



Pooling 101

Presented by NeuStar Pooling Administration

January 2008



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.
- ✓ Critical Idea: same rate center, same NPA-NXX – different service providers



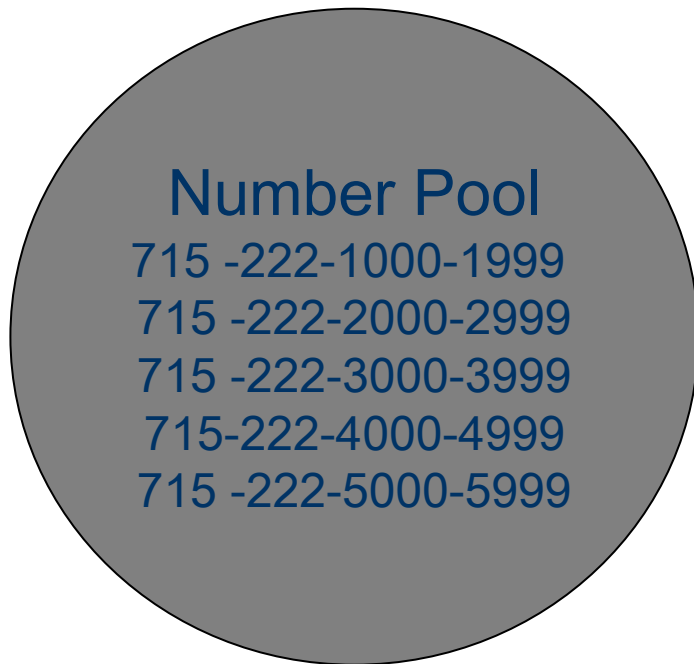
- Local Number Portability (LNP) allows a number, or block of numbers, to be moved from one carrier to another within the same rate center.
- Number Pooling uses number portability to share a prefix (NPA-NXX) among different carriers
 - A prefix can be broken up into ten separate blocks of 1,000 numbers 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 Idea: one LRN per switch, per LATA
 - However, in a VoIP environment, this can technically be accomplished by the gateway provider (giving the VoIP provider the LNP capability)

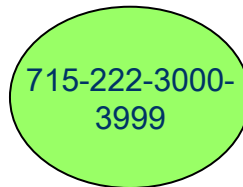
How Number Pooling Works



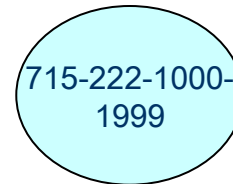
When service providers need additional numbers, they can send a request for blocks of one thousand numbers instead of requesting that a full prefix be opened.



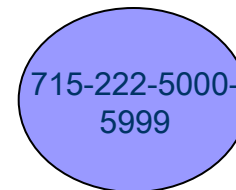
Service provider C



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.
- ✓ Carriers should become familiar with FCC rules for exemption status

***Rate centers designations are located on the pooling website
Constantly in flux, change daily, changes posted monthly.***

Pooling status designations are:

- *Mandatory (M)*
- *State trial mandatory (M)*
- *Single service provider (M*)*
- *State Single Service provider (M*)*
- *Optional (O)*
- *Excluded (X)*

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

LEARN THE RULES OF THE ROAD

- ✓ It is **ESSENTIAL** that you download and become familiar with the guidelines and user guides
- TBPAG (Thousands-Block Pooling Administration Guidelines)
- COCAG (Central Office Code Administration Guidelines)
- LRN Assignment Practices
- ✓ All of these documents are available for free and can be downloaded from www.atis.org/inc/docs.asp under the Industry Numbering Committee (INC) link and then under documents.
- SP User Guide for PAS
- 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 idea** – 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?

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

An SP may maintain only a 6-month inventory. Therefore, all blocks greater than 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 either numbers are assigned in that block to your customers or they are not available for assignment. Donations may be made only with blocks that are 10% (100 telephone numbers) contaminated or less.



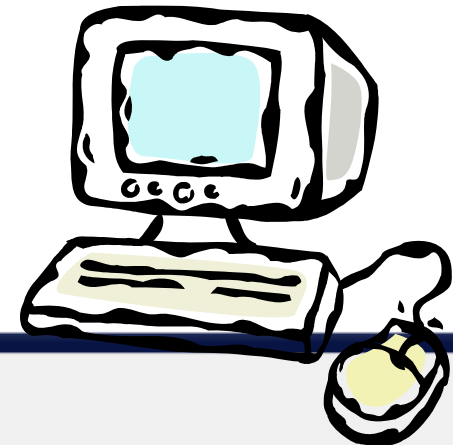
- All contaminated numbers in blocks that are being donated must be Intra-Service Provider Ported in NPAC prior to the block being donated.
- Prior to donating a block, an NXX must be marked as portable in BIRRDs and NPAC.
- It is recommended that one block be kept when donating blocks in an NXX.
- After 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
- For those new to NPAC, you can get started by going to <http://www.npac.com.bdev.neustar.com/newcustomer/newcustomer.shtml> or by calling 571-434-5434 or emailing cc@neustar.biz.

- Requesting thousands blocks is done through the 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 idea:** 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.

- 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, or suspended.
- 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



- 11.2 Safety Valve Process
- SPs disputing the NANPA/PA's decision to withhold initial numbering resources upon a finding of noncompliance may appeal the NANPA/PA's decision to the appropriate state commission for resolution.
- The state commission may affirm, or may overturn, the NANPA/PA's decision to withhold numbering resources from the SP based on its determination that the SP has complied with the reporting and numbering resource application requirements.
- The state commission also may overturn the NANPA/PA's decision to withhold numbering resources from the SP based on its determination that the SP has demonstrated a verifiable need for numbering resources and has exhausted all other available remedies. [1]
- If a state does not reach a decision on a safety valve request within a reasonable timeframe, SPs may submit such requests to the FCC for resolution. In addition, SPs may appeal to the FCC safety valve decisions made by states.
- [1] FCC 01-362 §52.15 (g) (5)

- 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.

- The PA as directed by the appropriate state commission point of contact, or by the FCC point of contact, will reclaim resources in the inventory of pool participants from both embedded resources as well as thousands-blocks allocated to an SP by the PA.
- 9.2.2 The PA will contact any thousands-block assignee identified as not having returned to the administrator for reassignment any thousands-block(s) that were:
 - a) allocated, but no longer in use by the assignee(s);
 - b) allocated for a service no longer offered;
 - c) allocated, but not placed in service within six months of the original block effective date returned on the Part 3 and entered onto the BCR/BCD screen in BIRRDS;
 - d) allocated, but not used in conformance with these guidelines.
- 9.2.3 If the PA has not received a Part 4 during the first five months following the original block effective date returned on the Part 3 and entered onto the BCR/BCD screen in BIRRDS, then the PA will send, via facsimile/electronic mail, a reminder notice to the block assignee. The notice will direct the assignee to do one of the following by the end of the sixth month after the block effective date:
 - If the block is in service, submit a Part 4 to the PA.
 - If the block is no longer needed or not in service, return the block by submitting a Part 1A.
 - Or request an extension per Section 9.1.4.

The following is a schedule that will be followed by NeuStar as the National Pooling Administrator, as well as the state commissions and FCC, to complete the block reclamation process:

- The PA will track all Part 4 due dates, and send a letter to the service provider 30 days prior to the Part 4 due date.
- By the tenth calendar day of each month, the PA will email the list of delinquent Part 4s to either the state Commissions or the FCC.
- By the last business day of the month, the state commissions and the FCC will provide the PA with a status.
- By the fifth business day of the following month, the PA will:
 1. Disconnect the blocks in BIRRDs according to the State Commission and FCC direction.
 2. Send a letter to the block holder of the reclaimed block(s), notifying them of the block disconnect. The PA will track the date sent and file the letter.
 3. Send Thousands Block Reclamation Form Part 5 to the NPAC with sections A and B completed.
- The NPAC will complete section C of the Part 5 form and send it to the PA, LERG Assignee and the Block Holder to notify that the block has been removed from NPAC.
- 90 days after the disconnect of the block, the block will be available in the pool for assignment by the PA.

Supplemental Implementation Meeting (SIM)



If you are a code holder in an NPA where additional mandatory pooling has been order pursuant to delegated authority from the FCC, you will receive an email notice about a Supplemental Implementation Meeting (SIM).

The purpose of the SIM is to determine milestone dates to implement the additional mandatory thousands-block pooling according to the state regulatory mandate and industry guidelines.

Milestone dates that will be determined at the meeting are:

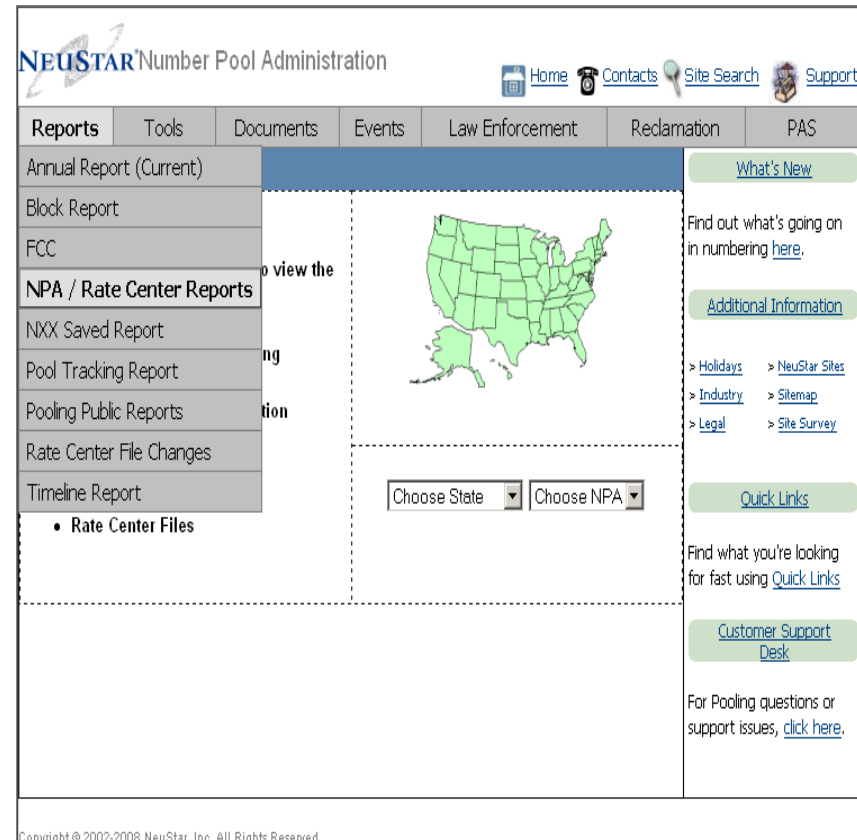
- Forecast Date
- Donation Date
- Block Donation Identification Date
- PA Assessment Date
- Block Donation Date
- Pool Start Date

You will find explanations of these dates in the SIM meetings materials.

Meeting documents are available two weeks prior to the meeting at www.nationalpooling.com

To access the documents, which include a presentation and rate center files:

- Select *Reports*
- Select *NPA/Rate Center Reports*
- Choose the *State and NPA*
- Select *Supplemental Implementation Meeting Materials*



The screenshot shows the NEUSTAR Number Pool Administration website. The header includes the NEUSTAR logo and navigation links for Home, Contacts, Site Search, and Support. A main navigation bar contains tabs for Reports, Tools, Documents, Events, Law Enforcement, Reclamation, and PAS. The Reports tab is active, displaying a list of report types: Annual Report (Current), Block Report, FCC, NPA / Rate Center Reports, NXX Saved Report, Pool Tracking Report, Pooling Public Reports, Rate Center File Changes, and Timeline Report. The NPA / Rate Center Reports section is expanded, showing a map of the United States and two dropdown menus labeled 'Choose State' and 'Choose NPA'. A 'Rate Center Files' link is visible below the map. On the right side, there are sections for 'What's New', 'Additional Information' (with links for Holidays, Industry, Legal, Neustar Sites, Sitemap, and Site Survey), 'Quick Links', and 'Customer Support Desk'.

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 related to number pooling.
- All pooling participants are encouraged to become familiar with the pooling 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 Administrators and the states they handle



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

Link to websites

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

Guidelines: <http://www.atis.org/inc.docs.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:

Shannon Sevigny
Regional Director –External Relations
shannon.sevigny@neustar.biz
509-465-4194

Linda Hymans
Regulatory/Compliance Manager
linda.hymans@neustar.biz
512-858-5357

Dara Sodano
Pooling Administration Manager
dara.sodano@neustar.biz
925-363-8730