## National Number Pooling Requirements

### **Document Change History:**

5/20/98

- 1. Updated definitions, added "blank directory" and "TN re-assignment" table.
- Updated section 3, added initial requirements for NPA-NXX and LRN validation. Updated NPAC Customer Data Model (for EDR flag). Also, Number Pooling Block Holder Information Model, and requirements RR3-27.1 through RR3-34.1, RR3-25, and RR3-26. Also added initial requirements for Sub-Block discussion.
- 3. Updated section 8, issue with audit and notification suppression to SOA, depending on value of ERD flag to LSMS.
- 4. Updated section 9, consolidated requirements for reports.

#### 6/1/98

- 1. Updated definition for "vacant number treatment".
- 2. Updated Block and Sub-Block sections based on discussion.
- 3. Added comments to SV section related to discussion in Chicago.

#### 6/29/98

?1 Re-worked most areas of document, to accommodate new direction (i.e., sub-blocks over the SOA).

#### 8/17/98

- ?2 Updated Block Holder section for issues discussed in Denver.
- ?3 Incorporated new requirements for "pending-like, no active" edits.

#### <u>8/31/98</u>

- ?4 Updated all sections.
- ?5 Put in sub-section headers and re-numbered all sections based on functionality.

### Number Pooling Requirement Overview

The National Number Pooling Requirements document provides a set of requirements developed by NANC T&O, as a "target architecture" approach for a national solution to Number Pooling.

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 Service Provider of a <u>1K Block pool of numbers</u> from the code holder. Also defined as the NPA-NXX-X holder in the LERG.
- Block A range of 1000 pooled TNs within the NPA-NXX, beginning with a station of n000, and ending with n999, where n is a value between 0 and 9.
- Sub-Block A range of pooled TNs, between size x and 1000 TNs. Currently, x equals 1000.
- Pre-Port Porting of an entire block of TN's from the code holder to the block holder on, or after, the effective date of the pool (the sub-block will be the same size as the block, i.e., 1000 TNs).
- Port on Demand Porting of a single TN or range 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 date of the pool. Note: this is not used for the current architecture.
- Number Pooling Block Holder Information –Data in the NPAC SMS that contains the range of TN's, the block holder (service provider), default routing for a block of TNs, and the effective date of the block.
- Number Pooling Sub Block Information Data in the NPAC SMS that contains the range of TN's (could be the entire set or a sub-set of the block, however, for the initial implementation, it will include the 1K range of TNs), default routing for a sub-block of TNs, and the activation timestamp date of the TN's within the range.
- De-Pool Return of a 1K pooled block to the Number Administrator. Also referred to as "un-allocation of the block".
- Vacant Number A non-working number.
- Vacant Number Treatment A recorded announcement played to the calling party, when the NPA-NXX of the TN they have dialed is valid, but the 10-digit TN is not a working number.
- Default Routing Restoration reinstatement of the default routing for the TN as defined in the applicable block/sub-block information, in order to provide vacant number treatment.
- Snapback Notification for TN reassignment.
- Contamination A working number, within a <u>block1K Block</u>, that is active (for either the code holder or another Service Provider), prior to the <u>block1K Block</u> being donated to the Pooling Administrator.

- <u>Pending-like SVs SVs that contain a status of pending, conflict, cancel-pending, or failed.</u>
- Active-like SVs SVs that contain a status of active, sending, partial failure, or disconnect pending.
- Effective Date The date that is considered to be the "ownership switchover" date for the 1K Block from the Code Holder (NPA-NXX owning SP) to the Block Holder (NPA-NXX-X owning SP). This is the date published by the LERG, and is also used by the Pooling Administrator and the NPAC.

The following table portrays **"vacant number treatment"** responsibility and **"snapback for TN re-assignment"** notifications throughout each phase of number pooling, once the Block has been donated to the Pooling Administrator:

Vacant Number Treatment	Pre effective date	post effective date	post Sub-Block activation
Contaminated disconnect	Code holder	Code holder	Block holder
Non-contaminated	Code holder	Code holder	Block holder
Snapback for TN			
Re-assignment			
Contaminated disconnect	Code holder*	Block holder	Block holder
Non-contaminated	N/A	N/A	Block holder

\* = Code Holder receives a notification but CANNOT reassign this TN.

At the present time, the approach includes the following:

0Pre-Port 1K Blocks to a single switch (i.e., all 1000 TNs contain same LRN).

- 1EDR (Efficient Data Representation) captured through the use of "sub-blocks" in the NPAC, and over the SOA-to-NPAC and NPAC-to-LSMS interfaces.
- 2The Block Holder Information in the NPAC is the same as the 1K Block managed by the Pooling Administrator, and represented in the LERG.
- 3The Block Holder Information is NOT broadcast by the NPAC over the SOA interface or the NPAC-to-LSMS interface.
- 4The Block Holder Information's "Effective Date" is the date the LERG, the Pooling Administrator, and the NPAC, consider to be the "ownership switchover" date for the 1K Block from the Code Holder (NPA-NXX owning SP) to the Block Holder (NPA-NXX-X owning SP).
- 5<u>At the time of Block creation, the NPAC will check for "pending-like, no-active" SVs or</u> pending Port-To-Original SVs. If any are found, the NPAC will reject the creation of this Block. An error message (new error message and error number for Block) will be

generated for the NPAC personnel. An "error dialog with a transition mechanism" will be developed that allows the NPAC personnel to easily generate this report (e.g., user gets prompted for report, "Print the report now, O.K. / Cancel").

6The new report will be created that is visible to NPAC personnel. The report will contain TN, SV ID, Old SP, New SP, Due Date, and Status.

7<u>The recipients of this report (e.g., Pooling Administrator, Code Holder) will have their own</u> <u>M&P (outside of NPAC) to clean up these SVs (either cancel or activate).</u> Once they are <u>cleaned up, NPAC personnel will await notification from the Pooling Administrator prior</u> to attempting the Block creation again.

8<u>Once the Block has been created on the NPAC, the Code Holder is prohibited from</u> performing intra-service provider ports. If TNs were missed during the Code Holder's pre-donation intra-port activities, then NPAC personnel only are allowed to perform these intra-service provider port creates, and subsequent activates. The NPAC will allow NPAC personnel, via the Ops GUI, to create these LISP ports up to the effective date (11:59p of the day prior to the effective date), and to activate these LISP ports up to the activation date/time.

- 9The Sub-Block Holder Information in the NPAC is a sub-set of the Block Holder Information. At the present time, they are equal (i.e., both contain all 1000 TNs).
- 10<u>Once the Block's Effective Date has been reached, the Sub-Block will be created (either</u> from a scheduled event on the NPAC, or from a SOA sending up the Sub-Block).
- 11The Sub-Block Holder Information is conditionally broadcast by the NPAC over the NPAC-to-LSMS interface, when the SP's LSMS EDR flag in the SP Profile record in the NPAC, is set to TRUE. The decision is based on the SP's LSMS EDR flag in the SP-Profile record in the NPAC (non-EDR LSMSs get individual SVs, since the SP's LSMS EDR flag is set to FALSE).
- 12The Sub-Block Holder Information's "Activation Timestamp" is the date/time the NPAC broadcasts sub-block or SV data to the applicable LSMSs. Only at this point in time are all SPs notified of the "ownership switchover" date for the <u>1K-block1K Block</u> from the Code Holder (NPA-NXX owning SP) to the Block Holder (NPA-NXX-X owning SP).
- 13The Sub-Block Holder Information's SOA notification is conditionally broadcast over the SOA to NPAC Interface. The decision is based on the SOA Origination on each Sub-Block record.
- 14<u>At the time of Sub-Block creation by the **NPAC** (attempted on Block's Effective Date), the NPAC will check for "pending-like, no-active" SVs or pending Port-To-Original SVs. If any are found, the NPAC will reject the creation of this Sub-Block. An error message (new error message and error number for Sub-Block) will be generated for the NPAC personnel. An "error dialog with a transition mechanism" will be developed that allows the NPAC personnel to easily generate this report (e.g., user gets prompted for report, "Print the report now, O.K. / Cancel").</u>
- 15<u>At the time of Sub-Block creation by the **SP's SOA** (attempted on Block's Effective Date), the NPAC will check for "pending-like, no-active" SVs or pending Port-To-Original SVs. If any are found, the NPAC will reject the creation of this Sub-Block. An error message (new error message and error number for Sub-Block) will be generated and sent back to the SP's SOA. A new M&P will require the SP to contact NPAC personnel (USA) and request the generation of the report.</u>

16<u>The new report will be created that is visible to NPAC personnel.</u> The report will contain <u>TN, SV ID, Old SP, New SP, Due Date, and Status.</u>

17<u>The recipients of this report (e.g., Pooling Administrator, Code Holder) will have their</u> own M&P (outside of NPAC) to clean up these SVs (either cancel or activate). Once they are cleaned up, NPAC personnel will await notification from the Pooling Administrator prior to attempting the Sub-Block creation again (if it is NPAC initiated), or contacting the Block Holder SP and informing them that they could re-submit the Sub-Block request.

- 18<u>Once the Sub-Block has been created on the NPAC, most of the NPAC functionality</u> remains the same. The differences include, Port-To-Original (PTO) must now be the <u>Block Holder SP, PTO activates and all disconnects broadcast different SV data to non-EDR LSMSs (M-CREATE) and EDR LSMSs (M-DELETE).</u>
- 19At Block Creation, a warning message (for TNs within the 1K range) for "pending-like" SVs with no currently active SVs, and PTO SVs, is generated. This warning message will indicate that these SVs need to be cleaned up prior to Sub-Block-Creation/Activation. The Block Holder data will still be created in the NPAC database.
- 20The warning message will contain a report that is visible to NPAC personnel. Thisinformation will be forwarded to the Donor, Block Holder, and Pooling Administrator. The data within the message will contain TN, SV ID, Old SP, New SP, Due Date, and Status.
- 21At Sub-Block Creation, the request will be rejected if there are any "pending-like" SVswith no currently active SVs or PTO SVs (both situations, for TNs within the 1K range).-Additionally, a similar warning message as the Block Creation, will be generated. No-Sub-Block data will be created in the NPAC database.

22At Sub-Block Effective Date,

### **Open Issues**

1. The Auto Activation Timestamp (Block Holder Data) has been removed from this version of the requirements. This means that either Lockheed Martin will create the Sub-Block or the SP will do this over the SOA. Question: how will this be decided (NPAC activated flag on the form), how will this decision be sent to interested parties, and how will Lockheed handle this if they need to create the Sub-Block? If done by Lockheed, need to add an M&P to define this "process". This will be the creation of the block(first step), and creation of the Sub-Block (second step). This will likely be a "scheduled" job, to run the auto activation request at the date and time specified in the Number Pooling form/SP contact.

### **Requirements**

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### **Section 3 Modifications**

### FRS <u>Section</u> 3.1.2

NPAC CUSTOMER DATA MODEL			
Attribute Name	Type (Size)	Required	Description
NPAC Customer ID	C (4)	$\checkmark$	An alphanumeric code which uniquely identifies an NPAC Customer.
NPAC Customer Name	C (40)	$\checkmark$	A unique NPAC Customer Name.
NPAC Customer Allowable Functions	М	V	<ul> <li>Each bit in the mask represents a boolean indicator for the following functional options:</li> <li>SOA Management</li> <li>SOA Network Data Management</li> <li>LSMS Network Data Management</li> <li>LSMS Data Download</li> <li>LSMS Queries/Audits</li> </ul>
NPAC Customer LSMS EDR Indicator	В	V	A boolean that indicates whether the NPAC Customer utilizes Efficient Data Representation (EDR) on the LSMS. The default value is False.

#### **EDR-10RR3-15** Service Provider EDR Indicator

NPAC SMS shall provide a mechanism for the Service Provider to indicate whether or not they manage the 1K Block using Efficient Data Representation (EDR), and want Number Pooling Sub-Block Information downloaded to their Local SMS via the NPAC SMS to Local SMS Interface, using the Number Pooling Sub-Block Object.

#### NOTE: NANC 139 needs to be updated to send Sub-Block to the SOA.

#### **EDR-20RR3-16** Service Provider EDR Indicator – Default

NPAC SMS shall default the EDR Indicator to FALSE.

#### **EDR-30RR3-17** Service Provider EDR Indicator – Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the EDR Indicator on the NPAC Customer record, using the NPAC Administrative Interface.

### FRS <u>Section</u> 3.1.3

	SUBSCRIPTION VERSION DATA MODEL			
Attribute Name	Type (Size)	Required	Description	
Version ID	N	V	A unique sequential number assigned upon creation of the Subscription Version.	
LRN	TN	V	The LRN is an identifier for the switch on which portable NPA-NXX-XXXX's reside.	
Old Service Provider ID	C (4)	V	Old Service Provider ID.	
New Service Provider ID	C (4)	V	New Service Provider ID.	
TN	TN	√	Subscription Version telephone number.	
Local Number Portability Type	Е	V	Number Portability Type. Valid enumerated values are: LSPP - Local Inter-Service Provider Portability (0) LISP - Local Intra-Service Provider Portability (1) POOL - Pooled Block Number Port (2)	
Status	E	V	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)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.	

SUBSCRIPTION VERSION DATA MODEL				
Attribute Name	Type (Size)	Required	Description	
LIDB DPC	N (9)	$\checkmark$	DPC for 10-digit GTT for LIDB features.	
LIDB SSN	N (3)	$\checkmark$	LIDB SSN for the Subscription Version.	
CNAM DPC	N (9)	$\checkmark$	DPC for 10-digit GTT for CNAM features.	
CNAM SSN	N (3)	$\checkmark$	CNAM SSN for the Subscription Version.	
ISVM DPC	N (9)	$\checkmark$	DPC for 10-digit GTT for ISVM features.	
ISVM SSN	N (3)	$\checkmark$	ISVM SSN for the Subscription Version.	
New Service Provider Due Date	Т	V	The due date planned by the new Service Provider for Subscription Version Transfer.	
Old Service Provider Due Date	Т		The due date planned by the old Service Provider for Subscription Version Transfer.	
Old Service Provider Authorization	В		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	Т		The date and time that the New Service Provider authorized Transfer of Service of the Subscription Version.	
Old Service Provider Authorization Time Stamp	Т		The date and time that the old Service Provider authorized Transfer of Service for the Subscription Version.	
Activation Request Time Stamp	Т		The date and time that the Subscription Version activation request was made by the new Service Provider.	
Activation Broadcast Date	Т		The date and time that broadcasting began to all local SMS systems for the activation of the Subscription Version.	
Activation Broadcast Complete Time Stamp	Т		The date and time that at least one Local SMS system successfully acknowledged the broadcast or the retries were exhausted for the activate.	
Disconnect Request Time Stamp	Т		The date and time that the Subscription Version disconnect request was made by the local Service	

	SUBSCR	IPTION VI	ERSION DATA MODEL
Attribute Name	Type (Size)	Required	Description
			Provider.
Disconnect Broadcast Time Stamp	Т		The date and time that broadcasting began to all local SMS systems for the disconnect of the Subscription Version.
Disconnect Broadcast Complete Time Stamp	Т		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	Т		The date that the Subscription Version is to be deleted from all Local SMS systems.
Customer Disconnect Date	Т		The date that the Customer's service was disconnected.
Pre-Cancellation Status	Е		<ul> <li>Status of the Subscription Version prior to cancellation. Valid enumerated values are:</li> <li>X - Conflict (0)</li> <li>P - Pending (2)</li> <li>DP - Disconnect Pending (6)</li> </ul>
Old Service Provider Cancellation Time Stamp	Т		The date and time that the Old Service Provider acknowledged that the Subscription Version be canceled.
New Service Provider Cancellation Time Stamp	Т		The date and time that the New Service Provider acknowledged that the Subscription Version be canceled.
Cancellation Time Stamp	Т		The date and time that the Subscription Version became canceled.
Old Time Stamp	Т		The date and time that the Subscription Version became old.
Conflict Time Stamp	Т		The date and time that the Subscription Version was last placed in conflict.
Conflict Resolution Time Stamp	Т		The date and time that the resolution of a Subscription Version in conflict is acknowledged.
Create Time Stamp	Т	√	The date and time that this Subscription Version record was created.

SUBSCRIPTION VERSION DATA MODEL			
Attribute Name	Type (Size)	Required	Description
Modified Time Stamp	Т	√	The date and time that this Subscription Version record was last modified.
			The default value is the Create Time Stamp.
Porting to Original	В	V	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	Т		The date and time that the Subscription Version Modify request was made.
Modify Broadcast Timestamp	Т		The date and time that broadcasting began to all local SMS systems for the modification of the Subscription Version.
Modify Broadcast Complete Timestamp	Т		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: <u>0</u> - No value <u>54</u> - General Conflict <u>50</u> - LSR Not Received <u>51</u> - FOC Not Issued <u>52</u> - Due Date Mismatch <u>53</u> - Vacant Number Port <u>55</u> - NPAC SMS Automatic Conflict from Cancellation <u>1</u> - NPAC SMS Automatic Cancellation

#### Table 0-1 Subscription Version Data Model

#### **RX3-3.1** Service Provider NPA-NXX Data Deletion

NPAC SMS shall allow Service Providers to delete their NPA- NXX data via the NPAC SMS to Local SMS interface or the SOA to NPAC SMS interface provided the changes do not cause any updates to the Subscription Versions, Number Pooling Block or Sub-Block Information.

#### **RR4-3** Removal of NPA-NXX

NPAC SMS shall allow the removal of an NPA-NXX by NPAC personnel only if no Subscription Versions, except for Old or Canceled Subscription Versions, Number Pooling Block or Sub-Block Information, exists for the NPA-NXX.

#### **RX3-3.2** Service Provider LRN Data Deletion

NPAC SMS shall allow Service Providers to delete their LRN data via the NPAC SMS to Local SMS interface or the SOA to NPAC SMS interface provided the changes do not cause any updates to the Subscription Versions; or Number Pooling Block or Sub-Block Information.

#### RR4-4.2 Removal of LRN

NPAC SMS shall allow the removal of an LRN by NPAC personnel only if no Subscription Versions, except for Old or Canceled Subscription Versions, <u>or</u> Number Pooling <del>Block or</del> Sub-Block Information, exists for the LRN.

#### R3-17 Scope of Database Extract File Creation/Bulk Data Download

NPAC SMS shall allow NPAC personnel to specify an NPA-NXX for database extract fileereation of active Subscription Versions.

**NOTE:** The Database Extract File needs to be enhanced for Number Pooling:

- Need a field for requesting SPID.

- Need to use EDR indicator to include/exclude LNPType = POOL.
- Need to "put" file in correct FTP site sub-directory.
- Need to update NPAC personnel M&P to accomplish this.

Section	3	New	Requirements
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NUMBER POOLING BLOCK HOLDER INFORMATION DATA MODEL				
Attribute Name	Type (Size)	Required	Description	
Block ID	N	⊻	<u>A unique sequential number assigned upon creation</u> of the Block.	
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 for the 1K Block.	
TN Range End	N(4)	V	Last four (4) digits of telephone number that indicate the end of the TN range for the pool for the 1K Block.	
<del>LRN</del>	TN	¥	The LRN is an identifier for the switch on which pooled NPA-NXX-X resides for the 1K Block.	
CLASS DPC	<del>N (9)</del>	¥	DPC for 10-digit GTT for CLASS features for the 1K Block.	
CLASS SSN	<del>N (3)</del>	√	CLASS SSN for the 1K Block.	
LIDB DPC	<del>N (9)</del>	√	DPC for 10-digit GTT for LIDB features for the 1K- Block.	
LIDB SSN	<del>N (3)</del>	√	LIDB SSN for the 1K Block.	
CNAM DPC	<del>N (9)</del>	√	DPC for 10-digit GTT for CNAM features for the 1K Block.	
CNAM SSN	<del>N (3)</del>	¥	CNAM SSN for the 1K Block.	
ISVM DPC	<del>N (9)</del>	√	DPC for 10-digit GTT for ISVM features for the 1K- Block.	
ISVM SSN	<del>N (3)</del>	√	ISVM SSN for the 1K Block.	
Effective Date	Т	V	The effective date of the pool for the 1K Block. The time for this field will be stored in GMT, but equivalent to 00:00:00 network data time CST-(consistent with current functionality of NPA Splits).	

NUMBER POOLING BLOCK HOLDER INFORMATION DATA MODEL			
Attribute Name	Type (Size)	Required	Description
Creation Date	Т		The date and time (GMT) that this Block Holder record was created.
Last Modified Date	Т		The date and time (GMT) of the Last Modification to this Block Holder record. The default value is the Creation Timestamp.
Status	Đ	√	Status of the Block. The default value is A for-         Active.       Valid enumerated values are:         A - Active (0)       O         O - Old (1)

**NOTE:** The Block Holder Information Data, can only be maintained by NPAC Personnel, and no notifications will be sent to either the SOA or LSMS.

### **Block Holder, General**

#### **B-10** Number Pool Block Holder Information – NPAC Personnel GUI

NPAC SMS shall allow NPAC Personnel to add, modify, and delete Block Holder information via the NPAC Administrative Interface.

#### **B-20** Number Pool Block Holder Information – Service Provider Request

NPAC SMS shall reject a request from a Service Provider SOA via the SOA to NPAC SMS Interface, Service Provider Local SMS via the NPAC SMS to Local SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, to add, modify, delete, or query Block Holder information as stored in the NPAC SMS.

#### **<u>B-30</u>RR3-27.1.1** Number Pool Block Holder Information – NPA-NXX Validation

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

#### **<u>B-40</u>RR3-27.1.2** Number Pool Block Holder Information – NPA-NXX Effective Date

NPAC SMS shall validate that the effective date of the block is equal to, or greater than, the effective date of the NPA-NXX as 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.

#### **<u>B-50</u>** 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.

#### **<u>B-60</u>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-X, where the range begins with n000 and end with n999, where n is a value between 0 and 9.

#### **B-70** 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.

### CMA to update numbers once requirements are finalized.

NOTE: need to add procedures within M&Ps to define steps that should be taken by the NPAC personnel when validation errors are encountered.

### **Block Holder, Addition**

#### **<u>B-80</u> RR3-30.1** Addition of Number Pooling Block Holder Information

NPAC SMS shall require NPAC personnel to specify the Service Provider Id, the TN range, and the effective date and the initial routing information, as defined in the Number Pooling Block Holder Information data model.

**B-90** Addition of Number Pooling Block Holder Information – SPID Validation

<u>NPAC SMS shall validate that the Block Holder SPID is a valid Service Provider in the NPAC SMS.</u>

## <u>B-100</u>RR3-30.2Addition of Number Pooling Block Holder Information – Check for pending-like SVs

NPAC SMS shall issue an error warning message to the NPAC personnel at the time of Block Creation, if there are any TNs within the <u>1K block1K Block</u>, that contain an SV, for a given TN in the <u>1K Block</u>, with a status of pending/conflict/cancel-pending/failed, and where a currently active SV does NOT exist, for that same given TN.

#### **B-110RR3-30.3** Addition of Number Pooling Block Holder Information – Check for Port-To-Original SVs

NPAC SMS shall issue an <u>errorwarning</u> message to the NPAC personnel at the time of Block Creation, if there are any TNs within the <u>1K block1K Block</u>, that contain an SV<u>, for a given TN</u> in the <u>1K Block</u>, with a status of pending/conflict/cancel-pending/failed, and where the SV is a Port-To-Original port<u>, for that same given TN</u>.

#### **B-120** Addition of Number Pooling Block Holder Information – Unique Error Message for Pending-Like No-Active or Port-To-Original SVs

NPAC SMS shall generate a unique error message with a unique error number, when an error is encountered during Block creation, for either pending-like no-active SVs or Port-To-Original SVs.

## **<u>B-130</u>RR3-30.4**</u>Addition of Number Pooling Block Holder Information – Report for pending-like SVs and Port-To-Original SVs

NPAC SMS shall provide an <u>"error dialog with a transition mechanism" that displays the unique</u> error message described in B-100, B-110, and B-120, and allows the user to perform an easy onebutton mouse click generation of the report to the NPAC personnel of all of the <u>errorwarning</u> messages that are generated at the time of Block Creation, for pending-like SVs and Port-To-Original SVs, for TNs within the <u>1K block1K Block</u>.

#### **<u>B-140</u>R3-30.5** Addition and Modification of Effective Date – Tunable Parameter

NPAC SMS shall provide a Block Holder Effective Date <u>Window</u> tunable parameter which is defined as the minimum length of time, in business days, between that must be added to the current date <u>and to determine a valid the effective date</u>, when Creating a Block in the NPAC <u>SMS</u>.

#### **<u>B-150</u>RR3-30.6** Addition of Effective Date – Tunable Parameter Default

NPAC SMS shall default the Block Holder Effective Date <u>Window</u> tunable parameter to five (5) business days.

**NOTE:** The value of five (5) <u>business</u> days is selected because of the first port notifier, and this could affect SPs operationally if this value is set to less than five <u>business</u> days.

#### **<u>B-160</u>RR3-30.7Addition of Effective Date – Validation**

NPAC SMS shall verify that the addition of the Effective Date for the Block Holder data is equal to, or greater than, <u>in business days</u>, the current date plus the value of the Block Holder Effective Date <u>Window</u> tunable parameter.

#### **B-170** Addition of Effective Date – Ops GUI Default

NPAC SMS shall default the time portion of the Effective Date Timestamp to 00:00 on the NPAC Administrative Interface GUI screen.

#### **B-180** Addition of Block Holder SPID – Validation

<u>NPAC SMS shall allow the value of the Block Holder SPID to be equal to the value of the SPID that owns the NPA-NXX.</u>

#### RR3-30.8 Use of Number Pool Default Routing Information – Port-To-Original of Contaminated Numbers with No Sub-Block

The NPAC SMS shall use the default routing restoration information in the Number Pooling-Block Holder Information as the block holder default routing when a port to original port (blockholder) is activated and returns the TN(s) to the block on, or after the effective date of thenumber pool, provided no Number Pooling Sub-Block Information exists.

### **Block Holder, Modification**

#### **B-190 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 <u>1K Block pool of numbers</u> as stored in the NPAC SMS.

NOTE: The modification (RR3-31-1) needs an associated M&P to state that approval for this change must be coordinated with the Pooling Administrator.

#### **<u>B-200</u>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 <u>1K Block pool of</u> numbers if the current date is less than the effective date for the <u>1K Block pool</u>.

#### **<u>B-210</u>R3-31.3Modification of Effective Date – Tunable Parameter**

NPAC SMS shall provide a Block Holder Effective Date <u>Window</u> tunable parameter which is defined as the minimum length of time, in <u>business days</u>, that must be added to <u>between</u> the <u>Block Creation date eurrent date to determine a new and the effective date</u>, when Modifying a <u>Block's Effective Date in the NPAC SMS</u>.

#### **<u>B-220</u>RR3-31.4** Modification of Effective Date – Tunable Parameter Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the Block Holder Effective Date <u>Window</u> tunable parameter.

#### **<u>B-230</u>RR3-31.5Modification of Effective Date – Validation**

NPAC SMS shall verify that the modification of the Effective Date for the Block Holder data is equal to, or greater than, <u>in business days</u>, the <u>block creation eurrent</u> date plus the value of the Block Holder Effective Date <u>Window</u> tunable parameter.

#### **RR3-31.6** Modification of Number Pool Block Holder Information – Existing Sub-Block(s)

NPAC SMS shall update any associated Sub-Block Holder Information when modifying Block-Holder Information in the NPAC SMS, if only one sub-block exists for the block, and containsthe full 1K block of TNs.

### **Block Holder, Deletion**

#### **B-240RR3-32** Deletion of Number Pool Block Holder Information – Block Data

NPAC SMS shall allow NPAC personnel to delete the block holder information for a <u>1K Block</u> pool of numbers as stored in the NPAC SMS.

#### **B-250** Deletion of Number Pooling Block Holder Information – Check for pendinglike SVs

NPAC SMS shall issue an error message to the NPAC personnel at the time of Block Deletion, if there are any TNs within the 1K Block, that contain an SV, for a given TN in the 1K Block, with a status of pending/conflict/cancel-pending/failed, where the Old SP is equal to the Block Holder SPID.

#### **B-260** Deletion of Number Pooling Block Holder Information – Check for Port-to-Original SVs

<u>NPAC SMS shall issue an error message to the NPAC personnel at the time of Block Deletion, if there are any TNs within the 1K Block, that contain an SV, for a given TN in the 1K Block, where the SV is a Port-To-Original port.</u>

#### **B-270** Deletion of Number Pooling Block Holder Information – Unique Error Message for Pending-Like or Port-To-Original SVs

NPAC SMS shall generate a unique error message with a unique error number, when an error is encountered during Block deletion, for either pending-like SVs where the Old SP is equal to the Block Holder SPID, or where the SV is a Port-To-Original port.

#### **B-280** Deletion of Number Pooling Block Holder Information – Report for pendinglike SVs

NPAC SMS shall provide an "error dialog with a transition mechanism" that displays the unique error message described in B-250, B-260 and B-270, and allows the user to perform an easy onebutton mouse click generation of the report to the NPAC personnel of all of the error messages that are generated at the time of Block Deletion, for pending-like SVs, where the Old SP is equal to the Block Holder SPID, or Port-To-Original SVs, for TNs within the 1K Block.

#### <u>B-290</u>RR3-100 Deletion of Number Pool Block Holder Information – Sub-Block and Subscription Version Data <u>Dependency</u>

NPAC SMS shall <u>delete the Block Holder Information for a 1K Block</u>, <u>process a delete Block</u> <u>Holder request</u>, <u>by</u> <u>by</u> <u>first broadcasting the request of the deletion</u>, and <u>after successfully</u> deleting all subordinate subscription versions with LNP Type of POOL <u>by setting status to old</u>, and <u>all</u> subordinate Sub-Block to all Local SMSs by setting status to old.

#### RR3-110 Deletion of Number Pooling Block Holder Information – Sending Status Update to Sub-Block and Subscription Versions

NPAC SMS shall update the status of the Sub-Block and Subscription Versions at the start of the broadcast to the Local SMSs, from an active status to a sending status.

#### RR3-120 Deletion of Number Pool Block Holder Information – Broadcast of Sub-Block Data

NPAC SMS shall broadcast Pooled data deletes of Sub-Block data, to EDR LSMSs, via the NPAC SMS to Local SMS Interface.

#### RR3-130 Deletion of Number Pool Block Holder Information – Broadcast of Subscription Data

NPAC SMS shall broadcast Pooled data deletes of Subscription data, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface.

#### RR3-140 Deletion of Number Pooling Block Holder Information – Old Status Update to Sub-Block and Subscription Versions

NPAC SMS shall update the status of the Sub-Block and Subscription Versions upon successful completion of the broadcast to at least one Local SMS, from a sending status to an old status.

#### **RR3-150** Deletion of Number Pooling Block Holder Information – Failed Status Update

NPAC SMS shall update the status of the Sub-Block and Subscription Versions upon successful completion of the broadcast to NONE of the Local SMSs, from a sending status to an active status.

#### RR3-160 Deletion of Number Pooling Block Holder Information – Subscription Version Broadcast Failure to Local SMS

NPAC SMS shall consider a non-EDR Local SMS to be discrepant, and on the failed SP List, for the Sub-Block, if one or more subscription version disconnect broadcasts were unsuccessful.

#### RR3-170 Deletion of Number Pooling Block Holder Information – Sub-Block Broadcast Failure to Local SMS

NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the failed SP List, for the Sub-Block and ALL subscription versions, if the Sub-Block disconnect broadcast was-unsuccessful.

#### RR3-180 Deletion of Number Pooling Block Holder Information – Block Holder Notification

NPAC SMS shall send a notification to the Block Holder to update the status of the Sub-Block on the SOA, from an active status to an old status, for a Sub-Block with a SOA Origination set to-TRUE.

#### **RR3-190** Deletion of Number Pooling Block Holder Information – Code Holder Notification

NPAC SMS shall send a "de-pool" notification to the Code Holder to indicate that the block hasbeen de-pooled, and the Code Holder should reinstate default routing for the block, but notconsider this to be a notification for potential TN re-assignment.

## **NOTE: When is the "de-pool" notification sent?** How is the step-by-step process actually performed? Need to discuss this in more detail in Baltimore.

#### **RR3-200** Deletion of Number Pooling Block Holder Information – Check for pendinglike SVs

NPAC SMS shall issue a warning message to the NPAC personnel at the time of Block Deletion, if there are any TNs within the 1K block, that contain an SV with a status of pending/conflict/cancel-pending/failed, where the Old SP is equal to the Block Holder SPID, or where the SV is a Port-To-Original port.

#### **RR3-210** Deletion of Number Pooling Block Holder Information – Report for pendinglike SVs

NPAC SMS shall provide a report to the NPAC personnel of all of the warning messages that are generated at the time of Block Creation, for pending-like SVs, where the Old SP is equal to the Block Holder SPID, or Port-To-Original SVs, for TNs within the 1K block.

#### RR3-220 Re-Send of Number Pooling Block Holder Information – Sending Status Update to Failed Sub-Block and Failed Subscription Versions

NPAC SMS shall update the status of the failed Sub-Block and failed Subscription Versions at the start of the re-send to the Local SMSs, from an active status to a sending status.

# RR3-230Re-Send of Number Pooling Block Holder Information – Sending Status<br/>Update to Partially Failed Sub-Block and Partially Failed Subscription<br/>Versions

NPAC SMS shall update the status of the partially failed Sub-Block and partially failed Subscription Versions at the start of the re-send to the Local SMSs, from an old status to a sending status.

#### RR3-240 Re-Send of Number Pool Block Holder Information – Broadcast of Sub-Block Data

NPAC SMS shall broadcast Pooled data re-send deletes of Sub-Block data, to EDR LSMSs, viathe NPAC SMS to Local SMS Interface.

#### RR3-250 Re-Send of Number Pool Block Holder Information – Broadcast of Subscription Data

NPAC SMS shall broadcast Pooled data re-send deletes of Subscription data, to non-EDR-LSMSs, via the NPAC SMS to Local SMS Interface.

### Block Holder, NPA Splits

#### **<u>B-300</u>RR3-33.1**NPA Splits and the Number Pool Block Holder Information – Modification

NPAC SMS shall upon the start of permissive dialing for an NPA Split, convert the old NPA-NXX to the new NPA-NXX in the Number Pooling Block Information-if appropriate. **NOTE:** need to update M&P to let everyone know that this is automated at the NPAC, and that all SPs need to deal with the new NPA from this point on.

#### **B-310RR3-33.2**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.

### **B-320RR3-33.3**NPA Splits and the Number Pool Block Holder Information Table – Addition of an NPA-NXX involved in an NPA Split

NPAC SMS shall convert the old NPA-NXX to the new NPA-NXX for an NPA-NXX involved in an NPA Split upon entry of the Number Pooling Block Holder Information, if the old NPA-NXX is currently in permissive dialing.

### **Block Holder, First Port Notification**

#### **<u>B-330</u>RR3-34** Number Pool Block Holder information notification of First Port

NPAC SMS shall upon creation of the Number Pooling Block Holder Information send a notification of the planned first port for the NPA-NXX if there have not been any previous ports for the NPA-NXX.

NOTE: Should check the Portable NPA-NXX Data Model to see if a notification had previouslybeen sent ("NPA-NXX has been Ported" attribute).

#### Need to add an M&P for provisioning flow, box 8, to state that NPAC personnel will reject the pooled request back to the Pooling Administrator.

### **Block Holder, Query**

#### **<u>B-340</u>RR3-35** Query of Number Pool Block Holder Information

NPAC SMS shall allow NPAC personnel to query the block holder information for all data as listed in the Block Holder Information Data Model, for a <u>1K Block pool of numbers</u> as stored in the NPAC SMS.

#### 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 massupdates on Subscription Versions with an LNP Type of POOL.

NUMBER POC	DLING SUB	-BLOCK H	OLDER INFORMATION DATA MODEL
Attribute Name	Type (Size)	Required	Description
Sub Block ID	N	⊻	A unique sequential number assigned upon creation of the Sub-Block.
Block Holder SPID	C(4)	√	The Service Provider Id of the block holder.
TN Range Start	TN	V	Telephone number at the start of the pool for the 1K Block.
TN Range End	N(4)	V	Last four (4) digits of the telephone number at the end of the pool for the 1K Block.
LRN	TN	V	The LRN is an identifier for the switch on which pooled NPA-NXX-X resides for the 1K Block.
CLASS DPC	N (9)	V	DPC for 10-digit GTT for CLASS features for the 1K Block.
CLASS SSN	N (3)	$\checkmark$	CLASS SSN for the 1K Block.
LIDB DPC	N (9)	V	DPC for 10-digit GTT for LIDB features for the 1K Block.
LIDB SSN	N (3)	√	LIDB SSN for the 1K Block.
CNAM DPC	N (9)	V	DPC for 10-digit GTT for CNAM features for the 1K Block.
CNAM SSN	N (3)	√	CNAM SSN for the 1K Block.
ISVM DPC	N (9)	V	DPC for 10-digit GTT for ISVM features for the 1K Block.
ISVM SSN	N (3)	$\checkmark$	ISVM SSN for the 1K Block.
Creation Date	Т		The date and time (GMT) that this Sub-Block Holder record was created.
Activation Start Timestamp	Т		Date and time (GMT) of the Start of the Activation. This field defines the date and time of the start of the activation request (i.e., the date and time the NPAC begins the broadcasts to the LSMSs).
Activation Complete Timestamp	Т		Date and time (GMT) of the Completion of the Activation. This field defines the date and time of

NUMBER POC Attribute Name	DLING SUB Type (Size)	-BLOCK H Required	OLDER INFORMATION DATA MODEL Description
			the completion of the activation request (i.e., the date and time the NPAC receives at least one Local SMS acknowledgment of the broadcast, or the retries were exhausted for the activate).
Last Modified Timestamp	Т		Date and time (GMT) of the Last Modification to the Sub-Block. The <u>initial default</u> value is the Creation Timestamp.
SOA Origination	В	V	A boolean that indicates whether or not the <u>Block</u> <u>HolderService Provider</u> 's SOA initiated the Sub- Block over the SOA to NPAC SMS Interface. This attribute will be set by the NPAC SMS at the time of Sub-Block creation. If originated by SOA, value is TRUE. If originated by NPAC, value is FALSE.
Status	E	V	<ul> <li>Status of the Sub-Block.</li> <li>The <u>initial default</u>-value is S for Sending.</li> <li>Valid enumerated values are:</li> <li>A - Active (0)</li> <li>S - Sending (1)</li> <li>F - Failed (2)</li> <li>PF - Partial Failure (3)</li> <li>O - Old (4)</li> </ul>

**NOTE:** The Sub-Block Holder Information Data, can be initiated by either NPAC Personnel or over the SOA Interface, and notifications may be sent or suppressed to the SOA, depending on the SOA Origination in each Sub-Block record.

### Sub-Block Holder, General

#### **<u>SB-10</u>** Number Pool Sub-Block Holder Information – NPAC Personnel GUI</u>

NPAC SMS shall allow NPAC Personnel to add or modify Sub-Block Holder information via the NPAC Administrative Interface.

#### <u>SB-20</u>RR3-17 Service Provider EDR Indicator Download of Sub-Block Object

NPAC SMS shall download Number Pooling Sub-Block Information, for additions, modifications, and deletions, using the Number Pooling Sub-Block Object, via the NPAC SMS to Local SMS Interface if the EDR indicator is **TRUE**.

#### **NOTE: NANC 139 needs to be updated to add this as a broadcast to the SOA.**

#### **<u>SB-30</u> RR3-18** Service Provider EDR Indicator Download of SVs

NPAC SMS shall download Number Pooling Sub-Block Information, for additions, modifications, and deletions, using individual subscription versions with LNP Type of POOL, via the NPAC SMS to Local SMS Interface if the EDR indicator is **FALSE**.

#### **<u>SB-40</u>** RR3-300 Number Pool Sub-Block Holder Information – Service Provider Validation

NPAC SMS shall validate that the Block Holder SPID attribute of the Sub-Block request for additions, is equal to the SPID making the request in the SOA to NPAC SMS Interface.

#### NOTE: <u>SB-40</u>this relates to the AccessControl portion of the CMIP Association.

#### **<u>SB-50</u>RR3-310** Number Pool Sub-Block Holder Information – SPID Validation

NPAC SMS shall validate that the Block Holder SPID attribute of the Sub-Block request for additions, is equal to the SPID of the requestor making the request.

#### <u>SB-60</u>RR3-320 Number Pool Sub-Block Holder Information – Block Data Validation

NPAC SMS shall validate the following three attributes such that the:-

-Block Holder SPID in the Sub-Block is equal to the Block Holder SPID,-

\_\_\_\_TN Range Start in the Sub-Block is equal to the TN Range Start, and the-

- TN Range End in the Sub-Block is equal to the TN Range End,-

in one of the valid Number Pooling Blocks defined in the NPAC SMS, as referred to in the Block Holder Information Data Model.

#### **<u>SB-70</u>RR3-36** Number Pool Sub-Block Holder Information – Block Effective Date

NPAC SMS shall reject a request to create or modify a Sub-Block if the current date is prior to the effective date of the Number Pooling Block as defined in the NPAC SMS.

#### **<u>SB-80</u>RR3-37** Number Pool Sub-Block Holder Information – LRN Validation

NPAC SMS shall validate that the LRN specified in the addition or modification of Number Pooling Sub-Block Holder information is a valid LRN defined in the NPAC SMS for the block holder. <u>May need to change to state exact LRN match from block holder, if we agree on this later.</u>

## <u>SB-90</u>RR3-38 Number Pool Sub-Block Holder Information – No Overlapping Sub-Block Validation

NPAC SMS shall validate that the TN range specified in the addition or modification of Number Pooling Sub-Block Holder Information does not overlap with a TN in a range for another entry in the Number Pooling Sub-Block Holder Information.

#### RR3-39 Number Pool Sub-Block Holder Information – Block in one NPA-NXX

NPAC SMS shall validate that the range specified for a sub-block of numbers to be pooled is contained in one NPA-NXX-X, where the range of stations matches 000 and 999, inclusive.

#### **RR3-40** Number Pool Sub-Block Holder Information – Minimum Sub-Block Size-Tunable Parameter

NPAC SMS shall provide a Minimum Sub-Block Size tunable parameter, which is defined as the minimum number of TNs in a sub-block.

#### RR3-41 Number Pool Sub-Block Holder Information – Minimum Sub-Block Size Tunable Parameter Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the Minimum Sub-Block Sizetunable parameter.

#### RR3-42 Number Pool Sub-Block Holder Information – Minimum Sub-Block Size Tunable Parameter Default

NPAC SMS shall default the Minimum Sub-Block Size tunable parameter to 1000 TNs.

#### RR3-43 Number Pool Sub-Block Holder Information – Minimum Sub-Block Size Processing

NPAC SMS shall use the Minimum Sub-Block Size tunable parameter to determine the threshold for processing Sub-Block creation requests, and will reject requests below the minimum size.

#### STOPPED HERE, Denver, 7/31.

#### <u>SB-100</u>RR3-320 Number Pool Sub-Block Holder Information – Originator

NPAC SMS shall set the SOA Origination to based on the origination point for the Sub-Block ereation, where this value is TRUE for Sub-Blocks sent over the SOA to NPAC SMS Interface, and to FALSE for Sub-Blocks that were created by NPAC personnel.

#### **<u>SB-110</u>RR3-44** Number Pool Sub-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 RR3-35, RR3-36, RR3-37, RR3-38, RR3-39, RR3-40, RR3-41, RR3-42, RR3-43, RR3-44, RR3-46, RR3-47, RR3-48, RR3-49, RR3-50, RR3-51, RR3-52, RR3-53, RR3-54, RR3-55, RR3-56, RR3-57, and RR3-58.

### CMA to update numbers once requirements are finalized.

### **<u>SB-120</u>RR3-330** Number Pooling Sub-Block Holder Information – Status Update Notification

NPAC SMS shall send <u>all</u> SOA notifications to the current SP (the block holder) for status updates on Sub<u>Blockseription Versions with an LNP Type of POOL</u>, when the Sub-Block SOA Origination is TRUE.

### **SB-130RR3-340** Number Pooling Sub-Block Holder Information – Status Update Notification Suppression

NPAC SMS shall suppress <u>all</u> SOA notifications to the current SP (the block holder) for status updates on Sub<u>Blockscription Versions with an LNP Type of POOL</u>, when the Sub-Block SOA Origination is FALSE.

#### <u>SB-140</u>RR3-350 Number Pooling Sub-Block Holder Information – Failed SP List Update <u>for Sub-Block</u>

NPAC SMS shall update the Sub-Block with a Failed SP List, based on an EDR Local SMS failing to process the Sub-Block Object, or a non-EDR Local SMS failing to process one or more Subscription Versions within the Sub-Block.

### SB-150Number Pooling Sub-Block Holder Information – Failed SP List Update for<br/>Subscription Versions

NPAC SMS shall update the Sub-Block with a Failed SP List, based on a non-EDR Local SMS failing to process one or more Subscription Versions within the Sub-Block.

#### <u>SB-160</u>RR3-360 Number Pooling Sub-Block Holder Information – Failed SP List Broadcast

NPAC SMS shall broadcast a Failed SP List, to the current SP (the block holder) via the SOA to NPAC SMS Interface, along with the SOA notification for status update <u>of the Sub-Block</u>.

### Sub-Block Holder, Addition

#### **<u>SB-170</u>RR3-370** Addition of Number Pooling Sub-Block Holder Information

NPAC SMS shall allow NPAC personnel or Service Provider via the SOA to NPAC SMS Interface to request the creation of a Number Pooling Sub-Block.

## **SB-180RR3-380** Addition of Number Pooling Sub-Block Holder Information – Required Data

NPAC SMS shall require NPAC personnel or Service Provider via the SOA to NPAC SMS Interface to specify the Service Provider Id, the TN range, and the initial routing information, as defined in the Number Pooling Sub-Block Holder Information data model.

#### RR3-400 Addition of Number Pooling Sub-Block Holder Information – Service Provider Data

NPAC SMS shall verify that the Old and New Service Provider IDs exist in the NPAC SMS at the time of initial Sub-Block creation.

## SB-190Addition of Number Pooling Sub-Block Holder Information – Check for<br/>pending-like SVs for NPAC Personnel

NPAC SMS shall issue an error message to the NPAC personnel at the time of Sub-Block Creation from the NPAC Administrative Interface, if there are any TNs within the 1K Block, that contain an SV, for a given TN in the 1K Block, with a status of pending/conflict/cancelpending/failed, and where a currently active SV does NOT exist, for that same given TN.

#### <u>SB-200</u> Addition of Number Pooling Sub-Block Holder Information – Check for Port-To-Original SVs for NPAC Personnel

NPAC SMS shall issue an error message to the NPAC personnel at the time of Sub-Block. Creation from the NPAC Administrative Interface, if there are any TNs within the 1K Block, that contain an SV, for a given TN in the 1K Block, with a status of pending/conflict/cancel-pending/failed, and where the SV is a Port-To-Original port, for that same given TN.

## SB-210Addition of Number Pooling Sub-Block Holder Information – Check for<br/>pending-like SVs for SOA

NPAC SMS shall issue an error message to the **SOA** at the time of Sub-Block Creation from the SOA via the SOA to NPAC SMS Interface, if there are any TNs within the 1K Block, that contain an SV, for a given TN in the 1K Block, with a status of pending/conflict/cancel-pending/failed, and where a currently active SV does NOT exist, for that same given TN.

#### <u>SB-220</u> Addition of Number Pooling Sub-Block Holder Information – Check for Port-To-Original SVs for SOA

NPAC SMS shall issue an error message to the **SOA** at the time of Sub-Block Creation from the SOA via the SOA to NPAC SMS Interface, if there are any TNs within the 1K Block, that contain an SV, for a given TN in the 1K Block, with a status of pending/conflict/cancel-pending/failed, and where the SV is a Port-To-Original port, for that same given TN.

#### **SB-230** Addition of Number Pooling Sub-Block Holder Information – Unique Error Message for Pending-Like No-Active or Port-To-Original SVs

NPAC SMS shall generate a unique error message with a unique error number, when an error is encountered during Sub-Block creation, for either pending-like no-active SVs or Port-To-Original SVs.

## **SB-240** Addition of Number Pooling Sub-Block Holder Information – Report for pending-like SVs and Port-To-Original SVs

NPAC SMS shall provide an "error dialog with transition mechanism" that displays the unique error message described in SB-190, SB-200, SB-210, SB-220, and SB-230, and allows the user to perform an easy one-button mouse click generation of the report to the NPAC personnel of all of the error messages that are generated at the time of Sub-Block Creation, for pending-like SVs and Port-To-Original SVs, for TNs within the 1K Block.

#### <u>SB-250</u>Requirement 3 Addition of Number Pooling Sub-Block Holder Information – Fieldlevel 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-x upon Sub-Block creation for a Number Pool:

- ?6 Block Holder SPID?7 TN Range Start?8 TN Range End
- ?8 TIN Kange En
  ?9 LRN
  ?10 Class DPC
  ?11 Class SSN
  ?12 LIDB DPC
  ?13 LIDB SSN
  ?14 CNAM DPC
  ?15 CNAM SSN
  ?16 ISVM DPC
  ?17 ISVM SSN

#### RR3-410 Addition of Number Pooling Sub-Block Holder Information – Subscription Data

NPAC SMS shall create individual subscription versions, with LNP Type of POOL, for each TNwithin a Sub-Block, that does not already exist with a status of pending/conflict/cancelpending/failure, immediately after successfully creating a Number Pooling Sub-Block in the NPAC SMS.

#### <u>SB-260</u>RR3-420 Addition of Number Pooling Sub-Block Holder Information – Broadcast of Sub-Block Data

NPAC SMS shall broadcast Pooled data additions of Sub-Block data, to EDR LSMSs, via the NPAC SMS to Local SMS Interface, upon successful creation of the Pooled Sub-Block in the NPAC SMS.

#### RR3-425 Addition of Number Pooling Sub-Block Holder Information – Broadcast of Subscription Data

NPAC SMS shall broadcast Pooled data additions of Subscription data, to non-EDR LSMSs, viathe NPAC SMS to Local SMS Interface.

### <u>SB-270</u>RR3-430 Addition of Number Pooling Sub-Block Holder Information – Active Status Update

NPAC SMS shall update the status of the Sub-Block and Subscription Versions upon successful completion of the broadcast to ALL Local SMSs, from a sending status to an active status.

#### <u>SB-280</u>RR3-440 Addition of Number Pooling Sub-Block Holder Information – Partially Failed Status Update

NPAC SMS shall update the status of the Sub-Block and Subscription Versions-upon completion of the broadcast to all Local SMSs, and a successful response from at least onecompletion of the broadcast to SOME, but not all Local SMSs, from a sending status to a partially failed status.

### **SB-290RR3-450** Addition of Number Pooling Sub-Block Holder Information – Failed Status Update

NPAC SMS shall update the status of the Sub-Block and Subscription Versions-upon completion of the broadcast to all Local SMSs, and a successful response from completion of the broadcast to-NONE of the Local SMSs, from a sending status to a failed status.

#### <u>SB-300</u>RR3-460 Addition of Number Pooling Sub-Block Holder Information – Subscription Version Broadcast Failure to Local SMS

NPAC SMS shall consider a non-EDR Local SMS to be discrepant, and on the failed SP List, for the Sub-Block and the individual unsuccessful subscription versions, if one or more subscription version activation broadcasts were unsuccessful.

#### <u>SB-310</u>RR3-470 Addition of Number Pooling Sub-Block Holder Information – Sub-Block Broadcast Failure to Local SMS

NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the failed SP List, for the Sub-Block-and ALL subscription versions, if the Sub-Block activation broadcast was unsuccessful.

#### RR3-480 Filters for "Pooled Number" Sub-Blocks

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

#### **RR3-47** Use of Number Pool Default Routing Information – Existing Sub-Block

The NPAC SMS shall use the default routing restoration information in the Number Pooling Sub-Block Holder Information as the block holder default routing when a ported pooled number is disconnected or port to original port and returns the TN(s) to the block, on or after the activation date of sub-block.

### Sub-Block Holder, Modification

#### **<u>SB-320</u>R3-48** Modification of Number Pooling Sub-Block Holder Information

NPAC SMS shall allow NPAC personnel or Service Provider via the SOA to NPAC SMS interface to modify the sub-block holder default routing information (LRN, DPC(s), and SSN(s)), for a <u>1K Block pool of numbers</u> as stored in the NPAC SMS for default routing restoration.

### SB-330Modification of Number Pooling Sub-Block Holder Information – SPID<br/>Validation

NPAC SMS shall allow a Service Provider via the SOA to NPAC SMS Interface, to modify Sub-Block data for Sub-Blocks where the Block Holder SPID matches the Service Provider making the request.

#### RR3-490 Modification of Number Pooling Sub-Block Holder Information – Subscription Data

NPAC SMS shall update individual subscription versions, with LNP Type of POOL, for each TNwithin a Sub-Block immediately after successfully modifying a Number Pooling Sub-Block inthe NPAC SMS.

### SB-340Modification of Number Pooling Sub-Block Holder Information –Status<br/>Update

NPAC SMS shall update the status of the Sub-Block, upon the start of the broadcast of a Sub-Block modification to the Local SMSs, from an active status to a sending status.

#### <u>SB-350</u>RR3-500 Modification of Number Pooling Sub-Block Holder Information – Broadcast of Sub-Block Data

NPAC SMS shall broadcast Pooled data modifications <u>of a Sub-Block to EDR LSMSs</u>, via the NPAC SMS to Local SMS Interface, upon successful modification of the Pooled Sub-Block in the NPAC SMS.

#### RR3-510 Modification of Number Pooling Sub-Block Holder Information – Broadcast of Subscription Data

NPAC SMS shall broadcast Pooled data modifications, via the NPAC SMS to Local SMS Interface, upon successful modification of the Pooled Subscription Versions in the NPAC SMS.

#### <u>SB-360</u>RR3-520 Modification of Number Pooling Sub-Block Holder Information – Active Status Update

NPAC SMS shall update the status of the Sub-Block and Subscription Versions upon completion of the broadcast to ALL Local SMSs, whether or not the broadcasts were successful, from a sending status to an active status.

## SB-370Modification of Number Pooling Sub-Block Holder Information – Sub-Block<br/>Holder Notification

<u>NPAC SMS shall send a notification to the Block Holder to update the status of the Sub-Block on the SOA, from a sending active status to an active status, for a Sub-Block with a SOA</u> <u>Origination set to TRUE.</u>

#### <u>SB-380</u>RR3-530 Modification of Number Pooling Sub-Block Holder Information – Subscription Version Broadcast Failure to Local SMS

NPAC SMS shall consider a non-EDR Local SMS to be discrepant, and on the Failed SP List, for the Sub-Block<u>and the individual unsuccessful subscription versions</u>, if one or more subscription version modify active broadcasts were unsuccessful<del>ly</del>.

#### <u>SB-390</u>RR3-540 Modification of Number Pooling Sub-Block Holder Information – Sub-Block Broadcast Failure to Local SMS

NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the Failed SP List, for the Sub-Block and ALL subscription versions, if the Sub-Block modify active broadcast was unsuccessfully.

### Sub-Block Holder, Deletion

#### <u>SB-400</u>RR3-50 Deletion of Number Pool Sub-Block Holder Information – NPAC

NPAC SMS shall reject a request to delete a Sub-Block by NPAC personnel-or Service Providervia the SOA to NPAC SMS interface.

NOTE: need error messaging, possibly use "processing failure 14018, with string" ...

#### SB-410 Deletion of Number Pool Sub-Block Holder Information – SOA

NPAC SMS shall reject a request to delete a Sub-Block by a Service Provider via the SOA to NPAC SMS interface, and will return an error message, SOA not authorized.

#### SB-420 Deletion of Number Pool Sub-Block Holder Information – Sub-Block Data

NPAC SMS shall process a delete Block Holder request, by deleting the subordinate Sub-Block by setting status to old.

## SB-430Deletion of Number Pool Sub-Block Holder Information – Sub-Block Data<br/>and Subscription Version Data Synchronization

NPAC SMS shall process a delete Block Holder request, by synchronizing the delete of the subordinate Sub-Block with the delete of the corresponding Subscription Versions, in the 1K Block.

## SB-440Deletion of Number Pooling Block Holder Information – Sending StatusUpdate to Sub-Block

<u>NPAC SMS shall update the status of the Sub-Block at the start of the broadcast to the Local</u> <u>SMSs, from an active status to a sending status.</u>

## SB-450 Deletion of Number Pool Block Holder Information – Broadcast of Sub-Block Data

NPAC SMS shall broadcast Pooled data deletes of Sub-Block data, to EDR LSMSs, via the NPAC SMS to Local SMS Interface.

## SB-460Deletion of Number Pooling Block Holder Information – Old Status Update to<br/>Sub-Block

<u>NPAC SMS shall update the status of the Sub-Block upon completion of the broadcast to all</u> Local SMSs, and a successful response from at least one Local SMS, from a sending status to an <u>old status</u>.

## SB-470Deletion of Number Pooling Block Holder Information – Failed Status Update<br/>to Sub-Block and Subscription Versions

<u>NPAC SMS shall update the status of the Sub-Block upon completion of the broadcast to the</u> <u>Local SMSs, and a successful response from NONE of the Local SMSs, from a sending status to</u> <u>an active status.</u>

## SB-480Deletion of Number Pooling Sub-Block Holder Information – SubscriptionVersion Broadcast Failure to Local SMS

<u>NPAC SMS shall consider a non-EDR Local SMS to be discrepant, and on the Failed SP List, for</u> the Sub-Block and the individual unsuccessful subscription versions, if one or more subscription version disconnect broadcasts were unsuccessful.

## SB-490Deletion of Number Pooling Block Holder Information – Sub-Block Broadcast<br/>Failure to Local SMS

<u>NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the failed SP List, for the Sub-Block, if the Sub-Block disconnect broadcast was unsuccessful.</u>

## SB-500Deletion of Number Pooling Block Holder Information – Block HolderNotification

NPAC SMS shall send a notification to the Block Holder to update the status of the Sub-Block on the SOA, from an active status to an old status, for a Sub-Block with a SOA Origination set to TRUE.

### Sub-Block Holder, NPA Splits

#### <u>SB-510</u>RR3-51 NPA Splits and the Number Pooling Sub-Block Holder Information – Modification

NPAC SMS shall upon the start of permissive dialing for an NPA Split convert the old NPA-NXX to the new NPA-NXX in the Number Pooling Sub-Block Information, if appropriate.

#### <u>SB-520</u>RR3-52 NPA Splits and the Number Pooling Sub-Block Holder Information – 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 Sub-Block Holder Information.

## <u>SB-530</u>RR3-53 NPA Splits and the Number Pool Sub-Block Holder Information – Addition of an NPA-NXX involved in an NPA Split

NPAC SMS shall convert the old NPA-NXX to the new NPA-NXX for an NPA-NXX involved in an NPA Split upon entry into the Number Pooling Sub-Block Holder Information, if the old NPA-NXX is currently in permissive dialing.

## SB-540NPA Splits and the Number Pool Sub-Block Holder Information – Addition of<br/>a Sub-Block for an NPA-NXX involved in an NPA Split

<u>NPAC SMS shall accept a Sub-Block create from NPAC personnel or a Service Provider via the SOA to NPAC SMS Interface, with either the old NPA-NXX or the new NPA-NXX for an NPA-NXX that is currently in permissive dialing.</u>

## SB-550NPA Splits and the Number Pool Sub-Block Holder Information – Broadcastof a Sub-Block Create for an NPA-NXX involved in an NPA Split

NPAC SMS shall broadcast a Sub-Block create to an EDR Local SMS, via the NPAC SMS to Local SMS Interface, by sending a Sub-Block using the new NPA-NXX for an NPA-NXX that is currently in permissive dialing.

## SB-560NPA Splits and the Number Pool Sub-Block Holder Information –Modification of a Sub-Block for an NPA-NXX involved in an NPA Split

NPAC SMS shall accept a Sub-Block modify active from NPAC personnel or a Service Provider via the SOA to NPAC SMS Interface, with either the old NPA-NXX or the new NPA-NXX for an NPA-NXX that is currently in permissive dialing.

## SB-570NPA Splits and the Number Pool Sub-Block Holder Information – Broadcastof a Sub-Block Modify Active for an NPA-NXX involved in an NPA Split

<u>NPAC SMS shall broadcast a Sub-Block modify active to an EDR Local SMS, via the NPAC SMS to Local SMS Interface, by sending a Sub-Block using the new NPA-NXX for an NPA-NXX that is currently in permissive dialing.</u>

### Sub-Block Holder, Filters

SB-580 Filters for Sub-Blocks

NPAC SMS shall apply NPA-NXX Filters to Sub-Block downloads to the Local SMS(s).

### Sub-Block Holder, Default Routing Restoration

#### SB-590 Use of Number Pool Default Routing Information – Existing Sub-Block

The NPAC SMS shall use the default routing restoration information in the Number Pooling Sub-Block Holder Information as the block holder default routing, when a ported pooled number is disconnected or port to original port is activated, and returns the TN(s) to the block, on or after the activation date of the sub-block.

### Subscription Version, Query

SB-600 Query Sub-Block

<u>NPAC SMS shall return Sub-Block data that match the query selection criteria, on query requests</u> by NPAC personnel, SOA via the SOA to NPAC SMS Interface, or Local SMS via the NPAC SMS to Local SMS Interface.

### Sub-Block Holder, Re-Send

## SB-610Re-Send of Number Pooling Sub-Block Holder Information – Sending StatusUpdate to Failed Sub-Block

<u>NPAC SMS shall update the status of the failed Sub-Block at the start of the re-send to all Local</u> <u>SMSs, from an active status to a sending status.</u>

## SB-620Re-Send of Number Pooling Sub-Block Holder Information – Sending StatusUpdate to Partially Failed Sub-Block

NPAC SMS shall update the status of the partially failed Sub-Block at the start of the re-send to the Local SMSs, specified in the re-send request, from a partially failed status to a sending status.

## SB-630Re-Send of Number Pooling Sub-Block Holder Information – Sending StatusUpdate to Active Sub-Block

<u>NPAC SMS shall update the status of the active Sub-Block, with a Failed SP List, at the start of the re-send to the Local SMSs, specified in the re-send request, from an active status to a sending status.</u>

## SB-640Re-Send of Number Pooling Sub-Block Holder Information – Sending StatusUpdate to Old Sub-Block

<u>NPAC SMS shall update the status of the old Sub-Block, with a Failed SP List, at the start of the re-send to the Local SMSs, specified in the re-send request, from an old status to a sending status.</u>

## SB-650 Re-Send of Number Pool Block Holder Information – Broadcast of Sub-Block Data

NPAC SMS shall broadcast Pooled data re-sends of Sub-Block data, to EDR LSMSs, via the NPAC SMS to Local SMS Interface.

## SB-660Re-Send of Number Pooling Sub-Block Holder Information – Update to Failed<br/>SP List

NPAC SMS shall update the Failed SP List of the Sub-Block by removing the previously failed Local SMS, upon a successful re-send to a previously failed Local SMS.

## SB-670Re-Send of Number Pool Sub-Block Holder Information – Sub-Block Data<br/>and Subscription Version Data Synchronization

<u>NPAC SMS shall process the update to the Failed SP List, by synchronizing the update to the Failed SP List for the Sub-Block with the update to the Failed SP List for all of the corresponding Subscription Versions, in the 1K Block.</u>

### Sub-Block Holder, Bulk Data Downloads

### RR3-20 Bulk Database Extracts – Sub-Block

NPAC SMS shall periodically perform NPAC SMS database extracts of active Sub-Blocks on a Service Provider basis to an ASCII file.

### **RR3-21** Scope of Extract File Creation – Sub-Block

NPAC SMS shall allow NPAC personnel to specify a Service Provider for database extract fileercation of active Sub-Blocks.

## **RR3-22 Parameters of Extract File Creation – Sub-Block**

NPAC SMS shall allow NPAC personnel to specify the following parameters for database extract file creation of active Sub-Blocks:

- Block Holder SPID - TN Range Start -- LRN -- CLASS DPC - LIDB DPC - CNAM DPC -- CNAM SSN -- ISVM SSN - Activation Start Timestamp -- Activation Complete Timestamp - Last Modified Timestamp - SOA Origination

## **<u>SB-680</u>RR3-23** Bulk Download File Creation – Sub-Block

NPAC SMS shall allow NPAC personnel to request a bulk <u>data</u> download file for <u>active</u> Sub-Block data via the NPAC Administrative Interface.

## **<u>SB-690</u>** Bulk Download File Creation – Sub-Block

NPAC SMS shall include the Requesting Service Provider as an entry field for the Sub-Block bulk data download file via the NPAC Administrative Interface.

## SB-700 Bulk Data Download – Sub-Block

NPAC SMS shall provide a bulk data download file that contains all active Sub-Blocks in the NPAC SMS.

## <u>SB-710</u> Bulk Data Download – Filters for Sub-Blocks

NPAC SMS shall apply NPA-NXX Filters to Sub-Blocks in the creation of bulk data download files.

## <u>SB-720 Bulk Data Download – FTP Sub-Directory</u>

NPAC SMS shall automatically put the bulk data download file into the FTP sub-directory of the Service Provider, based on SPID, that requested the creation of the bulk data download file.

## Sub-Block Holder, Resync

### **<u>SB-730</u>RR3-24** Resynchronization – Sub-Block

NPAC SMS shall process a Service Provider request to download Sub-Block data over the NPAC SMS to Local SMS Interface, when a Service Provider establishes an association with the resynchronization flag set to TRUE, and requests Sub-Block data based on criteria sent to the NPAC SMS upon association.

## <u>SB-740 Resynchronization – Sub-Block resync and queuing of messages</u>

<u>NPAC SMS shall queue up all messages to the Local SMS, via the NPAC SMS to Local SMS</u> <u>Interface, when a Service Provider has requested Sub-Block data download upon establishing an</u> <u>association with the NPAC SMS and where the resynchronization flag is set to TRUE.</u>

#### **SB-750** Resynchronization – Sub-Block resync and sending of queued messages

<u>NPAC SMS shall send, in order, queued up messages to the Local SMS, via the NPAC SMS to Local SMS Interface, when a Service Provider has sent a message to the NPAC SMS that resynchronization has been completed.</u>

## <u>SB-760</u> Resynchronization – Filters on Sub-Block resync

NPAC SMS shall apply NPA-NXX Filters to Sub-Block resynchronization to the Local SMS(s), via the NPAC SMS to Local SMS Interface.

## **SB-770** Resynchronization – Update to Failed SP List

NPAC SMS shall update the Failed SP List of the Sub-Block by removing the resyncing Local SMS, upon a successful resynchronization to a previously failed Local SMS.

## SB-780Resynchronization – Sub-Block Data and Subscription Version DataSynchronization

NPAC SMS shall process the update to the Failed SP List, by synchronizing the update to the Failed SP List for the Sub-Block with the update to the Failed SP List for all of the corresponding Subscription Versions, in the 1K Block.

## **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 serviceprovider (the block holder) for distribution to their customers.

## Subscription Version, Addition for Number Pooling

## SV-10Addition of Number Pooling Subscription Version Information – SubscriptionData

NPAC SMS shall create individual subscription versions, with LNP Type of POOL, for each TN within the 1K Block, that do not already exist with a status of active/partial failure/disconnect pending/sending, after successfully creating a Number Pooling Sub-Block in the NPAC SMS.

### <u>SV-20</u>Requirement 1 <u>Addition of Number Pooling Subscription Version Information –</u> Create "Pooled Number" Subscription Version

NPAC SMS shall automatically populate the following data from the associated Sub-Block upon Subscription Version creation for a Pooled Number port:

?18 Version ID - Automatically generated by NPAC SMS.

?19 LRN - Value set to same field in Sub-Block.

?20 Old Service Provider ID - Value set to owner of NPA-NXX.

?21 New Service Provider ID - Value set to Block Holder SPID field in Sub-Block.

?22 TN - Telephone Number associated with this Subscription Version.

?23 LNP Type - Value set to "POOL".

?24 Status - Value initially set to "Sending".

?25 CLASS DPC - Value set to same field in Sub-Block.

?26 CLASS SSN - Value set to same field in Sub-Block.

?27 LIDB DPC - Value set to same field in Sub-Block.

?28 LIDB SSN - Value set to same field in Sub-Block.

?29 CNAM DPC - Value set to same field in Sub-Block.

?30 CNAM SSN - Value set to same field in Sub-Block.

?31 ISVM DPC - Value set to same field in Sub-Block.

?32 ISVM SSN - Value set to same field in Sub-Block.

?33 New Service Provider Due Date - Value set to current date.

?34 Old Service Provider Due Date - Value set to current date.

?35 Old Service Provider Authorization - Value set to "TRUE".

?36 New Service Provider Create Time Stamp - Value set to current date/time.

?37 Old Service Provider Authorization Time Stamp - Value set to current date/time.

?38 Activation Request Time Stamp - Value set to current date/time.

?39 Activation Broadcast Date - Value set to current date.

	?40 Activation Broadcast Complete Time Stamp - Value set to current date/time, once the
	broadcast is complete (either Local SMS has responded or retries have been exhausted).
	?41 Disconnect Request Time Stamp - Value set to all zeros.
	?42 Disconnect Broadcast Time Stamp - Value set to all zeros.
	?43 Disconnect Broadcast Time Stamp - Value set to all zeros.
	?44 Disconnect Broadcast Complete Time Stamp - Value set to all zeros.
	?45 Effective Release Date - Value set to all zeros.
	?46 Customer Disconnect Date - Value set to all zeros.
	?47 Pre-Cancellation Status - Value set to all zeros.
	?48 Old Service Provider Cancellation Time Stamp - Value set to all zeros.
	?49 New Service Provider Cancellation Time Stamp - Value set to all zeros.
	?50 <u>Cancellation Time Stamp - Value set to all zeros.</u>
	?51 Old Time Stamp - Value set to all zeros.
	?52 Conflict Time Stamp - Value set to all zeros.
	?53 Conflict Resolution Time Stamp - Value set to all zeros.
	?54 Create Time Stamp - Value set to current date/time.
	?55 Modified Time Stamp - Value set to current date/time.
	?56 Porting to Original - Value set to "FALSE".
	?57 End User Location Value - Value set to "no value".
	?58 End User Location Value Type - Value set to "no value".
	?59 Modify Request Time Stamp - Value set to all zeros.
	?60 Modify Broadcast Time Stamp - Value set to all zeros.
	?61 Modify Broadcast Complete Time Stamp - Value set to all zeros.
	?62 Billing ID - Value set to "no value".
	?63 <u>Status Change Cause Code - Value set to "no value".</u>
	?64 Local Number Portability Type - Port Type. This field must be set to "POOL" for an LNP
	pooled number port.
	?65 Ported Telephone Numbers - this entry is a continuous range of TNs that identifies a group of
	Subscription Versions that have not previously been ported.
1	266 Due Data data on which transfer of service of a number need from an old facilities based
	?66 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. This field will be set to the current date.
	This field will be set to the current date.
	?67 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).
1	?68 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).
	Provider that is the code holder (i.e. the current owner of the block).
	?69 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.
ļ	?70 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.
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?71 Porting to Original - flag indicating whether or not this is a "porting to original" port. Thisflag 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 automatically populate the following optional fields upon Subscription Versionereation for a Pooled Number port:

?72 Billing Service Provider ID - This field will be set to "no value" by the NPAC SMS.

?73 End-User Location - Value - This field will be set to "no value" by the NPAC SMS.

?74 End-User Location - Type - This field will be set to "no value" by the NPAC SMS.

## **Requirement 9** Create "Pooled Number" Subscription Version – Subscription Version Validation

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

## **NOTE: If this situation arises, it will need to be resolved via M&Ps, since the failure should have occurred at the Sub-Block creation.**

**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.

#### <u>SV-30</u>Requirement 10.2 Create "Pooled Number" Subscription Version – Addition of Number Pooling Subscription Version Information – 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 for any TNs within the 1K Block, 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.

### <u>SV-40</u>Requirement 11 Create "Pooled Number" Subscription Version - Addition of Number Pooling Subscription Version Information – 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.

## CMA Comment → need to update requirements list above and below, once numbers are finalized.

<u>SV-50</u>Requirement 12 Create "Pooled Number" Subscription Version - Addition of Number Pooling Subscription Version Information - 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.

<u>CMA Comment</u> → need to update requirements list above, once numbers are finalized.

<u>SV-60</u>Requirement 13 Create "Pooled Number" Subscription Version - Addition of Number Pooling Subscription Version Information – 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 of Subscription Versions with LNP Type of POOL.

<u>SV-70</u>Requirement 14.1 <u>Create "Pooled Number" Subscription Version - Addition of</u> <u>Number Pooling Subscription Version Information – Set to SendingActive</u>

NPAC SMS shall set a Subscription Version to <u>sendingactive</u> upon successful subscription creation.

# SV-80Addition of Number Pooling Subscription Version Information – Broadcast of<br/>Subscription Data

NPAC SMS shall broadcast Pooled data additions of Subscription data, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface, upon successful creation of the 1K Block in the NPAC SMS.

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<u>NPAC SMS shall update the status of each Subscription Version with LNP Type of POOL for</u> each TN in the 1K Block, upon successful completion of the broadcast to ALL Local SMSs, from a sending status to an active status.

## SV-100Addition of Number Pooling Subscription Version Information – Partially<br/>Failed Status Update

<u>NPAC SMS shall update the status of each Subscription Version with LNP Type of POOL for</u> each TN in the 1K Block, upon completion of the broadcast to all Local SMSs, and a successful response from at least one, but not all Local SMSs, from a sending status to a partially failed status.

# SV-110Addition of Number Pooling Subscription Version Information – Failed Status<br/>Update

<u>NPAC SMS shall update the status of each Subscription Version with LNP Type of POOL for</u> <u>each TN in the 1K Block, upon completion of the broadcast to all Local SMSs, and a successful</u> <u>response from NONE of the Local SMSs, from a sending status to a failed status.</u>

## SV-120Addition of Number Pooling Subscription Version Information – Sub-BlockBroadcast Failure to Local SMS

<u>NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the failed SP List, for</u> <u>ALL subscription versions with LNP Type of POOL in the 1K Block, if the Sub-Block activation</u> <u>broadcast was unsuccessful.</u>

### <u>SV-130</u>Requirement 14.2 <u>Create "Pooled Number" Subscription Versions – Addition</u> of Number Pooling Subscription Version Information – No Notifications

NPAC SMS shall suppress all notifications to the old and new service provider SOA systems for Pooled Number ports of Subscription Versions with LNP Type POOL.

### <u>SV-140</u>Requirement 14.3 <u>Addition of Number Pooling Subscription Version</u> <u>Information –</u> 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.

# SV-150Requirement 17Addition of Number Pooling Subscription VersionInformation – "Pooled Number" Subscription Version – Reject Messages

NPAC SMS shall <u>only allow</u>reject a message from NPAC personnel, or a Service Provider SOA via the SOA to NPAC SMS Interface, a Service Provider LSMS via the NPAC SMS to Local SMS Interface, or a Service Provider via the NPAC SOA Low-tech Interface, to QueryCreate, Modify Pending, Activate, Modify Active, Cancel, Conflict, or Disconnect, a Subscription Version with an LNP Type of POOL.

## Subscription Version, Create in a Number Pooling Environment

## SV-160 Create Intra-Service Provider Port – NPAC Personnel After Block Creation

NPAC SMS shall allow NPAC personnel to create intra-service provider ports for a TN within the 1K Block, after the Creation of the Block and up to the Block's Effective Date, only where the new Service Provider is the Code Holder SPID (NPA-NXX owner), and a previously active SV does NOT exist in the NPAC SMS.

## <u>SV-170 Create Intra-Service Provider Port – SOA After Block Creation</u>

NPAC SMS shall reject an intra-service provider Subscription Version Create message for a TN within the 1K Block, from a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, after the Creation of the Block and prior to the activation of the Sub-Block, where the new Service Provider is the Code Holder SPID (NPA-NXX owner), and a previously active SV does NOT exist.

## SV-180 Create Inter-Service Provider Port – NPAC and SOA After Block Creation

NPAC SMS shall reject an inter-service provider Subscription Version Create message for a TN within the 1K Block, from NPAC Personnel, a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, after the Creation of the Block and prior to the activation of the Sub-Block.

### SV-190 Create Inter-Service Provider Port-to-Original Port – NPAC and SOA After Block Creation

<u>NPAC SMS shall reject an inter-service provider Port-to-Original Subscription Version Create</u> <u>message for a TN within the 1K Block, from NPAC Personnel, a Service Provider SOA via the</u> <u>SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, after</u> <u>the Creation of the Block and prior to the activation of the Sub-Block.</u>

## <u>SV-200</u> Create Inter-Service Provider Port-to-Original Subscription Version – After <u>Sub-Block Activation</u>

NPAC SMS shall validate that the New Service Provider is the Block Holder, in an inter-service provider port-to-original port for a TN within the 1K Block, after the activation of the Sub-Block.

# SV-210Create Inter-Service Provider Port or Intra-Service Provider Port – SOA with<br/>LNP Type of POOL

NPAC SMS shall reject an inter-service provider or intra-service provider Subscription Version Create message for a TN within the 1K Block, with an LNP Type of POOL, from a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface.

#### **Requirement 18** Create Inter-Service Provider Subscription Version – After Block Effective Date

NPAC SMS shall validate that the Old Service Provider is the Block Holder, in an inter-serviceprovider port, if the active Subscription Version in the NPAC SMS is LNPType of POOL.

## **Requirement 19** Create Intra-Service Provider Subscription Version – After Block-Effective Date

NPAC SMS shall validate that the Old Service Provider is the Block Holder, in an intra-serviceprovider port, if the active Subscription Version in the NPAC SMS is LNPType of POOL.

### **Requirement 20** Create Inter-Service Provider Port-to-Original Subscription Version — After Block Effective Date

NPAC SMS shall validate that the Old Service Provider is the Block Holder, and the currently active Subscription Version in the NPAC SMS does NOT belong to the Block Holder, in an interservice provider port-to-original port.

### Assumption – Number Pool Lifetime

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

## Subscription Version, Activate in a Number Pooling Environment

## SV-220 Activate Intra-Service Provider Port – After Block Creation

NPAC SMS shall allow NPAC personnel to activate intra-service provider ports for a TN within the 1K Block, up to the Activation of the Sub-Block.

## SV-230Activate Port-to-Original Subscription Version – Broadcast of SubscriptionData Creation

The NPAC SMS shall broadcast a new Subscription Version Create to a non-EDR Local SMS, upon activating a port-to-original Subscription Version, where the TN is within the range of a 1K Block.

## SV-240Activate Port-to-Original Subscription Version – Broadcast of SubscriptionData Deletion

The NPAC SMS shall broadcast a Subscription Version Delete to an EDR Local SMS, upon activating a port-to-original Subscription Version, where the TN is within the range of a 1K Block.

### **SV-250** Activate Inter-Service Provider Port or Intra-Service Provider Port – SOA with LNP Type of POOL

NPAC SMS shall reject an inter-service provider or intra-service provider Subscription Version Activate message for a TN within the 1K Block, with an LNP Type of POOL, from a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface.

## Subscription Version, Modification for Number Pooling

### <u>SV-260</u><u>Modification of Number Pooling Subscription Version Information –</u> Subscription Data

NPAC SMS shall automatically apply the updates to the attributes of the individual subscription versions with LNP Type of POOL, for each TN within the Sub-Block, after successfully modifying a Number Pooling Sub-Block in the NPAC SMS.

# SV-270Modification of Number Pooling Subscription Version Information – Status<br/>Update to Sending

<u>NPAC SMS shall update the status of the individual subscription versions with LNP Type of</u> <u>POOL, for each TN within the Sub-Block, upon the start of the broadcast of a Sub-Block</u> <u>Modification to the Local SMSs, from an active status to a sending status.</u>

# SV-280Modification of Number Pooling Subscription Version Information –<br/>Broadcast of Subscription Data

<u>NPAC SMS shall broadcast Pooled data modifications of Subscription Versions with LNP Type</u> of POOL in the 1K Block, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface, upon successful modification of the Pooled Subscription Versions in the NPAC SMS.

# SV-290Modification of Number Pooling Subscription Version Information – Status<br/>Update to Active

NPAC SMS shall update the status of each Subscription Version with LNP Type of POOL in the 1K Block, upon completion of the broadcast to the Local SMSs, from a sending status to an active status.

# SV-300Modification of Number Pooling Subscription Version Information – Failed<br/>SP List

<u>NPAC SMS shall update the Failed SP List with the discrepant Local SMS of the individual</u> subscription versions with LNP Type of POOL, upon completion of the broadcast to the Local SMSs, and an unsuccessful response from at least one Local SMS.

# SV-310Modification of Number Pooling Subscription Version Information – Sub-<br/>Block Broadcast Failure to Local SMS

NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the failed SP List, for ALL subscription versions with LNP Type of POOL in the 1K Block, if the Sub-Block modification broadcast was unsuccessful.

## Subscription Version, Modify in a Number Pooling Environment

## **SV-320** Modify of Inter-Service Provider Port or Intra-Service Provider Port – SOA with LNP Type of POOL

NPAC SMS shall reject an inter-service provider or intra-service provider Subscription Version Modify message for a TN within the 1K Block, with an LNP Type of POOL, from a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface.

## Subscription Version, Deletion for Number Pooling

## **SV-330** Deletion of Number Pool Subscription Version Information – NPAC

<u>NPAC SMS shall reject a request to delete a Subscription Version with LNP Type of POOL by</u> <u>NPAC personnel, or Service Provider via the NPAC SOA Low-tech Interface.</u>

## SV-340 Deletion of Number Pool Subscription Version Information – SOA

<u>NPAC SMS shall reject a request to delete a Subscription Version with LNP Type of POOL by a</u> <u>Service Provider via the SOA to NPAC SMS interface, and will return an error message, SOA not</u> <u>authorized.</u>

## SV-350Deletion of Number Pool Subscription Version Information – SubscriptionVersion Data

NPAC SMS shall process a delete Block Holder request, by deleting all subordinate subscription versions with LNP Type of POOL in the 1K Block, by setting status to old.

## SV-360Deletion of Number Pool Subscription Version Information – Sub-Block Data<br/>and Subscription Version Data Synchronization

<u>NPAC SMS shall process a delete Block Holder request, by synchronizing the delete of the corresponding Subscription Versions, in the 1K Block, with the delete of the subordinate Sub-Block.</u>

## SV-370Deletion of Number Pooling Subscription Version Information – Sending<br/>Status Update to Sub-Block and Subscription Versions

NPAC SMS shall update the status of the Subscription Versions with LNP Type of POOL in the 1K Block, at the start of the broadcast to the Local SMSs, from an active status to a sending status.

## SV-380Deletion of Number Pool Subscription Version Information – Broadcast of<br/>Subscription Data

NPAC SMS shall broadcast Pooled data deletes of Subscription data, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface.

## SV-390Deletion of Number Pooling Subscription Version Information – Old StatusUpdate to Sub-Block and Subscription Versions

<u>NPAC SMS shall update the status of the Subscription Versions with LNP Type of POOL in the 1K Block, upon successful completion of the broadcast to at least one Local SMS, from a sending status to an old status.</u>

# SV-400Deletion of Number Pooling Subscription Version Information – Failed StatusUpdate

<u>NPAC SMS shall update the status of the Subscription Versions with LNP Type of POOL in the 1K Block, upon successful completion of the broadcast to NONE of the Local SMSs, from a sending status to an active status.</u>

# SV-410 Deletion of Number Pooling Subscription Version Information – Subscription Version Broadcast Failure to Local SMS

NPAC SMS shall consider a non-EDR Local SMS to be discrepant, and on the failed SP List, for the Sub-Block, if one or more subscription version disconnect broadcasts were unsuccessful.

# SV-420Deletion of Number Pooling Block Holder Information – Sub-Block Broadcast<br/>Failure to Local SMS

<u>NPAC SMS shall consider an EDR Local SMS to be discrepant, and on the failed SP List, for</u> <u>ALL subscription versions with LNP Type of POOL in the 1K Block, if the Sub-Block disconnect</u> <u>broadcast was unsuccessful.</u>

## Subscription Version, Disconnect in a Number Pooling Environment

### <u>SV-430</u>Requirement 21 – Disconnect Subscription Version – Pooled Number Sub-Block Holder Default Routing Restoration

The NPAC SMS shall reinstate the Sub-Block holder default routing, block holder Service Provider Id and the LNP Type to POOL for a subscription version upon a disconnect for a <u>ported</u> TN, or an activate for a <u>Port-To-Original TN</u>, belonging to <u>the 1K Blocka pool</u>.

### <u>SV-440</u>Requirement 22 - 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.

### <u>SV-450 – Disconnect Subscription Version – Default Routing Restoration for an Old</u> <u>Subscription Version</u>

The NPAC SMS shall reinstate the Sub-Block holder default routing, for a TN in the 1K Block, if the disconnect request or Port-To-Original activate request, was successfully sent to all Local SMSs, and a successful response was received from at least one Local SMS.

## <u>SV-460</u>Requirement 23 – Disconnect Subscription Version – Broadcast of Subscription Data Creation

The NPAC SMS shall broadcast a new Subscription Version Create to a non-EDR Local SMS, upon deleting an inter-ported or intra-ported Subscription Version, where the TN is within the <u>1K</u> range of a Pooled Block.

## <u>SV-470Requirement 24</u> – Disconnect Subscription Version – Broadcast of Subscription Data Deletion

The NPAC SMS shall broadcast a Subscription Version Delete to an EDR Local SMS, upon deleting an inter-ported or intra-ported Subscription Version, where the TN is within the range of a Pooled Block.

### <u>SV-480</u> Disconnect of Inter-Service Provider Port or Intra-Service Provider Port – <u>SOA with LNP Type of POOL</u>

NPAC SMS shall reject an inter-service provider or intra-service provider Subscription Version Disconnect message for a TN within the 1K Block, with an LNP Type of POOL, from a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface.

## Subscription Version, NPA Splits

## SV-490NPA Splits and the Number Pool Sub-Block Holder Information – Broadcast<br/>of Subscription Versions for an NPA-NXX involved in an NPA Split

NPAC SMS shall broadcast a Sub-Block create to a non-EDR Local SMS, via the NPAC SMS to Local SMS Interface, by sending Subscription Versions in a TN Range using the new NPA-NXX for an NPA-NXX that is currently in permissive dialing.

## Subscription Version, Query

## Section 5.1.3.2 System Functionality

### **SV-500RR5-44** Query Subscription Version – LNP Type of POOL

NPAC SMS shall return Subscription Versions with LNP Type of POOL that match the query selection criteria, on query requests by NPAC personnel, SOA via the SOA to NPAC SMS Interface, Local SMS via the NPAC SMS to Local SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface.

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

### RR5-45 Query Sub-Block

NPAC SMS shall on query requests by authorized NPAC personnel, or SOA to NPAC SMSinterface users, return Sub-Block data that match the query selection criteria.

## Subscription Version, Re-Send

## SV-510Re-Send of Number Pooling Subscription Version Information – Sending<br/>Status Update to Failed Subscription Versions

NPAC SMS shall update the status of the failed Subscription Versions with LNP Type of POOL in the 1K Block, at the start of the re-send to the Local SMSs, from an active status to a sending status.

## SV-520Re-Send of Number Pooling Subscription Version Information – Sending<br/>Status Update to Partially Failed Subscription Versions

NPAC SMS shall update the status of the partially failed Subscription Versions with LNP Type of POOL in the 1K Block, at the start of the re-send to the Local SMSs, from a partially failed status to a sending status.

## SV-530Re-Send of Number Pooling Subscription Version Information – Sending<br/>Status Update to Active Subscription Version

NPAC SMS shall update the status of the active Subscription Version with LNP Type of POOL in the 1K Block, with a Failed SP List, at the start of the re-send to the Local SMSs, from an active status to a sending status.

# SV-540Re-Send of Number Pooling Subscription Version Information – Sending<br/>Status Update to Old Subscription Version

NPAC SMS shall update the status of the old Subscription Version with LNP Type of POOL in the 1K Block, with a Failed SP List, at the start of the re-send to the Local SMSs, from an old status to a sending status.

# SV-550Re-Send of Number Pool Subscription Version Information – Broadcast of<br/>Subscription Data

NPAC SMS shall broadcast Pooled data re-sends of Subscription data, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface.

# SV-560Re-Send of Number Pooling Subscription Version Information – Update to<br/>Failed SP List

NPAC SMS shall update the Failed SP List of the Subscription Version with LNP Type of POOL in the 1K Block, by removing the previously failed Local SMS, upon a successful re-send to a previously failed Local SMS.

# SV-570Re-Send of Number Pool Subscription Version Information – Sub-Block Data<br/>and Subscription Version Data Synchronization

NPAC SMS shall process the update to the Failed SP List, by synchronizing the update to the Failed SP List for all of the corresponding Subscription Versions, in the 1K Block, with the update to the Failed SP List for the Sub-Block.

## Subscription Version, Mass Updates

SV-580 Mass Update of "Pooled Number" Subscription Versions - Rejection

NPAC SMS shall reject a request to perform a mass update on Subscription Versions with an LNP Type of POOL.

## Section 5 Modified Requirements

## Section 5.1.2.2 System Functionality

### R5-19.2 Create Subscription Version – Old Service Provider ID Validation – No Active Subscription Version and No Sub-Block

NPAC SMS shall validate that the old Service Provider in the create message is the Service-Provider to which the TN's NPA-NXX is assigned (as stored in the NPAC SMS service providerdata tables), if there is currently no active Subscription Version for the TN in the NPAC SMS, and if there is no entry for the TN's NPA-NXX-X (as stored in the NPAC SMS Number Pooling-Block Holder data tables).

### R5-19.3 Create Subscription Version – Old Service Provider ID Validation – No Active Subscription Version with Sub-Block

NPAC SMS shall validate that the old Service Provider in the create message is the Service-Provider to which the TN's NPA-NXX-X is assigned (as stored in the NPAC SMS Number-Pooling Block Holder data tables), if there is currently no active Subscription Version for the TNin the NPAC SMS, and there is an entry for the TN's NPA-NXX-X (as stored in the NPAC SMS-Number Pooling Block Holder data tables).

### R5-6.9 Create "Intra-Service Provider Port" Subscription Version – Old Service Provider ID Validation – No Active Subscription Version and No Sub-Block

NPAC SMS shall validate that the old Service Provider in the create message is the Service-Provider to which the TN's NPA-NXX is assigned (as stored in the NPAC SMS service providerdata tables), if there is currently no active Subscription Version for the TN in the NPAC SMS, and if there is no entry for the TN's NPA-NXX-X (as stored in the NPAC SMS Number Pooling-Block Holder data tables).

#### R5-6.10 Create "Intra-Service Provider Port" Subscription Version – Old Service Provider ID Validation – No Active Subscription Version

NPAC SMS shall validate that the old Service Provider in the create message is the Service-Provider to which the TN's NPA-NXX-X is assigned (as stored in the NPAC SMS Number-Pooling Block Holder data tables), if there is currently no active Subscription Version for the TNin the NPAC SMS, and there is an entry for the TN's NPA-NXX-X (as stored in the NPAC SMS-Number Pooling Block Holder data tables).

## Section 6 New Requirements

## RR6-15 – Sub-Block Resynchronization Filter Usage

NPAC SMS shall, for a Sub-Block Resynchronization request, over the NPAC SMS to Local SMS Interface, only send Sub-Blocks that are not filtered on the Local SMS.

## **Section 8 New Requirements**

### A-10 Requirement 25—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. <u>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.</u>

### A-20 Requirement 26- Audit Status Attribute Value Change Notification Suppress for Pooled Number Subscription Versions.

NPAC SMS shall for audits of Subscription Versions with LNP Type of P<u>OOL</u>ool suppress status changes for discrepancy corrections to the block holder <u>SOA</u> (current SP).

NOTE: The "suppress status changes" approach should work for both EDR and non-EDR SPs.— Therefore, the NPAC SMS should suppress these based on the LNPType, and not take intoaccount the value of the EDR flag for the SP.

NOTE: Determination of how audits should be handled for a sub-block needs to be done. Should the LSMS return the block or SV's. It would be cheaper or NPAC processing if SV's were returned. The SVID's might be an issue.

### A-30 Audit Attribute Value Change Notification Suppress for Pooled Number Subscription Versions

NPAC SMS shall for audits of Subscription Versions with LNP Type of Pool suppress attribute changes for discrepancy corrections to the block holder SOA (current SP).

## <u>A-40</u>R8-16.1 Flow of Audit Execution – Pooled Numbers to EDR Local SMS

NPAC SMS shall send a query for a Sub-Block and a query for a-Subscription Version(s), resulting from the <u>TN or TN Range</u> audit request, to an EDR Local SMS that is accepting Sub-Block and Subscription Version data download for the given NPA-NXX-X via the NPAC SMS to Local SMS Interface, as described in the NPAC SMS Interoperable Interface Specification.

## A-50Req 27 Ignore missing SVs for Pooled Ports at EDR Local SMS

NPAC SMS shall ignore a query response of a missing Subscription Version from an EDR Local SMS, for a <u>Subscription Version with LNP Type of POOLpooled port</u>.

## A-60 Delete erroneous SVs for Pooled Ports at EDR Local SMS

NPAC SMS shall process a query response of an erroneous Subscription Version from an EDR Local SMS, for a Subscription Version with LNP Type of POOL, by sending a Subscription Version Delete message for the erroneous Subscription Version.

## A-70Req 28 Suppress Notifications for Discrepancy Corrections for Pooled Ports at EDR Local SMS

NPAC SMS shall suppress status notifications to the Block Holder SOA for audit discrepancy corrections of Subscription Versions with LNP Type of POOL.

## A-80 Compare NPAC SMS Sub-Block to Service Provider Sub-Block at EDR Local SMS

NPAC SMS shall conduct a comparison of the Sub-Block belonging to the EDR Service Provider to its owns Sub-Block.

## A-90 Add Sub-Block to Service Provider at EDR Local SMS

<u>NPAC SMS shall</u>, following the comparison of its own Sub-Block to the EDR Service Provider's Sub-Block, add a Sub-Block found to be absent in the EDR Service Provider's Sub-Block database, by sending a Sub-Block Activate message.

## A-100 Modify Sub-Block to Service Provider at EDR Local SMS

NPAC SMS shall, following the comparison of its own Sub-Block to the EDR Service Provider's Sub-Block, modify a Sub-Block found to be in error in the EDR Service Provider's Sub-Block database, by sending a Sub-Block Modify message.

## A-110 Delete Discrepant Sub-Block to Service Provider at EDR Local SMS

NPAC SMS shall, following the comparison of its own Sub-Block to the EDR Service Provider's Sub-Block, delete a Sub-Block found to be erroneously present in the EDR Service Provider's Sub-Block database, by sending a Sub-Block Delete message.

## **Section 9 New Requirements**

## **<u>R-10</u> Pooled Number Report – Query functions**

NPAC SMS shall support pooled number reports that allow queries on any combination of SPID, Block ID, and TN Range, where the NPAC SMS returns all TNs that meet the selection criteria.

## **R-20 Pooled Number Report – Filters**

<u>NPAC SMS shall support pooled number reports that allow filters on any combination of LNP</u> Type (POOL, LSPP, LISP), where the NPAC SMS returns all TNs that meet the selection criteria.

## <u>R-30</u>RR9-5 Pooled Number Report – Numbers in a Block

NPAC SMS shall support <u>a</u> reports that list all numbers in a <u>1Kpooled number</u> block (NPA-NXX-X) for a block holder, for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

## <u>R-40</u>RR9-6 Pooled Number Report – <u>Numbers in a Block</u> Data Elements

NPAC SMS shall support a pooled number report that <u>lists all numbers in a 1K Block for a block</u> <u>holder, that</u> contains the following data elements:

TN (primary sort) SV id LNP Type activation date LRN

#### RR9-7 Pooled Number Report – Filters

NPAC SMS shall support a pooled number report that allows filters on LNP Type, to return TNswith either POOL, LSPP, or LISP type.

## <u>**R-50**</u>**RR9-8** Pooled Number Report – Block Holder History

NPAC SMS shall support a pooled number report that contains Block Holder History for <u>a 1K</u> Block, for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface. the following data elements:

Code Holder

Block Holder

-----Effective Date

## **R-60 Pooled Number Report – Block Holder History Data Elements**

NPAC SMS shall support a report that contains Block Holder History for a 1K Block, that contains the following data elements:

Code Holder Block Holder TN Range

Effective Date

### <u>R-70</u> Pooled Number Report – Pending-Like No-Active Subscription Versions

NPAC SMS shall support a report, used for Block and Sub-Block Creation, that contains a list of all numbers in a 1K Block, that currently have a Subscription Version with a status of pending/conflict/cancel-pending/failure, and where no active Subscription Version exists, for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

#### 

NPAC SMS shall support a report, used for Block and Sub-Block Creation, that contains a list of all numbers in a 1K Block, that currently have a Subscription Version with a status of pending/conflict/cancel-pending/failure, and where no active Subscription Version exists, that contains the following data elements:

TN
 Old Service Provider
 New Service Provider
 Due Date

Status

#### **R-90 Pooled Number Report – Port-to-Original Pending Subscription Versions**

NPAC SMS shall support a report, used for Block and Sub-Block Creation, that contains a list of all numbers in a 1K Block, that currently have a Port-to-Original Subscription Version with a status of pending/conflict/cancel-pending/failure, for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

### <u>R-100 Pooled Number Report – Port-to-Original Pending Subscription Versions</u> <u>Data Elements</u>

NPAC SMS shall support a report, used for Block and Sub-Block Creation, that contains a list of all numbers in a 1K Block, that currently have a Port-to-Original Subscription Version with a status of pending/conflict/cancel-pending/failure, that contains the following data elements: TN

Old Service Provider

New Service Provider

Due Date

Status

## <u>R-110</u> Pooled Number Report – Active-Like Subscription Versions

NPAC SMS shall support a report, used for de-pooling, that contains a list of all numbers in a 1K Block, that currently have a Subscription Version with a status of active/partial failure/disconnect pending/sending, for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

## **<u>R-120</u>** Pooled Number Report – Active-Like Subscription Versions Data Elements

<u>NPAC SMS shall support a report, used for de-pooling, that contains a list of all numbers in a 1K Block, that currently have a Subscription Version with a status of active/partial failure/disconnect pending/sending, that contains the following data elements:</u>

TN Old Service Provider New Service Provider Due Date Status

## **General Comments**

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

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

Miscellancous M&P Issues:

 The NPAC personnel can modify the activation date (that was originally on the Pooling-Form, that is used for NPAC personnel doing the PP of the 1K block [both block and sub-block]) in the "seript/schedule", but it must be modified to something equal to orgreater than the effective date.

- 2. Need to add procedures within M&Ps to define steps that should be taken by the NPACpersonnel when validation errors are encountered.
- Need to add M&Ps to state that when NPAC personnel are creating a Sub-Block, and the SPprovides an activation date, then the NPAC personnel must convert and store this in GMT.
- 4. Need an M&P on the Service Provider side to clean up SVs prior to implementing the new-Sub-Block Object (this should be done in a migration plan).
- Need to figure out how NPAC personnel, will determine if the sub-block is successful or not, for the broadcast. May need to create the sub-block table when the activation date/time is reached.

## **POOLING ADMINISTRATOR ISSUES**

1. Need to verify that the Number Pooling form contains the "auto activation date" on the form, so that the Lockheed USA knows the date that the auto activation timestamp should be added as a "seript/schedule".