



LNP CO Code Transfer Process

**(For the Number Portability Administration Center, North
American Numbering Plan Administrator, and Pooling
Administrator)**

September 11, 2001

Central Office Code (NXX) Transfer (*Background*)

Before the Telecommunications Act of 1996, competition between telecommunication carriers was minimal. Central Office codes commonly known as a **NXX** (NPA-NXX-XXXX) or a block of 10,000 numbers, were in plentiful supply and readily available to existing Local Exchange Carriers (LECs). Little thought was ever given to telephone number conservation. If a LEC inadvertently asked for more numbers than they needed, it was common practice to hold the numbers until some future date, when they might be used. It was not uncommon to see CO Codes assigned to a LEC, sit unused for years. During this period, it was rare to see a CO Code taken out of service or returned, so that the CO Code could be reassigned. In the rare case where a CO Code was taken out of service, or returned, it was a relatively simple matter to give the CO Code back and then reassign the code. If there were a few working customers in the CO Code, they were simply given a telephone number change to remove the customer from the CO Code being returned.

With the implementation of the Telecommunications Act of 1996, Local Number Portability (LNP) was introduced, and competition blossomed as numerous new Competitive Local Exchange Carriers (CLECs) entered the market. CLECs entering into business for the first time, required telephone numbers to serve customers in the markets they were entering as well as being able to port a customer away from a competitor. In addition to CLECs entering the market, Cellular service has seen dramatic growth and new products have been developed which are dependent on the availability of telephone numbers. All of this combined has required opening new CO Codes at an alarming rate.

As CO Codes continued to be opened, regulators and industry alike looked for ways to minimize the opening of new CO Codes and to maximize the use of existing numbers in CO Codes which have already been opened. One of the methods, which has been, and continues to be used successfully, is Number Pooling. Other methods have included Rate Center Consolidation (RCC), sequential numbering, and utilization percentages which companies are required to reach before new resources will be assigned (blocks or CO Codes).

In 1999, the FCC issued the first of several Number Resource Optimization (NRO) orders which ordered several optimization measures on a national scale and allowed states to apply for delegated authority to implement specific optimization methods by state. The combined result of all of the above orders (and optimization methods) has inalterably changed the telecommunications landscape, and the way telecommunications carriers manage their numbering resources.

One of the issues that telecommunications carriers currently have to consider is the forecasting, of how many numbers (or 1K blocks in pooling areas) that they can keep in their allowable six-month inventory. Various states are questioning telecommunications

carriers about the amount of numbers they are keeping in their six-month inventory, and are asking the carriers to voluntarily return resources.

Another issue telecommunications carriers have to deal with in the current economic climate, is whether or not, it is economically feasible to continue to provide service in certain geographic areas. In some cases, the telecommunications carrier is forced to go out of business or declare bankruptcy. In any of these cases, the telecommunications carrier may need to return CO Codes (or 1K Blocks) that they are shown as, the assigned CO Code holder for in the Local Exchange Routing Guide (LERG).

In a Non-LNP area, returning a CO Code to the North American Numbering Plan Administrator (NANPA) so it can be reassigned is relatively straight forward, and detailed procedures are available in the Industry Numbering Committee (INC) CO Code guidelines. Once the CO Code holder has removed any working customers from the CO Code, the rating and routing information in the LERG, can be removed and the CO Code returned to NANPA for reassignment.

In an area where LNP has been deployed, the procedure is not as simple for telecommunication carriers participating in LNP and/or Pooling, and can affect telecommunication carriers other than the telecommunication carrier returning the CO Code. For example:

Carrier (A) is returning a CO Code in Rate Center 1 where they no longer want to provide service. Carrier (A) has removed any remaining customers of theirs from the CO Code, but carrier (B), and carrier (C) both have ported customers away from carrier (A). In an area where LNP is deployed, once the CO Code is removed from the LERG, terminating calls will continue to be routed correctly via the Location Routing Number (LRN) when a query is done by a carrier routing the call. The problem comes when a query is not done and default routing is expected to take place via the LERG routing, which no longer would exist. This is overcome by simply changing the CO Code holder information in the LERG to carrier (B) or (C) based on current guidelines and practices (volunteer or who has the most ported numbers). Unfortunately, this still leaves problems in the NPAC Database where the Service Provider ID (SPID) is shown as carrier (A), and any ported number, which disconnects will be shown as belonging to carrier (A) for the “snapback”. This in essence will strand numerous numbering resources upon disconnect.

The above scenario is but only one issue, which can affect carriers participating in LNP, and the issues become even more critical for carriers that additionally are participating in pooling. Again, this can be fixed by changing the “SPID” in the NPAC to reflect the current CO Code holder.

In order to change the “SPID” in the NPAC database, currently all the numbers in the affected CO Code will need to be removed (disconnected) before the “SPID” can be changed to reflect the new CO Code holder (also called the “LERG assignee”). This method of changing the “SPID” is unacceptable to the majority (if not all) of the telecommunications carriers who have ported numbers in the affected CO Code. It does

require substantial coordination with the telecommunications carriers and requires all the affected telecommunications carriers to take their working customers out of service to make the change. The process of updating an entire SPID without disconnecting the numbers has been proposed for NANC Change Order 217, which was previously packaged in a rejected "Statement Of Work" (SOW) for NPAC Release 4.0. A substantial period of time may pass before an "SOW" containing that Change Order is agreed upon, priced, designed, tested, and ultimately implemented.

In the interim period, until such an "SOW" is implemented, Verizon has suggested (and many other carriers have concurred with) as well as have brought an issue to the LNPAWG, concerning an alternative method to accomplish the CO Code transfer.

The alternative method would port the CO Code to the new "LERG Assignee" using a port type of "pool". This would allow the numbers to snap back to the new "LERG Assignee" the same as if the "SPID" had been changed in the NPAC database without the ported numbers being taken out of service. The NPAC has additionally developed a "Tracking Database" to track the information on all CO Codes where this procedure will take place. This will facilitate updating the NPAC database once a SOW is developed and implemented, as well as provide in the interim, a source of information (should it be needed) for any CO Code where this is applied.

The attached documents provide a flow chart of the process (with notes and footnotes) that details the process from both the NANPA and PA perspective as well as the NPAC perspective. This process has been worked out with participation by the NANPA and the PA, and will work equally well from both entities with the addition of a new Part 1B form (attached), which will be provided for the NANPA's use. The PA will use their existing form.

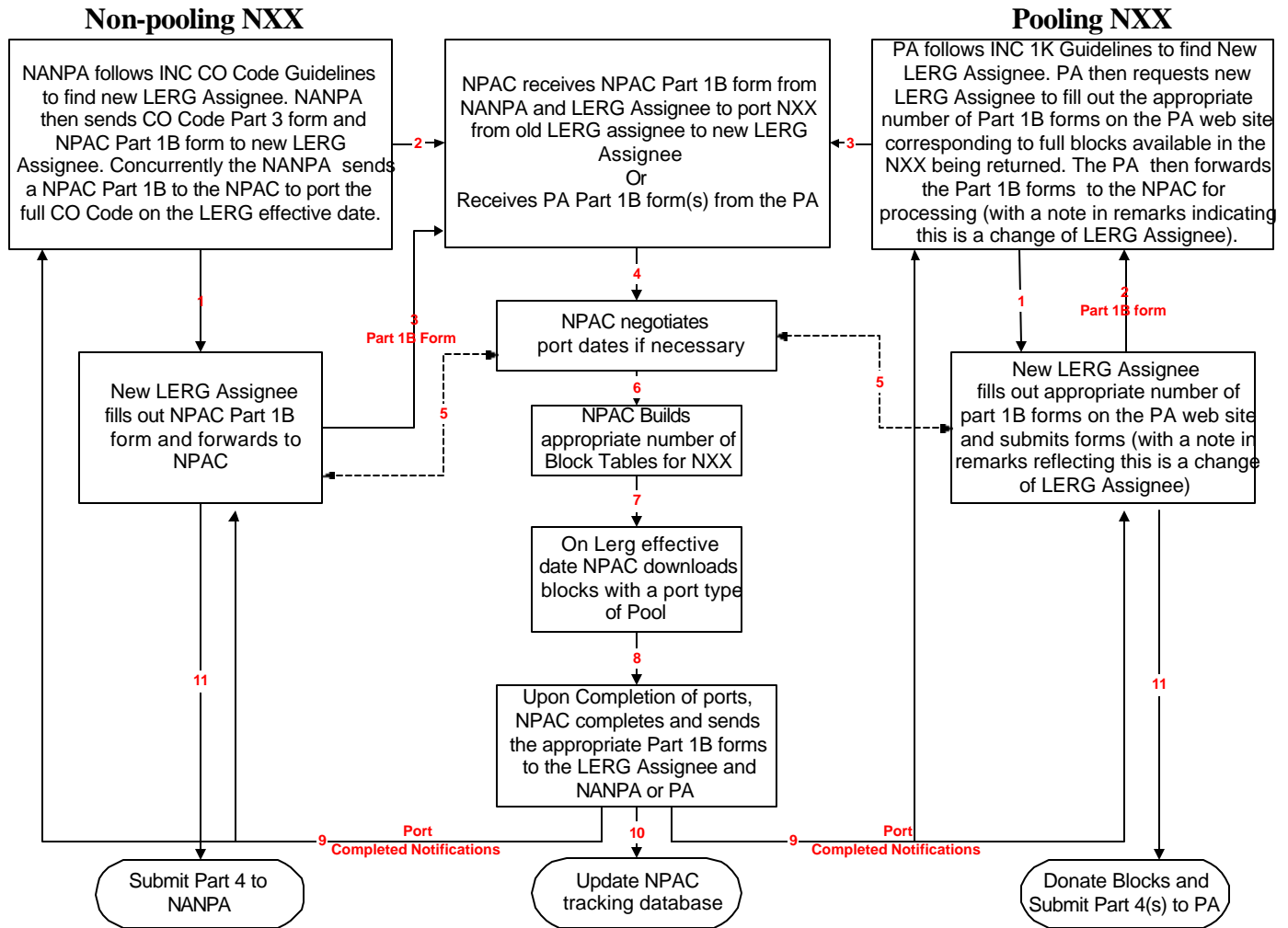
If the NAPM LLC concurs with, or does not object to the attached process, no additional cost will be incurred by carriers, for administration of the process by the NANPA, NPAC and PA. If the NAPM LLC were to request modifications to the attached process, the affected entities (NANPA, NPAC and PA) would need to evaluate the modification(s) to see if the modification(s) would add any additional cost to their processes.

If the NAPM LLC concurs with, or does not object to the attached process, the process will be used, with the concurrence of the carriers involved in a CO Code transfer, and the process will be made available to the appropriate industry forums (LNPAWG, INC, etc)

On August 29 2001, this CO Code Transfer Process was presented to the NAPM LLC. After the presentation, the NAPM LLC notified NeuStar, that it does not object to the process being used. NeuStar will immediately make the attached process available to those LERG Assignee carriers wishing to avail themselves of the process. For those LERG Assignee carriers who do not wish to avail themselves of this process, the current NPAC process will still be available.

In addition to making the process available to the industry, NeuStar will submit a contribution to the LNPWG and the INC at the next regularly scheduled meeting so that each organization may modify and/or codify this interim process in the appropriate guidelines, as each organization may deem necessary.

CO Code (NXX) Transfer (with active Ported Numbers)



1. **CO Code Administration and Pool Administration will follow normal procedures (appropriate INC Guidelines or existing procedures if not currently addressed in INC Guidelines) to find new LERG Assignee for CO codes being returned with portable numbers or blocks working in the NXX, which are being returned.**

2. **Non-pooling NXX Flow** *(Note: Last digit of paragraphs below correspond to numbers on flow chart)*
 - 2.1. CO Code Administrator fills out and sends CO Code Part 3 form and NPAC Part 1B form to new LERG Assignee.
 - 2.2. Concurrently CO Code Administrator sends a copy of the NPAC Part 1B form to the NPAC Administrator.
 - 2.3. New LERG Assignee fills out their information on the NPAC Part 1B form and forwards to the NPAC Administrator.
 - 2.4. NPAC Administrator verifies a corresponding NPAC Part 1B form has been received from the CO Code administrator and new LERG Assignee. Care is to be taken to ensure that the NPA-NXX and the effective date are the same on both forms. NPAC Administrator will verify that the NXX (10 blocks) can be ported on the day requested.
 - 2.5. If for some reason the NXX (10 blocks) cannot be ported on the effective date or the new LERG Assignee has requested a different date for the port in the remarks of the NPAC Part 1B form, the NPAC Administrator will contact the new LERG Assignee and negotiate a date after the LERG effective date to port the numbers (Note: this will not extend the length of time the new LERG Assignee has to return a Part 4 form to the CO Code administrator).
 - 2.6. NPAC builds 10 individual Block tables for the NXX being transferred to the new LERG Assignee.
 - 2.7. On LERG effective date (or date negotiated with the new LERG Assignee), NPAC downloads all 10 blocks with a port type of "Pool".
 - 2.8. Upon completion of the download, the NPAC administrator completes the NPAC Part 1B form.
 - 2.9. NPAC administrator forwards a completed copy of the NPAC Part 1B form to the new LERG Assignee and the CO Code Administrator.
 - 2.10. NPAC administrator shall then update the NPAC tracking database.
 - 2.10.1. The NPAC tracking database has been created to track changes of LERG assignee to carriers who are not the original SPID holder in the NPAC database. This will facilitate corrections to the NPAC database once a SOW (Statement Of Work) has been developed and implemented which will allow the SPID (Service Provider ID) to be changed in the NPAC database. Until such time as a SOW has been developed and implemented, this database will facilitate any need to track the current LERG assignee at the NPAC.
 - 2.11. New LERG Assignee completes internal work and submits a Part 4 form to the CO Code administrator showing the NXX has been placed in service.

3. Pooling NXX Flow (*Note: Last digit of paragraphs below correspond to numbers on flow chart*)

- 3.1. Pooling Administrator requests the new LERG Assignee to submit part 1B forms (the amount corresponding to blocks, which have not been assigned to another carrier) corresponding to the NXX to be ported.
- 3.2. New LERG Assignee fills out the appropriate Part 1B forms (with a note in remarks reflecting their company is the new LERG Assignee) and submits to the Pooling Administrator.
- 3.3. Pooling Administrator forwards the Part 1B forms (the amount corresponding to blocks, which have not been assigned to another carrier) to the NPAC Administrator, and returns Part 3 forms (in the amount corresponding to blocks, which have not been assigned to another carrier) to the new LERG Assignee.
- 3.4. NPAC Administrator will verify that the NXX (or the amount of blocks indicated on the PA Part 1B) can be ported on the day requested.
- 3.5. If for some reason the NXX (the number of blocks which have not been assigned to another carrier) cannot be ported on the effective date or the new LERG Assignee has requested a different date for the port in the remarks of the NPAC Part 1B form, the NPAC Administrator will contact the new LERG Assignee and negotiate a date after the LERG effective date to port the numbers (*Note: this will not extend the length of time the new LERG Assignee has to return the Part 4 forms to the Pooling administrator*).
- 3.6. NPAC builds individual Block tables (the amount corresponding to blocks, which have not been assigned to another carrier) for the NXX being transferred to the new LERG Assignee.
- 3.7. On the LERG effective date (or date negotiated with the new LERG Assignee), NPAC downloads all blocks (the amount corresponding to blocks, which have not been assigned to another carrier) with a port type of "Pool".
- 3.8. Upon completion of the download, the NPAC administrator completes the PA Part 1B forms (the amount corresponding to blocks, which have not been assigned to another carrier).
- 3.9. NPAC administrator forwards the completed copies of the PA Part 1B form (or the amount corresponding to blocks, which have not been assigned to another carrier) to the new LERG Assignee and the Pooling Administrator.
- 3.10. NPAC administrator shall then update the NPAC tracking database noting that this SP is the LERG Assignee for the NXX.
 - 3.10.1. The NPAC tracking database has been created to track changes of LERG assignee to carriers who are not the original SPID holder in the NPAC database. This will facilitate corrections to the NPAC database once a SOW (Statement Of Work) has been developed and implemented which will allow the SPID (Service Provider ID) to be changed in the NPAC database. Until such time as a SOW has been developed and implemented, this database will facilitate any need to track the current LERG assignee at the NPAC.
- 3.11. New LERG Assignee completes internal work and submits appropriate number of Part 4 forms or Block Donation forms (or combinations thereof) to the Pooling administrator showing the blocks have been placed in service or donated to the pool.

Tracking Number: _____

LNP NXX LERG Assignee Transfer Form
NPAC Part 1B Form

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NPAC NXX LERG ASSIGNEE DATA

(Submit one form per NXX request)

Activation Request: _____

Or

Modification Request: _____ For Information Only: _____

If code is being transferred, to a new LERG assignee due to ported TNs, the new LERG assignee must complete and submit this form to the NPAC administrator upon receipt.

Section A:

(If request is for Activation, the LERG Assignee applicant is to provide all data except NXX and NXX Effective Date; the CO Code Administrator will fill in those two fields. For a Modification Request, the requestor is to provide all information.)

CO Code Administrator

Name Cheryl Dixon
Address 1800 Sutter Street, Suite 570
City, State, ZIP Concord, CA 94520
Phone 925-363-8787 Fax 925-363-8729
E-Mail Cheryl.dixon@neustar.com

NPAC Administrator

Name Nicole Draut
Address 200 S. Wacker, Suite 3000
City, State, ZIP Chicago, Illinois, 60606
Phone 312 - 928 - 4571 Fax 312 - 382 - 8080 Company Name:
E-Mail Nicole.draut@neustar.com

NXX LERG Assignee Company Name:

Number Administrator	NPAC/LNP Contact within LERG Assignee Co.
Contact Name:	Contact Name:
Address:	Address:
City, State, ZIP:	City, State, ZIP:
Phone - - Fax - -	Phone - - Fax - -
E-Mail:	E-Mail:

Service Provider NPAC SOA SPID¹ _____
LRN² _____ - _____ - _____

CO Code Administrator to fill in these two items.	
NPA-NXX ³	_____ - _____
NXX Effective Date (MMDDYYYY) ⁴	_____

NPAC Activate Block Range⁵ Yes ___ No ___

Tracking Number: _____

LNP NXX LERG Assignee Transfer Form
NPAC Part 1B Form

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- a) If the LERG Assignee is requesting a modification, the LERG Assignee needs to complete Sections A and any applicable data in Section B of this form and send it to the NPAC for processing.
 - b) If the CO Code Administrator (CA) is requesting the modification to the NPA-NXX and/or Effective Date, the CA will review the change with the LERG Assignee. After receiving concurrence from the LERG Assignee, the CA will update the NPA-NXX and/or Effective Date information on Section A and forward it to the NPAC (for information) and LERG Assignee. The LERG Assignee will forward this to the NPAC for processing.
- 5) Post-Block Activation: If LERG Assignee requests NPAC to perform the NXX Modification, then Sections A & B of this form should be completed and sent to the NPAC. Upon completion of this request, NPAC sends a copy of the completed form to the CO Code Administrator and LERG Assignee.

Tracking Number: _____

LNP NXX LERG Assignee Transfer Form
NPAC Part 1B Form

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Foot Notes:

¹ The Service Provider ID of the block holder. The SPID must be a valid SPID in the NPAC system. If your company does not have a SPID, please call the NPAC at 1-888-NPAC-HEL(P) for assistance.

² A Location Routing Number is a 10-digit number, in the format NPA-NXX-XXXX, which uniquely identifies a switch or point of interconnection (POI). The NPA-NXX portion of the LRN is used to route calls to numbers that have been ported.

³ The CO Code Administrator will insert NPA-NXX information.

⁴ The CO Code Administrator will insert NXX Effective Date. This is the earliest date that the NPAC will broadcast the NXX Block information to all Local SMS's.

⁵ If "YES" is marked the NPAC will activate the block range. If "NO" is marked it will be the responsibility of the SP to activate the block range.

⁶ Customer Local Area Signaling Services Destination Point Code for 10-digit GTT for CLASS features for the 1K block. The CLASS DPC must be three sets of numbers where the value for each set ranges from 0 to 255

⁷ Customer Local Area Signaling Services Subsystem Number for the 1K block. The CLASS SSN must be a number between 0 and 255.

⁸ Line Information Database Destination Point Code for 10-digit GTT for LIDB features for the 1K block. The LIDB DPC must be three sets of numbers where the value for each set ranges from 0 through 255.

⁹ Line information Database Subsystem Number for the 1K block. The LIDB DPC must be three sets of numbers where the value for each set ranges from 0 through 255.

¹⁰ Calling Name Delivery Destination Point Code for 10-digit GTT for CNAM features for the 1K block. The CNAM DPC must be three sets of numbers where the value for each set ranges from 0 through 255.

¹¹ Calling Name Delivery Subsystem Number for the 1K block. The CNAM SSN must be a number between 0 and 255.

¹² Inter-Switch Voice Mail Destination Point Code for 10-digit GTT for ISVM features for the 1K Block. The ISVM DPC must be three sets of numbers where the value for each set ranges from 0 through 255.

¹³ Inter-Switch Voice Mail Services Subsystem Number for the 1K block. The ISVM SSN must be a number between 0 and 255.

¹⁴ Wireless Short Message Service Center Destination Point Code for 10-digit GTT for WSMSC features. This field is only required if the service provider supports WSMSC data. The WSMSC must be three sets of numbers where the value for each set ranges from 0 through 255.

¹⁵ Wireless Short Message Service Center Subsystem Number for the 1K block. This field is only required if the service provider supports WSMSC data. The WSMSC must be a number between 0 and 255.