



Pooling 101

Developed by NeuStar Pooling Administration

Updated June 15, 2009



The objective of this presentation is to familiarize you with the Thousands-Block Pooling Administration process. It is not a step-by-step training session. It is an overview of pooling administration intended to help you understand the basics.

At the end of this presentation you should:

- Be familiar with pooling terminology;
- Be familiar with where to find pooling administration rules, guidelines, user materials, and web site links; and
- Be familiar with basic pooling administration procedures.

The national Pooling Administrator (PA) is a neutral third party that was selected by the FCC in a competitive bidding process to create and administer the FCC's number conservation initiative via thousand block number "pools" that serve each affected rate center.

NeuStar has been handling pooling administration since the first pooling trial in 1998.

Other divisions within NeuStar that an SP needs to be familiar with, both governed by separate contracts, are:

- NANPA – North American Numbering Plan Administrator, and
- NPAC – Number Portability Administration Center.

What is Thousands Block Pooling?



- Thousands-block number pooling involves breaking up the 10,000 numbers in an NXX into ten sequential blocks of 1,000 numbers each, and potentially allocating each thousands-block to a different service provider, and possibly a different switch, within the same rate center.

Cool fact: We estimate that **41,063** NXXs have been saved as a result of pooling. That equates to approximately **50** NPAs.



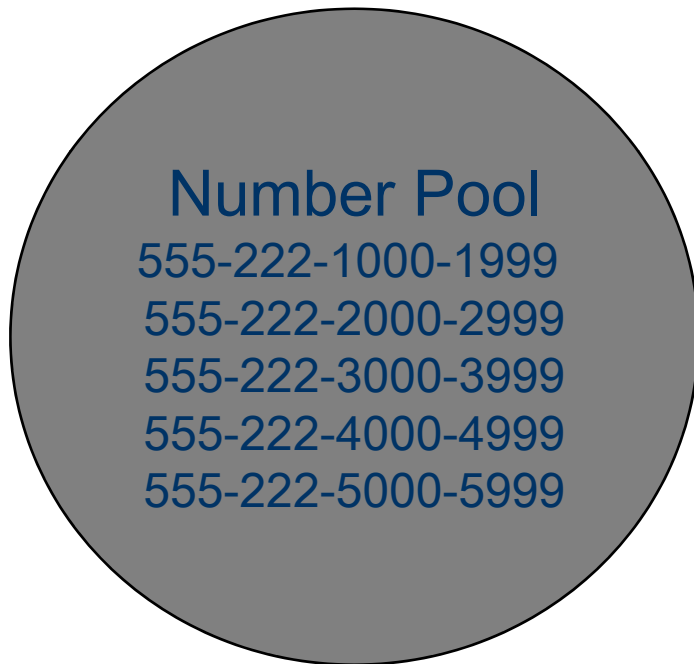
- Local Number Portability (LNP) allows a number, or block of numbers, to be moved from one carrier to another within the same rate center.
- Number Pooling uses number portability to share a prefix (NPA-NXX) among different carriers
 - A prefix can be broken up into ten separate blocks of 1,000 numbers each, with each block potentially assigned to a different carrier/switch

- Conceptually, carriers must at least have the Location Routing Number (LRN) platform portion of Local Number Portability (LNP) deployed in their switches
- ✓ **Critical Concept:** one LRN per switch, per LATA
 - In a VoIP environment, this can technically be accomplished by the gateway provider (giving the VoIP provider the LNP capability)

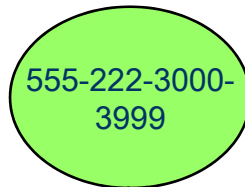
How Number Pooling Works



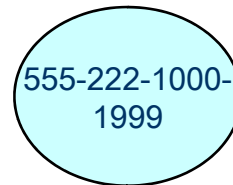
When service providers need additional numbers, they can send a request for blocks of one thousand numbers instead of requesting that a full prefix be opened.



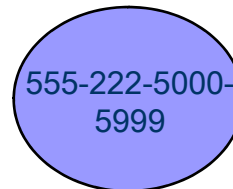
Service provider C



Service provider B



Service provider D



Thousands-Block Number Pooling:

- Decreases the need to use whole prefixes and promotes competitively neutral competition because blocks in the same prefix can be shared by different service providers in the same rate center
- Can provide greater number utilization
- Can make use of unused and slightly used (10% contaminated) prefixes
- Is not customer-affecting
- Used by itself or in conjunction with other measures, may extend the life of an area code

Participation in thousands-block pooling is required:

- By all SPs operating in the top 100 Metropolitan Statistical Areas (MSAs), unless exempted by the FCC;
- In all areas designated as mandatory by a state regulatory mandate as a result of delegated authority, unless exempted by the FCC.
 - ✓ There are no Top 100 MSAs, and therefore no mandatory pooling, in Alaska.

Key Concept 1: *Exemption from pooling is by carrier not by rate center and should not be confused with an “excluded” rate center.*

Key Concept 2: *In order to pool in an EXCLUDED (X) rate center you must contact the PA to change the status to OPTIONAL (O) so that the rate center is available for pooling .*

Key Concept 3: *Once you elect to voluntarily pool you may not change your mind and go back to not pooling.*

Pooling Designation Definitions



In the Rate Center Reports, the Pooling Status designation is defined as follows:

1. **Mandatory (M)** - This rate center is located in a top 100 MSA and service providers with numbering resources in this rate center that have not been granted a specific exemption must pool in this rate center.
2. **Mandatory State (M)** - Pooling was implemented in this rate center pursuant to a state commission order. This rate center is not in a top 100 MSA, but has one or more pooling-capable service providers, and is considered a mandatory pooling rate center.
3. **Mandatory Single Service Provider (M*)** - This rate center is located in a top 100 MSA, but has only one service provider that has numbering resources. This rate center will be considered optional under these conditions and designated as M*. When a second service provider receives numbering resources in this rate center, the designation will be changed to M for Mandatory.
4. **Mandatory State Single Service Provider (M*)** - Pooling has been implemented in this rate center pursuant to a state commission order. This rate center is not in a top 100 MSA and has only one service provider that has numbering resources. This rate center will be considered optional under these conditions and designated as M*. When a second service provider receives numbering resources in this rate center, the designation will be changed to M for Mandatory State.
5. **Optional (O)** - This rate center is not in a top 100 MSA and any service provider with numbering resources in this rate center may elect to pool at its option. Service providers may voluntarily participate in thousands-block number pooling in an Optional rate center outside the top 100 MSAs.
6. **Excluded (X)** - This rate center is not in a top 100 MSA and no service provider is currently participating in pooling. This rate center is not included in the Pooling Administration System.

- OCN – Operating Company Number – Carriers must have an OCN to be able to request resources. Required on user registration as well as on PA applications. Call NECA to obtain at 973-884-8249
- NPAC – Number Portability Administration Center - In order to pool, carriers must be LNP capable and have a user agreement with the NPAC. New customers should contact the NPAC at cc@neustar.biz or 571-434-5434

- AOCN – Administrative Operating Company Number - SPs need to have a AOCN or can be their own AOCN. An AOCN updates BIRRDs with block assignments, donations, etc. BIRRDs is a Telcordia product. Any time a donation is made, or a block is assigned, records should be updated in BIRRDs. Contact Telcordia for more information on how to update BIRRDs. A list of AOCNs can be found on the Telcordia website at http://www.trainfo.com/products_services/tra/downloads/aocnlist.doc
- PAS- Pooling Administration System – SPs must register in PAS to be able to forecast, donate, and request blocks and pooling codes. Access to PAS is located at www.nationalpooling.com

BEFORE YOU POOL - LEARN THE RULES OF THE ROAD

- ✓ It is **ESSENTIAL** that you download and become familiar with the guidelines and user guides
- ✓ The following documents are available for free and can be downloaded from <http://www.atis.org/inc/incguides.asp>. under the Industry Numbering Committee (INC) link and then under documents.
 - TBPAG (Thousands-Block Pooling Administration Guidelines)
 - COCAG (Central Office Code Administration Guidelines)
 - LRN Assignment Practices
- ✓ The following helpful documents can be downloaded from www.nationalpooling.com under **Documents**.
 - SP User Guide for PAS
 - New service provider checklist
 - Pooling FAQs

- Establish OCN
- Set up in NPAC
- Register in PAS
- Register in NAS
- Read TBPAG
- Read COCAG
- Read LRN guidelines
- Read SP USER guide for PAS
- Establish AOCN



- ✓ **Helpful hint** – print out the guidelines and user guide and mark pages to be able to refer to sections that you may use frequently.

What is a forecast and what does the PA do with it?



- A Pooling Forecast is required by the TBPAG in mandatory rate centers and rate centers where the carrier has chosen to pool in an optional rate center. A forecast tells the PA how many blocks (and LRNs) you anticipate needing in the next 12 months. This allows the PA to keep enough blocks in the pool to meet the forecasted demand by SPs for the next 6 months and to complete our NRUF for the NANPA.
- The Pooling Forecast should not be confused with the NRUF 502 form filed with NANPA.
- To complete a forecast through the PAS, an SP must know how many blocks it anticipates requesting in a rate center within the next 12 months.
- An SP can modify its forecast at any time if it changes, however if an SP increases its forecast and there are not enough blocks available at that time, it may have to wait until that pool is replenished to receive resources.
- Be careful to forecast in blocks and not individual TNs (1 block = 1000 TNs)

- **TBPAG Section 6.1.3** A separate Thousands-Block Forecast Report (Appendix 1) will be required to establish an industry inventory pool. At the pool implementation meeting, the PA will notify all SPs participating in the thousands-block number pooling area of the request and provide a reasonable length of time or SP responses (i.e., one month or more).
- **TBPAG Section 6.1.4** If an SP submits a Thousand Block Application Form Part 1A for additional thousands-blocks greater than that which had been previously forecasted, the SP could be temporarily restricted to their original forecasted amount to allow the PA sufficient time to replenish the industry inventory pool, when necessary, before the SP's application can be fulfilled. If satisfying these particular requests would result in a critical industry inventory insufficiency (see Section 10.2) in the industry inventory pool for a rate center, the PA may not be able to meet the entire request.

More Forecasting ~

- It is a requirement that an SP submit a semi-annual forecast to the PA through the PAS. **THIS IS NOT THE SAME AS THE NRUF YOU FILE WITH NANPA.** Due dates for the forecasts are *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
- NRUF is due to NANPA during this same time period. More information on submitting a NRUF can be located on the www.nanpa.com website

What is a donation?

Simply put, a donation is a thousand-block that you donate to the rate center pool from your NXX.



A pooling service provider may maintain only a 6-month inventory. Therefore, all blocks that exceed the 6-month inventory must be donated to the pool. This action is completed through the PAS.

- ✓ **Blocks that you donate to the pool must be 10% or less contaminated.**
 - ★ **Contamination** means that at least one telephone number within a thousands-block is not available for assignment to end users or customers. Blocks contaminated up to and including 10 percent are eligible for donation. A telephone number is “not available for assignment” if it is classified as administrative, aging, assigned, intermediate, or reserved as defined in FCC rules (FCC 00-104, §52.7 (h)).

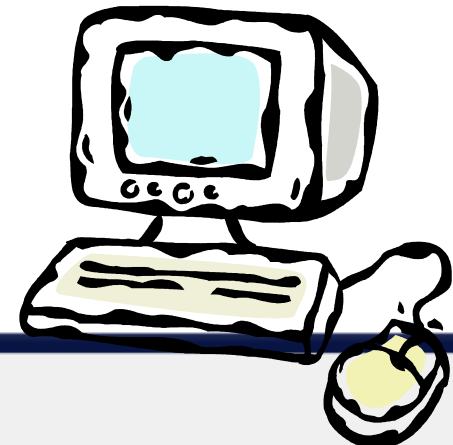
- All contaminated numbers in blocks that are being donated must be ***Intra-Service Provider Ported*** in NPAC prior to the block being donated.
- Prior to donating a block, an NXX must be marked as portable in BIRRDs and NPAC.
- It is recommended that one block be kept when donating blocks in an NXX.
- After the PA has processed the donation, coordinate with your AOCN to mark blocks not being donated as retained blocks in the LERG.
- Donating contaminated blocks is transparent to your customers and does not require a telephone number change.

Intra-Service Provider Porting in NPAC



- A service provider can keep TNs that are assigned to active end users within a block that is to be donated by completing an **Intra-Service Provider Port (LISP)** in the NPAC.
- This action is similar to a normal competitive port; however the old service provider does not have to release the TN to complete the port (since the old service provider = new service provider).
- Essentially you are porting a number from **yourself to yourself** using the same LRN and DPC values associated with the pooled block.
- Completing an Intra-Service Provider Port assures that the number stays in the service provider's network and does not move with the donated block.
- Performing this action assures that the active end users do not have to get their numbers changed and experience no interruption of service.
- The Intra-Service Provider Port must be accomplished **prior** to pooled block donation.
- The NPAC Help Desk (888-672-2435) can be contacted for more information or assistance with Intra-Service Provider Ports.
 - Note: you will need to provide a valid SPID and PIN to access the NPAC HD. A charge may result from contacting the NPAC Help Desk depending on the classification of the call as a billable event
- For those new to NPAC, you can get started by going to <https://ncc.neustar.biz/ccs/> or by calling 571-434-5434 or emailing cc@neustar.biz.

- Requesting thousands blocks is done through the Pooling Administration System (PAS).
- There are industry forms that must be filled out to receive resources: (Part 1A, Part 1B, Months-to-Exhaust (MTE) (if growth).
- For initial requests, certification and documentation of facilities readiness must be submitted with your application.



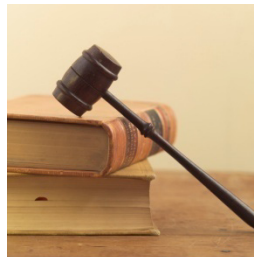
- At times when blocks are not available, a carrier may be requested to open up a full NXX for pool replenishment. This is also done through the PAS.
- In addition to pool replenishment, there are two other times a full CO Code may be opened: for a dedicated customer, or for a new LRN.

Helpful hint: If you are looking for what specific blocks are available, you can locate the blocks available report under the reports section of the pooling website.

- ✓ **Key Concept:** in mandatory pooling rate centers even requests for NXXs come through the PA.

- Once you have submitted your application, the PA will provide you with a response on a Part 3 form within 7 calendar days.
- Possible responses are: approved, denied, suspended or withdrawn.
- Please review Part 3s carefully for the disposition of your request, including the effective date of the block or important information such as suspension reason or a denial reason.

- There may be a time when an SP does not meet either the MTE or utilization on the MTE form. There is a process called a **SAFETY VALVE** in which an SP can appeal to the appropriate state commission to approve the requested resources that were denied by the PA according to FCC rules.
- An SP must show the commission proof of the denial from the PA along with their appeal. Each state has its own requirements for documentation so be sure to check with the commission.
- A state commission may direct the Pooling Administrator to assign additional numbering resources to the carrier



- An SP has a requirement to put the block or code it received into service within 6 months of the original Part 3 effective date.
- An SP has to submit a Part 4 to the PA indicating that the block is in service when it first assigns numbers out of the block.
- If the PA does not receive a Part 4 within the 6-month timeframe, the PA initiates the reclamation process.
- The PA informs the state commission or FCC about the delinquent Part 4. The commission will then advise the PA to either reclaim the block or code, or that it has received the Part 4.
- The commission may extend the period for the SP to file the Part 4. It is the responsibility of the SP to request an extension from the appropriate regulatory authority.

www.nationalpooling.com

- The nationalpooling.com website is the gateway to enter the PAS.
 - The website also contains block information such as blocks available, blocks assigned, user guides, rate center information, and other valuable information that is public information related to number pooling.
 - All pooling participants are encouraged to become familiar with the pooling website.
- ✓ **Key Concept:** use the pooling website to gain access to the Pooling Administration System (PAS)

- **Reports**

- **Annual Report** (Current)
This report is the Pooling Administrator's Annual Report that was submitted to the FCC for the prior year's performance. This report includes all contractual requirements such as the highlights and significant milestones for that year, as well as other performance reports.
- **Block Report** This report displays a list of blocks that are available, assigned or retained by State, NPA and Rate Center. On the Blocks Available Report blocks in **RED** are pending verification of activation in PSTN. Blocks in **BLACK** are conditional block donations and **ARE NOT** available for assignment.
- **Block Report by Region**
The Block Report described above may be downloaded by region or for all regions.
- **FCC** Reports required by the contract.
- **NPA / Rate Center Reports** This report contains a list of rate centers by NPA. The list includes the rate center's pooling status and if applicable the FCC top 100 MSA Name.
- **NXX Saved Report** A list of NXXs saved as a result of pooling.
- **Pool Tracking Report** A report selected by State and NPA showing forecast and usage information for each rate center within the requested NPA.
- **Rate Center File Changes** A list of files showing when the pooling status designation changes on specific rate centers. This report shows the date the status change was made and became effective.
- **Timeline Report** A list of Pooling Implementation events and dates for each State and NPA.

- **Tools**

- **Archive** Provides historical information relating to pooling.
- **FAQs** Help is on the way! Look here for answers to commonly asked questions.
- **Glossary** The Glossary is an informational list of commonly used acronyms, and definitions that have been gathered from multiple sources including the FCC, ATIS, NANPA, NPAC and industry forums.
- **New Service Provider Checklist** The New Service Provider Checklist is a tool provided to new Service Providers that has helpful tips and pointers to assist SPs in navigating the many steps necessary in getting started with requesting block and full NXX assignments in pooled NPAs.
- **PA Tip of the Month** The Tip of the Month provides helpful information for carriers regarding the pooling process and serves as a useful reference on processes for regulators.
- **PAS Suggestions** Provides users with information on submitting suggestions for possible enhancements to the Pooling Administration System (PAS).
- **Problem Resolution Process** The PA Problem Resolution Process outlines the steps to be taken to resolve problems involving Pooling Administration, using our supervisory escalation process. It also provides instructions for filing a formal complaint.
- **Q/A from new PAS overview sessions**
This document contains a list of questions and answers that were discussed during the Service Provider/Service Provider Consultant overview sessions of the enhanced PAS held during the week of January 21st.
- **State Safety Valve Process Quick Sheet** A matrix of safety valve process information by state.

- Documents

- [Change Orders](#) FCC approved change orders.
- [Federal](#)
A list of orders and OMB Bulletins issued by the FCC.
- [Forecasts](#)
Provides information on how to submit Forecasts via Excel and the required format.
- [SFTP Registration](#)
Registration form for the Pooling Administration System Users on File Secure Transfer Protocol (SFTP).
- [Meetings and Minutes and other NPA related information](#)
It contains First Implementation Meeting (FIM) materials, Supplemental Implementation Meeting (SIM) materials, other meeting materials and minutes, PA Assessments, archived reports by NPA.
- [Optional Pooling Notice](#) (PDF)
Provides general information on what is required for optional pooling.
- [PAS Regulatory User Guide for Registration](#) (PDF)
Provides information for the Regulatory Users on the registration process for the Pooling Administration System.
- [PAS Regulatory User Guide](#) (PDF)
Provides information for the Regulatory Users on the Pooling Administration System.
- [PAS Service Provider and Service Provider Consultant User Guide for Registration](#) (PDF)
Provides information for the Service Provider and Service Provider Consultant Users on the registration process for the Pooling Administration System.
- [PAS Service Provider and Service Provider Consultant User Guide](#) (PDF)
Provides information for the Service Provider and Service Provider Consultant Users on the Pooling Administration System.
- [Pooling Related Documents](#)
Provides general information pertaining to pooling.

- **Reclamation**

- [Part 4 Contacts](#) Provides a list of FCC or State Commission contacts regarding any Part 4 related issues, such as submitting overdue Part 4's, reclamation questions or requesting extensions.
- [Reclamation Procedures](#) Describes the thousands-block reclamation procedures that are followed by the Pooling Administrator each month.

- **Contacts**

- Pooling Administration Contacts
 - [NeuStar Number Pool Organizational Directory](#) (HTML)
 - [Pooling Administrators State Assignments](#) (Excel)
- [NeuStar Number Pool Organizational Directory](#) (HTML)
- [Pooling Administrators State Assignments](#) (Excel)
- [Reclamation Contacts](#) (Excel)
- [State PUC Numbering Contacts](#) (Excel)
- [State Safety Valve Process Quick Sheet](#)

- **PAS Login**

- [PAS Login](#) Click here to gain access to the Pooling Administration System (PAS) login page.
- [PAS Request User ID and Password](#) Click here to register as a new user in the Pooling Administration System (PAS).

- Requires a **User ID** and **Password** to enter
- You will need to access PAS to input your forecasts, submit applications and submit Part 4 information.
- There are also numerous reports available through PAS that are not available through the public portion of the website.

How do you contact Pooling personnel?



- Pooling Help Desk 1-866-Neu-pool or poolingsupport@neustar.biz. Available between 5:00 am PT and 5:00 pm PT
- www.nationalpooling.com. Look under *contacts* for the Pooling Administrator who handles your state



Pooling Administrator Assignments effective 3/5/09



Kevin	Dara	Dora	Diane	Genevieve	Agnes
CA	FL	AL	CO	AR	AZ
ME	NY	AK	IA	GA	DC
WA	WV	CT	ID	HI	DE
TX		MA	LA	KS	IL
		NC	MI	KY	IN
		NH	NE	MN	MD
		RI	NJ	MO	MS
		SC	NM	MT	ND
		VA	NV	OK	PA
		VT	OH	PR	
			OR	SD	
			UT	TN	
				WI	
				WY	

Link to websites

PA: <http://www.nationalpooling.com>

Guidelines: <http://www.atis.org/inc/incguides.asp>.

NANPA: <http://www.nanpa.com>

NANC: <http://www.nanc-chair.org>

FCC: <http://www.fcc.gov>

FCC Rules (CFR Title 47 Part 52, Numbering):

http://www.access.gpo.gov/nara/cfr/waisidx_06/47cfr52_06.html

NPAC: <http://www.npac.com>

Everyone, start pooling!

QUESTIONS ?

Feel free to contact today's presenters:

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