

# **Native Block Pooling Proposal**

North American Number Council  
Wireless Number Portability Subcommittee  
Wireless Pooling Task Force

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# Table of Contents

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>PURPOSE.....</b>  | <b>3</b> |
| <b>2</b> | <b>BACKGROUND.....</b>                                       | <b>3</b> |
|          | <b>2.1 TRADITIONAL THOUSANDS -BLOCK NUMBER POOLING .....</b> | <b>3</b> |
|          | <b>2.2 NATIVE BLOCK POOLING.....</b>                         | <b>3</b> |
| <b>3</b> | <b>BENEFITS .....</b>  | <b>7</b> |
| <b>4</b> | <b>TRANSITION .....</b>                                      | <b>7</b> |
| <b>5</b> | <b>CONCLUSION.....</b>                                       | <b>8</b> |
| <b>6</b> | <b>RECOMMENDATIONS .....</b>                                 | <b>8</b> |
|          | <b>APPENDIX A: WORLDCOM'S MINORITY OPINION.....</b>          | <b>9</b> |

# **1 Purpose**

The Pooling Task Force is seeking approval from the North American Numbering Council (NANC) and FCC to utilize the Native Block Pooling proposal as a process to facilitate completion of certain pooling establishment milestones in order to meet the FCC November 24, 2002 Pooling Mandate. Participation by wireless Service Providers in Native Block Pooling would be strictly voluntary.

The Wireless Number Portability Subcommittee (WNPSC) of NANC's Local Number Portability Administration Working Group (LNPAWG) was established to solely focus on wireless number portability matters. The WNPSC established the Pooling Task Force to address the implementation of wireless number pooling.

The Pooling Task Force provides a forum for the identification, discussion and resolution of issues affecting wireless implementation of all areas and associated area codes that will be participating in pooling by November 24, 2002. The Pooling Task Force has created this proposal to transition wireless service providers to National Thousands Block Number Pooling, hereafter also referred to as traditional pooling.

## **2 Background**

### **2.1 Traditional Thousands-block Number Pooling**

Traditional thousands-block number pooling of geographic telephone numbers, using the LNP capability, is a number administration and assignment process that allocates numbering resources using a shared industry inventory associated with a designated geographic rate area. In the United States, thousands-block number pooling involves the allocation of blocks of sequential North American Numbering Plan (NANP) telephone numbers within the same NPA/ NXX to different service providers, who serve customers within the same NPA rate area. All ten thousand numbers within each NPA/NXX continue to be assigned to one rate area, but are allocated among multiple service providers at the thousands-block (NXX-X) level. The numbering resource is allocated from a shared industry inventory and is administered in blocks of one thousand numbers (NXX-X) for assignment to service providers (SPs) participating in that rate area.

### **2.2 Native Block Pooling**

Native Block Pooling (NBP) is a process that allows wireless service providers to participate in the initial process milestones of traditional thousands-block pooling. However, there is no inventory sharing, i.e. it is not traditional thousands-block number pooling. Native Block Pooling is a manual paper process where the NXX cannot be shared with other providers and is reserved for the donating provider's use. Although NBP by FCC definition is not traditional pooling, it is a process that will allow SPs and the Pooling Administrator (PA) to prepare for the transition to traditional pooling beginning November 24, 2002, as mandated by the FCC.

The NBP process would allow wireless SPs to attend First Implementation Meetings, where rate centers are identified and milestone timelines are developed consistent with industry guidelines<sup>1</sup>. Wireless SPs would follow most traditional pooling procedures and reporting requirements. However, the respective block donations and requests would be manually controlled into and out of each SP's dedicated numbering resources by the PA, until the wireless industry's networks are ready for numbers from a single NXX to be shared across multiple SPs. The PA would mark those donated blocks in their system as unassignable blocks to be reserved for the donating SPs.

Each SP participating in NBP with more than a six-month inventory would donate those blocks. The PA would put those blocks aside for the exclusive use of the donating SP, on an "as needed" basis consistent with the utilization, and month-to-exhaust requirements noted in the FCC's NRO Orders and in the industry guidelines.

Another difference between traditional thousands-block pooling and NBP involves the handling of contaminated block donations. A contaminated block is a block where up to ten percent of the numbers in the block, are already assigned to end-users. In traditional thousands block pooling, these assigned numbers are ported back to the donating carrier through the NPAC upon block donation. With NBP, the actual porting of contaminated numbers is delayed until transition to traditional pooling is required. If there are any remaining contaminated blocks donated to the PA prior to transition, intra-SP ports would be required.

Wireless SPs participating in NBP would need to submit forms to the PA to request and justify additional resources, just as is done in traditional pooling today. After SPs submit their months-to-exhaust form and meet the utilization criteria, the PA will reallocate the SP's own donated blocks back to that donating provider. The PA will manually track the NBP transactions.

In cases where the SP's forecast shows insufficient blocks are available to meet a six-month inventory, the PA will apply to the NANPA for a new NXX for that SP's dedicated native block pool. The SP needing resources would be identified as the LERG assignee of that NXX. All blocks in excess of the SP's forecasted six-month inventory would be retained by the PA and held for future allocation to that SP.

When the wireless industry begins supporting traditional pooling on November 24, 2002, all dedicated NBP resources would become available to all participants in the traditional pool. SPs who have been participating in NBP will simply continue to submit the same forms to the PA and receive blocks in the same way. The difference will be that now block assignments will come from the traditional pool, as opposed to each SP's own dedicated numbering resources.

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<sup>1</sup> Industry Numbering Committee; *Industry Numbering Committee (INC) Thousand Block (NXX-X) Pooling Guidelines*, INC 99-0127-023, (November 12, 2001), by the Industry Numbering Committee, a forum of the Carrier Liaison Committee, sponsored by the Alliance for telecommunications Industry Solutions (ATIS)

SP participation in NBP is strictly voluntary. SPs can determine the scope of their participation depending on their needs and resources. A decision to participate requires a commitment to allow the PA to manage all aspects of the SP's number resources in the NPAs in which the SP participates. Once a SP establishes a native block pool, they cannot withdraw from that pool. Failure to comply with all thousands block pooling requirements could lead to service outages when the dedicated native block pool transitions to the traditional shared inventory pool.

SPs that choose not to participate in NBP shall continue to apply directly to the CO Code Administrator for NXX codes.

It has become clear that if the wireless industry waits until the late summer of 2002 to commence the process of transition to traditional thousands block pooling, the result will be an enormous workload concentrated in a short period of time. The participating SPs and PA must be able to start the NBP establishment process, by March of 2002, in approximately 20 NPAs per month, which includes 13 NPAs already in traditional pooling, and 7 additional NPAs in the national roll out schedule.

**Table 1- Comparison of Pooling Establishment Milestones and Requirements**

| <b>Process Steps</b>   | <b>Traditional Pooling</b> | <b>Native Block Pooling (Wireless Only)</b> |
|--|----------------------------|---|
| <b>First Implementation Meeting</b><br>The meeting held by the PA for all participating SPs to develop the time intervals between thousand block pooling milestones  | YES                        | YES   |
| <b>Forecast Report Due Date</b><br>The deadline for SPs to report their forecasted thousands-block demand using the Thousands-Block Forecast Report Form   | YES                        | YES   |
| <b>Block Protection Date</b><br>The deadline for SPs to "protect" specified thousands-blocks (those with up to 10% contamination) from further contamination   | YES                        | YES   |
| <b>Block Donation Identification Date</b><br>The deadline for SPs to report their surplus/deficiency of thousand-block to the PA.  | YES                        | YES   |
| <b>National Pooling Administrator Assessment</b><br>The deadline for the PA to aggregate and evaluate SP thousands-block donation information and determine, on a rate area basis, whether there is a surplus of thousands-blocks or whether there is a deficiency and an additional NXX code(s) is required to establish the 6-month inventory. The time interval for this activity should be established at the First Implementation | Yes                        | Dedicated SP Numbering Resources Only       |

| <b>Process Steps</b>  | <b>Traditional Pooling</b> | <b>Native Block Pooling (Wireless Only)</b>  |
|---|----------------------------|--|
| Meeting.  |                            |  |
| <b>LERG Updates</b><br>The associated NPA/NXX is currently available for call routing and is flagged as LNP capable in the LERG   | YES                        | Performed by 11/24/02  |
| <b>NPAC Updates</b><br>The associated NPA/NXX is currently available for call routing and is flagged as LNP capable in the NPAC. The NPA/NXX query triggers are applied in LNP capable switches and reflected in the appropriate network databases (e.g. STP routing tables)  | YES                        | Performed by 11/24/02  |
| <b>Intra-Service Provider Ports</b><br>An intra-service provider port allows an SP to retain unavailable TNs in contaminated thousands-block that are being donated to an industry inventory pool. Specifically, numbers assigned to customers from donated thousands-blocks that are contaminated will be ported back to the donating SP to enable it to continue to provide service to those customers. An intra-service provider port can also be used to move a TN from one switch servicing a rate area to another switch serving the same rate area where LRN-LNP technology is in use. | YES                        | Performed during transition to traditional pooling   |
| <b>Block Donation Date</b><br>SPs are required to donate protected thousands-blocks at the Block Donation Date. Intra-SP porting of all unavailable TNs within all thousands-blocks that are being donated to the industry inventory pool by SPs is to be completed by the Block Donation Date.   | YES                        | Performed during transition to traditional pooling   |
| <b>Service Provider Inventory</b><br>SPs will retain a six-month inventory of available blocks for each pool  | YES                        | YES  |
| <b>Pool Start Date</b><br>The date the PA may start allocating thousands-blocks from the industry inventory pool to SPs. This is also the start date for SPs to send requests to the PA for thousands-blocks.   | YES                        | Per NBP first implementation meeting until 11/24/02, and thereafter per the national roll out schedule |
| <b>Pool Inventory</b><br>The PA will maintain a six-month inventory pool for each rate area in order to meet the forecasted resource needs of participating service providers.  | YES                        | Dedicated SP Numbering Resources Only  |
| <b>Applications for block assignments (Initial and Growth) to PA</b><br>Block assignments will be made from NPA-NXX codes assigned to a single rate area inventory pool. The inventory pool will be comprised of a rate area boundary that covers the same geographic area. Different geographic rate areas will maintain separate inventory pools. SPs are also required to furnish  | YES                        | Dedicated SP Numbering Resources Only  |

| <b>Process Steps</b>   | <b>Traditional Pooling</b> | <b>Native Block Pooling (Wireless Only)</b> |
|--|----------------------------|---|
| months to exhaust reports with each block growth application and to update their forecasted block demand as soon as they become aware of anticipated changes to previously reported forecasted demand. |                            |   |
| <b>Block Reclamation</b><br>The PA is responsible for initiating the reclamation of assigned blocks that have not met the required criteria to retain the assigned block.                              | YES                        | YES   |

### 3 Benefits

The adoption of the Native Block Pooling approach could greatly benefit the participating wireless SPs and the PA. Benefits include:

- Ability to keep pace as new NPAs are opened for pooling, thus reducing the challenge of concurrently implementing pooling in up to 160 NPAs by November 24, 2002
- Provides for a far longer period in which to learn about and use existing pooling processes; thus making the learning curve more gradual. Wireless SPs would become familiar with forms, application timelines, forecasting, and block donation processes.
- Will allow SPs to be ready for participation in traditional pooling in November of 2002 with less difficulty. SP will have all of the methods and procedures in place to accommodate pooling.
- Encourages a more efficient implementation of traditional pooling for both the PA and the participating SPs because of the early completion of several pooling establishment milestones and a substantial portion of the block assignment paperwork
- Provides for a more controlled transition to traditional pooling for participating SPs by reducing the workload required between August and November of 2002

### 4 Transition

In order for wireless SPs to transition to traditional pooling, they must complete all traditional thousands-block pooling process steps. The following list, while not all inclusive, does identify some of the critical transition steps required to support traditional pooling.

- LRN Assignment - Per the INC LRN Assignment Practices
- LERG Routing Guide Updates - SP marks NPA NXXs as portable in the LERG Routing Guide
- NPAC Notification - SPs mark their NPA NXXs as portable in the NPAC; SPs establish LRNs in the NPAC
- Complete intra-SP ports on contaminated blocks

To ensure a successful transition, it is recommended that participating wireless SPs verify the status of their donated block pools with the PA prior to placing them in the traditional shared inventory pool.

## **5 Conclusion**

This proposal would permit SPs to voluntarily participate in Native Block Pooling. By choosing to participate in NBP, a SP will realize a gradual transition to traditional pooling. This proposal will allow the PA and SPs to more efficiently manage the workload and complete the paperwork required. Providing a phased conversion plan will minimize the adverse impacts anticipated if all the milestones for all the pooled NPAs must be completed between August and November of 2002. Native Block Pooling would effectuate a more positive transition to traditional pooling.

Carriers who are not ready or choose not to implement NBP will not be excluded from submitting their forms and other requirements needed to begin donating and receiving thousand blocks from the industry pool on November 24, 2002.

## **6 Recommendations**

The WNPSC Task Force is asking for the NANC's expedited approval of NBP and to forward this proposal to the FCC to allow voluntary wireless SP participation in NBP.



## **APPENDIX A: WORLDCOM'S MINORITY OPINION**

Thousands-block number pooling requires the implementation and use of Local Number Portability (LNP) technology. LNP technology allows donated thousands-blocks, contaminated and non-contaminated, to be shared and assigned to any LNP-capable carrier requesting a block from the Pooling Administrator. Without the implementation of LNP technology the number conservation benefits of thousand block number pooling will not be realized when wireless carriers are required to participate in traditional pooling. Native Block Pooling, as it is defined in this document, allows wireless carriers to establish in advance, the administrative framework that is required for carriers to participate in thousands-block number pooling. Thus it allows the administrative work to be spread over a longer period of time. Participation in Native Block Pooling is strictly voluntary. There is no requirement for a company to participate in NBP prior to the mandated implementation date for traditional pooling.

It is unclear how much work will be required to integrate wireless NXXs with the pending wireline national pooling framework. If little in the way of contaminated block donations appears to be likely, then advance establishment of wireless pooled NXXs using NBP seems to offer little to ease the work of the Pooling Administrator. That being said, NBP is purely a training exercise for the wireless carriers that opt to participate in NBP rather than a management tool for the PA. If Native Block Pooling does not result in an increase of PA costs to the industry, and if the national PA is willing to accommodate the additional work, then Native Block pooling appears to do no harm.