the updated document to the NANC or its designee. Updates shall include, but not be limited to, any new functionality added to the NAS or the web site, any change orders that have been implemented since the last review and update, changes to any specific industry guidelines that are referenced in the document, any industry guidelines changes that affect or conflict with language in the document, and any new Numbering Resources designated and managed by the NANPA.

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<sup>13</sup> 47 CFR §52.13

### **Section 3: NANP Administration**

The NANPA is responsible for management, administration, and assignment of all designated Numbering Resources within the NANP. The following list identifies NANP Numbering Resources that fall under the NANPA's direct responsibility and management:

- NPA Codes (Geographic and Non-Geographic)
- Geographic CO (NXX) Codes
- Geographic thousands-blocks
- Geographic p-ANIs
- Non-Geographic 5XX-NXX Codes
- Non-Geographic Easily Recognizable Code (ERC) 900-NXX Codes
- N11 Service Codes (reporting only)
- Non-Geographic Hearing Impairment 800-855-XXXX line numbers
- 555 [NXX] Line Numbers (reference only)
- Non-Geographic Carrier Identification Codes (CICs)
- Non-Geographic Vertical Service Codes (VSCs)
- Non-Geographic Automatic Number Identification Information Integer (ANI II) Digits
- Additional Numbering Resources, as may be defined.<sup>14</sup>

The sections that follow describe each resource, and summarize the NANPA's responsibilities. The NANPA shall perform assignment and administration functions for each of the above resources in conformance with regulatory directives and the relevant INC guidelines for those resources. The NANPA also is required to report on the status of each resource (see Section 11).

#### **3.17 Numbering Plan Areas (NPAs)**

The NPA refers to an area code that is the first three digits of a ten-digit telephone number. NPAs are classified as either geographic or non-geographic:

- Geographic NPAs are NPAs that correspond to discrete geographic areas within the NANP area.
- Non-geographic NPAs are NPAs that do not correspond to discrete geographic areas, but which are instead assigned for services with attributes, functions, or requirements that transcend specific geographic boundaries.

States within the United States have been delegated area code relief authority and may have unique directives and legal requirements associated with approval and implementation of any NPA relief activity.

The NANPA is responsible for assigning NPAs when the criteria for such an assignment have been met. The NANPA shall ensure that an NPA assignment conforms to regulatory directives and NPA relief plans (from the FCC and state commissions) and industry guidelines (*e.g.*, from the INC).

#### **3.18 Geographic Central Office (CO) Codes**

The three digits after the NPA are referred to as the CO Code. The NANPA shall monitor the actual and forecasted assignment of geographic CO Codes through the Months-to-Exhaust (MTE) form filed with each CO Code application. In addition, forecast and utilization data are submitted to the NANPA by reporting service providers in the NRUF Report. This information is used to plan for the assignment of new NPA codes when existing NPA codes near exhaust (*i.e.*, additional telephone numbers are required to serve projected demand). The NANP Administration function also includes consultation with affected service providers and state commissions when the depletion of central office codes necessitates relief. The NANPA shall initiate the reclamation process for geographic CO codes assigned to entities that fail to

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<sup>14</sup> See also 47 CFR §52.13



meet the terms specified in the assignment guidelines and/or by directives from the appropriate regulatory authorities.

### **3.3 Geographic Thousands-Blocks**

The NANPA is responsible for administering thousands-block number pools by assigning, managing, forecasting, reporting and processing data that will allow service providers in rate centers designated for thousands-block number pooling to receive telephone numbers in blocks of 1,000. References to thousands-blocks or blocks throughout this document are specific to thousands-block (NXX-X) number pooling in the United States and Puerto Rico only, unless otherwise specified. Thousands-block number pooling involves the allocation of blocks of 1,000 sequential telephone numbers within the same NPA and NXX to different service providers who serve customers within the same NPA and rate center. All 10,000 numbers within each NPA-NXX continue to be assigned to one (1) rate center, but are allocated among multiple service providers from a shared industry inventory and administered at the thousands-block level (e.g., NPA-NXX-X000 through X999) for assignment to service providers participating in that rate center. The NANPA shall monitor the actual and forecasted assignment of thousands-blocks through the Months-to-Exhaust (MTE) form filed with each thousands-block application. In addition, thousands-block forecast data by month is submitted to the NANPA by service providers in Appendix 1 of the *Thousands-Block (NXX-X) Pooling Administration Guidelines* (Reference 6). This information is used to plan for the replenishment of the thousands-block inventory pool from new central office codes as needed and assignment of new NPA codes when existing NPA codes near exhaust (i.e., additional telephone numbers are required to serve projected demand). The NANPA shall initiate the reclamation process for thousands-blocks assigned to entities that fail to meet the terms specified in the assignment guidelines and/or by directives from the appropriate regulatory authorities.

### **3.4 Geographic p-ANIs**

The NANPA is responsible for managing and assigning non-dialable pseudo-Automatic Number Identification numbers (p-ANIs), which are used to support the routing of wireless and VoIP 9-1-1 emergency calls on a national basis, including the United States, Puerto Rico and the US Virgin Islands. A p-ANI is a number, consisting of the same number of digits as an Automatic Number Identification (ANI), which is not a North American Numbering Plan telephone directory number and may be used in place of an ANI to convey special meaning to the selective router, public safety answering point (PSAP), and other elements of the 911 system. The NANPA is responsible for managing and assigning non-dialable p-ANIs, out of the 211 NXX and 511 NXX<sup>15</sup> on a national basis including Puerto Rico and the Virgin Islands. The NANPA shall monitor the actual and forecasted assignment of p-ANIs through the information filed with each p-ANI application, the semi-annual forecast data submitted to the NANPA by p-ANI assignees and applicants in Appendix 1 of the *p-ANI Administration Guidelines* (Reference 34), and the annual utilization data submitted to the NANPA by p-ANI assignees in Appendix 2 of the *p-ANI Administration Guidelines* (Reference 34). The NANPA shall initiate the reclamation process for p-ANIs assigned to entities that fail to meet the terms specified in the assignment guidelines and/or by directives from the appropriate regulatory authorities.

### **3.5 Non-Geographic 5XX-NXX Codes**

Non-Geographic 5XX-NXX codes are a non-geographic Numbering Resource to be used for applications which are non-geographic in nature, are not assigned to rate centers and may or may not traverse the PSTN, but do require an E.164 addressing scheme. The use of this NANP Numbering Resource is to communicate with both fixed and mobile devices, some of which may be unattended. This resource may be used for applications enabling machines, which would include but not be limited to wireless devices

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<sup>15</sup> Initially, the 211 and 511 NXXs, but also any subsequent NXXs designated for p-ANI purposes when the 211 and 511 NXXs exhaust in a particular NPA.

and appliances, the ability to share information with back-office control and database systems and with the people that use them. Service is limited only by terminal and network capabilities and restrictions imposed by the service provider.

The NANPA shall manage, assign and administer NXX codes in the 5XX NPAs pursuant to regulatory directives and the *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14). The NANPA shall monitor the actual and forecasted assignment of these 5XX-NXX codes through the Months-to-Exhaust (MTE) form filed with each application. In addition, forecast and utilization data are submitted to the NANPA by reporting service providers in the NRUF Report. This information is used to plan for the assignment of new NPA codes when existing NPA codes designated for non-geographic 5XX-NXX services near exhaust (*i.e.*, additional telephone numbers are required to serve projected demand). The NANPA shall initiate the reclamation process for 5XX-NXX codes assigned to entities that fail to meet the terms specified in the assignment guidelines and /or by directives from the appropriate regulatory authorities.

### 3.6 Non-Geographic Easily Recognizable Code (ERC) 900-NXX Codes

The 900 NPA is an ERC used for information services in which the caller pays for call setup and the specific services associated with the 900 call. The 900-NXX codes (also referred to as 9YY-NXX codes) shall be assigned and used only for pay-per-call information services. The codes, referred to as “Pay-Per-Calls,” may be accessed by the public over the PSTN using the dialing format 900-NXX-XXXX.

The NANPA shall manage, assign, and administer 9YY-NXX codes in the 900 NPA pursuant to regulatory directives and the *9YY-NXX Code Assignment Guidelines* (Reference 12). The NANPA shall monitor the actual and forecasted assignment of these 900-NXX codes. In addition, forecast and utilization data are submitted to the NANPA by reporting service providers in the NRUF Report. This information is used to plan for the assignment of new NPA codes when the existing NPA code designated for these services nears exhaust (*i.e.*, additional telephone numbers are required to serve projected demand). The NANPA shall initiate the reclamation process for 9YY-NXX codes assigned to entities that fail to meet the terms specified in the assignment guidelines and/or by directives from the appropriate regulatory authorities.

### 3.7 N11 Service Codes

Codes in the N11 format (*e.g.*, 911) are referred to as Service Codes. There are eight N11 service codes available in the NANP. The FCC determines the uses of N11 codes in the U.S. and its territories, which have been assigned as follows:

211	Community Information and Referral Services
311	Non-emergency Police and Other Governmental Services
511	Traffic and Transportation Information (US); Provision of Weather and Traveler Information Services (Canada)
711	Telecommunications Relay Service (TRS)
811	Access to One Call Services to Protect Pipeline and Utilities from Excavation Damage (US); Non-Urgent Health Triage Services (Canada)
911	Emergency

The 411 and 611 codes have not been assigned by the FCC. Carriers, however, use the 411 and 611 codes for access to their directory assistance and repair services respectively. Unassigned codes may also be assigned locally with the understanding that a local assignment shall be discontinued, on short notice, if

the unassigned codes are requested for nationally assigned purposes. Some U.S. states have permitted local use of certain N11 codes, pending FCC designated assignments. In Canada, the assignment of the N11 codes is generally consistent with the table above, except for code 511 which has been assigned for weather and traveler information services and 811 for non-urgent healthcare telephone triage service. Other NANP member countries may in the future designate specific uses for N11 codes within their jurisdictions.

### **3.8 Non-Geographic Hearing Impairment 800-855 XXXX Line Numbers**

Line numbers from the 800-855 CO code in the format 800-855-XXXX are used for assisting persons with hearing impairments. These numbers are assigned individually at the line level. The NANPA shall manage, assign, and administer line numbers within the 800-855-XXXX resource pursuant to regulatory directives and the *800-855 Number Assignment Guidelines* (Reference 16). Other NANP member countries may designate specific uses for 800-855-XXXX line numbers in the future.

### **3.9 555 [NXX] Line Numbers**

The 555 [NXX] code within each geographic NPA and its line numbers are currently not available for assignment. However, the 555-1212 line number in each geographic NPA is grandfathered for directory assistance purposes, and the fictitious non-working line numbers 555-0100 through 0199 remain reserved for entertainment and advertising purposes. Future use of this resource shall be determined by the FCC and/or the INC. The NANPA shall maintain a link on its web site to the *555 NXX Line Number Reference Document* (Reference 13), and answer questions about the limited remaining uses as needed.

### **3.10 Non-Geographic Carrier Identification Codes (CICs)**

A CIC is primarily used to route and bill calls in the public switched telephone network. A CIC is a four-digit code in the format XXXX, where X is any digit from 0 through 9. Separate CIC pools are maintained for Feature Group B (line side) access and Feature Group D (trunk side) access.

NANPA assigns CICs to Local Exchange Carriers, purchasers of Feature Group B or D access, switchless resellers, Billing and Collection Clearinghouses, and Interconnected VoIP Service Providers.

The NANPA shall manage and assign CICs in accordance with the *Carrier Identification Code (CIC) Assignment Guidelines* (Reference 15) and/or FCC directives. The NANPA shall initiate the reclamation process for CICs assigned to entities that fail to meet the terms specified in the assignment guidelines and/or by directives from the FCC.

### **3.11 Non-Geographic Vertical Service Codes (VSC)**

VSCs are standardized codes dialed by customers to access network features and services (*e.g.*, call forwarding) provided by network service providers. These codes appear in the \*XX or \*2XX format. The NANPA shall assign, manage, and approve new VSC assignment requests in accordance with the *Vertical Service Code (VSC) Assignment Guidelines* (Reference 17).

### **3.12 Non-Geographic Automatic Number Identification (ANI) II Digits**

ANI II digits are two (2) digits that are sent with the originating telephone number identifying the type of originating station (*e.g.*, Plain Old Telephone Service (POTS), hotel/motel). The NANPA shall assign the digits and track the assignments. ANI II digits are assigned by the NANPA at the request of the INC. The assignment of an ANI II digit does not imply its ubiquitous availability.

## **Section 4: Geographic Central Office (CO) Code Administration**

### **4.19 Requirements**

The NANPA shall manage the CO Code resources in accordance with federal regulatory requirements and the latest version of the published *Central Office Code (NXX) Assignment Guidelines* (Reference 8) or its successor document. The NANPA shall perform the CO Code administration that encompasses the following major functional categories:

- User<sup>16</sup> Services
- Processing
- Client and Internal Communication / Notification Functions
- Status Reporting
- Tracking CO Code Utilization for NPA relief
- Managing jeopardy conditions

The NANPA, in order to perform CO Code Administration functions, shall maintain considerable knowledge of local/regional environments, including geography, demographics, growth patterns, local dialing plans, and eligibility requirements. This knowledge shall be applied to each CO Code assignment. Local conditions for each NPA shall be posted to the NANPA web site.

When there are changes to the *Central Office Code (NXX) Assignment Guidelines* (Reference 8) or there are regulatory directives, the NANPA shall institute a training program to educate its CO Code Administration staff in order to ensure consistent application. Training shall be completed within five (5) business days before the date the change to the guidelines becomes effective.

Within 90 days of contract award, the contractor shall provide to the Contracting Office Representative (COR) a Change Management Plan for adapting the CO Code assignment practices in accordance with updates and modifications to the *Central Office Code (NXX) Assignment Guidelines* (Reference 8) and regulatory directives. The COR shall review the plan and request any necessary changes within 60 days, which the contractor will effectuate before implementation.

### **4.20 Functional Specifications**

CO Code administration activities include the key functional requirements detailed below.

#### **4.20.30 User Services**

The NANPA shall produce and make available information regarding CO Code Administration processes, guidelines, procedures, interfaces, and services.

Upon request, the NANPA shall provide information on how to obtain current documents related to CO code administration. The NANPA may refer users to web sites where information can be located and downloaded. These documents currently include, but are not limited to:

- *Central Office Code (NXX) Assignment Guidelines* (Reference 8)
- *Thousands-Block (NXX-X) Number Pooling Administration Guidelines* (Reference 6)
- *Location Routing Number (LRN) Assignment Practices* (Reference 20)
- *Guidelines for the Administration of Telephone Numbers* (Reference 45)
- *NANP Numbering Resource Utilization/Forecast (NRUF) Reporting Guidelines* (Reference 7)
- *NPA Code Relief Planning and Notification Guidelines* (Reference 19)
- *NPA Allocation Plan and Assignment Guidelines* (Reference 18)

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<sup>16</sup> User represents code applicants, code holders, regulatory agencies, and the general public.

- *Jeopardy Procedures for a particular NPA*
- *Recommended Notification Procedures to Industry for Changes in Access Network Architectures* (Reference 22)

The NANPA shall provide assistance to all entities who use Numbering Resources and suggest alternatives, when possible, that may assist users with Numbering Resource optimization and utilization issues. The NANPA shall maintain a working knowledge of applicable state regulations and local dialing plans. The NANPA shall assist code applicants with understanding and completing all forms and appendices associated with INC guidelines. The NANPA shall educate users. Such education may include, but is not limited to, providing training videos, job aides, and/or providing necessary forms and instructions on the NANPA web site. The NANPA shall notify its users and interested parties when industry guidelines or applicable regulatory directives have changed. The NANPA shall provide electronic notification of administrative process and procedural changes within five (5) business days of the change being identified by the NANPA. Implementation of these changes shall include a transition period before the new process or procedure becomes effective.

The NANPA shall respond to inquiries regarding available and assigned CO Codes. Such response may consist of referring the user to a specific page on the NANPA web site.

#### **4.20.31 Processing**

The NANPA shall receive and verify applications (Part 1) for CO Codes in accordance with FCC directives and the INC guidelines. The NANPA shall provide a confirmation (Part 3) in response to every CO Code application received. The subject line of the Part 3 shall contain the following information: rate center abbreviation, state, NPA-NXX, Part 3 for tracking ID XXX and the status of application (*i.e.*, approved, denied, suspended or withdrawn). However, if the Part 3 is denying, suspending or withdrawing a new CO Code request, no NPA-NXX shall appear in the subject line.

If a state commission has not yet chosen a relief method and established a relief date, the NANPA, as CO Code administrator, and the industry shall devise the jeopardy conservation or rationing measures, consistent with the industry guidelines. As CO Code Administrator, the NANPA shall be aware of and adhere to any limits on code assignments as ordered by state commissions or agreed to by industry, as well as any other provisions of rationing plans. The NANPA shall apply CO Code optimization practices in accordance with FCC directives and the *Central Office Code (NXX) Assignment Guidelines* (Reference 8), as appropriate.

The NANPA shall also:

- Maintain a CO code conflict database and publish on the NANPA's web page CO codes by NPA that are "unavailable for assignment" due to dialing, routing and/or rating conflicts
- Include in this list CO codes that are unavailable due to permissible services identified by the state tariff, CO codes that are used for testing, and CO codes that are used for unique call routing/rating arrangements
- Provide, as needed, details of local/regional environments including, for example, geography, demographics, growth patterns, local dialing plans, and eligibility requirements

#### **4.20.32 Communication/Notification Functions**

The NANPA shall post daily on its web site the NXXs assigned, available, and unavailable in each NPA. This information shall be updated as changes occur. Other means of distributing reports shall be available as necessary. The NANPA shall follow the *Central Office Code (NXX) Assignment Guidelines* (Reference 8) for notification of CO Code assignments. The NANPA shall enter CO code data through a

mechanized interface into the BIRRDs database, accurately and within the timeframes required in the INC guidelines. The NANPA also shall have the capability to input rating and routing data into the BIRRDs database as an Enterprise Service to a code holder.

The NANPA shall issue notification of all CO Code jeopardy situations and other pertinent CO Code administration activities to the appropriate regulatory agencies and the affected industry members.

#### **4.20.33 Status Reporting**

For CO Code Administration, the NANPA shall monitor and report the status of NXXs in each NPA, including a total by status (e.g., total available, total unavailable and total assigned NXXs). These reports shall be generated and posted to the NANPA web site each business day.

#### **4.20.34 Tracking CO Code Utilization for NPA Relief**

The NANPA shall fulfill the process responsibilities in accordance with the *NPA Code Relief Planning and Notification Guidelines* (Reference 19) and regulatory directives, including the following:

- Determine when to initiate NPA Relief by continually monitoring CO Code growth and projecting exhaust.
- Upon the identification of a potential exhaust situation, notify appropriate regulatory authorities and affected parties within the NPA.
- If necessary, immediately organize a relief planning meeting to obtain local industry consensus and subsequent regulatory direction for a relief implementation plan.

#### **4.2.6 Management of Jeopardy Conditions**

The NANPA shall:

- Declare a jeopardy NPA condition within any NPA that meets the conditions established in the appropriate industry guidelines and regulatory orders
- Monitor CO Code growth and projected exhaust
- Notify appropriate regulatory authorities and affected parties within the NPA
- Notify the industry that jeopardy code rationing is available if so desired, or may be specified in a pending state commission order if the industry does not come to consensus on final jeopardy procedures
- Implement NPA-specific conservation measures as a part of CO Code application processing, if necessary, subject to local industry consensus or regulatory direction

#### **4.21 Management of the CO Code Inventory**

The NANPA shall track and monitor months-to-exhaust (MTE), forecast, and utilization reports so that it shall be able to forecast demand and anticipate the need for relief to avoid premature exhaust of each NPA and the NANP.

#### **4.22 CO Code Reclamation**

In accordance with paragraph 237 of FCC 00-104 (Reference 1), the NANPA shall initiate the reclamation process, as specified in the *Central Office Code (NXX) Assignment Guidelines* (Reference 8). The NANPA shall receive and process Part 4 confirmations from code holders during the six-month period following the LERG™ Routing Guide effective date of the code specified on the Part 3. Receipt of a Part 4 from a code holder certifies that the code has been placed in service. The NANPA shall acknowledge its Part 4 receipt by issuing the code holder a Part 5 Administrator's Part 4 Receipt/Confirmation. The NANPA shall maintain a tracking system for receipt of Part 4s and return notification of Part 5 Forms. No further action is required of the code holder once a Part 4 has been submitted.

Not later than one (1) month prior to the end of the six (6)-month period, the NANPA shall send a reminder notice to code holders if no Part 4 Form has been posted for the code now assigned to them. The subject line of the reminder notice shall contain the following information: rate center abbreviation, state, NPA-NXX, Confirmation of Code Activation (Required) – Part 4. The body of the reminder notice shall contain, at minimum, the following information: NPA-NXX, switch CLLI, OCN, OCN name, Part 3 effective date and the Part 4 due date. The NANPA shall send a second notice to the service provider if no Part 4 is received within six (6) months of the original code effective date. The subject line of this second notice shall contain the following information: rate center abbreviation, state, NPA-NXX, Part 4 Delinquent Notice. The body of the reminder notice shall contain, at minimum, the following information: NPA-NXX, switch CLLI, OCN, OCN name, Part 3 effective date and the Part 4 due date. This second notice also shall inform the service provider that it must submit the Part 4 to the appropriate regulatory authority.

If requested, the NANPA shall submit lists of service providers and their OCNs who are delinquent in the return of the Part 4 forms to state regulators monthly. If a code holder fails to submit a Part 4 within the timeframe specified by the FCC, the NANPA shall initiate the reclamation procedures, keeping accurate and complete records for each action taken. The NANPA shall obtain either state or FCC regulatory approval prior to reclaiming codes.

The NANPA shall maintain a current point of contact list for CO Code reclamation. Regulators and service providers are to be included on the list. In addition, a contact list for all other NANP members shall be maintained, if necessary.

## Section 5: Geographic Thousands-Block Pooling Administration

### 5.23 Requirements

The NANPA shall manage the thousands-block resources in accordance with federal regulatory requirements and the latest version of the published *Thousands-Block (NXX-X) Number Pooling Administration Guidelines* (Reference 6) or its successor document. The NANPA shall perform the thousands-block administration that encompasses the following major functional categories:

- User<sup>17</sup> Services
- Management of the thousands-block inventory pools
- Processing
- Client and Internal Communication / Notification Functions
- Status Reporting
- Reclamation

When there are changes to the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6) or there are regulatory directives, the NANPA shall institute a training program to educate its thousands-block administration staff in order to ensure consistent application. Training shall be completed within five (5) business days before the date the change to the guidelines becomes effective.

Within 90 days of contract award, the contractor shall provide to the COR a Change Management Plan for adapting the thousands-block assignment practices in accordance with updates and modifications to the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6) and regulatory directives. The COR shall review the plan and request any necessary changes within 60 days, which the contractor will effectuate before implementation.

### 5.24 Functional Specifications

Thousands-block pooling administration activities include the key functional requirements detailed below.

#### 5.24.35 User Services

The NANPA shall produce and make available information regarding thousands-block pooling administration processes, guidelines, procedures, interfaces, and services.

Upon request, the NANPA shall provide information on how to obtain current documents related to thousands-block pooling administration. The NANPA may refer users to web sites where information can be located and downloaded. These documents (referenced in Section 16) currently include, but are not limited to:

- *Central Office Code (NXX) Assignment Guidelines* (Reference 8)
- *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6)
- *Location Routing Number (LRN) Assignment Practices* (Reference 20)
- *Guidelines for the Administration of Telephone Numbers* (Reference 45)
- *NANP Numbering Resource Utilization/Forecast (NRUF) Reporting Guidelines* (Reference 7)
- *NPA Code Relief Planning and Notification Guidelines* (Reference 19)
- *NPA Allocation Plan and Assignment Guidelines* (Reference 18)
- *Jeopardy Procedures for a particular NPA*
- *Recommended Notification Procedures to Industry for Changes in Access Network Architectures* (Reference 22)

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<sup>17</sup> User represents thousands-block applicants, thousands-block assignees, regulatory agencies, and the general public.



The NANPA shall provide assistance to all entities who use Numbering Resources and suggest alternatives, when possible, that may assist users with Numbering Resource optimization and utilization issues. The NANPA shall assist thousands-block applicants with understanding and completing all forms and appendices associated with the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6). The NANPA shall educate users. Such education may include, but is not limited to, providing job aides and providing necessary forms and instructions on the NANPA web site. The NANPA shall notify its users and interested parties when industry guidelines or applicable regulatory directives have changed. The NANPA shall provide electronic notification of administrative process and procedural changes within five (5) business days of the change being identified by the NANPA. Implementation of these changes shall include a transition period before the new process or procedure becomes effective.

The NANPA shall respond to inquiries regarding available and assigned thousands-blocks. Such response may consist of referring the user to a specific page on the NANPA web site.

### **5.2.2 Management of Thousands-Block Industry Inventory Pool**

The NANPA shall be responsible for all activities associated with the industry inventory thousands-block pool establishment, management and on-going maintenance. The NANPA shall use all reasonable efforts to maintain sufficient blocks of 1,000 numbers to ensure that all participating service providers' requirements can be met, which is the objective of the industry inventory pool.

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

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

Thousands-blocks shall be assigned from both contaminated (10% or less) and non-contaminated inventoried pooled thousands-blocks. Contamination occurs when at least one (1) telephone number within a donated or returned thousands-block is not available for assignment to customers of the thousands-block holder.

#### **5.2.2.1 Thousands-Block Inventory Pool Level**

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

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

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

#### **5.2.2.2 Industry Inventory Thousands-Block Pool Establishment Timeline for Rate Centers becoming Pooling Mandatory**

The NANPA shall be responsible for developing the inventory pool implementation timeline in consultation with the industry, in conformance with applicable state or FCC orders, if/when thousands-block pooling becomes mandatory in additional rate centers. The timeline shall specifically identify those

rate centers. This timeline contains all the steps and dates that participating service providers shall be required to meet in order to implement thousands-block number pooling in a designated pooling rate center.

The timeline shall include the following activities:

- Designation of the pooling rollout schedule 90 calendar days prior to the start of pooling in a rate center
- First or Supplemental Implementation Meeting
- Forecast Report Date
- Block Protection Date
- Block Identification Date
- Date for completion of the industry inventory pool surplus or deficiency
- Block Disconnect Date
- Pool Start and Block Allocation Date
- Accounting for all blocks with ten (10) percent or less contamination

Additional details regarding requirements for establishing the industry inventory pool can be found in Appendix A of the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6).

### **5.2.2.3 Replenishment of the Thousands-Block Inventory Pool**

The NANPA shall provide a mechanism for service providers to replenish the six (6)-month thousands-block inventory pool for each rate center, consistent with the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6).

#### **5.2.2.3.1 Forecast**

Service providers participating in thousands-block pooling are required to submit forecasted demand reports semi-annually to the NANPA. The NANPA shall use this data and the criteria in Section 5.2.2.1 to size and manage each rate center pool, and shall also use this data in determining NPA exhaust for relief planning purposes and for determining NANP exhaust.

#### **5.2.2.3.2 Data Request Dates**

The forecasted thousands-block data request shall be consistent with the NRUF reporting dates. The NANPA shall compile, at least semi-annually, aggregated pooling forecast data submitted by service providers pursuant to the industry guidelines for use in determining NPA and NANP exhaust.

#### **5.2.2.3.3 Forecast Analysis**

The NANPA shall use service provider forecasts to ensure that service providers are notified when there are insufficient thousands-blocks available to meet the expected applications from participating service providers in each rate center inventory pool.

#### **5.2.2.3.4 Reports**

The NANPA shall utilize aggregated thousands-block holder forecast data for each pool for consideration in NPA relief, NANP exhaust and NRUF reporting activities.

State regulatory authorities may request access to the thousands-block inventory pool and forecast data for the NPAs associated with their states.

### **5.2.2.3.5 Replenishment**

The NANPA is responsible for monitoring each rate center pool and providing a mechanism for service providers to replenish and maintain a six (6)-month supply of assignable thousands-blocks (industry level inventory) in each rate center pool. The aggregate service provider forecasts submitted during each NRUF cycle shall be used initially to determine the appropriate level of inventory.

When the NANPA first realizes that the amount of inventory in each rate center pool may – in the future – fall below the projected six (6)-month forecast, the NANPA shall begin the replenishment process in accordance with the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6).

### **5.2.4.3 Thousands-Block Application Processing**

The NANPA shall receive and verify applications for thousands-blocks in accordance with FCC directives and the INC guidelines. Thousands-block applications shall be transmittable through the NAS, for which access can be found on the NANPA's web site.

#### **5.2.3.1 Thousands-Block Application Supporting Data**

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

1. Thousands-block applicants shall be licensed or certified to operate in the rate center, and, if required, demonstrate that all applicable regulatory requirements have been met (*e.g.*, facilities readiness criteria).
2. Thousands-block applicants shall submit a Months to Exhaust (MTE) worksheet for telephone numbers (TNs) with growth thousands-block applications.
3. Thousands-block applicants shall have on file a current Numbering Resource Utilization and Forecast (NRUF) Report for the associated requested rate center and/or NPA and a current pooling forecast with the NANPA.
4. Thousands-block applicants shall be confirmed by 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.
5. Authorized interconnected VoIP providers shall provide evidence of 30-day notification to the appropriate state commission.

#### **5.2.3.2 Thousands-Block Applicant Treatment**

The NANPA shall be responsible for ensuring that thousands-blocks are assigned in a fair and non-discriminatory manner. In addition, information requested from participating service providers shall be limited to that necessary for accurate and timely assignment and should be uniform for all thousands-block applicants.

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

### **5.2.3.3 Thousands-Block Application Response**

The NANPA shall provide a confirmation in response to every thousands-block application received. Any system-generated emails associated with a NAS Tracking Number sent to service providers or thousands-block applicants shall clearly identify the rate center, state, specific NPA-NXX or NPA-NXX-X, type of response or request, status of the application (*i.e.*, approved, denied, suspended or withdrawn), and the Tracking Number in the subject line. However, if the response is denying, suspending or withdrawing a new CO Code request, no NPA-NXX shall appear in the subject line. The contents of the emails shall include sufficient information (*e.g.*, OCN, effective date, switching ID/POI) so that recipients can determine disposition of the email without logging into the system.

### **5.2.4 Communication/Notification Functions**

The NANPA shall post daily on its web site the thousands-blocks assigned, retained and available in each rate center. This information shall be updated as changes occur (*i.e.*, information should be near real-time). Other means of distributing reports shall be available as necessary. The NANPA shall follow the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6) for notification of thousands-block assignments.

#### **5.2.4.1 BIRRDs/LErG™ Routing Guide Notification**

After the NANPA has made a thousands-block assignment, the NANPA shall enter the necessary thousands-block information through a mechanized interface into the iconectiv® BIRRDs, accurately and within the timeframes required in the INC guidelines. This will allow the service provider to build the necessary NXD-X block record(s) in BIRRDs for LErG™ Routing Guide update.

#### **5.2.4.2 NPAC Notification**

Consistent with the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6), the NANPA shall notify the NPAC via the mechanized interface of all block assignments and block returns/disconnects to ensure that the appropriate porting activity and industry notification occurs.

#### **5.2.4.3 Problem Resolution Assistance**

The NANPA shall use all records available to the NANPA to assist service providers and/or regulators in resolving customer complaints as the result of call completion failures, misrouting and/or service outages. Although proprietary data cannot be disclosed to other parties, the NANPA shall provide all other information and referral contacts to requesting parties within a timeframe that is agreed upon between the NANPA and the requesting party based upon the urgency of the failure. The NANPA 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 NANPA 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.

### **5.2.5 Status Reporting**

For thousands-block pooling administration, the NANPA shall monitor and report the status of all thousands-blocks in each rate center, including a total by status (*e.g.*, total available, total assigned or retained). These reports shall be generated and posted to the NANPA web site each business day.

### **5.2.6 Thousands-Block Reclamation**

Consistent with the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6), the NANPA shall be responsible for initiating the reclamation process of assigned or abandoned

thousands-blocks where the assignee has not met the required criteria to retain the assigned or abandoned thousands-block.

The NANPA shall receive and process In Service confirmations from thousands-block assignees during the six-month period following the LERG™ Routing Guide effective date of the thousands-block specified on the response form. Receipt of an In Service confirmation from a thousands-block assignee certifies that the thousands-block has been placed in service. The NANPA shall maintain a tracking system for receipt of Part 4s. No further action is required of the thousands-block assignee once a Part 4 has been submitted.

Not later than one (1) month prior to the end of the six-month period, the NANPA shall send a reminder notice to thousands-block assignees if no Part 4 Form has received. The subject line of the reminder notice shall contain the following information: rate center abbreviation, state, NPA-NXX-X, Confirmation of Block Activation (Part 4) Reminder. The body of the reminder notice shall contain, at minimum, the following information: NPA-NXX-X, rate center abbreviation, state, switch CLLI, OCN, OCN name, Part 3 effective date and the Part 4 due date. The NANPA shall send a second notice to the service provider if no Part 4 is received within six (6) months of the original effective date for the thousands-block. The subject line of this second notice shall contain the following information: NPA-NXX-X, Overdue Part 4 Reminder, Tracking Number. The body of the reminder notice shall contain, at minimum, the following information: NPA-NXX-X, rate center abbreviation, state, switch CLLI, OCN, OCN name, Part 3 effective date and the Part 4 due date. This second notice also shall inform the service provider that it must submit the Part 4 to the appropriate regulatory authority.

If requested, the NANPA shall submit lists of service providers and their OCNs who are delinquent in the return of the Part 4 forms to state regulators monthly. If a block holder fails to submit a Part 4 within the timeframe specified by the FCC, the NANPA shall initiate the reclamation procedures, keeping accurate and complete records for each action taken. The NANPA shall obtain either state or FCC regulatory approval prior to reclaiming thousands-blocks.

The NANPA shall maintain a current point of contact list for thousands-block reclamation. Regulators and service providers are to be included on the list.

#### **5.2.6.1 Criteria for Thousands-Blocks Reclamation**

Specific criteria for block reclamation can be found in the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6).

#### **5.2.6.2 Administrative Responsibilities for Thousands-Blocks Reclamation**

At a minimum, the NANPA shall:

- Apply thousands-block reclamation criteria to any thousands-blocks subject to reclamation
- Clarify any alleged non-use or misuse of an assigned thousands-block
- Notify the service provider that a thousands-block is subject to reclamation
- If appropriate, notify and coordinate reclamation efforts with the appropriate regulatory bodies
- Notify the service provider when a thousands-block has been reclaimed using the Part 5 form in the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (Reference 6), and that the thousands-block will be available shortly for reassignment
- Enter the thousands-block disconnect information into BIRRDS via the mechanized interface
- Notify the NPAC of the thousands-block disconnect through the mechanized interface

## Section 6: Geographic p-ANI Administration

### 6.25 Requirements

The NANPA shall manage the p-ANI resources in accordance with federal regulatory requirements and the latest version of the published *p-ANI Administration Guidelines* (Reference 24). The NANPA shall perform the p-ANI administration that encompasses the following major functional categories:

- User<sup>18</sup> Services
- Management of the p-ANI inventory pools
- Processing
- Problem Resolution
- Status Reporting
- Reclamation

When there are changes to the *p-ANI Administration Guidelines* (Reference 24) or there are regulatory directives, the NANPA shall institute a training program to educate its p-ANI administration staff in order to ensure consistent application. Training shall be completed within five (5) business days before the date the change to the guidelines becomes effective.

Within 90 days of contract award, the contractor shall provide to the COR a Change Management Plan for adapting the p-ANI assignment practices in accordance with updates and modifications to the *p-ANI Administration Guidelines* (Reference 24) and regulatory directives. The COR shall review the plan and request any necessary changes within 60 days, which the contractor will effectuate before implementation.

### 6.26 Functional Specifications

p-ANI administration activities include the key functional requirements detailed below.

#### 6.26.36 User Services

The NANPA shall produce and make available information regarding p-ANI administration processes, guidelines, procedures, interfaces, and services.

Upon request, the NANPA shall provide information on how to obtain current documents or other information related to p-ANI administration. The NANPA may refer users to web sites where information can be located and downloaded. These documents or information currently include, but are not limited to:

- *p-ANI Administration Guidelines* (Reference 24)
- *NPA Code Relief Planning and Notification Guidelines* (Reference 19)
- Relevant ESIF, NENA, FCC licensing information and PSAP documentation.

The NANPA shall provide assistance to all entities who use Numbering Resources and suggest alternatives, when possible, that may assist users with Numbering Resource optimization and utilization issues. The NANPA shall assist p-ANI applicants with understanding and completing all forms and appendices associated with the *p-ANI Administration Guidelines* (Reference 24). The NANPA shall educate users. Such education may include, but is not limited to, providing job aides and providing necessary forms and instructions on the NANPA web site. The NANPA shall notify its users and interested parties when industry guidelines or applicable regulatory directives have changed. The NANPA shall provide electronic notification of administrative process and procedural changes within five

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<sup>18</sup> User represents p-ANI applicants, p-ANI assignees, regulatory agencies, 9-1-1 system service providers, and PSAPs.

(5) business days of the change being identified by the NANPA. Implementation of these changes shall include a transition period before the new process or procedure becomes effective.

### **6.2.2 Management of p-ANI Inventory Pool**

The NANPA shall be responsible for all activities associated with the industry inventory p-ANI pool establishment, management and on-going maintenance. The NANPA shall monitor and manage the p-ANI inventory pool for each NPA. The aggregate p-ANI assignee forecast submitted during each Forecast Report cycle, is to be used initially to determine the appropriate level of inventory.

The NANPA shall maintain a current listing of NPAs selected for p-ANI implementation. Therefore the NAS shall be capable of implementing additional NPAs in relation to p-ANI inventory pools. Initially p-ANI assignments shall be made from the 211 and 511 NXX codes, but the NAS shall be capable of implementing additional NXXs as needed in relation to p-ANI inventory pools.<sup>19</sup>

P-ANIs shall be assigned from the p-ANI inventory of the requested NPA. The p-ANI inventory shall be from the non-dialable NPA-NXX codes designated for p-ANI purposes (*e.g.*, 211 and 511). Each individual NPA is considered a separate pool of p-ANI numbers, even in cases where an NPA overlay situation exists, because of technical limitations (*e.g.*, many selective routers can only support a maximum of four (4) NPAs). Initially the inventory pool shall be comprised of p-ANIs from the 211 and 511 NXX codes in each NPA, maintained in a single pool for that NPA.<sup>20</sup>

#### **6.2.2.1 p-ANI Inventory Pool Level**

The quantity of p-ANIs that need to be maintained in the inventory pool should be determined using the following criteria:

- The NANPA's analysis of all p-ANI forecasts filed for each NPA inventory pool
- The NANPA's analysis of all p-ANI annual reports filed for each NPA inventory pool

The NANPA shall make every attempt to have a sufficient quantity of p-ANIs are available for assignment to satisfy demand.

#### **6.2.2.2 Forecast and Utilization**

Service providers and other p-ANI assignees participating in p-ANI administration are required to submit forecasted demand reports semi-annually to the NANPA, and utilization reports annually to the NANPA. The NANPA shall use this data and the criteria in Section 6.2.2.1 to ensure that there are sufficient p-ANIs available to meet the expected applications from participating p-ANI assignees in each NPA inventory pool.

#### **6.2.2.3 Data Request Dates**

The forecasted p-ANI data request shall be made to p-ANI assignees 30 days prior to the semi-annual Forecast Report due dates. The p-ANI annual report data request shall be made to p-ANI assignees 30 days prior to the Annual Report due date.

#### **6.2.2.4 Forecast and Utilization Analysis**

The NANPA shall use p-ANI assignee forecasts and utilization data and the criteria in Section 6.2.2.1 to size and manage each NPA's inventory pool. The NANPA also shall use this data to estimate the projected exhaust date for each NPA pool.

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<sup>19</sup> Additional NXXs may be designated in the future as needed.

<sup>20</sup> There is no technological or other distinction between the 211 and 511 NXXs, nor is there expected to be any for any other NXXs assigned in the future. As such, p-ANIs from designated NXXs will be interchangeably assigned to wireless and VoIP service providers.

### **6.2.2.5 Reports**

Regulatory authorities may request access to p-ANI inventory pool and forecast data. The NANPA shall use the p-ANI assignee forecast and utilization data to produce and publish the p-ANI Activity and Projected Exhaust Report on the NANPA web site (See Section 6.2.5).

### **6.2.2.6 Replenishment**

The NANPA is responsible for monitoring each NPA pool and replenishing the supply of assignable p-ANIs in each NPA inventory pool when needed. The aggregate p-ANI assignee forecast submitted during each Forecast Report cycle, is to be used initially to determine the appropriate level of inventory. When the NANPA determines that the amount of inventory in a given NPA pool may – in the future – fall below the projected 12-month forecast, the NANPA shall begin the replenishment process in accordance with the *p-ANI Administration Guidelines* (Reference 34).

### **6.2.6.3 p-ANI Application Processing**

The NANPA shall receive and verify applications for p-ANIs in accordance with FCC directives and the INC guidelines. Applications for p-ANIs shall be transmittable through the NAS, for which access can be found on the NANPA's web site.

#### **6.2.3.1 p-ANI Application Supporting Data**

A p-ANI applicant is required to provide evidence that it is an Eligible User of p-ANI resources with each application, and verify the requested quantity of p-ANIs against any applicable ESIF Formula.<sup>21</sup> The NANPA shall be responsible for assessing the p-ANI applicant's application to verify that it meets all requirements in order to have p-ANIs assigned. At a minimum:

1. p-ANI applicants shall meet the definition of an Eligible User.
2. p-ANI applicants shall have on file a current p-ANI Forecast Report with the NANPA (or provide the p-ANI Forecast Report to the NANPA prior to submitting its first application in the requested NPA).
3. p-ANI applicants shall provide a detailed explanation that documents the need for the requested quantity of p-ANIs in the comments field on the Part 1 application when making a request in excess of any applicable ESIF Formula<sup>22</sup> or in excess of 50 p-ANIs if no formula applies. If the p-ANI applicant is requesting additional p-ANIs in a PSAP where it has existing p-ANI resources, then the applicant shall include those resources and the quantity that is being requested when determining if the request exceeds the applicable ESIF Formula or exceeds 50 p-ANIs when no formula applies.
4. p-ANI applicants shall have a current p-ANI Annual Report on file with the NANPA unless it is the p-ANI applicant's first request for any p-ANI resources.
5. p-ANI applicants shall be confirmed by the NANPA that the applicant is in good standing and that no known ineligibility conditions exist (or are under investigation) in the NPA in which the applicant is seeking resources prior to assigning resources to that applicant.

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<sup>21</sup> The ESIF Formula document (ATIS-0500018: p-ANI Allocation Tables for ESQs, ESRs, and ESRDs) can be obtained at <https://www.atis.org/docstore/default.aspx>.

<sup>22</sup> The ESIF Formula document (ATIS-0500018: p-ANI Allocation Tables for ESQs, ESRs, and ESRDs) can be obtained at <https://www.atis.org/docstore/default.aspx>.



### **6.2.3.2 p-ANI Applicant Treatment**

The NANPA shall be responsible for ensuring that p-ANIs are assigned in a fair and non-discriminatory manner. In addition, information requested from participating p-ANI applicants shall be limited to that necessary for accurate and timely assignment and should be uniform for all p-ANI applicants.

The NANPA shall time-stamp all applications. All applications must be processed within five (5) business days. If for any reason an application is suspended, the NANPA shall detail the reasons for such suspension and provide the procedure for escalation to clear the suspension.

### **6.2.3.3 p-ANI Application Response**

The NANPA shall provide a confirmation in response to every p-ANI application received. Any system-generated emails associated with a NAS Tracking Number sent to p-ANI applicants shall clearly identify the state, NPA, specific p-ANI range, type of response or request, status of the application (*i.e.*, approved, denied, suspended or withdrawn), and the Tracking Number in the subject line. However, if the response is denying, suspending or withdrawing a new p-ANI request, no p-ANI range shall appear in the subject line. The contents of the emails shall include sufficient information (*e.g.*, OCN, assignment date, selective router CLLI, PSAP ID, PSAP name, PSAP county/municipality) so that recipients can determine disposition of the email without logging into the system.

### **6.2.4 Problem Resolution Assistance**

The NANPA shall use all records available to the NANPA to assist service providers, p-ANI assignees and/or regulators in resolving customer or PSAP complaints. Although proprietary data cannot be disclosed to other parties, the NANPA shall provide all other information and referral contacts to requesting parties within a timeframe that is agreed upon between the NANPA and the requesting party based upon the urgency of the complaint. The NANPA 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 NANPA 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 complaint.

### **6.2.5 Status Reporting**

The NANPA shall monitor monthly p-ANI activity for each NPA, and shall produce an annual p-ANI Activity and Projected Exhaust Report that includes, at minimum, the following information:

- national p-ANI utilization information
- p-ANI utilization by NPA
- the number of p-ANIs requested on a monthly basis
- the number of p-ANIs assigned on a monthly basis
- the number of p-ANIs returned on a monthly basis
- the number of p-ANIs modified on a monthly basis
- the number of p-ANI requests processed and the disposition of each
- forecast reports for projected future p-ANI resource usage

The annual p-ANI Activity and Projected Exhaust Report shall be provided to the INC and made available on the NANPA web site.

### **6.2.6 p-ANI Reclamation**

Consistent with the *p-ANI Administration Guidelines* (Reference 34), the NANPA shall be responsible for initiating the reclamation process of assigned or abandoned p-ANIs where the assignee has not met the

required criteria to retain the assigned or abandoned p-ANI and as directed by the appropriate governmental agency.

#### **6.2.6.1 Criteria for p-ANI Reclamation**

Specific criteria for p-ANI reclamation can be found in the *p-ANI Administration Guidelines* (Reference 34).

#### **6.2.6.2 Administrative Responsibilities for p-ANI Reclamation**

At a minimum, the NANPA shall:

- Apply p-ANI reclamation criteria to any p-ANI subject to reclamation
- Clarify any alleged non-use or misuse of an assigned p-ANI
- Notify the p-ANI assignee that a p-ANI is subject to reclamation
- Notify and coordinate reclamation efforts with the appropriate governmental agency.
- Notify the p-ANI assignee when a p-ANI has been reclaimed

## **Section 7: Non-Geographic NPA 5XX-NXX Code Administration**

### **7.27 Requirements**

The NANPA shall manage the non-geographic NPA 5XX-NXX resource in accordance with federal regulatory requirements and the latest version of the published *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14). The NANPA shall perform the 5XX-NXX Code Administration that encompasses the following major functional categories:

- User<sup>23</sup> Services
- Processing
- Client and Internal Communication / Notification Functions
- Status Reporting
- Tracking 5XX-NXX Code Utilization for NPA relief

### **7.28 Functional Specifications**

Non-Geographic 5XX-NXX Code administration activities include the key functional requirements detailed below.

#### **7.28.37 User Services**

The NANPA shall produce and make available information regarding 5XX-NXX Code Administration processes, guidelines, procedures, interfaces, and services. Upon request, the NANPA shall provide information on how to obtain current documents related to 5XX-NXX Code Administration. The NANPA may refer users to web sites where information can be located and downloaded. These documents currently include:

- *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14)
- *NPA Allocation Plan and Assignment Guidelines* (Reference 18)

The NANPA shall provide assistance to all entities who use Numbering Resources and suggest alternatives, when possible, that may assist users with Numbering Resource optimization and utilization issues. The NANPA shall assist 5XX-NXX code applicants with understanding and completing all forms and appendices associated with the *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14). The NANPA shall educate users. Such education may include, but is not limited to, providing job aides and providing necessary forms and instructions on the NANPA web site. The NANPA shall notify its users and interested parties when industry guidelines or applicable regulatory directives have changed. The NANPA shall provide electronic notification of administrative process and procedural changes within five (5) business days of the change being identified by the NANPA. Implementation of these changes shall include a transition period before the new process or procedure becomes effective.

The NANPA shall respond to inquiries regarding available and assigned 5XX-NXX Codes. Such response may consist of referring the user to a specific page on the NANPA web site.

#### **7.28.38 Processing**

The NANPA shall receive and verify applications (Part A) for 5XX-NXX Codes in accordance with FCC directives and the *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14). The NANPA shall provide an email confirmation (Part B) in response to every 5XX-NXX Code application received with sufficient detail in the subject line and the body of the email to clearly identify the application (*i.e.*, the Tracking ID), type of response, and 5XX-NXX codes assigned or returned. Such responses shall also be downloadable from the NAS.

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<sup>23</sup> User represents code applicants, code holders, regulatory agencies, and the general public.

As 5XX-NXX Code Administrator, the NANPA shall be aware of and adhere to any limits on code assignments as ordered by the FCC or agreed to by industry. The NANPA shall also provide a list of 5XX-NXX codes that are unavailable for assignment (e.g., 5XX-N11 codes).

#### **7.28.39 Communication/Notification Functions**

The NANPA shall post daily on its web site the 5XX-NXX assigned, available and unavailable in each 5XX NPA. This information shall be updated as changes occur. Other means of distributing reports shall be available as necessary. The NANPA shall follow the *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14) for notification of 5XX-NXX Code assignments. The NANPA shall notify iconectiv® of each 5XX-NXX assignment and return so that iconectiv® can input the information in BIRRDs. The NANPA shall issue notification of all 5XX-NXX Code administration activities to the appropriate regulatory agencies and the affected industry members.

#### **7.28.40 Status Reporting**

For 5XX-NXX Code Administration, the NANPA shall monitor and report the status of NXXs in each 5XX NPA, including a total by status (e.g., total available, total unavailable and total assigned NXXs). These reports shall be generated and posted to the NANPA web site each business day.

#### **7.28.41 Tracking 5XX-NXX Code Utilization for NPA Relief**

The NANPA shall fulfill the process responsibilities in accordance with the *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14) and regulatory directives, including the following:

- Forecasting the need for additional 5XX NPAs by continually monitoring 5XX-NXX code growth and projecting exhaust.
- Upon the identification of a potential exhaust situation, notify appropriate regulatory authorities and affected parties.

#### **7.29 Management of the 5XX-NXX Code Inventory**

The NANPA shall track and monitor MTE, forecast, and utilization reports so that it shall be able to forecast demand and anticipate the need for relief of the 5XX NPA resource (i.e., open a new 5XX NPA for assignments).

#### **7.30 5XX-NXX Code Reclamation**

NANPA shall initiate the reclamation of 5XX-NXX resources assigned to service providers that fail to meet the terms specified in the *Non-Geographic 5XX-NXX Code Assignment Guidelines* (Reference 14). The NANPA shall receive and process Part C confirmations from 5XX-NXX code holders during the six-month period following the published assignment date of the code. Receipt of a Part C from a code holder certifies that the 5XX-NXX code has been placed in service. The NANPA shall maintain a tracking system for receipt of Part Cs. No further action is required of the 5XX-NXX code holder once a Part C has been submitted.

Not later than one month prior to the end of the six-month period, the NANPA shall send a reminder notice to 5XX-NXX code holders if no Part C Form has been received for the code assigned. The subject line of the reminder notice shall contain the following information: 5XX-NXX, Confirmation of Code Activation (Required) – Part C, Tracking Number. The body of the reminder notice shall contain, at minimum, the following information: NPA-NXX, OCN, OCN name, 5XX-NXX assignment date and the Part C due date. The NANPA shall send a second notice to the service provider if no Part C is received within six (6) months of the 5XX-NXX assignment date on the Part B. The subject line of this second notice shall contain the following information: 5XX-NXX, Part C Delinquent Notice, Tracking Number. The body of the second notice shall contain, at minimum, the following information: 5XX-NXX, OCN,

OCN name, 5XX-NXX assignment date and the Part C due date. This second notice will inform the service provider that it must submit the Part C to the appropriate regulatory authority (*i.e.*, the FCC). If a code holder fails to submit a Part C within the timeframe specified by the regulatory authority, the NANPA shall initiate the reclamation procedures, keeping accurate and complete records for each action taken. The NANPA shall obtain regulatory approval prior to reclaiming codes.

The NANPA shall maintain a current point of contact list for 5XX-NXX code reclamation. Regulators and service providers are to be included on the list. In addition, a contact list for all other NANP members shall be maintained, if necessary.

## **Section 8: NPA Relief Planning**

The NANPA shall perform the area code (NPA) relief functions specified in the *NPA Code Relief Planning and Notification Guidelines* (Reference 19) and 47 CFR §52.13. The NANPA shall be prepared to work with state regulatory authorities, which may choose to assume any of these responsibilities pursuant to FCC orders. The NANPA, in order to effectively perform its NPA relief functions, shall maintain considerable knowledge of local/regional environments, including geography, demographics, and communities of interest, as well as growth patterns, local dialing plans, and operating/certified service providers. The NANPA shall determine NPAs in need of relief and appropriately manage the relief efforts through the implementation of a new area code.

The NANPA shall notify all affected CO code and block holders with regard to an NPA in need of relief, and any associated meeting information. In addition to notification, the NANPA shall post in NAS the Initial Planning Documents (IPD) a minimum of four (4) weeks before any scheduled NPA relief-planning meeting and the NANPA shall facilitate the meeting. An IPD and relief planning meeting will not be required where NPA Relief is required for an existing overlay complex or where NPA Relief is required for a single NPA area and only an overlay alternative will meet the requirements in the Guidelines. The NANPA shall post in NAS all NPA relief meeting announcements and preliminary planning information, and distribute a notice to affected industry members that such information has been posted. Accordingly, the NANPA shall continue to update the local/regional information and contact information to meet the level of NPA relief expected in any given year during its Term of Administration.

### **8.31 Key Responsibilities**

Key NANPA NPA relief responsibilities consist of the items listed below.

#### **8.31.42 Relief Timing**

The NANPA shall determine the need for and identify the timing of NPA Relief in accordance with the *Central Office Code (NXX) Assignment Guidelines* (Reference 8) and the *NPA Code Relief Planning and Notification Guidelines* (Reference 19). Tools for performing this task include NRUF Report data and the semi-annual NPA Exhaust Forecast Report.

#### **8.31.43 Relief Planning Communication**

The NANPA shall promptly communicate with all affected industry members and appropriate state regulatory authorities to advise them of the need for relief planning to occur.

#### **8.31.44 Initial Planning Document (IPD) Preparation and Distribution**

The NANPA shall prepare and distribute to industry members and state regulatory authorities an IPD for each NPA projected to exhaust within the next 36 months, as identified in the NRUF Report (*i.e.*, NPA Exhaust Forecast Report). The IPD shall describe and assess possible relief options and include detailed historical information regarding prior years' forecasts versus the actual assignment of codes. The NANPA shall include detailed historical information on the assignment of blocks and pooled codes, and forecasted block and code demand for the pool. NANPA shall include the pooling information in the IPD so that the industry has sufficient information to make a decision on the method of relief to recommend to the state regulatory authority.

### **8.1.4 Relief Planning Meetings**

The NANPA shall schedule initial NPA relief planning meeting(s) per the *NPA Code Relief Planning and Notification Guidelines* (Reference 19). This meeting shall be 36 months in advance of the projected NPA exhaust date to permit the timely planning and implementation of NPA relief.

#### **8.31.45 Relief Planning Report**

The NANPA shall provide a report to the NANC, once per quarter, on its success or failure in meeting this Performance Measurement.

#### **8.31.46 Relief Planning Consensus Building**

The NANPA shall notify interested industry and state regulatory authorities of NPA relief planning meeting(s) and conduct the meeting(s) with the objective of gaining consensus on a relief plan.

#### **8.31.47 Neutral Facilitator Role**

The NANPA shall act as neutral facilitator (*e.g.*, issuing meeting announcements, coordinating meeting arrangements, setting an agenda, providing a conference bridge and web conferencing capabilities, leading the meeting, issuing meeting minutes, and performing other duties necessary to conduct the meeting) for all relief planning meeting(s).

#### **8.31.48 Proactive Role in Relief Planning**

The NANPA shall ensure state regulatory authorities have appropriate information necessary to endorse industry-consensus relief plans or develop their own plan if they desire. The NANPA shall proactively work with the state regulatory authorities to achieve endorsement of a relief plan no later than 18 months prior to the projected exhaust of the NPA to allow the industry appropriate time for implementation and to ensure relief is implemented at least 6 months prior to the projected exhaust of the NPA.

#### **8.31.49 Status Reporting on Relief Plans**

The NANPA shall track and report on the status of pending relief plans to the FCC and the NANC each month. The NANPA shall track and report on the status of pending relief plans each business day by posting the report on its web site.

#### **8.31.50 Possible Testimony**

The NANPA may be requested to provide testimony to the state regulatory authorities regarding the relief plan, as necessary. This service shall be treated as an Enterprise Service (see Section 15).

#### **8.1.51 New NPA Code Assignment**

The NANPA shall assign a new NPA code(s) in accordance with the *NPA Code Relief Planning and Notification Guidelines* (Reference 19) and the approved relief plan.

#### **8.1.52 Implementation Scheduling**

The NANPA shall schedule and facilitate the first implementation meeting once a form of relief has been selected and ordered by a state regulatory authority, in accordance with the *NPA Code Relief Planning and Notification Guidelines* (Reference 19).

#### **8.31.53 Industry Scheduling and Notification**

The NANPA shall provide industry notification of NPA code relief implementation activities via a Planning Letter and information posted to the NANPA web site. For example, the NANPA shall provide adequate advanced notice, public announcements, test number and testing period, new boundary maps, new dialing procedures, the relief date, permissive dialing period, mandatory dialing date, and ANI records conversion dates (if applicable). Further, the NANPA shall provide information for any applicable databases updates, including but not limited to the Line Information Database (LIDB), the BIRRS database, the LERG™ Routing Guide, LIDB Access Routing Guide (LARG), etc. The NANPA shall also provide notifications of any subsequent changes made by state commissions to relief dates, permissive dialing periods, or mandatory dialing dates.

### **8.1.54 Press Release**

The NANPA shall, with the input and approval of the state regulatory authorities and industry, prepare and issue a press release to inform the public of the approved Relief Plan and respond to requests from the media and public for information. If the state regulatory authority chooses to issue such a press release instead, the NANPA may forgo issuing its own press release.

### **8.1.55 Implementation Assistance**

The NANPA shall assist any industry-led NPA Relief implementation committees, such as assisting with distribution of initial meeting notices and providing a high resolution map in the format and granularity needed for the industry's customer notifications. The NANPA shall assist the Toll-Free Number Administrator, as necessary, with modifications to the toll-free database.

If necessary, the NANPA shall declare an NPA code in jeopardy based upon the INC definition of a jeopardy situation and implement interim jeopardy procedures (*e.g.*, an NXX code-rationing plan) until final jeopardy procedures are agreed to by the industry. If there is no industry consensus on final jeopardy procedures, the NANPA shall implement a state approved rationing plan after the state regulatory authority orders NPA relief. After a state regulatory authority orders a specific form of area code relief and has established an implementation date, the NANPA shall adopt and implement that plan as ordered by the state regulatory authority, unless the ordered plan does not meet the criteria for assignment outlined in the *NPA Code Relief Planning and Notification Guidelines* (Reference 19). In that case, the NANPA shall suspend assignment of the new NPA pending FCC direction.

### **8.1.16 Compliance**

The NANPA shall:

- Comply with the *Central Office Code (NXX) Assignment Guidelines* (Reference 8), the *NPA Allocation Plan and Assignment Guidelines* (Reference 18), and the *NPA Code Relief Planning and Notification Guidelines* (Reference 19).
- Implement a planned approach using effective forecasting and management tools and skills in order to ensure the availability of Numbering Resources.
- Facilitate the timely planning and implementation of NPA relief.
- Proactively work with state regulatory authorities to achieve selection of a relief plan by the requested date or 18 months prior to exhaust, whichever is later, to allow the industry appropriate time for implementation.

If a relief plan has not been approved by 90 days prior to industry requested approval date, or at least 18 months prior to exhaust, then the NANPA shall notify the state commission in writing of the date the relief plan approval was requested or that the NPA is projected to exhaust within the next 18 months, with a copy of which shall be sent to the NANC Chair.

If the state regulatory authority has not ordered an NPA relief plan on or before the industry requested approval date or at least 18 months prior to exhaust, then the NANPA shall notify the FCC and the NANC in writing and provide the date by which an order is required to avoid jeopardizing the timely implementation of NPA relief.

## **8.2 User Notification**

The NANPA shall maintain an electronic document distribution and notification system (*i.e.*, NNS), which NANPA's NPA relief planners shall use to notify affected users of the need for an NPA relief meeting and to keep all users informed of all NPA-relief related postings in NAS (*e.g.*, IPDs, meeting notices), final relief plans and implementation processes. The document notification system shall also be



used to distribute additional details and data deemed necessary to keep clients informed of the status of any relief activity that has experienced a delay in implementation.

## **Section 9: Utilization and Forecasting**

The NRUF Report is filed semi-annually by service providers in accordance with FCC orders and regulations and the *NANP Numbering Resource Utilization/Forecast (NRUF) Reporting Guidelines* (Reference 7). Each service provider assigned geographic CO codes and/or thousands-blocks or assigned non-geographic 5XX-NXX or 900-NXX codes shall complete the appropriate geographic or non-geographic NRUF Report and submit it to the NANPA by February 1<sup>st</sup> and August 1<sup>st</sup> of each year.

The NANPA shall compile, examine, and analyze the data gathered from these reports and submit its analysis to the NANC, the FCC and state regulatory commissions that have requested it, semi-annually by the last business day of April and October of each year, unless otherwise directed by the FCC.

### **9.32 Responsibilities**

The following is a list of the functional areas that fall within the NANPA's data collection, processing and NRUF reporting responsibilities:

#### **9.32.56 Point of Contact**

The NANPA shall be the point of contact for collecting NRUF forecast and utilization data. Forms shall be submitted electronically, via NAS, spreadsheet attachment to email, FTP, or RESTful API. The NANPA shall assist carriers in completing the NRUF forms by clarifying the service provider requirements to report and correctly understand the NRUF process.

#### **9.32.57 Contact List Maintenance**

The NANPA shall maintain a list of the individual(s) within each reporting entity identified on the last NRUF report submitted by that entity as the contact person(s). The NANPA shall periodically remind reporting entities in writing of the need to keep the list of contacts current and accurate.

### **9.1.3 Data Requests**

The NANPA shall request the NRUF data from all service providers within the U.S. Such data shall be requested for submission by February 1<sup>st</sup> and August 1<sup>st</sup> of each year. All NRUF data shall be aggregated from within the same timeframe. Data from U.S. service providers shall be processed separately, and then aggregated with all other reported data to obtain a complete picture of the status of the NANP. Canada and other NANP nations will provide exhaust projections for their NPAs to the NANPA.

#### **9.32.58 Data Requests in Pooled Areas**

In pooled rate centers within an NPA, the NANPA shall receive forecast data in thousands-block increments, by month, from service providers in the same timeframe as the NRUF requirements. The NANPA shall aggregate this forecast data and incorporate it into its data analysis.

#### **9.32.59 Data Analysis**

The NANPA shall compile, examine and analyze all the data obtained from the semi-annual NRUF Reports and the forecast data in thousands-block increments, by month. The results of this analysis shall be made available by the NANPA by the last business day of April and October of each year. The NANPA shall compare actual NPA exhaust and current exhaust forecasts with the past five (5) exhaust projections. The NANPA shall summarize the accuracy of its forecast outlining: (1) contributing factors, (2) changes required, (3) the outcome if no change is made, (4) the parties who shall participate in the change and (5) a description of the activity each party shall take to realize the desired outcome.

### **9.1.60 Data Reporting**

The NANPA shall produce a semi-annual report(s) that summarizes the projections of exhaust of each NPA and the NANP as a whole.<sup>24</sup> The geographic NPAs report shall at a minimum, be similar in format and content to the *NANP and NPA Exhaust Analysis* report provided to the NANC and posted on the NANPA web site. The NANPA shall highlight significant anomalies, for example, those NPAs with projected exhaust date changes of more than six (6) months from one report to another, and provide a brief explanation for the change.

### **9.1.61 User Support**

The NANPA shall be available to its users to answer questions pertaining to any aspect of the NRUF Report process (*e.g.*, forms, instructions, analysis, data assumptions, etc.). The NANPA shall also distribute periodic tips to NRUF Reporting service providers, to assist them in avoiding common errors.

### **9.32.62 Data Aggregation**

The NANPA shall also compile, examine, and analyze the forecast and utilization data submitted by reporting service providers between reporting periods. If it appears that the life of an NPA or the NANP shall be significantly affected by an updated NRUF Report submitted by a service provider(s), the NANPA shall report those results within 30 days of receiving the data submissions from the service provider(s) to the appropriate regulatory authority and post the updated exhaust projection on the web site.

In the event that NANP exhaust is affected by an updated NRUF submission, the NANPA shall send the results to the appropriate regulatory authority in NANP member countries and the NANC. In cases that only involve NPA exhaust, the NANPA shall forward the results to the appropriate regulatory authority.

### **9.32.63 Request to Review Data**

At the request of a U.S. state regulatory authority and upon receipt by the NANPA of a written statement that the state regulatory authority has the appropriate confidentiality procedures in place to protect the data, the NANPA shall, within ten (10) business days, provide a single report containing disaggregated data to any requesting state that is reported by service providers in that state, so long as the request is made 30 days after the deadline for NRUF reporting and before the subsequent NRUF reporting deadline. Regulators also shall have access to the NRUF data for the NPAs in their respective states via NAS.

The NANPA shall provide reports to state regulatory authorities per their initial request and delivery schedule. State regulatory authorities shall provide the NANPA with requested delivery schedule changes and report content changes at least 30 days prior to the effective date of the change. Requests of this nature shall be provided without an additional charge to the state regulatory authority.

### **9.64 Penalties for Non-Submission**

If an NRUF Report has not been submitted by a service provider, the NANPA shall withhold future numbering assignments from that service provider within the NPA for which the NRUF data has not been supplied. Once the NRUF data has been submitted, the NANPA shall process any assignment request.

### **9.1.65 Report Anomalies**

If the NANPA identifies any significant inconsistencies or anomalies in a service provider's data (*e.g.*, missing utilization on assigned central office codes or thousands-blocks), the NANPA shall inform the submitting service provider of its findings, provide the specific data relevant to document the significant

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<sup>24</sup> NANPA may choose to publish the exhaust of the non-geographic 5XX NPAs separately, but such data shall be incorporated into the calculation for the NANP exhaust as a whole.

inconsistency or anomaly in the service provider report, and request a review and confirmation (written or oral) from the service provider. The NANPA shall allow the service provider five (5) business days to provide that confirmation, or to resubmit the data. If, after the discussions with the service provider, the NANPA still believes that a U.S. telecommunications service provider's data contains inconsistencies or anomalies, then the NANPA shall report its findings to the appropriate regulatory bodies (e.g., state regulatory authority, the FCC). The NANPA shall assign no additional numbering resources to such service providers until the appropriate state regulatory authority instructs it to do so. Where the state regulatory authority has chosen not to exercise this delegated authority, the NANPA shall seek instruction from the FCC.

## **9.2 Development of Tests for Anomalies and Inconsistencies**

The NANPA shall examine the NRUF report submitted by each service provider for inconsistencies or anomalies. The NANPA shall design the tests and algorithms that it shall use to test the utilization and forecast data submitted by service providers prior to actually performing any tests. The NANPA shall provide a detailed description of the actual methodology employed to identify inconsistencies and anomalies. The description shall include a list of all assumptions and rationales incorporated into the methodology tests, as well as any mathematical formulas that are used.

The NANPA also shall work with the NANC to form criteria for determining what types of submissions shall be deemed inconsistent or anomalous. It is expected that the NANPA shall continually refine this process and remain mindful of the changing telecommunications landscape to ensure that its methods and assumptions are current and valid.

## **9.33 NANPA Analysis of Data**

The NANPA shall accumulate and analyze forecast and utilization data from each service provider according to the schedule detailed in the FCC 00-104 (Reference 1). The NANPA shall use this information along with historical and other data possessed by the NANPA to create a forecast that is as accurate as possible.

### **9.3.66 Methodology for Projecting NPA Exhaust**

The NANPA shall project the potential exhaust of NPA codes. Although the NRUF data shall be the primary source of information for any analysis, the NANPA shall incorporate other relevant data elements into its analysis in determining the projected exhaust time frame of each NPA. Some of the additional data elements to be incorporated where relevant are noted below.

#### **9.3.66.1 NRUF Survey Responses**

Once the tests for inconsistencies and anomalies have been performed and the responses deemed acceptable by the NANPA, these responses shall be the primary input to any analysis of NANP and NPA exhaust.

#### **9.3.66.2 Historical CO Code Assignment Data**

The historical CO Code data includes NXX code assignments over at least the two (2) years immediately preceding the date of the NRUF for all industry segments, e.g., Incumbent Local Exchange Carrier (ILEC), Competitive Local Exchange Carrier (CLEC), two-way Commercial Mobile Radio Service (CMRS) Carrier, Paging Carrier, and Interconnected VoIP Provider.

### **9.33.66.3 CO Code Rationing**

After jeopardy has been declared, the rationed amount shall have a significant and direct effect on the life of the NPA, regardless of forecasted demand. In such cases, all other elements may be rendered irrelevant.

### **9.33.66.4 CO Code Assignments as of the Data Collection Date**

A single recent event can affect the life span of an NPA, and thus CO code assignments as of the data collection date should be factored into the exhaust projections.

### **9.33.66.5 Total Number of Codes Available for Assignment**

If relief has been applied since the last reporting period, the environment will have changed and the analysis must reflect the change.

### **9.33.66.6 Rate Centers Per NPA**

The effects of any rate center consolidation or split within an NPA may have a significant impact on CO Code demand.

### **9.33.66.7 Expanded Local Calling Areas**

The inclusion of additional carriers in expanded local calling areas may also have an impact on CO Code demand.

### **9.33.66.8 Thousands-Block Pooling**

The impact of thousands-block number pooling on CO Code demand, where it has been implemented, must also be taken into account.

### **9.33.67 Minimum Analysis Requirements**

Prior to performing the analysis, the NANPA shall provide to the NANC a detailed description of the actual methodology employed. The description shall include a list of all assumptions and rationales incorporated into the methodology, as well as any mathematical formulas that are used.

The NANC shall have the opportunity to provide advice and consent to the analysis methods and assumptions the NANPA uses to perform its analysis of the NRUF results. Continuous methodology refinement is expected and encouraged. At a minimum, the analysis shall begin with a determination of the quantity of available NXXs within each NPA.

Using the aggregated service provider forecasts and the tests developed by the NANPA to identify inconsistencies and anomalies, the NANPA shall determine the quarterly NXX demand for each NPA. The actual adjustments applied shall be consistent with, and fully explained in, the NANPA's description of assumptions and rationales.

### **9.3.3 Anomalies and Trends**

The NANPA shall identify anomalies and trends in numbering usage for all NANP resources. The NANPA shall assist users in assessing the results shown and the action required to achieve numbering optimization goals. On an annual basis, the NANPA shall provide a report to the FCC reporting any anomalies and trends affecting the NANP.

### **9.34 Numbering Resource Utilization and Forecasting (NRUF) Report Submissions**

U.S. service providers are required to submit NRUF data electronically. The NANPA shall support five (5) electronic methods for NRUF submission data collection: electronic file transfer (EFT) or FTP,

RESTful API, spreadsheet attachment to e-mail, online entry into the NAS, or spreadsheet on other electronic format (*e.g.*, flash drive).

## **Section 10: NANP Administration System (NAS) Requirements**

This section describes key capabilities, which are required minimum capabilities, of the NANP Administration System (NAS), which also includes functionality to support thousands-blocks and p-ANI administration. At a minimum, the newly developed system shall encompass all existing functionality of the current NAS, Pooling Administration System (PAS) and the Routing Numbering Administration System (RNAS). The system shall provide NANPA employees and clients' access to all necessary information required for NANP Numbering Resource management. The NANPA shall maintain the NAS to ensure that the system is capable of supporting the requirements and functionality acknowledged within this document. In addition, the NAS shall have sufficient capacity to support current and future resources and users.

This system shall include appropriate security measures for maintaining confidential data and provide accessibility for all users to their own information through an appropriately secured mechanism. In addition, a user class shall be maintained that allows specific users (*e.g.*, state regulatory authorities, PSAPs) to access selected, appropriate geographic data submitted by other users. These security measures shall be described in the NANPA's Security Plan.

Service provider and assignee/applicant specific data submitted to the NANPA shall be treated as confidential. Any data published by the NANPA shall be aggregated for presentation.

### **10.35 System Characteristics**

The NAS shall utilize standard electronic commerce type functionality that allows efficient user interaction and data file transfer. Data file transfer shall be simple and easy to understand.

#### **10.35.68 System Availability**

The NAS shall possess high reliability and allow for economical and efficient system expansion as needed. The NAS shall be seamlessly available for input, processing, and downloads during users' normal business hours. The NAS shall, at a minimum, adhere to the following availability and reliability requirements:

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

Scheduled maintenance shall occur outside of normal business hours and users shall be notified by e-mail and/or other electronic notice (*e.g.*, NNS notification) no less than 30 days in advance of any scheduled event. Such notifications shall also be posted to the NANPA website, and shall provide sufficient detail such that users can determine how such maintenance may impact them (*e.g.*, changes that may affect users' FTP or RESTful API processes).

The NAS design shall, at a minimum:

- Use an FCC-approved web services provider
- Support system fault tolerance that shall be transparent to users
- Support a system architecture that enables continuous operation in the event of system failure including loss of AC power up to eight (8) hours

- Support a system architecture that has the ability to identify when the quantity of simultaneous queries exceeds a specified threshold and can temporarily limit the queries so that no user's experience is negatively impacted.

If the NAS becomes unavailable for normal operations due to any reason, including both scheduled and nonscheduled maintenance, users and regulatory agencies shall be notified of the NAS unavailability within five (5) minutes of the outage. Whenever possible, the notification shall be made by e-mail and/or other electronic notice (*e.g.*, NNS notification). When this is not possible, the NANPA shall notify users and regulatory agencies via web site notification. When the NAS is restored to normal operations, users and regulatory agencies shall be notified of the NAS's availability via electronic broadcast message (*e.g.*, NNS notification) within five (5) minutes of NAS restoration. Notices shall be auditable.

### **10.35.69 System Query Capability**

For the purpose of this document, a query is defined as the ability to request and retrieve data stored in the system. The system shall:

- Support users' needs to retrieve their data through a query capability.
- Support users' needs to retrieve public data through a query capability. For example, a search by NPA shall provide information about the NPA such as whether it is assigned, how it is used, state information, the in service date, associated Planning Letters with hyperlinks to the Planning Letters, the associated dialing plan, overlay status, parent NPA information, time zone, whether relief planning is in progress, and jeopardy status.
- Support a user authorization level that identifies the range and scope of the data access of each user, including identification notice of approved access to their data by other users.
- Be capable of querying and retrieving one or multiple records using any stored data fields.

### **10.1.3 System Scalability**

The NAS shall continue to be expandable and flexible so that it can easily expand its capacity and number of users, such as, but not limited to, through:

- Addition of new NPAs
- Addition of new rate centers
- Additional users
- Addition of new Numbering Resource and data elements
- Expansion of the NANP
- Electronic application, request and document tracking

### **10.1.4 NAS Characteristics**

NAS shall have the following characteristics:

- Use of Infrastructure As A Service (IAAS), which enables NANPA to create code to automate routine maintenance tasks, quickly rebuild virtual servers in the event of a failure, and automatically deploy new builds
- A high level of scalability, lowering the need for infrastructure that accommodates peak usage at all times
- Component isolation, so that an issue with one component will not affect others
- Automation functionality
- Allow secure and efficient user interaction and file transfer



## 10.1.5 User Functionality

### 10.1.5.1 General User Functionality

The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to query the data contained in and submitted to the NAS:

- System email responses to Numbering Resources application requests shall clearly identify the Numbering Resource, response and type of response, and shall not contain generic “subject lines”.
- User profiles shall include contact information, OCN(s) and parent company OCN(s) so that the user’s contact information is automatically populated on application forms, and so that the user can select the appropriate OCN and parent company OCN information from drop down boxes on the application forms.
- NANPA shall explore the feasibility of providing a link to switching entity/POI information in BIRRDS or a daily LERG file so that a user can select the appropriate switching entity/POI information from a drop down box on the application form once an OCN has been selected.
- User profiles in NAS shall include SPID and various Point Code fields from the thousands-block Part 1B form so that the user can select the appropriate information for these fields from drop down boxes on the Part 1B form.
- User profiles shall allow users to specify additional contacts that will allow system responses to multiple users.
- Users shall be able to search for and retrieve data on a read-only basis, but shall have the ability to download query report data to Excel spreadsheets. Searches shall be capable of searching by specific Numbering Resource, Tracking Number, date range, and/or form type relevant to that Numbering Resource.
- Users shall be able to search for and retrieve forms on a read-only basis, but shall have the ability to download such forms to Word documents or Adobe PDF files. Searches shall be capable of searching by specific Numbering Resource, tracking number, date range, and/or form type relevant to that Numbering Resource.
- Users shall be able to obtain assistance from the Help Desk, track and resolve issues through NAS associated with the functions in this section.
- Users shall be able to search reports (*e.g.*, forms) by particular user within the user’s company (*e.g.*, by name or email address)

### 10.1.5.2 CO Codes User Functionality

The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to query the data contained in and submitted to the NAS:

- CO Code applications - Forms shall be available. Users shall be permitted to save partially completed applications, and withdraw pending applications, which will be accessible during future system log-ins. Users shall be able to view a list of available CO codes when completing a Part 1 application form and select a check box(es) next to a CO code(s) in the list to request that specific CO code(s).
- CO Code reservations – Users shall be able to reserve a CO Code pending regulatory approval of a “safety valve” request with the appropriate documentation.
- Previously filed CO Code application materials pertaining to the specific user – Users shall have the ability to modify a pending request provided the NANPA has not started processing the request.
- Supporting Documentation Upload – Users shall have the ability to upload supporting documentation for multiple applications and tracking numbers at a time.

### 10.1.5.3 Thousands-Blocks User Functionality

The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to query the data contained in and submitted to the NAS:

- Thousands-Block rate center inventory pool data - Users shall be able to query data by rate center only, NPA only, or both rate center and NPA. These data queries shall allow the user to specify assigned/retained thousands-blocks only, available thousands-blocks only, or both assigned/retained and available thousands-blocks.
- Thousands-block applications - Forms shall be available. Users shall be permitted to save partially completed applications, and withdraw pending applications, which will be accessible during future system log-ins. Users shall be able view a list of available thousands-blocks when completing a Part 1A application form and select a check box(es) next to a thousands-block(s) in the list to request that specific thousands-block(s)
- Thousands-block reservations - Users shall be able to reserve thousands-block(s) pending regulatory approval of “safety valve” requests, and withdraw pending applications.
- Previously filed thousands-block application materials pertaining to the specific user - Users shall have the ability to modify a pending request, provided the NANPA has not started processing the request.
- Pooling Status Indicator updates - Users shall be able to submit a request that the “Pooling Status Indicator” be updated when possible (*e.g.*, a request to update the indicator from Excluded to Optional).
- Part 1B form - The SPID and Point Code fields on the Part 1B shall have a drop down box linked to the SPID and Point Code fields in a user’s NAS profile.
- Block Disconnect/Donation requests – Users shall be able to submit a request for the NANPA to solicit thousands-blocks disconnects or donations from current code and block holders in the rate center.
- Pooling Forecast Upload - Users shall be able to upload into NAS a standardized form for semi-annual forecasts by rate center and NPA.
- Supporting Documentation Upload – Users shall have the ability to upload supporting documentation for multiple applications and tracking numbers at a time

### 10.1.5.4 p-ANIs User Functionality

The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to query the data contained in and submitted to the NAS:

- p-ANI applications - Forms shall be available. Provides users the ability to submit new p-ANI applications, modifications, return requests, and cancel return requests.
- p-ANI forecast - Provides the user the ability to submit a new forecast report or modify an existing forecast report.
- p-ANI Annual Report - Provides the user the ability to submit a new annual utilization report, and modify an existing annual utilization report.
- p-ANI Lookup - Provides the user the ability to look up p-ANI data as long as the State, NPA, NENA Company ID and OCN exist in the user’s profile. The user may search by p-ANI (*i.e.*, 10-digit number).
- View Forms - Provides the user the ability to view Part 1 and Part 3 forms as long as the State, NPA, NENA Company ID and OCN exist in the user’s profile. The user may search by Tracking Number or p-ANI.
- List Forms - Provides the user the ability to display and download a list of Forms searching by the State, NPA, NENA Company ID, OCN, date range (from and to) and/or form types (*i.e.*, Part 1, Part 3, or both).

- Supporting Documentation Upload – Users shall have the ability to upload supporting documentation for multiple applications and tracking numbers at a time.

#### **10.1.5.5 5XX-NXX User Functionality**

The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to query the data contained in and submitted to the NAS:

- 5XX applications - Forms shall be available. Users shall have the ability to submit new 5XX applications, modifications, return requests and cancel return requests. Users shall have the ability to withdraw pending applications if they are not in the process of being worked and to save partially completed applications, which will be accessible during future system log-ins.
- 5XX applications - Multiple requests on one application. Users shall have the ability to request up to ten (10) 5XX-NXXs on an initial application, or up to 25 5XX-NXXs on an initial application with supporting documentation provided to the NANPA.
- 5XX-NXX Part C – Provides the user the ability to submit a Part C, to confirm that a resource is in service.
- Search and View Forms – Users shall have the ability to search for and view submitted forms by date range, by NPA(s), by OCN in the user’s NAS security profile, and by form type.

#### **10.1.5.6 Other Resources User Functionality**

The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to query the data contained in and submitted to the NAS:

- NPA Code Assignment Form - Provides the user the ability to request the assignment of a new NPA.
- CIC Application Form - Provides the user the ability to request a new CIC, CIC modification, CIC return request with a current or future date and cancel a CIC return request.
- CIC Part C Form - Provides the user the ability to submit a Part C, to confirm that a resource is in service.
- Search CIC Forms – Provides the user the ability to search for and view CIC forms by date range, form type, and by ACNAs associated with the user’s NAS profile.
- 9YY-NXX Code Application Form - Provides the user the ability to request an assignment, return a 9YY NXX code and make an information change to an assignment.
- 9YY-NXX Part C Form - Provides the user the ability to submit a Part C, to confirm that a resource is in service.
- Search 9YY Forms – Provide the user the ability to search for and view 9YY forms by date range, form type and by OCN associated with the user’s NAS profile.
- 800-855 Line Request Form - Provides the user the ability to request an initial or additional assignment and to make changes to an existing assignment.
- View Other Resource Forms - Provides the user the ability to view submitted forms by entering the NAS tracking number for CICs, NPAs, 5XX-NXXs and 9YY-NXXs, or the specific CIC, NPA, 5XX-NXX and 9YY-NXX.

#### **10.1.5.7 Documents User Functionality**

The NANPA shall assure that an NANP Notification System (NNS) is made available to provide individuals the opportunity to receive email notifications on a variety of NANP topics. The NANPA shall assure that an authorized user is able to invoke, at a minimum, the following functionality to search for, view and download notification documents contained in the NAS by any of the following criterion or a combination of any of the following criteria:

- Documents by state or all states
- Documents by NPA or all NPAs

- Search by date range
- Search by category or all categories, including but not limited to:
  - CO code administration notifications
  - Thousands-block administration notifications
  - p-ANI administration notifications
  - NRUF reporting notifications
  - Jeopardy notifications
  - NANPA Planning Letters
  - INC guidelines changes notifications
  - Other Geographic notifications
  - Other Non-Geographic notifications
  - NPA relief planning notifications
  - NANPA quarterly newsletters

### **10.36 System Capabilities**

The NAS is designed for high reliability, possesses data integrity features, and allows for economical and efficient system expansion. The NAS shall:

- Capture all relevant applicant and user information
- Pre-populate relevant applicant and user information on applications from the user profile where possible (*e.g.*, contact information, OCN name)
- When the Parent Company OCN is required on an application or NRUF submission, allow the user to select the appropriate Parent Company OCN in the user's profile via a drop-down menu on the application or NRUF report
- Facilitate the application and data filing process and the capture of required data in the database
- Provide for generation of user information notices
- Possess the ability to track status of all NANP resources
- Support ad hoc query capabilities as well as production of predefined reports
- Assist with NANP Administration document management
- Possess the ability to track the status of a user's Numbering Resource application or data filing, and the generation of reports regarding the tracking status of each application or data filing
- Maintain data integrity
- Offer a web interface and allow for automated data input for Numbering Resource applications and other data needed for the processing of applications
- Accommodate automated data output via FTP and Webhook to service providers or other applicants when transmitting data from an application response
- Be capable of generating an acknowledgement to the submitter within eight (8) seconds 95% of the time over any 12-month period when an application or other document or report has been submitted
- Support access to secure NAS data with a unique logon ID and password
- Support access to secure NAS data via API key
- Contain a web support design that simulates the design of the user profile, and the various application and reporting forms for each type of Numbering Resource contained in the INC industry guidelines; Such simulations should be easily modified so that form changes do not require change orders.
- Provide users with the ability to query and retrieve data on a read-only basis, but shall have the ability to download the query report data to Excel spreadsheets.

### **10.37 System Location**

NAS system/servers shall be in the cloud with a FedRAMP-compliant cloud service provider that has been assessed and authorized through the FedRAMP and FCC authorization processes, and has agency-approved Authority to Operate. The NAS servers shall be within the continental United States, but location within the continental United States is at the discretion of the contractor.

### **10.4 System Data**

NANP Numbering Resource data and information shall be stored in the NAS in accordance with the categories and formats that correspond to those currently used and/or as may be defined in the future by regulatory directives and INC industry guidelines.

#### **10.4.70 Data Integrity**

The NANPA shall ensure that all data stored is accurate and shall take commercially reasonable steps to confirm that data processed is accurate. Furthermore, the NANPA shall ensure that data/information shared publicly is factual in nature and findings and their underlying assumptions that are unexpected or significant are first reported to regulatory authorities and the NANC prior to public disclosure.

#### **10.4.71 Confidential Treatment**

All individual, user-specific data submitted to the NANPA, in any form, shall be treated as confidential. Any data that contains confidential or proprietary user information shall not be accessible by the public on the NANPA web site, or published by the NANPA. The NANPA shall only publish and distribute aggregated data.

#### **10.37.72 Automated Submittal**

The NANPA shall implement in NAS, at a minimum, the data interface protocols previously adopted and in use between service providers and the current NANPA and PA vendor(s). Except as noted, the NAS shall offer a web interface and/or allow for automated data input via EFT/FTP and RESTful API for Numbering Resource applications and data forecast and/or utilization reports, as well as support an e-mail attachment transfer capability and upload of supporting documentation into the NAS (as applicable). The EFT/FTP and RESTful API capabilities shall permit users to forward data in a predetermined format, per the forms from the relevant guidelines for the Numbering Resource being requested, which the NANPA shall then use to initiate processing within the NAS.

#### **10.37.73 Automated Data Output Capabilities**

The NANPA shall also accommodate automated data output via EFT/FTP and Webhook when transmitting responses and other industry forms/data or reports to users per the appropriate INC industry guidelines.

The NANPA shall ensure that the NAS is capable of performing and performs the following actions, at a minimum:

- Approved requests will generate a response (*e.g.*, Part 3 for CO codes, thousands-blocks and p-ANIs, Part B for 5XX-NXXs and CICs) with all of the information pertaining to the specific request and type of request.
- Denied requests will generate a response with all of the information pertaining to the specific request listed and the reason for the denial in the remarks or comments field of the response (as appropriate).
- OCN names are current, as published in the LERG™ Routing Guide. This will ensure that any changes due to merger/acquisition are reflected in the NAS automatically. Service providers and assignees shall not have to notify the NANPA of such changes.

- All request information is viewable on the screen when the applicant is submitting a request (*e.g.*, fields should allow for all characters to be viewed on the working screen).
- Applicants are given the option of requesting different effective dates on various thousands-blocks of a multiple thousands-block submission. This will help service providers when the Part 4s are due.
- Any system-generated emails associated with a Tracking Number sent to applicants for geographic resources shall clearly identify, as applicable, the rate center, state, specific NPA-NXX or NPA-NXX-X or p-ANI range, the type of response or request, and the Tracking Number in the subject line. The contents of the emails shall include sufficient information (*e.g.*, OCN, effective date, switching ID/POI) so that recipients can determine disposition of the email without logging into the NAS.
- Any other emails (*e.g.*, solicitation for a new block holder or code holder) sent to service providers shall clearly identify the rate center, state, specific NPA-NXX or NPA-NXX-X, the type of response or request in the subject line. The contents of the emails shall include sufficient information (*e.g.*, OCN or SPID, quantity of recipient's ported TNs and overall quantity of ported TNs) so that recipients can determine disposition of the email without logging into the NAS.

## 10.4.5 System Reports

### 10.4.5.1 CO Code System Reports

At a minimum, the NAS shall be capable of producing the following CO Code reports with flexible search functionality for the user (*e.g.*, independently by OCN, State, NPA, date, or any combination of these or other data elements) and shall be downloadable in Excel™ format:

- CO Code Utilized Report: This report is generated “real time” and provides an up-to-date list of central office codes assigned in a NPA. Details will include State, NPA, NXX, Use (Code state), OCN, Company Name, Rate Center, Switch, Initial/Growth (assignment type), Assigned Date, Effective Date
- CO Code Assignment Records Report: This report is generated and updated daily and provides a daily updated listing of assigned, available and unavailable central office codes by NPA.
- Submitted Part 1s Report: This report shows Part 1s that have been submitted for all OCNs listed in the user's profile. Report fields on the Part 1 Report are: Tracking number, NPA, NXX, Type of Request, (Initial, Growth, change, etc.) Submit Date, Requested Effective Date, OCN, Switch and Rate Center.
- Part 3 Report: This report shows Part 3s that have been generated by NANPA in response to Part 1 requests for all OCNs listed in the user's profile. The fields shown on “Part 3 Report” are: Tracking number, NPA, NXX, State, Type of Request, Disposition, Effective Date, OCN and Rate Center.
- Submitted Part 4s Report: This report shows Part 4s that have been submitted for all OCNs listed in the user's profile. The fields shown on the “Submitted Part 4s” Report are: Tracking number, NPA, NXX, State, Assigned Date, Effective Date, OCN, Switch and Rate Center.
- Assignments Needing Part 4 Report: This report shows all code assignments that have an outstanding Part 4 due for all OCNs listed in the user's profile. The fields shown on the “Assignments Needing Part 4” Report are: Tracking number, OCN, NPA, NXX, Part 4 Due Date and Effective Date.

### 10.4.5.2 Thousands-Block System Reports

At a minimum, the NAS shall be capable of producing the following reports with flexible search functionality for the user (*i.e.*, independently by OCN, State, NPA or any combination of these data elements) and shall be downloadable in Excel™ format:

- Forecast Report: A list of all current forecasts on file in NAS for the next 18 months, based on the states, NPAs and OCNs included in the user's profile. Details will include the NPA, Rate Center, OCN, OCN Name and the associated forecast data for months 1-18 by month, as well as the LRN forecast data for months 1-18 by month.
- Disconnect and Donation Report: A historical record of disconnects and donations received in NAS. Details will include the State, NPA-NXX-X, Tracking Number, OCN, Company Name, Contaminated (Y or N), TNs (Contaminated), rate center, pooling status, Switch, Effective Date, Status (Approved, Suspended, Withdrawn, Denied, Accepted, Rejected, Available, Conditional Received) and Response Date. Users can search by customizable date range via a drop-down menu.
- Part 1/1A Report: A list of Part 1 (Pooled CO Code) and Part 1A (Thousands-blocks) requests submitted in NAS. Details will include the State, Tracking Number, Type of Request, OCN, Company Name, Parent Company OCN, Parent Company Name, Submission Date, Part 3 Issue Date, the Disposition (approved, denied, suspended or withdrawn), and the NPA-NXX-X. Users can search by a customizable date range via a drop-down menu.
- Part 1B Report: A list of Part 1Bs associated with requests submitted in NAS. Details will include the State, NPA-NXX-X, Tracking Number, Type of Request, OCN, SPID, CLASS (DPC and SSN), LIDB (DPC and SSN), CNAM (DPC and SSN), ISVM (DPC and SSN), WSMS (DPC and SSN), SOA Origination (Y or N), Info Only (Y or N), Allocated back to the Code Holder's Switch (Y or N), NPAC Activate Block Range (Y or N), Block Effective Date and the Reject Reason. Users can search by a customizable date range via a drop-down menu.
- Part 3 Report: A list of Part 3s created. Details will include the State, NPA-NXX-X, Tracking Number, Type of Request, OCN, Company Name, Parent Company OCN, Parent Company Name, Rate Center, Pooling Status of rate center, Switch, Part 3 Effective Date, Part 3 Status (approved, denied, suspended or withdrawn), and the Part 3 Response Date. Users can search by a customizable date range via a drop-down menu.
- Part 4 Report: A list of Part 4s submitted. Details will include the State, NPA-NXX-X, OCN, Type of Request, Rate Center, Assignment Date, Effective Date, In-Service Date, Part 4 Receipt Date, and Submitter's Name. Users can search by a customizable date range via a drop-down menu.
- Assignments Needing Part 4 Report: A list of thousands-block assignments that still require a thousands-block Part 4 and a list of CO code assignments for a Dedicated Customer that require a CO code Part 4. Details will include the State, the NPA-NXX-X, OCN, Type of Request, Rate Center, Assignment Date, Effective Date, Part 4 Due Date, and Pending Disconnect. Users can search by a customizable date range via a drop-down menu.
- Total Numbering Resources Report: A list and calculated total of the service provider's assigned and retained pooled thousands-blocks and assigned non-pooled codes for a given State, NPA, Rate Center and OCN.

### 10.4.5.3 p-ANI System Reports

At a minimum, the NAS shall be capable of producing the following reports with flexible search functionality for the user (*i.e.*, independently by OCN, State, NPA, NENA company ID or any combination of these data elements) and shall be downloadable in Excel™ format:

- Forecast Report – a list of all current forecasts that are on file in NAS based on the states, NPAs, NENA IDs and OCNs included in the user's profile. Details will include State, NPA, NENA ID, OCN, and the reporting periods (*e.g.*, quantity needed in the next 0-6 months, the next 6-12 months and the next 12-18 months).
- Annual Report – a list of p-ANIs reported as assigned by the user for the current reporting cycle. Details will include NENA ID, OCN, State, NPA, NXX, Low Range, High Range, In Use indicator (Y or N) and Remarks.

- Missing Annual Report – a list of p-ANIs or p-ANI ranges that are assigned to the user but have not been reported during the current reporting cycle. Details will include NENA ID, OCN, State, NPA, NXX, Low Range, High Range.
- Part 1/Part 3 Report – a list of Part 1s and Part 3s created for the user based on the states, NPAs, NENA IDs and OCNs included in the user’s profile. Details will include State, NPA, p-ANI range, Tracking Number, type of request, NENA ID, OCN, selective router CLLI, FCC PSAP ID, PSAP name, PSAP state, PSAP County/Municipality, Part 1 submission date, Part 3 response date, and Part 3 status (*i.e.*, approved, denied, suspended or withdrawn). Users can search by a customizable date range via a drop-down menu.
- Assigned p-ANI Report – a list of p-ANI or p-ANI range assignments for the user based on the states, NPAs, NENA IDs and OCNs included in the user’s profile. Details will include the state, NPA, p-ANI range, FCC PSAP ID, PSAP name, PSAP state, PSAP county/municipality, NENA ID, OCN, selective router CLLI, assignment date, and 24X7 emergency company contact number.

#### 10.4.5.4 NRUF System Reports

At a minimum, the NAS shall be capable of producing the following NRUF reports with flexible search functionality for the user (*e.g.*, independently by OCN, State, NPA, date, or any combination of these or other data elements) and shall be downloadable in Excel™ format:

- Forecast Report: This report shows accepted geographic forecast records for the current NRUF cycle, sorted by NPA and rate center. Fields shown on the report are: NPA, OCN, Rate Center, State, Form Name, Forecast Year 1, Forecast Year 2, Forecast Year 3, Forecast Year 4, Forecast Year 5, Total NXX Count, Total Blocks Count.
- OCN Report for Forecasts: This report shows company and contact information for accepted NRUFs with geographic forecasts. Fields on the report are: Company Name, Parent Company Name, Address 1, Address 2, City, State, Zip, Contact Name, Phone, Fax, Email Address, Parent OCN, SP OCN, Service Type, Rural Officer 1, Rural Officer 2, SP FRN.
- Utilization Report: This report shows accepted geographic utilization records for the current NRUF cycle sorted by NPA, OCN, NXX and X. Fields on the report are: NPA, NXX, X, OCN, Rate Center, Form Name, Utilization, Assigned, Intermediate, Reserved, Aging, Admin, Available, Received, Donated to Pool, Notes/Assignee.
- OCN Report for Utilization: This report shows company and contact information for accepted NRUFs with geographic utilization data. Fields on the report are: Company Name, Parent Company Name, Address 1, Address 2, City, State, Zip, Contact Name, Phone, Fax, Email Address, Parent OCN, SP OCN, Service Type, Rural Officer 1, Rural Officer 2, SP FRN.
- Utilization Under 5%: This report shows utilization records where utilization is less than 5% which can be sorted by NPA, NXX and OCN. Fields on the report are: NPA, NXX, X, OCN, Rate Center, Form Name, Utilization, Assigned, Intermediate, Reserved, Aging, Admin, Available, Received, Donated to Pool.
- Utilization Missing Report: This report shows geographic central office codes (NXXs) and thousands-blocks (NPA-NXX-Xs) where the service provider did not report utilization on a code or thousands-block assigned to the service provider for the current cycle. Central office code and thousands-block assignment data used in creating the report is as of December 31 for the NRUF due February 1 and as of June 30 for the NRUF due August 1. Fields on this report are OCN, NPA-NXX, X, RPTD.
- Donation Discrepancy Report: This report shows specific thousands-blocks marked as “donated” on NRUF submissions but which are also shown as assigned in the Pooling Administrator assignment data to the same OCN that indicated the thousands-blocks were donated. Thousands-Block assignment data used in creating the report is as of December 31 for the NRUF due February 1 and as of June 30 for the NRUF due August 1. Fields on this report are NPA-NXX, X, OCN.



- Non-Geographic Forecast Report: This report shows accepted non-geographic forecast and utilization records for the current cycle. Fields shown on the report are: NPA, OCN, Rate Center, State, Form Name, Forecast Year 1, Forecast Year 2, Forecast Year 3, Forecast Year 4, Forecast Year 5, Total NXX Count, Total Blocks Count.
- Non-Geographic Utilization Report: This report shows company information for accepted NRUFs with non-geographic forecasts and utilization. Fields on the report are: NPA, NXX, X OCN, Rate Center, Form Name, Utilization, Assigned, Intermediate, Reserved, Aging, Admin, Available, Received, Donated to Pool, Notes/Assignee.
- Non-Geographic OCN Report for Forecasts: This report shows company information for accepted NRUFs with non-geographic forecasts and utilization. Fields on the report are: Company Name, Parent Company Name, Address 1, Address 2, City, State, Zip, Contact Name, Phone, Fax, Email Address, Parent OCN, SP OCN, Service Type, Rural Officer 1, Rural Officer 2, SP FRN.
- Non-Geographic OCN Report for Utilization: This report shows non-geographic 5XX-NXX codes where the service provider did not report utilization on a code assigned to the service provider for the current cycle. 5XX-NXX code assignment data used in creating the report is as of December 31 for the NRUF due February 1 and as of June 30 for the NRUF due August 1. Fields on the report are: Company Name, Parent Company Name, Address 1, Address 2, City, State, Zip, Contact Name, Phone, Fax, Email Address, Parent OCN, SP OCN, Service Type, Rural Officer 1, Rural Officer 2, SP FRN.
- 5XX NPA Utilization Missing Report: This report shows non-geographic 5XX-NXX codes where the service provider did not report utilization on a code assigned to the service provider for the current cycle. 5XX-NXX code assignment data used in creating the report is as of December 31 for the NRUF due February 1 and as of June 30 for the NRUF due August 1. Fields on this report are: OCN, NPA-NXX, RPTD.

#### **10.4.5.5 5XX-NXX System Reports**

At a minimum, the NAS shall be capable of producing the following 5XX-NXX report with flexible search functionality for the user (*i.e.*, independently by OCN, State, NPA or any combination of these data elements) and shall be downloadable in Excel™ format:

- 5XX-NXX Assignments Needing Part C Report: This report shows the 5XX-NXX assignments for which a Part C has not been submitted. Fields on this report are: Tracking Number, NPA, NXX, OCN, Assignment Date.

#### **10.37.6 Alternative Data Capabilities**

The NANPA shall also support e-fax and e-mail submissions of user documentation (*e.g.*, applications, forms, forecasts and other reports).

#### **10.38 System Maintenance**

The details of a proposed system maintenance schedule shall be provided in the NANPA's System Maintenance Plan. All scheduled maintenance activities shall occur during non-core business hours, shall require prior approval of the FCC, and shall not exceed a four (4)-hour period unless approved by the FCC.

#### **10.39 System Security**

The NANPA shall maintain and enforce system safety and physical security procedures in accordance with the *FCC Cyber Security Program* (Reference 23). The NANPA shall maintain confidential and proprietary information and institute any physical and safety procedures required. The details shall be provided in the NANPA's Security Plan.

Following contract award, the NANPA shall prepare a NANPA Security Plan following, as appropriate, the National Institute of Standards and Technology (NIST) *Guide for Developing Security Plans for Federal Information Systems* (Reference 28).

#### **10.40 System User Profile Application**

The NANPA shall develop and maintain a User Profile application process for the NAS to ensure that there is a mechanism to distinguish one system user from another. The NANPA shall maintain the capability to reach all service providers and assignees by maintaining automated and up-to-date lists of addresses corresponding to all contacts. The NANPA shall update the list of contacts quarterly. The contact list shall be automated and allow contact by U.S. Mail, e-mail, or telephone. The User Profile application shall contain at a minimum the contact information for each client, and any other relevant identifying features, such as service provider Operating Company Number (OCN), parent company OCN, and FCC Registration Number (FRN). The NANPA is not responsible for assigning the OCN, parent company OCN or FRN.

To promote the use of the RESTful API, the NANPA shall provide a process for service providers to request access to and obtain API keys via API key management.

#### **10.40.74 User Logon System**

The system shall be able to support access to the NAS data with a unique logon ID and password upon receipt and approval by the NANPA of a request form.

#### **10.40.75 Logon System Access**

Access is initiated upon receipt by the NANPA of a completed logon ID request form having the proper written approvals from the requesting organization.

#### **10.40.76 Logon System Approval**

After access approval, the NANPA shall assign the unique logon ID and password with the appropriate security level corresponding to the type of user requesting access.

#### **10.40.77 Logon System Security Level**

The user's security clearance sets the correct level of record access and system capabilities. For forms and reports requiring an applicant signature, a valid logon ID and password or API key shall be considered tantamount to an applicant signature.

#### **10.40.78 Logon System Password**

After the logon ID is initialized and entered into the system by the NANPA, the users shall be informed of the logon ID activation and password via email or other notification.

#### **10.40.79 Logon System Problems**

Users experiencing problems in obtaining a logon ID shall contact the NANPA for resolution. The NANPA shall resolve all logon ID problems within one business day.

#### **10.40.80 User Access Permission Classes**

The NANPA is responsible for assigning new users the appropriate security permission class for using NAS. The NANPA shall exercise appropriate control over access to all records, and shall ensure that users are only allowed access to the data appropriate to their permission. A system that establishes various classes of user access shall be developed by the NANPA.

The NAS shall provide the ability for a user for a particular company or OCN to query and download a report of all active users associated with the user's own company or OCN (e.g., a user with Company A / OCN XXXX can query and download a list of all active users associated with Company A / OCN XXXX), without having to request such information from NANPA personnel.

#### **10.40.81 Password Changes/API Key Changes**

All user passwords shall be changed every 180 days. If an individual ends employment with the user, the NANPA should be immediately notified. Upon such notification, NANPA shall immediately assign a new password or disable the logon ID, as directed by the user's company. API key management shall enable service providers to create new or revoke API keys as needed.

#### **10.40.82 Unauthorized Client User System Access**

In the event the NANPA becomes aware of an unauthorized access to the NAS or user data, the NANPA shall immediately:

- Notify the FCC and the applicable user(s) by email.
- Report to the NANC that a breach has occurred and that the affected party has been notified.
- Investigate the unauthorized access
- Provide the FCC and affected users (subject to reasonable access, security, and confidentiality requirements) and their respective designees with reasonable access to all resources and information in the NANPA's possession as may be necessary to investigate the unauthorized access.

The FCC or its designee shall have the right to conduct and control any investigation relating to the unauthorized access as it determines is appropriate.

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

#### **10.41 System Inspection**

Subject to the NANPA's reasonable access, security, and confidentiality requirements, a NANP member country or a designee, upon notice to the NANPA, shall have the right to inquire about the safety/security functions of NAS in the cloud application. The FCC, with or without notice to the NANPA, shall have the right to make visits to the NANPA to review safety/security requirements.

If any of the safety and physical security procedures as stated in the selected offeror's proposal are not implemented and maintained throughout its Term of Administration, or any safety and physical security procedures related to the NAS do not comply with those specified, the NANPA shall be deemed noncompliant. The NANPA shall implement corrective measures of noncompliance within ten (10) calendar days of notice of noncompliance. Failure to correct such noncompliance within ten (10) calendar days shall subject the contractor to termination of the contract for default.

The NANPA shall: (1) implement corrective measures, and (2) give notice of such implementation to the FCC. The FCC may make one (1) or more follow-up visits, 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 NANPA for reasons other than a safety/security visit.

System inspections may include, without limitation, the system or system components located at: NANPA or subcontractor facilities; telecommuting employees of the NANPA or subcontractor(s); NANPA or

subcontractor maintenance organizations; or employees of the NANPA or subcontractor(s) on traveling status with access to the NAS.

#### **10.42 System Report Administration and Distribution**

The NAS shall be capable of generating and distributing reports upon request, to all requesting users who are entitled to receive reports. The full set of reports shall be described in the NANPA's Management Reporting Plan. All reports, except individual, user-specific data, shall be available and accessible electronically on the NANPA web site. All individual, user-specific data submitted to the NANPA, in any form, shall be treated as confidential. Any data that contains proprietary user information shall not be accessible by the public on the NANPA web site or published by the NANPA. The NANPA shall only publish and distribute aggregated data.

The NAS shall validate the accuracy of report contents prior to any distribution. Reports generated by the NAS shall be capable of being distributed and updated automatically. The report distribution system shall support an email distribution list for signup for automatic updated report notification.

The NANPA shall distribute via the NANPA web site all summaries and comprehensive reports made known to the NANPA or produced by the NANPA or its affiliate subcontractor(s) performing NANPA duties in part or whole. Reports shall be distributed by paper (including via U.S. Mail) and facsimile when requested. Such reports shall be downloadable in a machine-readable form using standard word processing and spreadsheet programs, as appropriate.

#### **10.43 Help Desk**

The NANPA shall maintain a Help Desk that is accessible during the NANPA's regularly scheduled business hours. Among other functions, the Help Desk shall be available to assist users with the input and the interpretation of system-generated reports. The NANPA Help Desk shall:

- Provide and maintain a toll free phone number to assist with interpretation of any system problem or inquiries related to Numbering Resources.
- Open trouble tickets as needed (see section 10.10.4).
- Assist customers with filling out applications, and accessing reports or other authorized FCC or industry information.
- Answer Numbering Resource specific questions from service providers, applicants and other entities as needed, and provide information on where and how to obtain more information about the resource on NANPA web site or in INC industry guidelines.

##### **10.43.83 Contact**

The toll-free telephone number for the Help Desk shall be posted on the NANPA web site along with other relevant contact information to help users. The NANPA shall provide mechanisms (*e.g.*, web, voicemail, e-mail, and facsimile) to be accessible on a 24-hour basis.

With e-mail, the NANPA shall have the capability of transmitting and receiving e-mail messages with and without attached files. The NANPA shall provide "firewall" protective screening of all incoming e-mail messages and attachments based on a security profile established by the NANPA and approved by the FCC. Additionally, the NANPA shall provide virus protection software on all devices that receive e-mail. The NANPA shall maintain the most recently updated version of virus software as defined by the software provider. With facsimile, the NANPA shall provide the capability of transmitting and receiving ITU G.3 and G.4 facsimiles.

#### **10.43.84 Help Desk Referrals**

Response to user inquiries for assistance shall include, where appropriate, referral to a NANPA Subject Matter Expert.

#### **10.43.85 Help Desk Actions**

Any frequently asked questions (FAQs) and their answers shall be added to the FAQ page on the web site on at least a monthly basis. Responses shall be provided within one business day of the request being sent to the NANPA.

#### **10.10.4 Help Desk Trouble Ticket Tracking and Reporting**

The NANPA Help Desk shall track and resolve trouble tickets. The NANPA Help Desk shall:

- Open a trouble ticket for each reported problem with NAS, the web site, facsimile, voice mail or e-mail.
- Receive and transmit trouble tickets concerning communications problems with other vendors.
- Require that each trouble ticket be time stamped with minute accuracy and stored for recall for two (2) years.
- Use the time stamped on the trouble ticket as the time for the start of the out-of-service period when an out-of-service condition exists; when the out-of-service condition has been cleared and the originator of the trouble ticket notified, use the time stamped on the last update of the trouble ticket shall be used as the end of the out-of-service period.
- Notify the originator of the trouble ticket of the disposition of the problem once the trouble ticket is closed.
- Summarize the quantity and type of trouble tickets opened and closed during the year in the Annual Report.
- Report other problems that, while not related to NAS, the web site, voice mail or email, are likely to be visible and impact multiple users.

#### **10.44 System Generated Notifications and Customized Notifications**

The NAS shall support an email distribution list that both registered and non-registered NAS users can apply to and receive system generated notifications. Such email distribution list may be used to send a general notice to all users, both registered and non-registered.

The NAS shall allow users to customize notices by geographical location (*e.g.*, NPA relief planning by NPA or state) and/or resource type that allows users to select categories of notices they want to receive. The NANPA shall provide customized notification support in the following areas:

- Instructions for users to subscribe to lists on [www.nationalnanpa.com](http://www.nationalnanpa.com)
- Topic and geography specific notifications
- Numbering Resource specific notifications (*e.g.*, a user is only interested in p-ANI related notices)
- NPA relief planning, guideline changes, regulatory directives, NANPA process changes
- NPA exhaust notification and relief planning
- General broadcast of system availability or maintenance
- User education opportunities
- New items on the web site
- New personnel announcements
- International activities impacting the NANP
- Data related to the status of resources associated with state conservation deliberation

#### **10.45 System Testing and Results**

Prior to any new system turn up or any new system functionality and feature implementation turn up, the NANPA shall provide and maintain a test bed for testing of the NAS in anticipation of the system acceptance test, as well as future system changes, and shall provide a System Test Plan to the FCC for the initial acceptance test of the NAS. This plan shall contain the selection criteria for users to participate in system testing and the timeline and specific NAS elements to be tested. The System Test Plan shall follow the format, where applicable, of *ISO/IEC/IEEE International Standard - Software and systems engineering — Software testing —Part 3: Test documentation* (Reference 24).

The NAS shall be subject to any system test deemed appropriate by the FCC to ensure the efficacy of the guidelines, any standards that are referenced or cited in any of the documents in Section 16 of this document or any standards that are offered in contractor's proposal (e.g., the Internet Engineering Task Force (IETF) interface standards for Internet Protocol (IP), or numbering plan standards, like ITU-T Recommendation E.164).

The testing will ensure the efficacy of the uniform numbering resource guidelines, interfaces and standards. The NANPA shall develop and implement a System Acceptance Plan following the format, where applicable, of *ISO/IEC/IEEE International Standard - Software and engineering –Software testing – Part 3: Test documentation* (Reference 24).

Upon completion of the NAS acceptance test, the NANPA shall inform the FCC of the results and shall publish the results of said test. These results shall be readily available to all interested parties. Final approval of the NAS shall be dependent on successful execution of the System Acceptance Plan, which shall include a System Test Plan. The System Acceptance Plan shall be submitted to the Government within 30 days of contract award and shall be successfully completed within 90 calendar days of the contract award.

#### **10.46 System Disaster Recovery and Costs**

A disaster recovery process shall be developed to restore the NAS within two (2) business days. The NANPA shall develop and implement a detailed Disaster/Continuity of Operations Plan, following the format, where applicable, of *NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs* (Reference 25) 60 days following contract award. In the event of a disaster, the NANPA shall cover all costs associated with rebuilding or recovering the applications systems, records, and related information that existed prior to the disaster.

#### **10.47 System Backup**

The NANPA shall initiate and maintain a backup process that ensures that the data contained in the NAS can be restored as needed. NAS backup information shall be generated, at least daily. The NANPA shall keep a full backup of the web, application, and database servers using an FCC-approved web services provider, where the data will be retained and accessible if necessary.

#### **10.48 System and Equipment Inventory**

Inventory data on personal computer equipment shall be reported as part of the NANPA's annual reporting requirements, as well as any upgrades or replacements, including the license numbers of any Commercial Off-the-Shelf (COTS) software.

#### **10.49 System Documentation Plan**

The NANPA shall, within 90 calendar days of the contract award, according to the System Documentation Plan, provide the FCC-designated COR, for approval, with copies of the:

- System Design documentation describing in sufficient detail to guide normal operations, the system's structure, modules, and interactions
- System Operations documentation describing how to load, operate, and maintain the system, including system and application software upgrades, application modifications and host ports
- System User documentation describing the system and its features from the end user perspective

This documentation should be consistent with *IEEE Standard for Information Technology – Systems Design -- Software Design Descriptions* (Reference 30), *ISO/IEC/IEEE Standard for Systems and Software Engineering - Software Life Cycle Processes* (Reference 31), and *ISO/IEC/IEEE Systems and software engineering -- Requirements for acquirers and suppliers of user documentation* (Reference 27), respectively.

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

### **10.50 NANP Administration System (NAS) Transfer to Successor**

The NANPA shall transfer to the FCC or a successor, in the case of termination, or at the expiration of the Term of Administration, all intellectual and physical property, accounts and web sites developed with funding from this contract and used in conjunction with the NAS.<sup>25</sup> This means that everything transfers, including all items attached to the NAS. Any other intellectual or physical property or contracts associated with the NANPA day-to-day operations shall transfer. This shall include but not be limited to:

- NAS and all its accounts and supporting documentation
- Cloud-based applications and other software
- Interface specifications and supporting documents
- All property associated with NAS
- All Numbering Resource records, both current and historical
- Also see the NAS Transition Plan

The NANPA shall provide to the FCC a detailed NAS Transition Plan that provides for an efficient and orderly transition, which includes a list of items that are subject to transfer at the end of its term. This Transition Plan shall follow the format, as applicable, of *Software Transition Plan (STrP)* (Reference 26). The NANPA shall file the Transition Plan with the Contracting Officer once its NAS has been accepted. Thereafter, the NANPA shall update the Transition Plan annually, and provide it to the FCC.

#### **10.50.86 Transfer Efficacy**

Transfer of property shall be performed in such a manner as to ensure an efficient and orderly transition of the NAS, cloud-based applications and any associated property to a successor's environment in a fully operational state without service interruption to any client.

#### **10.50.87 System Software Source Code Escrow**

The FCC shall be the custodian of a copy of the NAS source code and any other code necessary to make the software and system executable, including any documentation. The NANPA shall provide the FCC with copies of all documentation specified in the System Documentation Plan.

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<sup>25</sup> See also 47 CFR §52.13

### **10.50.88 Property Inventory and Transfer**

Any property related to NAS shall transfer with lien-free title to the FCC or the FCC's designee, without charge. Inventory data (models, serial numbers and descriptions) on any property shall be reported as part of the NANPA's annual reporting requirements, as well as any upgrades or replacements, including the license numbers of any commercial item software.

### **10.50.4 Technical Support**

After the period provided in the services continuity clause (*Federal Acquisition Regulation (FAR) Section 52.237-3*) (Reference 46), if requested, the NANPA shall provide up to 45 business days (over a six (6)-month period) of technical support to ensure a smooth transition of the system.

### **10.51 Tools**

The NAS shall maintain the applications and tools necessary for users to access and use the system to perform the applicable tasks and functions.

### **10.51.89 Exhaust Forecasting**

Exhaust forecasting currently uses the NRUF tool. Other tools and data may be needed and used to successfully forecast NPA and NANP exhaust. The NAS shall validate data submissions for users, process them, and then the NANPA will prepare and present an accurate NPA and NANP exhaust forecast report.

The NPA and NANP exhaust report shall be published semi-annually and as warranted when information materially affecting the life of an NPA and/or the NANP becomes known to the NANPA. The NANPA shall maintain NRUF interface specifications and post them to the NANPA web site.

The NANPA and/or the NAS shall be able to:

- Produce timely forecasts that are reasonably accurate, currently at least 36 months in advance of exhaust as indicated in INC guidelines
- Retain the models used, the forecast and actual exhaust date for each NPA, and a comparison showing the accuracy of each model and forecast over the past five (5) years
- Produce the NPA Exhaust Report when new data materially affecting NPA exhaust becomes available (*e.g.*, within 30 days of NRUF deadline)
- Post all forms and job aids related to NPA Exhaust Forecasting and NANP Exhaust Forecasting for users on the NANPA web site
- Prepare and present the monthly NPA relief tracking report to NANC during the NANPA's NANC report
- Maintain historical NRUF data by individual service provider so that it shall be available to the service provider for the previous five (5) years. Additionally, provide each service provider access to its NRUF data for the current submission cycle within the system
- Post exhaust forecasts and actual exhaust dates (without rationing) on the NANPA web site
- Maintain the forecasting system so that it shall be capable of accessing the five (5) prior years of NRUF data forecasts and the corresponding actual consumption by service provider and rate area

### **10.51.2 Application Processing**

The NAS and tools shall provide real time access to resource usage and status data. The NAS shall support standard electronic filing capabilities (*e.g.*, FTP and RESTful API), as well as on-line application processing capabilities.



### 10.51.3 CO Codes

CO code application submission shall be available on-line via NAS, by FTP, RESTful API, or via e-mail, if necessary. The NAS shall process applications by performing application data validation, resource eligibility verification, and receipt of request and acceptance/rejection notification to service providers.

The NANPA and/or NAS shall:

- Provide applicants with the ability to complete administrative forms online and upload supporting documentation to NAS to avoid the need to send faxes and/or e-mail attachments. Web based tools shall be provided for use in performing code activities, such as Code applications (Part 1), In Service confirmations (Part 4), submission of MTE information, and submission of NRUF reports.
- Provide service providers with a web-based application that confirms CO code application data field input accuracy and consistency using drop down menus for all appropriate fields (*e.g.*, OCN, FRN, rate center, homing tandem, switch COMMON LANGUAGE® Location Identification (CLLI™) Code).
- Display on its web site the status of each NXX as: (1) assigned, (2) available for assignment, to include codes in the pooling set-aside status, (3) unavailable for assignment (*e.g.*, N11 codes) and (4) pending disconnect.
- Provide accurate assignments, avoid rating and/or routing conflicts, and conform to established dialing plans.
- Support mass modification submissions, consistent with INC industry guidelines

### 10.51.4 Thousands-Blocks

Thousands-block application submission shall be available on-line via NAS, by FTP, RESTful API, or via e-mail, if necessary. The NAS shall process applications by performing application data validation, resource eligibility verification, and receipt of request and acceptance/rejection notification to service providers.

The NANPA and/or NAS shall:

- Provide applicants with the ability to complete administrative forms online and upload supporting documentation to NAS to avoid the need to send faxes and/or e-mail attachments. Web based tools shall be provided for use in performing thousands-block activities, such as thousands-block applications and supporting NPAC information, In Service confirmations, submission of MTE information and submission of thousands-block forecasts.
- Provide service providers with a web-based application that confirms thousands-block application data field input accuracy and consistency using drop down menus for all appropriate fields (*e.g.*, OCN, FRN, rate center, switch COMMON LANGUAGE® Location Identification (CLLI™) Code).
- Contain and display on its web site all thousands-blocks contained in each industry inventory pool, including thousands-block assignment and contamination status, to whom thousands-blocks are allocated (assigned or retained), date assigned, block effective date
- Contain and display on its web site all rate centers per NPA and their pooling status
- Contain and display on its web site all available thousands-blocks, their contamination status and quantity of contaminating TNs, and block available date
- Provide accurate assignments
- Support mass modification submissions, consistent with INC industry guidelines

### **10.51.5 p-ANIs**

p-ANI application submission shall be available on-line via NAS, by FTP, RESTful API, or via e-mail, if necessary. The NAS shall process applications by performing application data validation, resource eligibility verification, and receipt of request and acceptance/rejection notification to p-ANI applicants.

The NANPA and/or NAS shall:

- Provide applicants with the ability to complete administrative forms online and upload supporting documentation to NAS to avoid the need to send faxes and/or e-mail attachments. Web based tools shall be provided for use in performing p-ANI activities, including p-ANI applications, forecast reports and annual report submissions.
- Provide p-ANI applicants with a web-based application that confirms p-ANI application data field input accuracy and consistency using drop down menus for all appropriate fields (*e.g.*, OCN, NENA ID, PSAP ID).
- Contain all p-ANIs in each NPA inventory pool, the assignment status of each p-ANI, to whom a p-ANI is allocated, all NPAs per state
- Provide accurate assignments, but also a process for resolving dual assignments if necessary, consistent with the *p-ANI Administration Guidelines* (Reference 34).

### **10.51.6 NPA Exhaust Relief Planning**

The NAS shall broadly distribute all meeting notices and Initial Planning Documents (IPD) via an electronic distribution system, providing sufficient advance notice of forecasted exhaust and corresponding anticipated relief meetings.

The NANPA shall facilitate and assist regulators in understanding and approving the final industry recommendation for relief, and advise the industry, the NANC, and the FCC on its progress and the status of the approval of the NPA Relief Plan.

### **10.51.7 Federal and State Directives/Orders**

The NANPA and/or a system application shall be capable of responding to a request by a regulator for assistance and/or advice on a Numbering Resource issue that may affect existing processes and procedures used today by users in managing NANP resources. Upon completion, the analysis shall be posted on the NANPA web page when information becomes releasable so that interested parties can understand the impact of the selected issue resolution.

The NANPA and the system's applications shall be capable of:

- Documenting the impact upon users in terms of: (1) the resource assignment/change/disconnect application process, (2) the application approval criteria, (3) all application forms, and (4) reports given to NANPA and reports generated by NANPA for users
- Documenting the impact upon: (1) forecast analysis, (2) the timeliness of NPA Relief, (3) the need for rationing, and (4) the availability of Numbering Resources

### **10.51.8 Federal and State Code Conservation Data**

The NAS applications shall provide prompt data updates no later than the next business day after the information has been received. The NANPA web site shall be updated in the same timeframe. The system shall produce timely and accurate documents displaying data and statistics for all Numbering Resources for viewing by designated users per confidentiality requirements and data access arrangements specified by appropriate NANP member regulatory authorities. Users shall be able to check the status of resources in real-time and "look-up" specific conditions and administrative practices required by local jurisdictions, including dialing and geographic characteristics impacting the assignment and use of

Numbering Resources. The NANPA shall prepare summaries that describe local conditions and geographic characteristics that vary from national guidelines. The system shall also maintain existing NANP administrative duties, and user application processes. The system's application shall be capable of assembling this information so that it is readily available for user access.

#### **10.51.9 CIC Access and Usage Report Processing**

CIC assignees (including billing & collection clearinghouses and switchless resellers) shall provide a usage report electronically to the NANPA per the *Carrier Identification Code (CIC) Assignment Guidelines* (Reference 15). Similarly, access providers shall provide an access/usage report electronically to the NANPA per the *Carrier Identification Code (CIC) Assignment Guidelines* (Reference 15).

The semi-annual CIC usage and access/usage report submissions shall be accepted on-line via NAS, email, FTP, and RESTful API per guideline requirements no later than January 31 for the period ending December 31, and no later than July 31 for the period ending June 30. The reports that are not submitted on-line shall be submitted and accepted by the NANPA in a standardized electronic form (*e.g.*, Microsoft® Word or Excel™).

With respect to CICs subject to reclamation as a result of the NANPA's usages analysis, the NANPA shall first contact the assignee to verify that the CIC should be reclaimed. The NANPA shall, in accordance with INC guidelines, notify the INC of CICs subject to reclamation where the CIC assignee cannot be found, and shall simultaneously post this information to the NANPA web site.

The CIC assignee interface specifications, programs, and processing used by the NANPA when determining reclamation, recording, and storing the status of CIC codes shall be posted on the NANPA web site.

#### **10.51.10 Contact Information**

The NAS applications shall record any contact information provided by Numbering Resource or subject category. The record shall contain the name, address, telephone number, company name, title and area of responsibility (*e.g.*, code administrator, regulatory liaison for a state or the FCC), and the date the record was verified, entered or updated. The NAS and its applications shall be capable of report generation using any of the entered fields for users and the NANPA. Such requests shall be accessible through NAS via the NANPA web site. Users shall use the data to facilitate contact and correspondence among the NANPA, users, the NANC, and industry and standards bodies.

#### **10.52 Web Site**

The NANPA shall provide and maintain an Internet web site. At a minimum, the NANPA web site shall encompass all existing functionality and information of the current NANPA web site ([www.nationalnanpa.com](http://www.nationalnanpa.com)), the current Pooling Administration web site ([www.nationalpooling.com](http://www.nationalpooling.com)) and the Routing Numbering Administration web site ([www.nationalpani.com](http://www.nationalpani.com)).

#### **10.52.90 Web Site Content**

The NANPA web site shall contain nonproprietary data on all NANP resources administered by the NANPA. It shall also contain links to the industry guidelines, industry committees and relevant regulatory agencies, and other information to assist users in obtaining NANP Numbering Resources and the public with understanding NANP resources. At minimum, the NANPA web site shall contain the following content:

Category	Content
1. NANPA Information	<ul style="list-style-type: none"> <li>• NANPA general information</li> <li>• All relevant staff contact names, updated as necessary</li> <li>• Telephone numbers</li> <li>• Facsimile numbers</li> <li>• E-mail addresses</li> </ul>
2. NPA Information	<ul style="list-style-type: none"> <li>• Assigned, reserved for possible geographic relief (Specific areas not indicated)</li> <li>• Other non-available NPA codes</li> <li>• NPAs assigned by state or region</li> <li>• Locations served by NPA</li> <li>• Dialing plans per NPA</li> <li>• Area Code Query, to include a hyperlink to the Planning Letter(s)</li> <li>• Relief plan, planning and implementation meetings, and implementation status</li> </ul>
3. NPA-NXX Code Information	<ul style="list-style-type: none"> <li>• NPA-NXX assigned, the carrier and OCN to which the NXX is assigned, assigned date, effective date, pooled code status, initial or growth code, and in service indicator (Y or N)</li> <li>• Unavailable NXXs</li> <li>• List and summary of assigned and available NXXs per NPA</li> <li>• During NPA relief activities: current data reflecting relief activity (e.g., NXX code assignments in each NPA, key dates, etc.)</li> </ul>
4. Thousands-Blocks Information	<ul style="list-style-type: none"> <li>• Block Report (Available, Assigned, Retained)</li> <li>• Block Report by Region</li> <li>• NPA / Rate Center Report (queried by NPA and state, that lists each relevant rate center abbreviation and full name, the LATA, the FCC Top 100 MSA name and the Pooling Status for the rate center).</li> <li>• NPA/Rate Center Report for All States</li> <li>• Pool Tracking Reports</li> <li>• Rate Center Changes</li> <li>• Public PSTN Activation Report</li> <li>• First and Supplemental Implementation Meeting (FIM/SIM) documents by state and NPA</li> </ul>
5. p-ANI Information	<ul style="list-style-type: none"> <li>• p-ANI Tips</li> <li>• Service Provider/Applicant Checklist</li> <li>• Glossary</li> <li>• Forecast Excel template and instructions</li> <li>• Mass Request, Modification and Return templates and instructions</li> <li>• PSAP and 9-11 Systems Service Provider User Guide</li> <li>• Governmental/Regulatory Agency User Guide</li> <li>• P-ANI Activity and Projected Exhaust Report</li> </ul>
6. 900-NXX Information	List of assigned 900-NXX codes and the carrier and OCN to which

Category	Content
	the NXX is assigned
7. Non-Geographic 5XX-NXX Information	List of assigned 5XX-NXX codes, assignment date, and the carrier and OCN to which the NXX is assigned
8. CIC Information	List of assigned CICs, with the entity name, ACNA and contact information to which the CIC is assigned and date assigned
9. Vertical Service Code Information	List of assigned VSCs and their respective purpose
10. ANI II Digits Information	List of assigned ANI II digits and the stated purpose of the code
11. 555 NXX Line Numbers	Access to the <i>555 NXX Line Number Reference Document</i> (Reference 13) and/or any future assignment/use of this resource as defined by the FCC and/or INC.
12. N11 Service Code Information	List of all N11 Service Codes and a description of the service to which the N11 code is assigned or generally used
13. 800-855 Number Information	List of assigned 800-855 numbers and the carrier/service provider to which the 800-855 number is assigned
14. Description of and details on new Numbering Resources as may be identified and defined in the future	Information concerning any new Numbering Resources made available
15. INC guidelines	Link to the INC web page where INC guidelines may be obtained
16. NANPA Planning Letters relative to NPA Code Relief ( <i>i.e.</i> , notification of assigned NPA and key dates associated with implementation)	List of all NANPA Planning Letters by year and a brief description ( <i>e.g.</i> , NPA 326 to Overlay NPA 937 (Ohio))
17. Other NANPA information as directed by the NANC or appropriate regulatory authorities	Documents and other information concerning number assignment and administration made by NANC and/or regulatory agencies
18. NANPA Reports	<ul style="list-style-type: none"> <li>• List of NANPA Reports concerning Numbering Resources (does not include enterprise service reports)</li> <li>• Annual report (downloadable in a machine-readable format using standard word processing and spreadsheet programs, as appropriate)</li> <li>• FCC and Metrics Reports, as required</li> </ul>
19. NANP member countries and any applicable information	List of all NANP member countries and appropriate contact information.
20. Index of reference documentation also called the Binder of Decisional Principles	<ul style="list-style-type: none"> <li>• FCC related directives</li> <li>• State directives under delegated authority</li> <li>• Other NANP member nation directives</li> </ul>
21. Training Videos	NANPA-produced training videos, specific to a particular Numbering Resource type (as needed), with multiple viewing options, developed to assist users with using NAS.

Category	Content
22. Tools	Various tools designed to assist users and web site visitors, such as Frequently Asked Questions (general and Numbering Resource specific, as needed), a Glossary, Web site Guide, Quarterly or Monthly Tips, Password Reset, API key management, New User Registration, Reclamation Procedures and contact lists, State Safety Valve Process Quick List, etc.
23. Area Code Maps	Area code maps showing all area codes in a given state, key cities or towns, area code boundaries, and whether area codes are single area codes or overlays.
24. Change Orders	Links to downloadable files of approved change orders with a brief description and its implementation date.
25. Other Documents	<ul style="list-style-type: none"> <li>• Mass modification procedures and templates, including Pooling Forecasts</li> <li>• User Guides</li> <li>• SFTP Registration</li> <li>• Web site Navigation Guide</li> <li>• New Service Provider Checklists</li> <li>• Getting Started documents for various Numbering Resources</li> <li>• New to Pooling information</li> <li>• New to p-ANI information</li> <li>• Problem Resolution Process</li> </ul>
26. Complaints, Comments, Suggestions	Ability to submit and track online forms to submit a complaint, comments or concerns, or suggested enhancements for the web site or the NAS

### 10.52.91 Content Posting and Updates

The web site shall contain current information. New information and documentation shall be posted to the NANPA web site within one (1) business day of its release. Information contained on the web site shall be updated within one (1) business day of any change or document release.

The rate center inventory pool information for thousands-blocks shall have no greater delay than 15 minutes between assignments and web site posting of updates.

The web site shall provide Numbering Resource application-specific help information that is constantly being improved, added to, and updated. This knowledge base of Numbering Resource application-specific help information and other Numbering Resource -specific FAQs content for each web application shall be updated as needed.

### 10.52.92 Web Site Design

The NANPA web sites (*i.e.*, [www.nationalnanpa.com](http://www.nationalnanpa.com) and [www.nanpa.com](http://www.nanpa.com)) shall be reliable and be able to quickly fulfill reasonable user expectations. The NANPA's web site shall be designed and maintained to ensure its accessibility according to the following principles:

- Maintain a NANP web site easily accessible by all users
- Allow web site pages to be navigated by keyboard
- Provide alternative methods to access non-textual content, including images, scripts, multimedia, tables, forms and frames for users who do not wish to display them

- Use accepted web site features (e.g., drop down menus) to provide information about the purpose and function of web site elements
- Provide a search engine to facilitate site navigation

#### **10.52.93 Availability and Access**

The NANPA web site shall be available 24 hours a day, 7 days a week. The web site shall be able to support up to 1000 simultaneous users initially, with an average holding time of 0.5 hours, to ensure that no user's experience is degraded when accessing or attempting to access the web site. The NANPA shall review semi-annually the quantity of simultaneous users and shall have the flexibility to adjust the support accordingly, and shall make such adjustments on an as needed basis.

#### **10.52.94 System Responsiveness**

The NANPA shall provide rapid response when accessing the web site or NAS. The NANPA shall provide a system such that will allow users the ability to view the complete web site or NAS 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 web site or NAS home page, the NAS shall have the capability to sense this condition. The NANPA 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 NAS. If the user reports to the help desk a problem with accessing information on either the web site or NAS, a trouble ticket shall be initiated to determine if an "out of service" condition exists.

#### **10.52.95 Out-of-Service**

The NANPA web site and NAS shall be operational 99.9% of the time over any 12-month period, excluding scheduled maintenance. NANPA's inability to deliver services at this level shall be deemed "out of service." This figure excludes problems due to the customer's network or equipment. 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.

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

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

#### **10.52.96 Out-of-Service Notification**

The NANPA shall be the point of contact for system recovery. The NANPA 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 NANPA 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 NANPA shall notify and report to all users and regulatory agencies of an unscheduled system shutdown or failure.

### **10.52.97 Web Site Privacy**

Web site privacy shall be monitored every time content and transaction functionality is added or changed to avoid any risk of exposing the web site to privacy risks and inappropriate access to the content.

#### **10.52.97.9 Privacy Management**

Privacy management shall include the rules that govern the collection, use, retention, and distribution of data. It shall address the privacy needs of users by assessing the risks to confidential data; managing the implementation of privacy policies and associated procedures; ensuring on-going compliance; monitoring developments, accommodating changes, and raising awareness within the NANPA's organization; and training NANPA staff.

#### **10.52.97.10 Privacy Compliance**

The NANPA's privacy practice shall contain details listing the compliance with the Gramm-Leach Bliley Act of 1999 regarding regulating the privacy of personally identifiable, non-public financial information in the United States, and the privacy requirements per the Personal Information Protection and Electronic Documents Act in Canada. The NANPA shall prominently display its privacy statement explaining NANPA's information handling practices on its web site.

#### **10.52.97.11 Privacy Breaches**

The NANPA shall monitor web site access to ensure that identified privacy practices are not compromised in any fashion. Any web site data privacy breach shall be documented and reported to the affected user and the appropriate regulatory authority. The NANPA shall report the web site privacy breach to the FCC.

### **10.19.4 Maintenance of NANC Chair Web Site**

The NANPA shall support and maintain an independent web site, the NANC Chair web site ([www.nanc-chair.org](http://www.nanc-chair.org)). The NANPA is the administrator of the NANC Chair web site and as such shall be required to maintain the web site in the same manner (*e.g.*, accessibility, security) as the NANPA web site.

#### **10.52.4.1 Responsibilities**

The NANC Chair web site administrator shall post documents as requested by the FCC, NANC members, members of the industry and regulatory agencies to the web site in a timely manner prior to NANC meetings. In addition, the administrator shall post documents and meeting records from the NANC's designated supporting groups (*e.g.*, Working Groups, subcommittees and Issue Management Groups (IMGs)) and make those records easily accessible. Finally, the NANPA will secure appropriate transcription services to be used for providing a written record of NANC meetings.

#### **10.52.4.2 Content**

The following is a partial list of the content contained on the NANC Chair web site:

- Links to relevant web sites (*e.g.*, those administered by the FCC, the NANPA, the NPAC, and the INC)
- Specific documentation (*e.g.*, NANC meeting minutes and documents)
- Working Group, subcommittee, and IMG documentation (*e.g.*, meeting records, work in progress)
- NANC, Working Group, subcommittee, IMG, and appropriate industry forum meeting dates by calendar year



## **Section 11: Reporting**

The following section discusses the Numbering Resource reports and the web site requirements for the NANPA. NANPA reporting shall take three (3) forms:

- an update to a table or document on the NANPA web site
- an electronic attachment to or notification of posting via an e-mail distribution list
- paper documents physically distributed at meetings

The NANPA shall provide regular reports on all NANP Numbering Resources to the NANP distribution list. The NANPA shall provide reports semi-annually in March and in September to the FCC, NANC, and the INC, and other necessary parties on all Numbering Resources administered by the NANPA.

Reports shall contain a written summary interpreting trends and the impact of new data upon Numbering Resources and the NANP in general. The reports shall contain, at a minimum, the following information:

- Assignments (assigned and available resources)
- Assignment rates
- Historical trends
- Projections (*e.g.*, NPA exhaust)
- Triggers for user action

The NANPA shall report semi-annually its projection for NANP exhaust. Further, the NANPA shall notify the FCC, the NANC and other necessary parties of any significant changes, as they occur, that might substantially alter the NANP exhaust projection.

The report format shall be subject to change and shall include any other information the FCC or the NANC deem necessary. The reports shall be for all resources not in a designated form of jeopardy. For those jeopardy resources, the NANPA shall publish reports on a monthly basis when there are high assignment rates and the resources are in danger of being depleted within two (2) years. In addition, the NANPA shall identify and develop other reports deemed necessary for managing the NANP resources in the future.

### **11.53 Annual Report**

The NANPA shall publish an Annual Report on the status of the NANP, and the Numbering Resources administered by the NANPA. The report shall be published during the first quarter of each year. The annual report shall also be reviewed during the NANC annual performance review process, and shall be made available on the NANPA web site. The Annual Report shall contain at a minimum, but not be limited to:

- Brief description of the NANP and the NANPA
- Description of all Numbering Resources assigned by the NANPA and appropriate points of contact
- Historical trends
- Highlights/significant milestones reached during previous year
- Current NPA Code assignment listings-Alphabetical by State/Province and in numerical order
- Current list of reserved NPAs
- Previous year-end NRUF results, NRUF forecast results, current year forecast
- Exhaust projections for individual NPAs and the NANP
- Status of NPA Codes
- NPA-specific dialing plans
- Status of CO Codes
- Identification of existing and potential thousands-block pooling areas
- Aggregated total number of the service providers participating in the pooled area, by pool
- Pooling forecast results, as well as a review of past forecasts vs. actual thousands-block activation

- Accounting of p-ANI activity by type and by month (*e.g.*, requested, assigned returned, modified)
- Accounting of p-ANI applications processed by request type
- Summary of p-ANI inventory as of year-end
- 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 or other assignees
- Additional informational offerings

#### **11.54 NRUF Report**

This report shall be produced and delivered to the FCC, to the NANP member nations, and the NANC. The NANPA shall provide aggregated forecast and utilization data to any requesting U.S. state user twice per year consistent with the dates of the NRUF reporting process. Within ten (10) calendar days of the request, the NANPA shall provide to any requesting state commission a single report containing only disaggregated data reported by service providers in that state, so long as the state commission has the appropriate confidentiality protections in place and the request is made 30 days after the deadline for NRUF reporting and before the subsequent NRUF reporting deadline. Because state commissions might wish to perform their own data analyses, the NANPA shall provide the data to requesting states via electronic transfer, which may include e-mail or other electronic format (*e.g.*, flash drive), and the ability for states with the appropriate security profile to download such consolidated NRUF data from the NAS. In the alternative, upon request from a state commission, the NANPA shall provide the data in paper copy form without additional charge to the state commission.

##### **11.54.98 Data Anomalies**

The NANPA shall provide a statement of any identified anomalies along with documented explanations for each anomaly in all NRUF reports to assist users in assessing the reports' impact and results. Among other things, these reports shall:

- Assist in interpreting the NRUF data
- Review the NANPA's data management and analytical performance
- Assess the effectiveness of numbering resource optimization efforts

##### **11.54.99 Reports to Regulatory Authorities**

The NANPA shall produce a list of all standardized NRUF data reports offered to regulatory users. The NANPA and interested regulatory authorities shall meet annually to determine the reports' format and content. These reports shall be produced by the NANPA upon demand from an appropriate regulatory authority, and at no charge to the requestor. Agreed-upon changes or modifications to these reports shall be at no charge to the requestor. These reports, once requested by a regulatory authority, shall be delivered continually until the regulatory authority notifies the NANPA otherwise. The NANPA shall also be prepared to produce a state-level summary of any of the NRUF reports. Comparison calculations shall properly compensate for the change in geographic coverage of both existing and new NPAs within areas that experienced area code splits during the designated reporting periods.

The following typifies information sought by and provided to regulatory authorities and other users. It is not intended to be an exhaustive list of information to be provided, nor is it prescriptive of the extent or format of other data that may be requested.

- Number of carriers in a rate center and/or NPA, identified by type. The NANPA shall produce on an as-needed basis a report that identifies the number of carriers that provided a NRUF report in a rate center and/or an NPA categorized by type as defined in FCC Form 502.

- Comparison of actual NPA exhaust with past five (5) exhaust projections. To test the assumptions and gauge the NANPA’s accuracy, the NANPA shall produce annually in April and in October reports that compare the actual exhaust dates of each NPA with the NANPA’s projections for that NPA over the previous five (5) reporting periods.
- Comparison of most recent NPA and NANP exhaust projections with past five (5) exhaust projections. To test the assumptions and gauge the NANPA’s accuracy, as well as to identify any problems that need to be addressed immediately, the NANPA shall produce reports that compare the most recent projected exhaust dates of NPAs and the NANP with the projected exhaust dates of the previous five (5) reporting periods.
- Comparison of aggregated or disaggregated service provider (SP) forecasts in an NPA with actual growth, with and without rationing. To gauge the accuracy of SP forecasts, the NANPA shall produce in April and in September reports that compare previous (aggregated) SP forecasts within an NPA with actual code demand for that same NPA.
- CO Code growth rate by NPA. The NANPA shall produce a semi-annual report that provides the CO Code growth rate by NPA for the current and previous five (5) reporting periods. These reports shall support a variety of formats, including, but not limited to, text, Microsoft Excel, and Microsoft Access.

**11.55 NPA Relief Activity Status Report**

The NANPA shall report the status of NPA relief planning efforts to the FCC and the NANC, and post its report on the NANPA web site on each business day, and on the NANC-chair web site on a monthly basis. At a minimum, the report shall contain the following categories:

<b>Category</b>	<b>Detail</b>
NPA	NPA needing relief
Jurisdiction	NANP member country, state, and locality of NPA needing relief
Date Relief Need Identified	Date the NANPA determined that relief was needed
Declaration Date	Date the NANPA notified the industry and regulators
Exhaust Date upon Declaration	Projected exhaust date when the need was declared
Current Exhaust Date	Current projection for exhaust
Forecasted Exhaust Date	The exhaust date of the NPA based on the latest NRUF data
Number of Remaining NXXs	Number of NXXs that are available for assignment
Number of Unavailable NXXs	Number of NXXs that are unavailable for assignment
Initial Relief Planning Meeting Notice Date	Date the first NPA relief planning meeting notice was distributed
Actual Filing Date	The date relief plan was actually filed with the appropriate regulatory authority
Requested Implementation Date	The requested date included in the relief plan when NPA relief shall take place, <i>e.g.</i> , end of mandatory dialing for a split, or the effective date for an overlay. When no date is requested, “none” is indicated.
Requested Relief Type	The recommended NPA relief solution indicated in the relief plan filed with the state commission if the industry was able to reach consensus
Requested Approval Date	The date indicated in the relief plan that regulatory authority approval is requested
Approval Date	The date the relief plan was approved by the regulatory authority
Approved Relief Type	The type of relief plan approved by the regulatory authority ( <i>e.g.</i> ,

Category	Detail
	overlay, split)
Approved Implementation Date	The date the regulatory authority has directed that the new NPA is to be implemented, <i>e.g.</i> , the effective date for an overlay or the end of permissive dialing for a split. In certain situations, a relief implementation date is not provided. The date may be determined at a later time or a trigger is identified ( <i>e.g.</i> , when a certain quantity of NXX codes are remaining in the existing NPA).
First Scheduled Implementation Meeting	The date of the initial NPA implementation meeting that the NANPA shall conduct
Rationing Date	Date rationing began. If no rationing, leave blank.
Jeopardy Declared	Date on which jeopardy was declared

### 11.56 Monthly CO Code Activity Status Report

The NANPA shall report the CO Code activity status to the FCC and the NANC, and post a monthly status report on both the NANPA and NANC-chair web sites. This report shall reflect the CO Code administration activity by state, and applicable NANP member country. At a minimum, the report shall contain the following categories:

Category	Detail
New Applications	Quantity of applications that the NANPA is handling for the first time
Assignments	Quantity of applications that resulted in the assignment of a new central office code
Denials	Quantity of applications that were denied because the applicable criteria were not met
Reclamations	Quantity of assigned central office codes reclaimed by the NANPA or returned by the assignee
Total	The sum of the above categories, equal to the total quantity of applications processed

## 11.5 Thousands-Blocks Pooling Reports

### 11.5.1 Monthly Thousands-Block Pooling Reports

The NANPA shall provide monthly reports to the FCC and the NANC or its designee on thousands-block pooling assignments. The Thousands-Block Pooling Assignments Report provided to the FCC and/or its designee shall be on a rolling 12-month basis, by month, and include the following information for each rate center and NPA:

- the number of applications processed
- the number of applications not processed in seven (7) calendar days
- the number of CO codes opened for pool replenishment
- the number of new thousands-blocks on the reclamation list
- total number of thousands-blocks on the reclamation list
- the number of thousands-blocks reclaimed
- the number of rate center status changes
- the number of rate centers with less than six (6) months of inventory based on forecasts

- the number of rate centers with less than six (6) months of inventory based on forecasts and zero thousands-blocks available
- the number of rate centers with thousands-blocks in pending status
- the number of assignments completed, the number of applications suspended in excess of seven (7) calendar days, the number of denials, and the percentage of suspended applications.

### **11.5.2 Semi-Annual Thousands-Block Pooling Reports**

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

### **11.5.3 Ad Hoc Thousands-Block Pooling Reports**

The NANPA may also be called upon to produce aggregated NPA / rate center / thousands-block pool status reports for various state and federal regulatory agencies, as needed. Requested information and reports for external distribution shall be distributed within three (3) business days after receipt of the request. The NAS shall be capable of quick processing of raw data into report format to ensure timely disbursement.

## **11.6 p-ANI Administration Reports**

### **11.6.1 Monthly p-ANI Administration Report**

The NANPA shall provide a monthly report to the FCC and/or its designee on p-ANI assignment activity. The monthly p-ANI Assignments Activity Report posted on the NANPA web site and provided to the FCC shall include, on a rolling 12-month basis, by month, the following information:

- The total and for each NPA:
  - The number of applications processed, and how many of those processed were approved, denied, suspended and withdrawn
  - The number and percentage of applications not processed within five (5) business days
- Identification of the typical reasons for an application to be denied, and the quantity and percentage of applications denied for each type of reason
- Identification of the typical reasons for an application to not be processed within five (5) business days

### **11.6.2 Annual p-ANI Activity and Projected Exhaust Report**

Consistent with the *p-ANI Administration Guidelines* (Reference 34), the NANPA shall provide and publish an annual “p-ANI Activity and Projected Exhaust Report” that includes, at minimum, the following information:

- national p-ANI utilization information
- p-ANI utilization by NPA
- the number of p-ANIs requested on a monthly basis
- the number of p-ANIs assigned on a monthly basis
- the number of p-ANIs returned on a monthly basis
- the number of p-ANIs modified on a monthly basis
- the number of p-ANI requests processed and the disposition of each
- forecast reports for projected future p-ANI resource usage

The annual p-ANI Activity and Projected Exhaust Report shall be provided to the INC and made available on the NANPA web site.

### **11.6.3 Ad Hoc p-ANI Reports**

The NANPA may also be called upon to produce aggregated NPA p-ANI pool status reports for various state and federal regulatory agencies. Requested information and reports for external distribution shall be distributed within three (3) business days after receipt of the request. The NAS shall be capable of quick processing of raw data into report format to ensure timely disbursement.

### **11.7 Other NANP Activity and Status Reports**

The NANPA shall provide a status report on any activity that occurs with other NANP resources that it administers. These reports shall be provided to the FCC, the NANC, and posted on the appropriate web sites on a monthly basis. The reports shall provide details as appropriate to the resource and the activity, including the NANP member country in which the activity occurred.

### **11.8 Requests for Additional Reports**

The NANPA may also be requested to produce additional reports as needed. The NANPA may create and provide data in different formats to accommodate requests to cull data and provide customized reports, as Enterprise Services, for a fee that is reasonable and based on its costs (See Section 15 for details on Enterprise Services). Note that Enterprise Services shall be reviewed by the NANC and approved by the FCC, but, once approved, the NANPA shall be free to negotiate a reasonable price with requestors.

### **11.9 Reference Documentation**

The NANPA shall maintain and make readily available an addendum of reference documentation to assist interested parties. The list shall include the most recent version of all guidelines and all NANP-related regulatory directives and requirements. This addendum shall be posted on the NANPA web site and updated as needed.

### **11.10 Standardized CO Code Reports and Reports for State Commissions**

The NANPA shall produce a series of standardized reports on CO Code assignment activity. A real-time report of codes assigned and available by NPA shall be available on the NANPA public web site and, at a minimum, include the following information:

- State
- NPA-NXX
- Use (Available, Assigned, Protected, Reserved, Unavailable)
- OCN
- Company
- Rate Center
- Initial/Growth
- Assignment Date
- Effective Date
- In Service Indicator
- Pooled Code (Y or N)

This same report shall be available in the password protected portion of NAS and shall include switch information in addition to the above data elements.

In addition, the NANPA shall provide a report on the NANPA public web site that includes the quantity of CO Codes assigned by the NANPA on a monthly basis. At a minimum, the report shall include the following information:

- ST-State
- NPA-Area code

- NPA Status (*e.g.*, jeopardy, exhausted)
- Monthly Rationed Amount
- Month-Each month of the year and the quantity of codes assigned in that month
- Current Month’s Return-The total number of codes returned to the NANPA and made available for assignment
- Year-to-date Returns-The total number of codes returned up through the last reported month
- Total Unavailable-The total number of codes unavailable for assignment; these include codes assigned, reserved or otherwise unavailable for assignment
- Total Available-The total number of codes available for assignment (*i.e.*, vacant codes)
- Remaining Codes Set-Aside for the Pooling Administrator

To those states with appropriate confidentiality protections in place, NANPA shall also provide a state-specific report that contains pertinent information from the Part 1 application submitted by service providers and information from the Part 3 response. States shall be able to select daily, weekly or monthly distribution of this report.

**11.11 Monthly NAS Performance Report**

The NANPA shall provide monthly reports to the FCC and/or its designee on the performance of the NAS. The monthly NAS Performance Report provided to the FCC shall include the percent of scheduled time NAS was available in the month, the hours and minutes of possible NAS availability, the hours and minutes of actual NAS availability, the number of instances of NAS scheduled unavailability, the hours and minutes of scheduled unavailability, the number of instances of NAS unscheduled unavailability, and the hours and minutes of unscheduled unavailability. The monthly NAS Performance Report shall be posted to the NANPA web site.

**11.12 Monthly Trouble Tickets, Phone Calls and Change Orders Report**

The NANPA shall provide monthly reports to the FCC and NANC or its designee on trouble tickets, phone calls, and change orders. See Section 13.3 for details on the monthly reports, but following is a summary of the monthly reports:

- A summary of the quantity of trouble tickets opened, closed and pending resolution, by type of issue (*e.g.*, web site, NAS)
- A listing of each trouble ticket with its status
- Summary of the quantity of phone calls received, and the quantity of phone calls not returned within 24 hours
- Summary of the quantity of change orders submitted, awaiting approval, approved but awaiting implementation, approved and implemented, or denied (if applicable). A brief description shall be provided for each change order.

**11.13 Summary of NANPA Technical Reports**

Following is a summary of the NANPA technical reports:

Name	Reference Sections	Frequency
Numbering Plan Area (NPA)	3, 3.1, 11	Weekly and Monthly; Semi-annually in March and in September; Annually during first quarter.
Central Office (CO) Code Status	3, 3.2, 4.2.4, 10.18.3, 11	Assigned, unavailable and available posted real-time and daily; Status monthly. NRUF form semi-annually; Semi-annually in March and September; Annually during first quarter.

Name	Reference Sections	Frequency
Thousands-Blocks	3, 3.3, 5.2.5, 10.18.4, 11	Assigned, retained and available posted real-time and daily; Status monthly. Semi-annually in March and September; Annually during first quarter.
p-ANIs	3, 3.4, 6.2.5, 10.18.5, 11	Upon any new assignment and monthly; forecasts semi-annually, activity and projected exhaust annually
Non-Geographic 5XX-NXX Codes	3, 3.5, 11	Assigned, unavailable, aging and available posted real-time and daily; NRUF form semi-annually; Status monthly; Semi-annually in March and September.
9YY-NXX Codes (e.g., 900-NXX Codes)	3, 3.6, 11	Upon any new assignment; NRUF form semi-annually; Status monthly; Semi-annually in March and September.
Toll-Free NPAs	3, 3.8, 11	Upon any new assignment; Status monthly; Semi-annually in March and September.
N11 Codes	3, 3.7, 11	Upon any new assignment; status monthly. Semi-annually in March and September.
Carrier Identification Codes	3, 3.10, 10.18.9, 11	Upon any new assignment; Status monthly; Semi-annual incorporating Entity Usage/Access Reports; Semi-annually in March and September.
Vertical Service Codes	3, 3.11, 11	Upon any new assignment; Existing VSCs, new VSCs, and updates; Status monthly; Semi-annually in March and September.
Automatic Number Identification II Digits	3, 3.12, 11	Existing ANI, new ANI, and new assignments within five (5) business days; Status monthly; Semi-annually in March and September.
Numbering Resource Utilization/Forecast Form	9, 9.1.5, 9.1.6, 11, 11.2, 11.2.2	Semi-annually by the last business day of April and October.
NPA Code Relief Planning Report to NANC	8.1.5	Quarterly.
Status of Pending Relief Plans	8.1.9	Monthly, to FCC/NANC; Each business day on web site.
Contact List Maintenance	4.4, 5.2.6, 7.4, 8, 9.1.2, 10.7	Quarterly.
NANP/NPA Exhaust Analysis	9.1.6, 10.18.1	Contingent upon material impact and semi-annually.
NPA/NANP Life Impact	9.1.8	Contingent, within 30 days of receipt of the updated NRUF Report.
Reports to Regulatory Authorities	9.1.9, 11.2.2	Contingent, within ten (10) business days of initial request following 30 days after the NRUF reporting deadline.
NRUF Anomalies	9.1.11, 9.3.3, 11.2.1	Contingent, in case of irresolvable anomalies, to State Regulatory Commissions or FCC;



<b>Name</b>	<b>Reference Sections</b>	<b>Frequency</b>
		Annually; Semi-annually.
NANP Annual Report	11.1	Annually during first quarter.
CO Code Growth Rate by NPA	11.2.2	Semi-annually.
Aggregated Utilization Data	11.2.2	By request.
NPA Relief Activity Status Report	11.3	Posted each business day to the NANPA web site and monthly to the NANC Chair web site.
Disaggregated Data by State	11.2	By request, 30 days after the deadline for NRUF reporting and before the subsequent NRUF reporting deadline.
Number of Carriers in rate center and/or NPA, by Type	11.2.2	By request.
Comparison of Actual NPA Exhaust, with Past Five (5) Exhaust Projections	11.2.2	Semi-annually in April and October.
Comparison of Most Recent NPA/NANP Exhaust Projections with Past Five (5) Exhaust Projections	11.2.2	By request; Semi-annually by last business day in April and October.
Comparison of Aggregated SP Forecasts in a NPA with Actual Growth, with and without Rationing	11.2.2	By request.
Standardized Report for State Commissions on CO Codes Assigned by the NANPA	11.10	Assigned and available posted real-time on the NANPA web site; Monthly; Daily, weekly or monthly as requested.
Part 4 /Part C Form Delinquency Notifications	4.4, 5.2.6, 7.4	Contingent, for resource assignees not submitting Part 4 or Part C forms; Monthly.

#### **11.14 Summary of NANPA Performance Reports**

Following is a summary of the NANPA performance reports:

<b>Name</b>	<b>Reference Sections</b>	<b>Frequency</b>
Customer Response Rates	2.7.1	Contingent, within one (1) business day; contingent and annual.
Dispute/Plan of Action	2.9	Contingent, to be prepared within one (1) business day.
Self-Assessment	13.1.5	Annually and quarterly to NANC.
Post-Audit Corrective Action Plan	12.2.3, 12.2.4	Within 20 days after receipt of the auditor's report and monthly (or more frequently if appropriate) until completion.
Unauthorized User Access	2.10.5, 10.7.9	Contingent upon occurrence.
System Outage	10.19.7	Contingent upon occurrence to all clients.
NAS Performance	11.11	Monthly to the FCC and posted on the web site

<b>Name</b>	<b>Reference Sections</b>	<b>Frequency</b>
Trouble Tickets	11.12	Monthly to the FCC
Phone Calls	11.12	Monthly to the FCC
Change Orders	11.12	Monthly to the FCC
Privacy Breach	10.19.8.3	Contingent upon occurrence, to affected client, regulatory authority, and FCC
Complaints	2.9, 13.1.5	Contingent, to be prepared within one (1) business day; Annually and quarterly to NANC;
Technical Requirements Document Update	2.15	Semi-annually to NANC or its designee; contingent upon change order implementation

## **Section 512: Audits**

### **15.1 Service Provider/Numbering Resource Assignee Audits**

The NANPA and service providers or other Numbering Resource assignees shall be subject to FCC and State audits to verify their compliance with guidelines and regulations relating to all applicable areas of Numbering Resource administration.

#### **15.1.100 For Cause Audits of Service Providers/Numbering Resource Assignees**

In the performance of its numbering administration duties and in meeting its responsibilities, the NANPA may encounter situations that may alert it to a service provider's or Numbering Resource assignee's possible noncompliance with the industry guidelines or FCC rules. This noncompliance warrants a "For Cause" audit. In these situations, the NANPA shall document its observations and forward relevant information to the FCC, service provider or Numbering Resource assignee, and the appropriate state commission (as applicable). The NANPA shall maintain the confidentiality of all requested information throughout the auditing process.

#### **15.1.101 Other Audits of Service Providers/Numbering Resource Assignees**

Upon request, the NANPA shall be required to provide specific data to an auditor in order to facilitate the audit of a service provider or Numbering Resource assignee.

### **12.1.3 Guidelines Compliance Issues**

The NANPA may encounter situations in which a service provider, Numbering Resource assignee, the LERG™ Routing Guide, or the NPAC is not in compliance with FCC rules or orders, or industry guidelines.

When a noncompliance situation is suspected, the NANPA shall in a non-discriminatory fashion, prior to fulfilling a Numbering Resource assignment request, request additional information from the applicant or from other sources as necessary to determine if the applicant is compliant with industry guidelines and regulatory rules and directives. The NANPA shall evaluate the information and document its determination if the assignment request should be granted or denied.

#### **12.1.4 FCC-Designated Auditor**

To facilitate the auditing of service provider or Numbering Resource assignee compliance with FCC rules and orders and industry guidelines, the NANPA shall provide access to the FCC-designated Auditor and/or the FCC or its designees to:

- NANPA's staff
- All Numbering Resource records and supporting documentation as requested by the FCC or FCC-designated auditor

#### **12.1.5 Office Facilities for Auditor**

For a reasonable period of time, the NANPA 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.

#### **12.1.6 Additional Obligations**

The NANPA may be subject to other audit availability requirements under other clauses in the awarded contract.

## **12.2 Audit of the NANPA**

The NANPA shall be subject to audits by the FCC or its designees that include the following:

- Compliance with industry guidelines
- Compliance with regulatory directives
- Conflict of Interest
- Neutrality
- NANPA operations and financial viability
- Record verification
- Facilities
- Security
- Enterprise Services

### **12.2.1 Staff Support**

The NANPA shall provide the FCC or its designee access during normal business hours to the NANPA's staff and books, records, and supporting documentation relating to the NANPA function being audited.

### **12.2.2 Office Facilities**

The NANPA shall provide office space, office furnishings, telephone and facsimile service, utilities, office-related equipment, and duplicating services that auditors may require to perform audits.

### **12.2.3 Audit Results**

The NANPA shall make audit results available to the public in a limited manner that protects any confidential or proprietary information. The FCC and the NANC shall receive a detailed summary of the audit results such that the content shall not identify any service provider or Numbering Resource assignee.

If any audit results in the NANPA being notified that it is not in compliance with any law, regulation, or requirement relating to its administration, the NANPA shall be required to take actions to correct any non-compliance.

### **12.2.4 Compliance**

The NANPA shall present a corrective action plan to the FCC and the NANC within 20 days after the receipt of the auditor's report. The NANPA shall report monthly or more frequently if appropriate, on the status of compliance efforts and notify the FCC and the NANC upon completion of the corrective action plan. The NANPA shall bear the complete expense of compliance activities that arise out of the implementation of a corrective action plan. In the event that the NANPA does not meet its obligations, all remedies, including termination for default, are reserved to the FCC.

## **Section 613: Performance Monitoring, Measurements, Metrics**

### **13.1 Performance Monitoring**

The program and performance monitoring process shall include, but not be limited to, an internal, documented performance monitoring mechanism to be developed and implemented by the NANPA in accordance with performance measurements established in this Technical Requirements Document and any associated numbering resource assignment guidelines established by the INC and appropriate regulatory bodies and made available to the FCC and the NANC or its designee.

#### **13.1.1 NANPA Client Feedback Survey**

The FCC and the NANC or its designee shall develop a formal client feedback survey to permit all interested parties to provide performance assessment data and recommendations to the FCC and the

NANC or its designee. The NANPA shall be responsible for working with the FCC in developing a methodology to recover the cost associated with hosting the on-line client feedback survey.

### **13.1.2 NANPA Annual Operational Review**

The NANPA shall undergo an annual operational review to be conducted by the NANC or its designee, in conjunction with the FCC.

The operational review shall consist of a review of appropriate NANPA operations and facilities to ensure that the NANPA is performing its functions and responsibilities in accordance with the requirements of the contract. The NANPA shall ensure that all data provided to the group conducting the operational review adheres to service provider and Numbering Resource assignee confidentiality requirements. The operational review shall at a minimum, address the following topics:

- Status of the NAS performance and maintenance
- 
- Status of NPA assignments
- Status of NPA relief planning activities
- Status of NXX assignments, both Geographic and Non-Geographic
- Status of thousands-block assignments
- Status of p-ANI assignments
- Status of NRUF data collection and analysis activities
- Status of CIC, 5XX-NXX, 900-NXX, and all other Numbering Resources administered
- Status of trouble tickets
- Status of Quality Assurance, Program Improvement Plan, and associated implementation management
- Status of security plans and disaster recovery activities
- Status of external relations and any special projects
- Status of industry forum participation (*e.g.*, INC, ESIF, CIGRR, meetings with state commissions)
- Status of reporting, compliance, and regulatory communications
- Status of the NANPA job aids, training videos, and other tools for the industry
- Status of continuing education programs, job aids and tools for employees to ensure a knowledgeable workforce

### **13.1.3 Program Improvement, Performance Problems, and Corrective Action**

The NANPA shall implement remedial action, at no charge to the FCC or the industry, to correct any identified performance problems. The NANPA shall develop a Program Improvement Plan (PIP) that addresses each area identified during the annual performance review that requires performance improvement along with a time frame for completion. The PIP shall be presented to the NANC or its designee for review and acceptance prior to implementation. The annual assessment process shall not preclude telecommunications industry and/or regulatory participants from identifying performance problems to the NANPA and the NANC or its designee, as they occur, and from seeking resolution of such performance problems in an expeditious manner.

### **13.1.4 NRUF-Related Measurements**

The review of the NANPA's NRUF responsibilities shall include the following:

- Maintain an up-to-date list of service provider contacts that is obtained from the semi-annual NRUF report and any subsequently updated contact information
- Distribution of notifications of NRUF reporting requirements and periodic "helpful hints" to all service providers allocated NANP resources

- Timely review and analysis of NRUF data to ensure service provider compliance with reporting requirements, including frequency and granularity
- Timely follow-up with carriers and regulators, as needed to ensure compliance
- Performance and accuracy of tests for inconsistencies and anomalies, to include identification of missing utilization for assigned central office codes and thousands-blocks
- Accuracy and timeliness of calculation of exhaust projections for the NANP and individual NPAs
- Timely notification to the FCC, NANC or its designee, and industry of problems and unusual activity
- Responsiveness to federal and state regulators, and to industry

### **13.1.5 Self-Assessment and Reporting**

The NANPA shall provide a self-assessment of its performance and remedial action plan to correct any identified performance problems. This annual and quarterly report shall be delivered to the NANC or its designee within 30 days of the measurement period. The NANPA shall provide the following information:

- Summary of areas in which NANPA experienced difficulty and how the NANPA corrected the problem (NANPA internal and external difficulties included)
- Summary and description of incidences of user dissatisfaction, and a description of the action taken by the NANPA to ensure the problem shall not reoccur
- Summary and tally of written and oral complaints identified by performance metric
- Summary of major issues addressed by the NANPA including an evaluation of how the NANPA's activities influenced the outcome and how the outcome affected users

### **13.2 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.

#### **13.2.1 Assessment Period**

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

#### **13.2.2 Remedial Action**

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

#### **13.2.3 Quality Assurance (QA)**

The contractor's Quality Assurance Plan (QA Plan), required following contract award, shall follow the format, where applicable, of *IEEE Standard for Software Quality Assurance Processes* (Reference 41).

The performance monitoring process shall include, but not be limited to, internal documented performance monitoring mechanisms to be developed and implemented by the NANPA and made available to the industry through the FCC and the NANC or its designee.

The NANPA shall have its representative(s) participate in a monthly call with the NANC or its designee. A formal agenda will be developed and agreed to by the NANPA and the NANC or its designee. The primary agenda items will include, at a minimum, the review of: (1) performance monitoring metrics and measurements; (2) complaints; (3) new developments impacting the availability of resources; (4) FCC and/or NANC reports; and (5) corrective action plans to resolve deficiencies in performance and/or complaints.

### **13.3 Performance Metrics**

At a minimum, the following metrics shall be monitored by the NANPA so that the NANC or its designee can ensure performance of the requirements of the NANPA. The NANPA shall also produce the performance reports outlined in Section 11.14.

#### **13.3.1 Trouble Tickets/Outages**

At a minimum, the NANPA shall track and report on the following trouble ticket and/or outage metrics:

- Number opened during the preceding month
- Number closed during the preceding month
- Number under corrective action for over 30 calendar days.
- Number related to
  - System performance
  - Web site
  - Contractor ISP
  - Other
- Total quantity of trouble tickets opened and closed by month for a calendar year, 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

#### **13.3.2 Change Orders**

At a minimum the NANPA shall track and report on the following metrics:

- Changes initiated or modified Requiring Functional Impact Analysis
  - numbering resource plans
  - administrative directives
  - assignment guidelines
  - other
- List of change orders submitted to include:
  - Type of change order
  - Date submitted
  - Status of each change order (*e.g.*, awaiting approval, approved but awaiting implementation, approved and implemented, denied)
  - Date approved or denied (if applicable)
  - Brief description of each change order
  - The Written Notice of Changes Summarizing Potential Impact upon Service and Cost to be sent to the COR

#### **13.3.3 Communications**

At a minimum, the NANPA shall track and report on the following metrics:

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

#### **13.3.4 Forecasting data on a per-state basis**

At a minimum, the NANPA shall track and report on the following metrics:

- Quantity of NPAs by state
- Quantity of rate center pools for thousands-blocks
- Quantity of CO codes applied for by SPs

- Quantity of CO codes applied for by SPs for thousands-block pool replenishment
- Quantity of rate centers with less than a 6-month supply of thousands-blocks
- Quantity of NPA p-ANI pools

### **13.3.5 Reporting**

At a minimum, the NANPA shall produce the following reports:

- Annual Report
- Semi-annual NPA exhaust projections
- Semi-annual NPA forecast demand report
- Annual p-ANI Activity and Projected Exhaust Report
- Semi-annual forecasted demand report for thousands-blocks
- Semi-annual rate center inventory pool report for thousands-blocks
- Quarterly pooling matrices report
- Monthly report to the FCC on CO Code assignments
- Monthly report to the FCC on thousands-block pooling assignments
- Monthly report to the FCC on p-ANI assignments
- Monthly report to the FCC on system performance
- Monthly report to the FCC on staffing
- Monthly report to the FCC on the number of ad hoc reports generated

### **13.3.6 CO Code, 5XX and Other Resources Application Processing on a monthly basis**

At a minimum, the NANPA shall track and report on the following metrics:

- Total applications processed
- Quantity of applications not processed in seven (7) calendar days
- Quantity of CO Code, 5XX-NXX, and Other Resource assignments made
- Quantity of change requests to existing CO Code, 5XX-NXX, and Other Resources
- Quantity of requests to cancel
- Quantity of CO Code, 5XX-NXX, and Other Resources requests
- Quantity of CO Code, 5XX-NXX, and Other Resources requests denied
- Quantity of CO Code, 5XX-NXX, and Other Resources reclaimed
- Quantity of CO Code, 5XX-NXX, and Other Resources reservation requests

### **13.3.7 Thousands-Block Application Processing on a monthly basis**

At a minimum, the NANPA shall track and report on the following metrics:

- Total applications processed
- Quantity of applications not processed in seven (7) calendar days
- Quantity of thousands-block assignments made
- Quantity of change requests to existing thousands-blocks
- Quantity of requests to cancel
- Quantity of thousands-block disconnect requests
- Quantity of thousands-block requests denied
- Quantity of thousands-blocks reclaimed
- Quantity of thousands-block reservation requests

### **13.3.8 p-ANI Application Processing on a monthly basis**

At a minimum, the contractor shall track and report on the following metrics:

- Total applications processed
- Quantity of applications not processed in five (5) business days



- Quantity of p-ANI requested
- Quantity of p-ANIs assigned
- Quantity of change requests
- Quantity of p-ANIs returned
- Quantity of requests to cancel
- Quantity of p-ANI requests denied

## **Section 714: Contract Data Requirements List (CDRL)**

All items on this Contract Data Requirements List (CDRL) shall be approved by the FCC.

### **14.1 Ad Hoc Reports**

The NANPA shall, from time to time, be requested to provide ad hoc reports per Section 11.

### **14.2 Annual Report**

The NANPA shall provide an Annual Report in the first quarter of each year, per Section 11.1.

### **14.3 Change Management Plan**

The contractor shall provide a Change Management Plan per Sections 4.1, 5.1, and 6.1 within 90 days of contract award. The COR shall review the Change Management Plan and request any necessary changes within 60 days, which the NANPA will effectuate before implementation.

### **14.4 Contract Change Management Plan**

The contractor shall provide a Contract Change Management Plan for implementing the requirements of Section 2.8 within 90 days after the start of the first Option Year. The Contract Change Management Plan shall be reviewed and updated annually 60 days prior to the beginning of each Option Year.

### **14.5 Disaster/Continuity of Operations Plan**

The contractor shall provide a Disaster/Continuity of Operations Plan per Section 10.13 within 60 days of contract award. The Disaster/Continuity of Operations Plan shall be updated annually 30 days prior to the beginning of each Option Year.

### **14.6 Implementation Plan**

The contractor shall provide an Implementation Plan per Section 2.11 within 30 calendar days of contract award and an update to that Implementation Plan 30 days prior to the takeover of NANP Administration (including the Pooling Administration function).

### **14.7 Management Reporting Plan**

The contractor shall provide a Management Reporting Plan per Section 10.9 within 60 calendar days of contract award. The full set of reports are described in Section 11 and are required annually, semi-annually, quarterly, and monthly.

### **14.8 NANP Administration System (NAS) Transition Plan**

The contractor shall provide the NANP Administration System Transition Plan, which includes a list of items that are subject to transfer at the end of its term per Section 10.17 at the time of the new or modified systems acceptance. The Transition Plan shall be updated annually.

### **14.9 Program Improvement Plan**

The contractor shall provide a Program Improvement Plan per Section 13.1.3 on an annual basis following the NANC's acceptance of each year's performance review report.

### **14.10 Quality Assurance (QA) Plan**

The contractor shall furnish a Quality Assurance (QA) Plan within 120 calendar days of contract award per Section 13.2.3.

#### **14.11 Security Plan**

The contractor shall provide a Security Plan per Section 10.6 within 45 calendar days of contract award and an update to that Security Plan 30 days prior to the takeover of NANP Administration. The Security Plan shall be updated annually 45 calendar days prior to the beginning of each Option Year.

#### **14.12 Staffing Report**

The contractor shall provide an initial staff report at the start of the contract and a monthly report, thereafter, to the FCC on staffing per Section 2.5.

#### **14.13 System Acceptance Plan**

The contractor shall furnish a System Acceptance Plan within 30 calendar days of contract award per Section 10.12

#### **14.14 System Implementation Plan**

The NANPA shall furnish a System Implementation Plan within 90 calendar days of contract award per Section 10.16.

#### **14.15 System Documentation Plan**

The contractor shall provide a System Documentation Plan per Sections 2.12.3 and 10.16 within 90 calendar days of contract award, the updated System Documentation Plan at the time of the new or modified systems acceptance, and thereafter the System Documentation Plan shall be updated annually.

#### **14.16 System Maintenance Plan**

The contractor shall provide a System Maintenance Plan within 150 calendar days of contract award per Section 10.5 prior to new or modified system acceptance. The System Maintenance Plan shall be reviewed and updated annually 120 days prior to the beginning of each Option Year.

#### **14.17 System Source Code**

The contractor shall provide the System Source Code, and any other code or documentation described in Section 10.17.2, in machine-readable form, 180 days prior to contract termination.

#### **14.18 System Test Plan**

The contractor shall provide a System Test Plan within 30 days of contract award and shall be successfully completed within 90 calendar days of the contract award per Section 10.12.

#### **14.19 Training Plan**

The contractor shall provide a Training Plan to implement Sections 4.1, 5.1, and 6.1 within 105 days of contract award. The Training Plan shall be reviewed and updated annually 30 days prior to the beginning of each Option Year.

#### **14.20 Transition Plan**

The contractor shall provide a Transition Plan 180 days prior to contract termination, per Section 2.12.4. The Transition Plan shall be a 90-day plan, however the FCC may allow a possible 90-day extension depending on the need at the time of transition.

**14.21 TRD Maintenance**

The NANPA shall keep current this Technical Requirements Document semi-annually and upon the implementation of any change order, per Section 2.15. Updated documents shall be provided to the NANC or its designee.

## **Section 15: Enterprise Services**

Enterprise Services<sup>26</sup> are functions performed by the NANPA that are outside of the requirements and responsibilities detailed within this document, and associated industry guidelines and regulatory orders. They are additional services that may be provided by the NANPA to carriers and other entities for a specific fee. These are described as services that the NANPA can provide but are limited to meeting the needs of a limited number of customers.

Enterprise Services and their associated fees are subject to prior review by the NANC and approval by the FCC and other applicable regulatory authorities before they can be implemented and made available to the requestor(s), except those required Enterprise Services set forth in Section 15.2 below.

### **15.1 Operating Principles**

The following operating principles apply to the provision of Enterprise Services:

- The fees associated with Enterprise Services shall be fair and reasonable
- Enterprise Service fees for the same service must be the same for all customers
- Enterprise Services must be performed without jeopardizing NANPA duties and responsibilities
- Proprietary/confidential information provided to the NANPA shall be protected in the provision of any Enterprise Service
- Fees associated with an Enterprise Service shall be collected by the NANPA
- Fees for Enterprise Services are independent of the price of this contract

### **15.2 Required Enterprise Services**

The NANPA is required to support the following Enterprise Services:

- Provide rating and routing input to BIRRDS upon request from CO code and thousands-block applicants (*i.e.*, the Administrative Operating Company Number [AOCN] function) that are enterprise service clients. The information is contained in the Part 2 of the Central Office Code application and the Part2A of the Thousands-Block application. This includes reviewing the information, assisting in the preparation of the information, and the actual inputting of the information in the associated database.
- Provide testimony in state regulatory hearings. NANPA shall prepare, file and present oral and written testimony at no charge. However, any costs associated with testifying in such regulatory hearings shall be treated as Enterprise Services. For example, should the state require NANPA witness(es) to attend the hearing in person, NANPA shall require the state to reimburse NANPA for associated expenses (*e.g.*, travel, lodging, meals, local transportation, etc.) for the witness(es) and legal counsel. If the state requires local counsel to represent the NANPA at state regulatory hearings, these costs shall be passed along to the state.

Services and the costs charged for these services may be reviewed by the FCC at any time and may be made subject to audit under Section 15.3 below.

### **15.3 Audit of Enterprise Services**

Any and all approved Enterprise Service(s) shall be subject to an audit by an independent auditor. The NANPA will contract with an auditor to have an audit of all Enterprise Service offerings conducted in the first, third and fifth year of the NANPA's Term of Administration (or as otherwise specified in the awarded contract). The Enterprise Service Audit Report shall be conducted during the second quarter of

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<sup>26</sup> See also 47 CFR §52.12.

the reporting year and the auditor's report shall be provided to the FCC, as a proprietary and confidential document, in the third quarter of the reporting year.

## Section 16: List of References

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9. North American Numbering Council: *Number Administration Auditor Technical Requirements (July 18, 2000) by the North American Numbering Council*. See also <https://ecfsapi.fcc.gov/file/6513073447.pdf>.
10. North American Numbering Council: *NANC Audit Framework (November 16, 1999) by the North American Numbering Council*. See also <https://ecfsapi.fcc.gov/file/6513073447.pdf>.

11. Industry Numbering Committee: *Automatic Number Identification (ANI) Information Digit Codes*, ATIS-0300064 by the INC, a committee sponsored by the ATIS. Available at: [http://www.atis.org/01\\_committ\\_forums/INC/inc\\_docs.asp](http://www.atis.org/01_committ_forums/INC/inc_docs.asp).
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Standards documents identified above to which the NANPA is held to comply under this contract shall be deemed to be the latest version of those documents. However, the NANPA is obliged to comply with updated standards only where consistent with FCC regulations and direction.

## Appendix A: Acronyms, Abbreviations and Definitions

<b>Administrative Operating Company Number (AOCN)</b>	Identifies the company responsible for the maintenance of the data for a given record in the iconectiv® Business Integrated Routing and Rating Database (BIRRDS) on behalf of a code or block holder. Assigned by iconectiv®.
<b>Allocation Date</b>	The date established by the NANPA when the NANPA officially makes a Numbering Resource assignment to a service provider (SP) or Numbering Resource assignee.
<b>ANI II Digits</b>	Automatic Number Identification ANI Information Integers (ANI II) digits are two-digit pairs sent with the originating telephone number. These digits identify the type of originating station. The current list of assigned ANI II Digits can be found on the NANPA web site at: <a href="http://www.nationalnanpa.com">www.nationalnanpa.com</a> .
<b>ANSI</b>	American National Standards Institute
<b>ATIS</b>	Alliance for Telecommunications Industry Solutions
<b>Auditor</b>	The appropriate bureau(s) within the FCC or other appropriate governmental entity, or other neutral fourth party vendor selected to audit the administration and assignment functions for North American Numbering Plan (NANP) resources for the telecommunications industry in the United States and its territories, including the numbering administrator(s).
<b>Automatic Location Identification (ALI)</b>	The automatic display at the PSAP of the caller's telephone number, the address/location of the telephone and supplementary emergency services information of the location from which a call originates.
<b>Billing and Collection Agent</b>	The entity responsible for the collection of funds to support numbering administration for telecommunications services from the United States telecommunications industry and NANP member countries (47 CFR §52.7 (f)).
<b>BIRRDS</b>	iconectiv®'s Business Integrated Routing and Rating Database System
<b>Block or Thousands-Block</b>	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.
<b>Block Holder</b>	The recipient service provider of a thousands-block from a pooled code. Also defined as the NPA-NXX-X holder in the LERG™ Routing Guide.
<b>Carrier Identification Code (CIC)</b>	Carrier Identification Codes (CICs) are used to route and bill calls in the public switched telephone network. CICs are four-digit codes in the format XXXX, where X is any digit from 0 through 9. Separate CIC pools are maintained for Feature Group B (line side) access and Feature group D (trunk side) access. NANPA assigns CICs to: Local Exchange Carriers, purchasers of Feature Group B or D access, switchless resellers, Billing and Collection Clearinghouses, and Interconnected VoIP Providers.
<b>CDRL</b>	Contract Data Requirements List
<b>CFR</b>	Code of Federal Regulations
<b>CIGRR</b>	iconectiv®'s Common Interest Group for Routing and Rating
<b>CLEC</b>	Competitive Local Exchange Carrier
<b>CLLI™</b>	iconectiv®'s COMMON LANGUAGE® Location Identification
<b>CMRS</b>	Commercial Mobile Radio Service

<b>CO</b>	Central Office
<b>CO Code</b>	The second three digits (NXX) of a ten-digit telephone number in the form NXX-NXX-XXXX, where N represents any one of the numbers 2 through 9 and X represents any one of the numbers 0 through 9. (47 CFR § 52. 7(c)). Central office codes may also be referred to as "NXX codes".
<b>Code Holder</b>	The assignee of a pooled or unpooled NPA-NXX assigned by the NANPA.
<b>Contractor</b>	The winning bidder for the NANPA contract.
<b>CONUS</b>	Continental United States
<b>COR</b>	Contracting Office Representative
<b>COTS</b>	Commercial Off-The-Shelf
<b>CRTC</b>	Canadian Radio Television and Telecommunications Commission
<b>CSCN</b>	Canadian Steering Committee on Numbering
<b>E9-1-1 System Service Provider</b>	<p>An E9-1-1 System Service Provider (E9-1-1SSP), typically but not always an ILEC, provides systems and support necessary to enable 9-1-1 calling for a single or group of Public Safety Answering Points (PSAPs). In relation to the jurisdictional boundary of the PSAP and the system provider's scope of authority, this includes:</p> <ol style="list-style-type: none"> <li>1) A method of interconnection for all telecommunications providers including but not limited to the wireline, wireless, and VoIP carriers;</li> <li>2) A method for routing a 9-1-1 call to the correct PSAP with no degradation in service regardless of the technology to originate the call;</li> <li>3) A method to provide accurate location information for an emergency caller to a PSAP and if required, other emergency response agencies;</li> <li>4) Installation and training of PSAP call handling equipment and other related systems when required; and</li> <li>5) Coordinating with PSAP authorities on issues involving contingency planning, disaster mitigation, and recovery.</li> </ol>
<b>Easily Recognizable Codes (ERC)</b>	When the second and third digits of an area code are the same, that area code is called an easily recognizable code (ERC). ERCs designate special services (e.g., 888 for toll-free service).
<b>Effective Date</b>	The date by which routing and rating changes within the PSTN must be completed for the assigned thousands-block or CO code; Also, the date by which the thousands-block becomes an active block or the CO code becomes an active code in the LERG™ Routing Guide and the NPAC.
<b>EFT</b>	Electronic File Transfer

<p><b>Eligible User</b></p>	<p>An "Eligible User" is an entity that:</p> <ol style="list-style-type: none"> <li>1) Demonstrates that it is permitted under applicable law to access p-ANI resources in the area for which the p-ANI resources are sought; <ul style="list-style-type: none"> <li>• A wireless service provider applicant shall provide the NANPA a copy of its FCC license, showing that it is authorized to provide service in the area in which it is seeking resources.</li> <li>• Any entity that requires p-ANIs to comply with any state or federal order and that has been certified as a CLEC by a state shall provide the NANPA a copy of its state certification showing that it is authorized to provide service in the area in which it is seeking resources.</li> <li>• An interconnected VoIP service provider applicant shall provide the NANPA with a copy of its FCC nationwide authorization.</li> <li>• A VPC provider applicant shall provide documentation from the state or the state's general counsel in the form of: <ol style="list-style-type: none"> <li>1. An order of the commission denying certification, with the reason for the denial being that the state does not certify VPC providers, or</li> <li>2. A statement from the state commission or its general counsel that it does not certify VPC providers.</li> </ol> <p>The NANPA will then retain this information in its records for that VPC provider's future requests for that specific state.</p> </li> </ul> </li> <li>2) Has received approval from the 9-1-1 governing authority to route E9-1-1 traffic for termination to a Public Safety Answering Point (PSAP) ;</li> <li>3) Has been assigned a valid Operating Company Number (OCN) ;</li> <li>4) Has been assigned a valid NENA Company Identifier (ID) 1 by the National Emergency Number Association (NENA) ; and</li> <li>5) Self-certifies that it will provide the technical and functional capability to route traffic or provide routing instructions to enable emergency call delivery to a PSAP.</li> </ol>
<p><b>Emergency Services Interconnection Forum (ESIF)</b></p>	<p>A standing committee of the ATIS and is the primary venue for the telecommunications industry, public safety and other stakeholders to generate and refine both technical and operational interconnection issues to ensure life-saving E9-1-1 services are available for everyone in all situations. ATIS ESIF enables many different telecommunications entities to fully cooperate and interconnect with each other to determine the best practices and solutions necessary to effectively and promptly deploy E9-1-1 services nationwide. ATIS ESIF's mission is to facilitate the identification and resolution of both technical and operational issues related to the interconnection of telephony and emergency services networks.</p>
<p><b>Enterprise Services</b></p>	<p>Functions performed by the NANPA that are outside of the requirements and responsibilities detailed within this document and associated industry guidelines and regulatory orders.</p>
<p><b>FACA</b></p>	<p>Federal Advisory Committee Act</p>
<p><b>FAQ</b></p>	<p>Frequently Asked Question</p>

<b>FCC</b>	Federal Communications Commission
<b>Feature Group B</b>	A type of access arrangement that provides trunk-side access to the interexchange carrier. FG B callers reach an interexchange carrier's facility for transport of their inter-LATA call by dialing the carrier access code 950-XXXX.
<b>Feature Group D</b>	A type of access arrangement that permits subscribers to presubscribe to or select, on a per-call basis, a specific interexchange carrier for transport of their inter-LATA calls. To use the presubscribed carrier for a call, the subscriber need only dial the destination directory number. To override the terminal's presubscription on a per-call basis and choose an alternative interexchange carrier, 101XXXX + 0 or 1 +10 digits must be dialed.
<b>FCC Registration Number (FRN)</b>	A unique 10-digit number that is assigned to an entity that does business with the Federal Communications Commission. A filer, licensee, certificate holder, or any entity sending payments to the FCC is considered to be doing business with the FCC. The FCC uses the FRN to determine if all of an entity's fees have been paid.
<b>FCC PSAP ID</b>	An FCC assigned identification number that identifies the PSAP name, state, county and city in the FCC Master PSAP Registry. See <a href="https://www.fcc.gov/general/9-1-1-master-psap-registry">https://www.fcc.gov/general/9-1-1-master-psap-registry</a> .
<b>FG A, B, C, D</b>	Feature Group A, B, C, D
<b>FTP</b>	File Transfer Protocol
<b>GUI</b>	Graphical User Interface
<b>IAC</b>	Interexchange Access Customer
<b>IETF</b>	Internet Engineering Task Force
<b>ILEC</b>	Incumbent Local Exchange Carrier
<b>IMG</b>	Issues Management Group
<b>Industry Numbering Committee (INC)</b>	An industry forum operating under the auspices of the ATIS. Its 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.
<b>IPD</b>	Initial Planning Document
<b>ISP</b>	Internet Service Provider
<b>ITU</b>	International Telecommunications Union
<b>ITU Study Group</b>	Standardization work is carried out by the technical Study Groups (SGs) in which representatives of the ITU-T membership develop Recommendations (standards) for the various fields of international telecommunications. See: <a href="http://www.itu.int/ITU-T/studygroups/">http://www.itu.int/ITU-T/studygroups/</a> .
<b>Knowledge base</b>	A database provided on a support web site programmed with application-specific, self-help information that is constantly being improved, added-to, and updated based on information gathered from use of the application.

<b>LARG</b>	iconectiv® LIDB Access Routing Guide
<b>LATA</b>	Local Access Transport Area
<b>LEC</b>	Local Exchange Carrier
<b>LERG™</b>	iconectiv® LERG™ Routing Guide
<b>LIDB</b>	Line Information Database
<b>LLC</b>	Limited Liability Corporation
<b>LNP</b>	Local Number Portability
<b>MBI</b>	Mobile Identification Number (MIN) Block Identifier
<b>MPC</b>	Mobile Positioning Center
<b>MSA</b>	Metropolitan Statistical Area
<b>MTE</b>	Months to Exhaust
<b>MTTR</b>	Mean Time To Repair
<b>N11 Codes</b>	Service codes, commonly called N11 codes because of their format, are used to provide three-digit dialing access to special services. In the United States, the FCC administers N11 codes, and recognizes only 211, 311, 511, 711, 811 and 911 as nationally assigned (See FCC 05-59). In some states, N11 codes that are not assigned nationally may be assigned locally, provided that these local assignments can be withdrawn promptly if a national assignment is made. The current list of N11 codes can be found on the NANPA web site at: <a href="http://www.nationalnanpa.com">www.nationalnanpa.com</a> .
<b>NAS</b>	NANP Administration System
<b>NENA</b>	A professional non-profit organization, established to promote implementation and awareness of 9-1-1 as the U.S. and Canadian universal emergency number. NENA provides a forum for dialogue between and among public safety and industry partners. NENA serves its members through policy advocacy, establishment of technical and operational standards, certification programs and a broad spectrum of educational offerings.
<b>NENA Company ID</b>	A 3-5 character identifier, which distinguishes the entity providing voice service ( <i>e.g.</i> , Wireline, Wireless, VoIP, PBX, etc.) to the end user and/or distinguishes the source of the ALI record information ( <i>e.g.</i> , service provider/reseller/private switch owner). See also <a href="https://companyid.nena.org/default.aspx">https://companyid.nena.org/default.aspx</a> .



<b>Next Generation Interconnection Interoperability Forum (NGIIF)</b>	An industry forum operating under the auspices of the ATIS. The NGIIF addresses next generation network interconnection and interoperability topics associated with emerging technologies. Specifically, it develops operational procedures that involve the network aspects of architecture, disaster preparedness, installation, maintenance, management, reliability, routing, security, and testing between network operators. In addition, the NGIIF addresses issues that impact the interconnection of existing and next generation networks and facilitate the transition to emerging technologies.
<b>NIST</b>	National Institute of Standards and Technology
<b>North American Numbering Council (NANC)</b>	A Federal Advisory Committee established pursuant to the United States Federal Advisory Committee Act (FACA) as amended, 5 U.S.C. App 2. The purpose of the NANC is to advise the FCC and to make recommendations that foster efficient and impartial NANP administration. The NANC advises the FCC on numbering policy and technical issues in areas of responsibility the FCC has entrusted to the NANC, with a focus on examining numbering in the changing, modern world of communications.
<b>North American Numbering Plan (NANP)</b>	The basic numbering scheme for the public switched telecommunications networks in the following 20 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, Sint Maarten, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, Turks & Caicos Islands, and the United States and its territories (including Puerto Rico, the U.S. Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa). The format of the NANP is in compliance with ITU standards as detailed in Recommendation E.164. See 47 CFR §52.5 (d).
<b>North American Numbering Plan Administration (NANPA)</b>	The entity or entities responsible for managing the NANP (47 CFR §52.7 (e)). See also 47 CFR §52.13.
<b>NNS</b>	NANP Notification System
<b>NPA</b>	Numbering Plan Area ( <i>i.e.</i> , area code)
<b>NPAC</b>	Number Portability Administration Center
<b>NPA-NXX-X</b>	A range of 1000 pooled telephone numbers (TNs) within the NPA-NXX, beginning with a station of n000, and ending with n999, where n is a value between 0 and 9.
<b>NPA Overlay</b>	Occurs when more than one (1) area code serves the same geographic area.
<b>NXX</b>	A central office code ( <i>i.e.</i> , the sub-NPA codes in a telephone number, digits D-E-F of a 10-digit number); often referred to as “NXX codes” because they are in the format of “NXX”, where N is a number from 2 to 9 and X is a number from 0 to 9.
<b>NRUF Report</b>	Numbering Resource Utilization and Forecast Report
<b>Numbering Resources</b>	NANP Numbering Resources administered and assigned by the NANPA,

	including, but not limited to: NPA codes, CO codes, thousands-blocks, p-ANIs, 5XX-NXX codes, 900-NXX codes, N11 codes, 800-855 line numbers, Carrier Identification Codes, Vertical Service Codes, and ANI II digit pairs. See also 47 CFR §52.13 (d).
<b>OCN</b>	Operating Company Number
<b>Offeror</b>	The company submitting a proposal response to an RFP.
<b>PA</b>	Pooling Administrator
<b>p-ANI</b>	Pseudo Automatic Number Identification; A 10-digit number used for the purpose of routing an E911 call to the appropriate Public Service Answering Point (PSAP).
<b>p-ANI Range</b>	A contiguous range of p-ANIs assigned by the RNA ( <i>e.g.</i> , NPA-211-0000 through 0005).
<b>PAS</b>	Pooling Administration System
<b>PCS</b>	Personal Communications Service
<b>PIP</b>	Program Improvement Plan
<b>Ported Telephone Numbers</b>	When a subscriber's Telephone Number (TN) has been ported, using LNP, to another service provider.
<b>POTS</b>	Plain Old Telephone Service
<b>PSTN</b>	Public Switched Telephone Network
<b>Public Safety Answering Point (PSAP)</b>	A facility equipped and staffed to receive 9-1-1 calls
<b>PUC</b>	Public Utility Commission
<b>QA</b>	Quality Assurance
<b>Query</b>	The ability to request and retrieve data stored in the NANP Administration System (NAS).
<b>Rate Center</b>	Denotes the smallest geographic area used to distinguish rating and billing boundaries.
<b>Reassignment</b>	The process of reestablishing the assignment of a thousands-block, which was previously assigned to another SP or to a new SP.
<b>Respondent</b>	A company submitting a proposal response to a Request For Quote (RFQ).
<b>RESTful API</b>	An application program interface (API) that uses HTTP requests to GET, PUT, POST and DELETE data.
<b>RFP</b>	Request for Proposal
<b>RNA</b>	Routing Number Administrator
<b>RNAS</b>	Routing Number Administration System

<b>Selective Router CLLI</b>	An 11-character code assigned to a central office to designate the physical location and area served. Characters 1-4 designate the rate center location, characters 5-6 designate the state code, characters 7-8 identify the central office, and characters 9-11 specify the equipment type. In particular, characters 9-11 will be in a unique format designated for the use of a selective router as determined by iconectiv® Common Language® Location Information Service.
<b>SMS</b>	Service Management System
<b>SP</b>	Service Provider
<b>SPID</b>	Service Provider Identification (ID)
<b>SPOC</b>	Single Point of Contact
<b>STrP</b>	Software Transition Plan
<b>Subcontractor</b>	One not in the employment of the contractor, who is performing designated services and functions contained within this document.
<b>Term of Administration</b>	The contractor's contract shall be for a term determined by the FCC; It shall be the period of time for which these requirements shall apply. At any time prior to the termination of the initial or subsequent Term of Administration, the Term of Administration may be renewed with the approval of the NANPA contractor and the appropriate regulatory authorities.
<b>TFNA</b>	Toll Free Number Administrator
<b>TNs</b>	Telephone Numbers
<b>TRA</b>	iconectiv® Telecom Routing Administration
<b>TRS</b>	Telecommunications Relay Service
<b>TSB</b>	Technical Standards Bureau
<b>U.S. Department of State Study Group A</b>	Study Group A advises the State Department, through the United States Telecommunications Advisory Committee, on issues related to U.S. policy, standardization, regulatory, and competitive aspects of the operations and tariffs of telecommunications services.
<b>User(s)</b>	The Numbering Resource applicants, Numbering Resource assignees, state and federal regulatory organizations, 9-1-1 system service providers, PSAPs and the general public that shall interface with NANPA on all the functions and applications contained with this document.
<b>Vertical Service Codes (VSC)</b>	A customer-dialed code that provides customer access to features and services provided by local exchange carriers, interexchange carriers, Commercial Mobile Radio Service (CMRS), etc. Services include call forwarding, automatic callback, customer originated trace, and many others. The format of a VSC is *XX or *2XX (touch-tone) and 11XX or 112XX (rotary). For example, call forwarding is activated by dialing *72 or 1172.
<b>VoIP</b>	Voice Over Internet Protocol
<b>VPC</b>	Voice over Internet Protocol (VoIP) Positioning Center
<b>Webhook</b>	An HTTP callback that receives notification messages for events



## Appendix B: Interface Contact Information

<b>Current NANPA</b>	<b>TBD</b>
<b>Current Pooling Administrator</b>	<b>TBD</b>
<b>Number Portability Administration Center (NPAC)</b>	<b>Telcordia Technologies Inc. dba iconectiv®</b> Attn: NPAC Service Representative, 8C802H 100 Somerset Corporate Blvd. Bridgewater, NJ 08807 Telephone: 1-844-820-8039 Email: <a href="mailto:LNPA-Acct-Mgmt@iconectiv.numberportability.com">LNPA-Acct-Mgmt@iconectiv.numberportability.com</a> or <a href="mailto:npac@iconectiv.numberportability.com">npac@iconectiv.numberportability.com</a>
<b>BIRRDs/LERG™ Routing Guide</b>	<b>Telcordia Technologies Inc. dba iconectiv®</b> Telecom Routing Administration (TRA-CCC) 100 Somerset Corporate Blvd. Bridgewater, NJ 08807 Telephone: 732-699-6700 or 866-672-6997 Email: <a href="mailto:tra@iconectiv.com">tra@iconectiv.com</a>
<b>Mobile Block Identifier (MBI) Administration</b>	<b>GDIT</b> 3833 Greenway Drive Lawrence, KS 66046 Telephone: 785-331-2323 Email: <a href="mailto:mbiadmin@GDIT.com">mbiadmin@GDIT.com</a>

Contact information is included to facilitate responses by potential bidders and is not intended to endorse the particular organizations listed.

## **Appendix C: Binder of Decisional Principles**

The Binder of Decisional Principles is a compilation of Numbering Rules, Orders, and Industry Agreements. Refer to the NANPA web site for the most current version:

<https://www.nationalnanpa.com/bdp/index.html>.