National Number Pooling Requirements

November 30, 1998

Based on results of San Ramon meeting, 11/16-19

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Document Change History

5/20/98

1. Updated definitions, added "blank directory" and "TN re-assignment" table.

2. Updated section 3, added initial requirements for NPA-NXX and LRN validation. Updated NPAC Customer Data Model (for EDR flag). Also, Number Pooling NPA-NXX-X Holder Information Model, and requirements RR3-27.1 through RR3-34.1, RR3-25, and RR3-26. Also added initial requirements for 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 NPA-NXX-X and 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

- 1. Updated NPA-NXX-X Holder section for issues discussed in Denver.
- 2. Incorporated new requirements for "pending-like, no active" edits.

8/31/98

- 1. Updated all sections.
- 2. Put in sub-section headers and re-numbered all sections based on functionality.

10/9/98

1. Updates based on 9/16/98 (Seattle), 9/21-25/98 (Kansas City), and 10/5-10/7 (New Orleans) Number Pooling meetings.

2. Changed references for Block and Sub-Block to match those found in the GMDO, ASN, and IIS flows. The Block is now referred to as "NPA-NXX-X" and the Sub-Block is now referred to as the "Block".

3. Added requirements for NPA-NXX-X notification.

4. Added requirements to capture the necessary synchronization that must be performed by the NPAC SMS for Block and associated Subscription Versions, within a 1K Range.

11/3/98

1. Updates based on 10/26-30 (Denver) Number Pooling meeting.

<u>11/30/98</u>

1. Updates based on 11/16-19 (San Ramon) Number Pooling meeting, and 11/24 telecon.

Number Pooling Requirements 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.

Glossary

The following definitions apply in the requirements that follow:

1 Code Holder – The code holder is the LERG assignee of the NPA-NXX.

2 Block Holder – The recipient Service Provider of a 1K Block from the code holder. Also defined as the NPA-NXX-X holder in the LERG.

3 NPA-NXX-X – 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.

4 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.

5 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. This is supported by the National Number Pooling architecture.

6 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. This is NOT supported by the National Number Pooling architecture.

7 Number Pooling NPA-NXX-X Holder Information –Data in the NPAC SMS that contains the first 7-digits of a range of TN's, the block holder (service provider), and the effective date of the block. According to the NPAC definition, this is considered Network data.

8 Number Pooling Block Information – Data in the NPAC SMS that contains the first 7-digits of a 1K range of TN's, default routing for a block of TNs, and the activation timestamp of the TN's within the 1K range.

9 De-Pool – Return of a 1K pooled block to the Number Administrator. Also referred to as "un-allocation of the block", or "reclamation" (INC definition).

10 Vacant Number – A non-working number.

11 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.

12 Default Routing Restoration – reinstatement of the default routing for the TN as defined in the applicable block information, in order to provide vacant number treatment.

13 Snapback – Notification for TN reassignment.

14 Contaminated Number – An unavailable number (e.g., working), within a 1K Block, at the time the 1K Block is donated to the Pooling Administrator.

15 Pending-like SVs – SVs that contain a status of pending, conflict, cancelpending, or failed.

16 Active-like SVs – SVs that contain a status of active, sending, partial failure, old with a Failed SP List, or disconnect pending.

17 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.

18 EDR (Efficient Data Representation) – The ability to represent 1000 TNs as a range.

19 EDR within the NPAC – A storage mechanism where a 1K range of TNs is represented, stored, and communicated, as a Range entity.

20 Unique Alarmable Error Message (Code) – An individual error message in the NPAC SMS that is only used by the NPAC for the individual Number Pooling requirement where the error message is listed.

21 Cascading Delete – A delete of an NPA-NXX-X where the NPAC sends deletes of Pooled SV data to non-EDR LSMSs, and sends deletes of Block data to EDR LSMSs. Once all LSMSs have successfully deleted the Pooled data (all SVs and Block status is Old, and the Failed SP Lists are all empty), the NPA-NXX-X is deleted.

Approach

At the present time, the National Number Pooling approach includes the following:

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

2. EDR (Efficient Data Representation) is captured through the use of "1K Blocks" in the NPAC, and over the SOA-to-NPAC and NPAC-to-LSMS interfaces.

3. The NPA-NXX-X Holder Information in the NPAC is <u>a representation of the same as</u> the 1K Block managed by the Pooling Administrator, and represented in the LERG.

4. <u>The NPAC Customer SOA NPA-NXX-X Indicator A new boolean</u> in the NPAC Customer Data Model will be added to indicate whether or not the Service Provider accepts NPA-NXX-X downloads from the NPAC (TRUE = yes, FALSE = no) to their SOA via the SOA-to-NPAC SMS Interface.

5. <u>The NPAC Customer LSMS NPA-NXX-X Indicator in the NPAC Customer Data Model</u> will be added to indicate whether or not the Service Provider accepts NPA-NXX-X downloads from the NPAC (TRUE = yes, FALSE = no) to their LSMS via the NPAC SMSto-Local SMS Interface.

6. <u>The NPAC Customer Data Model (logical) and Service Provider Profile (physical) refer</u> to the same information.

7. <u>The NPA-NXX-X Holder Information is broadcast over the SOA-to-NPAC SMS</u> <u>Interface to all Service Providers in that NPAC region (exclusive of those that have filters for</u> <u>the NPA-NXX, and those who have a SOA NPA-NXX-X indicator in the Customer Data</u> <u>Model set to FALSE)</u>, for the opening of NPA-NXX-X data to the NPA-NXX-X Holder.

8. The NPA-NXX-X Holder Information is broadcast over the NPAC SMS-to-Local SMS Interface to all Service Providers in that NPAC region (exclusive of those that have filters for the NPA-NXX, and those who have an LSMS NPA-NXX-X indicator in the Customer Data Model set to FALSE), for the opening of NPA-NXX-X data to the NPA-NXX-X Holder, just like NPA-NXX openings today.

9. The NPA-NXX-X 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).

10. At the time of NPA-NXX-X creation, the NPAC will check for "pending-like, no-active" SVs or "pending-like Port-To-Original" SVs. If any are found, the NPAC will reject the creation of this NPA-NXX-X. An error message will be generated for the NPAC personnel. Additionally, the NPAC Personnel will be able to view the discrepant TNs (on the screen in the *Pending-Like No-Active Subscription Version and Pending-Like Port-to-Original Subscription Version REPORT* format), then be able to select multiple output destinations for the report by navigating to screen that displays the erroneous TNs.

11. The Pending-Like No-Active Subscription Version and Pending-Like Port-to-Original Subscription Version report will be available to NPAC personnel. The report will contain TN, SV ID, Old SP, New SP, Due Date, and Status.

12. The recipients of the Pending-Like No-Active Subscription Version and Pending-Like Port-to-Original Subscription Version report (e.g., Pooling Administrator, Code Holder) will have their 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 NPA-NXX-X creation again (need input from INC before proceeding with this one).

13. Once the NPA-NXX-X has been created on the NPAC, the Code Holder is prohibited from 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 of SVs with no previously active SV, on behalf of the Code Holder. 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 Block's activation date/time. The Code Holder can also assist in the activation of the LISP ports up to the Block's activation date/time.

14. Once the NPA-NXX-X's Effective Date has been reached, the Block will be created, either from a scheduled event on the NPAC, or from a Service Provider SOA sending up the Block.

15. Once the Block has been created in the NPAC, then NPAC processing considers the Block to be "activated" for the Block Holder, and all snapback messages and default routing will go to the Block Holder.

16. The Block Holder Information is broadcast over the NPAC-to-LSMS interface, when the SP's LSMS EDR flag in the Customer Profile record in the NPAC, is set to TRUE (non-EDR LSMSs get individual SVs, since the SP's LSMS EDR flag is set to FALSE).

17. The Block Holder Information's "Activation Timestamp" is the date/time the NPAC broadcasts 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 1K Block from the Code Holder (NPA-NXX owning SP) to the Block Holder (NPA-NXX-X owning SP).

18. Block Create messages over the SOA-to-NPAC SMS Interface will set the SOA Origination to TRUE.

19. The Block Holder Information's SOA notification is broadcast over the SOA to NPAC Interface, when the SOA Origination on the Block record is set to TRUE.

20. At the time of Block creation by the **NPAC** (attempted on or after the NPA-NXX-X's Effective Date), the NPAC will check for "pending-like, no-active" SVs. If any are found, the NPAC will reject the creation of this Block. An <u>unique alarmable</u> error message (new error message and error number for Block) will be generated <u>and alarm for the NPAC</u> personnel.

21. At the time of Block creation by the **SP's SOA** (attempted on or after the NPA-NXX-X's Effective Date), the NPAC will check for "pending-like, no-active" SVs. If any are found, the NPAC will reject the creation of this Block. An <u>unique alarmable</u> error message (new error message and error number for Block, but no alarm to NPAC Personnel) 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 Pending-Like No-Active Subscription Version and <u>Pending-Like Port-to-Original Subscription Version</u> report.

22. The Pending-Like No-Active Subscription Version and Pending-Like Port-to-Original Subscription Version report will be created and will contain TN, <u>SV ID</u>, Old SP<u>ID</u>, New SP<u>ID</u>, Due Date, and Status.

23. The recipients of this report (e.g., Pooling Administrator, Code Holder) will have their own M&P (outside of NPAC) to clean up these SVs (either cancel or activate) by the Code Holder and the NPAC Personnel. Once they are cleaned up, NPAC personnel will await notification from the ______ prior to attempting the Block creation again (if it is

NPAC initiated), or contacting the Block Holder SP and informing them that they could resubmit the Block request (need input from INC).

24. If during the broadcast of the Pooled Data (Blocks and SVs), one or more Service Providers cause the Block to go into a Partial Failure or Failed status, the NPAC will generate a unique alarmable message, and NPAC Personnel will be notified of the error. M&P will be established to have NPAC Personnel resolve the broadcast failures with the Service Providers on the Block's Failed SP ListOnee the Block has been created on the NPAC, most of the NPAC functionality remains the same. The differences include, Port-To-Original (PTO) must now be the NPA-NXX-X Holder SP, PTO activates and all disconnects broadcast different SV data to non-EDR LSMSs (M-CREATE) and EDR LSMSs (M-DELETE).

25. Once the Pooled Data (Blocks and SVs) has been successfully broadcast to the LSMSs, and the Block status is Active, the NPAC will execute a background process to ensure that there are 1000 SVs (combination of POOL, LISP, LSPP) for the Block. This is designed to capture any "disconnect requests that were sending on it's way to old", which may result in an orphan TN that does NOT have an Active SV. This background process will most likely be run during NPAC housekeeping, and will be run for the first time within 24 hours of Block Creation (with an Active status). Once all 1000 TNs have been accounted for in the NPAC, this Block will no longer be checked by the NPAC.

26. The NPAC will manage the synchronization of, and maintain the integrity of, the data between a Block and the subordinate Pooled Subscription Versions within the Block. This means that, at all times, the LRN and GTT routing data for the Block and all SVs with LNP Type of POOL within the 1K Block, will contain the same values. The status for the Block and status for each SV with LNP Type of POOL within the 1K Block, may not always contain the same value. The matrix to coordinate the status is found in the detailed requirements. The failed SP List for the Block and Failed SP List for each SV with LNP Type of POOL within the 1K Block, may not always contain the same Service Providers. The matrix to coordinate the various Failed SP Lists is found in the detailed requirements.

27. <u>At the time of NPA-NXX-X deletion (i.e., de-pool), the NPAC will check for "pending-like, with Active POOL" SVs.</u> If any are found, the NPAC will reject the Deletion of this NPA-NXX-X. An error message will be generated for the NPAC personnel (on the screen in the *Pending-Like With Active POOL Subscription Version REPORT* format), then be able to select multiple output destinations for the report.

28. <u>The Pending-Like With Active POOL Subscription Version report will be available to</u> <u>NPAC personnel.</u> The report will contain TN, Old SPID, New SPID, Due Date, and Status.

29. The recipients of the Pending-Like With Active POOL Subscription Version report (e.g., Pooling Administrator, Block Holder) will have their 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 NPA-NXX-X deletion again.

30. The NPAC performs a "cascading delete" when processing an NPA-NXX-X Deletion. This includes sending deletes of Pooled SV data to non-EDR LSMSs, and sending deletes of Block data to EDR LSMSs. Once all LSMSs have successfully deleted the Pooled data (all SVs and Block status is Old, and all Failed SP Lists are empty), the NPA-NXX-X is deleted. Similar to the NPA-NXX-X Creation, the NPA-NXX-X Deletion is broadcast to the appropriate Service Providers.

31. <u>Once the Block has been deleted in the NPAC, then NPAC processing considers the</u> <u>Block to be "deleted" for the Block Holder, and all snapback messages and default routing</u> will go to the Code Holder. Additionally, the Block is now available to be allocated to another Service Provider.

32. See Appendix F for Block and SV behavior in a National Number Pooling Environment.

33. <u>The NPAC Customer LSMS EDR Indicator A new boolean in the NPAC Customer Data</u> Model will be added to indicate whether or not the Service Provider uses Efficient Data Representation on the Local SMS (TRUE = yes, FALSE = no).

34. The two new objects that will be broadcast over the interface include the NPA-NXX-X (1K Block) openings (similar to today's code opening of NPA-NXX), and Block for EDR compatible Local SMSs that represent the 1000 TNs of POOL'ed numbers as the 1K Block.

35. The baseline for any requirements that begin with "RR..." is IIS/FRS 1.10.

36. The baseline for the National Number Pooling requirements was the Illinois Number Pooling NPAC Release 1.4.

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 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.

Requirements

Section 3 Modifications

FRS Section 3.1.2

NPAC CUSTOMER DATA MODEL				
Attribute Name	Type (Size)	Required	Description	
NPAC Customer ID	C (4)		An alphanumeric code which uniquely identifies an NPAC Customer.	
NPAC Customer Name	C (40)		A unique NPAC Customer Name.	
NPAC Customer Allowable Functions	М		Each bit in the mask represents a boolean indicator for the following functional options: ?1 SOA Management ?2 SOA Network Data Management ?3 LSMS Network Data Management ?4 LSMS Data Download ?5 LSMS Queries/Audits	
NPAC Customer SOA NPA-NXX-X Indicator	B		<u>A boolean that indicates whether the</u> <u>NPAC Customer accepts NPA-NXX-X</u> <u>downloads from the NPAC SMS to their</u> <u>SOA.</u> <u>The default value is False.</u>	
NPAC Customer LSMS NPA-NXX- X Indicator	B		A boolean that indicates whether the NPAC Customer accepts NPA-NXX-X downloads from the NPAC SMS to their LSMS. The default value is False.	
NPAC Customer LSMS EDR Indicator	B		A boolean that indicates whether the NPAC Customer utilizes Efficient Data Representation (EDR) on the LSMS. The default value is False.	

NC-1 NPAC Customer SOA NPA-NXX-X Indicator

NPAC SMS shall provide a mechanism to indicate whether a Service Provider supports receiving the NPA-NXX-X data, by downloading this data to their SOA via the SOA to NPAC SMS Interface, using the Number Pooling NPA-NXX-X Object.

NC-3 NPAC Customer SOA NPA-NXX-X Indicator – Default

NPAC SMS shall default the SOA NPA-NXX-X Indicator to FALSE.

NC-5 NPAC Customer SOA NPA-NXX-X Indicator – Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the SOA NPA-NXX-X Indicator on the NPAC Customer record.

NCSP-10 NPAC Customer Service Provider LSMS NPA-NXX-X Indicator

NPAC SMS shall provide a mechanism to indicate whether a Service Provider supports receiving the NPA-NXX-X data, by downloading this data to their Local SMS via the NPAC SMS to Local SMS Interface, using the Number Pooling NPA-NXX-X Object.

<u>NCSP-20</u><u>NPAC Customer Service Provider LSMS NPA-NXX-X</u> <u>Indicator – Default</u>

NPAC SMS shall default the LSMS NPA-NXX-X Indicator to FALSE.

NCSP-30 NPAC Customer Service Provider LSMS NPA-NXX-X Indicator – Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the LSMS NPA-NXX-X Indicator on the NPAC Customer record.

NCSP-50 NPAC Customer Service Provider LSMS EDR Indicator

NPAC SMS shall provide a mechanism to indicate whether a Service Provider supports Efficient Data Representation (EDR), by downloading this data to their Local SMS via the NPAC SMS to Local SMS Interface, using the Number Pooling Block Object.

NCSP-60 NPAC Customer Service Provider LSMS EDR Indicator – Default

NPAC SMS shall default the EDR Indicator to FALSE.

NCSP-70 NPAC Customer Service Provider LSMS EDR Indicator – Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the EDR Indicator on the NPAC Customer record.

FRS Section 3.1.3

SUBSCRIPTION VERSION DATA MODEL				
<u>Attribute Name</u>	<u>Type</u> (Size)	Required	Description	
Version ID	N		<u>A unique sequential number assigned upon creation</u> of the Subscription Version.	
LRN	<u>TN</u>		<u>The LRN is an identifier for the switch on which</u> portable NPA-NXX-XXXX's reside.	
<u>Old Service Provider</u> ID	<u>C (4)</u>		Old Service Provider ID.	
New Service Provider ID	<u>C (4)</u>		New Service Provider ID.	
TN	<u>TN</u>		Subscription Version telephone number.	
<u>Local Number</u> Portability Type	Ē		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)	
<u>Status</u>	Ē		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-S -Sending (3)F-F -Failed (4)PF -Partial Failure (5)DP -Disconnect Pending (6)O-Old (7)C-Canceled (8)CP -Cancel Pending (9)	
CLASS DPC	<u>N (9)</u>		DPC for 10-digit GTT for CLASS features.	
CLASS SSN	<u>N (3)</u>		CLASS SSN for the Subscription Version.	
LIDB DPC	<u>N (9)</u>		DPC for 10-digit GTT for LIDB features.	
LIDB SSN	<u>N (3)</u>		LIDB SSN for the Subscription Version.	
CNAM DPC	<u>N (9)</u>		DPC for 10-digit GTT for CNAM features.	

<u>CNAM SSN</u>	<u>N (3)</u>	CNAM SSN for the Subscription Version.
ISVM DPC	<u>N (9)</u>	DPC for 10-digit GTT for ISVM features.
ISVM SSN	<u>N (3)</u>	ISVM SSN for the Subscription Version.
New Service Provider Due Date	T	The due date planned by the new Service Provider for Subscription Version Transfer.
Old Service Provider Due Date	T	The due date planned by the old Service Provider for Subscription Version Transfer.
Old Service Provider Authorization	B	A boolean indicator set by the old Service Provider to indicate authorization or denial of Transfer of Service for the Subscription Version to the new Service Provider.
<u>New Service Provider</u> Create Time Stamp	Τ	The date and time that the New Service Provider authorized Transfer of Service of the Subscription Version.
Old Service Provider Authorization Time Stamp	Τ	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 <u>Provider.</u>
Activation Broadcast Date	Τ	The date and time that broadcasting began to all local SMS systems for the activation of the Subscription Version.
Activation Broadcast Complete Time Stamp	Τ	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	T	The date and time that the Subscription Version disconnect request was made by the local Service Provider.
Disconnect Broadcast Time Stamp	T	The date and time that broadcasting began to all local SMS systems for the disconnect of the Subscription Version.
Disconnect Broadcast Complete Time Stamp	T	The date and time that at least one Local SMS system successfully acknowledged the broadcast or the retries were exhausted for the disconnect.
Effective Release Date	T	The date that the Subscription Version is to be deleted from all Local SMS systems.
Customer Disconnect Date	T	The date that the Customer's service was disconnected.
Pre-Cancellation Status	E	Status of the Subscription Version prior to cancellation. Valid enumerated values are:

		X-Conflict (0)P-Pending (2)DP-Disconnect Pending (6)
Old Service Provider Cancellation Time Stamp	Τ	The date and time that the Old Service Provider acknowledged that the Subscription Version be canceled.
New Service Provider Cancellation Time Stamp	Τ	The date and time that the New Service Provider acknowledged that the Subscription Version be canceled.
Cancellation Time Stamp	Τ	The date and time that the Subscription Version became canceled.
Old Time Stamp	T	The date and time that the Subscription Version became old.
Conflict Time Stamp	Ţ	The date and time that the Subscription Version was last placed in conflict.
Conflict Resolution Time Stamp	T	The date and time that the resolution of a Subscription Version in conflict is acknowledged.
Create Time Stamp	Ţ	The date and time that this Subscription Version record was created.
Modified Time Stamp	Τ	The date and time that this Subscription Version record was last modified. The default value is the Create Time Stamp.
Porting to Original	B	A boolean that indicates whether the Subscription Version created is to be ported back to the original Service Provider. The default value is False.
End User Location Value	<u>C (12)</u>	For future use.
End User Location Value Type	<u>C (2)</u>	For future use.
Modify Request Timestamp	Τ	The date and time that the Subscription Version Modify request was made.
Modify Broadcast <u>Timestamp</u>	T	The date and time that broadcasting began to all local SMS systems for the modification of the Subscription Version.
<u>Modify Broadcast</u> <u>Complete Timestamp</u>	Τ	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	<u>C (4)</u>	For future use.

		The default value is the Facilities Based Service Provider ID.
<u>Status Change Cause</u> <u>Code</u>	<u>N (2)</u>	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: 0 - No value 54 - General Conflict 50 - LSR Not Received 51 - FOC Not Issued 52 - Due Date Mismatch 53 - Vacant Number Port 55 - NPAC SMS Automatic Conflict from Cancellation 1 - NPAC SMS Automatic Cancellation

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 NPA-NXX-X or 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, or Number Pooling NPA-NXX-X Information, exists for the NPA-NXX.

<u>RX3-3.2</u> 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 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 or Number Pooling Block Information, except for Old with NO Failed SP List, exists and usesfor the LRN.

Section 3 New Requirements

NUMBER POO	NUMBER POOLING NPA-NXX-X HOLDER INFORMATION DATA MODEL				
Attribute Name	<u>Type</u> (Size)	<u>Required</u>	Description		
NPA-NXX-X ID	N		A unique sequential number assigned upon creation of the NPA-NXX-X.		
<u>NPA-NXX-X Holder</u> <u>SPID</u>	<u>C(4)</u>		The Service Provider Id of the NPA-NXX-X holder.		
NPA-NXX-X	<u>N(7)</u>		NPA-NXX-X of the 1K Block.		
Effective Date	T		The effective date of the 1K Block. The time for this field will be stored in GMT, but equivalent to 00:00:00 network data time CST.		
Creation Date	T		The date and time (GMT) that this NPA-NXX-X Holder record was created.		
Last Modified Date	Т		The date and time (GMT) of the Last Modification to this NPA-NXX-X Holder record. The default value is the Creation Timestamp.		
Download Reason	E		The reason the NPA-NXX-X is being downloaded to the SOA or LSMS. Valid values are: <u>0 – New</u> <u>1 – Delete</u> <u>2 – Modified</u>		

NPA-NXX-X Holder, General

N-10 Number Pool NPA-NXX-X Holder Information – NPAC Personnel GUI

NPAC SMS shall allow NPAC Personnel to add, modify, delete, and query NPA-NXX-X Holder information via the NPAC Administrative Interface.

N-11 Number Pool NPA-NXX-X Holder Information –GUI Entry Field for NPAC or SOA Origination

<u>NPAC SMS shall provide a mechanism for NPAC Personnel to select NPAC Origination or SOA</u> <u>Origination for the Block data, when creating NPA-NXX-X Holder information, via the NPAC</u> <u>Administrative Interface.</u>

<u>N-12</u><u>Number Pool NPA-NXX-X Holder Information – Routing Data for</u> NPAC Origination

NPAC SMS shall require NPAC Personnel to enter applicable Block routing data, via the NPAC Administrative Interface, when the NPAC Origination has been selected while creating NPA-NXX-X Holder information.

<u>N-20</u> Number Pool NPA-NXX-X Holder Information – Service Provider Request

<u>NPAC SMS shall reject a request from a Service Provider SOA via the SOA to NPAC SMS</u> <u>Interface, or Service Provider via the NPAC SOA Low-tech Interface, to add, modify, or delete,</u> <u>NPA-NXX-X Holder information as stored in the NPAC SMS.</u>

<u>N-30</u> Number Pool NPA-NXX-X Holder Information – NPA-NXX Validation

<u>NPAC SMS shall validate that the NPA-NXX specified in the addition of Number Pooling NPA-NXX-X Holder information is a valid NPA-NXX defined in the NPAC SMS.</u>

<u>N-40 Number Pool NPA-NXX-X Holder Information – NPA-NXX</u> Effective Date

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

<u>N-50 Number Pool NPA-NXX-X Holder Information – Duplicate NPA-NXX-X Validation</u>

NPAC SMS shall validate that the NPA-NXX-X specified in the addition of Number Pooling NPA-NXX-X Holder Information is not a duplicate for another entry in the Number Pooling NPA-NXX-X Holder Information.

N-61 Number Pool NPA-NXX-X Holder Information – NPAC SMS download of network data to the Local SMS

NPAC SMS shall be able to communicate creation, modification, or deletion of NPA-NXX-X data for a Service Provider to Local SMSs.

The contents of the network download are:

- ?6 <u>Network data:</u>
 - <u>NPAC Customer ID</u>
 - <u>NPAC Customer Name</u>
- ?7 <u>NPA-NXX-X Download Data:</u>
 - <u>NPA-NXX-X ID</u>
 - <u>NPA-NXX-X Value</u>
 - <u>Effective Date TimeStamp</u>
 - <u>Last Modified Date TimeStamp</u>
 - <u>Download Reason</u>

<u>N-62</u><u>Number Pool NPA-NXX-X Holder Information – NPAC SMS</u> notification of NPA-NXX-X availability to the Service Providers</u>

NPAC SMS shall inform all Service Providers about the availability of the NPA-NXX-Xs for pooling via the NPAC SMS to Local SMS interface or the Web bulletin board. The NPA-NXX-X data fields sent via the NPAC SMS to Local SMS interface are:

?8 NPAC Customer ID
?9 NPAC Customer Name
?10 NPA-NXX-X ID
?11 NPA-NXX-X Value
?12 Effective Date TimeStamp
?13 Last Modified Date TimeStamp
?14 Download Reason

The NPA-NXX-X data fields sent to the WEB bulletin board are:

?15 NPAC Customer ID
?16 NPAC Customer Name
?17 NPA-NXX-X Value
?18 Effective Date

N-63 Number Pool NPA-NXX-X Holder Information – Service Provider NPA-NXX-X Indicator Download of NPA-NXX-X Object

<u>NPAC SMS shall download Number Pooling NPA-NXX-X Information, for additions,</u> <u>modifications, and deletions, using the Number Pooling NPA-NXX-X Object, via the NPAC SMS</u> to Local SMS Interface if the Service Provider's NPA-NXX-X indicator is **TRUE**.

N-64 Number Pool NPA-NXX-X Holder Information – Service Provider NPA-NXX-X Indicator Download of SVs

<u>NPAC SMS shall suppress the download of Number Pooling NPA-NXX-X Information, for</u> additions, modifications, and deletions, via the NPAC SMS to Local SMS Interface if the Service <u>Provider's NPA-NXX-X indicator is **FALSE**</u>.

<u>N-65</u><u>Number Pool NPA-NXX-X Holder Information – Filters for NPA-NXX-Xs</u>

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

<u>N-70 Number Pool NPA-NXX-X Holder Information – Validation Error</u>

NPAC SMS shall report an error to the NPAC Personnel and reject the addition or modification of Number Pooling NPA-NXX-X Holder information if validation errors occur as defined in Requirements N-30, N-40, N-50, N-90, N-160, N-200 and N-230.

NPA-NXX-X Holder, NPAC Scheduling of Block Creation

N-71.1 Number Pool NPA-NXX-X Holder Information –GUI Entry Field for NPAC or SOA Origination

<u>NPAC SMS shall provide a mechanism for NPAC Personnel to select NPAC Origination or SOA</u> <u>Origination for the Block data, when creating NPA-NXX-X Holder information, via the NPAC</u> <u>Administrative Interface.</u>

N-71.2 Number Pool NPA-NXX-X Holder Information –GUI Entry Mechanism for Immediate or Scheduled Block Creation

NPAC SMS shall provide a mechanism for NPAC Personnel to request NPAC Block Creation for either immediate execution, once the Effective Date has been reached, or at a future date/time, via the NPAC Administrative Interface.

<u>N-71.3</u> Number Pool NPA-NXX-X Holder Information –GUI Entry Field for Scheduled Date/Time

<u>NPAC SMS shall include the "Scheduled Date/Time on the Effective Datefor Block Activation"</u> as an entry field in the format of MM/DD/YYYY and HH:MM, for the NPA-NXX-X Holder information via the NPAC Administrative Interface.

N-72.1 Number Pool NPA-NXX-X Holder Information –Default for Scheduled Date/Time Entry Field

NPAC SMS shall default the value in the "Scheduled Date/Time on the Effective Date for Block Activation" field in the NPAC Administrative Interface, to the Effective Date and 00:01 (HH:MM) Central Time.

N-72.2 Number Pool NPA-NXX-X Holder Information –Scheduled Date/Time Entry Field Validation

NPAC SMS shall validate that the "Scheduled Date/Time for Block Activation" field in the NPAC Administrative Interface, is a valid date and time.

<u>N-73</u><u>Number Pool NPA-NXX-X Holder Information –Use of Scheduled</u> Date/Time and NPAC Origination Entry Fields

NPAC SMS shall use the value in the "Scheduled Date/Time on the Effective Date for Block Activation" field as the date and time, in Central Time, that the Block Creation scheduled event will occur on the Effective Date for NPAC initiated Block Holder data, when the NPAC Origination has been selected by NPAC Personnel while creating NPA-NXX-X Holder information.

<u>N-74 Number Pool NPA-NXX-X Holder Information – Routing Data for</u> <u>NPAC Origination</u>

NPAC SMS shall require NPAC Personnel to enter applicable Block routing data, via the NPAC Administrative Interface, when the NPAC Origination has been selected by NPAC Personnel while creating NPA-NXX-X Holder information.

NPA-NXX-X Holder, Addition

<u>N-80 Addition of Number Pooling NPA-NXX-X Holder Information –</u> <u>Required Fields</u>

NPAC SMS shall require NPAC personnel to specify the NPA-NXX-X Holder SPID, the NPA-NXX-X, and the Effective Date, as defined in the Number Pooling NPA-NXX-X Holder Information data model.

<u>N-90</u> Addition of Number Pooling NPA-NXX-X Holder Information – <u>SPID Validation</u>

NPAC SMS shall validate that the NPA-NXX-X Holder SPID is a valid Service Provider in the NPAC SMS.

<u>N-100</u> Addition of Number Pooling NPA-NXX-X Holder Information – Check for Pending-Like No-Active SVs

NPAC SMS shall reject the request and issue an error message to the NPAC personnel at the time of NPA-NXX-X Creation, if there are any TNs within the 1K Block, that contain an SV, with a status of pending/conflict/cancel-pending/failed, and where a currently active SV does NOT exist, for the given TN.

<u>N-110</u> Addition of Number Pooling NPA-NXX-X Holder Information – Check for Pending-Like Port-To-Original SVs

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

<u>N-130.1</u> Addition of Number Pooling NPA-NXX-X Holder Information – Error Message for Pending-Like No-Active SVs and Pending-Like Port-To-Original SVs

NPAC SMS shall provide an "error dialog with a transition mechanism" that displays the unique error message described in N-100 and N-110, and provides an option for the NPAC Personnel to either, exit the NPA-NXX-X Create request, or generate and upon completion of the request, the list of Pending-Like No-Active Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, in the report format listed in R-70, R-80, R-81, and R-82, to the screen for TNs within the 1K Block, will be made available to NPAC Personnel with minimal navigation on the NPAC Administrative Interface.

<u>N-130.2</u> Addition of Number Pooling NPA-NXX-X Holder Information – Pending-Like No-Active SVs and Pending-Like Port-To-Original SVs Report Selection of Output Destinations

NPAC SMS shall, after displaying the Pending-Like No-Active Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, to the screen, prompt the NPAC Personnel to select output destinations for the report.

<u>N-130.3</u> Addition of Number Pooling NPA-NXX-X Holder Information – Pending-Like No-Active SVs and Pending-Like Port-To-Original SVs Report Output Destinations for Multiple Destinations

NPAC SMS shall, continue to display the Pending-Like No-Active Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, to the screen, and prompt the NPAC Personnel to select additional output destinations for the report, until the NPAC Personnel requests the closure of the report window.

<u>N-130.4</u> Addition of Number Pooling NPA-NXX-X Holder Information – Multiple Destination and Multiple Copies of the Pending-Like No-Active SVs and Pending-Like Port-To-Original SVs Report

NPAC SMS shall allow NPAC Personnel to route the Pending-Like No-Active Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, to multiple output destinations along with multiple copies of the report, without requiring NPAC Personnel to regenerate the report.

<u>N-131</u> Addition of Number Pooling NPA-NXX-X Holder Information – Output Destination for Pending-Like No-Active SVs and Pending-Like Port-To-Original SVs

<u>NPAC SMS shall provide output destination options, as listed in R9-2, for the Pending-Like No-Active Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, based on the error condition in N-130.</u>

<u>N-140 Addition of Number Pooling NPA-NXX-X Holder Information</u> <u>Effective Date – Tunable Parameter</u>

NPAC SMS shall provide a NPA-NXX-X Holder Effective Date Window tunable parameter which is defined as the minimum length of time between the current date and the effective date, when Creating a NPA-NXX-X in the NPAC SMS.

N-150 Addition of Number Pooling NPA-NXX-X Holder Information Effective Date – Tunable Parameter Default

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

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

<u>N-160</u> Addition of Number Pooling NPA-NXX-X Holder Information Effective Date – Validation

<u>NPAC SMS shall verify that the Effective Date for the NPA-NXX-X Holder data is equal to, or greater than, the current date plus the value of the NPA-NXX-X Holder Effective Date Window tunable parameter.</u>

N-170 Addition of Number Pooling NPA-NXX-X Holder Information Effective Date – Ops GUI Default

<u>NPAC SMS shall default the time portion of the Effective Date Timestamp to 00:00 Central Time,</u> and not allow the NPAC Personnel to modify the Time portion of the Effective Date, on the <u>NPAC Administrative Interface.</u>

<u>N-180</u> Addition of Number Pooling NPA-NXX-X Holder Information – Successful Validation

NPAC SMS shall, upon successful validation, store the NPA-NXX-X in the NPAC SMS, and broadcast the NPA-NXX-X to the Service Providers.

NPA-NXX-X Holder, Modification

<u>N-190</u> Modification of Number Pool NPA-NXX-X Holder Information – Effective Date Modification from GUI

NPAC SMS shall allow NPAC personnel to modify the block holder effective date for an NPA-NXX-X as stored in the NPAC SMS via the NPAC Administrative Interface.

<u>N-200</u><u>Modification of Number Pool NPA-NXX-X Holder Information -</u> Effective Date versus Current Date

NPAC SMS shall allow the NPAC personnel to modify the effective date for an NPA-NXX-X if the current date is less than the effective date for the NPA-NXX-X.

<u>N-210</u> Modification of Number Pool NPA-NXX-X Holder Information -Effective Date Update to Scheduled Block Create

NPAC SMS shall, upon modifying the effective date for an NPA-NXX-X, and where the Block Creation was a scheduled event within the NPAC SMS, also modify the corresponding date for that Block Create scheduled event.

N-220 Modification of Number Pool NPA-NXX-X Holder Information Effective Date – Tunable Parameter Modification

NPAC SMS shall allow the NPAC SMS Administrator to modify the NPA-NXX-X Holder Effective Date Window tunable parameter.

N-230 Modification of Number Pool NPA-NXX-X Holder Information Effective Date – Validation

<u>NPAC SMS shall verify that the modification of the Effective Date for the NPA-NXX-X Holder</u> data is equal to, or greater than, the NPA-NXX-X Holder block creation date plus the value of the <u>NPA-NXX-X Holder Effective Date Window tunable parameter.</u>

<u>N-235</u><u>Modification of Number Pooling NPA-NXX-X Holder Information –</u> Successful Validation

NPAC SMS shall, upon successful validation, store the updates to the NPA-NXX-X in the NPAC SMS, and broadcast the updated NPA-NXX-X to the Service Providers.

NPA-NXX-X Holder, Deletion

<u>N-240 Deletion of Number Pool NPA-NXX-X Holder Information – NPA-NXX-X Data</u>

NPAC SMS shall allow NPAC personnel to delete the NPA-NXX-X block holder information for an NPA-NXX-X as stored in the NPAC SMS.

N-245 Deletion of Number Pool NPA-NXX-X Holder Information – Single NPA-NXX-X at a time from GUI

<u>NPAC SMS shall allow NPAC personnel to delete the NPA-NXX-X holder information for a single NPA-NXX-X at a time, via the NPAC Administrative Interface.</u>

<u>N-250 Deletion of Number Pooling NPA-NXX-X Holder Information –</u> <u>Check for Pending-Like and Active POOL SVs</u>

NPAC SMS shall reject the request and issue an error message to the NPAC personnel at the time of NPA-NXX-X 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 NPA-NXX-X Holder SPID, and the current active SV is LNP Type of POOL.

<u>N-260</u> Deletion of Number Pooling NPA-NXX-X Holder Information – Check for Port-to-Original SVs

NPAC SMS shall reject the request and issue an error message to the NPAC personnel at the time of NPA-NXX-X Deletion, if there are any TNs within the 1K Block, that contain an SV, where the SV is a Port-To-Original port.

<u>N-265</u> <u>Deletion of Number Pooling NPA-NXX-X Holder Information –</u> <u>Check for non-Active Block</u>

NPAC SMS shall reject the request and issue an error message to the NPAC personnel at the time of NPA-NXX-X Deletion, if the associated Block, contains a status other than Active, or the Failed SP List contains any SPIDs.

<u>N-280.1</u> Deletion of Number Pooling NPA-NXX-X Holder Information – Error Message Report for Pending-Like and With Active POOL SVs and Pending-Like Port-To-Original SVs

NPAC SMS shall provide an "error dialog with a transition mechanism" that displays the unique error message described in N-250 and N-260, and provides an option for the NPAC Personnel to either, exit the NPA-NXX-X Delete request, or generate the upon completion of the request, the list of Pending-Like Withand Active POOL Subscription Version(s) where the current active SV contains LNP Type of POOL, and Pending-Like Port-to-Original Subscription Version(s) Report, in the report format listed in R-130, R-140, R-141, and R-142, to the screen for TNs within the 1K Block, will be made available to NPAC Personnel with minimal navigation on the NPAC Administrative Interface.

<u>N-280.2</u> Deletion of Number Pooling NPA-NXX-X Holder Information – Pending-Like With Active POOL SVs and Pending-Like Port-To-Original SVs Report Selection of Output Destinations

<u>NPAC SMS shall, after displaying the Pending-Like With Active POOL Subscription Version(s)</u> and Pending-Like Port-to-Original Subscription Version(s) Report, to the screen, prompt the NPAC Personnel to select output destinations for the report.

<u>N-280.3 Deletion of Number Pooling NPA-NXX-X Holder Information –</u> <u>Pending-Like With Active POOL SVs and Pending-Like Port-To-Original SVs</u> <u>Report Output Destinations for Multiple Destinations</u>

NPAC SMS shall, continue to display the Pending-Like With Active POOL Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, to the screen, and prompt the NPAC Personnel to select additional output destinations for the report, until the NPAC Personnel requests the closure of the report window.

<u>N-280.4 Deletion of Number Pooling NPA-NXX-X Holder Information –</u> <u>Multiple Destination and Multiple Copies of the Pending-Like With Active</u> <u>POOL SVs and Pending-Like Port-To-Original SVs Report</u>

NPAC SMS shall allow NPAC Personnel to route the Pending-Like With Active POOL Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, to multiple output destinations along with multiple copies of the report, without requiring NPAC Personnel to re-generate the report.

<u>N-281 Deletion of Number Pooling NPA-NXX-X Holder Information –</u> Output Destination for Pending-Like and Active POOL SVs and Pending-Like Port-To-Original SVs

NPAC SMS shall provide output destination options, as listed in R9-2, for the Pending-Like Withand Active POOL Subscription Version(s) and Pending-Like Port-to-Original Subscription Version(s) Report, based on the error conditionmessage in N-280, that include print, fax, e-mail, stored to a file.

<u>N-290</u> Deletion of Number Pool NPA-NXX-X Holder Information – Block and Subscription Version Data Dependency

NPAC SMS shall delete the NPA-NXX-X Holder Information for a 1K Block, through a multistep process that includes:

- Broadcasting the delete of SVs to non-EDR Local SMSs.

- Broadcasting the delete of Blocks to the EDR Local SMSs.

- Receiving a successful response from all EDR and non-EDR Local SMSs.

- Updating all SVs and Blocks on the NPAC SMS.

- Deleting the NPA-NXX-X Holder information from the NPAC SMS.

- Broadcasting the delete of NPA-NXX-X to the NPA-NXX-X enabled Local SMSs.

N-295 Deletion of Number Pool NPA-NXX-X Holder Information – NPA-NXX-X Dependency

<u>NPAC SMS shall only delete the NPA-NXX-X Holder Information after successfully updating all</u> associated SVs and Blocks to a status of Old with NO Failed SP List.

NPA-NXX-X Holder, NPA Splits

<u>N-300</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – New NPA Split Automatic Create of New NPA-NXX-X

NPAC SMS shall automatically create a new NPA-NXX-X in the Number Pooling NPA-NXX-X Information, when a valid request is made to add an NPA Split, if the old NPA-NXX-X exists, but the new NPA-NXX-X does NOT exist in the Number Pooling NPA-NXX-X Information.

<u>N-301</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – New NPA Split Error Message if New NPA-NXX-X Already Exists

<u>NPAC SMS shall reject the request and generate an error message to the NPAC Personnel when a request is made to add an NPA Split, and the new NPA-NXX-X already exists in the Number Pooling NPA-NXX-X Information.</u>

<u>N-302</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – New NPA Split Field Values for Automatic Add of New NPA-NXX-X

NPAC SMS shall populate the fields for the automatically generated new NPA-NXX-X in the Number Pooling NPA-NXX-X Information, when a request is made to add an NPA Split, as follows:

- <u>NPA-NXX-X ID -- automatically generated by NPAC.</u>
- <u>NPA-NXX-X Holder SPID set as same value as old NPA-NXX-X.</u>

• <u>NPA-NXX-X – set to the same value as the new NPA-NXX, plus the seventh</u> <u>digit of the old NPA-NXX-X.</u>

• Effective Date -- set to the later of, the same field in old NPA-NXX-X, or the start of PDP.

- <u>Creation Date -- set to the System Date.</u>
- Last Modified Date -- set to the System Date.
- <u>Download Reason set to the value of "new1".</u>

<u>N-303</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – New NPA Split, Skip Block and Subscription Version Create

NPAC SMS shall NOT schedule the Creation of a Block and Subscription Versions with LNP Type of POOL, for an NPA-NXX-X that is automatically generated by the NPAC SMS in the Number Pooling NPA-NXX-X Information, as a result of a request to add an NPA Split.

NOTE: The Block and SVs will be created at PDP Start based on Block and SV split requirements.

<u>N-310</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – NXX Removal from NPA Split prior to the end of PDP

NPAC SMS shall upon the removal of an NPA-NXX from an NPA Split *prior to the end* of permissive dialing, remove the new NPA-NXX-X from the NPA-NXX-X Holder Information.

<u>N-320</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – Addition of an NPA-NXX-X involved in an NPA Split

NPAC SMS shall, upon entry of an NPA-NXX-X in the Number Pooling NPA-NXX-X Holder Information, automatically add an entry for the new/old NPA-NXX-X for an NPA-NXX involved in an NPA Split, if the old NPA-NXX exists in the NPAC SMS is scheduled for permissive dialing or currently in permissive dialing.

NOTE: Therefore, if entering the new NPA-NXX-X, then the old NPA-NXX-X will be automatically added; and if entering the old NPA-NXX-X, then the new NPA-NXX-X will be automatically added.

<u>N-325</u><u>NPA Splits and the Number Pool NPA-NXX-X Holder Information –</u> Broadcast of Addition or Deletion of NPA-NXX-X Split Data

NPAC SMS shall broadcast NPA-NXX-X data that is added or deleted for an NPA Split, as defined in requirements N-61, N-62, N-63, N-64, and N-65.

<u>N-326</u> NPA Splits and the Number Pool NPA-NXX-X Holder Information – Deletion of Old NPA-NXX-X at the end of permissive dialing

<u>NPAC SMS shall automatically delete the old NPA-NXX-X from the Number Pooling NPA-NXX-X Holder Information, upon reaching the end of the permissive dialing period for the old NPA-NXX of the NPA-NXX-X.</u>

NPA-NXX-X Holder, First Port Notification

N-330 Number Pool NPA-NXX-X Holder information notification of First Port

NPAC SMS shall notify all accepting Local SMSs and SOAs of the NPA-NXX-X, effective date, and owning Service Provider when an NPA-NXX is being ported for the first time immediately after creation validation of a Number Pooling NPA-NXX-X.

NPA-NXX-X Holder, Query

<u>N-340 Query of Number Pool NPA-NXX-X Holder Information – NPAC</u> Personnel

NPAC SMS shall allow NPAC personnel, Service Provider SOA via the SOA to NPAC SMS Interface, Local SMS via the NPAC SMS to Local SMS Interface, or Service Provider SOA via the NPAC SOA Low-tech Interface, to query the NPA-NXX-Xblock holder information for all data as listed in the NPA-NXX-X Holder Information Data Model, for an NPA-NXX-X as stored in the NPAC SMS.

<u>N-360 Query of Number Pool NPA-NXX-X Holder Information – Return of Queried Data</u>

NPAC SMS shall return to the NPAC Personnel or requesting Service Provider all NPA-NXX-Xs that match the query selection criteria, as listed in the NPA-NXX-X Holder Information Data Model, for an NPA-NXX-X as stored in the NPAC SMS.

NPA-NXX-X Holder, Bulk Data Download

N-371 Number Pool NPA-NXX-X Holder Information Bulk Download File – Inclusion of NPA-NXX-X Data on the GUI

NPAC SMS shall provide a mechanism for NPAC Personnel to indicate whether NPA-NXX-X data should be included or excluded when requesting a bulk data download file for Network data, via the NPAC Administrative Interface.

N-372 Number Pool NPA-NXX-X Holder Information Bulk Download File – Using the Input Data and Not the NPA-NXX-X Indicator

NPAC SMS shall use the NPAC Personnel's input data to determine whether to include or exclude NPA-NXX-X data, and shall NOT use the value in the Service Provider's NPA-NXX-X Indicator, when creating a bulk data download file for Network data.

N-373 Number Pool NPA-NXX-X Holder Information Bulk Download File – Separate File containing all NPA-NXX-X Data

NPAC SMS shall provide a separate bulk data download file that contains all NPA-NXX-Xs in the NPAC SMS, when generating bulk data download files for Network Data.

<u>N-374</u> Number Pool NPA-NXX-X Holder Information Bulk Download File <u>– Filters for NPA-NXX-X Data</u>

NPAC SMS shall apply NPA-NXX Filters to NPA-NXX-Xs in the creation of a bulk data download file.

N-375 Number Pool NPA-NXX-X Holder Information Bulk Download File – FTP Sub-Directory

<u>NPAC SMS shall automatically put the NPA-NXX-X bulk data download file into the FTP subdirectory of the Service Provider, based on SPID, that requested the creation of the bulk data download file for Network Data.</u>

NPA-NXX-X Holder, Resync

<u>N-380 Resynchronization of Number Pool NPA-NXX-X Holder Information</u> <u>– NPA-NXX-X Indicator set to TRUE</u>

NPAC SMS shall process a Service Provider request to download Network data over the NPAC SMS to Local SMS Interface, when a Service Provider establishes an association with the resynchronization flag set to TRUE, and the download of NPA-NXX-X (or ALL) is TRUE, and shall *send* the NPA-NXX-X portion of the Network data when the Service Provider's NPAC Customer LSMS NPA-NXX-X Indicator is set to TRUE.

N-390 Resynchronization of Number Pool NPA-NXX-X Holder Information – NPA-NXX-X Indicator set to FALSE

NPAC SMS shall process a Service Provider request to download Network data over the NPAC SMS to Local SMS Interface, when a Service Provider establishes an association with the resynchronization flag set to TRUE, and the download of NPA-NXX-X (or ALL) is TRUE, and shall *suppress* the NPA-NXX-X portion of the Network data when the Service Provider's NPAC Customer LSMS NPA-NXX-X Indicator is set to FALSE.

N-392 Resynchronization of Number Pool NPA-NXX-X Holder Information – NPA-NXX-X resync and queuing of messages

NPAC SMS shall queue up a single instance of all messages to the Local SMS, via the NPAC SMS to Local SMS Interface, when a Service Provider establishes an association with the NPAC SMS and where the resynchronization flag is set to TRUE.

<u>N-394 Resynchronization of Number Pool NPA-NXX-X Holder Information</u> <u>– NPA-NXX-X resync and sending of queued messages</u>

NPAC SMS shall send 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>N-400</u> Resynchronization of Number Pool NPA-NXX-X Holder Information – Filters on NPA-NXX-X resync

<u>NPAC SMS shall apply NPA-NXX Filters to NPA-NXX-X resynchronization to the Local</u> <u>SMS(s) via the NPAC SMS to Local SMS Interface.</u>

NUMBER POOLING BLOCK HOLDER INFORMATION DATA MODEL				
<u>Attribute Name</u>	<u>Type</u> (Size)	<u>Required</u>	Description	
Block ID	N		<u>A unique sequential number assigned upon creation</u> of the Block.	
Block Holder SPID	<u>C(4)</u>		The Service Provider Id of the block holder.	
<u>NPA-NXX-X</u>	<u>N(7)</u>		NPA-NXX-X of the 1K Block.	
LRN	<u>TN</u>		The LRN is an identifier for the switch on which the pooled NPA-NXX-X resides for the 1K Block.	
CLASS DPC	<u>N (9)</u>		DPC for 10-digit GTT for CLASS features for the <u>1K Block.</u>	
CLASS SSN	<u>N (3)</u>		CLASS SSN for the 1K Block.	
LIDB DPC	<u>N (9)</u>		DPC for 10-digit GTT for LIDB features for the 1K Block.	
LIDB SSN	<u>N (3)</u>		LIDB SSN for the 1K Block.	
<u>CNAM DPC</u>	<u>N (9)</u>		DPC for 10-digit GTT for CNAM features for the <u>1K Block.</u>	
<u>CNAM SSN</u>	<u>N (3)</u>		CNAM SSN for the 1K Block.	
ISVM DPC	<u>N (9)</u>		DPC for 10-digit GTT for ISVM features for the 1K Block.	
ISVM SSN	<u>N (3)</u>		ISVM SSN for the 1K Block.	
Creation Date	<u>T</u>		The date and time (GMT) that this Block Holder record was created.	
Activation Start Timestamp	T		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 Broadcast Complete Timestamp	Τ		Date and time (GMT) of the Completion of the Activation. This field defines the date and time of 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	Τ		Date and time (GMT) of the Last Modification to the Block.	
			The initial value is the Creation Timestamp.	
Disconnect Request Time Stamp	<u>T</u>		The date and time that the Block disconnect request was made by the NPAC personnel.	

Disconnect Broadcast <u>Time Stamp</u>	<u>T</u>	The date and time that broadcasting began to all local SMS systems for the disconnect of the Block.
Disconnect Broadcast Complete Time Stamp	T	The date and time that at least one Local SMS system successfully acknowledged the broadcast or the retries were exhausted for the disconnect.
Old Time Stamp	T	The date and time that the Block became old.
Modify Request Timestamp	T	The date and time that the Block Modify request was made.
<u>Modify Broadcast</u> <u>Timestamp</u>	T	The date and time that broadcasting began to all local SMS systems for the modification of the Block.
Modify Broadcast Complete Timestamp	Τ	The date and time that all at least one local SMS systems successfully acknowledged the broadcast or the retries were exhausted for the modification of the Block.
SOA Origination Indicator	B	 A boolean that indicates whether or not the NPA- NXX-X Holder's SOA initiated the Block over the SOA to NPAC SMS Interface, and whether or not to send notifications to the SOA. This attribute will be initially set by the NPAC SMS at the time of Block creation. If originated by SOA, value is TRUE. If originated by NPAC, value is FALSE.
<u>Status</u> 	E	Status of the Block.The initial value is S for Sending.Valid enumerated values are:A-Active (1)SS-S-F-Failed (4)PF-O-Old (7)
Download Reason	E	The reason the Block is being downloaded to the SOA or LSMS. Valid values are: 0 - New 1 - Delete 2 - Modified 2 - Modified

NUMBER POOLING BLOCK FAILED SP LIST DATA MODEL					
<u>Attribute Name</u>	<u>Type</u> (Size)	<u>Required</u>	Description		

Block ID (Key)	<u>N</u>	<u>A unique sequential number assigned upon creation</u> of the Block.
SPID	<u>C(4)</u>	The Service Provider ID of the discrepant SP.
SP Name	<u>C(40)</u>	The NPAC Customer Name of the discrepant SP.

Block Holder, General

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

<u>NPAC SMS shall allow NPAC Personnel to add, modify, or query Block Holder information via</u> <u>the NPAC Administrative Interface.</u>

B-20 Number Pool Block Holder Information – NPAC Customer Service Provider EDR Indicator Download of Block Object

NPAC SMS shall download Number Pooling Block Information, for additions, modifications, deletions, re-sends, and resync using the Number Pooling Block Object, via the NPAC SMS to Local SMS Interface if the EDR indicator is **TRUE**, at the time a request is processed by the NPAC SMS.

NOTE: The EDR Indicator will be used by the NPAC SMS when processing a request, but not during the retry functionality (n by m [e.g., 3 by 5]).

B-30 Number Pool Block Holder Information – NPAC Customer Service Provider EDR Indicator Download of SVs

NPAC SMS shall download Number Pooling Block Information, for additions, modifications, deletions, re-sends, and resyncs, using individual subscription versions with LNP Type of POOL, for the TNs within the range of the 1K Block, via the NPAC SMS to Local SMS Interface if the EDR indicator is **FALSE**, at the time a request is processed by the NPAC SMS.

B-32 Number Pool Block Holder Information – NPAC Customer EDR Indicator For Requests But Not Retries

<u>NPAC SMS shall use the EDR Indicator when processing a request for Number Pooling Block</u> Information, but not during the retry functionality (n by m [e.g., 3 by 5]).

B-34 Number Pool Block Holder Information – Data Integrity for Block and Pooled Subscription Versions

<u>NPAC SMS shall maintain data integrity for LRN and GTT data, between a Number Pooling</u> <u>Block and the corresponding Subscription Versions with LNP Type of POOL in that 1K Block, in</u> <u>the NPAC SMS.</u>

B-40 Number Pool Block Holder Information – Service Provider Validation

NPAC SMS shall verify the Block NPA-NXX-X Holder SPID attribute of the Block object matches the SPID in the accessControl for SOA Activation.

B-50 Number Pool Block Holder Information – SPID Validation

NPAC SMS shall verify the SPID of the accessControl matches the owner of the association.

B-60 Number Pool Block Holder Information – NPA-NXX-X Data Validation

NPAC SMS shall validate the following two attributes are contained in a single NPA-NXX-X entry in the Number Pooling NPA-NXX-X Holder Information in the NPAC SMS:

- NPA-NXX-X Block Holder SPID in the Block is equal to the NPA-NXX-X Holder SPID in the NPA-NXX-X Holder Information,

- NPA-NXX-X in the Block is equal to the NPA-NXX-X in the NPA-NXX-X Holder Information.

B-70 Number Pool Block Holder Information – NPA-NXX-X Effective Date

<u>NPAC SMS shall reject a request to create a Block if the current date is prior to the effective date</u> of the Number Pooling NPA-NXX-X as defined in the NPAC SMS.

B-80 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.

B-90 Number Pool Block Holder Information – Duplicate Block Validation

NPAC SMS shall validate that the NPA-NXX-X specified in the addition of Number Pooling Block Holder Information does not already exist in the Number Pooling Block Holder Information, except for a status of Old where the Block's Failed SP List is empty.

B-100 Number Pool Block Holder Information – SOA Origination Values

NPAC SMS shall set the SOA Origination to TRUE for Blocks sent over the SOA to NPAC SMS Interface, and to FALSE for Blocks that were created by NPAC personnel, except for those that were automatically generated by the NPAC as a result of an NPA Split, as defined in requirements B-552 and B-553.

B-110 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 B-40, B-50, B-60, B-70, B-80, B-90, B-180, and B-250.

B-120 Number Pooling Block Holder Information – Update Notification

NPAC SMS shall *send* all SOA notifications to the current SP (the block holder) for updates on Blocks, when the Block SOA Origination is TRUE.

B-130 Number Pooling Block Holder Information – Update Notification Suppression

NPAC SMS shall *suppress* all SOA notifications to the current SP (the block holder) for updates on Blocks, when the Block SOA Origination is FALSE.

B-140 Number Pooling Block Holder Information – Failed SP List Update for Block

NPAC SMS shall consider an EDR Local SMS to be discrepant and shall update the Block's Failed SP List on the Block, based on an EDR Local SMS failing to process the Block Object, for an addition, modification, deletion, re-send, resync, or mass update.

B-150 Number Pooling Block Holder Information – Failed SP List Update for Subscription Versions

NPAC SMS shall consider a non-EDR Local SMS to be discrepant and shall update the Block's Failed SP List on the Block, based on a non-EDR Local SMS failing to process one or more Subscription Versions, with LNP Type of POOL, within the Block, for an addition, modification, deletion, re-send, resync, or mass update.

B-160 Number Pooling Block Holder Information – Failed SP List Sent to Block Holder

NPAC SMS shall send the Block's Failed SP List for the Block, to the current SP (the block holder) via the SOA to NPAC SMS Interface, along with the SOA notification for status update of the Block, when the Block SOA Origination is TRUE, and the broadcast to one or more Local SMSs fail.

B-165.1 Number Pooling Block Holder Information – Synchronization of Block Status and Subscription Version Status

<u>NPAC SMS shall ensure that the *status* for Block broadcasts to EDR Local SMSs and Subscription Versions with LNP Type of POOL broadcasts to non-EDR Local SMSs, are synchronized, by performing the following:</u>

• <u>The *status* for the Block and Subscription Versions shall cross-reference one</u> another and contain the results of the broadcast of the Block to the EDR Local SMSs, and the broadcast of the Subscription Versions to the non-EDR Local SMSs.

• The <i>status</i> for each the Subscription Versions shall only be	set, once the
broadcasts of the Block to all EDR and Subscription Versions to not	n-EDR Local SMSs
has been completed, and a response has been received by all EDR a	<u>nd non-EDR Local</u>
SMSs or retries have been exhausted.	

• The *status* for the Block shall only be set, once the broadcasts of the Block to all EDR and Subscription Versions to non-EDR Local SMSs has been completed, and a response has been received by all EDR and non-EDR Local SMSs or retries have been exhausted.

• The *status* for the Block shall be based on the summary of all Subscription Versions with LNP Type of POOL within the 1K Block.

• The *status* for the Block shall reflect the information contained in Tables B-165.2, B-165.3, and B-165.4.

- Key for Tables B-165.2, B-165.3, and B-165.4
- <u>A = all EDR Local SMSs respond successfully.</u>
- <u>B = some but not all EDR Local SMSs respond successfully.</u>
- <u>C = none of the EDR Local SMSs respond successfully.</u>
- <u>D = all non-EDR Local SMSs respond successfully.</u>
 - <u>E = some buty not all non-EDR Local SMSs respond successfully to a given SV, but all non-EDR Local SMSs respond successfully to another SV.</u>
 - <u>F = some but not all non-EDR Local SMSs respond successfully to a given SV, but none of the non-EDR Local SMSs respond successfully to another SV.</u>
 - <u>GF = some but not all none of the non-EDR Local SMSs respond successfully to any of the</u> <u>Pooled SVs.</u>
- H = none of the non-EDR Local SMSs respond successfully.
- Act = Active status
- <u>Act/Part = a mix of both Active status and Partial Failure status</u>
- <u>Part = Partial Failure status</u>
- <u>Part/Fail = a mix of both Partial Failure status and Failed status</u>
- <u>Fail = Failed status</u>
- Old = Old status
- <u>Act/Old = a mix of both Active status and Old status</u>

<u>B-165.2</u> Number Pooling Block Holder Information – Synchronization of Block Status and Subscription Version Status for Block Creation

NPAC SMS shall set the *status* of a Block for Block Creation, based on the data contained in Table B-165.2.

	• 1	Cable B-165.2 Block Creation	
·	• EDR Local SMS	<u>Non-EDR Local SMS</u>	•

•		•	A	• [3	• <u>C</u>	•	D	•	E	•	<u>F</u>	•	<u>G</u>	•	H	•	All	•	
																		<u>Pool</u>	•	<u>Bl</u>
																		<u>ed</u> SVs		<u>oc</u> <u>k</u>
																		<u>SVs</u> <u>in</u>		
																		<u>the</u> <u>Bloc</u>		
																		<u>bioc</u> <u>k</u>		
	1					_	ļ											A /		
•	1	•		•		•	•		•		•		•		•		•	<u>Act</u>	•	$\frac{\underline{Ac}}{\underline{t}}$
	2	•		•	+	•	•		•		•		•		•		•	<u>Act/</u>	•	Par
																		Part		<u>t</u>
•	3	•		•		•	•		•		•		•		•		•	Part	•	Par
																				<u>t</u>
•	<u>4</u>	•		•		•	•		٠		•		•		٠		٠	Part	•	Par
																				<u>t</u>
•	<u>5</u>	•		•		•	•		•		٠		٠		٠		•	<u>Part</u>	•	Par
																				<u>t</u>
•	<u>6</u>	•		•		•	•		٠		•		•		•		•	<u>Part</u>	•	Par
																				<u>t</u>
•	7	•		•		•	•		٠		•		٠		٠		٠	<u>Part</u>	•	Par
																				<u>t</u>
•	<u>8</u>	•		•		•	•		٠		•		٠		٠		٠	<u>Part</u>	•	Par
																				<u>t</u>
•	2	•		•		•	•		٠		•		•		•		•	<u>Part</u>	•	Par
																				<u>t</u>
ĺ	<u>10</u>	•		•		•	•		٠		•		•		•		•	<u>Part</u>	•	Par
																				<u>t</u>
	<u>11</u>	•		•		•	•		٠		•		•		٠		٠	Part Part	•	Par
																				<u>t</u>
	<u>12</u>	•		•		•	•		٠		•		•		•		•	Part	•	<u>Par</u>
																				<u>t</u>
ĺ	<u>13</u>	•		•		•	•		•		٠		٠		•		•	Part/	•	Par
																		<u>Fail</u>		<u>t</u>
	<u>14</u>	•		•		•	•		•		•		٠		•		•	<u>Part</u>	•	Par

											<u>t</u>
	<u>15</u>	•	•	•	•	•	•	•	•	• <u>Fail</u>	• <u>Fai</u> 1
•		ļ				ļ					

•	EDR Local S	SMS	• No	m-EDR Loc	al SMS	• Poole	• Dlask
• A	• •	• €	• Ð	• E	• ₽	• SVs	Block
٠	•	•	•	•	•	• Act	• Ac
•	•	•	•	•	•	Act/P art or Part	• Pa
•	•	•	•	•	•	Act/P art or Part	• Pa
•	•	•	•	٠	•	• Part	• Pa
•	•	٠	٠	•	•	• Part	• Pa
٠	•	٠	٠	•	•	• Part	• Pa
٠	•	٠	٠	•	•	• Part	• Pa
•	•	•	•	•	•	Part/ Fail Or Fail	• Pa
•	•	•	•	•	•	• Fail	• Fa

B-165.3 Number Pooling Block Holder Information – Synchronization of Block Status and Subscription Version Status for Block Modification

NPAC SMS shall set the *status* of a Block for Block Modification, based on the data contained in Table B-165.3.

•

				• <u>Tab</u>	ole B-1	65.3	Block	Modifi	<u>cation</u>		
·		• <u>E</u>	DR Loca	<u>l SMS</u>		• <u>Nor</u>	1-EDR Lo	ocal SMS		• <u>All</u> <u>Pool</u>	•
		• <u>A</u>	• <u>B</u>	• <u>C</u>	• <u>D</u>	• <u>E</u>	• <u>F</u>	• <u>G</u>	• <u>H</u>	ed <u>SVs</u> in the Bloc <u>k</u>	• <u>B1</u> <u>oc</u> <u>k</u>
·	1	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
·	2	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
·	<u>3</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
•	<u>4</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
·	<u>5</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
•	<u>6</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
•	7	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
·	<u>8</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
·	<u>9</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
	<u>10</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>

11	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
12	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
13	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
<u>14</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>
<u>15</u>	•	•	•	•	•	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>

		Table B-	165(2) I	Block Mo	dification		
•	EDR Local S	SMS	• Nc	on-EDR Loca	al SMS	Poole	•
• A	• B	• C	• D	• E	• F	d •	Block
						• SVs	
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act
•	•	•	•	•	•	• Act	• Act

B-165.4 Number Pooling Block Holder Information – Synchronization of Block Status and Subscription Version Status for Block Deletion

NPAC SMS shall set the *status* of a Block for Block Deletion, based on the data contained in Table B-165.4.

•

				• 1	<u>able B</u>	-165.4	Bloc	k Dele	tion		
•		• <u>E</u>	DR Loca				1-EDR Lo			• <u>All</u> <u>Pool</u>	•
•		• A	• <u>B</u>	• <u>C</u>	• <u>D</u>	• <u>E</u>	• <u>F</u>	• <u>G</u>	• <u>H</u>	ed <u>SVs</u> in the Bloc <u>k</u>	• <u>B1</u> <u>oc</u> <u>k</u>
•	1	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	2	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	3	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>O1</u> <u>d</u>
•	4	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	5	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	<u>6</u>	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	7	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	8	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
•	9	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
	<u>10</u>	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>O1</u> <u>d</u>

<u>11</u>	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
12	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
<u>13</u>	•	•	•	•	•	•	•	•	• <u>Act/</u> <u>Old</u>	• <u>Ol</u> <u>d</u>
14	•	•	•	•	•	•	•	•	• <u>Old</u>	• <u>Ol</u> <u>d</u>
<u>15</u>	•	•	•	•	٠	•	•	•	• <u>Act</u>	• <u>Ac</u> <u>t</u>

		Table I	3-165(3) -	- Block D	eletion		
•	EDR Local S	SMS	• Nc	on-EDR Loca	al SMS	Poole	•
• A	• B	• C	• D	• E	• F	d •	Block
						• SVs	
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Old	• Old
•	•	•	•	•	•	• Act	• Act

<u>B-166.1 Number Pooling Block Holder Information – Synchronization of</u> <u>Block Failed SP List and Subscription Version Failed SP List</u>

NPAC SMS shall ensure that the *Block Failed SP List* and the *Subscription Versions Failed SP Lists* for Block broadcasts to EDR Local SMSs and Subscription Versions broadcasts to non-EDR Local SMSs, are synchronized, by performing the following:

• The *Block Failed SP List* for the Block and *Subscription Versions Failed SP Lists* for the Subscription Versions shall cross-reference one another and contain the results of the broadcast of the Block to the EDR Local SMSs, and the broadcast of the Subscription Versions to the non-EDR Local SMSs.

• <u>The Subscription Versions Failed SP Lists</u> for the Subscription Versions shall only be set, once based on the results of the Block broadcasts to all EDR Local SMSs and the Subscription Version broadcasts to all non-EDR Local SMSs, and a response has been received by all EDR and non-EDR Local SMSs or retries have been exhausted, for Activations, Modifications, and Deletions has been completed.

• The *Block Failed SP List* for the Block shall only be set, once based on the results of the Block broadcasts to all EDR Local SMSs and the Subscription Version

broadcasts to all non-EDR Local SMSs, and a response has been received by all EDR and non-EDR Local SMSs or retries have been exhausted has been completed.

• The *Block Failed SP List* for the Block shall be based on the summary of all Subscription Versions with LNP Type of POOL within the 1K Block.

• The *Block Failed SP List* for the Block shall reflect the information contained in Table B-166.2.

- Key for Table B-166.2
- <u>A = all EDR Local SMSs respond successfully</u>
- <u>B = some but not all EDR Local SMSs respond successfully</u>
- C =none of the EDR Local SMSs respond successfully
- <u>D = all non-EDR Local SMSs respond successfully</u>
 - <u>E = some buty not all non-EDR Local SMSs respond successfully to a given SV, but all non-EDR Local SMSs respond successfully to another SV.</u>
 - <u>F = some but not all non-EDR Local SMSs respond successfully to a given SV, but none of the non-EDR Local SMSs respond successfully to another SV.</u>
 - <u>G = some but not all non-EDR Local SMSs respond successfully to any of the Pooled SVs.</u>
- <u>HF = none of the non-EDR Local SMSs respond successfully</u>
- ZFSL = Zero Failed SP List (no SPs in the list)
- <u>Z/S FSL = Zero/Some Failed SP List (mix of both Zero Failed SP List and Some Failed SP List)</u>
- <u>SFSL = Some but not all Failed SP List (some but not all SPs in the list)</u>
- S/A FSL = Some/All Failed SP List (mix of both Some Failed SP List and All Failed SP List)
- <u>AFSL = All Failed SP List (all SPs in the list)</u>

B-166.2 Number Pooling Block Holder Information – Synchronization of Block Failed SP List and Subscription Version Failed SP List for Block Creation, Modification, or Deletion

NPAC SMS shall set the *Block Failed SP List* of a Block for updates, based on the data contained in Table B-166.2.

					Table I			ed SP I			
•		• <u>E</u>	DR Loca					ocal SMS	5	• <u>All</u> <u>Pool</u>	•
•		• <u>A</u>	• <u>B</u>	• <u>C</u>	• D	• <u>E</u>	• <u>F</u>	• <u>G</u>	• <u>H</u>	ed <u>SVs</u> in the <u>Bloc</u> <u>k</u>	• <u>B1</u> <u>oc</u> <u>k</u>
•	1	•	•	•	•	•	•	•	•	• <u>ZFS</u> L	• <u>ZF</u> <u>SL</u>
•	2	•	•	•	•	•	•	•	•	• <u>Z/S</u>	• <u>SF</u>

									<u>FSL</u>	<u>SL</u>
<u>3</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
• <u>4</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
<u>5</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
<u>6</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
2	•	•	•	•	•	•	•	•	• <u>SFS</u> L	• <u>SF</u> <u>SL</u>
• <u>8</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
<u>9</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
<u>10</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> L	• <u>SF</u> <u>SL</u>
11	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
12	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
13	•	•	•	•	•	•	•	•	• <u>S/A</u> <u>FSL</u>	• <u>SF</u> <u>SL</u>
<u>14</u>	•	•	•	•	•	•	•	•	• <u>SFS</u> <u>L</u>	• <u>SF</u> <u>SL</u>
<u>15</u>	•	•	•	•	•	•	•	•	• <u>AFS</u> <u>L</u>	• <u>AF</u> <u>SL</u>

• Table B-166 – Failed SP List									
•	EDR Local S	SMS	Non-EDR Local SMS			Poole	•		
• A	• B	• C	• D	• E	• F	d •	Block		
						• SVs			
•	•	•	•	•	•	• ZFSL	• ZFSL		
•	•	•	•	•	•	• Z/S	• SFSL		

						FSL	
						• or	
						• SFSL	
•	•	•	•	•	•	• Z/S	• SFSL
						FSL	
						• or	
						• SFSL	
•	•	•	•	•	•	• SFSL	• SFSL
•	•	•	•	•	•	• SFSL	• SFSL
•	•	•	•	•	•	• SFSL	• SFSL
•	•	•	•	•	•	• SFSL	• SFSL
•	•	•	•	•	•	• S/A	• SFSL
						FSL	
•	•	•	•	•	•	• AFS	• AFS
						L	L

B-167 Number Pooling Block Holder Information – Synchronization of Block Failed SP List and Subscription Version Failed SP List for the last failed Subscription Version in the 1K Block

NPAC SMS shall remove a non-EDR Service Provider from the *Block's Failed SP List* on the Block when the Service Provider is no longer on the *Subscription Version Failed SP List* for ALL subscription versions in the 1K Block.

B-168 Number Pooling Block Holder Information – Synchronization of Block Failed SP List and Subscription Version Failed SP List for the Block

NPAC SMS shall remove an EDR Service Provider from ALL subscription version's *Failed SP List* when the Service Provider is no longer on the *Block Failed SP List* for the Block.

> <u>B-169.1 Number Pooling Block Holder Information – Unique Error Message</u> for Partial Failure or Failed Status Update to a Block

NPAC SMS shall generate a unique alarmable error message when a Block's status is updated to either Partial Failure or Failed, for the first time, and the SOA Origination Indicator is FALSE.

NOTE: The NPAC SMS shall NOT use the unique alarmable error described in B-169 for Block's where the SOA Origination is TRUE.

B-169.2 Number Pooling Block Holder Information – Unique Error Message for Active Status With a Failed SP List Update to a Block

NPAC SMS shall generate a unique alarmable error message when a Block's status is updated to Active with a Failed SP List, for each occurrence, regardless of the value of the SOA Origination Indicator.

<u>B-169.3 Number Pooling Block Holder Information – Unique Error Message</u> for Partial Failure or Failed Status Update to a Block

<u>NPAC SMS shall generate a unique alarmable error message when a Block's status is updated to</u> <u>Old with a Failed SP List, for the first time, regardless of the value of the SOA Origination</u> <u>Indicator.</u>

B-169.4 Number Pooling Block Holder Information – Block Broadcast Failure Paging Interval Tunable Parameter

NPAC SMS shall provide a Block Broadcast Failure Paging Interval tunable parameter which is defined as the length of time between NPAC initiated error condition paging to NPAC Personnel, when a pooled broadcast of Block data to EDR Local SMSs or Subscription Versions to non-EDR Local SMS, has failed, for activations, modifications, or deletions.

<u>B-169.5 Number Pooling Block Holder Information – Block Broadcast</u> <u>Failure Paging Interval Tunable Parameter Default Value</u>

NPAC SMS shall default the Block Broadcast Failure Paging Interval tunable parameter to sixty (60) minutes.

<u>B-169.6 Number Pooling Block Holder Information – Block Broadcast</u> <u>Monitoring Mechanism</u>

NPAC SMS shall, following a Block's status being set to:

- Partial Failure for the first time,
- Failed for the first time,
- Active with a Failed SP List for each occurrence, or
 - Old with a Failed SP List for the first time,

send a reminder page about the Block's status to NPAC Personnel, based on the frequency defined in the value of the Block Broadcast Failure Paging Interval tunable parameter.

<u>B-169.7 Number Pooling Block Holder Information – Block Broadcast</u> <u>Monitoring Mechanism Completion</u>

<u>NPAC SMS shall NOT send a reminder page about the Block's status to NPAC Personnel, once</u> the Block's status is set to Active AND the Block Failed SP List is empty.

Block Holder, Addition

B-170 Addition of Number Pooling Block Holder Information

<u>NPAC SMS shall allow NPAC personnel or Service Provider via the SOA to NPAC SMS</u> <u>Interface to request the creation of a Number Pooling Block.</u>

B-180 Addition of Number Pooling Block Holder Information – Required Data

<u>NPAC SMS shall require NPAC personnel or Service Provider via the SOA to NPAC SMS</u> <u>Interface to specify the Block Holder SPID, the NPA-NXX-X, and the initial routing information, as defined in the Number Pooling Block Holder Information.</u>

B-190 Addition of Number Pooling Block Holder Information – Check for pending-like SVs for NPAC Personnel

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

B-210 Addition of Number Pooling Block Holder Information – Error Message to SOA for pending-like SVs

NPAC SMS shall reject the request and issue an error message to the **SOA** at the time of 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 the given TN.B-240 Addition of Number Pooling Block Holder Information – Error Message for pending-like SVs

B-240.1 Addition of Number Pooling Block Holder Information – Error Message for pending-like SVs

NPAC SMS shall provide an "error dialog with transition mechanism" that displays the unique error message described in B-190, and provides an option for the NPAC Personnel to either, exit the Block Create request, or generate upon completion of the request, the list of Pending-Like No-Active Subscription Version(s) report, in the report format listed in R-70, R-80, R-81, and R-82, to the screen for TNs within the 1K Block, will be made available to NPAC Personnel with minimal navigation on the NPAC Administrative Interface.

B-240.2 Addition of Number Pooling Block Holder Information –Pending-Like No-Active SVs Report Output Destinations

NPAC SMS shall, after displaying the Pending-Like No-Active Subscription Version(s) report, to the screen, prompt the NPAC Personnel to select output destinations for the report.

B-240.3 Addition of Number Pooling Block Holder Information –Pending-Like No-Active SVs Report Output Destinations for Multiple Destinations

NPAC SMS shall, continue to display the Pending-Like No-Active Subscription Version(s) report, to the screen, and prompt the NPAC Personnel to select additional output destinations for the report, until the NPAC Personnel requests the closure of the report window.

B-240.4 Addition of Number Pooling Block Holder Information – Error Message for Pending-Like No-Active SVs

<u>NPAC SMS shall allow NPAC Personnel to route the Pending-Like No-Active Subscription</u> <u>Version(s) report, to multiple output destinations along with multiple copies of the report.</u>

B-241 Addition of Number Pooling Block Holder Information – Output Destination for Pending-Like No-Active SVs

NPAC SMS shall provide output destination options for the Pending-Like No-Active Subscription Version(s) Report, based on the error message in B-240, that include print, fax, e-mail, stored to a file.

B-242 Addition of Number Pooling Block Holder Information – Reschedule of NPAC Initiated Block Create

NPAC SMS shall provide a mechanism for NPAC Personnel to re-schedule a Block Create, after the effective date of the NPA-NXX-X, via the NPAC Administrative Interface.

B-243 Addition of Number Pooling Block Holder Information – Reschedule of NPAC Initiated Block Create

NPAC SMS shall provide a mechanism where the re-schedule of a Block Create, can be immediately executed or scheduled for a future date/time.

B-250 Addition of Number Pooling Block Holder Information – Field-level Data Validation

<u>NPAC SMS shall perform field-level data validations to ensure that the value formats for the following input data, is valid according to the formats specified in Table 3-10 upon Block creation for a Number Pool:</u>

NPA-NXX-X Holder SPID NPA-NXX-X LRN Class DPC Class SSN LIDB DPC LIDB SSN CNAM DPC CNAM SSN ISVM DPC ISVM SSN

B-260 Addition of Number Pooling Block Holder Information – Broadcast of Block Data

NPAC SMS shall, upon successfully creating a Block, set the Block's status to sending, and broadcast an addition of a Block, to EDR Local SMSs, via the NPAC SMS to Local SMS Interface.

B-265 Addition of Number Pooling Block Holder Information – Activation Broadcast Complete Timestamp Update

NPAC SMS shall update the *Activation Broadcast Complete Timestamp* of the Block upon completion of the broadcast, and the FIRST successful response, or retries are exhausted, for either an EDR or non-EDR Local SMS.

B-270 Addition of Number Pooling Block Holder Information – Status Update

NPAC SMS shall update the *status* of the Block upon completion of the broadcast, and a response from any retries, to ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

B-275 Addition of Number Pooling Block Holder Information – Failed SP List Update

NPAC SMS shall update the *Block Failed SP List* of the Block upon completion of the broadcast, and a response from ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-166.1, and B-166.2.

Block Holder, NPAC Rescheduling of Block Creation

B-280 Re-Schedule of Number Pooling Block Holder Information – Reschedule of NPAC Initiated Block Create

NPAC SMS shall provide a mechanism for NPAC Personnel to re-schedule a Block Create, on or after the effective date of the NPA-NXX-X, via the NPAC Administrative Interface.

B-290 Re-Schedule of Number Pooling Block Holder Information – Reschedule of Block Create Scheduling Options

NPAC SMS shall provide a mechanism where the re-schedule of a Block Create, can be immediately executed or scheduled for a future date/time.

B-300 Re-Schedule of Number Pooling Block Holder Information – Reject Re-schedule Based on Status

NPAC SMS shall reject the re-schedule of a Block Create, if the Block exists in the NPAC SMS with a status other than Old with or without a Failed SP List.

Block Holder, Modification

B-315 Block's SOA Origination Indicator – NPAC Personnel GUI

NPAC SMS shall allow NPAC Personnel to modify the SOA Origination Indicator on the NPAC Block record, via the NPAC Administrative Interface.

B-317 Block's SOA Origination Indicator – Suppress Broadcast

NPAC SMS shall suppress the broadcast to a Local SMS, of a modification to a Block's SOA Origination Indicator.

<u>B-320 Modification of Number Pooling Block Holder Information –</u> <u>Routing Data</u>

NPAC SMS shall allow NPAC personnel, Service Provider via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, to modify the block holder default routing information (LRN, DPC(s), and SSN(s)), for a 1K Block as stored in the NPAC SMS.

B-330 Modification of Number Pooling Block Holder Information – SPID Validation

NPAC SMS shall allow a Service Provider via the SOA to NPAC SMS Interface or Service Provider via the NPAC SOA Low-tech Interface, to modify Block data for Blocks where the NPA-NXX-X Block Holder SPID matches the Service Provider making the request.

<u>B-332</u><u>Modification of Number Pooling Block Holder Information –</u> Selection Criteria

NPAC SMS shall allow a Service Provider via the SOA to NPAC SMS Interface, to modify Block data by specifying either Block ID, or NPA-NXX-X value and status, in the request.

<u>B-335</u><u>Modification of Number Pooling Block Holder Information –</u> Current status and Failed SP List

NPAC SMS shall reject and issue an error message to allow NPAC personnel, Service Provider via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, when to modifying the block holder data, for a 1K Block as stored in the NPAC SMS, and when the Block's current status is anything other than active, and the Block does NOT have any has at least one Service Providers in the Failed SP List.

<u>B-340 Modification of Number Pooling Block Holder Information –</u> <u>Sending Status Update</u>

NPAC SMS shall, upon processing a valid request to modify a Block, update the status of the Block, at the start of the broadcast of a Block modification to the Local SMSs, from an active status to a sending status.

<u>B-350 Modification of Number Pooling Block Holder Information –</u> <u>Broadcast of Block Data</u>

NPAC SMS shall, upon successfully modifying a Block and setting the Block's status to sending, broadcast a modification of a Block to EDR Local SMSs, via the NPAC SMS to Local SMS Interface.

B-355 Modification of Number Pooling Block Holder Information – Modify Broadcast Complete Timestamp Update

<u>NPAC SMS shall update the *Modify Broadcast Complete Timestamp* of the Block upon completion of the broadcast, and the FIRST successful response, or retries are exhausted, for either an EDR or non-EDR Local SMS.</u>

B-360 Modification of Number Pooling Block Holder Information – Active Status Update

NPAC SMS shall update the *status* of the Block upon completion of the broadcast, and any response from retries, to ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

B-370 Modification of Number Pooling Block Holder Information – Failed SP List Update

NPAC SMS shall update the *Block Failed SP List* of the Block upon completion of the broadcast, and a response from ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-166.1, and B-166.2.

B-380 Modification of Number Pooling Block Holder Information – Modify of Block Broadcast Failure Paging Interval Tunable Parameter

NPAC SMS shall allow the NPAC SMS Administrator to modify the Block Broadcast Failure Paging Interval tunable parameter.

Block Holder, Deletion

B-400 Deletion of Number Pool Block Holder Information – NPAC

NPAC SMS shall not allow NPAC Personnel to reject a request a to delete of a Block in the by NPAC SMSpersonnel.

B-410 Deletion of Number Pool Block Holder Information – SOA

<u>NPAC SMS shall reject a request to delete a Block by a Service Provider via the SOA to NPAC</u> <u>SMS interface, and will return an error message to the SOA.</u>

B-415 Deletion of Number Pool Block Holder Information – LTI

NPAC SMS shall not allow Service Provider Personnel to reject a request to a delete of a Block in the NPAC SMS by a Service Provider via the NPAC SOA Low-tech Interface, and will return an error message to the LTI user.

B-430 Deletion of Number Pooling NPA-NXX-X Holder Information – Sending Status Update to Block

NPAC SMS shall, upon processing a valid request to delete an NPA-NXX-X, update the status of the Block at the start of the broadcast to the Local SMSs, from an active status to a sending status.

<u>B-440 Deletion of Number Pool NPA-NXX-X Holder Information –</u> <u>Broadcast of Block Data</u>

NPAC SMS shall, upon setting the Block's status to sending, broadcast a delete of a Block, to EDR LSMSs, via the NPAC SMS to Local SMS Interface.

B-445 Deletion of Number Pooling Block Holder Information – Disconnect Broadcast Complete Timestamp Update

NPAC SMS shall update the *Disconnect Broadcast Complete Timestamp* of the Block upon completion of the broadcast, and the FIRST successful response, or retries are exhausted, for either an EDR or non-EDR Local SMSs.

<u>B-450</u> Deletion of Number Pooling NPA-NXX-X Holder Information – <u>Status Update to Block</u>

<u>NPAC SMS shall update the status of the Block upon completion of the broadcast, and a</u> response from any retries, to ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

<u>B-480</u> Deletion of Number Pooling NPA-NXX-X Holder Information – Failed SP List Update

NPAC SMS shall update the *Block Failed SP List* of the Block upon completion of the broadcast, and a response from ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-166.1, and B-166.2.

Block Holder, NPA Splits

<u>B-490 NPA Splits and the Number Pooling Block Holder Information –</u> <u>Modification Recognition of Both Old NPA and New NPA</u>

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

B-495 NPA Splits and the Number Pooling Block Holder Information – Same Block Routing Data for Old NPA and New NPA

NPAC SMS shall apply all of the Number Pooling Block Information routing data in the Old NPA-NXX to the New NPA-NXX, for an NPA-NXX involved in an NPA Split.

<u>B-500 NPA Splits and the Number Pooling Block Holder Information – NXX Removal from Split</u>

NPAC SMS shall upon the removal of an NPA-NXX from an NPA Split, after the start of permissive dialing, reinstate the original NPA for the NXX-X in the Block Holder Information.

<u>B-510</u> NPA Splits and the Number Pool Block Holder Information – Addition of an NPA-NXX-X involved in an NPA Split

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

B-520 NPA Splits and the Number Pool Block Holder Information – Addition of a Block for an NPA-NXX involved in an NPA Split

<u>NPAC SMS shall accept a Block *create* request from NPAC personnel or a Service Provider via</u> 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.

B-530 NPA Splits and the Number Pool Block Holder Information – Broadcast of a Block Create for an NPA-NXX involved in an NPA Split

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

B-540 NPA Splits and the Number Pool Block Holder Information – Modification of a Block for an NPA-NXX involved in an NPA Split

NPAC SMS shall accept a Block *modify active* request 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.

B-550 NPA Splits and the Number Pool Block Holder Information – Broadcast of a Block Modify Active for an NPA-NXX involved in an NPA Split

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

B-551 NPA Splits and the Number Pool Block Holder Information – Depooling of the Block during PDP

NPAC SMS shall broadcast a scoped and filtered Block *delete* request to an EDR Local SMS, via the NPAC SMS to Local SMS Interface, by sending a Block using the new NPA-NXX for an NPA-NXX that is currently in permissive dialing.

NOTE: NPAC SMS shall set the SOA Origination to TRUE for a Block associated with the new NPA-NXX, if the Block associated with the old NPA-NXX is currently set to TRUE.

NPAC SMS shall set the SOA Origination to FALSE for a Block associated with the new NPA-NXX, if the Block associated with the old NPA-NXX is currently set to FALSE.

Block Holder, Query

B-555 Query of Number Pool Block Holder Information – NPAC Personnel

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 1K Block as stored in the NPAC SMS.

B-556 Query of Number Pool Block Holder Information – Service Provider Personnel

NPAC SMS shall allow 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 query Blocks, for all data as listed in the Block Holder Information Data Model, for a 1K Block as stored in the NPAC SMS, regardless of the value in the requesting Service Provider's EDR Indicator.

B-557 Query of Number Pool Filtered Block Holder Information – Query Block

NPAC SMS shall return, to the NPAC Personnel or requesting Service Provider, all Block data that match the query selection criteria, as listed in the Block Holder Information, for a Block as stored in the NPAC SMS.

Block Holder, Filters

B-560 Number Pool Block Holder Information – Filters for Blocks

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

Block Holder, Default Routing Restoration

B-570 Number Pool Block Holder Information Use of Number Pool Default Routing Information – Existing 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 ported pooled number is disconnected or port to original port is activated, and returns the TN(s) to the block, once the Block exists, except for Old with or without a Failed SP Liston or after the activation start timestamp of the block.

B-571 Number Pool Block Holder Information Use of Number Pool Default Routing Information – Block Status of Old

The NPAC SMS shall send a notification to the Code Holder, when a ported pooled number is disconnected or port to original port is activated, for TN(s) in the block, and the most recent block contains a status of Old, with or without a Failed SP List.

Block Holder, Re-Send

B-574 Re-Send of Number Pool Block Holder Information – Filters for Blocks

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

B-575.1 Re-Send of Number Pooling Block Holder Information – NPAC Personnel GUI Single Block

NPAC SMS shall allow NPAC Personnel to re-send Block Information, one Block at a time, via the NPAC Administrative Interface.

B-575.2 Re-Send of Number Pooling Block Holder Information – NPAC Personnel GUI One or All Service Providers

NPAC SMS shall allow NPAC Personnel to re-send Block Information, to a single Service Provider or all Service Providers in the Block Failed SP List, via the NPAC Administrative Interface.

B-576 Re-Send of Number Pooling Block Holder Information – Use of EDR Indicator for Re-Send data

<u>NPAC SMS shall use the value in the Service Provider's EDR Indicator to determine the type of data to re-send to the Service Provider, when a re-send request is initiated.</u>

B-577 Re-Send of Number Pooling Block Holder Information – Re-Send to EDR Local SMS

NPAC SMS shall re-send Block Information to an EDR Local SMS, by re-sending the previously failed Block Object, via the NPAC SMS to Local SMS Interface.

B-578 Re-Send of Number Pooling Block Holder Information – Re-Send to non-EDR Local SMS

NPAC SMS shall re-send Block Information to a non-EDR Local SMS, by re-sending the previously failed Subscription Version(s), via the NPAC SMS to Local SMS Interface.

B-580 Re-Send of Number Pooling Block Holder Information – Sending Status Update to Failed Block

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

B-590 Re-Send of Number Pooling Block Holder Information – Sending Status Update to Partial failure Block

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

B-600 Re-Send of Number Pooling Block Holder Information – Sending Status Update to Active Block

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

<u>B-610</u> Re-Send of Number Pooling Block Holder Information – Sending Status Update to Old Block

NPAC SMS shall update the status of the old Block, with a Failed SP List, specified in the re-send request, 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>B-620 Re-Send of Number Pool NPA-NXX-X Block Holder Information –</u> Broadcast of Block Data

NPAC SMS shall, upon setting the Block's status to sending, broadcast a re-sends of a Block, to EDR LSMSs, via the NPAC SMS to Local SMS Interface.

B-630 Re-Send of Number Pooling Block Holder Information – Update to Failed SP List

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

B-635 Re-Send of Number Pooling Block Holder Information – Status Update to Block after Re-Send

NPAC SMS shall update the *status* of the Block, specified in the re-send request for a Block Creation, Modification, or Deletion, at the completion of the re-send to the Local SMS, and a response from the Local SMS or if retries have been exhausted, from a sending status, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

B-636 Re-Send of Number Pooling Block Holder Information – Failed SP List Update

NPAC SMS shall update the *Block Failed SP List* of the Block, specified in the re-send request for a Block Creation, Modification, or Deletion, at the completion of the re-send to the Local SMS, and a response from the Local SMS or if retries have been exhausted, as defined in B-166.1, and B-166.2.

Block Holder, Bulk Data Downloads

B-640 Number Pool Block Holder Information Bulk Download File Creation – Active Blocks

NPAC SMS shall allow NPAC personnel to request a bulk data download file for active Block data via the NPAC Administrative Interface.

B-650 Number Pool Block Holder Information Bulk Download File Creation – Selection Criteria

NPAC SMS shall include the Requesting Service Provider, Time Range in Central Time, and NPA-NXX-X Block Range as Selection Criteria fields for the Block bulk data download file via the NPAC Administrative Interface.

B-654 Number Pool Block Holder Information Bulk Download File Creation – Time Range Fields

NPAC SMS shall use the first Time Range entry field as an inclusive start range, and the second Time Range entry field as an inclusive ending range, for Block data, based on the Activation Broadcast Complete Timestamp.

B-655 Number Pool Block Holder Information Bulk Download File Creation – NPA-NXX-X Block Range Fields

NPAC SMS shall use the first NPA-NXX-X Block Range entry field as an inclusive start range, and the second NPA-NXX-X Block Range entry field as an inclusive ending range, for Block data.

NOTE: If the NPA-NXX-X Block Range was 303-242-2 through 303-355-6, the inclusive range would contain all Blocks within the TN Range of 303-242-2000 through 303-355-6999.

<u>B-660</u><u>Number Pool Block Holder Information Bulk Data Download –</u> Block Results

NPAC SMS shall provide a bulk data download file, based on the selection criteria, that contains all active Blocks in the NPAC SMS, regardless of the value in the Service Provider's EDR Indicator.

<u>B-670</u> Number Pool Block Holder Information Bulk Data Download – <u>Filters for Blocks</u>

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

B-680 Number Pool Block Holder Information Bulk Data Download – FTP Sub-Directory

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.

Block Holder, Resync

B-690 Number Pool Block Holder Information Resynchronization – Block

NPAC SMS shall process a Service Provider request to download 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 Block data based on criteria sent to the NPAC SMS upon association.

B-691 Number Pool Block Holder Information Resynchronization – Block Criteria

NPAC SMS shall accept criteria for Block data, of either Time Range in GMT or Block Range entry fields, where the Time Range in GMT includes the starting time in GMT and ending time in GMT, and the Block Range includes the starting Block and ending Block.

NOTE: If the Block Range was 303-242-2 through 303-355-6, the range would contain all Blocks within the TN Range of 303-242-2000 through 303-355-6999.

B-695 Number Pool Block Holder Information Resynchronization – Block Range Tunable Parameters

<u>NPAC SMS shall use the existing Subscription Version tunables for Time Range and Maximum</u> <u>Number of Records, for Blocks that can be resynchronized by a Local SMS.</u>

<u>B-698</u><u>Number Pool Block Holder Information Resynchronization –</u> <u>Rejection of Block Criteria</u>

NPAC SMS shall reject a resynchronization request, if the criteria of either Time Range or Block Range, exceeds the current values of the Time Range or Block Range Maximum Number of Records tunables.

B-700 Number Pool Block Holder Information Resynchronization – Block resync and queuing of messages

NPAC SMS shall queue up a single instance of all messages to the Local SMS, via the NPAC SMS to Local SMS Interface, when a Service Provider establishes an association with the NPAC SMS and where the resynchronization flag is set to TRUE.

B-710 Number Pool Block Holder Information Resynchronization – Block resync and sending of queued messages

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.

B-720 Number Pool Block Holder Information Resynchronization – Filters on Block resync

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

B-730 Number Pool Block Holder Information Resynchronization – Update to Failed SP List

NPAC SMS shall update the *Block Failed SP List* of the Block and *Subscription Version Failed SP List* of the Subscription Versions, by removing the resyncing Local SMS, upon a successful response to a resynchronization request to a previously failed EDR Local SMS, as defined in B-166.1 and B166.2.

B-740 Number Pool Block Holder Information Resynchronization – Status Update to Block after Successful Resynchronization

NPAC SMS shall update the *status* of the Block, specified in the resynchronization request for a Block Creation, Modification, or Deletion, at the completion of the resynchronization to the Local SMS, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

Block Holder, Mass Update

B-760 Block Holder Information Mass Update – GUI Selection Criteria

NPAC SMS shall provide SPID, LNP Type, and TN Range Selection Criteria for mass updates, on the NPAC Administrative Interface.

B-761 Block Holder Information Mass Update – LNP Type Options

NPAC SMS shall allow NPAC Personnel to select any combination of LNP Type as Selection Criteria for mass updates, on the NPAC Administrative Interface.

NOTE: This allows any of the seven combinations of LNP Type (LISP only, LSPP only, POOL only, LISP and LSPP, LISP and POOL, LSPP and POOL, all three).

B-762 Block Holder Information Mass Update – Update Fields

NPAC SMS shall allow NPAC Personnel, via a mass update, to update the block holder default routing information (LRN, DPC(s), and SSN(s)), for a 1K Block as stored in the NPAC SMS.

B-763 Block Holder Information Mass Update – Block Intersection Rejection

NPAC SMS shall reject a mass update request by NPAC Personnel, and issue an error message, if the TN Range entered as Selection Criteria, includes a TN that does NOT end in 000 or 999, and intersects an existing 1K Block as stored in the NPAC SMS, other than Blocks with a status of old.

B-764 Block Holder Information Mass Update – Block Status Validation

<u>NPAC SMS shall apply reject a mass update modifications request to a Block, if the Block's *status* is anything other than active, and or if the *Block's Failed SP List* for the Block contains one or more Service Providersis empty.</u>

B-780 Block Holder Information Mass Update – Download to EDR Local SMS

NPAC SMS shall download Number Pooling Block Information, for mass updates, using the Number Pooling Block Object, via the NPAC SMS to Local SMS Interface, when the Service Provider's EDR Indicator is **TRUE**, at the time of the mass update request.

B-790 Block Holder Information Mass Update – Download to non-EDR Local SMS

<u>NPAC SMS shall download Number Pooling Block Information, for mass updates, using</u> <u>Subscription Version(s) with LNP Type of POOL, via the NPAC SMS to Local SMS Interface,</u> when the Service Provider's EDR Indicator is **FALSE**, at the time of the mass update request.

Section 5 New Requirements

Subscription Version, General

SV-1 Number Pooling Subscription Version Information – Reject Messages

NPAC SMS shall reject a message from NPAC personnel, 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 Create, Modify, Cancel, Set to Conflict, Activate, or Disconnect, a Subscription Version with an LNP Type of POOL.

<u>SV-2</u><u>Number Pooling Subscription Version Information – Suppression of</u> Notifications

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

NOTE: This includes creation, modification, deletion, re-send, resync, and mass update.

SV-3 Number Pooling Subscription Version Information – Filters for <u>"Pooled Number" Subscription Versions</u>

<u>NPAC SMS shall apply NPA-NXX Filters to subscription version broadcasts to the Local SMSs</u>, for Subscription Versions with LNP Type of POOL.

<u>SV-4</u><u>Number Pooling Subscription Version Information – Broadcast of</u> <u>Subscription Data</u>

<u>NPAC SMS shall broadcast an addition, modification, or deletion of Subscription Versions, with</u> <u>LNP Type of POOL, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface, upon</u> <u>successful update of the 1K Block in the NPAC SMS, for Subscription Versions.</u>

SV-5 Number Pooling Subscription Version Information – Failed SP List Update for Block

NPAC SMS shall consider an EDR Local SMS to be discrepant and shall update the Subscription Version Failed SP List for all Subscription Versions with LNP Type of POOL in the 1K Block, based on an EDR Local SMS failing to process the Block Object, for an addition, modification, deletion, re-send, resync, or mass update.

<u>SV-6</u><u>Number Pooling Subscription Version Information – Data Integrity</u> for Pooled Subscription Versions and Block</u>

NPAC SMS shall maintain data integrity for LRN and GTT data, between Subscription Versions with LNP Type of POOL in a 1K Block, and the corresponding Number Pooling Block, in the NPAC SMS.

Subscription Version, Addition for Number Pooling

<u>SV-10</u><u>Addition of Number Pooling Subscription Version Information –</u> <u>Subscription Data</u>

NPAC SMS shall create individual subscription versions, with LNP Type of POOL, for each TN within the 1K Block, that does not already exist with a status of active/partial failure/disconnect pending/old with a Failed SP List/sending, immediately after successfully creating Number Pooling Block Holder Information in the NPAC SMS.

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

NPAC SMS shall automatically populate the following data upon Subscription Version creation for a Pooled Number port:

Version ID - Automatically generated by NPAC SMS. LRN - Value set to same field in Block. Old Service Provider ID - Value set to owner of NPA-NXX. New Service Provider ID - Value set to NPA-NXX-X Holder SPID field in Block. TN - Telephone Number associated with this Subscription Version. LNP Type - Value set to "POOL". Status - Value initially set to "Sending". CLASS DPC - Value set to same field in Block. CLASS SSN - Value set to same field in Block. LIDB DPC - Value set to same field in Block. LIDB SSN - Value set to same field in Block. CNAM DPC - Value set to same field in Block. CNAM SSN - Value set to same field in Block. ISVM DPC - Value set to same field in Block. ISVM SSN - Value set to same field in Block. New Service Provider Due Date - Value set to current date. Old Service Provider Due Date - Value set to current date. Old Service Provider Authorization - Value set to "TRUE". New Service Provider Create Time Stamp - Value set to current date/time. Old Service Provider Authorization Time Stamp - Value set to current date/time. Activation Request Time Stamp - Value set to current date/time. Activation Broadcast Date - Value set to current date. 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).

Disconnect Request Time Stamp - Value set to all zeros.

Disconnect Broadcast Time Stamp - Value set to all zeros. Disconnect Broadcast Time Stamp - Value set to all zeros. Disconnect Broadcast Complete Time Stamp - Value set to all zeros. Effective Release Date - Value set to all zeros. Customer Disconnect Date - Value set to all zeros. Pre-Cancellation Status - Value set to NULL. Old Service Provider Cancellation Time Stamp - Value set to all zeros. New Service Provider Cancellation Time Stamp - Value set to all zeros. Cancellation Time Stamp - Value set to all zeros. Old Time Stamp - Value set to all zeros. Conflict Time Stamp - Value set to all zeros. Conflict Resolution Time Stamp - Value set to all zeros. Create Time Stamp - Value set to current date/time. Modified Time Stamp - Value set to current date/time. Porting to Original - Value set to "FALSE". End User Location Value - Value set to "no value". End User Location Value Type - Value set to "no value". Modify Request Time Stamp - Value set to all zeros. Modify Broadcast Time Stamp - Value set to all zeros. Modify Broadcast Complete Time Stamp - Value set to all zeros. Billing ID - Value set to "no value". Status Change Cause Code - Value set to "no value".

<u>SV-30</u><u>Addition of Number Pooling Subscription Version Information</u> Create "Pooled Number" Subscription Version – Bypass of Existing Subscription Versions</u>

NPAC SMS shall upon finding an existing subscription version with an active, partial failure, disconnect pending, old with a failed SP list, or sending status for any TNs within the 1K Block, will bypass and not alter that TN/subscription version, log an information message, and continue processing.

SV-60 Addition of Number Pooling Subscription Version Information Create "Pooled Number" Subscription Version - Validation Success - Create New

NPAC SMS shall create a new Subscription Version with LNP Type of POOL, for each noncontaminated TN in the 1K Block, after successfully creating the corresponding Block.

> **SV-70** Addition of Number Pooling Subscription Version Information Create "Pooled Number" Subscription Version - Set to Sending

NPAC SMS shall set a Subscription Version of LNP Type POOL in the 1K Block, to sending upon successful subscription creation.

<u>SV-90</u> Addition of Number Pooling Subscription Version Information – Active Status Update

NPAC SMS shall update the *status* of each Subscription Version with LNP Type of POOL for each TN in the 1K Block, upon completion of the broadcast, and a response from any retries, to ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

<u>SV-121</u> Addition of Number Pooling Subscription Version Information – <u>Failed SP List</u>

NPAC SMS shall update the *Subscription Version Failed SP List* with the discrepant Local SMS of the individual subscription version(s) with LNP Type of POOL, upon completion of the activation broadcast to All EDR and non-EDR Local SMSs, and an unsuccessful response from at least one Local SMS, and a response from ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-166.1 and B-166.2.

Subscription Version, Block Create Validation of Subscription Versions

<u>SV-131</u><u>Block Create Validation of Subscription Versions – Subscription</u> Version Completion Check

NPAC SMS shall, upon successful completion of a Block Create request, where the Block status is active, verify that 1000 TNs exist for the Block, with an LNP Type of either POOL, LSPP, or LISP.

NOTE: NPAC shall perform this 1000 TN verification Block Create Validation Process until all 1000 TNs have been accounted for in the 1K Block.

NOTE: NPAC shall NOT perform this Block Create Validation Process once all 1000 TNs have been accounted for in the 1K Block.

SV-132 Block Create Validation of Subscription Versions – First Time Execution of Subscription Version Completion Check

NPAC SMS shall run the Block Create Validation Process within 24 hours of Block Creation where the Block status is active.

<u>SV-133</u><u>Block Create Validation of Subscription Versions – Subscription</u> <u>Version Create for Missing TNs</u>

NPAC SMS shall, upon finding any missing TNs in the 1K Block defined in SV-1301, create a Subscription Version with LNP Type of POOL in the NPAC SMS, using the routing data in the Block, and setting the status to sending, for both the Block and the Subscription Version.

<u>SV-135</u><u>Block Create Validation of Subscription Versions – Subscription</u> Version Broadcast to non-EDR Local SMS

NPAC SMS shall, for any missing TNs in the 1K Block, broadcast the Subscription Version(s) to all non-EDR Local SMSs, via the NPAC SMS to Local SMS Interface.

<u>SV-137</u><u>Block Create Validation of Subscription Versions – Block Status</u> <u>Update</u>

NPAC SMS shall update the *status* of the Block based on the results of the broadcast of the Subscription Version(s) to all non-EDR Local SMSs, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

SV-139 Block Create Validation of Subscription Versions – Block Failed SP List Update

NPAC SMS shall update the *Block Failed SP List* of the Block based on the results of the broadcast of the Subscription Version(s) to all non-EDR Local SMSs, as defined in B-166.1 and B-166.2.

<u>SV-140</u><u>Block Create Validation of Subscription Versions – Subscription</u> Version Logging

NPAC SMS shall upon finding any missing TNs within the 1K Block during the Block Create Validation Process, log an information message, and continue processing.

Subscription Version, Create in a Number Pooling Environment

<u>SV-160</u> <u>Create Intra-Service Provider Port – NPAC Personnel After NPA-NXX-X Creation</u>

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

<u>SV-170 Create Intra-Service Provider Port – SOA After NPA-NXX-X</u> <u>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 NPA-NXX-X Holder Information, where the new Service Provider is the Code Holder SPID, and a previously active SV does NOT exist in the NPAC SMS.

<u>SV-180 Create Inter-Service Provider Port-to-Original Port – NPAC and</u> <u>SOA After NPA-NXX-X Creation</u>

NPAC SMS shall reject an inter-service provider Port-to-Original 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 NPA-NXX-X, and prior to the existence of the Block a previously active SV does NOT exist in the NPAC SMS.

<u>SV-190</u> Create Inter-Service Provider Port-to-Original Subscription Version <u>– After Block Activation</u>

NPAC SMS shall validate that the New Service Provider is the NPA-NXX-X Block Holder, in an inter-service provider port-to-original port for a TN within the 1K Block, once the Block exists in the NPAC SMS.

<u>SV-195 Create Pending Provider Port – NPAC Personnel or Service Provider</u> <u>After Block Activation</u>

NPAC SMS shall allow NPAC personnel, a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, to create inter-service provider ports or intra-service provider ports for a TN within the 1K Block, when the currently active Subscription Version(s) is LNP Type POOL, and the Block's status is active, with an empty Failed SP List.

Subscription Version, Activate in a Number Pooling Environment

<u>SV-200 Activate Intra-Service Provider Port – After NPA-NXX-X Creation</u>

NPAC SMS shall allow NPAC personnel, a Service Provider SOA via the SOA to NPAC SMS Interface, or Service Provider via the NPAC SOA Low-tech Interface, to activate intra-service provider ports for a TN within the 1K Block, where there is no active Subscription Version once the Block exists in the NPAC SMS.

<u>SV-210</u> <u>Activate Port-to-Original Subscription Version – Broadcast of</u> <u>Subscription Data Creation</u>

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, once the Block exists in the NPAC SMS.

<u>SV-220</u> Activate Port-to-Original Subscription Version – Broadcast of <u>Subscription Data Deletion</u>

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, once the Block exists in the NPAC SMS.

Subscription Version, Modification for Number Pooling

<u>SV-230</u><u>Modification of Number Pooling Subscription Version Information –</u> Subscription Data

<u>NPAC SMS shall automatically apply the updates to the attributes of the individual subscription</u> <u>versions with LNP Type of POOL, for each TN within the 1K Block after successfully modifying</u> <u>a Number Pooling Block in the NPAC SMS.</u>

<u>SV-240</u><u>Modification of Number Pooling Subscription Version Information –</u> Status Update to Sending

NPAC SMS shall update the status of the individual subscription versions with LNP Type of POOL, for each TN within the 1K Block, upon the start of the broadcast of a Block Modification to the Local SMSs, from an active status to a sending status, after successfully modifying a Number Pooling Block in the NPAC SMS.

<u>SV-270</u> <u>Modification of Number Pooling Subscription Version Information –</u> <u>Status Update to Active</u>

NPAC SMS shall update the *status* of each Subscription Version with LNP Type of POOL for each TN in the 1K Block, upon completion of the broadcast, and a response from to All EDR and non-EDR Local SMSs, from a sending status to an active statusor retries are exhausted, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

<u>SV-280</u><u>Modification of Number Pooling Subscription Version Information –</u> <u>Failed SP List</u>

NPAC SMS shall update the *Subscription Version Failed SP List* with the discrepant Local SMS of the individual subscription version(s) with LNP Type of POOL, upon completion of the modification broadcast to All EDR and non-EDR Local SMSs, and an unsuccessful response from at least one Local SMS, and a response from ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-166.1 and B-166.2.

Subscription Version, Deletion for Number Pooling

<u>SV-330</u> <u>Deletion of Number Pooling Subscription Version Information –</u> <u>Sending Status Update to Subscription Versions</u>

NPAC SMS shall, upon processing a valid request to delete an NPA-NXX-X, update the status of the Subscription Versions with LNP Type of POOL in the 1K Block, at the start of the broadcast to all EDR and non-EDR Local SMSs, from an active status to a sending status.

<u>SV-335</u> <u>Deletion of Number Pooling Subscription Version Information</u> – <u>Broadcast of Subscription Version Data</u>

NPAC SMS shall, upon setting the Subscription Versions with LNP Type of POOL in the 1K Block status to sending, broadcast a delete of Subscription Versions with LNP Type of POOL in the 1K Block, to non-EDR LSMSs, via the NPAC SMS to Local SMS Interface.

<u>SV-350</u> <u>Deletion of Number Pooling Subscription Version Information –</u> <u>Status Update to Subscription Versions</u>

NPAC SMS shall update the *status* of a particular Subscription Version with LNP Type of POOL for each TN in the 1K Block, upon completion of the broadcast, and any retries, of a response for the Block to all EDR Local SMSs and that particular Subscription Version to non-EDR Local SMSs, or retries are exhausted, and a successful response from at least one Local SMS, as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

<u>SV-365</u> <u>Deletion of Number Pooling Subscription Version Information –</u> <u>Failed SP List</u>

NPAC SMS shall update the *Subscription Version Failed SP List* with the discrepant Local SMS of the individual subscription version(s) with LNP Type of POOL, upon completion of the deletion broadcast to All EDR and non-EDR Local SMSs, and an unsuccessful response from at least one Local SMS, and a response from ALL EDR and non-EDR Local SMSs, or retries are exhausted, as defined in B-166.1 and B-166.2.

Subscription Version, Disconnect and Port-To-Original in a Number Pooling Environment

<u>SV-390 – Disconnect Subscription Version or Port-To-Original – Pooled</u> <u>Number Block Default Routing Restoration</u>

The NPAC SMS shall reinstate the Block default routing, block holder Service Provider Id and the LNP Type to POOL for a subscription version upon a disconnect for a ported TN, or an activate for a Port-To-Original TN, belonging to the 1K Block, once the Block exists in the NPAC SMS, except for a status of Old, with or without a Block Failed SP List.

<u>SV-400 - Disconnect Subscription Version - Customer Disconnect Date</u> <u>Notification for Pooled Number</u>

<u>NPAC SMS shall notify the new Service Provider (the block owner) of the Subscription Version</u> <u>Customer Disconnect Date and Effective Release Date, for a ported pooled Subscription Version</u> <u>that is being disconnected, prior to reinstating the default routing.</u>

<u>SV-410 – Disconnect Subscription Version – Broadcast of Subscription Data</u> <u>Creation</u>

The NPAC SMS shall broadcast a new Subscription Version Create to a non-EDR Local SMS, upon a disconnect of a ported pooled Subscription Version, where the TN is within the 1K Block.

<u>SV-420 – Disconnect Subscription Version – Broadcast of Subscription Data</u> <u>Deletion</u>

The NPAC SMS shall broadcast a Subscription Version Delete to an EDR Local SMS, upon a disconnect of a ported pooled Subscription Version, where the TN is within the 1K Block.

<u>SV-425 – Disconnect Subscription Version – Updates to the Failed SP List for</u> <u>Disconnect</u>

NPAC SMS shall update the *Subscription Version Failed SP List* with the discrepant Local SMS of the individual subscription version(s) with LNP Type of POOL, that were *active prior to the disconnect broadcast and used to indicate the status of the previously active Subscription Version(s) that is being disconnected*, upon completion of the disconnect broadcast to All EDR and non-EDR Local SMSs, and an unsuccessful response from at least one Local SMS, so that the Subscription Version that was active prior to the disconnect contains the *Subscription Version Failed SP List* for both itself plus the Subscription Version that was pending prior to the disconnect.

NOTE: The NPAC SMS will roll up the Subscription Version Failed SP List so that the SV that was active prior to the disconnect request (SV1) contains the Failed SP List for both SV1 and SV2, as defined in the IIS Flows for Disconnect of a Ported Pooled Number.

<u>SV-426 – Disconnect Subscription Version – Updates to the Failed SP List for</u> <u>Port-To-Original</u>

NPAC SMS shall update the *Subscription Version Failed SP List* with the discrepant Local SMS of the individual subscription version(s) with LNP Type of POOL, that were *pending prior to the disconnect broadcast and used to indicate the status of the Port-To-Original Subscription Version(s)*, upon completion of the disconnect broadcast to All EDR and non-EDR Local SMSs, and an unsuccessful response from at least one Local SMS, so that the Subscription Version that was pending prior to the port-to-original contains the *Subscription Version Failed SP List* for both itself plus the Subscription Version that was used to reinstate the default routing for the Block Holder.

NOTE: The NPAC SMS will roll up the Subscription Version Failed SP List so that the SV that was pending prior to the port-to-original request (SV2) contains the Failed SP List for both SV2 and SV3, as defined in the IIS Flows for a Port-To-Original of a Ported Pooled Number.

Subscription Version, NPA Splits

<u>SV-430 NPA Splits and the Number Pool Block Holder Information –</u> <u>Broadcast of Subscription Versions for an NPA-NXX involved in an NPA Split</u>

<u>NPAC SMS shall broadcast convert the old NPA-NXX to the new NPA-NXX using when</u> <u>broadcasting Subscription Versions with LNP Type of POOL, for an addition, modification,</u> <u>deletion, re-send, resync, or mass update, to a non-EDR Local SMS, via the NPAC SMS to Local</u> <u>SMS Interface, for an NPA-NXX that is currently in permissive dialing.</u>

Subscription Version, Query

SV-440 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, regardless of the value in the requesting Service Provider's EDR Indicator.

Subscription Version, Re-Send for Number Pooling

<u>SV-451 Re-Send of Number Pooling Subscription Version Information –</u> <u>NPAC Personnel GUI</u>

NPAC SMS shall prevent NPAC Personnel from re-sending a Subscription Version with LNP Type of POOL, via the NPAC Administrative Interface.

NOTE: The re-send of SVs with LNP Type of POOL to non-EDR Local SMSs shall be initiated from the Block Re-send on the NPAC Administrative GUI.

<u>SV-452</u><u>Re-Send of Number Pooling Subscription Version Information</u> – <u>Subscription Versions sent to non-EDR Local SMS</u>

NPAC SMS shall re-send Subscription Versions to a non-EDR Local SMS via the NPAC SMS to Local SMS Interface, when a re-send request is initiated to a Block.

<u>SV-460 Re-Send of Number Pooling Subscription Version Information –</u> <u>Sending Status Update to Failed Subscription Versions for Block Activation</u>

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 a failed status to a sending status.

<u>SV-470</u> <u>Re-Send of Number Pooling Subscription Version Information –</u> Sending Status Update to Partial failure Subscription Versions for Block Activation</u>

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

<u>SV-480</u> <u>Re-Send of Number Pooling Subscription Version Information –</u> <u>Sending Status Update to Active Subscription Version for Block Modification</u> <u>or Deletion</u>

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.

<u>SV-490 Re-Send of Number Pooling Subscription Version Information –</u> <u>Sending Status Update to Old Subscription Version for Block Deletion</u>

<u>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.</u>

<u>SV-510</u><u>Re-Send of Number Pooling Subscription Version Information –</u> Update to Failed SP List for Block Activation

NPAC SMS shall update the *Subscription Version Failed SP List* of the Subscription Version(s) 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.

<u>SV-515</u><u>Re-Send of Number Pooling Subscription Version Information –</u> Status Update to Subscription Version after Successful Re-Send</u>

NPAC SMS shall update the *status* of the Subscription Version(s) and the Block, specified in the re-send request for a Block Creation, Modification, or Deletion, at the completion of the re-send to the Local SMS, and a **successful** response from the Local SMS or if retries have been exhausted, from a sending status, based on the following:as defined in B-165.1, B-165.2, B-165.3, and B-165.4.

- If the re-send was for a *Create*, and the Failed SP list contains at least one SPID, then the status is set to *partial failure*.
- If the re-send was for a *Create*, and the Failed SP list is now empty, then the status is set to *active*.
- If the re-send was for a *Modify*, then the status is set to *active*.
- If the re-send was for a *Disconnect*, then the status is set to *old*.

<u>SV-516</u> <u>Re-Send of Number Pooling Subscription Version Information –</u> <u>Failed SP List Status Update to Subscription Version after Un-Successful Re-Send</u>

NPAC SMS shall update the *Subscription Version Failed SP List* of the Subscription Version(s) with LNP Type of POOL in the 1K Block, specified in the re-send request for a Block Creation. Modification, or Deletion, at the completion of the re-send to the Local SMS, and a response from the Local SMS, or if retries have been exhausted, as defined in B-166.1 and B-166.2.

NPAC SMS shall update the status of the Subscription Version(s), specified in the re-send request, at the completion of the re-send to the Local SMS, and an **un-successful or missing** response from the Local SMS, from a sending status, based on the following:

- If the re-send was for a *Create*, and the Failed SP List contains all SPIDS, then the status is set to *failed*.
- If the re-send was for a *Create*, and the Failed SP List contains some but not all SPIDS, then the status is set to *partial failure*.
- If the re-send was for a *Modify*, then the status is set to *active*.

• If the re-send was for a *Disconnect*, and the Failed SP List contains all SPIDS, then the status is set to *active*.

• If the re-send was for a *Disconnect*, and the Failed SP List contains some but not all SPIDS, then the status is set to *old*.

SV-517 Re-Send of Number Pooling Subscription Version Information – Status Update to Block after all Subscription Versions are Successfully re-sent

NPAC SMS shall update the status of the corresponding Block after all Subscription Versions with LNP Type of POOL in the 1K Block, have been re-sent to the Local SMSs, as follows:

• If the status of all Subscription Versions with LNP Type of POOL in the 1K Block is *failed*, then the status of the Block is set to *failed*.

- If the status of all Subscription Versions with LNP Type of POOL in the 1K Block is *partial failure*, then the status of the Block is set to *partial failure*.
- If the status of all Subscription Versions with LNP Type of POOL in the 1K Block is *active*, then the status of the Block is set to *active*.
- If the status of all Subscription Versions with LNP Type of POOL in the 1K Block is *old*, then the status of the Block is set to *old*.
- If the status of all Subscription Versions with LNP Type of POOL in the 1K Block is a combination of either *active/partial failure* or *partial failure/failed*, then the status of the Block is set to *partial failure*.
- If the status of all Subscription Versions with LNP Type of POOL in the 1K Block is a combination of *active/old*, then the status of the Block is set to *old*.

Subscription Version, Re-Send in a Number Pooling Environment

<u>SV-518</u><u>Re-Send of Subscription Version Information – Disconnect or Port-</u> To-Original of a TN within a Pooled 1K Block</u>

<u>NPAC SMS shall examine a Service Provider's EDR Indicator, at the time of re-send, to</u> <u>determine the message to re-send, for a disconnect or a Port-To-Original Subscription Version of</u> <u>a ported pooled TN, where the TN is contained within a Pooled 1K Block.</u>

<u>SV-519.1 Re-Send of Subscription Version Information – Disconnect TN within</u> <u>a Pooled 1K Block to EDR Local SMS</u>

NPAC SMS shall, for a re-send of a disconnect Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, re-send the Delete request of the Subscription Version that was active prior to the disconnect broadcast to an EDR Local SMS.

NOTE: The NPAC SMS will re-send an M-DELETE, to an EDR Local SMS, of the Subscription Version that was active prior to the disconnect request (SV1), as defined in the IIS Flows for Disconnect of a Ported Pooled Number.

<u>SV-519.2 Re-Send of Subscription Version Information – Disconnect TN within</u> <u>a Pooled 1K Block to non-EDR Local SMS</u>

NPAC SMS shall, for a re-send of a disconnect Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, re-send the Create request of the Subscription Version that was pending prior to the disconnect broadcast to a non-EDR Local SMS.

NOTE: The NPAC SMS will re-send an M-CREATE, to a non-EDR Local SMS, of the Subscription Version that was pending prior to the disconnect request (SV2), even though the Failed SP List resides on SV1, as defined in the IIS Flows for Disconnect of a Ported Pooled Number.

<u>SV-520.1 Re-Send of Subscription Version Information –Port-To-Original TN</u> within a Pooled 1K Block to EDR Local SMS

NPAC SMS shall, for a re-send of a Port-To-Original Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, re-send the Delete request of the Subscription Version that was active prior to the Port-To-Original broadcast to an EDR Local SMS.

NOTE: The NPAC SMS will re-send an M-DELETE, to an EDR Local SMS, of the Subscription Version that was active prior to the Port-To-Original request (SV1), even though the Failed SP List resides on SV2, as defined in the IIS Flows for a Port-To-Original of a Ported Pooled Number.

<u>SV-520.2 Re-Send of Subscription Version Information –Port-To-Original TN</u> within a Pooled 1K Block to non-EDR Local SMS

NPAC SMS shall, for a re-send of a Port-To-Original Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, re-send the Create request of the Subscription Version that was created at the time of the Port-To-Original broadcast, and shall NOT re-send the Delete request of the Subscription Version that was active prior to the Port-To-Original broadcast to a non-EDR Local SMS.

NOTE: The NPAC SMS will re-send an M-CREATE, to a non-EDR Local SMS, of the Subscription Version that was created at the time of the Port-To-Original request (SV3), and will NOT re-send an M-DELETE of the Subscription Version that was active prior to the Port-To-Original request (SV1), even though the Failed SP List resides on SV2, as defined in the IIS Flows for a Port-To-Original of a Ported Pooled Number.

Subscription Version, Bulk Data Downloads

<u>SV-521</u> Bulk Download File Creation – Pooled Subscription Versions Filtered for EDR Local SMS

<u>NPAC SMS shall filter out Subscription Versions with LNP Type of POOL for Bulk Data</u> <u>Download files of Subscription Version data, when the requesting Service Provider has an EDR</u> <u>Indicator set to TRUE.</u>

Subscription Version, Resynchronization

SV-522 Addition of Number Pooling Subscription Version Information Resynchronization – Filters on Subscription Versions Resync

NPAC SMS shall filter out Subscription Versions with LNP Type of POOL for Resynchronization of Subscription Version data, when the resyncing Service Provider has an EDR Indicator set to TRUE.

<u>SV-530</u><u>Number Pooling Subscription Version Information</u> Resynchronization – Disconnect or Port-To-Original of a TN within a Pooled <u>1K Block</u>

<u>NPAC SMS shall examine a Service Provider's EDR Indicator, at the time of resync, to determine the message to resync, for a disconnect or a Port-To-Original Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block.</u>

<u>SV-540</u><u>Number Pooling Subscription Version Information</u> Resynchronization – Disconnect TN within a Pooled 1K Block to EDR Local SMS</u>

<u>NPAC SMS shall, for a resync of a disconnect Subscription Version of a ported pooled TN, where</u> the TN is contained within a Pooled 1K Block, resync the Delete request of the Subscription Version that was active prior to the disconnect broadcast to an EDR Local SMS.

NOTE: The NPAC SMS will resync an M-DELETE, to an EDR Local SMS, of the Subscription Version that was active prior to the disconnect request (SV1), as defined in the IIS Flows for Disconnect of a Ported Pooled Number.

<u>SV-550</u><u>Number Pooling Subscription Version Information</u> Resynchronization – Disconnect TN within a Pooled 1K Block to non-EDR Local SMS</u>

NPAC SMS shall, for a resync of a disconnect Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, resync the Create request of the Subscription Version that was pending prior to the disconnect broadcast to a non-EDR Local SMS.

NOTE: The NPAC SMS will resync an M-CREATE, to a non-EDR Local SMS, of the Subscription Version that was pending prior to the disconnect request (SV2), even though the Failed SP List resides on SV1, as defined in the IIS Flows for Disconnect of a Ported Pooled Number.

<u>SV-560</u><u>Number Pooling Subscription Version Information</u> Resynchronization –Port-To-Original TN within a Pooled 1K Block to EDR Local SMS</u>

NPAC SMS shall, for a resync of a Port-To-Original Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, resync the Delete request of the Subscription Version that was active prior to the Port-To-Original broadcast to an EDR Local SMS.

NOTE: The NPAC SMS will resync an M-DELETE, to an EDR Local SMS, of the Subscription Version that was active prior to the Port-To-Original request (SV1), even though the Failed SP List resides on SV2, as defined in the IIS Flows for a Port-To-Original of a Ported Pooled Number.

<u>SV-570</u><u>Number Pooling Subscription Version Information</u> Resynchronization – Port-To-Original TN within a Pooled 1K Block to non-EDR Local SMS</u>

NPAC SMS shall, for a resync of a Port-To-Original Subscription Version of a ported pooled TN, where the TN is contained within a Pooled 1K Block, resync the Create request of the Subscription Version that was created at the time of the Port-To-Original broadcast, and shall NOT resync the Delete request of the Subscription Version that was active prior to the Port-To-Original broadcast to a non-EDR Local SMS.

NOTE: The NPAC SMS will resync an M-CREATE, to a non-EDR Local SMS, of the Subscription Version that was created at the time of the Port-To-Original request (SV3), and will NOT resync an M-DELETE of the Subscription Version that was active prior to the Port-To-Original request (SV1), even though the Failed SP List resides on SV2, as defined in the IIS Flows for a Port-To-Original of a Ported Pooled Number.

Section 8 New Requirements

Audit Processing

The Audit processing that is described in this section deals with Subscription Versions with LNP Type of POOL. Audit processing for Subscription Versions with LNP Type of LSPP or LISP is "Business As Usual" functionality and is captured in the existing FRS.

A-2 Audit Processing for Pooled Number Subscription Versions

NPAC SMS shall process an audit request of a **Subscription Version(s) with LNP Type of POOL**, by performing the following steps:

• <u>Validate that the audit request is valid.</u>

• Validate that the Block associated with the TN contained in the Subscription Version(s), exists in the NPAC SMS.

• Send TN Range, or TN Range with Activation Timestamp, to non-EDR Local SMSs that are accepting downloads for the given NPA-NXX.

• <u>Send Block AND TN Range, or TN Range with Activation Timestamp, to EDR</u> Local SMSs that are accepting downloads for the given NPA-NXX.

• Process non-EDR Local SMS responses using same functionality as LSPP and LISP Subscription Versions.

• <u>Process EDR Local SMS responses for the Block by doing a comparison. If a</u> <u>discrepancy exists, the NPAC SMS data is considered "correct", and a correction should</u> <u>be sent to the EDR Local SMS.</u>

Process EDR Local SMS responses for Subscription Versions, as follows:

LSPP and LISP – Use existing audit functionality

POOL – "No Data" is correct response, SVs for other LNP Types need to be deleted.

• Send audit results and notification of discrepancies, back to requesting SOA, only for TN Range that was requested, even if other TNs were affected because of EDR Local SMS.

• <u>Suppress status change and attribute change notifications to the Block Holder</u>

• Perform an internal integrity check within the NPAC SMS to ensure that the Block and all Subscription Versions with LNP Type of POOL within the audited TN Range, contain the same data.

• If any of the Subscription Versions are out of sync in the NPAC SMS, update those Subscription Versions in the NPAC SMS, issue a unique alarmable error message, then continue processing.

• If any of the Subscription Versions in the audited TN Range are out of sync in the NPAC SMS, then perform an internal integrity check on all Subscription Versions with LNP Type of POOL in the 1K, even for those outside of the audited TN Range.

• Once the integrity check is complete, broadcast the query of the Block and audited TN Range to the EDR Local SMS, per requirement A-40, and the query of the audited TN Range to the non-EDR Local SMS.

A-3 Audit Processing for Erroneous Pooled Number Subscription Versions

NPAC SMS shall, for Subscription Versions that failed the internal integrity check, broadcast a correction for the erroneous Subscription Versions to all non-EDR Local SMSs.

A-10 Audit Discrepancy and Results Notifications for Pooled Number Subscription Versions to Requesting SOA

<u>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>

A-15 Audit Discrepancy and Results Notifications for Pooled Number Subscription Versions for Audited TNs

NPAC SMS shall, for audits of Subscription Versions with LNP Type of POOL, only send back notifications to the requesting SOA, of the audited TNs, even if other TNs were modified.

A-20 Audit Status Attribute Value Change Notification Suppress for Pooled Number Subscription Versions

NPAC SMS shall, for audits of Subscription Versions with LNP Type of POOL, suppress status change notifications for discrepancy corrections to the block holder SOA (current SP).

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 change notifications for discrepancy corrections to the block holder SOA (current SP).

A-40 Flow of Audit for Execution – Pooled Numbers and Block to EDR Local SMS

NPAC SMS shall send a query for a Block and a query for Subscription Version(s), resulting from the TN Range or TN Range with Activation Timestamp audit request for Subscription Version(s) with LNP Type of POOL, and a query for the corresponding Block of the Subscription Version(s) with LNP Type of POOL, to an EDR Local SMS that is accepting Block and Subscription Version data download for the given NPA-NXX via the NPAC SMS to Local SMS Interface.

<u>A-50</u> Audit Response – Ignore missing SVs for Pooled Ports at EDR Local SMS

NPAC SMS shall not consider a query response of No Data, as a discrepancy valid response from an EDR Local SMS, for a Subscription Version with LNP Type of POOL, and shall not include this as a discrepancy for the Subscription Version.

<u>A-60</u> Audit Response – Delete erroneous SVs for Pooled Ports at EDR Local SMS

<u>NPAC SMS shall consider a query response, which contains a Subscription Version, as a discrepancy from an EDR Local SMS, for a Subscription Version with LNP Type of POOL, by sending a Subscription Version Delete message for the Subscription Version.</u>

<u>A-80 Audit Response – Compare NPAC SMS Block to Service Provider</u> <u>Block at EDR Local SMS</u>

NPAC SMS shall conduct a comparison of the Block sent back in the audit response by belonging to the EDR Local SMS, Service Provider to its owns the Block stored in the NPAC SMS.

<u>A-90</u> Audit Response – Add Block Missing from to Service Provider at EDR Local SMS

NPAC SMS shall consider a query response of No Data related to a Block, for a Block that exists in the NPAC SMS, other than a status of Old, as a discrepant response from an EDR, following the comparison of its own Block to the Service Provider's Block, add a Block found to be absent in the Service Provider's Local SMS, and shallby sending a Block Create/Activate message.

A-100 Audit Response – Modify Block Discrepant at to Service Provider at EDR Local SMS

NPAC SMS shall consider a query response with mis-matched data for a Block, as a discrepant response from an EDR, following the comparison of its own Block to the Service Provider's Block, modify a Block found to be in error in the Service Provider's Local SMS, and shallby sending a Block Modify message.

<u>A-110</u> Audit Response – Delete Discrepant Extra Block to Service Provider at EDR Local SMS

NPAC SMS shall consider a query response of an existing Block, for a Block that has been depooled, as a discrepant response from an EDR, following the comparison of its own Block to the Service Provider's Block, delete a Block found to be erroneously present in the Service Provider's Local SMS, and shallby sending a Block Delete message.

A-120 Audit Processing – Skipping In-Progress Blocks

<u>NPAC SMS shall skip the audit of a Block with a status of Sending, by NOT sending a query for the Block, and shall send back a notification to the requesting SOA, of no discrepancies found for the Block.</u>

Section 9 New Requirements

Reports Processing

<u>RR9-7</u> Pooled Number Reports – GUI Report Generation

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

<u>R-10</u> Pooled Number Reports – Query functions

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

RR9-8 Pooled Number Reports – Pooled Number Block Hholder Ddefault Rrouting Report

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

R-25Pooled Number Reports – Pooled Number Block Hholder DdefaultRrouting Report – Report Data Elements

NPAC SMS shall support a report that lists the number pool range, the block holder, and the block holder default routing information, that contains the following data elements: Block ID NPA-NXX-X Effective Date LRN DPC SSN

<u>R-30</u> Pooled Number Reports – Pooled TNumbers in a NPA-NXX-X Report

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

<u>R-40 Pooled Number Reports – Pooled TNumbers in a NPA-NXX-X</u> <u>Report Data Elements</u>

NPAC SMS shall support a report that lists all Active-Like numbers in a 1K Block for a block holder, that contains the following data elements:

<u>TN (primary sort)</u>

LNP Type

Activation Start Time Stamp

SP Name

<u>Status</u>

R-70 Pooled Number Reports – Pending-Like No-Active and Pending-Like Port-to-Original Subscription Versions Report

NPAC SMS shall support a report, used for NPA-NXX-X and 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, or have a Subscription Version with a status of pending/conflict/cancel-pending/failure, and where the Subscription Version is a Port-to-Original port, for NPAC personnel using the NPAC Administrative Interface and Service Provider personnel using the NPAC SOA Low-tech Interface.

R-80 Pooled Number Reports – Pending-Like No-Active and Pending-Like Port-to-Original Subscription Versions Report Data Elements

NPAC SMS shall support a report, used for NPA-NXX-X and 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, or have a Subscription Version with a status of pending/conflict/cancel-pending/failure, and where the Subscription Version is a Port-to-Original port, that contains the following data elements:

TN

Old Service Provider SPID

New Service Provider SPID

Due Date

Status

R-81 Pooled Number Reports – Pending-Like No-Active and Pending-Like Port-to-Original Subscription Versions Report Sort Priority

NPAC SMS shall sort the report listed in R-80, in the following order: <u>New Service Provider SPID (primary sort)</u> <u>TN (secondary sort)</u>

R-82 Pooled Number Reports – Pending-Like No-Active and Pending-Like Port-to-Original Subscription Versions Report Page Break

NPAC SMS shall page break the report listed in R-80, for every change in SPID.

<u>R-130</u> Pooled Number Reports – Pending-Like With Active and POOL Subscription Versions Report

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 pending/conflict/cancelpending/failure, and where the currently active Subscription Version is LNP Type of POOL, for NPAC personnel using the NPAC Administrative Interface.

R-140 Pooled Number Reports – Pending-Like With and Active POOL Subscription Versions Report Data Elements

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 pending/conflict/cancelpending/failure, and where the currently active Subscription Version is LNP Type of POOL, that contains the following data elements:

TN

Old Service Provider SPID

New Service Provider SPID

Due Date

Status

<u>R-141</u> Pooled Number Reports – Pending-Like With and Active POOL Subscription Versions Report Sort Priority

NPAC SMS shall sort the report listed in R-140, in the following order:

New Service Provider SPID (primary sort)

TN (secondary sort)

<u>R-142</u> Pooled Number Reports – Pending-Like With and Active POOL Subscription Versions Report Page Break

NPAC SMS shall page break the report listed in R-140, for every change in SPID.

Section 12 New Requirements

Migration for National Number Pooling

<u>M-10</u> National Number Pooling Migration – Conversion of Blocks for 1.4 Pooling

NPAC SMS shall provide a mechanism for Pooled Data in a pre-EDR environment, to be converted to Pooled Data in an EDR environment, prior to the live date for the National Number Pooling Release in the NPAC SMS.

NOTE: The Subscription Versions with LNP Type of POOL will remain in the NPAC SMS, and a corresponding EDR Block will be created in the NPAC SMS, but will not be broadcast over the Interface.

M-20 National Number Pooling Migration – Setting of NPA-NXX-X Indicators

NPAC SMS shall provide a mechanism for the NPAC Customer SOA NPA-NXX-X Indicator and the NPAC Customer LSMS NPA-NXX-X Indicator, in the NPAC Customer Data Model, to be set for all Service Providers, prior to the live date for the National Number Pooling Release in the NPAC SMS.

M-30 National Number Pooling Migration – Setting of EDR Indicators

NPAC SMS shall provide a mechanism for the NPAC Customer LSMS EDR Indicator, in the NPAC Customer Data Model, to be set for all Service Providers, prior to the live date for the National Number Pooling Release.

Delta between 1.4 Pooling and National Pooling

National Requirements that supercede functionality in the 1.4 Requirements

<u>N-180</u> Addition of Number Pooling NPA-NXX-X Holder Information NPA-NXX-X Holder SPID – Validation

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

In 1.4 Code Holder and Block Holder could NOT be the same.

1.4 Requirements that have been removed from the National Requirements

Requirement 7 – Create "Pooled Number" Subscription Version – Service Provider ID Different Validation

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

Edit has changed in National. Now, the Code Holder and Block Holder can be the same.

<u>RR9-5</u> Pooled Ported Number Report

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

Report is no longer needed, as this is being replaced by a new report for National.

<u>RR9-6</u> Pooled Non-Ported Number Block holder default routing Report

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

Report is no longer needed, as this is being replaced by a new report for National.

Appendix C – System Tunables

BLOCK TUNABLES						
<u>Tunable Name</u>	<u>Tunable Variable Name</u>	<u>Default</u> <u>Value</u>	<u>Units</u>	<u>Valid</u> <u>Range</u>		
NPA-NXX-X Holder Information Effective Date	<u>NPA-NXX-X Holder Information Effective</u> <u>Date</u>	<u>5</u>	<u>business</u> <u>days</u>	<u>5-360</u>		
Minimum length of time modifying an NPA-NXX	between the Creationcurrent date and the effect -X.	ive date wh	en creating	or		
<u>Block Broadcast</u> Failure Paging Interval	Failure Paging					
Length of time between Pages to NPAC Personnel for Blocks with a status of Partial Failure (first time), Failed (first time), Active with a Failed SP List (each occurrence), or Old with a Failed SP List (first time), and Block's status being set to Active with NO Failed SP List.						

Table C-6 Block Tunables

Appendix E – Bulk Data Download File Formats

NPA-/NXX-X Download File

The NPA-/NXX-X download block contains two records in the file, individual fields are pipe_ delimited, with a carriage return(CR) after each NPA-NXX-X record. The breaks in the lines and the parenthesized comments are solely for ease of reading and understanding. There are no selection criteria for these files: all data is included.

The "Value in Example" column in Table E-5 directly correlates to the values for the first NPA-/NXX-X in the download file example, as seen in Figure E-5.

The file name for the NPA-NXX-X download file will be in the format:

NPANXXX.DD-MM-YYYYHH24MISS (The NPANXXX portion is the literal string "NPANXXX".)

The NPA-NXX-X file given in the example would be named:

NPANXXX.11-02-1998133022

EXPL	EXPLANATION OF THE FIELDS IN THE NETWORK NPA-/NXX-X DOWNLOAD <u>FILE</u>			
FieldField NameValue in ExampleNumber				
1	Service Provider Id	0001		
2	<u>NPA-NXX-X Id</u>	<u>2853</u>		
3	NPA-NXX-X Value	<u>303-123-6</u>		
4	Creation TimeStamp	<u>19980101155555</u>		
5	Effective TimeStamp	<u>19980105000000</u>		
<u>6</u>	Download Reason	<u>0</u>		

Table E-5 Explanation of the Fields in the Network NPA-/NXX-X Download File

Figure E-5 Network NPA-/NXX-X Download File Example

Block Download File

The following table describes each field of the sample Block download file. This download file example contains data for three Blocks, with three lines for each Block. Each Block is one record in the file, pipe delimited, with a carriage return(CR) between each Block. The breaks in the lines and the parenthesized comments are solely for ease of reading and understanding.

Table E-6 describes the entries for Block 1: The "Value in Example" column directly correlates to the values for Block 1 in the download file example, as seen in Figure E-6.

Blocks in the download file are selected by a combination of NPA-NXX-X begin and end range, as well as TIME begin and end range. The TIME Range is keyed off the Activation Broadcast Complete Timestamp. The file name for the Block download file will be in the format:

NPANXXX-NPANXXX.DD-MM-YYYYHH24MISS-DD-MM-YYYHH24MISS

The NPANXXX-NPANXXX values map to the NPA-NXX-X selection criteria and the time values map to the time selection criteria.

The Block file given in the example would be named:

3031235-3031252.07-11-1996091222-09-17-1996153344

The files available for LSMS compares will be defined as one or more NPA-NXX-Xs per file.

 0001|3031235|1234567890|0001|19960916152337|

 123456789|123|123456789|123|123456789|123|123456789|123|

 123456789012|12|0001||0|0(CR)
 (end of Block 1)

 0002|3031241|1234567891|0001|19960825011010||

 123456789|123|1234567891|23|123456789|123|123456789|123|

 123456789013|13|0001|0|0(CR)
 (end of Block 2)

 0003|3031251|123456789|123|123456789|123|123456789|123|

 123456789013|13|0001|0|0(CR)
 (end of Block 2)

 0003|3031251|123456789|123|123456789|123|123456789|123|

 123456789014|13|0001|0|0(CR)
 (end of Block 3)

Figure E-6 Block Download File Example

]	EXPLANATION OF THE FIELDS IN THE BLOCK DOWNLOAD FILE			
FieldField NameValue in ExampleNumber		<u>Value in Example</u>		
1	Block Id	<u>000000001</u>		
2	<u>NPA-NXX-X</u>	<u>3031231</u>		
3	LRN	<u>1234567890</u>		
<u>4</u>	New Current Service Provider Id	0001		
5	Activation Timestamp	19960916152337 (yyyymmddhhmmss)		

<u>6</u>	CLASS DPC	123456789
2	<u>CLASS SSN</u>	123
8	LIDB DPC	<u>123456789</u>
<u>9</u>	LIDB SSN	123
10	ISVM DPC	<u>123456789</u>
11	ISVM SSN	123
12	<u>CNAM DPC</u>	<u>123456789</u>
13	<u>CNAM SSN</u>	123
14	Download Reason	<u>Q</u>

Table E-6 Explanation of the Fields in The Block Download File

Appendix F – Block and SV Behavior Matrix

<u>9/18/98</u>

NPAC SMS Processing in a Number Pooling Environment

For SOA-Initiated and NPAC-Initiated Requests of

Blocks

And Subscription Versions

Including LSMS Broadcasts (EDR and non-EDR)

Definitions:

- <u>N/A = Not Applicable (cannot get into this situation)</u>
- <u>BAU = Business As Usual (i.e., same as it works today)</u>

Scenario: Block Behavior, Pre-Effective Date for the Block in the Block Holder Table

The table below shows the SOA/NPAC message sent, and the behavior of the NPAC based on the sent message, for Block behavior.

SOA/NPAC sends to NPAC	NPAC internal processing	NPAC sends to non-EDR LSMS	NPAC sends to EDR LSMS
Create/Activate Block	Reject message, send error back to SOA/NPAC (not allowed to perform this activity prior to block effective date)	<u>N/A</u>	<u>N/A</u>
Modify Pending Block	<u>N/A (no such message exists)</u>	<u>N/A</u>	<u>N/A</u>
Cancel Block	N/A (no such message exists)	<u>N/A</u>	<u>N/A</u>
Activate Block	N/A (no such message exists)	<u>N/A</u>	<u>N/A</u>
Modify Active Block	Reject message, send error back to SOA/NPAC (because no object found)	<u>N/A</u>	<u>N/A</u>
Disconnect Block	<u>N/A (no such message exists)</u>	<u>N/A</u>	<u>N/A</u>

Scenario: Sub-Block Behavior, On or After Effective Date for the Block in the Block Holder Table

The table below shows the SOA/NPAC message sent, and the behavior of the NPAC based on the sent message, for Sub-Block behavior.

SOA/NPAC	NPAC internal processing	NPAC sends to	NPAC sends to
sends to NPAC		<u>non-EDR LSMS</u>	EDR LSMS
Create/Activate Block	New NPAC functionality. Perform appropriate validation on block. If error is encountered. Provide error message (need to have M&P to resolve issue). This includes the pending-like, no-active SVs, plus all the normal SV-like error conditions (LRN, range, etc.). Send error to SOA when SOA Origination = TRUE. Exit the process. Else, Create block and SV data on the NPAC (sending status). Send block update (sending status) to SOA when SOA Origination = TRUE. For SV data, loop through 1000 TNs. If contaminated*.	Individual SVs (TN Range M-ACTION) with type POOL, for each newly created TN (non- contaminated) in the Block. (the newly created ones are defined in the previous box)	A single block object. for the 1K range of TNs in the Block.
Modify Pending	N/A (no such message exists)	<u>N/A</u>	<u>N/A</u>
<u>Block</u>			
Block Cancel Block	<u>N/A (no such message exists)</u>	<u>N/A</u>	<u>N/A</u>

Modify Active Block	New NPAC functionality.	Individual CVa (TN	A single block object
Modify Active Block	New NPAC functionality.	Individual SVs (TN Range M-ACTION),	<u>A single block object</u> for the 1K range of
	Perform appropriate validation on block (request must be for current	for each TN in the 1K	TNs in the Block.
	block that exists on NPAC).	range that currently	<u>1145 III the Diotk.</u>
	If error is encountered,	contain LNPType =	
	Provide error message (need to have M&P to resolve issue).	POOL, in the Block.	
	This includes the existence of the block on the NPAC,		
	validation that it belongs to the requesting SPID, etc.		
	Send error to SOA when SOA Origination = TRUE.		
	Exit the process.		
	Else,		
	Update block and SV data on the NPAC (sending status).		
	Send block update (sending status) to SOA when SOA		
	<u>Origination = TRUE.</u> For SV data, loop through 1000 TNs.		
	If SV contains type POOL,		
	update SV with new routing data.		
	<u>Else</u> ,		
	<u>skip.</u>		
	Endif.		
	End loop.		
	<u>Send appropriate data to LSMSs.</u> If successful to LSMSs.		
	Update block and SV data (active status).		
	Else.		
	Update block and SV data (active, with a failed SP List).		
	Endif.		
	<u>Send block update to SOA when SOA Origination = TRUE.</u>		
	Suppress SV data updates to SOA.		
	Endif.		
	In the case where a broadcast fails to an SP, the block assumes an "all		
	or nothing" perspective. Therefore, a broadcast failure to an SP for		
	either the block object, or one or more SVs, is considered a failure to		
	the SP, and is returned if the originating SP sent the request (SOA		
	Origination = TRUE).		
	If one or more individual SVs fail, the originating SOA will not		
	know the specific TNs that failed to the non-EDR SP, but will		
	know the discrepant SP. In order to identify the specific TNs that failed to the non-EDR SP, the initiating SOA can either send up		
	<u>TN range queries, or request this information from NPAC</u>		
	personnel.		
	*	2714	27/1
Disconnect Block	<u>N/A (no such message exists)</u>	<u>N/A</u>	<u>N/A</u>
	l.		

Scenario: Subscription Version Behavior, Pre-Effective Date for the Block in the Block Holder Table

The table below shows the SOA/NPAC message sent, and the behavior of the NPAC based on the sent message, for a TN within the 1K Pooled Block.

SOA/NPAC sends to NPAC	NPAC internal processing	NPAC sends to non-EDR LSMS	<u>NPAC sends to</u> <u>EDR LSMS</u>
Create SV, LSPP	Previous SV exists BAU.	BAU	BAU
	Previous SV does not exist reject request.	<u>N/A</u>	<u>N/A</u>
Create SV, LISP	If initiated by SOA, Previous SV exists BAU. Previous SV does not exist reject request.		
	Else (it was initiated by NPAC), Previous SV exists BAU. Previous SV does not exist BAU. This functionality will remain to allow a code holder to intra-port working numbers that were missed during the initial clean up process, prior to block donation. It was determined by the sub-committee to only allow this to be performed by NPAC personnel, once the block has been created in the block holder table, regardless of effective date.		
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Endif.		
Create SV, PTO	Reject message, send error back to SOA/NPAC.	<u>N/A</u>	<u>N/A</u>
Create SV, POOL	Reject message, send error back to SOA/NPAC.	<u>N/A</u>	<u>N/A</u>
Modify Pending SV, LSPP	BAU	<u>N/A</u>	<u>N/A</u>
Modify Pending SV, LISP	BAU	<u>N/A</u>	<u>N/A</u>
Modify Pending SV, PTO	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Modify Pending SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Activate SV, LSPP	BAU	BAU	BAU
Activate SV, LISP	BAU	BAU	BAU
Activate SV, PTO	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Activate SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Modify Active SV, LSPP	BAU	BAU	BAU
Modify Active SV, LISP	BAU	BAU	BAU
Modify Active SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Disconnect SV, LSPP	BAU	BAU	BAU
Disconnect SV, LISP	BAU	BAU	BAU
Disconnect SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>

1		

Scenario: Subscription Version Behavior, Post-Effective Date, but Pre-Activation Date for the Block in the Block Holder Table

The table below shows the SOA/NPAC message sent, and the behavior of the NPAC based on the sent message, for a TN within the 1K Pooled Block.

SOA sends to	NPAC internal processing	NPAC sends to	NPAC sends to
NPAC		non-EDR LSMS	EDR LSMS
Create SV, LSPP	Previous SV exists BAU.	BAU	BAU
	Previous SV does not exist reject request.	<u>N/A</u>	<u>N/A</u>
Create SV, LISP	Previous SV exists BAU.	BAU	BAU
	Previous SV does not exist reject request.	<u>N/A</u>	<u>N/A</u>
Create SV, PTO	Previous SV exists reject request.	<u>N/A</u>	<u>N/A</u>
	Previous SV does not exist BAU (fail the request).	BAU	BAU
Create SV, POOL	Reject message, send error back to SOA	<u>N/A</u>	<u>N/A</u>
Modify Pending SV, LSPP	BAU	BAU	BAU
Modify Pending SV, LISP	BAU	BAU	BAU
Modify Pending SV, PTO	BAU	BAU	BAU
Modify Pending SV, POOL	BAU (NPAC will return error message "object not found")	BAU	BAU
Activate SV, LSPP	BAU	BAU	BAU
Activate SV, LISP	BAU	BAU	BAU
Activate SV, PTO	BAU (NPAC will return error message "object not found" because the CREATE was prohibited)	<u>N/A</u>	<u>N/A</u>
Activate SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Modify Active SV, LSPP	BAU	BAU	BAU
Modify Active SV, LISP	BAU	BAU	BAU
Modify Active SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Disconnect SV, LSPP	Disconnect notification goes to the Block Holder SOA, not the Code Holder SOA.	BAU	BAU
Disconnect SV, LISP	Disconnect notification goes to the Block Holder SOA, not the Code Holder SOA.	BAU	BAU
Disconnect SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>

Scenario: Subscription Version Behavior, Post-Activation Date for the Block in the Block Holder Table

The table below shows the SOA message sent, and the behavior of the NPAC based on the sent message, for a TN within the 1K Pooled Block.

SOA sends to	NPAC internal processing	NPAC sends to	NPAC sends to
NPAC		non-EDR LSMS	EDR LSMS
Create SV, LSPP	Previous SV exists BAU.	BAU	BAU
1	Previous SV does not exist N/A.	<u>N/A</u>	<u>N/A</u>
Create SV, LISP	Previous SV exists BAU.	BAU	BAU
	Previous SV does not exist N/A.	<u>N/A</u>	<u>N/A</u>
Create SV, PTO	Previous SV exists validates that the requesting SP is the Block Holder.	<u>N/A</u>	<u>N/A</u>
	Previous SV does not exist BAU (fail the request).	BAU	BAU
Create SV, POOL	Reject message, send error back to SOA	<u>N/A</u>	<u>N/A</u>
Modify Pending SV, LSPP	BAU	BAU	BAU
Modify Pending SV, LISP	BAU	BAU	BAU
Modify Pending SV, PTO	BAU	BAU	BAU
Modify Pending SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Activate SV, LSPP	BAU	BAU	BAU
Activate SV, LISP	BAU	BAU	BAU
Activate SV, PTO	PTO (must be Block Holder) processing will send an M-CREATE instead of today's M-DELETE to the non-EDR LSMSs, and send an M-DELETE to the EDR LSMSs (to remove the SV, and revert back to the sub-block).	Send an M-CREATE for the SV, with type POOL, using the routing data for sub- block holder.	Send an M-DELETE for the SV.
Activate SV, POOL	BAU (NPAC will return error message "object not found")	<u>N/A</u>	<u>N/A</u>
Modify Active SV, LSPP	BAU	BAU	BAU
Modify Active SV, LISP	BAU	BAU	BAU
Modify Active SV, POOL	Reject message, send error back to SOA	<u>N/A</u>	<u>N/A</u>
Disconnect SV, LSPP	Disconnect processing will send an M-CREATE instead of today's M-DELETE to the non-EDR LSMSs, and send an M-DELETE to the EDR LSMSs (to remove the SV, and revert back to the sub-block). A notification is sent to the Block Holder SOA.	Send an M-CREATE for the SV, with type POOL, using the routing data for sub- block holder.	Send an M-DELETE for the SV.
Disconnect SV, LISP	Disconnect processing will send an M-CREATE instead of today's M-DELETE to the non-EDR LSMSs, and send an M-DELETE to the EDR LSMSs (to remove the SV, and revert back to the sub-block).	Send an M-CREATE for the SV, with type POOL, and routing for sub-block holder.	Send an M-DELETE for the SV.

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	A notification is sent to the Block Holder SOA.		
Disconnect SV, POOL	Reject message, send error back to SOA	<u>N/A</u>	<u>N/A</u>

Scenario: Block/Subscription Version Migration Plan

The table below lists the open issues for an SP migrating from the current environment (individual SVs) to the EDR environment (Blocks representing a Pool of 1000 TNs).

Duplicate TNs. When an SP migrates from a non-EDR to an EDR environment, the existing POOL'ed TNs need to be "cleaned up" (migrated from individual SVs to a single Block).

End of Document