

## **Section 7**

# **Automated System Support**

This section describes key requirements of the NANP administration system and its capabilities.

The system shall provide NANPA employees and clients access to all necessary information required for NANP number resource management.

NANPA shall maintain a NANP administration system that is capable of supporting the requirements and functionality acknowledged within this document. In addition, the system shall be sized accordingly to support current and future resources and clients.

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

## **7.1 System Characteristics**

The NANPA system shall utilize standard electronic commerce type functionality that allows efficient client user interaction and data file transfer.

Data file transfer shall be simple and easy to understand.

### **7.1.1 System Availability**

Any contractor-defined new NANP administration system or system upgrade shall be available within six months of contract award. The NANPA system shall be seamlessly available for input, processing, and downloads during clients' normal business hours.

Scheduled maintenance shall occur outside of normal business hours and clients shall be notified no less than 30 days in advance of any scheduled event.

### **7.1.2 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 a clients' needs to retrieve their data through a query capability

- Support a user authorization level that identifies the range and scope of the data access of each client, including identification notice of approved access to their data by other clients or state regulatory authorities
- Be capable of querying and retrieving one or multiple records using any stored data fields.

### **7.1.3 System Scalability**

The NANP system shall be expandable and flexible so that it can easily expand its capacity and number of clients.

Examples include:

- Addition of new NPAs
- Additional users
- The addition of new resource, and data elements
- Expansion of the NANP.

## **7.2 System Capabilities**

The NANPA system shall be designed for high reliability, possess data integrity features, and allow for economical and efficient system expansion.

The NANPA system design shall provide for the following capabilities:

- Capture all relevant applicant and client information
- Facilitate the application and data filing process and the capture of required data in the database
- Provide for generation of client 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 client's NANP resource application or data filing and the generation of reports regarding the tracking status of each application or data filing
- Maintain data integrity.

If the system becomes unavailable for normal operations due to any reason, clients shall be notified of the system unavailability within five minutes of any outage.

When possible, such notification shall be made via electronic capabilities. When this is not possible the NANPA shall notify all clients via identified contact information by prearranged method (e.g. fax, telephone).

When the system is restored to normal operations, clients shall be notified of the system's availability via electronic broadcast message within 5 minutes of system restoration.

### **7.3 System Location**

The physical location of the NANPA system facility is at the discretion of the NANPA. The only limitation is that the facility shall be within the continental United States. Identification of the proposed system location must be included in the Bidder's proposal

#### **7.3.1 Facility Characteristics**

Space allocated to the NANPA's system shall have the following characteristics:

- Be a distinguishable area with secure access points
- Be contiguous space where personnel are physically located within the same area
- Provide sufficient backup power to maintain operation through electrical outages of at least eight hours.

### **7.4 System Data**

NANP numbering resource data and information shall be stored in the NANPA system in accordance with the categories and formats that correspond to those currently used and/or may be defined by industry guidelines and regulatory directives.

#### **7.4.1 Data Integrity**

NANPA shall ensure that all data stored is accurate and take whatever steps are necessary to confirm that data processed is so.

#### **7.4.2 Confidential Treatment**

All individual client-specific data submitted to NANPA, in any form, shall be treated as confidential.

Any data that contains proprietary client information shall not be accessible by the public on the NANPA web site, or published by the NANPA. NANPA shall only publish and distribute aggregated data.

### **7.4.3 Automated Submittal**

NANPA shall use the data interface protocols previously adopted and in use between service providers and the current NANPA vendor.

Except as noted, the NANPA system shall offer a web interface and/or allow for automated data input via EFT for applications and data forecast reports, as well as support an email attachment transfer capability.

The EFT capability shall permit clients to forward data in a predetermined format, which the NANPA shall then use to initiate processing within the NANP administration system(s).

### **7.4.4 Automated Data Output Capabilities**

NANPA shall also accommodate automated data output via EFT to clients when transmitting responses to clients per the appropriate industry guideline and other industry forms/data or reports.

### **7.4.5 Alternative Data Capabilities**

NANPA shall also support fax and e-mail submissions of client documentation (*e.g.*, applications, forms, forecast reports).

## **7.5 System Maintenance**

The details of a proposed system maintenance schedule shall be provided in NANPA's System Maintenance Plan.

## **7.6 System Security**

NANPA shall maintain and enforce system safety and physical security procedures in accordance with the *FCC Computer Security Program* (Reference 21).

NANPA shall maintain confidential and proprietary information and institute any physical and safety procedures required.

Following contract award, NANPA shall prepare a NANPA Security Plan following, as appropriate, the National Institute of Standards and Technology (NIST) *Guide for Developing Security Plans for Information Technology Systems* (Reference 26).

## **7.7 System Client Profile Application**

NANPA shall develop and maintain a Client User Profile application process for the NANP administration system to ensure that there is a mechanism to distinguish one system client user from another. NANPA shall maintain the capability to reach all service providers by maintaining automated and up-to-date lists of addresses corresponding to all contacts.

NANPA shall update the list of contacts quarterly. The contact list shall be automated, allowing easy mailing via U. S. Mail, or electronically via e-mail.

The User Profile application shall contain at a minimum the contact information for each client, and other relevant identifying factors such as service provider operating company number (OCN). NANPA shall not assign the OCN.

#### **7.7.1 User Logon System**

The system shall be able to support access to the NANP system data with a unique logon ID and password upon receipt of an approved request form.

#### **7.7.2 Logon System Access**

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

#### **7.7.3 Logon System Approval**

After access approval, NANPA shall assign the unique logon ID and appropriate security level corresponding to the type of user requesting access within 60 seconds.

#### **7.7.4 Logon System Security Level**

The user's security clearance sets the correct level of record access and system capabilities.

#### **7.7.5 Logon System Password**

After the logon is initialized and entered into the system by NANPA, the users shall be informed of the logon activation, and a completed logon ID request form shall be sent back to the requestor for their records within 10 seconds.

#### **7.7.6 Logon System Problems**

Users experiencing problems in obtaining a logon ID shall contact the NANPA for resolution.

The NANPA shall resolve all logon problems within one business day.

#### **7.7.7 Client User Access Permission Classes**

The NANP system is responsible for assigning new users the appropriate security permission class. The NANPA shall exercise absolute control access to all records.

### **7.7.8 Password Changes**

All user passwords shall be changed every 180 days. If a Client User ends employment with the client, the NANPA shall be immediately notified and a new password assigned.

### **7.7.9 Unauthorized Client User System Access**

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

- Notify the FCC, and the applicable client(s) electronically
- Report to the NANC of such a breach and that the affected party has been notified. Subject to reasonable access, security, and confidentiality requirements, provide the FCC, affected users, and their respective designees with reasonable access to all resources and information in 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.

### **7.8 System Inspection**

Subject to NANPA's reasonable access, security, and confidentiality requirements, a NANP member country or a designee, upon notice to NANPA, shall have the right to make visits to the NANPA system and its facilities to review safety/security applications.

However, NANPA is not required to support more than four visits in any 12-month period (excluding any follow-up visits referred to in the following sentence).

If any of the safety and physical security procedures as stated in the selected vendors proposal are not implemented and maintained throughout its Term of Administration the vendor shall be deemed noncompliant. Failure to correct such noncompliance within 10 days of such deficiency shall result in the vendor's termination.

NANPA shall:

- Implement corrective measures
- Give notice of such implementation in preparation for one or more follow-up visits to the affected Data Center, as necessary, to confirm that the deficiency has been rectified.

### **7.9 System Report Administration**

The NANPA system shall be capable of generating and distributing reports upon request. All reports shall be available and accessible electronically on the NANPA web site.

### **7.9.1 Report Distribution**

Reports generated by the NANPA system shall be capable of being distributed and updated automatically. The report distribution system shall support an exploder list for automatic signup for updated report notification.

NANPA shall distribute via the NANPA web site all summaries and comprehensive reports made known to NANPA or produced by NANPA or its affiliate(s) contractors performing NANPA duties in part or whole.

Reports shall be distributed by paper (including via U.S. Mail) and facsimile when requested. The Bidder shall describe its report distribution mechanism in their response.

### **7.10 Help Desk**

NANPA shall maintain a help desk that is accessible during NANPA's regularly scheduled business hours.

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

NANPA shall:

1. Report problems with the web site, facsimile, voice mail or email; for each problem the Help Desk will open a trouble ticket
2. Receive and transmit trouble tickets concerning communications problems with other vendors
3. Require that each trouble ticket be time stamped with a minute accuracy and stored for recall for up to two years
4. Require that once a trouble ticket is closed, the originator of the trouble ticket shall be notified of disposition of the problem
5. Summarize the quantity and type of trouble tickets opened and closed during the year in the annual report
6. Require the help desk to assist customers to fill out applications or reports or to gain access to other authorized FCC or industry information
7. Require that if out-of-service conditions exists, the time stamped on the trouble ticket shall be used as the time for the start of the out-of-service period; when the out-of-service condition has been cleared and the originator of the trouble ticket notified, the time stamped on the last update of the trouble ticket shall be used as the end of the out-of-service period.

### **7.10.1 Contact**

The telephone number for the Help Desk shall be posted on the NANPA web site along with other relevant contact information to help clients.

NANPA shall provide mechanisms; *e.g.*, web, voicemail, email, and facsimile, to be accessible on a 24-hour basis.

With email, NANPA shall have the capability of transmitting and receiving email messages with and without attached files. NANPA shall provide “firewall” protective screening of all incoming email messages and attachments based on a security profile established by NANPA and approved by the FCC. NANPA shall additionally provide virus protection software on all devices that receive email. NANPA shall maintain the most recently updated version of virus software as defined by the software provider.

With facsimile, NANPA shall provide the capability of transmitting and receiving ITU G.3 and G.4 facsimiles.

### **7.10.2 Help Desk Referrals**

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

### **7.10.3 Help Desk Actions**

Frequently asked questions (FAQs) and their answers shall be added to the FAQ on the web page at least monthly.

Responses shall be provided within one business day of the request being sent to the NANPA.

## **7.11 System Generated Notifications**

The NANP system shall support an exploder list that subscribers can apply to, and receive system generated notifications. Such an exploder list may be used to send a general notice to all clients.

### **7.11.1 Customized Notifications**

The NANP system shall allow clients to customize notices by geographical location (*e.g.*, NPA relief planning by NPA or state) and/or resource type that allows clients to select categories of notices they want to receive.

*The following subjects shall warrant customized notification support:*

- Instructions for clients to subscribe to lists on NANPA.com
- Topic and geography specific notifications

- NPA relief planning, guideline changes, regulatory directives, NANPA process changes
- NPA exhaust notification and relief planning
- General broadcast of system availability
- Client 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.

## **7.12 System Testing**

Prior to any new system functionality and feature implementation and turn up, NANPA shall provide a System Test Plan to the FCC. This plan shall contain the selection criteria for clients to participate in system testing and the timeline and specific NANP administration system elements to be tested. The System Test Plan shall follow the format, where applicable, of Reference 22, *IEEE Standard for Software Test Documentation*.

### **7.12.1 System Test Results**

Upon completion of the NANPA system test, the NANPA shall publish the results of said test. These results shall be readily available to all interested parties.

## **7.13 System Disaster Recovery**

A disaster recovery process shall be developed to restore the NANPA system within two business days.

NANPA shall develop and implement a detailed Disaster/Continuity of Operations Plan, following the format, where applicable, of Reference 23, *NFPA 1600 Standard on Disaster/Emergency Management and Business Continuity Programs*.

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

## **7.14 System Backup**

NANPA shall initiate and maintain a backup process that ensures that the data contained in the system can be restored as needed. System backup information shall be generated, at least

daily, and stored in a secure off site location that can be accessed within one business day if backup data is necessary for system restoration. Files shall be retained online for two years and archived for five years.

### **7.15 System and Equipment Inventory**

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

### **7.16 System Documentation**

The NANPA shall provide the FCC designated Contract Administrator with copies of:

- Configuration manuals or documentation for systems to operate the software
- Operations manuals or documentation for operation of the NANP administration systems including the methods and procedures for operating the system.

This documentation should be consistent with Reference 25, *IEEE Standard for Software User Documentation*.

### **7.17 NANPA System Transfer to Successor**

NANPA shall transfer to a successor in the case of termination or at the expiration of the Term of Administration, designated hardware and software property developed with funding from this contract, including:

- NANPA system and its software
- Designated hardware
- Computers and related equipment
- Other peripheral devices
- Records, both current and historical.

NANPA shall provide the FCC with a list of items that are subject to transfer at the end of its term. The list shall be filed within 60 days of contract award. Thereafter NANPA shall update the list annually, and provide such list to the FCC.

#### **7.17.1 Transfer Efficacy**

Transfer of such physical property shall be performed in such a manner as to ensure an efficient and orderly transition of the NANP administration system and associated equipment

to a successor's environment in a fully operational state without service interruption to any client.

#### **7.17.2 System Software Source Code Escrow**

The FCC shall be the custodian of a copy of the source code.

#### **7.17.3 System and Equipment Transfer**

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

### **7.18 Tools**

The NANPA system shall maintain the applications and tools necessary for clients to access and use the system to perform the tasks and functions.

#### **7.18.1 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 NANPA system shall validate data submissions for clients, process them, and then prepare and present an accurate NPA and NANP exhaust forecast report.

The NANPA exhaust report shall be published biannually and as warranted when information materially affecting the life of an NPA and/or the NANP becomes known to NANPA.

NANPA shall maintain NRUF interface specifications and post them to the NANPA web site.

NANPA and the system shall be able to:

- Produce timely forecasts, currently at least 36 months in advance of exhaust as indicated in INC guidelines, that are reasonably accurate
- 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 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 clients on the NANPA web site

- Prepare and present monthly NPA relief tracking report to NANC during NANPA's NANC report
- Maintain historical client NRUF data by individual client so that it shall be accessible by that client for the previous five years
- 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 prior years of NRUF data forecasts and the corresponding actual consumption by client and rate area.

#### **7.18.1.1 Application Processing**

The NANPA systems and tools shall provide real time access to resource usage and status data.

The NANPA system shall support standard electronic filing capabilities, as well as on-line application processing capabilities via the NANPA web site.

#### **7.18.2 CO Codes**

Resource application submission shall be available via e-mail, on-line with the NANPA web site, and by FTP.

The NANPA system shall process applications by performing application data validation, resource eligibility verification, and receipt of request and acceptance/rejection notification to clients.

NANPA shall:

- Complete administrative forms online to avoid the need of sending faxes and/or e-mail attachments. Web based tools shall be provided for client use in performing code activities, including Code Requests (Part 1), In Service Notification (Part 4) MTE
- Provide clients with a web-based application that confirms Part 1 data field input accuracy and consistency using drop down menus for all appropriate fields, *e.g.*, OCN, rate area, homing tandem, switch COMMON LANGUAGE® Location Identification (CLLI™)
- Display on its web site the status of each NXX block as (1) available for assignment, (2) pending disconnect, (3) pending change, and (4) pending reclamation and/or suspended

- Provide accurate assignments, avoid rating and/or routing conflicts, and conform to established dialing plans.

### **7.18.3 NPA Exhaust Relief Planning**

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

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

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

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 clients in managing NANP resources.

Upon completion, the analysis shall be posted on the NANPA web page when information becomes releasable so that other clients and interested parties can understand the impact of the selected issue resolution.

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

- Documenting the impact upon clients in terms of: (1) the resource assignment/change/disconnect application process, (2) the application approval criteria, (3) all application forms, (4) client reports given to NANPA and reports generated by NANPA for use by clients
- 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.

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

The NANPA system's applications shall provide prompt data updates no later than the next business day after the information has been received. 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 clients per confidentiality requirements and data access arrangements specified by appropriate NANP member regulatory authorities.

Clients 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.

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 client application processes. The system's application shall be capable of assembling this information so that it is readily available for client access.

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

Clients shall provide a usage report to NANPA per the industry CIC guidelines.

With respect to CICs subject to reclamation as a result of NANPA's usages analysis, NANPA shall first contact the client to allow for verification and correspondence with its clients. NANPA shall, in accordance with industry guidelines, notify INC of CICs subject to reclamation and simultaneously post this information to the NANPA web site.

The NANPA system shall be capable of accepting CIC usage reports per guideline requirements on January 31 for the period ending December 31 and no later than July 31 for the period ending June 30. These reports shall also be mailed and accepted by the NANPA in paper form.

The client CIC interface specifications and programs and processing used by the NANPA when determining reclamation and recording and storing the status of CIC codes shall be posted on the NANPA web site. Any new specifications and reporting requirements shall be reviewed by the NANC prior to any change.

#### **7.18.7 Contact Information**

The NANPA system's applications shall record any contact information provided by resource or subject category. The record shall contain the name, address, telephone number, company name, title and area of responsibility, i.e., code administrator, regulatory liaison (identified state or FCC) and the date the record was verified, entered or updated.

The NANPA system and its applications shall be capable of report generation using any of the entered fields for use by its clients and the NANPA. Such requests shall be accessible through the NANPA's web site.

Clients shall use the data to facilitate contact and correspondence among NANPA, its clients, NANC, and industry forums and standards bodies.

### **7.19 Web Site**

The NANPA vendor shall provide and maintain an Internet web site.

#### **7.19.1 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 clients in obtaining NANP numbering resources and the public with understanding NANP resources. It shall also contain numbers and outcomes of disputes, system availability--unscheduled down time, breaches of security, and statistics concerning comments and complaints regarding the web site.

**Table 7-1. Content on the NANPA Web Site**

Category	Content
1. NANPA Information	NANPA general information All relevant contact names, updated as necessary Telephone numbers Facsimile numbers E-mail addresses
2. NPA Information	Assigned, reserved for possible geographic relief (Specific areas not indicated) Other non-available NPA codes NPAs assigned by state or region Locations served by NPA Dialing plans per NPA Relief plan, planning and implementation meetings, and implementation status
3. NPA NXX Code Information	NPA-NXX assigned, the carrier to which the NXX is assigned, effective date NPA -NXX test numbers Unavailable NXXs Summary of assigned and available NXXs per NPA During NPA relief activities: current data reflecting relief activity (e.g., NXX code assignments in each NPA, key dates, etc.)
4. 900 NXX Information	List of assigned 900 NXX codes and the carrier to which the NXX is assigned
5. 500 NXX Information	List of assigned 500 NXX codes and the carrier to which the

Category	Content
	NXX is assigned
6. CIC Information	List of assigned CICs and the carrier to which the CIC is assigned and date assigned.
7. Vertical Service Code Information	List of assigned VSCs and their respective purpose
8. 456 NXX Code Information	List of 456 NXX codes and the carrier to which the NXX is assigned
9. ANI II Digits Information	List of assigned ANI II digits and the stated purpose of the code
10. 555-XXXX Line Number Information	List of 555 line numbers and the carrier/service provide to which the 555-XXXX line number is assigned
11. N11 Service Code Information	List of assigned N11 Service Codes and a description of the service to which the N11 code is assigned
12. 800-855 Number Information	List of assigned 800-855 numbers and the carrier/service provider to which the 800-855 number is assigned
13. Description and details on new numbering resources as may be identified and defined in the future	
14. INC Number Resource Assignment Guidelines	
15. NANPA Information Letters relative to NPA Code Relief ( <i>i.e.</i> , notification of assigned NPA and key dates associated with implementation)	
16. Other NANPA information as directed by NANC or appropriate regulatory authorities	
17. NANPA Reports	List of NANPA Reports concerning number resources (does not include enterprise service reports) Annual report (downloadable in a machine-readable form

Category	Content
	using standard word processing and spreadsheet programs, as appropriate).
18. NANP member countries and any applicable information.	
19. Index of reference documentation also called the Binder of Decisional Principals	FCC related directives State directives under delegated authority Other NANP member nation directives
20. Inquiries	Inquiries by state regulatory commissions, the public, and service providers.

### 7.19.2 Content Posting

New information and documentation shall be posted to the NANPA web site within one business day of its release.

Information contained on the web site shall be updated within one business day of any change or document release.

### 7.19.3 Web Site Design

The NANPA web site ([www.nanpa.com](http://www.nanpa.com)) shall be reliable and be able to quickly fulfill client 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 clients
- 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 clients 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.

### 7.19.4 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 500 simultaneous clients with an average holding time of 0.5 hours.

#### **7.19.5 System Responsiveness**

NANPA shall provide rapid response when accessing the web site. NANPA shall provide a system such that a 56 Kbps modem-equipped user will be able to view the complete home page in less than 8 seconds, 95% of the time over any 12-month period.

If a user is experiencing greater than 12 seconds to view the complete home page, the NANPA system shall have the capability to sense this condition. 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 NANPA system. If the user reports to the help desk a problem with accessing information on either the web site or the NANPA system, a trouble ticket shall be initiated to determine if an "out of service" condition exists.

#### **7.19.6 Out-of-Service**

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

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

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

#### **7.19.7 Out-of-Service Notification**

NANPA shall be the point of contact for system recovery. 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, 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.

### **7.19.8 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.

#### **7.19.8.1 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 NANPA's clients 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.

#### **7.19.8.2 Privacy Compliance**

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.

NANPA shall prominently display its privacy statement explaining NANPA's information handling practices.

#### **7.19.8.3 Privacy Breaches**

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 client and the appropriate regulatory authority. NANPA shall report the web site privacy breach to the FCC.

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

The NANPA vendor shall support and maintain an independent web site, the NANC Chair web site ([www.nanc-chair.org](http://www.nanc-chair.org)). The NANPA vendor 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.

#### **7.19.9.1 Responsibilities**

The NANC Chair web site administrator shall post documents as requested by NANC members, members of the industry and regulatory agencies to post documents 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, Issues Management Groups (IMGs) such that those records are easily accessible.

#### **7.19.9.2 Content**

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

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

## **Section 8**

# **Reporting**

The following section discusses the number resource reports and the web site requirements for NANPA.

NANPA reporting shall take three forms: the first form shall be as an update to a table or document on the NANPA web site; the second form shall be as an electronic attachment to an email distribution list; the third form shall be as paper documents physically distributed at meetings. See Section 7.9, Summary of NANPA Reports for the appropriate form.

NANPA shall provide regular reports on all NANP number resources to the NANP distribution list. NANPA shall provide reports in March and in September on all number resources administered by the NANPA. Reports shall contain a written summary interpreting trends and the impact of new data upon NPAs and the NANP. The report shall contain, at a minimum, the following information:

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

NANPA shall report its projection for NANP exhaust after each NRUF data collection cycle. Further, 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 industry or clients deem necessary. The reports shall be for all resources not in a designated form of jeopardy. For those resources being closely watched, NANPA shall publish reports on a monthly basis when they are high assignment rates and they are in danger of being depleted within two years.

In addition, NANPA shall identify and develop other reports deemed necessary for managing the NANP resource in the future.

### **8.1 Annual Report**

NANPA shall publish this document annually to report on the status of the NANP, NPA, and CO Codes.

The report shall be published during the first quarter of each year. It shall contain the results of the previous year-end NRUF survey results. The annual report shall also be reviewed during the NANC annual performance review process.

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

- Brief description of the NANP
- 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
- NRUF forecast results—Current year forecast
- Exhaust projections for individual NPAs and the NANP
- Status of NPA Codes planning or in relief planning
- NPA specific dialing plans
- Description of all numbering resources assigned by the NANPA and appropriate point of contact.
- Activities identified in the Annual Report shall also be placed on the NANPA web site.

## **8.2 NRUF Report**

This report shall be produced and delivered to the FCC, to the NANP member nations, and the NANC. NANPA shall provide aggregated forecast and utilization data to any requesting U.S. state client twice per year consistent with the dates of the NRUF reporting process.

Within ten calendar days of the request, NANPA shall provide to any requesting state a single report containing disaggregated data that contains only the data 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.

Because state regulatory commissions might wish to perform their own data analyses, NANPA shall provide the data to requesting states via electronic transfer, which may include email, or by computer disk. In the alternative, upon request from a state regulatory commission, NANPA shall provide the data in paper copy form without additional cost.

### **8.2.1 Data Anomalies**

NANPA shall provide a statement of any identified anomalies along with documented explanations for the anomaly in all NRUF reports to assist clients in assessing the reports impact and results.

These reports shall serve several different functions, including the following:

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

### **8.2.2 Reports to Regulatory Authorities**

NANPA shall produce a list of all standardized NRUF data reports offered to clients. The NANPA and state regulatory commissions shall meet annually to determine the reports' format and content. These reports shall be produced by the NANPA upon demand by an appropriate regulatory authority, and at no cost to the requestor. Agreed-upon changes or modifications to these reports shall be at no cost to the requestor.

These reports, once requested by a state regulatory commission, shall be delivered continually until a commission notifies NANPA otherwise. 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 list below is not meant to be exclusive of any information, nor of the extent or format of the data requested and required by regulatory authorities and or other clients. These reports shall support a variety of formats, including, but not limited to, text, Microsoft Excel, and Microsoft Access.

Number of carriers in a rate center and/or NPA, identified by type. 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 exhaust projections. To test the assumptions and gauge NANPA's accuracy, NANPA shall produce annually in April and in September reports that compare the actual exhaust dates of an NPA with the NANPA's projections for that NPA over the previous five reporting periods.

Comparison of most recent NPA and NANP exhaust projections with past five 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, NANPA shall produce

in March and in September reports that compare the most recent projected exhaust dates of NPAs and the NANP with the projected exhaust dates of the previous five reporting periods.

Comparison of aggregated Service Provider (SP) forecasts in a 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.

Comparison of actual unidentified demand with non-forecasted demand growth additive. In order to test the validity of the non-forecasted demand growth additive formula being used, the NANPA shall produce a report in April and in September (after three reporting periods) that compares the output of the formula with the actual quantity of non-forecasted demand that materialized.

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 reporting periods. The NANPA shall also produce a report that compares aggregated growth rates in pooled NPAs with growth rates in those NPAs prior to pooling. To test any conclusions drawn from this report, the NANPA shall also compare growth rates over the same period of time in NPAs that have not been pooled.

Aggregated utilization data. The NANPA shall produce, in April and in September, a report that provides aggregated utilization rates by category for every NPA. This report shall include a percentage breakdown of numbers in each category (*e.g.*, assigned, reserved, and aging).

Comparison of data in pooling areas versus non-pooling areas. To begin to test the efficacy of pooling, the NANPA shall produce, in April and in September, a report that compares the utilization rates of a pooled NPA with the aggregated utilization rate in that NPA prior to being pooled. To test any conclusions drawn from this report, the NANPA shall also compare utilization rates over the same period of time in NPAs that have not been pooled.

### 8.3 NPA Relief Activity Status Report

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

Category	Detail
NPA	NPA needing relief

Category	Detail
Jurisdiction	NANP member country, state, and locality of NPA needing relief
Date Relief Need Identified	Date NANPA determined that relief was needed.
Declaration Date	Date 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 NXXs Unavailable	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. In some circumstances, the industry may have reached consensus on more than one alternative.
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> split, overlay)
Approved Implementation Date	The date the regulatory authority has directed that the new NPA is to be implemented, <i>e.g.</i> , end of mandatory dialing for a split or the effective date for an overlay. In certain

<b>Category</b>	<b>Detail</b>
	situations, a relief implementation date is not provided. The date may be determined at a later time or a trigger is identified (e.g., 60 days after the last NXX code is assigned in the existing NPA).
First Scheduled Implementation Meeting	The date of the initial NPA implementation meeting that NANPA shall conduct.
Rationing Date	Date rationing began. If no rationing, leave blank.
Jeopardy Declared	Date on which jeopardy was declared.

#### **8.4 CO Code Activity Status Report**

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

The report shall contain the following categories:

<b>Category</b>	<b>Detail</b>
New Applications	All applications that NANPA is handling for the first time.
Assignments	The number of applications that resulted in the assignment of a new central office code.
Denied	The number of applications that were denied because the criteria set by the assignment guidelines were not met.
Reclaimed	The number 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 number of applications processed.

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

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.

## **8.6 Requests for Additional Reports**

NANPA may also be requested to produce additional reports as needed by its clients.

NANPA may create and provide data in different formats to accommodate requests to cull data and provide customized reports for a fee that is reasonable and based on its costs. See Section H.

Note that these arrangements 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.

## **8.7 Reference Documentation**

NANPA shall maintain and make readily available an addendum of reference documentation to assist its clients and other numbering resource users. 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.

## **8.8 Standardized Reports for State Commissions**

NANPA shall produce a series of standardized reports on CO Codes assignment activity. A weekly report of codes assigned and available by NPA shall be available and, at a minimum, include the following information:

- NPA-NXX
- Use (Vacant, Assigned, Protected, Reserved, Unavailable)
- OCN
- Company
- Rate Center
- Switch
- Initial/Growth
- Assign. Date
- Effective Date.

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

ST—State

NPA—Area code

NPA Status—(e.g., jeopardy, exhausted)

**Monthly Rationed Amount**

**Total Number on Priority List**—If an NPA is in rationing and a priority list is used, the total number of code requests on the priority list

**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 NANPA and made available for assignment

**Year-to-date Returns**—The total number of codes returned up through the last reported month

**Protected**—The number of protected codes

**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).

These reports shall be provided on the NANPA web site.

## 8.9 Summary of NANPA Technical Reports

**Table 8-1. Summary of Technical Reports**

<b>Name</b>	<b>Reference</b>	<b>Media</b>	<b>Periodicities</b>
Numbering Plan Area	8.0		Weekly and Monthly. Biannually in March and in September.
Central Office Code Status	4.1, 4.2.2, 4.2.4, 8.0		Assigned and available posted daily; status monthly. Biannually in March and September.
International Inbound NPA Code	8.0		Within 5 days of a new assignment; status monthly. Biannually in March and September.
Personal Communications Service Code	8.0		NRUF form semi-annually; upon any new assignment. Status monthly. Biannually in March and September.
900 Code	8.0		NRUF form semi-annually; upon any new assignment. Status monthly. Biannually in March and September.

<b>Name</b>	<b>Reference</b>	<b>Media</b>	<b>Periodicities</b>
800 Code	8.0		Semi-annually; status monthly. Biannually in March and September.
N11 Code	8.0		Semi-annually; status monthly. Biannually in March and September.
555 Code	8.0		New assignments within 5 days; status, monthly. Biannually in March and September.
Carrier Identification Code	6.18.6, 7.5, 9.5.2.4 3.9		Semi-annual incorporating Entity Usage 1 Access Reports; upon any new assignment. Status monthly. Biannually in March and September.
Vertical Service Code	7.18.6, 8.0		Existing VSCs, new VSCs, and updates; status monthly. Biannually in March and September.
Automatic Number Identification	8.0		Existing ANI, new ANI, and new assignments within 5 business days; status monthly. Biannually in March and September.
Non-Dialable Toll Points	8.0		Semi-annual; status, monthly. Biannually in March and September.
809 Codes	8.0		Semi-annual; status monthly. Biannually in March and September.
Numbering Resource Utilization Form	3.2, 6.0, 6.1.5, 8.0, 8.2.2		Semi-annual on February and August 1st.
Code Relief Planning Report to NANC	5.1.5		Quarterly.
Reserved.			
Reserved.			
Status of Pending Relief Plans	5.1.9		Monthly, to FCC/NANC.
Contact List Maintenance	4.4, 6.1.2, 7.7		Quarterly.
Reserved.			
Reserved.			

<b>Name</b>	<b>Reference</b>	<b>Media</b>	<b>Periodicities</b>
NANP/NPA Exhaust Analysis	6.16, 7.18.1		Contingent upon material impact and semiannually.
NPA/NANP Life Impact	6.1.8		Contingent, within 30 days of receipt of the updated NRUF Report.
Reports to Regulatory Authorities	6.1.9, 8.2.2		Contingent, within 10 days of request following 30 days after the NRUF reporting deadline.
NRUF Anomalies	6.1.11, 6.3.3, 8.2.1		Contingent, in case of unresolvable anomalies, to State Regulatory Commissions or FCC. Also annually.
Reserved.			
Reserved.			
NANC Annual Report	7.10, 7.15, 8.1		Annually during first quarter.
CO Code Growth Rate by NPA	8.2.2		Semi-annually.
Aggregated Growth Rates, Pooled vs. Non-Pooled	8.2.2		Upon demand.
Aggregated Utilization Data	8.2.2		Upon demand.
Utilization Rates, Pooled vs. Prior to Being Pooled, Plus Rates in Non-Pooled NPAs	8.2.2		Upon demand.
NPA Relief Activity Status Report	8.3		Monthly.
Disaggregated Data by State	8.2		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	8.2.2		Upon demand.
Comparison of Actual NPA Exhaust, with Past Five Exhaust Projections	8.2.2		Upon demand.
Comparison of Most Recent NPA/NANP Exhaust Projections with Past Five Exhaust Projections	8.2.2		Upon demand.

<b>Name</b>	<b>Reference</b>	<b>Media</b>	<b>Periodicities</b>
Comparison of Aggregated SP Forecasts in a NPA with Actual Growth, with and without Rationing	8.2.2		Upon demand.
Comparison of Actual Unidentified Demand with Non-Forecasted Demand Growth Additive	8.2.2		Upon demand.
Standardized Report for State Commissions on CO Codes Assigned by NANPA	8.4, 8.8		Weekly and monthly.
Part 4 Form Delinquency Notifications	4.4		Contingent, for code holders not submitting Part 4 forms.
Relief Planning Report	5.1.5		Quarterly.

## 8.10 Summary of NANPA Performance Reports

**Table 8-2. Summary of Performance Reports**

<b>Name</b>	<b>Reference</b>	<b>Media</b>	<b>Periodicities</b>
Customer Response Rates	2.7.1		Contingent and annual.
Dispute/Plan of Action	2.1.2		Contingent, to be prepared within one business day.
Reserved.			
Reserved.			
Reserved.			
Self-Assessment	7.10, 9.5		Annually and Quarterly to NANC.
Reserved.			
Post-Audit Corrective Action Plan	9.1.4		Within 20 days after receipt of the auditor's report and monthly until completion.
Unauthorized User Access	2.13.5, 7.7.9		Contingent upon occurrence.
System Outage	7.19.7		Contingent upon occurrence to all clients.

Name	Reference	Media	Periodicities
Privacy Breach	7.19.8.3		Contingent upon occurrence, to affected client, regulatory authority, and FCC
Complaints	2.1.2, 7.10		Contingent, to be prepared within one business day.
Reserved.			
Reserved.			