

# National Number Pooling Requirements

## Number Pooling Requirement Overview

The NPAC SMS requirements below have been developed by NANC T&O as a National Number Pooling solution for the industry.

The following definitions apply in the requirements that follow:

- Code Holder – The code holder is the LERG owner of the NPA-NXX.
- Block Holder – The recipient of a pool of numbers from the code holder defined as the NPA-NXX-X holder in the LERG.
- Pre-Port – Porting of an entire block of TN's from the code holder to the block holder on, or after, the effective (~~donation~~) date of the pool.
- Port on Demand – Porting of a single TN or block(s) of TN's from the code holder to the block holder at a time desired by the block holder that is on, or after, the effective (~~donation~~) date of the pool.
- Number Pooling Block Holder Information Table – A table in the NPAC SMS that contains the ~~block~~ range of TN's, the block ~~holder owner~~ (service provider), default routing for a block of TN, and the effective date of the block.
- Block – A range of TNs that contain the NPA-NXX-X (7 digits), and begin with a station of x000, and end with x999.
- Number Pooling Sub Block Information Table – A table in the NPAC SMS that contains the range of TN's (could be the entire set or a sub-set of the block), and the activation date of the TN's within the range.
- De-Pool – Return of a 1K pooled block to the Number Administrator.
- Default Routing Restoration Snap Back – reinstatement in the case of pre-port, or instatement in the case of port on demand, of the default routing for the TN as defined in the sub block ~~holder~~ information table.
- Snapback – return to the block holder for TN reassignment.

The following summarizes the approach taken:

**NOTE: The approach summary will be produced after discussion/definition by the group.**

*The requirements defined for the national porting solution allows for the Pre-Porting or Port-on Demand of a block of pooled numbers.*

*For pre-porting the NPAC personnel do the Pre-Porting with no notifications across the mechanized interface and no concurrence of port request by old or new service provider.*

The activate of the subscription version takes place at a scheduled time upon creation of the porting request by NPAC personnel.

Block holder information is entered into the NPAC prior to the port of the pool. If no ports have previously been done for a pre-port block then the NPA-NXX then a notification will be sent upon entry of the information to allow for time to make any necessary facilities changes.

## Requirements

### Section 3 Modifications

SUBSCRIPTION VERSION DATA MODEL			
Attribute Name	Type (Size)	Required	Description
Version ID	N	√	A unique sequential number assigned upon creation of the Subscription Version.
LRN	TN	√	The LRN is an identifier for the switch on which portable NPA-NXX-XXXX's reside.
Old Service Provider ID	C (4)	√	Old Service Provider ID.
New Service Provider ID	C (4)	√	New Service Provider ID.
TN	TN	√	Subscription Version telephone number.
Local Number Portability Type	E	√	Number Portability Type. Valid enumerated values are: LSSP - Local Service Provider Portability (0) LISP - Local Intra-Service Provider Portability (1) POOL - Pooled Block Number Port (2)
Status	E	√	Status of the Subscription Version.  The default value is P for Pending.  Valid enumerated values are: X - Conflict (0) A - Active (1) P - Pending (2) S - Sending (3) F - Failed (4) PF - Partial Failure (5) DP - Disconnect Pending (6)

<b>SUBSCRIPTION VERSION DATA MODEL</b>			
<b>Attr_ibute Name</b>	<b>Type (Size)</b>	<b>Required</b>	<b>Description</b>
			O - Old (7) C - Canceled (8) CP - Cancel Pending (9)
CLASS DPC	N (9)	√	DPC for 10-digit GTT for CLASS features.
CLASS SSN	N (3)	√	CLASS SSN for the Subscription Version.
LIDB DPC	N (9)	√	DPC for 10-digit GTT for LIDB features.
LIDB SSN	N (3)	√	LIDB SSN for the Subscription Version.
CNAM DPC	N (9)	√	DPC for 10-digit GTT for CNAM features.
CNAM SSN	N (3)	√	CNAM SSN for the Subscription Version.
ISVM DPC	N (9)	√	DPC for 10-digit GTT for ISVM features.
ISVM SSN	N (3)	√	ISVM SSN for the Subscription Version.
New Service Provider Due Date	T	√	The due date planned by the new Service Provider for Subscription Version Transfer.
Old Service Provider Due Date	T		The due date planned by the old Service Provider for Subscription Version Transfer.
Old Service Provider Authorization	B		A boolean indicator set by the old Service Provider to indicate authorization or denial of Transfer of Service for the Subscription Version to the new Service Provider.
New Service Provider Create Time Stamp	T		The date and time that the New Service Provider authorized Transfer of Service of the Subscription Version.
Old Service Provider Authorization Time Stamp	T		The date and time that the old Service Provider authorized Transfer of Service for the Subscription Version.
Activation Request Time Stamp	T		The date and time that the Subscription Version activation request was made by the new Service Provider.
Activation Broadcast Date	T		The date and time that broadcasting began to all local SMS systems for the activation of the Subscription Version.
Activation Broadcast Complete Time Stamp	T		The date and time that at least one Local SMS system successfully acknowledged the broadcast or the retries were exhausted for the activate.

### SUBSCRIPTION VERSION DATA MODEL

Attribute Name	Type (Size)	Required	Description
Disconnect Request Time Stamp	T		The date and time that the Subscription Version disconnect request was made by the local Service Provider.
Disconnect Broadcast Time Stamp	T		The date and time that broadcasting began to all local SMS systems for the disconnect of the Subscription Version.
Disconnect Broadcast Complete Time Stamp	T		The date and time that at least one Local SMS system successfully acknowledged the broadcast or the retries were exhausted for the disconnect.
Effective Release Date	T		The date that the Subscription Version is to be deleted from all Local SMS systems.
Customer Disconnect Date	T		The date that the Customer's service was disconnected.
Pre-Cancellation Status	E		Status of the Subscription Version prior to cancellation. Valid enumerated values are:  X - Conflict (0) P - Pending (2) DP - Disconnect Pending (6)
Old Service Provider Cancellation Time Stamp	T		The date and time that the Old Service Provider acknowledged that the Subscription Version be canceled.
New Service Provider Cancellation Time Stamp	T		The date and time that the New Service Provider acknowledged that the Subscription Version be canceled.
Cancellation Time Stamp	T		The date and time that the Subscription Version became canceled.
Old Time Stamp	T		The date and time that the Subscription Version became old.
Conflict Time Stamp	T		The date and time that the Subscription Version was last placed in conflict.
Conflict Resolution Time Stamp	T		The date and time that the resolution of a Subscription Version in conflict is acknowledged.
Create Time Stamp	T	√	The date and time that this Subscription Version record was created.
Modified Time Stamp	T	√	The date and time that this Subscription Version record was last modified.  The default value is the Create Time Stamp.

<b>SUBSCRIPTION VERSION DATA MODEL</b>			
<b>Attribute Name</b>	<b>Type (Size)</b>	<b>Required</b>	<b>Description</b>
Porting to Original	B	√	A boolean that indicates whether the Subscription Version created is to be ported back to the original Service Provider.  The default value is False.
End User Location Value	C (12)		For future use.
End User Location Value Type	C (2)		For future use.
Modify Request Timestamp	T		The date and time that the Subscription Version Modify request was made.
Modify Broadcast Timestamp	T		The date and time that broadcasting began to all local SMS systems for the modification of the Subscription Version.
Modify Broadcast Complete Timestamp	T		The date and time that all local SMS systems successfully acknowledged or the retries were exhausted for the modification of the Subscription Version
Billing ID	C (4)		For future use.  The default value is the Facilities Based Service Provider ID.
Status Change Cause Code	N (2)		Used to specify reason for conflict when old Service Provider Authorization is set to False, or to indicate NPAC SMS initiated cancellation. Valid values are: No value General Conflict LSR Not Received FOC Not Issued Due Date Mismatch Vacant Number Port NPAC SMS Automatic Conflict from Cancellation NPAC SMS Automatic Cancellation

Table 0-1 Subscription Version Data Model

## Section 3 New Requirements

## NUMBER POOLING **BLOCK HOLDER** INFORMATION DATA MODEL

Attribute Name	Type (Size)	Required	Description
Block Holder SPID	C(4)	√	The Service Provider Id of the block holder.
TN Range Start	TN	√	Telephone number at the start of the pool.
TN Range End	TN	√	Telephone number at the end of the pool.
LRN	TN	√	The LRN is an identifier for the switch on which portable NPA-NXX-XXXX resides.
CLASS DPC	N (9)	√	DPC for 10-digit GTT for CLASS features.
CLASS SSN	N (3)	√	CLASS SSN for the Subscription Versions.
LIDB DPC	N (9)	√	DPC for 10-digit GTT for LIDB features.
LIDB SSN	N (3)	√	LIDB SSN for the Subscription Version.
CNAM DPC	N (9)	√	DPC for 10-digit GTT for CNAM features.
CNAM SSN	N (3)	√	CNAM SSN for the Subscription Version.
ISVM DPC	N (9)	√	DPC for 10-digit GTT for ISVM features.
ISVM SSN	N (3)	√	ISVM SSN for the Subscription Version
Effective Date	T	√	The effective date of the pool. The time for this field will be normalized 00:00:00.
<a href="#">Auto</a> Activation Timestamp	T		Date and time of the Auto Activation. <a href="#">This field should be populated when an auto activation is being requested (i.e., the NPAC will broadcast upon reaching the specified date and time. This field can only be specified if the Auto-Activation-Flag is set to TRUE. If the Auto Activation-Flag is set to TRUE then this field is required.</a>
Port Type ( <b><u>NOTE: do we still need this?</u></b> )	E	√	Type of porting that will be used for the block of pooled numbers.  Valid values:  PP – Pre-port  PD – Port on Demand

***NOTE: CMA assumed that although the notification of creation, modification and deletion of block table information would occur over the mechanized CMIP interface, that the action taken to create, modify, and delete creation, modification, and deletion of the block table information would be performed managed by NPAC personnel via interaction with service providers.***

**RR3-27.1 Number Pool Block Holder Information – NPA-NXX Validation**

NPAC SMS shall validate that the NPA-NXX specified in the addition or modification of Number Pooling Block Holder information are valid NPA-NXX defined in the NPAC SMS.

**RR3-27.2 Number Pool Block Holder Information – LRN Validation**

NPAC SMS shall validate that the LRN specified in the addition or modification of Number Pooling Block Holder information is a valid LRN defined in the NPAC SMS for the block holder.

**RR3-28.1 Number Pool Block Holder Information – No Overlapping Block Validation**

NPAC SMS shall validate that the TN range specified in the addition or modification of Number Pooling Block Holder information does not overlap with a TN in a range for another entry in the Number Pooling [Block Holder Information](#) [Table](#).

**RR3-28.2 Number Pool Block Holder Information – Block in one NPA-NXX**

NPAC SMS shall validate that the range specified for a block of numbers to be pooled is contained in one NPA-NXX.

**RR3-29 Number Pool Block Holder Information – Validation Error**

NPAC SMS shall report an error to the user and reject the addition or modification of Number Pooling Block Holder information if validation errors occur as defined in RR3-27.1, RR3-27.2, RR3-28.1, RR3-28.2, RR3-31.1.1, RR3-30.1.2, RR3-30.1.3, RR3-31.2, RR3-31.3, and RR3-31.4.

**RR3-30.1.1 Addition of Number Pooling Block Holder Information**

NPAC SMS shall require NPAC personnel to store the Service Provider Id, the TN range, the effective date and the initial routing information, and port type as defined in the number pooling [block holder](#) information data model.

**RR3-30.1.2 Addition of Number Pooling Block Holder Information – Optional Data**

NPAC SMS shall allow NPAC personnel to optionally store the auto activation ~~and activation~~ timestamp as defined in the number pooling [block holder](#) information data model.

~~**RR3-30.1.3 Addition of Auto Activation Time Stamp with Auto Activation**~~

~~NPAC SMS shall require and only accept the activation timestamp when the auto-activation flag is set to TRUE.~~

**RR3-30.2 Use of Number Pool Default Routing Information**

The NPAC SMS shall use the routing information in the number pooling [block holder](#) information data model as the block holder default routing when a pooled number is disconnected or port to original port and returns the TN(s) to the block after the effective date of the number pool.

**RR3-30.3 Use of Number Pool Default Routing Information with Effective Date**

NPAC SMS shall reinstate the default routing for a disconnected TN in a pool from the Number Pooling Block Holder Information Table on or after the effective date in the Number Pooling Block Holder Information Table.

**RR3-31.1 Modification of Number Pool Block Holder Information**

NPAC SMS shall allow NPAC personnel to modify the block holder default routing information (LRN, DPC(s), and SSN(s)), and the effective date for a pool of numbers as stored in the NPAC SMS for block holder snap back processing.

**RR3-31.2 Modification of Number Pool Block Holder Information - Effective Date**

NPAC SMS shall allow the NPAC personnel to modify the effective date for a pool of numbers if the current date is less than the effective date for the pool.

**RR3-31.3 Modification of Number Pool Block Holder Information – Auto Activation  
Timestamp Flag**

NPAC SMS shall allow the NPAC personnel to modify the auto activation ~~flag or the activation~~ timestamp if the current date is less than the auto activation ~~timestamp~~ date for the pool.

~~**RR3-31.4 Modification of Number Pool Block Holder Information – Auto Activation Flag-  
Prevention**~~

~~NPAC SMS shall allow the NPAC personnel to modify the auto activation flag to TRUE if the block has not previously been activated.~~

**RR3-32 Deletion of Number Pool Block Holder Information**

NPAC SMS shall allow NPAC personnel to delete the block holder default routing information for a pool of numbers as stored in the NPAC SMS for return to the code holder if there are no pooled Subscription Versions in the block.

**RR3-33.1 NPA Splits and the Number Pool Block Holder Information Table Modification**

NPAC SMS shall upon the start of permissive dialing for an NPA Split modify the NPA-NXX information in the Number Pooling Block Information ~~Table~~ if appropriate.

**RR3-33.2 NPA Splits and the Number Pool Block Holder Information Table – NXX Removal  
from Split**

NPAC SMS shall upon the removal of an NPA-NXX from an NPA Split after the start of ~~permissive~~ dialing shall reinstate the original NPA for the NXX in the block holder information table.

**RR3-33.3 NPA Splits and the Number Pool Block Holder Information Table – Addition of an  
NPA-NXX involved in an NPA Split**

NPAC SMS shall during permissive dialing convert the old NPA-NXX to the new NPA-NXX for an NPA-NXX involved in an NPA Split upon entry into the number pool block holder information table.

**RR3-34.1 Number Pool Block Holder information notification of First Port - Send**

NPAC SMS shall for a pre-port block send a notification of the planned first port for the NPA-NXX if there have not been any previous ports for the NPA-NXX when the number pool is entered into the NPAC SMS Number Pool Block Holder information table, and the effective date of the pool is five days or less from the current date.

**RR3-34.2 Number Pool Block Holder information notification of First Port - Hold**

NPAC SMS shall for a pre-port block delay the sending of a notification of the planned first port for the NPA-NXX if there have not been any previous ports for the NPA-NXX when the number pool is entered into the NPAC SMS Number Pool Block Holder information table, and the effective date of the pool is greater than five days from the current date.

**RR3-34.3 Number Pool Block Holder information notification of First Port – Notification Suppression**

NPAC SMS shall for a port on demand block suppress notifications of the planned first port for the NPA-NXX if there have not been any previous ports for the NPA-NXX when the number pool is entered into the NPAC SMS Number Pool Block Holder information table, regardless of the relationship between the effective date of the pool and the current date.

**RR3-25 Mass Update of “Pooled Number” Subscription Versions - Notification Suppression**

NPAC SMS shall suppress SOA notifications to the current SP (the block holder) for mass updates on Subscription Versions with an LNP Type of POOL.

**RR3-26 Broadcast of Number Pool Block Holder Information**

NPAC SMS shall broadcast addition, modification and deletion of number pool block holder information via the SOA to NPAC SMS and NPAC to Local SMS interfaces.

**NOTE: RR3-26 above, is broadcasting to both SOA and LSMS because of a Release 2 change order (NANC 139), which includes SOAs in broadcasts.**

**ISSUES:**

- **Do we want this data on both the LSMS and SOAs?**
- **Do we want the auto activate and activation timestamp broadcast? CMA thinks no.**

## **Section 5 New Requirements**

### *Subscription Version Creation - Number Pooling Ports – Pre Port*

This section provides the Subscription Version Creation requirements for performing a Number Pooling port of a TN. This will cause the pooled numbers to be owned by a new service provider (the block holder) for distribution to their customers.

No notifications are sent to the SOA systems of the old service provider or the new service provider (the block holder) as a result of a pooled number port. However, as with existing porting activity, downloads of Subscription Versions to the Local SMS's occur.

**Requirement 1 Create “Pooled Number” Subscription Version**

NPAC SMS shall require the following data from NPAC personnel upon Subscription Version creation for a Pooled Number port:

- ?1 Local Number Portability Type - Port Type. This field must be set to “POOL” for an LNP pooled number port.
- ?2 Ported Telephone Numbers - this entry is a continuous range of TNs that identifies a group of Subscription Versions that have not previously been ported.
- ?3 Due Date - date on which transfer of service of a number pool from an old facilities-based Service Provider to new facilities-based Service Provider is initially planned to occur.
- ?4 New Facilities-based Service Provider ID - the identifier of the new facilities-based Service Provider (the service provider identified in the block holder information table as the new block holder).
- ?5 Old Facilities-based Service Provider ID - the identifier of the old facilities-based Service Provider that is the code holder (i.e. the current owner of the block).
- ?6 Authorization from old facilities-based Service Provider - indication that the ported-from Service Provider authorizes the transfer of the pooled numbers. This value will be set to TRUE by the NPAC SMS and can not be changed.
- ?7 Status Change Cause Code - indication of reason for denial of authorized by the Old Service Provider. This field will be set to “no value” by the NPAC SMS.
- ?8 Porting to Original - flag indicating whether or not this is a “porting to original” port. This flag will be set to “FALSE” for a Pooled Number port by the NPAC SMS.

**Requirement 2 Create “Pooled Number” Subscription Version - New Service Provider Optional input data**

NPAC SMS shall accept the following optional fields from NPAC personnel upon Subscription Version creation for a Pooled Number port:

- ?9 Billing Service Provider ID
- ?10 End-User Location - Value
- ?11 End-User Location - Type

**Requirement 3 Create “Pooled Number” Subscription Version - Field-level Data Validation**

NPAC SMS shall perform field-level data validations to ensure that the value formats for the following input data, if supplied, is valid according to the formats specified in Table 3-5 upon Subscription Version creation for a Pooled Number port:

- ?12 LNP Type
- ?13 Ported TNs
- ?14 Old Service Provider Due Date
- ?15 New Service Provider Due Date
- ?16 Old Service Provider ID
- ?17 New Service Provider ID
- ?18 Authorization from old facilities-based Service Provider
- ?19 Status Change Cause Code
- ?20 Porting to Original
- ?21 Billing Service Provider ID
- ?22 End-User Location - Value
- ?23 End-User Location – Type

**Requirement 3.2 Create “Pooled Number” Subscription Version – Routing Information**

NPAC SMS shall automatically populate and use the following information from the Number Pool Block information table for the TN range specified:

- ?24 LRN
- ?25 Class DPC
- ?26 Class SSN
- ?27 LIDB DPC
- ?28 LIDB SSN
- ?29 CNAM DPC
- ?30 CNAM SSN
- ?31 ISVM DPC
- ?32 ISVM SSN

**Requirement 3.3 Create “Pooled Number” Subscription Version – Range Validation**

NPAC SMS shall verify that the range specified in a pooled number port is contained within a block specified in the Number Pool Block information table.

**Requirement 4 Create “Pooled Number” Subscription Version - Due Date Validation**

NPAC SMS shall verify that the due date is the current date upon Subscription Version creation for a Pooled Number port.

**Requirement 5.1 Create “Pooled Number” Subscription Version - Ported TN Old NPA-NXX Validation**

NPAC SMS shall verify that the NPA-NXX to be ported exists as an NPA-NXX in the NPAC SMS system for the old Service Provider upon Subscription Version creation for a Pooled Number port.

**Requirement 5.2 Create “Pooled Number” Subscription Version - Ported TN New NPA-NXX Validation**

NPAC SMS shall verify that the NPA-NXX for the range of TN’s to be ported exists in the NPAC SMS Number Pooling [Block Holder](#) Information Table for the new Service Provider upon Subscription Version creation for a Pooled Number port.

**RR5-6.4.2 Create “Pooled Number” Subscription Version – Due Date Validation for NPA-NXX effective date**

NPAC SMS shall verify that the due date is greater than or equal to the NPA-NXX effective date upon Subscription Version creation for a Pooled Number port.

**RR5-6.4.3 Create “Pooled Number” Subscription Version – Due Date Validation for Pool effective date**

NPAC SMS shall verify that the due date is greater than or equal to the pool effective date in the Number Pool Block information table upon Subscription Version creation for a Pooled Number port.

**Requirement 6 Create “Pooled Number” Subscription Version - Service Provider ID Validation**

NPAC SMS shall verify that the old and new Service Provider IDs exist in the NPAC SMS system upon Subscription Version creation for Pooled Number port.

**Requirement 7 – Create “Pooled Number” Subscription Version – Service Provider ID Different Validation**

NPAC SMS shall verify that the old and new Service Provider Ids are not the same, ~~Service Provider Id~~ upon Subscription Version Creation for a Pooled Number Port.

**Requirement 8 Create “Pooled Number” Subscription Version - Originating Service Provider Validation**

NPAC SMS shall verify that only NPAC Personnel can create Subscription Versions for Pooled Number ports.

**Requirement 9 Create “Pooled Number” Subscription Version – Subscription Version Validation**

NPAC SMS shall verify that there are no subscription versions with pending, conflict, cancel-pending, or failure status that exist for any of the TN’s in the specified Number Pool Block information upon Subscription Version creation for a Pooled Number port.

**Requirement 10.1 Create “Pooled Number” Subscription Version – No Override of Existing Subscription Versions**

NPAC SMS shall not affect any existing subscription versions with an active, partial failure, disconnect pending, old with a failed LSMS list, or sending status that exist in the number pool for a Pooled Number Port.

**Requirement 10.2 Create “Pooled Number” Subscription Version – Bypass of Existing Subscription Versions**

NPAC SMS shall upon finding an existing subscription version with an active, partial failure, disconnect pending, old with a failed LSMS list, or sending status in the number pool for a Pooled Number Port will bypass and not alter that TN/subscription version, log an information message, and continue processing.

**Requirement 11 Create “Pooled Number” Subscription Version - Validation Failure Notification**

NPAC SMS shall send an appropriate error message to the originating NPAC personnel user if any of the validations listed in Requirements 3.3, 4, 5.1, RR5-6.4.2, RR5-6.4.3, 6, 7, 8, 9, 10 fail upon Subscription Version creation for a Pooled Number port.

**Requirement 12 Create “Pooled Number” Subscription Version - Validation Failure - No Create**

NPAC SMS shall not create a new Subscription Version, if any of the validations fail listed in Requirements 3.3, 4, 5.1, 5.2, RR5-6.4.2, RR5-6.4.3, 6, 7, 8, 9, 10 upon Subscription Version creation for a Pooled Number port.

**Requirement 13 Create “Pooled Number” Subscription Version - Validation Success - Create New**

NPAC SMS shall create a new Subscription Version if all validations pass at the time of Subscription Version creation for a Pooled Number port.

**Requirement 14.1 Create “Pooled Number” Subscription Version - Set to Sending**

NPAC SMS shall set a Subscription Version to sending upon successful subscription creation.

**Requirement 14.2 Create “Pooled Number” Subscription Versions – No Notifications**

NPAC SMS shall suppress all notifications to the old and new service provider SOA systems for Pooled Number ports.

**ISSUE for 14.2: Do we want to send or suppress notifications for PP and NO auto activation? For PP with auto activation, we suppress (see 14.2 above).**

**NOTE for 14.2: For ERD, 14.2 above, these notification are being suppressed at the time of creation, but will be broadcast during the activation process.**

**Requirement 14.3 Filters for “Pooled Number” Subscription Versions**

NPAC SMS shall apply NPA and/or NPA-NXX (Accepted) Filters to subscription versions downloads to the Local SMS(s) for pooled number ports.

**Requirement 14.4 – Prevention of Port to Original on “Pooled Number” Subscription Versions**

NPAC SMS will shall prevent port to original ports for Subscription Versions with an LNP Type of POOL.

*Subscription Version Creation - Number Pooling Ports – Port on Demand*

**Requirement 15 Create “Pooled Number” Subscription Version - Service Provider ID Validation for Port on Demand**

NPAC SMS shall validate that the old and new Service Provider IDs contain the same value as the ID of the requesting user upon Subscription Version creation for a Pooled Number port, when port type is Port on Demand (PD).

**ISSUES for Port on Demand:**

- ~~*Is old service provider concurrence required?—This will determine whether the port looks like LSSP or a LISP.*~~
- *Should notifications be suppressed for the port on demand? Maybe, need to discuss further in Chicago—I am assuming no.*
- *First Usage Notification will be handled on the first port for port on demand instead of when the number pooling block information table entry is created as is done for pre-porting*

*CMA refrained from writing requirements until the above issues are resolved. There are some old requirements that could potentially be used depending on the outcome of these issues.*

## **Section 5 Modified Requirements**

### **Subscription Version Activation**

#### **R5-57.1 Activate Subscription Version - Send to Local SMSs**

NPAC SMS shall send the activated Subscription Version for an activated Inter-Service Provider, Intra-Service Provider, or Number Pool port via the NPAC SMS to Local SMS Interface to the Local SMSs

### **Subscription Version Disconnect**

#### **Requirement 15.1 – Disconnect Subscription Version – No Service Provider Disconnect of a non-ported Pooled Number**

NPAC SMS shall prevent a disconnect by the Service Provider of a subscription version that has an LNP Type of POOL.

#### **Requirement 15.2 – Disconnect Subscription Version – NPAC Personnel Disconnect of a non-ported Pooled Number**

NPAC SMS shall allow a disconnect by NPAC personnel of a subscription version that has an LNP Type of POOL.

### **Assumption – Number Pool Lifetime**

Once a TN is pooled in the NPAC SMS it will remain in the pool until a subsequent port occurs.

#### **Requirement 16 – Disconnect Subscription Version – Pooled Number Block holder default routing Restoration**

The NPAC SMS will reinstate the block holder default routing, block holder Service Provider Id and the LNP Type to POOL for a subscription version upon a disconnect for a TN belonging to a pool. NOTE: The reinstatement of the block holder default routing will result in an M-Create to the Local SMS.

**Requirement 17 - Disconnect Subscription Version - Customer Disconnect Date Notification for Pooled Number**

NPAC SMS shall notify the new Service Provider (the block owner) of the Subscription Version Customer Disconnect Date and Effective Release Date immediately prior to reinstating the default routing.

**Section 5.1.3.2 System Functionality**

**RR5-44 Query Subscription Version – LNP Type of POOL**

NPAC SMS shall on query requests by authorized NPAC personnel, SOA to NPAC SMS interface users, or NPAC SMS to Local SMS interface return subscription versions with LNP Type of POOL that match the query selection criteria.

**Section 8 New Requirements**

**Requirement 18 – Audit Discrepancy and Results Notifications for Pooled Number Subscription Versions**

NPAC SMS shall for audits of Subscription Versions with LNP Type of POOL send notifications of discrepancies found and audit results to the requesting SOA. Note: This would mean that a SOA (like today) could potentially get a discrepancy notification for a TN that is not present in the SOA database.

**Requirement 19- Audit Status Attribute Value Change Notification Suppress for Pooled Number Subscription Versions.**

NPAC SMS shall for audits of Subscription Versions with LNP Type of Pool suppress status changes for discrepancy corrections to the block holder (current SP). Note: This would mean that a SOA (like today) could potentially get a discrepancy notification for a TN that is not present in the SOA database for Pre-Ported TNs.

**Section 9 New Requirements**

**RR9-5 Pooled Ported Number Report**

NPAC SMS shall support reports that list the ported numbers in a pooled number range for a block holder for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

**RR9-6 Pooled Non-Ported Number Block holder default routing Report**

NPAC SMS shall support reports that list the non-porting numbers in a pooled number range for a block holder for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

**RR9-7 Pooled Number Report**

NPAC SMS shall support reports that list the pooled number range and the block holder for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

**RR9-8 Pooled Number Block holder default routing Report**

NPAC SMS shall support reports that list the number pool range, the block holder, and the block holder default routing information for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

**General Comments**

**CONTAMINATED BLOCK HANDLING IS NOT ENFORCED BY THE NPAC.  
CONTAMINATED BLOCK ASSIGNMENT IS LEFT TO THE POOLING ADMINISTRATOR.**

**NOTE: ASN, GMDO, and M&P sections need to be modified from Illinois requirements based on outcome of 5/18 Chicago meeting.**

**ASN.1 Modifications**

```
LNPTType ::= ENUMERATED {
    lspp (0),
    lisp (1),
    pool (2)
}
```

```
LocalSMS-CreateAction ::= SEQUENCE {
    actionId INTEGER,
    subscriptionVersionObjects SET OF SubscriptionVersionObject,
    tn-range TN-Range OPTIONAL -- to be used only on pooled ports
}
```

Verbiage will be placed in the LSMS create action to indicate the following:

There will be no need on the part of the LSMS to validate the tn-range. The LSMS will use the subscriptionVersionObjects to create the subscription versions for the TN range in the LSMS. This is done to insure that the subscription version id's used in the NPAC SMS and the Local SMS are the same.

**GDMO Modifications**

The subscriptionVersionNewNPA-NXX notification will be added as a valid notification for the NPAC SMS object. The SOA systems will have to support this notification from the NPAC SMS object or at least be able to receive it and log an error.

## General Comments

~~CONTAMINATED BLOCK HANDLING IS NOT ENFORCED BY THE NPAC.~~  
~~CONTAMINATED BLOCK ASSIGNMENT IS LEFT TO THE POOLING ADMINISTRATOR.~~

## **M&P FOR NUMBER POOLING**

### **Creating a Number Pool in the NPAC SMS – PRE-PORTING**

For a pooled number port the following steps must be followed:

←

1. The NPAC personnel will be notified by the pool administrator of a planned transfer of a block of numbers and the date that the pooled port is to occur. The day that the pooled port is to occur is expected to be 8 days in the future. Blocks to be pooled will be specified in 1000 TN ranges.
2. The NPAC personnel will enter the number pooling block holder default routing information into the NPAC SMS block holder default routing table. If no ports have previously occurred for the NPA-NXX a subscriptionVersionNewNPA-NXX notification will be sent. This notification will have to be sent off of the NPAC SMS object.
3. Prior to the pooled number port the Service Provider that owns the block of numbers (the code holder) will perform intra-service provider ports for the numbers currently active in the block of numbers to be pooled. This will insure that when the pooled number port occurs the routing information for the currently active numbers will be in place on the LSMS's and will not be affected by the pooled port. Note: Working numbers in the block that are ported using the intra-SP port procedure, will not have the "POOL" indicator attribute included on these subscription versions.
4. The NPAC personnel on the due date for the pooled number port will port the block of numbers to the new block holder as defined in the requirements. A script could be created to automatically do the port at a time on the due date (such as 3:00 a.m.) to prevent operator errors.

### **Removal of Pooled Subscription Versions from the NPAC SMS (De-Pooling)**

To remove subscription versions with an LNP Type of POOL is the responsibility of the block holder to coordinate with NPAC Personnel. Only NPAC personnel can remove subscription versions with an LNP Type of POOL. NPAC Personnel will only remove all TNs with an LNP Type of POOL from a pool.