



**ATIS-0300068**

**North American Numbering Plan  
Numbering Resource Utilization/Forecast  
(NRUF) Reporting Guidelines**

Issued with an administrative update.

**October 23, 2020**

**ATIS-0300068**

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The Industry Numbering Committee (INC) provides an open forum to address and resolve industry-wide issues associated with planning, administration, allocation, assignment and use of North American Numbering Plan (NANP) numbering resources within the NANP area.

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## Foreword

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The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Industry Numbering Committee provides an open forum to address and resolve industry-wide issues associated with planning, administration, allocation, assignment and use of the North American Numbering Plan (NANP) numbering resources within the NANP area.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes a optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, INC, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, INC, which was responsible for its development, had the following leadership:

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**Note:** The NRUF Report Form (Form 502) may be found at [www.nanpa.com](http://www.nanpa.com).

ATIS Standard on –

# North American Numbering Plan Numbering Resource Utilization/Forecast (NRUF) Reporting Guidelines

## 1 Purpose and Scope

This document specifies guidelines and procedures that address the North American Numbering Plan Numbering Resource Utilization/Forecast (NRUF) Report. Service Providers are required to submit an NRUF Report to provide both utilization and forecast data for numbering resources from geographic numbering plan area (NPA) codes, including numbering resources in Non-Geographic NPAs (e.g. 5XX and 900 NXX codes).<sup>1, 2, 3</sup>

This information is used by the North American Numbering Plan Administrator (NANPA) to project the exhaust date of individual NPAs as well as the life span of the North American Numbering Plan (NANP).

The NRUF Report addresses the need to collect both utilization and forecast data in a single tool. Along with forecasting NPA and NANP exhaust, the NRUF Report also assists in assessing the utilization of numbering resources within an NPA code for the potential application of numbering resource optimization measures. This data provides valuable insight to the impact of various numbering resource optimization measures that may be implemented to extend the life of a NPA code. In addition, utilization data collected via the NRUF Report may also serve in the audit process of an individual service provider's usage of numbering resources.

These guidelines are expected to apply throughout the NANP area subject to the appropriate regulatory and governmental procedures and constraints within each NANP country.

## 2 NRUF Report Overview

The NRUF Report combines both utilization and forecast data to more accurately project the exhaust of numbering resources.

NRUF requires service providers (SPs) to provide utilization and forecast data as follows:

1. SPs shall submit to the NANPA the NRUF data on or before February 1, for the period ending on December 31, and on or before August 1, for the period ending on June 30 of each year.
2. Non-rural SPs shall report utilization data semi-annually at a thousands-block level per rate center.
3. Rural SPs (rural telephone companies<sup>4</sup>) participating in thousands-block pooling shall report utilization data semi-annually at a thousands-block level per rate center. Rural SPs not participating in thousands-block pooling shall report utilization data only at the NXX level per rate center.
4. SPs in areas where they are participating in thousands-block pooling shall report forecast data at the thousands-block level per rate center.

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<sup>1</sup> See 47 CFR §52.15 (f) (4) and (5).

<sup>2</sup> See Section 4.4.2 of the Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG, ATIS-0300119).

<sup>3</sup> Public Notice, DA 01-1409, released June 11, 2001, clarified that 500 and 900 NPAs are covered by *Numbering Resource Optimization*, CC Docket No. 99-200, *Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 7574 (2000) (*NRO Order*).

<sup>4</sup> As defined in the Communications Act of 1934, as amended, 47 U.S.C. § 153 (37). See 47 CFR §52.15 (f) (5) (ii)

5. SPs in areas where they are not participating in thousands-block pooling shall report forecast data at the NXX level per rate center.
6. SPs in non-pooling areas shall report forecast data at the NXX level per NPA.

Service provider submission of the NRUF Report is mandatory so that more complete information can be gathered which will contribute to improved forecasts of NPA code exhaust. In addition, due to the large amount of utilization and forecast data to be collected, electronic data collection and storage is recommended to improve efficiencies and to enhance data analysis and reporting capabilities. The available electronic data collection methods are electronic file transfer, NRUF Form 502 spreadsheet sent via email or CD, and the NANP Administration System (NAS).

NRUF reporting carriers who choose to submit their NRUF Report Form (Form 502) via facsimile or mailed copy will be charged a fee. See the NANPA website at [www.nanpa.com](http://www.nanpa.com) for specific details regarding the associated fee structure.

SPs must submit NRUF reports for 5XX and 9YY NPAs separately from those NRUF reports for geographic NPAs. See NANPA Form 502 Job Aid for Geographic Reporting at <http://www.nanpa.com/pdf/NRUF/GeoJobAid.pdf> for instructions on completing the NRUF Report submission. See NANPA Form 502 Job Aid for Non-Geographic Reporting at <http://www.nanpa.com/pdf/NRUF/NonGeoJobAid.pdf> for instructions to complete the separate Non-geographic NRUF report for numbering resources in the 5YY and 9YY NPAs.

### 3 Assumptions and Constraints

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***The following are the assumptions and constraints for the NRUF Report:***

A reporting carrier is responsible for providing timely and accurate utilization and forecast data for numbering resources to the NANPA and the PA. The sanction for noncompliance will be the withholding by the NANPA of numbering resources as described in the Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG, ATIS-0300119), the Non-Geographic 5XX-NXX Code Assignment Guidelines (ATIS-0300052), and the 9YY NXX Assignment Guidelines (ATIS-0300060).<sup>5</sup>

- 3.1 The NANPA shall secure all data received and treat SP-specific forecast and utilization data as confidential. Specifically, disaggregated, carrier-specific forecast and utilization data should be treated as confidential and should be exempt from public disclosure under 5 U.S.C. § 552 (b) (4).
- 3.2 SPs and numbering resource administrators are responsible for managing numbering resources in accordance with these guidelines and the orders of applicable regulatory authorities. Both SPs and numbering resource administrators are subject to audits. Further information may be found in FCC 00-104 ¶¶62, FCC 00-429 ¶¶81-99, FCC 01-362 ¶¶95-111, and 47 CFR § 52.15(k).
- 3.3 Reporting carriers shall report their utilization and forecast data by separate legal entity. Each reporting carrier shall be identified by its Operating Company Number (OCN) on the submission. Furthermore, the NANPA shall not issue new numbering resources to a carrier without an OCN.<sup>6,7</sup> The reporting carrier must populate the SP Name field of the NRUF with the exact name that corresponds to the SP OCN, as indicated in NECA records as also published in the LERG™ Routing Guide Volume 1. The reporting carrier shall also populate the FCC Registration Number (FRN) field in order to submit the NRUF Report.

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<sup>5</sup> 47 CFR §52.15 (g) (3) (iv).

<sup>6</sup> 47 CFR §52.15 (f) (3) (ii).

<sup>7</sup> 47 CFR §52.15 (g) (1).

## 4 NRUF Report Attributes

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The NRUF Report requires the submission of both utilization and forecast data. The frequency and granularity of such data is dependent on whether a service provider is classified as a rural or non-rural service provider and whether the reporting area is a pooling or non-pooling area. The classification of a service provider as rural or non-rural and whether the reporting area is a pooling or non-pooling area does not apply to a service provider NRUF submission to report on 5XX-NXX or 9YY-NXX codes because these resources are reported at the NXX level.

### 4.1 Utilization Data

SPs shall submit utilization data on a semi-annual basis. Rural SPs participating in thousands-block pooling shall report utilization data at the thousands-block level per rate center. Rural SPs not participating in thousands-block pooling shall report utilization data at the central office code (NXX) level per rate center in those areas. All other SPs shall submit utilization data at the thousands-block level per rate center. All utilization data shall be reported as Telephone Numbers (TNs) categorized in one of the following mutually exclusive categories: *assigned, intermediate, reserved, aging, and administrative*. These categories are defined by the FCC in its First Report & Order (FCC 00-104) on Numbering Resource Optimization released March 31, 2000 and are listed in the Glossary. The reporting of sub-categories within each of these five (5) categories is not required. Carriers must maintain internal records on the eight (8) sub-categories for a period of no less than five years.<sup>8</sup>

### 4.2 Forecast Data

All SPs shall submit forecast data on a semi-annual basis. The forecast period is five (5) years for the February 1 submission. The August 1 submission is 4 ½ years per the NANPA Form 502 Job Aid. Year 1 for the August submission refers to additional resources needed for the remainder of the current year.

SPs that are participating in thousands-block pooling, regardless of whether they are rural SPs, shall submit forecast data at a thousands-block level per rate center. Non-pooling SPs in a pooling area shall submit forecast data at an NXX level per rate center. SP forecasts shall specifically identify the number of initial and growth codes or blocks required. SPs in non-pooling areas shall submit forecast data at an NXX level per NPA.

### 4.3 Data Submission Methods

The available methods for SPs to submit NRUF Reports are: electronic file transfer (EFT), NRUF Form 502 spreadsheet via e-mail ([nruf@nanpa.com](mailto:nruf@nanpa.com)) or CD, and NAS online.

NRUF reporting carriers who choose to submit their NRUF Report Form (Form 502) via facsimile or mailed copy will be charged a fee. See the NANPA website at [www.nanpa.com](http://www.nanpa.com) for specific details regarding the associated fee structure.

### 4.4 Data Analysis

The NANPA uses both the utilization and forecast data provided by SPs to develop exhaust projections for both geographic NPAs and the NANP. The NANPA is required to provide these projections to the North American Numbering Council (NANC) and the FCC.

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<sup>8</sup> FCC 00-104, ¶ 62

## 5 NANPA Responsibilities

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- 5.1 The NANPA is the single point of contact for collection of forecast and utilization data.
- 5.2 NRUF submission reminders shall be sent out to SPs so that data can be received by the NANPA by February 1 and August 1 of each year. The NRUF submission reminders should be sent out at least two months prior to the submission dates.
- 5.3 The NANPA must maintain an updated contact list of the specific individuals who supply and are responsible for NRUF data.
- 5.4 The NANPA will request from non-US NANP nations administering CO codes the aggregated NRUF data within the same timeframe. This aggregated data will be processed with the US results to obtain a complete picture of the status of the NANP.
- 5.5 The NANPA shall process all the data obtained from the semi-annual submissions within sixty days of the submission date.
- 5.6 The NANPA shall be available to answer questions pertaining to any aspect of the NRUF Report process, forms, instructions, data assumptions, etc.
- 5.7 The NANPA compiles, examines, and analyzes the forecast and utilization data submitted by reporting SPs to carry out its NANP management responsibilities, which include tracking and reporting on number utilization throughout the United States combined with non-US NANP nation data, and projecting the life of individual NPAs as well as the NANP. The NANPA shall project NPA exhaust dates for all NPAs using data collected semi-annually.
- 5.8 The NANPA shall use PA and NANPA data to examine each SP's NRUF utilization data to ensure that utilization is reported for all allocated codes (NXXs) and thousands-blocks (NXX-Xs) associated with the SP's OCN. This includes all blocks assigned to the SP's OCN regardless of whether the SP is the code holder or not. The NANPA shall also compare blocks identified as "donated" on the NRUF with block data from the PA to determine if a donated block is assigned to, or retained by, the donating OCN.
- 5.9 If an NRUF Report is not received from a given SP, the NANPA and PA have the authority to deny future numbering requests from that delinquent SP until a current NRUF Report has been submitted.
- 5.10 If the NANPA identifies any significant inconsistencies or anomalies in an SP's data, the NANPA shall inform the submitting SP of its findings, after which the SP shall have five days to explain the inconsistencies or anomalies, or to resubmit the data. If, after the discussions with an SP, the NANPA preliminarily concludes that the SP's data is insufficient, then the NANPA shall report that preliminary conclusion to the commission in the state where the SP is providing service, and to the FCC's Wireline Competition Bureau (formerly the Common Carrier Bureau). The NANPA shall assign no additional resources to that SP until the appropriate state commission has resolved all questions regarding the inconsistency or anomaly. If NANPA is notified that a service provider's jurisdictional certification, license, or authorization to operate has been revoked, then NANPA will remove any current NRUF 502 forecasts associated with the SP's OCN(s).
- 5.11 The NANPA shall provide to a state commission, upon request, a single report containing disaggregated data reported by SPs operating in its state.<sup>9</sup>

## 6 Service Provider Responsibilities

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- 6.1 Each carrier shall submit to the NANPA forecast and utilization data on or before February 1, for the period ending on December 31, and on or before August 1, for the period ending on June 30 of each year. Carriers

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<sup>9</sup> 47 CFR §52.15 (f) (7). See also FCC 00-429, ¶ 118.

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in NPAs where state commissions reduce the filing requirement to an annual reporting shall report on August 1 of each year for the 12-month period ending June 30<sup>10</sup>.

- 6.2 All service providers must report their number usage in the following mutually exclusive categories: aging, reserved, intermediate, assigned and administrative. In addition, carriers must maintain internal records of their numbering resources for the following eight subcategories of numbers: soft dial tone numbers, ported-out numbers, dealer number pools, test numbers, employee/official numbers, Location Routing Numbers, Temporary Local Directory Numbers, and Pseudo-Automatic Number Identification (p-ANI) numbers. Internal records on the eight subcategories of numbers must be maintained for five years.<sup>11</sup> All service providers shall maintain records of numbers used for intermittent purposes, or retained per the Servicemembers Civil Relief Act, each as an additional subcategory.

Subcategories	Aging	Reserved	Intermediate	Assigned	Administrative
Soft Dial Tone Numbers					<b>X</b>
Ported-Out Numbers				<b>X</b>	
Dealer Number Pools			<b>X</b>		
Test Numbers					<b>X</b>
Employee/Official Numbers					<b>X</b>
Location Routing Numbers					<b>X</b>
Temporary Local Directory Numbers					<b>X</b>
ESRD/ESRK					<b>X</b>
Numbers used for intermittent purposes				<b>X*</b>	
Numbers retained per the Servicemembers Civil Relief Act <sup>12</sup>				<b>X**</b>	

\* Although not a designated subcategory, numbers used for intermittent purposes may or may not be categorized as “Assigned.” See Glossary for more information.

\*\* Although not a designated subcategory, numbers retained to comply with Title III, Section 302, of the Veterans Benefit Act of 2010 may be categorized as “Assigned”. See Glossary for more information.

Reporting carriers with Intermediate Numbers shall provide the name and contact information to the NANPA of the telecommunications carriers that have received the intermediate numbers. These other telecommunication carriers, e.g., reseller, type 1 wireless carriers, and Interconnected VoIP SPs, shall be responsible to provide NRUF Report number utilization data to the NANPA, as intermediate reporting carriers.

- 6.3 SPs shall submit or have submitted NRUF forecast and utilization data to the NANPA for the NPA(s) in which a CO code(s) or block(s) is being requested. This requirement shall not apply in instances where an NPA has been opened since the last NRUF Report and the SP has submitted NRUF data for the NPA(s) previously serving the geographic areas involved.<sup>13</sup>

- 6.3.1 Regardless of a code/block effective date, SPs shall report utilization information on all assigned CO Code and thousands-block resources as of December 31 for the February 1 submission and report utilization

<sup>10</sup> 47 CFR §52.15 (f) (6).

<sup>11</sup> FCC 00-104, ¶ 62.

<sup>12</sup> The Veterans Benefits Act of 2010 was signed into law on October 13, 2010, increasing the scope of the Servicemembers Civil Relief Act signed into law in 2003.

<sup>13</sup> See section 4.4.2 of the Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG, ATIS-0300119).

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information on all assigned CO Code and thousands-block resources as of June 30 for the August 1 submission cycles. SPs shall report on all ten blocks within a CO Code regardless of whether a block is assigned to, or not retained by, the reporting SP. SPs should also use the Administrator Part 3 approval date of code/block transfer or OCN change, not the effective date, to determine under which OCN utilization is to be reported. SPs are not responsible for reporting utilization on resources that have been returned to a Numbering Administrator as long as the SP is in receipt of the Part 3 by December 31 for the February 1 submission and by June 30 for the August 1 submission. If the SP's request was suspended on the Part 3, the SP is not expected to report utilization. Utilization calculated using NRUF data is distinct from that reported on Months To Exhaust worksheets submitted to NANPA or the PA to qualify for codes or blocks.

- 6.4 SPs shall be prepared to respond to any questions that the NANPA may have with respect to their NRUF data and be prepared to modify their submitted data if necessary.
- 6.5 If the NANPA identifies any significant inconsistencies or anomalies in an SP's data, the NANPA shall inform the submitting SP of its findings, after which the SP shall have five business days to explain the inconsistencies or anomalies, or to resubmit the data. If, after the discussions with an SP, the NANPA preliminarily concludes that the SP's data are insufficient, then the NANPA shall report that preliminary conclusion to the commission in the state where the SP is providing service, and to the FCC's Wireline Competition Bureau.
- 6.6 SPs are responsible for keeping company contact information updated by maintaining an active NAS profile with the NANPA.
- 6.7 In a rate center consolidation an SP must update its NRUF forecast in the new rate center(s) in order to receive resources in that rate center. Forecasts in the old rate center(s) will be deleted on the effective date of the consolidation. In the case of a rate center consolidation with a consolidation effective date that falls between June 30 and August 1 or December 31 and February 1, SPs should submit their NRUF forecasts for the rate center that is in effect at the time of the SP's NRUF submissions to avoid submission errors.

## 7 Pooling Administrator Responsibilities

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- 7.1 The PA shall forward its aggregated NRUF data to the NANPA within 21 calendar days of the February 1 date, and within 21 calendar days of the August 1 date of each year.
- 7.2 The PA shall submit the status of the industry inventory pools to the NANPA using the electronic forms found on the NANPA website, via Electronic File Transfer (EFT), or via NAS on-line.<sup>14</sup>

## 8 Definitions, Acronyms, & Abbreviations

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For a list of common communications terms and definitions, please visit the *ATIS Telecom Glossary*, which is located at < <http://www.atis.org/glossary> >.

### 8.1 Definitions

**Administrative Numbers:** Administrative numbers are numbers used by telecommunications carriers to perform internal administrative or operational functions necessary to maintain reasonable quality of service standards (47 CFR § 52.15 (f) (1) (i) and FCC 00-104, ¶ 36 and 62). Examples of administrative numbers are: Test numbers, employee/official numbers, Location Routing Numbers, Temporary Local Directory Numbers (TLDN), soft dial tone numbers and Pseudo-Automatic Number Identification (p-ANI) numbers.

**Aging Numbers:** Aging numbers are disconnected numbers that are not available for assignment to another end user or customer for a specified period of time. Numbers previously assigned to residential customers may be aged

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<sup>14</sup> See [www.nanpa.com](http://www.nanpa.com) for the NRUF Report Utilization/Forecast Form (Form 502).

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for no less than 45 days and no more than 90 days. Numbers previously assigned to business customers may be aged for no less than 45 days and no more than 365 calendar days (47 CFR §52.15 (f)(1)(ii)).

**Assigned Numbers:** Assigned numbers are numbers working in the PSTN under an agreement such as a contract or tariff at the request of specific end users or customers for their use, or numbers not yet working but having a customer service order pending. Numbers that are not yet working and have a service order pending for more than five days shall not be classified as assigned numbers (47 CFR § 52.15 (f) (1) (iii)).

**Audit:** The accumulation and evaluation of evidence about documented information of an auditee to determine and report on the degree of compliance with INC industry guidelines.

**Auditee:** The SP/NANPA/PA that is the subject of an audit.

**Auditor:** The FCC Common Carrier Bureau's Audits Branch of the Accounting Safeguards Division or its other designated agents perform audits of US numbering resources (47 CFR §52.15 (k) (2))<sup>15</sup>. State Commissions also may conduct audits (FCC 01-362 ¶101) and may request "for cause" audits under the national auditing program (47 CFR §52.15 (k) (3)).

**Available Numbers:** Available numbers are numbers that are available for assignment to subscriber access lines, or their equivalents, within a switching entity or point of interconnection and are not classified as assigned, intermediate, administrative, aging, or reserved (47 CFR § 52.15 (f) (1) (iv)). Available numbers is a residual category that can be calculated by subtracting a sum of numbers in the assigned, reserved, intermediate, aged, and administrative primary categories from the total of numbers in the inventory of a code or block holder (FCC 00-104, ¶ 35).

**BIRRDs:** The iconectiv® Business Integrated Routing and Rating Database System contains data in the routing and rating of calls. Contains a complete description of all Local Exchange Companies' networks in the NANP area and pertinent information relating to the networks of other code holders. This provides information for, (1) message routing, (2) common channel signaling call setup routing, and (3) operator service access routing. Data supports all CO Codes assigned through INC Guidelines, as well as all CO Codes in place prior to the existence of INC Guidelines, and covers all Numbering Plan Areas (NPAs) administered under the North American Numbering Plan (NANP).

**Central Office (CO) Code:** The sub-NPA code in a TN, i.e., digits D-E-F of a 10-digit NANP area address. Central office codes are in the form "NXX," where N is a number from 2 to 9 and X is a number from 0 to 9. Central office codes may also be referred to as "NXX codes." (47 C.F.R. § 52.7(c))

**CO Code Administrator:** Entity(ies) responsible for the administration of the NXXs within an NPA. In the United States and its territories, this is currently the NANPA. See also 47 CFR §52.15 and §52.7.

**Conservation:** Consideration given to the efficient and effective use of a finite numbering resource in order to minimize the cost and need to expand its availability in the introduction of new services, capabilities, and features.

**Dealer Numbering Pools:** Numbers allocated by a service provider to a retail dealer for use in the sale and establishment of service on behalf of that service provider. See the definition of "Intermediate Numbers" below (47 CFR §52.15 (f) (1) (v)).

**Emergency Service Query Key (ESQK) (VoIP):** The ESQK identifies an E911 call instance processed through a VoIP Positioning Center (VPC). An ESQK is associated with a particular PSAP or area within a PSAP. The ESQK is delivered to the PSAP as the calling number/ANI for the call, and is subsequently used by the PSAP to request ALI information for the call. The ALI database includes the ESQK in location requests sent to the VPC. The ESQK is used by the VPC as a key to look up the location object and other call information associated with an emergency call instance. The ESQK is a non-dialable North American Numbering Plan (NANP) number in the format of NPA-NXX-XXXX.

**Emergency Services Routing Digit (ESRD) and Emergency Services Routing Key (ESRK) (Wireless):** A 10-digit number used for the purpose of routing an E911 call to the appropriate Public Service Answering Point (PSAP) when that call is originating from wireless equipment. The Emergency Services Routing Digit (ESRD) identifies the cell site and sector of the call origination in a wireless call scenario. The Emergency Services Routing Key (ESRK) uniquely identifies the call in a given cell site/sector and correlates data that is provided to a PSAP by different paths, such as the voice path and the Automatic Location Identification (ALI) data path. Both the ESRD and ESRK

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<sup>15</sup> The Common Carrier Bureau is now the Wireline Competition Bureau.

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define a route to the proper PSAP. The ESRK alone, or the ESRD and/or Mobile Identification Number (MIN), is signaled to the PSAP where it can be used to retrieve from the ALI database, the mobile caller's call-back number, position and the emergency service agencies (e.g., police, fire, medical, etc.) associated with the caller's location. If a NANP TN is used as an ESRD or ESRK, this number cannot be assigned to a customer. See "Administrative Numbers" definition.

**Employee/Official Number:** A number assigned by a service provider for its own internal business purposes. See "Administrative Numbers" definition.

**Exchange or Exchange Area:** A geographic area tariffed by a state utilities commission and served by an incumbent Local Exchange Carrier (LEC). A LEC's franchise territory is comprised of multiple Exchanges and the Basic Local Calling Areas are defined by Exchanges. The Exchanges are generally in the state General Subscriber Services Tariff, Section A3.

The term "Exchange" denotes a geographic area generally smaller than a Local Access Transport Area (LATA) and usually embraces a city, town or village and its environs. Subscribers in a given Exchange area may be served by one or more central offices together with the associated facilities or subscribers in an Exchange area may be served by a central office located in an adjacent Exchange area. (A LATA is usually comprised of multiple Exchanges.)

**FCC Registration Number (FRN):** A ten-digit number assigned by the Federal Communications Commission (FCC) to an entity that does business with the FCC. 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. The FRN is the same number used by entities on FCC Form 499-A and FCC Form 502 (NRUF Report). More information about FRNs can be obtained by calling the FRN Help Line (877-480-3201) or from the following website: <https://apps.fcc.gov/coresWeb/publicHome.do>.

**(Industry) Inventory Pool:** Used in thousands-block number pooling to describe a reservoir of unassigned thousands-blocks administered by the PA for purposes of assignment to SPs participating in thousands-block number pooling.

**Initial Code:** The first geographic NXX code assigned to a Service Provider for each rate center in which it provides service.

**Interconnected Voice over Internet Protocol (VoIP) Service Provider:** An entity that provides interconnected VoIP service, as that term is defined in 47 U.S.C. § 153(25) (47 CFR § 52.5 (b)).

Interconnected VoIP providers are providers of a service that (1) enables real-time, two way voice communications, (2) requires a broadband connection from the user's location, (3) requires Internet protocol-compatible customer premises equipment, and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network (47 CFR § 9.3).

**Intermediate Numbers:** Intermediate numbers are numbers that are made available for use by another telecommunications carrier or non-carrier entity for the purpose of providing telecommunications service to an end user or customer. Numbers ported for the purpose of transferring an established customer's service to another service provider shall not be classified as intermediate numbers (47 CFR §52.15 (f)(1)(v)). Numbers such as dealer number pools should be included as a subcategory of intermediate numbers (FCC 00-104 ¶ 36). An "intermediate" number is one that is made available to a carrier or non-carrier entity from another carrier, but has not necessarily been assigned to an end-user or customer by the receiving carrier or non-carrier entity (FCC 15-70 ¶30). Numbers provided to carriers, interconnected VoIP providers, or other non-carrier entities by numbering partners should be reported [on FCC Form 502, the NRUF Report] as "intermediate," and do not qualify as "end users" or "customers" (FCC 15-70, ¶32).

**Inventory:** The term "inventory" refers to all telephone numbers distributed, assigned, or allocated:

(1) To a service provider, or

(2) To a Pooling Administrator for the purpose of establishing or maintaining a thousands-block number pool (47 CFR §52.7 (j)).

**Location Routing Number (LRN):** The ten-digit (NPA-NXX-XXXX) number assigned to a switch/POI used for routing in a permanent local number portability environment. See "Administrative Numbers" definition.

**NANP (North American Numbering Plan):** A numbering architecture in which every station in the NANP area is identified by a unique ten-digit address consisting of a three-digit NPA code, a three digit central office code of the

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form NXX, and a four-digit line number of the form XXXX, where N represents the digits 2-9 and X represents the digits 0-9.

It is the basic numbering scheme for the telecommunications networks located in Anguilla, Antigua, Bahamas, Barbados, Bermuda, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, Sint Maarten, St. Kitts & Nevis, St. Lucia, St. Vincent, Turks & Caicos Islands, Trinidad & Tobago, and the United States (including American Samoa, Puerto Rico, the U.S. Virgin Islands, Guam, and the Commonwealth of the Northern Mariana Islands) [see also 47 CFR §52.5 (d)].

**NANPA (North American Numbering Plan Administration):** The NANPA is responsible for the neutral administration of NANP numbering resources, subject to directives from regulatory authorities in the NANP member countries (see also 47 CFR §52.7 (e)). The NANPA is an impartial non-governmental entity that is not aligned with any particular telecommunications industry segment.<sup>16</sup> Under contract to the FCC, NANPA's responsibilities include assignment of NANP resources, and, in the U.S. and its territories, coordination of area code relief planning and collection of utilization and forecast data. See also 47 CFR §52.13.

**NPA:** Numbering Plan Area (NPA), also called area code. An NPA is the 3-digit code that occupies the A, B, and C positions in the 10-digit North American Numbering Plan (NANP) format that applies throughout the NANP area. NPAs are of the form NXX, where N represents the digits 2-9 and X represents any digit 0-9. In the NANP, NPAs are classified as either geographic or non-geographic.

- a) Geographic NPAs are NPAs which correspond to discrete geographic areas within the NANP area.
- b) Non-geographic NPAs are NPAs that do not correspond to discrete geographic areas, but which are instead assigned for services with attributes, functionalities, or requirements that transcend specific geographic boundaries. The common examples are NPAs in the N00 format, e.g., 800.

**Numbers Retained per the Servicemembers Civil Relief Act:** Numbers related to contracts terminated as provided by the Servicemembers Civil Relief Act (as amended by the Veterans Benefit Act of 2010), which service providers have retained for re-subscription by the servicemember. These numbers shall be categorized as Assigned numbers. See also NRUF Guidelines.

See Title III, Section 302 of the Veterans Benefit Act of 2010 for further information: < <http://www.govtrack.us/congress/billtext.xpd?bill=h111-3219> >.

**Numbers Used for Intermittent Purposes:** Numbers used for intermittent purposes are numbers designated for use by a particular customer that may be "working" in the Public Switched Telephone Network (PSTN) periodically, but that remain designated for the customer's use even if they are not "working."

Numbers used for intermittent or cyclical purposes should not be categorized as reserved numbers for NRUF reporting purposes.

Numbers contained in blocks assigned for use in Centrex or PBX systems may be categorized as assigned numbers by reporting carriers, to the extent that fifty percent (50%) or more of such numbers are "working" at all times. Also, numbers "working" periodically for regular intervals of time, such as numbers assigned to summer homes or student residences, may be categorized as assigned numbers, to the extent that they are "working" for a minimum of 90 days during each calendar year in which they are assigned to a particular customer (FCC 01-362, ¶ 122). See also NRUF Guidelines.

**OCN (Operating Company Number):** An Operating Company Number (OCN) is a four place alphanumeric code that uniquely identifies providers of local telecommunications service. OCN assignments are required of all SPs in their submission of utilization and forecast data (FCC 00-104, ¶ 41 and Public Notice DA 00-1549). Relative to CO Code assignments, NECA assigned Company Codes may be used as OCNs. Companies with no prior CO Code or Company Code assignments contact NECA ([www.neca.org](http://www.neca.org); 800-228-8597) to be assigned a Company Code(s). Since multiple OCNs and/or Company Codes may be associated with a given company, companies with prior assignments should direct questions regarding appropriate OCN usage to the iconectiv® Telecom Routing Administration (TRA) ([www.trainfo.com](http://www.trainfo.com); 866-672-6997).

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<sup>16</sup> Administration of the North American Numbering Plan, Report and Order, CC Docket No. 92-237, 11 FCC Rcd 2588, 2608 (1995) (NANP Order).

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**Pooling Administrator (PA):** The term Pooling Administrator refers to the entity or entities responsible for administering a thousands-block number pool (47 CFR §52.7 (g)). The Pooling Administrator is responsible for the neutral administration of thousands-blocks from Central Office (CO) Codes in areas where thousands-block number pooling has been ordered or implemented. The PA is an impartial non-governmental entity that is not aligned with any particular telecommunications industry segment and is under contract to the FCC.

**Pseudo-Automatic Number Identification (p-ANI):** A 10-digit number used for the purpose of routing an E911 call to the appropriate Public Service Answering Point (PSAP). P-ANIs include but are not limited to: ESRD, ESRK, and ESQK numbers. If a NANP TN is used as a p-ANI, this number cannot be assigned to a customer. See “Administrative Numbers” definition.

**Public Switched Telephone Network (PSTN):** The PSTN is composed of all transmission and switching facilities and signal processors supplied and operated by all telecommunications common carriers for use by the public. Every station on the PSTN is capable of being accessed from every other station on the PSTN via the use of NANP E.164 numbers.

**Rate Area:** Denotes the smallest geographic area used to distinguish rate boundaries.

**Rate Center:** Rate Center is used for numbering resource applications and reports to associate telephone numbers with a geographic area, as defined by the relevant regulatory agency. A Rate Center is also a uniquely defined point (Vertical & Horizontal Coordinates) located within an exchange area from which mileage measurements are determined. Those measurements can be used with the tariffs in the message rating processes.

**Reporting Carrier:** Refers to a telecommunications carrier that receives numbering resources from the NANPA, a Pooling Administrator or another telecommunications carrier (47 CFR §52.15 (f)(2)).

**Reseller:** An SP which purchases facilities and/or services from another SP for resale. Also, see “Intermediate Numbers” above.

**Reserved Numbers:** Reserved numbers are numbers that are held by service providers at the request of specific end users or customers for their future use. Numbers held for specific end users or customers for more than 180 days shall not be classified as reserved numbers. (47 CFR § 52.15 (f) (1) (vi)).

**Service Provider (SP):** A telecommunications carrier or other entity that receives numbering resources from the NANPA, a Pooling Administrator, or a telecommunications carrier for the purpose of providing or establishing telecommunications service. For the purposes of this part, the term “service provider” includes an interconnected VoIP service provider (47 CFR §52.5 (e)).

**Soft Dial Tone Numbers:** Numbers that permit restricted dialing, such as calling emergency services, and sometimes receive incoming calls (FCC 00-104 ¶33). See “Administrative Numbers” definition.

**Switching Entity:** An electromechanical, electronic, or digital system for connecting lines to lines, lines to trunks, or trunks to trunks for the purpose of originating/terminating PSTN calls. A single switching system may handle several Central Office (CO) codes.

**Temporary Local Directory Number (TLDN):** A number dynamically assigned on a per call basis by the serving wireless service provider to a roaming subscriber for the purpose of incoming call setup. See “Administrative Numbers” definition.

**Test Number:** A TN assigned for inter- and intra-network testing purposes. See “Administrative Numbers” definition.

**Thousands-block:** A range of one thousand TNs within an NPA-NXX beginning with X000 and ending with X999, where X is a value from 0 to 9.

**Thousands-block (NXX-X) Number Pooling:** Thousands-block number pooling is a process by which the 10,000 numbers in a central office code (NXX) are separated into ten sequential blocks of 1,000 numbers each (thousands-blocks), and allocated separately within a rate center (47 CFR §52.20 (a)).

**Type 1 Interconnection Service Provider:** A wireless SP that utilizes Type 1 (trunk side with line treatment) interconnection with another SP’s end office switch.

## 8.2 Acronyms & Abbreviations

ATIS	Alliance for Telecommunications Industry Solutions
BIRRDSD	Business Integrated Routing and Rating Database System
CO	Central Office Code (NPA-NXX)
ESQK	Emergency Service Query Key
ESRD	Emergency Services Routing Digit
ESRK	Emergency Services Routing Key
FCC	Federal Communications Commission
FRN	FCC Registration Number
LATA	Local Access Transport Area
LEC	Local Exchange Carrier
NANC	North American Numbering Council
NANP	North American Numbering Plan
NANPA	North American Numbering Plan Administration
NAS	NANP Administration System
NPA	Number Plan Area
NPAC	Number Portability Administration Center
NRUF	North American Numbering Plan Numbering Resource Utilization/Forecast Report
OCN	Operating Company Number
p-ANI	Pseudo-Automatic Number Identification
PA	Pooling Administrator
POI	Point of Interconnection
PSAP	Public Safety Answering Point
PSTN	Public Switched Telephone Network
SP	Service Provider
TBCOCAG	Thousands-Block (NPA-NXX-X) & Central Office Code (NPA-NXX) Administration Guidelines
TLDN	Temporary Local Directory Numbers
TN	Telephone Number
VoIP	Voice over Internet Protocol
VPC	VoIP Positioning Center