NPAC SMS/Individual Service Provider Certification and Regression Test Plan

For New Entrants Certification and Existing Service Providers/Vendors Regression Testing up to and including NPAC Release ~~3.3.4.1b~~3.4.0a

Chapter 13

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13. Individual Turn Up Test Scenarios related to NPAC Release 3.3.

Section 13 contains all test cases written for individual Service Provider Turn Up testing of Release 3.3.x of the NPAC software.

1. NANC 375 – Prevent New Service Provider from Removing Conflict Status with Certain Cause Code Values

A. TEST IDENTITY

Test Case Number:	NANC 375-1	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – New Service Provider personnel attempt to remove a Subscription Version from Conflict status whose cause code is currently set to 50 or 51 – Error			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 375
NANC FRS Version Number:		Relevant Requirement(s):	RR5-137, RR5-139
NANC IIS Version Number:		Relevant Flow(s):	B.5.5.2

C. PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that a Subscription Version with a status of Conflict exists on the NPAC SMS where the Service Provider participating in this Test Case is the New Service Provider on the port request and the cause code value is either 50, or 51. The Conflict Resolution New Service Provider Restriction tunable has expired. TN Used _____.
Prerequisite SP Setup:	

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionRemoveFromConflict to the NPAC SMS, for a single TN Subscription Version that has a current status of Conflict and the cause code value equals either 50 or 51.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionRemoveFromConflict from the Service Provider SOA and determines the request is from the New Service Provider, for a Subscription Version in Conflict status whose cause code value equals either 50 or 51. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a Conflict status the cause code value equals 50 or 51.

4. optional	SP	Service Provider personnel, perform a local query for the Subscription Version.	SP	Verify that the Subscription Version exists in the local database with a status of Conflict and a cause code value of 50 or 51.

E.	**Pass/Fail Analysis, NANC 375-1**

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	NANC 375-2	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Old Service Provider personnel remove a Subscription Version from Conflict status whose cause code is currently set to 50 or 51 – Success			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 375
NANC FRS Version Number:		Relevant Requirement(s):	RR5-138
NANC IIS Version Number:		Relevant Flow(s):	B.5.5.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	
Prerequisite SP Setup:	1. Place a Subscription Version into Conflict and set the cause code value to either 50 or 51 where you are the Old Service Provider for the port. 2. TN Used _____.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionRemoveFromConflict or an M-SET Request subscriptionVersionNPAC to the NPAC SMS, for a single TN Subscription Version that has a current status of Conflict and the cause code value equals either 50 or 51.	NPAC	NPAC SMS receives the request (M-ACTION Request subscriptionVersionRemoveFromConflict or M-SET subscriptionVersionNPAC) from the Service Provider SOA.
2.	NPAC	The NPAC SMS validates the SOA request and issues an M-SET Request subscriptionVersionNPAC to itself, updating the modified attributes and setting the subscriptionModifiedTimeStamp to the current date/time.	NPAC	NPAC SMS receives the M-SET Request subscriptionVersionNPAC.
3.	NPAC	The NPAC SMS issues a response (either an M-ACTION Response subscriptionVersionRemoveFromCo	SP	The Service Provider SOA receives the response (either M-ACTION or M-SET Response) from the NPAC SMS.

		nflict or M-SET subscriptionVersionNPAC based on the original message issued by the SOA) to the Service Provider SOA indicating the request was successfully processed by the NPAC SMS.		
4.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the status is now Pending.	SP	The Old Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
5.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the status is now Pending.	SP	The New Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
6.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT attributeValueChange. The M-EVENT-REPORT indicates the authorization has been set to TRUE.	SP	The Old Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.

7.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeAttribute ValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT attributeValueChange. The M-EVENT-REPORT indicates the authorization has been set to TRUE.	SP	The New Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
8.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a status of Pending.
9. optional	SP	Service Provider personnel, perform a local query for the Subscription Version.	SP	Verify that the Subscription Version exists in the local database with a status of Pending.

E.	Pass/Fail Analysis, NANC 375-2	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	NPAC personnel can verify the SV exists on the NPAC SMS with a status of Pending.

A.   TEST IDENTITY

Test Case Number:	NANC 375-3	SUT Priority:	SOA	Required
			LSMS	N/A

Objective:	SOA – New Service Provider personnel attempt to remove a range of Subscription Versions from Conflict status where one Subscription Version has a cause code set to 50 or 51 and the other Subscription Versions in the range have a cause code set to some other value – Error

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 375
NANC FRS Version Number:		Relevant Requirement(s):	RR5-137, RR5-139
NANC IIS Version Number:		Relevant Flow(s):	B.5.5.2

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that a range of Subscription Versions with a status of Conflict exist on the NPAC SMS where the Service Provider participating in this Test Case is the New Service Provider on the port request and one Subscription Version in the range has a cause code value of 50 or 51 and the other Subscription Versions have some other cause code value. 2. The Conflict Resolution New Service Provider Restriction tunable has expired. 3. TNs Used _____.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionRemoveFromConflict to the NPAC SMS, for a range of TNs. Specify Subscription Versions that have a current status of Conflict and at least one Subscription Version in the range has a cause code value of either 50 or 51 and the other Subscription Versions in the range have some other cause code value.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionRemoveFromConflict from the Service Provider SOA and determines the request is from the New Service Provider, for a range of Subscription Versions in Conflict status but at least one of the Subscription Versions in the range has a code value of either 50 or 51. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.

3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a Conflict status the cause code value equals 50 or 51.
4. optional	SP	Service Provider personnel, perform a local query for the Subscription Version.	SP	Verify that the Subscription Version exists in the local database with a status of Conflict and a cause code value of 50 or 51.

E.	**Pass/Fail Analysis, NANC 375-3**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   **TEST IDENTITY**

Test Case Number:	NANC 375-4	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Old Service Provider personnel remove a range of Subscription Versions from Conflict status whose cause code values are currently set to 50 or 51 – Success			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 375
NANC FRS Version Number:		Relevant Requirement(s):	RR5-138
NANC IIS Version Number:		Relevant Flow(s):	B.5.5.5

C.   **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that a range of Subscription Versions with a status of Conflict exist on the NPAC SMS where the Service Provider participating in this Test Case is the Old Service Provider on the port request and the cause code values are either 50 or 51. 2. TNs Used _____.
Prerequisite SP Setup:	

D.   **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionRemoveFromConflict to the NPAC SMS, for a range of TNs. Specify Subscription Versions that have a current status of Conflict and the cause code values equal either 50 or 51.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionRemoveFromConflict from the Service Provider SOA.
2.	NPAC	The NPAC SMS validates the SOA request and issues an M-SET Request subscriptionVersionNPAC to itself, updating the modified attributes and setting the subscriptionModifiedTimeStamp to the current date/time.	NPAC	NPAC SMS receives the M-SET Request subscriptionVersionNPAC.
3.	NPAC	The NPAC SMS issues an M-ACTION Response subscriptionVersionRemoveFromConflict to the Service Provider SOA	SP	The Service Provider SOA receives the M-ACTION Response from the NPAC SMS.

		indicating the request was successfully processed by the NPAC SMS.		
4.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange for each TN in the range. The M-EVENT-REPORT indicates the status of the Subscription Versions is now Pending.	SP	The Old Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
5.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange for each TN in the range. The M-EVENT-REPORT indicates the status of the Subscription Versions is now Pending.	SP	The New Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
6.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT attributeValueChange for each TN in the range. The M-EVENT-REPORT indicates the authorization has been set to	SP	The Old Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.

		TRUE.		
7.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeAttribute ValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT attributeValueChange for each TN in the range. The M-EVENT-REPORT indicates the authorization has been set to TRUE.	SP	The New Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
8.	NPAC	NPAC personnel perform a query for the Subscription Versions.	NPAC	NPAC personnel verify that the Subscription Versions exist with a status of Pending.
9. optional	SP	Service Provider personnel, perform a local query for the Subscription Versions.	SP	Verify that the Subscription Versions exist in the local database with a status of Pending.

E.	Pass/Fail Analysis, NANC 375-4		
Pass	Fail	NPAC personnel performed the test case as written.	
Pass	Fail	Service Provider personnel performed the test case as written.	
Pass	Fail	NPAC personnel can verify the SVs exist on the NPAC SMS with a status of Pending.	

2.   NANC 388 – Un-do a "Cancel-Pending" SV

A.   TEST IDENTITY

Test Case Number:	NANC 388-1	SUT Priority:	SOA	Conditional
			LSMS	N/A
Objective:		SOA – Using their SOA system, Service Provider personnel send an "un-do" cancel request to the NPAC SMS for a Subscription Version in a Cancel-Pending status for which they are either the New SP or Old SP that cancelled the SV – Success		

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 388
NANC FRS Version Number:		Relevant Requirement(s):	RR5-143, RR5-144, RR5-147, RR5-150
NANC IIS Version Number:		Relevant Flow(s):	B.5.3.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. On behalf of either the Old or New Service Provider, work with the Service Provider under test to create/concur to a Subscription Version such that it exist in a Pending status.
Prerequisite SP Setup:	1. Create or concur to a Subscription Version where you are either the Old or New Service Provider. 2. Issue a cancel request for the Subscription Version/TN to be used in this test case. 3. Verify that the Subscription Version exists with a status of Cancel-Pending.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionModify to the NPAC SMS, for a single TN Subscription Version that has a current status of Cancel-Pending with the new-version-status=Pending attribute only, to un-do the cancel request they previously submitted.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionModify from the Service Provider SOA.
2.	NPAC	The NPAC SMS validates the SOA Request and issues an M-SET Request subscriptionVersionNPAC to itself update the status attribute.	NPAC	NPAC SMS receives the M-SET Request subscriptionVersionNPAC.
3.	NPAC	The NPAC SMS issues an M-ACTION Response subscriptionVersionModify to the Service Provider SOA indicating the	SP	The Service Provider SOA receives the M-ACTION Response from the NPAC SMS.

		request was successfully processed by the NPAC SMS.		
4.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the status is now Pending.	SP	The Old Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
5.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the status is now Pending.	SP	The New Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
6.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a status of Pending.
7. optional	SP	Service Provider personnel, perform a local query for the Subscription Version.	SP	Verify that the Subscription Version exists in the local database with a status of Pending.

E.	Pass/Fail Analysis, NANC 388-1	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

A.   TEST IDENTITY

Test Case Number:	**NANC 388-2**	SUT Priority:	**SOA**	Conditional
			LSMS	N/A
Objective:		SOA – Using their SOA system, Service Provider personnel attempt to send an "un-do" cancel request to the NPAC SMS for a Subscription Version (currently in cancel-Pending state) for which they are neither the Old SP or New SP party to the port – Error		

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 388
NANC FRS Version Number:		**Relevant Requirement(s):**	RR5-144
NANC IIS Version Number:		**Relevant Flow(s):**	B.5.3.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Create and concur to a Subscription Version where the Service Provider under test is neither the Old nor New Service Provider. 2. Verify that the Subscription Version exists with a status of Cancel-Pending.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel attempt to submit an M-ACTION Request subscriptionVersionModify to the NPAC SMS, for a the TN identified in the Prerequisite Set-up with the new-version-status=Pending attribute only, attempting to un-do a cancel request for a Subscription Version for which the Service Provider under test is neither the Old or New Service Provider specified in the SV.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionModify from the Service Provider SOA and determines that the Service Provider is neither the Old nor New Service Provider specified in the Subscription Version. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a status of Cancel-Pending.
4.	SP	Service Provider personnel perform	SP	Service Provider personnel verify that the Subscription Version

optional		a local query for the Subscription Version.		does not exist.
E.	**Pass/Fail Analysis, NANC 388-2**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.		

A.   TEST IDENTITY

Test Case Number:	NANC 388-3	SUT Priority:	SOA	Conditional
			LSMS	N/A

Objective:	SOA – Using their SOA system, Service Provider personnel attempt to send an "un-do" cancel request to the NPAC SMS for a Subscription Version (currently in cancel-Pending state) for which they are either the Old or New SP party to the port, but they did not issue a cancel request for the SV – Error

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 388
NANC FRS Version Number:		Relevant Requirement(s):	RR5-149
NANC IIS Version Number:		Relevant Flow(s):	B.5.3.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. On behalf of either the Old or New Service Provider, work with the Service Provider under test to create/concur to a Subscription Version such that this exists in a Pending status. 2. Acting as the 'other' Service Provider (whichever the Service Provider under test is not acting as) issue a cancel request for the Subscription Version/TN to be used in this test case. 3. Verify that the Subscription Version exists with a status of Cancel-Pending.
Prerequisite SP Setup:	1. Create or concur to a Subscription Version where you are either the Old or New Service Provider. 2. Verify that the Subscription Version exists with a status of Cancel-Pending.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionModify to the NPAC SMS, for a single TN Subscription Version that has a current status of Cancel-Pending with the new-version-status=Pending attribute only, attempting to un-do a cancel request that they did not previously submit.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionModify from the Service Provider SOA and determines that they are not the same Service Provider that issued the original cancel request for the TN. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a status of Cancel-Pending.

4. optional	SP	Service Provider personnel perform a local query for the Subscription Version.	SP	Service Provider personnel verify that the Subscription Version exists with a status of Cancel-Pending.

E.	**Pass/Fail Analysis, NANC 388-3**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	**NANC 388-4**	SUT Priority:	**SOA**	Conditional
			LSMS	N/A
Objective:	SOA – Using their SOA system, Service Provider personnel attempt to send an "un-do" cancel request to the NPAC SMS for a Subscription Version (currently in a Pending state) for which they are either the Old or New SP party to the port – Error			

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 388-4
NANC FRS Version Number:		**Relevant Requirement(s):**	RR5-145
NANC IIS Version Number:		**Relevant Flow(s):**	B.5.3.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. On behalf of either the Old or New Service Provider, work with the Service Provider under test to create/concur to a Subscription Version such that it exist in a Pending status.
Prerequisite SP Setup:	1. Create or concur to a Subscription Version where you are either the Old or New Service Provider. 2. Verify that the Subscription Version exists with a status of Pending.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionModify to the NPAC SMS, for a single TN Subscription Version that has a current status of Pending with the new-version-status=Pending attribute only, attempting to un-do a cancel request for a Subscription Version that is not in a Cancel-Pending state.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionModify from the Service Provider SOA and determines that the Subscription Version does not exist in a Cancel-Pending state. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a status of Pending.
4. optional	SP	Service Provider personnel perform a local query for the Subscription Version.	SP	Service Provider personnel verify that the Subscription Version exists with a status of Pending.

E. Pass/Fail Analysis, NANC 388-4

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	**NANC 388-5**	**SUT Priority:**	**SOA**	Conditional
			LSMS	N/A
Objective:		SOA – Using their SOA system, Service Provider personnel attempt to send an "un-do" cancel request to the NPAC SMS for a range of Subscription Versions (all but one of the SVs in the range exist in cancel-Pending state) for which they are either the Old or New SP party to the port – Error		

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 388
NANC FRS Version Number:		**Relevant Requirement(s):**	RR5-145
NANC IIS Version Number:		**Relevant Flow(s):**	B.5.3.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. On behalf of either the Old or New Service Provider, work with the Service Provider under test to create/concur to a range of Subscription Version such that they exist in a Pending status.
Prerequisite SP Setup:	1. Create or concur to the range of Subscription Versions where you are either the Old or New Service Provider. 2. Issue a cancel request for all but one of the SubscriptionVersions in the range to be used in this test case. 3. Verify that all but one of the Subscription Versions in the range exists with a status of Cancel-Pending and the one remaining SV has a status of Pending.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionModify to the NPAC SMS, for a range of TNs where all but one have a status of Cancel-Pending and one has a status of Pending with the new-version-status=Pending attribute only, attempting to un-do a cancel request for a range of Subscription Versions where all but one exist in a Cancel-Pending state.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionModify from the Service Provider SOA and determines that not all of the Subscription Versions in the range exist in a Cancel-Pending state. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request	SP	The Service Provider SOA receives the M-ACTION Response.

		to the SOA.		
3.	NPAC	NPAC personnel perform a query for the Subscription Versions.	NPAC	NPAC personnel verify that the Subscription Versions exists in their original states (all but one with a status of Cancel-Pending and one with a status of Pending).
4. optional	SP	Service Provider personnel perform a local query for the Subscription Versions.	SP	Service Provider personnel verify that the Subscription Versions exists in their original states (all but one with a status of Cancel-Pending and one with a status of Pending).
E.	**Pass/Fail Analysis, NANC 388-5**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.		

A.   TEST IDENTITY

Test Case Number:	**NANC 388-6**	SUT Priority:	**SOA**	Conditional
			LSMS	N/A

Objective:	SOA – Using their SOA system, Service Provider personnel attempt to send an "un-do" cancel request to the NPAC SMS for a Subscription Version indicating a new version status of something other than Pending - Error

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 388
NANC FRS Version Number:		**Relevant Requirement(s):**	RR5-164
NANC IIS Version Number:		**Relevant Flow(s):**	B.5.3.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. On behalf of either the Old or New Service Provider, work with the Service Provider under test to create/concur to a Subscription Version such that it exist in a Pending status.
Prerequisite SP Setup:	1. Create or concur to the Subscription Version where you are either the Old or New Service Provider. 2. Issue a cancel request for the SubscriptionVersion to be used in this test case. 3. Verify that the Subscription Version exists with a status of Cancel-Pending.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel submit an M-ACTION Request subscriptionVersionModify to the NPAC SMS, for a single TN Subscription Version that has a current status of Cancel-Pending with the new-version-status=(something other than Pending) attribute only, to un-do the cancel request they previously submitted.	NPAC	NPAC SMS receives the M-ACTION Request subscriptionVersionModify from the Service Provider SOA and determines that the request indicates a new-version-status of something other than Pending. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with a status of Cancel-Pending.
4. optional	SP	Service Provider personnel perform a local query for the Subscription	SP	Service Provider personnel verify that the Subscription Version exists with a status of Cancel-Pending.

		Version.		
E.	**Pass/Fail Analysis, NANC 388-6**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.		

3.   NANC 348 – BDD for Notifications

A.   TEST IDENTITY

Test Case Number:	NANC 348-1	SUT Priority:	SOA	Optional
			LSMS	N/A
Objective:	SOA - NPAC personnel create a Bulk Data Download file for SOA notification data specifying a service provider ID and time range. Verification steps are performed to ensure the BDD file was processed successfully by the service provider system. – Success			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 348
NANC FRS Version Number:		Relevant Requirement(s):	RR3-220, RR3-462, RR3-463, RR3-464, RR3-465, RR3-466, RR3-467, RR3-468, RR3-469
NANC IIS Version Number:		Relevant Flow(s):	N/A

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Work with the Service Provider under test to create porting scenarios that result in a subset of the following notifications: subscriptionVersionCancellationAcknowledgeRequest subscriptionVersionRangeCancellationAcknowledgeRequest subscriptionVersionDonorSP-CustomerDisconnectDate subscriptionVersionRangeDonorSP-CustomerDisconnectDate subscriptionVersionNewSP-CreateRequest subscriptionVersionRangeNewSP-CreateRequest subscriptionVersionOldSP-ConcurrenceRequest subscriptionVersionRangeOldSP-ConcurrenceRequest subscriptionVersionStatusAttributeValueChange subscriptionVersionRangeStatusAttributeValueChange subscriptionVersionNPAC-ObjectCreation (*including Medium Timer indicator if supported by the Service Provider under test) subscriptionVersionRangeNPAC-ObjectCreation (*including Medium Timer indicator if supported by the Service Provider under test) subscriptionVersionNPAC-attributeValueChange (*including Medium Timer indicator if supported by the Service Provider under test) subscriptionVersionRangeAttributeValueChange (*including Medium Timer indicator if supported by the Service Provider under test) subscriptionVersionNewSP-FinalCreateWindowExpiration subscriptionVersionRangeNewSP-FinalCreateWindowExpiration subscriptionAudit-DiscrepancyRpt subscriptionAuditResults

	subscriptionAudit-objectCreation
	subscription Audit-objectDeletion
	lnpNPAC-SMS-Operational-Information
	subscriptionVersionNewNPA-NXX
	subscriptionVersionOldSPFinalConcurrenceWindowExpiration
	subscriptionVersionRangeOldSPFinalConcurrenceWindowExpiration
	numberPoolBlock-objectCreation
	numberPoolBlock-attributeValueChange
	numberPoolBlockStatusAttributeValueChange
	Note:
	In the **objectCreation notifications** within a notification BDD file: Medium Timer indicator, Timer Type and Business Hours are included uniquely (either a value or an empty placeholder when applicable) when the respective Service Provider configurable for each unique attribute is set to TRUE. Additionally, the Region supports tunable for the Medium Timer indicator must also be set to TRUE for the Medium Timer indicator to be included. These conditions must be true both at the time the notification was generated and at the time the BDD is created. If, for example the Service Provider supports only Medium Timers and Timer Type, and the Region Supports Medium Timers indicator both at the time the notification was originally generated and at the time the BDD was created, then the BDD will contain Medium Timer Indicator and Timer Type, but not Business Hours.
	In the **attributeValueChange notifications** within a notification BDD file: Timer Type is included when the Service Provider under test supports both the Timer Type and Medium Timer Indicators and the Region supports the Medium Timer indicator. Business Hours is included when the Service Provider under test supports Medium Timers and Business Hours and the Region supports Medium Timer indicator. Medium Timer indicator is included when the Service Provider supports Medium Timers and the Region supports the Medium Timer indicator. Like in the objectCreation notification scenario, the Service Provider configurables and Region supports tunable must be set in these combinations at the time the notification was originally generated as well as at the time the BDD is requested for the attributes to be included in the AVC notification within the BDD.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	NPAC	NPAC personnel request a Bulk Data Download for Notification Data, specifying the Service Provider under test and a Time Range equal to the prerequisite activities.	NPAC	1. The NPAC SMS receives the request from the NPAC OP GUI. 2. The NPAC SMS generates the Bulk Data Download File.
2.	SP	Service Provider personnel FTP the Bulk Data Download File and load the file into their SOA.	SP	Service Provider personnel successfully process the BDD file.
3. optional	SP	Service Provider personnel, using their SOA, perform a local query for the Notification Data to verify	SP	The Notification data was loaded.

		that the Notification data was loaded.		
E.	**Pass/Fail Analysis, NANC 348-1**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		

A.   **TEST IDENTITY**

Test Case Number:	**NANC 348-2**	**SUT Priority:**	**SOA**	N/A
			LSMS	Optional
Objective:	LSMS - NPAC personnel create a Bulk Data Download file for LSMS notification data specifying a service provider ID and time range. Verification steps are performed to ensure the BDD file was processed successfully by the service provider system. – Success			

B.   **REFERENCES**

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 348
NANC FRS Version Number:		**Relevant Requirement(s):**	RR3-220, RR3-462, RR3-463, RR3-464, RR3-465, RR3-466, RR3-467, RR3-468, RR3-469
NANC IIS Version Number:		**Relevant Flow(s):**	N/A

C.   **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Work with the Service Provider under test to create porting scenarios that result in a subset of the following notifications: lnpNPAC-SMS-Operational-Information subscriptionVersionNewNPA-NXX
Prerequisite SP Setup:	

D.   **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	NPAC	NPAC personnel request a Bulk Data Download for Notification Data, specifying the Service Provider under test and a Time Range equal to the prerequisite activities.	NPAC	1. The NPAC SMS receives the request from the NPAC OP GUI. 2. The NPAC SMS generates the Bulk Data Download File.
2.	SP	Service Provider personnel FTP the Bulk Data Download File and load the file into their LSMS.	SP	Service Provider personnel successfully process the BDD file.
3. optional	SP	Service Provider personnel, using their LSMS, perform a local query for the Notification Data to verify that the Notification data was loaded.	SP	The Notification data was loaded.

E.   **Pass/Fail Analysis, NANC 348-2**

Pass	Fail	NPAC personnel performed the test case as written.

Pass	Fail	Service Provider personnel performed the test case as written.

4.   ILL 130 – Application Level Errors

A.   TEST IDENTITY

Test Case Number:	ILL 130-1	SUT Priority:	SOA	Conditional
			LSMS	N/A

Objective:	SOA – Service Provider personnel issue one or more of the following M-ACTION requests to the NPAC SMS when their SOA Supports Action Application Level Errors Indicator is set to TRUE in their Service Provider profile on the NPAC SMS – Success
	- lnpDownload
	- lnpRecoveryComplete
	- numberPoolBlock-Create
	- subscriptionVersionActivateWithErrorCode
	- subscriptionVersionCancelWithErrorCode
	- subscriptionVersionNewSP-CancellationAcknowledgeWithErrorCode
	- subscriptionVersionRemoveFromConflictWithError Code
	- subscriptionVersionOldSP-CancellationAcknowledgeWithErrorCode
	- subscriptionVersionDisconnect
	- subscriptionVersionModify
	- subscriptionVersionNewSP-Create
	- subscriptionVersionOldSP-Create
	- lnpNotificationRecovery

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	ILL 130
NANC FRS Version Number:		Relevant Requirement(s):	
NANC IIS Version Number:		Relevant Flow(s):	

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Work with Service Provider personnel to create porting scenarios resulting in a subset of the Action requests listed in the Test Objective.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Service Provider personnel using	NPAC	The NPAC SMS receives the M-ACTION Request from the

		their SOA system attempt to perform porting activities that result in the NPAC SMS issuing the enhanced error processing M-ACTION response messaging, by sending erroneous information or otherwise invalid request. The Service Provider SOA issues an M-ACTION "xyz" Request to attempt to perform porting activity. The request includes either erroneous information or an invalid request.		SOA and determines that the request includes either erroneous information or is an otherwise invalid request and issues an M-ACTION "xyz" response indicating the detailed error information.
2.	SP	The SOA receives the M-ACTION Response.	SP	The SOA successfully processes the M-ACTION Response.
3.	NPAC	NPAC personnel query for the object that the Service Provider under test attempted to manipulate in this test case.	NPAC	Verify that the porting information exists on the NPAC SMS as it should (depending on the type of erroneous request that was sent over the interface).
E.	**Pass/Fail Analysis, Ill 130-1**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		

A.   TEST IDENTITY

Test Case Number:	ILL 130-2	SUT Priority:	SOA	Conditional
			LSMS	N/A

Objective:	SOA – Service Provider personnel issue one or more requests (select from the following regular CMIP primitive requests) to the NPAC SMS when their SOA Supports Application Level Errors Indicator is set to TRUE in their Service Provider profile on the NPAC SMS – Success
	- M-CREATE subscriptionAudit
	- M-CREATE serviceProvNPA-NXX
	- M-CREATE serviceProvLRN
	- M-CREATE lsmsFilterNPA-NXX
	- M-GET subscriptionAudit
	- M-GET serviceProv
	- M-GET serviceProvNPA-NXX
	- M-GET serviceProvLRN
	- M-GET serviceProvNPA-NXX-X
	- M-GET numberPoolBlockNPAC
	- M-GET subscriptionVersionNPAC
	M-GET lsmsFilterNPA-NXX
	- M-SET serviceProv
	- M-SET numberPoolBlockNPAC
	- M-SET subscriptionVersionNPAC
	- M-DELETE subscriptionAudit
	- M-DELETE serviceProvNPA-NXX
	- M-DELETE serviceProvLRN
	- M-DELETE lsmsFilterNPA-NXX

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	ILL 130
NANC FRS Version Number:		Relevant Requirement(s):	
NANC IIS Version Number:		Relevant Flow(s):	B.5.1.5

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Work with Service Provider personnel to create porting scenarios resulting in a subset of the CMIP primitive requests listed in the Test Objective.

Prerequisite SP Setup:				

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Service Provider personnel using their SOA system attempt to perform porting activities that result in the NPAC SMS issuing the enhanced error processing messages (ProcessingFailure) response messages by sending erroneous information or otherwise invalid requests. The Service Provider SOA issues an "xyz" Request to attempt to perform porting activity. The request includes either erroneous information or an invalid request.	NPAC	The NPAC SMS receives the request from the SOA and determines that the request includes either erroneous information or is an otherwise invalid request and issues a ProcessingFailure response indicating the error.
2.	SP	The SOA receives the response.	SP	The SOA successfully processes the response.
3.	NPAC	NPAC personnel query for the object that the Service Provider under test attempted to manipulate in this test case.	NPAC	Verify that the porting information exists on the NPAC SMS as it should (depending on the type of erroneous request that was sent over the interface).

E.   Pass/Fail Analysis, Ill 130-2

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

5. NANC 394 – Consistent Behavior of Five-Day Waiting Period Between NPA-NXX-X Creation and Number Pool block Activation, and Subscription Version Creation and its Activation

A. TEST IDENTITY

Test Case Number:	NANC 394-1	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Service Provider personnel create an Inter-SP Subscription Version specifying a due date less than the NPA-NXX Live TimeStamp - Error			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 394
NANC FRS Version Number:		Relevant Requirement(s):	RR5-162
NANC IIS Version Number:		Relevant Flow(s):	B.5.1.1 or B.5.1.2

C. PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX for the TN that is going to be used in this test case is open for porting and that the NPA-NXX Live TimeStamp has not been reached.
Prerequisite SP Setup:	

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Service Provider personnel using their SOA system attempt to create an Inter-SP Subscription Version indicating a due date that is less than the NPA-NXX Live TimeStamp. The Service Provider SOA issues an M-ACTION Request for a single TN, Inter-SP SV indicating a due date that is less than the NPA-NXX Live TimeStamp.	NPAC	The NPAC SMS receives the M-ACTION Request from the SOA and determines that the due date specified is less than the NPA-NXX Live TimeStamp. **(This violates system requirements.)**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version does not exist on the NPAC SMS.
4.	SP	Service Provider personnel, perform	SP	Verify that the Subscription Version does not exist in the local

optional		a local query for the Subscription Version.		database.

E.	**Pass/Fail Analysis, NANC 394-1**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	NANC 394-2	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Service Provider personnel create a range of Intra-SP Subscription Versions specifying a due date less than the NPA-NXX Live TimeStamp - Error			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 394
NANC FRS Version Number:		Relevant Requirement(s):	RR5-162
NANC IIS Version Number:		Relevant Flow(s):	B.5.1.1

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX for the TNs that are going to be used in this test case is open for porting and that the NPA-NXX Live TimeStamp has not been reached.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Service Provider personnel using their SOA system attempt to create a range of Intra-SP Subscription Versions indicating a due date that is less than the NPA-NXX Live TimeStamp. The Service Provider SOA issues an M-ACTION Request for a range of TNs, Intra-SP SVs indicating a due date that is less than the NPA-NXX Live TimeStamp.	NPAC	The NPAC SMS receives the M-ACTION Request from the SOA and determines that the due date specified is less than the NPA-NXX Live TimeStamp. **(This violates system requirements.)**
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version does not exist on the NPAC SMS.
4. optional	SP	Service Provider personnel, perform a local query for the Subscription Version.	SP	Verify that the Subscription Version does not exist in the local database.

E.   Pass/Fail Analysis, NANC 394-2

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	NANC 394-3	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Service Provider personnel modify the due date to a date that is less than the NPA-NXX Live TimeStamp for a Pending Subscription Version - Error			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 394
NANC FRS Version Number:		Relevant Requirement(s):	RR5-163
NANC IIS Version Number:		Relevant Flow(s):	B.5.2.3 or B.5.2.4

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that a Pending Subscription Version exists with a Due Date in the future. Verify that the NPA-NXX Live TimeStamp has not been reached.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Service Provider personnel using their SOA system attempt to modify the due date to a date less than the NPA-NXX Live TimeStamp for a Pending Subscription Version. The Service Provider SOA issues an M-ACTION Request or M-SET Request for a single TN, Subscription Version indicating a due date that is less than the NPA-NXX Live TimeStamp.	NPAC	The NPAC SMS receives the M-ACTION or M-SET Request from the SOA and determines that the due date specified is less than the NPA-NXX Live TimeStamp. **(This violates system requirements.)**
2.	NPAC	The NPAC SMS issues a Failure Response to match the Request issued by the SOA (either an M-ACTION or M-SET) indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the (M-ACTION or M-SET) Response.
3.	NPAC	NPAC personnel perform a query for the Subscription Version.	NPAC	NPAC personnel verify that the Subscription Version exists with the original attribute values (prior to the modify attempt performed in this test case) with a status of Pending on the NPAC SMS.
4.	SP	Service Provider personnel, perform a local query for the Subscription	SP	Verify that the Subscription Version exists with the original attribute values (prior to the modify attempt performed in this

optional		Version.		test case) with a status of Pending on the NPAC SMS.
E.	**Pass/Fail Analysis, NANC 394-3**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.		

6.   NANC 383 – Separate SOA Channel for Notifications

A.   TEST IDENTITY

Test Case Number:	NANC 383-1	SUT Priority:	SOA	Conditional
			LSMS	N/A
Objective:		SOA – Service Provider personnel send a resynchronization request for notification information over a separate SOA channel for notifications – Success		

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 383
NANC FRS Version Number:		Relevant Requirement(s):	RR6-185
NANC IIS Version Number:		Relevant Flow(s):	B.7.3 or B.7.3.1

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that the SOA Notification Channel is set to TRUE in the Service Provider profile.
	2. The Service Provider SOA SWIM Recovery Indicator is set to production setting. If it is set to TRUE, then the Service Provider Linked Replies Indicator must be set to TRUE.
	3. While the SOA is not associated with from the NPAC SMS, NPAC Personnel perform activities to generate a set of notifications that the Service Provider under test will recover. Work with the Service Provider under test to create porting scenarios that result in a subset of the following notifications:
	subscriptionVersionCancellationAcknowledgeRequest
	subscriptionVersionRangeCancellationAcknowledgeRequest
	subscriptionVersionDonorSP-CustomerDisconnectDate
	subscriptionVersionRangeDonorSP-CustomerDisconnectDate
	subscriptionVersionNewSP-CreateRequest
	subscriptionVersionRangeNewSP-CreateRequest
	subscriptionVersionOldSP-ConcurrenceRequest
	subscriptionVersionRangeOldSP-ConcurrenceRequest
	subscriptionVersionStatusAttributeValueChange
	subscriptionVersionRangeStatusAttributeValueChange
	subscriptionVersionNPAC-ObjectCreation - *if the service provider under test supports optional data and/or Medium Timer Indicators include these attributes in the request to generate this notification.
	subscriptionVersionRangeNPAC-ObjectCreation - *if the service provider under test supports optional data and/or Medium Timer Indicators include these attributes in the request to generate this notification.
	subscriptionVerisonNPAC-attributeValueChange - *if the service provider under test supports optional data and/or Medium Timer Indicators include these attributes in the request to generate this notification.

<table>
<tr><td colspan="2">

subscriptionVersionRangeAttributeValueChange - *if the service provider under test supports optional data and/or Medium Timer Indicators include these attributes in the request to generate this notification.

subscriptionVersionNewSP-FinalCreateWindowExpiration

subscriptionVersionRangeNewSP-FinalCreateWindowExpiration

subscriptionAudit-DiscrepancyRpt

subscriptionAuditResults

subscriptionAudit-objectCreation

subscription Audit-objectDeletion

lnpNPAC-SMS-Operational-Information

subscriptionVersionNewNPA-NXX

subscriptionVersionOldSPFinalConcurrenceWindowExpiration

subscriptionVersionRangeOldSPFinalConcurrenceWindowExpiration

numberPoolBlock-objectCreation

numberPoolBlock-attributeValueChange

numberPoolBlockStatusAttributeValueChange

NOTE: If the region and the service provider under test support PLRN, verify that the SUT is included in the "PLRN Accepted SPID List" and establish additional scenarios specifying the PLRN value:

     subscriptionVersionRangeNPAC-ObjectCreation

     numberPoolBlock-objectCreation

The service provider will receive these PLRN downloads when they support PLRN and their SPID is included in the "PLRN Accepted List" in their service provider profile.

</td></tr>
<tr><td>**Prerequisite SP Setup:**</td><td>Establish an association to the NPAC SMS where one channel has only the notification bit set and another channel has bits set (network data and/or data download) for additional functions that your system supports.</td></tr>
</table>

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	The Service Provider establishes an association from their SOA to the NPAC SMS with only the notification download bit set on one channel and another channel with other bits set (network data, and/or data download) for the functionality that they support and the resynchronization flag set to TRUE.	NPAC	The NPAC SMS receives the association bind request from the SOA. Once the association is established, the NPAC SMS queues all current updates.
2.	SP	The SOA Service Provider issues an M-ACTION Request lnpNotificationRecovery over the channel with only the notification download bit set. If the Service Provider DOES NOT	NPAC	The NPAC SMS receives the M-ACTION Request. If the Service Provider DOES NOT support SWIM recovery the NPAC SMS issues an M-ACTION response including the Notification Data updates down a separate channel where only the notification download bit is set.

		support SWIM recovery, issue lnpNotificationRecovery (notification data) to the NPAC SMS. If the Service Provider DOES support SWIM recovery, issue lnpNotificationRecovery (swim: notification data) to the NPAC SMS.		If the Service Provider DOES support SWIM recovery the NPAC SMS issues multiple, linked M-ACTION replies lnpNotificationRecovery with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the SOA with the Notification Data updates down a separate channel where only the notification download bit is set. NOTE for SWIM Response: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response. Depending on the prerequisite data established, the SWIM response may be a single normal response or it may be multiple, linked responses.
3.	SP	If the Service Provider SOA supports SWIM recovery, the SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 2 expected results to the NPAC SMS indicating the replies for this data were successfully processed, over the channel with only the notification download bit set.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Success down a separate channel where only the notification download bit is set. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
4.	SP	The SOA Service Provider issues an M-ACTION Request lnpRecoveryComplete to the NPAC SMS to set the resynchronization flag to FALSE over the channel with only the notification download bit set.	NPAC	The NPAC SMS receives the M-ACTION Request from the SOA over a channel where only the notification download bit is set and sets the resynchronization flag to 'off'.
4. optional	SP	Service Provider personnel, using the SOA, perform a local query for the Notification Data in this test case.	SP	Verify that the Notification Data updates were sent. Verify optional data and Medium Timer Indicator attributes are included in the respective notifications recovered and handled appropriately when the Service Provider under test supports these attributes.
5.	NPAC	NPAC personnel verify that the notification data requests and updates were issued down a separate SOA channel where only the notification download bit is set for this Service Provider.	NPAC	The notification downloads were received from and sent back to the Service Provider system using a channel where only the notification bit is set.
E.	**Pass/Fail Analysis, NANC 383-1**			
Pass	Fail	NPAC personnel performed the test case as written.		

Pass	Fail	Service Provider personnel performed the test case as written.

7.   NANC 138 – Definition of Cause Code

A.   TEST IDENTITY

Test Case Number:	NANC 138-1	SUT Priority:	SOA	Conditional
			LSMS	N/A
Objective:	SOA – NPAC SMS automatically sets a cancel-Pending SV to conflict after the Cancellation-Initial Concurrence and Cancellation-Final Concurrence Timers expire - Success			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 138
NANC FRS Version Number:		Relevant Requirement(s):	RR5-36.1, RR5-36.2
NANC IIS Version Number:		Relevant Flow(s):	B.5.3.2

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify the Cancel-Pending-to-Conflict Cause Code Indicator is set to TRUE for the Service Provider under test. 2. Verify that a Pending Subscription Version exists where the Service Provider under test is the New Service Provider and both Service Providers have concurred to the port. 3. Acting as the Old Service Provider issue a cancel request for the Pending Subscription Version to be used in this test case, verify that the status is Cancel-Pending. 4. Allow the Cancellation-Initial and Cancellation-Final Concurrence Timers expire.
Prerequisite SP Setup:	Do not issue a cancel request to the NPAC SMS for this TN.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	NPAC	Wait for the Initial Cancellation Window to expire. The NPAC SMS issues an M-EVENT-REPORT to the New Service Provider SOA indicating the Initial Cancellation Window has expired.	SP	The New Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC indicating it successfully received the NPAC notification.
2.	NPAC	Wait for the Final Cancellation Window to expire. The NPAC SMS issues an M-EVENT-REPORT to the New Service Provider SOA indicating the Final Cancellation Window has expired.	SP	The New Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issue an M-EVENT-REPORT Confirmation back to the NPAC indicating it successfully received the NPAC notification.
3.	NPAC	Upon expiration of the Final	NPAC	The NPAC SMS issues an M-SET Request

		Cancellation window the NPAC sets the status of the Subscription Version to Conflict.		subscriptionVersionNPAC to itself in order to set the respective Subscription Version status to Conflict and set the subscriptionConflictTimeStamp to the current date and time. The NPAC SMS receives the M-SET Request and issues an M-SET Response back to itself.
4.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the Subscription Version status is now Conflict and includes the cause code value of 2 - NPAC SMS Automatic Conflict from Cancellation.	SP	The Old Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC SMS.
5.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the Subscription Version status is now Conflict and includes the cause code value of 2 - NPAC SMS Automatic Conflict from Cancellation.	SP	The New Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC SMS.
6.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set	SP	The Old Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC SMS.

		to FALSE, the NPAC SMS issues an M-EVENT-REPORT attributeValueChange including the subscriptionConflictTimeStamp.		
7.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeAttribute ValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT attributeValueChange including the subscriptionConflictTimeStamp.	SP	The New Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC SMS.
8.	NPAC	NPAC personnel query for the Subscription Version they attempted to cancel in this test case.	NPAC	The Subscription Version exists in a state of Conflict and the cause code value is set to '2'.
9.	SP	Service Provider personnel, using their SOA, perform an NPAC query for the Subscription Version that NPAC personnel attempted to cancel in this test case.	SP	The Subscription Version exists in a state of Conflict and the cause code value is set to '2'.
10. optional	SP	Service Provider personnel, using their SOA, perform a local query for the Subscription Version that NPAC personnel attempted to cancel in this test case.	SP	The Subscription Version exists in a state of Conflict. If the Service Provider's Cancel-Pending-to-Conflict Cause Code Indicator is set to TRUE then the cause code value is also set to '2'.

E.	Pass/Fail Analysis, NANC 138-1	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

8. NANC 357 – Unique Identifiers for wireline versus wireless carriers (long term solution)

A. TEST IDENTITY

Test Case Number:	NANC 357-1	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Service Provider personnel using their SOA submit a Service Provider query request to the NPAC SMS – Success			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 357
NANC FRS Version Number:		Relevant Requirement(s):	RR4-16
NANC IIS Version Number:		Relevant Flow(s):	B.3.7

C. PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	The Service Provider Type SOA Indicator is set to the production setting and the SP Type attribute has a value.
Prerequisite SP Setup:	

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel issue a query for their own Service Provider information. The SOA issues an M-GET CMIP Request serviceProv to the NPAC SMS.	NPAC	The NPAC SMS receives the M-GET Request from the Service Provider and verifies that the information to be retrieved is owned by the Service Provider that initiated the request. For Service Provider whose Service Provider Type SOA Indicator is set to FALSE, the NPAC SMS issues an M-GET Response for the Service Provider information excluding the SP Type. For Service Provider whose Service Provider Type SOA Indicator is set to TRUE, the NPAC SMS issues an M-GET Response for the Service Provider information including the SP Type.
2.	SP	The Service Provider SOA receives the M-GET Response.	SP	Service Provider personnel verify that they received the appropriate Service Provider attributes in the query response from the NPAC SMS.

E. Pass/Fail Analysis, NANC 357-1

Pass	Fail	NPAC personnel performed the test case as written.

Pass	Fail	Service Provider personnel performed the test case as written.

A.   TEST IDENTITY

Test Case Number:	NANC 357-2	SUT Priority:	SOA	N/A
			LSMS	Required
Objective:		LSMS – Service Provider personnel using their LSMS submit a Service Provider query request to the NPAC SMS – Success		

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 357
NANC FRS Version Number:		Relevant Requirement(s):	RR4-16
NANC IIS Version Number:		Relevant Flow(s):	B.3.6

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	The Service Provider Type LSMS Indicator is set to the production setting.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the LSMS, Service Provider personnel issue a query for their own Service Provider information. The LSMS issues an M-GET CMIP Request serviceProv to the NPAC SMS.	NPAC	The NPAC SMS receives the M-GET Request from the Service Provider and verifies that the information to be retrieved is owned by the Service Provider that initiated the request. For Service Provider whose Service Provider Type LSMS Indicator is set to FALSE, the NPAC SMS issues an M-GET Response for the Service Provider information excluding the SP Type. For Service Providers who's Service Provider Type LSMS Indicator is set to TRUE, the NPAC SMS issues an M-GET Response for the Service Provider information including the SP Type.
2.	SP	The Service Provider LSMS receives the M-GET Response.	SP	Service Provider personnel verify that they received the appropriate Service Provider attributes in the query response from the NPAC SMS.

E.   Pass/Fail Analysis, NANC 357-2

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

A.   TEST IDENTITY

Test Case Number:	**NANC 357-3**	**SUT Priority:**	**SOA**	Required
			LSMS	Required

Objective:	SOA/LSMS – NPAC Personnel create a new service provider profile that includes a setting for the SP Type. The NPAC SMS broadcasts the service provider creating messaging to all SOAs and LSMSs in the region including the SP Type based on the configuration of their SOA Supports SP Type and LSMS Supports SP Type tunable settings in their NPAC Customer Profile settings. – Success

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 357
NANC FRS Version Number:		**Relevant Requirement(s):**	
NANC IIS Version Number:		**Relevant Flow(s):**	B.3.1

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	The SOA Supports Service Provider Type and LSMS Supports Service Provider Type tunables are set to production settings.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	**Expected Result**
1.	NPAC	NPAC Personnel create a new service provider on the NPAC SMS including a setting for the SP Type. The NPAC SMS issues an M-CREATE Request serviceProv to itself.	NPAC	NPAC SMS receives the M-CREATE Request serviceProv request and issues an M-CREATE Response to itself.
2.	NPAC	NPAC SMS issues an M-CREATE Request serviceProvNetwork to itself.	NPAC	NPAC SMS receives the M-CREATE Request serviceProvNetwork and issues an M-CREATE Response to itself.
3.	NPAC	NPAC SMS issues an M-CREATE Request serviceProvNetowork to each LSMS in the region for the Service Provider that NPAC Personnel just created. The NPAC includes the SP Type for the Service Provider if the receiving LSMS supports this attribute as specified in their NPAC Customer profile.	SP	Each LSMS in the region receives the M-CREATE Request serviceProvNetwork.

Each LSMS in the region issues their own M-CREATE Response back to the NPAC indicating they successfully received and processed the request. |

4.	NPAC	NPAC SMS issues an M-CREATE Request serviceProvNetowork to each SOA in the region for the Service Provider that NPAC Personnel just created. The NPAC includes the SP Type for the Service Provider if the receiving SOA supports this attribute as specified in their NPAC Customer profile.	SP	Each SOA in the region receives the M-CREATE Request serviceProvNetwork. Each SOA in the region issues their own M-CREATE Response back to the NPAC indicating they successfully received and processed the request.
5.	SP	Service provider personnel perform a local query for the service provider that was broadcast to them by the NPAC SMS.	SP	1. Service provider personnel verify on their LSMS that the service provider exists and has the SP Type attributes based on whether or not they support it. 2. Service provider personnel verify on their SOA that the service provider exists and has the SP Type attribute based on whether or not they support it.

E.	**Pass/Fail Analysis, NANC 357-3**	
Pass	**Fail**	**NPAC personnel performed the test case as written.**
Pass	**Fail**	**Service Provider personnel performed the test case as written.**

9. NANC 285 – SOA/LSMS Requested Subscription Version Query Max Size

A.   TEST IDENTITY

Test Case Number:	NANC 285-1	SUT Priority:	SOA	Conditional
			LSMS	N/A

Objective:	SOA – Service Provider personnel using their SOA submit a Subscription Version query request to the NPAC SMS specifying criteria that matches a number of Subscription Versions greater than the Maximum Subscription Query tunable – Success

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 285
NANC FRS Version Number:		Relevant Requirement(s):	RR5-153, RR5-154
NANC IIS Version Number:		Relevant Flow(s):	B.5.6

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that there are a number of Subscription Versions that can be queried that exceeds the Maximum Subscription Query tunable. 2. The Service Provider SOA SV Query Indicator is set to the production setting. In this test case Service Providers for whom their Service Provider SOA SV Query Indicator is set to FALSE will be referred to as "Service Providers that do not support enhanced SV Query capabilities". Service Providers for whom their Service Provider SOA SV Query Indicator is set to TRUE will be referred to as "Service Providers that do support enhanced SV Query capabilities".
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider personnel issue a query for Subscription Versions that will return query results larger than maximum subscription query tunable. The SOA issues a scoped/filtered M-GET CMIP Request for subscriptionVersionNPAC to the NPAC SMS.	NPAC	The NPAC SMS receives the M-GET Request from the Service Provider and determines that the results include a number of Subscription Versions greater than the Maximum Subscription Query tunables. For Service Provider SOAs that do not support enhanced SV Query capabilities, when the number of records is greater than the Maximum Subscription Query tunable, the NPAC SMS issues an M-GET Error Response indicating **complexityLimitation**. For Service Provider SOAs that do support enhanced SV Query capabilities, the NPAC SMS issues an M-GET Response for the number of records equal to the Maximum Subscription Query tunable.

| 2. | SP | The Service Provider SOA receives the M-GET Response.

For Service Provider SOAs that do support enhanced SV Query capabilities, because the amount of data returned is equal to the Maximum Subscription Query tunable, issue a subsequent M-GET Request starting with the next record from where the previous results left off. | NPAC | The NPAC SMS receives the M-GET Request from the SOA and issues and M-GET Response for the remaining data.

NOTE: This step may repeat until the NPAC response includes a number of records less than the Maximum Subscription Query tunable. Until that point, the SOA will continue to issue subsequent M-GET requests starting with the next record from the most recent NPAC response. The number of times this step may repeat is dependent on the prerequisite data.

The NPAC SMS responds with a final, empty M-GET Response indicating the end of the data. |

E.	**Pass/Fail Analysis, NANC 285-1**

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	For SOAs that do not support enhanced SV Query capabilities, they received the complexityLimitation error response.
Pass	Fail	For SOAs that do support enhanced SV Query capabilities, they received the M-GET Response(s) from the NPAC for the Subscription Version records and issued subsequent M-GET requests until the NPAC response indicated a number of records less than the Maximum Subscription Query tunable.

A. **TEST IDENTITY**

Test Case Number:	NANC 285-2	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS – Service Provider personnel using their LSMS submit a Subscription Version query request to the NPAC SMS specifying criteria that matches a number of Subscription Versions greater than the Maximum Subscription Query tunable – Success			

B. **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 285
NANC FRS Version Number:		Relevant Requirement(s):	RR5-153, RR5-155
NANC IIS Version Number:		Relevant Flow(s):	B.5.6

C. **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that there are a number of Subscription Versions that can be queried that exceeds the Maximum Subscription Query tunable. 2. The Service Provider LSMS SV Query Indicator is set to the production setting. In this test case Service Providers for whom their Service Provider LSMS SV Query Indicator is set to FALSE will be referred to as "Service Providers that do not support enhanced SV Query capabilities". Service Providers for whom their Service Provider LSMS SV Query Indicator is set to TRUE will be referred to as "Service Providers that do support enhanced SV Query capabilities".
Prerequisite SP Setup:	

D. **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the LSMS, Service Provider personnel issue a query for Subscription Versions that will return query results larger than maximum subscription query tunable. The LSMS issues a scoped/filtered M-GET CMIP Request for subscriptionVersionNPAC to the NPAC SMS.	NPAC	The NPAC SMS receives the M-GET Request from the Service Provider and determines that the results include a number of Subscription Versions greater than the Maximum Subscription Query tunables. For Service Provider LSMSs that do not support enhanced SV Query capabilities, when the number of records is greater than the Maximum Subscription Query tunable, the NPAC SMS issues an M-GET Error Response indicating **complexityLimitation**. For Service Provider LSMSs that do support enhanced SV Query capabilities, the NPAC SMS issues an M-GET Response for the number of records equal to the Maximum Subscription Query tunable.
2.	SP	The Service Provider LSMS	NPAC	The NPAC SMS receives the M-GET Request from the LSMS

	receives the M-GET Response. For Service Provider LSMSs that do support enhanced SV Query capabilities, because the amount of data returned is equal to the Maximum Subscription Query tunable, issue a subsequent M-GET Request starting with the next record from where the previous results left off.	and issues and M-GET Response for the remaining data. NOTE: This step may repeat until the NPAC response includes a number of records less than the Maximum Subscription Query tunable. Until that point, the LSMS will continue to issue subsequent M-GET requests starting with the next record from the most recent NPAC response. The number of times this step may repeat is dependent on the prerequisite data. The NPAC SMS responds with a final, empty M-GET Response indicating the end of the data.

E.	**Pass/Fail Analysis, NANC 285-2**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	For LSMSs that do not support enhanced SV Query capabilities, they received the complexityLimitation error response.
Pass	Fail	For LSMSs that do support enhanced SV Query capabilities, they received the M-GET Response(s) from the NPAC for the Subscription Version records and issued subsequent M-GET requests until the NPAC response indicated a number of records less than the Maximum Subscription Query tunable.

10. NANC 351 – Recovery Enhancements – SWIM Recovery

Service Providers that support SWIM recovery functionality will need to execute NANC 351 test cases. These may be executed during Group testing.

A. **TEST IDENTITY**

Test Case Number:	NANC 351-1	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS – EDR and Non-EDR LSMS Service Provider personnel submit a resynchronization request for service provider, network data, number pool block data (EDR only), subscription data, and notification data with SWIM indicator – Success			

B. **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 351
NANC FRS Version Number:		Relevant Requirement(s):	RR6-43, RR6-58, RR6-65, RR6-132, RR6-122, RR6-135, RR6-136, RR6-139, RR6-141, RR6-142
NANC IIS Version Number:		Relevant Flow(s):	B.7.1.1, B.7.2.1

C. **PREREQUISITE**

Prerequisite Test Cases:	

Prerequisite NPAC Setup:	1. Service Provider LSMS SWIM Recovery Indicator must be set to TRUE.
	2. The Service Provider Linked Replies Indicator must be set to TRUE.
	3. LSMS SWIM Maximum Tunable should be greater than or equal to 500 objects.
	4. While the LSMS is disconnected from the NPAC SMS, NPAC personnel perform the following functions.
	   a) Create 10 LRNs. (LRN group a)
	   b) Delete 5 LRNs for a different Service Provider. (LRN group b)
	   c) Create 10 NPA-NXXs. (NPA-NXX group c)
	   d) Delete 5 NPA-NXXs for a different Service Provider. (NPA-NXX group d)
	   e) Activate 10 new Blocks. If the LSMS under test supports SV Type and/or Optional Data elements specify these attributes with the Number Pool Block. (NPB group e)
	   f) DePool 5 existing Blocks. (NPB group f)
	   g) Create 2 NPA-NXX-Xs for different Service Providers. (Dash X group g)
	   h) Modify an NPA-NXX-X for a different Service Provider. (Dash X group h)
	   i) Delete an NPA-NXX-X for a different Service Provider. (Dash X group i)
	   j) Activate 20 Inter-SP Subscription Versions for a Pooled TN. (SV group j)
	   k) Disconnect 10 Pooled Ported TNs. (SV group k)
	   l) Activate 20 Inter-SP, Port-To-Original Subscription Versions for a Pooled Ported TN. (SV group l)
	   m) Create 25 Subscription Versions with the NPA-NXX created above, where the Service Provider under test is the New Service Provider. (SV group m)
	   n) Issue an activate request for a range of 10 Inter-Service Provider Subscription Versions. (SV group n).
	   o) Create a new service provider. (service provider group o)
	   p) Modify the NPA-NXX Effective Date for an NPA-NXX where the current date is less than the existing Effective Date and no pending-like SVs, NPA-NXX-Xs or NPBs exist for the respective NPA-NXX. (NPA-NXX group p)
	5. If the Region and the Service Provider under test support PLRN, establish (some) respective prerequisite data (PLRN SVs and NPB's). Verify that the SUT is included in the "PLRN Accepted SPID List" in their service provider profile so that they will receive respective PLRN information during resynchronization including downloads as appropriate for the test case. If the SUT is not included in the "PLRN Accepted SPID List" they will not receive this information during resynchronization.

Prerequisite SP Setup:	The Service Provider LSMS should be 'disassociated' from the NPAC SMS while NPAC personnel are performing the setup specified above.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	The Service Provider establishes an association from their LSMS to the NPAC SMS with the resynchronization flag set to TRUE.	NPAC	The NPAC SMS receives the association bind request from the LSMS. Once the association is established, the NPAC SMS queues all current updates.
2.	SP	The LSMS issues an M-ACTION Request lnpDownload (swim: service provider data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues a single, normal M-ACTION Response lnpDownload message with a status of Success and an ACTION_ID back to the LSMS with the Service Provider Data updates. NOTE: If the Service Provider Type LSMS Indicator is set to TRUE for the SP under test, and there is a SP Type set for the Service Provider that was created in the prerequisite data, then the SP Type will be included in the download information.

3.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 2 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
4.	SP	The LSMS issues an M-ACTION Request lnpDownload (swim: network data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS with the Network Data updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
5.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 4 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
6.	NPAC	As soon as the M-ACTION Request is received, NPAC personnel issue a create for an NPA-NXX.	NPAC	The NPAC SMS receives the M-CREATE Request serviceProvNPA-NXX.
7.	NPAC	The NPAC SMS checks to see if the M-CREATE servProvNPA-NXX can be sent to the LSMS in recovery.	NPAC	The NPAC SMS does NOT issue the M-CREATE servProvNPA-NXX to the LSMS since the LSMS is still in recovery.
8.	NPAC	NPAC personnel issue an SV activate request. (SV3)	NPAC	The NPAC SMS receives the M-ACTION Request. The NPAC SMS issues an M-SET Request to itself and sets the SV's status to Sending. The NPAC SMS issues an M-SET Response to itself.
9.	NPAC	The NPAC SMS checks to see if the M-CREATE subscriptionVersion can be sent to the LSMS in recovery.	NPAC	The NPAC SMS does NOT issue the M-CREATE subscriptionVersion to the LSMS since the LSMS is still in recovery.
10.	SP	The EDR and/or non-EDR LSMS Service Provider issues an M-ACTION Request lnpDownload (swim: subscription data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS. EDR LSMSs will receive only non-pooled Subscription Version Data updates while Non-EDR LSMSs will receive both non-pooled, and pooled Subscription Version Data updates.

				NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
11.	SP	The EDR and/or non-EDR LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 10 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
12. conditio nal	SP	The EDR LSMS Service Provider issues an M-ACTION Request lnpDownload (swim: number pool block data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the EDR LSMS with the number pool block updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response. NOTE: If the LSMS under test supports SV Type and/or Optional Data elements attributes this information will be included in the recovery information.
13.	SP	The EDR LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 12 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResults back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
14.	SP	The LSMS Service Provider issues an M-ACTION Request lnpNotificationRecovery (swim: notification data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues multiple, linked M-ACTION replies lnpNotificationRecovery with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS with the notification updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
15.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 14	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM

		expected results, to the NPAC SMS indicating the replies for this data were successfully processed.		list for this Service Provider under test.
16.	SP	The LSMS Service Provider issues an M-ACTION Request lnpRecoveryComplete to the NPAC SMS to set the resynchronization flag to FALSE.	NPAC	The NPAC SMS receives the M-ACTION Request from the LSMS and sets the resynchronization flag to 'off'.
17.	NPAC	NPAC SMS issues the following messages to the LSMS for the request made while the LSMS was in recovery: • M-CREATE Request serviceProvNPA-NXX for the NPA-NXX that was created during recovery. • M-CREATE Request subscriptionVersion for the Subscription Version that was activated during recovery.	SP	The service provider's LSMS receives the requests from the NPAC SMS for the requests that occurred during recovery and issues the following responses: • M-CREATE Response serviceProvNPA-NXX for the NPA-NXX that was created during recovery, indicating the LSMS successfully received/processed the request. • M-CREATE Response subscriptionVersion for the Subscription Version that was activated during recovery, indicating the LSMS successfully received/processed the request.
18. optional	SP	Service Provider personnel, using the LSMS, perform a local query for the data updated in this test case.	SP	Verify that the following updates were sent: • LRN group a was created. • LRN group b was deleted. • NPA-NXX group c was created. • NPA-NXX group d was deleted. • On non-EDR LSMSs, Pooled Subscription Versions associated with NPB e were created. • On EDR LSMSs, the NPB e was created. If the LSMS supports SV Type and/or Optional Data elements, these attributes are included. • On non-EDR LSMSs, Pooled Subscription Versions associated with NPB f were deleted. • On EDR LSMSs, the NPB f was deleted. • NPA-NXX-X (Dash X group g) was created – if supported by the Service Provider LSMS. • NPA-NXX-X (Dash X group h) was modified – if supported by the Service Provider LSMS. • NPA-NXX-X (Dash X group i) was deleted – if supported by the Service Provider LSMS. • SV group j was created/activated. • SV group k was disconnected. • SV group l was created/activated. • SV group m was created. • SV group n was activated. • Service Provider group o was created; if the LSMS Supports SPID Recovery. The Service Provider will include the SP Type if the Service Provider Type LSMS Indicator is set to TRUE for the SP under test, and an SP Type was set for the Service Provider created in the prerequisites, then the SP Type will be included in the

				download information.
				• Notifications were recovered, including applicable notifications based on the pre-requisite data.
				• First port of NPA-NXX notification associated with SV group m was sent.
				• 1 NPA-NXX create after recovery is complete
				• SV3 was activated after recovery is complete.
				• NPA-NXX group p, to verify the Effective Date was modified as indicated in the prerequisite data.
19.	NPAC	NPAC personnel perform a Full audit for the Subscription Versions that were activated during this test case.	NPAC	Using the Audit Results Log, verify that there were no updates made. If any updates were made as a result of running this audit, this test case fails.

E.	Pass/Fail Analysis, NANC 351-1	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

A.   TEST IDENTITY

Test Case Number:	NANC 351-2	SUT Priority:	SOA	Conditional
			LSMS	N/A
Objective:	SOA – Service Provider personnel submit a resynchronization request for service provider, network data, and notification data with the SWIM indicator – Success (conditional)			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 351
NANC FRS Version Number:		Relevant Requirement(s):	RR6-43, RR6-132, RR6-122, RR6-135, RR6-136, RR6-137, RR6-139, RR6-140, RR6-142
NANC IIS Version Number:		Relevant Flow(s):	B.7.3.1

C.   PREREQUISITE

Prerequisite Test Cases:	

| Prerequisite NPAC Setup: | Prerequisite data may be set up different depending on if this test case is being run during Individual testing versus Group Testing. For example, during Individual Testing, if the service provider under test does not support NPA-NXX-X's, don't perform any of the related tasks or verify related data.

1. Service Provider SOA SWIM Recovery Indicator must be set to TRUE.
2. While the SOA is disconnected from the NPAC SMS, NPAC personnel should perform the following functions for data to be resync'd:
   • Create a new Service Provider.
   • Create an LRN.
   • Delete an LRN for a different Service Provider.
   • Create an NPA-NXX.
   • Delete an NPA-NXX for a different Service Provider.
   • <u>Modify the Effective Date of an NPA-NXX (where the current date is less than the existing Effective Date and no pending-like SVs, NPA-NXX-Xs or NPBx exist for the respective NPA-NXX.</u>
   • Create NPA-NXX-X Information for different Service Providers.
   • Modify NPA-NXX-X Information for different Service Providers.
   • Delete NPA-NXX-X Information for different Service Providers.
   • Activate a Block on behalf of the Service Provider that is 'down' (with SOA Origination TRUE, if supported by the Service Provider under test) (If the SOA under test also supports SV Type and/or NPB attributes include these attributes in the NPB you are activating).
   • Create a Subscription Version with the NPA-NXX created above on behalf of the Old Service Provider and where the Service Provider Under Test is the New Service Provider; let the Initial and Final Concurrence timers expire.
   • Issue an immediate disconnect for a Subscription Version where the Service Provider Under Test is the Donor Service Provider.
   • Issue a Cancel request for a Pending Inter-Service Provider Subscription Version for which both service providers have concurred to the Pending port, on behalf of the Service Provider Under Test, let the Cancellation Initial Concurrence Timer expire.
   • Acting as the Old Service Provider issue a Create request for a range of two Pending Subscription Versions that were initially created by the Service Provider under test (as the New Service Provider), where the Authorization Flag is set to "False" and provide a Cause Code.
   • Issue an activate request for an Inter-Service Provider Subscription Version on behalf of the Service Provider Under Test.
   • Issue an Activate request for a range of two Inter-Service Provider Subscription Versions where a broadcast to the LSMSs goes into a Partial Failure status.
   • <u>If the SUT's, S-3.00 C, Attribute Value Change, For Mass Update of Active SVs and NPBs notification priority is set to a value other than NONE, issue a Mass Update for non-pooled Subscription Versions and NPBs/pooled Subscription Versions.</u>
3. While the SOA is in recovery, NPAC personnel should perform the following functions:
   • Create an NPA-NXX.
   • Activate a Subscription Version as the Service Provider Under Test.
4.   If the Region and the Service Provider under test support PLRN, establish (some) respective prerequisite data (PLRN SVs and NPB's). Verify that the SUT is included in the "PLRN Accepted SPID List" in their service provider profile so that they will receive respective PLRN information during resynchronization including notifications as appropriate for the test case. If the SUT is not included in the "PLRN Accepted SPID List" they will not receive this information during resynchronization.
NOTE: If the Service Provider SOA supports Optional Data elements and/or SV Type, these attributes will be included in the Number Pool Block and Subscription Version prerequisite steps above; these attributes will be appropriately included in the notifications recovered. |

Prerequisite SP Setup:	The service provider SOA should be 'disassociated' from the NPAC SMS while NPAC personnel are performing the setup specified above.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	The Service Provider establishes an association from their SOA to the NPAC SMS with the resynchronization flag set to TRUE.	NPAC	The NPAC SMS receives the association bind request from the SOA. Once the association is established, the NPAC SMS queues all current updates.
2.	SP	The SOA issues an M-ACTION Request lnpDownload (swim: service provider data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues a single, normal M-ACTION Response lnpDownload with a status of Success and an ACTION_ID back to the SOA with the Service Provider Data updates. NOTE: If the Service Provider Type SOA Indicator is set to TRUE for the SP under test, and there is a SP Type set for the Service Provider that was created in the prerequisite data, then the SP Type will be included in the download information.
3.	SP	The SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 2 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test. NOTE: If the SUT's S-3.00 C Attribute Value Change for Mass Update of Active SVs and NPBs notification priority is set to a value other than NONE, they will receive M-EVENT-REPORT AttributeValueChange notifications for the modified attributes. This will be a subscriptionVersionAttributeValueChange for the non-pooled Subscription Versions and/or numberPoolBlockAttributeValueChange to the Current/Block Holder Service Provider *if* the numberPoolBlockSOA-OriginationIndicator is set to TRUE.
4.	SP	The SOA issues an M-ACTION Request lnpDownload (swim: network data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the SOA with the Network Data updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
5.	SP	The SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 4 expected results, to the NPAC SMS indicating the replies for this data	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.

		were successfully processed.		
6.	NPAC	As soon as the M-ACTION Request is received, NPAC personnel issue a create for an NPA-NXX.	NPAC	The NPAC SMS receives the M-CREATE Request serviceProvNPA-NXX.
7.	NPAC	The NPAC SMS checks to see if the M-CREATE servProvNPA-NXX can be sent to the SOA in recovery.	NPAC	The NPAC SMS does NOT issue the M-CREATE servProvNPA-NXX to the SOA since the SOA is still in recovery.
8.	NPAC	NPAC personnel issue an SV activate request.	NPAC	The NPAC SMS receives the M-ACTION Request. The NPAC SMS issues an M-SET Request to itself and sets the SV's status to Sending. The NPAC SMS issues an M-SET Response to itself.
9.	NPAC	The NPAC SMS checks to see if the M-EVENT-REPORT objectCreation can be sent to the SOA in recovery.	NPAC	The NPAC SMS does NOT issue the M-EVENT-REPORT objectCreation to the SOA since the SOA is still in recovery.
10.	SP	The SOA Service Provider issues an M-ACTION Request lnpNotificationRecovery (swim: notification data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request and issues multiple, linked M-ACTION replies lnpNotificationRecovery with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the SOA with Notification updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response. NOTE: If the SOA under test supports SV Type and/or Optional Data elements these attributes will be included in the numberPool-objectCreation and subscriptionVersion-objectCreation notifications recovered (if the attributes were specified in the prerequisite data above). NOTE: If the Service Provider under test supports Medium Timer Indicator, perform the respective prerequisite SV create requests including the MTI indicator; this attribute will be included in the subscriptionVersion-objectCreation (including Range) notifications.
11.	SP	The SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 10 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
12.	SP	The SOA Service Provider issues an M-ACTION Request lnpRecovery to the NPAC SMS to set the resynchronization flag to FALSE.	NPAC	The NPAC SMS receives the M-ACTION Request from the SOA and sets the resynchronization flag to 'off'.
13.	NPAC	NPAC SMS issues the following messages to the SOA for the request	SP	The service provider's SOA receives the requests from the NPAC SMS for the requests that occurred during recovery and

		made while the SOA was in recovery: • M-CREATE Request serviceProvNPA-NXX for the NPA-NXX that was created during recovery. • The NPAC SMS will issue, depending upon the new service provider's TN Range Notification Indicator, a subscriptionVersionStatusAttributeValueChange or subscriptionVersionRangeStatusAttributeValueChange M-EVENT-REPORT notifications to the new service provider SOA of the status change using an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange.		issues the following responses: • M-CREATE Response serviceProvNPA-NXX for the NPA-NXX that was created during recovery, indicating the SOA successfully received/processed the request. • M-EVENT-REPORT Confirmation for the Subscription Version that NPAC personnel activated on behalf of the service provider during recovery, indicating the SOA successfully received the M-EVENT-REPORT.
14.	NPAC	NPAC personnel verify the data was sent in the action response.	NPAC	Verify that the appropriate data was sent.
15. optional	SP	Service Provider personnel, using the SOA, perform a local query for the actions taken in this test case.	SP	Verify that the following updates were made: • 1 Service Provider create; If the SOA Supports SPID Recovery is set to TRUE. The Service Provider create will include the SP Type if the Service Provider Type SOA Indicator is set to TRUE for the SP under test, and an SP Type was set for the Service Provider created in the prerequisites, then the SP Type will be included in the download information. • 1 LRN create. • 1 LRN delete. • 1 NPA-NXX create. • 1 NPA-NXX delete. • <u>The Effective Date for the NPA-NXX that was modified is updated.</u> • • 1 NPA-NXX-X create – if supported by the Service Provider SOA. • 1 NPA-NXX-X modify – if supported by the Service Provider SOA. • 1 NPA-NXX-X delete – if supported by the Service Provider SOA. • 1 numberPoolBlock-objectCreation including SV Type and/or Optional Data elements – if the SOA under test supports blocks and these attributes. • objectCreation notification and for the SV created where SP under test is NSP. • statusAttributeValueChange notification for the immediate disconnect initiated during prerequisite steps. • statusAttributeValueChange notification for the SV

				canceled during prerequisite steps. • attributeValueChange notification (or range notification depending on whether the SP under test supports range notifications) for the SV range created by the OSP in response to a NSP (SUT) create during prerequisite steps. • statusAttributeValueChange for the SV activate indicated in the prerequisite steps. • statusAttributeValueChange (or range notification depending on whether the SP under test supports range notifications) for the range of two Inter-SP SVs where the status indicates PF. • NOTE: If the SOA under test supports SV Type and/or Optional Data elements these attributes are included in the numberPoolBlock-objectCreation and subscriptionVersion-objectCreation notifications recovered. NOTE: If the Service Provider under test supports Medium Timer Indicator, and the respective prerequisite SV create requests included the MTI indicator; this attribute will be included in the subscriptionVersion-objectCreation (including Range) notifications. • 1 First port of NPA-NXX notification. • 1 NPA-NXX create after recovery is complete • 1 Subscription Version activate after recovery is complete

E.	**Pass/Fail Analysis, NANC 351-2**			

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

A.   TEST IDENTITY

Test Case Number:	NANC 351-3	SUT Priority:	SOA	N/A
			LSMS	Conditional

Objective:	LSMS – EDR and Non-EDR LSMS Service Provider personnel submit a resynchronization request for service provider data, network data, number pool block data (EDR only), subscription data (that exceeds the Subscription Data Maximum Linked Recovered Objects) and notification data. The SWIM maximum tunable has also been exceeded - Success for part of the data
	Perform regular recovery to recover data in excess of the SWIM Maximum tunable.

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 351
NANC FRS Version Number:		Relevant Requirement(s):	RR6-139
NANC IIS Version Number:		Relevant Flow(s):	B.7.1.1, B.7.2.1

C.   PREREQUISITE

Prerequisite Test Cases:	

| Prerequisite NPAC Setup: | 1. Service Provider LSMS SWIM Recovery Indicator must be set to TRUE.
2. The Service Provider Linked Replies Indicator must be set to TRUE.
3. LSMS SWIM Maximum Tunable should be set to a value less than the amount of prerequisite data (realistically only less than the volume of prerequisite SV data) in order to adequately create the test scenario that will require *regular* recovery after the SWIM recovery.
4. While the LSMS is disconnected from the NPAC SMS, NPAC personnel perform the following functions.
  a) Create 10 LRNs. (LRN group a)
  b) Delete 5 LRNs for a different Service Provider. (LRN group b)
  c) Create 10 NPA-NXXs. (NPA-NXX group c)
  d) Delete 5 NPA-NXXs for a different Service Provider. (NPA-NXX group d)
  e) Activate 10 new Blocks. (NPB group e)
  f) DePool 5 existing Blocks. (NPB group f)
  g) Create 2 NPA-NXX-Xs for different Service Providers. (Dash X group g)
  h) Modify an NPA-NXX-X for a different Service Provider. (Dash X group h)
  i) Delete an NPA-NXX-X for a different Service Provider. (Dash X group i)
  j) Activate 50 Inter-SP Subscription Versions for a Pooled TN. (SV group j)
  k) Disconnect 25 Pooled Ported TNs. (SV group k)
  l) Activate 50 Inter-SP, Port-To-Original Subscription Versions for a Pooled Ported TN. (SV group l)
  m) Create 50 Subscription Versions with the NPA-NXX created above, where the Service Provider under test is the New Service Provider. (SV group m)
  n) Issue an activate request for a range of 20 Inter-Service Provider Subscription Versions. (SV group n).
  o) Create a new service provider. (service provider group o)
5. If the Region and the Service Provider under test support PLRN, establish (some) respective prerequisite data (PLRN SVs and NPB's). Verify that the SUT is included in the "PLRN Accepted SPID List" in their service provider profile so that they will receive respective PLRN information during resynchronization including downloads as appropriate for the test case. If the SUT is not included in the "PLRN Accepted SPID List" they will not receive this information during resynchronization.

NOTE: Create enough subscription version activity that you are sure to exceed the Subscription Data Maximum Linked Recovered Objects tunable.
NOTE: If the Service Provider under test supports WSMSC, Optional Data elements and/or SV Type include these attributes in the subscription version and number pool block processing above. |
| Prerequisite SP Setup: | The Service Provider LSMS should be 'disassociated' from the NPAC SMS while NPAC personnel are performing the setup specified above. |

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	The Service Provider establishes an association from their LSMS to the NPAC SMS with the resynchronization flag set to TRUE.	NPAC	The NPAC SMS receives the association bind request from the LSMS. Once the association is established, the NPAC SMS queues all current updates.
2.	SP	The LSMS issues an M-ACTION Request lnpDownload (swim: service provider data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues a single, normal M-ACTION Response lnpDownload with a status of Success and an ACTION_ID, message back to the SOA with the Service Provider Data updates.

				NOTE: If the Service Provider Type LSMS Indicator is set to TRUE for the SP under test, and there is a SP Type set for the Service Provider that was created in the prerequisite data, then the SP Type will be included in the download information.
3.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 2 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Failed, an error code and a stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
4.	SP	The LSMS issues an M-ACTION Request lnpDownload (swim: network data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS with the Network Data updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
5.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 4 expected results, to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Failed, an error code and a stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
6.	NPAC	As soon as the M-ACTION Request is received, NPAC personnel issue a create for an NPA-NXX.	NPAC	The NPAC SMS receives the M-CREATE Request serviceProvNPA-NXX.
7.	NPAC	The NPAC SMS checks to see if the M-CREATE servProvNPA-NXX can be sent to the LSMS in recovery.	NPAC	The NPAC SMS does NOT issue the M-CREATE servProvNPA-NXX to the LSMS since the LSMS is still in recovery.
8.	NPAC	NPAC personnel issue an SV activate request. (SV3)	NPAC	The NPAC SMS receives the M-ACTION Request. The NPAC SMS issues an M-SET Request to itself and sets the SV's status to Sending. The NPAC SMS issues an M-SET Response to itself.
9.	NPAC	The NPAC SMS checks to see if the M-CREATE subscriptionVersion can be sent to the LSMS in recovery.	NPAC	The NPAC SMS does NOT issue the M-CREATE subscriptionVersion to the LSMS since the LSMS is still in recovery.
10.	SP	The EDR and/or non-EDR LSMS Service Provider issues an M-ACTION Request lnpDownload (swim: subscription data) to the	NPAC	The NPAC SMS receives the M-ACTION Request. The prerequisite SV data exceeds the SWIM Maximum Tunable.

		NPAC SMS.		The NPAC SMS issues multiple sets of, multiple linked M-ACTION replies, lnpDownload. The first set of linked replies will each have a status of Swim-More-Data and (the same) ACTION_ID. The EDR and/or non-EDR LSMS will need to issue subsequent M-ACTION Request lnpDownload (swim: subscription data), including the latest ACTION_ID, to the NPAC SMS until the M-ACTION Response from the NPAC SMS indicates a status of Success with an ACTION_ID. Each set of linked replies will be followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS. The NPAC SMS will clear the downloaded data associated with each M-ACTION Response upon receiving a subsequent M-ACTION lnpDownload request from the LSMS with the previous ACTION_ID. EDR LSMSs will receive only non-pooled Subscription Version Data updates while NON-EDR LSMSs will receive both non-pooled, and pooled Subscription Version Data updates. NOTE: If the Service Provider LSMS supports WSMSC, Optional Data elements and/or SV Type, these attributes will be included in the downloads as appropriate.
11.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the last ACTION_ID from step 10 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Failed, an error code and a stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears the downloaded data (associated with the last M-ACTION Request/Response and the ACTION_ID in this request) from the SWIM list for this Service Provider under test.
12. conditional	SP	The EDR LSMS Service Provider issues an M-ACTION Request lnpDownload (swim: number pool block data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the EDR LSMS with the number pool block updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response. NOTE: If the Service Provider LSMS supports WSMSC, Optional Data elements and/or SV Type, these attributes will be included in the downloads as appropriate.
13.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 12	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Failed, an error code and a stop-date timestamp indicating SWIM has been

		expected results, to the NPAC SMS indicating the replies for this data were successfully processed.		turned off for the Service Provider under test. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
14.	SP	The LSMS Service Provider issues an M-ACTION Request lnpNotificationRecovery (swim: notification data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS with the notification updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
15.	SP	The LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 14 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Failed an error code and a stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
16.	SP	The LSMS Service Provider issues an M-ACTION Request lnpDownload (SP data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues a single normal response back to the LSMS with any additional data to recover. NOTE: If you are using the exact prerequisites as described above, there shouldn't be additional SP data to recover, however it's difficult to determine all activity that may be occurring during test.
17.	SP	The LSMS Service Provider issues an M-ACTION Request lnpDownload (Network data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues a single normal response back to the LSMS with any additional data to recover. NOTE: If you are using the exact prerequisites as described above, there shouldn't be additional Network data to recover, however it's difficult to determine all activity that may be occurring during test.
18.	SP	The EDR and/or non-EDR LSMS Service Provider issues an M-ACTION Request lnpDownload (subscription data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues multiple, linked M-ACTION replies, lnpDownload, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS (with the 'non-pooled' Subscription Version Data updates to the EDR LSMS and pooled and non-pooled Subscription Version Data updates to the EDR LSMS). NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple,

				linked replies followed by a non-linked empty normal response. NOTE: If the Service Provider LSMS supports WSMSC, Optional Data elements and/or SV Type, these attributes will be included in the downloads as appropriate.
19.	SP	The EDR LSMS Service Provider issues an M-ACTION Request lnpDownload (Number Pool Block data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues a single normal response back to the LSMS with any additional data to recover. NOTE: If you are using the exact prerequisites as described above, there shouldn't be additional Number Pool Block data to recover, however it's difficult to determine all activity that may be occurring during test. NOTE: If the Service Provider LSMS supports WSMSC, Optional Data elements and/or SV Type, these attributes will be included in the downloads as appropriate.
20.	SP	The LSMS Service Provider issues an M-ACTION Request lnpNotificationRecovery (Notification data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues a single normal response back to the LSMS with any additional data to recover. NOTE: If you are using the exact prerequisites as described above, there shouldn't be additional Notification data to recover, however it's difficult to determine all activity that may be occurring during test.
21.	SP	The LSMS Service Provider issues an M-ACTION Request lnpRecoveryComplete to the NPAC SMS to set the resynchronization flag to FALSE.	NPAC	The NPAC SMS receives the M-ACTION Request from the LSMS and sets the resynchronization flag to 'off'.
22.	NPAC	NPAC SMS issues the following messages to the LSMS for the request made while the LSMS was in recovery: • M-CREATE Request serviceProvNPA-NXX for the NPA-NXX that was created during recovery. • M-CREATE Request subscriptionVersion for the Subscription Version that was activated during recovery.	SP	The service provider's LSMS receives the requests from the NPAC SMS for the requests that occurred during recovery and issues the following responses: • M-CREATE Response serviceProvNPA-NXX for the NPA-NXX that was created during recovery, indicating the LSMS successfully received/processed the request. • M-CREATE Response subscriptionVersion for the Subscription Version that was activated during recovery, indicating the LSMS successfully received/processed the request.
23. optional	SP	Service Provider personnel, using the LSMS, perform a local query for the data updated in this test case.	SP	Verify that the following updates were sent: • LRN group a was created. • LRN group b was deleted. • NPA-NXX group c was created. • NPA-NXX group d was deleted. • On non-EDR LSMSs, Pooled Subscription Versions associated with NPB e were created.

				• On EDR LSMSs, NPB e was created. • On non-EDR LSMSs, Pooled Subscription Versions associated with NPB f were deleted. • On EDR LSMSs, NPB f was deleted. • NPA-NXX-X (Dash X group g) was created – if supported by the Service Provider LSMS. • NPA-NXX-X (Dash X group h) was modified – if supported by the Service Provider LSMS. • NPA-NXX-X (Dash X group i) was deleted – if supported by the Service Provider LSMS. • SV group j was created/activated. • SV group k was disconnected. • SV group l was created/activated. • SV group m was created. • SV group n was activated. • Service Provider group o was created; If the Service Provider Type LSMS Indicator is set to TRUE for the SP under test, and an SP Type was set for the Service Provider created in the prerequisites, then the SP Type will be included in the download information. • Notifications were recovered, including applicable notifications based on the pre-requisite data. • First port of NPA-NXX notification associated with SV group m was sent. • 1 NPA-NXX create after recovery is complete • SV3 was activated after recovery is complete. • Verify that the WSMSC, Optional Data elements and/or SV Type attributes are present if the Service Provider under test supports these attributes on their LSMS and based on how they were specified in the prerequisite subscription version and number pool block data.
24.	NPAC	NPAC personnel perform a Full audit for the Subscription Versions that were activated during this test case.	NPAC	Using the Audit Results Log, verify that there were no updates made. If any updates were made as a result of running this audit, this test case fails.

E.   Pass/Fail Analysis, NANC 351-3

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

A.   TEST IDENTITY

Test Case Number:	NANC 351-4	SUT Priority:	SOA	Conditional
			LSMS	N/A

Objective:	SOA – Service Provider personnel submit a resynchronization request for service provider, network data, and notification data (that exceeds the Notification Data Maximum Linked Recovered Notifications). The SWIM maximum tunable has also been exceeded – Success for part of the data Perform regular recovery to recover data in excess of the SWIM Maximum tunable.

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 351
NANC FRS Version Number:		Relevant Requirement(s):	RR6-139
NANC IIS Version Number:		Relevant Flow(s):	B.7.3.1

C.   PREREQUISITE

Prerequisite Test Cases:	

Prerequisite NPAC Setup:	Prerequisite data may be set up different depending on if this test case is being run during Individual testing versus Group Testing. For example, during Individual Testing, if the service provider under test does not support NPA-NXX-X's, don't perform any of the related tasks or verify related data.
	1. Service Provider SOA SWIM Recovery Indicator must be set to TRUE.
	2. The Service Provider Linked Replies Indicator must be set to TRUE.
	3. SOA SWIM Maximum Tunable should be set to a value less than the amount of prerequisite data (realistically only less than the volume of prerequisite Notification data) in order to adequately create the test scenario that will require *regular* recovery after the SWIM recovery.
	4. While the SOA is disconnected from the NPAC SMS, NPAC personnel should perform the following functions for data to be resync'd:
	• Create a new Service Provider.
	• Create an LRN.
	• Create an NPA-NXX.
	• Create NPA-NXX-X Information for different Service Providers.
	• Modify NPA-NXX-X Information for different Service Providers.
	• Activate 10 Blocks on behalf of the Service Provider that is 'down' with SOA Origination TRUE. If the SOA under test supports SV Type and/or Optional Data elements include these attributes in the NPBs you are activating.
	• Create 20 Subscription Versions with the NPA-NXX created above on behalf of the Old Service Provider and where the Service Provider Under Test is the New Service Provider; let the Initial and Final Concurrence timers expire.
	• Issue an immediate disconnect for 20 Subscription Versions where the Service Provider Under Test is the Donor Service Provider.
	• Issue a Cancel request for 10 Pending Inter-Service Provider Subscription Versions for which both service providers have concurred to the Pending port, on behalf of the Service Provider Under Test, let the Cancellation Initial Concurrence Timer expire.
	• Issue a Create request for a range of 10 Pending Subscription Versions that were initially created by the New Service Provider, on behalf of the Old Service Provider, where the Authorization Flag is set to "False" and provide a Cause Code.
	• Issue an activate request for 20 Inter-Service Provider Subscription Versions on behalf of the Service Provider Under Test.
	• Issue an Activate request for a range of two Inter-Service Provider Subscription Versions where a broadcast to the LSMSs goes into a Partial Failure status.
	5. If the Region and the Service Provider under test support PLRN, establish (some) respective prerequisite data (PLRN SVs and NPB's). Verify that the SUT is included in the "PLRN Accepted SPID List" in their service provider profile so that they will receive respective PLRN information during resynchronization including notifications as appropriate for the test case. If the SUT is not included in the "PLRN Accepted SPID List" they will not receive this information during resynchronization.
	NOTE: Create enough notification activity that you are sure to exceed the Notification Data Maximum Linked Recovered Notifications tunable.
	NOTE: If the Service Provider SOA supports Optional Data elements and/or SV Type, these attributes will be included in the Number Pool Block and Subscription Version prerequisite steps above; these attributes will be appropriately included in the notifications recovered.
	NOTE: If the Service Provider under test supports Medium Timer Indicator, perform the respective prerequisite Subscription Version create requests including the MTI indicator; this attribute will be included in the appropriate notifications recovered.
	6. While the SOA is in recovery, NPAC personnel should perform the following functions:
	• Create an NPA-NXX.

Prerequisite SP Setup:	The service provider SOA should be 'disassociated' from the NPAC SMS while NPAC personnel are performing the setup specified above.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	The Service Provider establishes an association from their SOA to the NPAC SMS with the resynchronization flag set to TRUE.	NPAC	The NPAC SMS receives the association bind request from the SOA. Once the association is established, the NPAC SMS queues all current updates.
2.	SP	The SOA issues an M-ACTION Request lnpDownload (swim: service provider data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues a single, normal M-ACTION Response lnpDownload with a status of Success and an ACTION_ID, message back to the SOA with the Service Provider Data updates. NOTE: If the Service Provider Type SOA Indicator is set to TRUE for the SP under test, and there is a SP Type set for the Service Provider that was created in the prerequisite data, then the SP Type will be included in the download information.
3.	SP	The SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 2 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Failed an error code and stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
4.	SP	The SOA issues an M-ACTION Request lnpDownload (swim: network data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION and issues multiple, linked M-ACTION replies lnpDownload with a status of Success and an ACTION_ID, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the SOA with the Network Data updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response.
5.	SP	The SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 4 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Failed an error code and a stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
6.	NPAC	As soon as the M-ACTION Request is received, NPAC personnel issue a create for an NPA-NXX.	NPAC	The NPAC SMS receives the M-CREATE Request serviceProvNPA-NXX.
7.	NPAC	The NPAC SMS checks to see if the M-CREATE servProvNPA-NXX can be sent to the SOA in recovery.	NPAC	The NPAC SMS does NOT issue the M-CREATE servProvNPA-NXX to the SOA since the SOA is still in recovery.

8.	NPAC	NPAC personnel issue an SV activate request.	NPAC	The NPAC SMS receives the M-ACTION Request. The NPAC SMS issues an M-SET Request to itself and sets the SV's status to Sending. The NPAC SMS issues an M-SET Response to itself.
9.	NPAC	The NPAC SMS checks to see if the M-EVENT-REPORT objectCreation can be sent to the SOA in recovery.	NPAC	The NPAC SMS does NOT issue the M-EVENT-REPORT objectCreation to the SOA since the SOA is still in recovery.
10.	SP	The SOA Service Provider issues an M-ACTION Request lnpNotificationRecovery (swim: notification data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request. The prerequisite Notification data (generated from NPB and SV activities) exceeds the SWIM Maximum Tunable. The NPAC SMS issues multiple sets of, multiple linked M-ACTION replies lnpNotificationRecovery . The first set of linked replies will each have a status of Swim-More-Data and (the same) ACTION_ID. The SOA will need to issue subsequent M-ACTION Request lnpNotificationRecovery (swim: notification data), including the latest ACTION_ID, to the NPAC SMS until the M-ACTION Response from the NPAC SMS indicates a status of Success with an ACTION_ID. Each set of linked replies will be followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the SOA with Notification updates. The NPAC SMS will clear the downloaded data associated with each M-ACTION Response upon receiving a subsequent M-ACITON lnpNotificationRecovery request from the SOA with the previous ACTION_ID. NOTE: If the SOA under test supports SV Type and/or Optional Data elements and this information was specified in the prerequisite data this information will be included in the numberPoolBlock-objectCreation and subscriptionVersion-objectCreation notifications. NOTE: If the SOA under test supports Medium Timer Indicator this attributes will be included in the respective subscriptionVersion-objectCreation notifications.
11.	SP	The SOA issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the last ACTION_ID from step 10 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the SOA and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the SOA with a status of Failed, an error code and a stop-date timestamp indicating SWIM has been turned off for the Service Provider under test. The NPAC SMS clears the downloaded data (associated with the last M-ACTION Request/Response and the ACTION_ID in this request) from the SWIM list for this Service Provider under test.
12.	SP	The SOA Service Provider issues an M-ACTION Request lnpDownload (SP data) to the NPAC SMS and specifies the start time for the	NPAC	The NPAC SMS receives the M-ACTION Request and issues a single normal response back to the SOA with any additional data to recover.

		resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.		NOTE: If you are using the exact prerequisites as described above, there shouldn't be additional SP data to recover, however it's difficult to determine all activity that may be occurring during test.
13.	SP	The SOA Service Provider issues an M-ACTION Request lnpDownload (Network data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues a single normal response back to the SOA with any additional data to recover. NOTE: If you are using the exact prerequisites as described above, there shouldn't be additional Network data to recover, however it's difficult to determine all activity that may be occurring during test.
14.	SP	The SOA Service Provider issues an M-ACTION Request lnpNotificationRecovery (notification data) to the NPAC SMS and specifies the start time for the resync request equal to the stop-date timestamp provided in each of the M-EVENT-REPORT SwimProcessing-RecoveryResponse steps above.	NPAC	The NPAC SMS receives the M-ACTION Request and issues multiple, linked M-ACTION replies, lnpNotificationRecovery, followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the SOA with Notification Data updates. NOTE: In the case where the amount of data to be returned is less than the associated Blocking Factor, the M-ACTION response will be a single normal response. In the case where the amount of data to be returned is greater than the associated Blocking Factor, the M-ACTION response will be multiple, linked replies followed by a non-linked empty normal response. NOTE: If the SOA under test supports SV Type and/or Optional Data elements and this information was specified in the prerequisite data this information will be included in the numberPoolBlock-objectCreation and subscriptionVersion-objectCreation notifications. NOTE: If the Service Provider under test supports Medium Timer Indicator, perform the respective prerequisite SV create requests including the MTI indicator; this attribute will be included in the subscriptionVersion-objectCreation (including Range) notifications.
15.	SP	The SOA Service Provider issues an M-ACTION Request lnpRecovery to the NPAC SMS to set the resynchronization flag to FALSE.	NPAC	The NPAC SMS receives the M-ACTION Request from the SOA and sets the resynchronization flag to 'off'.
16.	NPAC	NPAC SMS issues the following messages to the SOA for the request made while the SOA was in recovery: • M-CREATE Request serviceProvNPA-NXX for the NPA-NXX that was created during recovery. • The NPAC SMS will issue, depending upon the new service provider's TN Range Notification Indicator, a	SP	The service provider's SOA receives the requests from the NPAC SMS for the requests that occurred during recovery and issues the following responses: • M-CREATE Response serviceProvNPA-NXX for the NPA-NXX that was created during recovery, indicating the SOA successfully received/processed the request. • M-EVENT-REPORT Confirmation for the Subscription Version that NPAC personnel activated on behalf of the service provider during recovery, indicating the SOA successfully received the M-EVENT-REPORT.

		subscriptionVersionStatusAttributeValueChange or subscriptionVersionRangeStatusAttributeValueChange M-EVENT-REPORT notifications to the new service provider SOA of the status change using an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange.		
17.	NPAC	NPAC personnel verify the data was sent in the action response.	NPAC	Verify that the appropriate data was sent.
18. optional	SP	Service Provider personnel, using the SOA, perform a local query for the actions taken in this test case.	SP	Verify that the following updates were made: • 1 Service Provider create; If the Service Provider Type SOA Indicator is set to TRUE for the SP under test, and an SP Type was set for the Service Provider created in the prerequisites, then the SP Type will be included in the download information. • 1 LRN create. • 1 LRN delete. • 1 NPA-NXX create. • 1 NPA-NXX delete. • 1 NPA-NXX-X create – if supported by the Service Provider SOA. • 1 NPA-NXX-X modify – if supported by the Service Provider SOA. • 1 NPA-NXX-X delete – if supported by the Service Provider SOA. • numberPoolBlock-objectCreation notifications for the 10 blocks created on behalf of the Service Provider under test including SV Type and/or Optional Data elements – if the SOA under test supports blocks and these attributes. • objectCreation notifications for the 20 Subscription Versions created on behalf of the New Service Provider under test. • statusAttributeValueChange notifications for the 20 Subscription Versions immediately disconnected on behalf of the Service Provider under test. • statusAttributeValueChange notifications for the 10 Subscription Versions canceled during prerequisite steps. • attributeValueChange notifications for the 10 Subscription Versions concurred to by the OSP in response to the New Service Provider under test creates (prior to prerequisites). • statusAttributeValueChange for the 20 Subscription Versions activates on behalf of the Service Provider under test indicated in the prerequisite steps. • statusAttributeValueChange (or range notification depending on whether the Service Provider under test supports range notifications) for the range of two Inter-SP Subscription Versions activated where the status goes to PF. NOTE: If the SOA under test supports SV Type and/or

				Optional Data elements and this information was specified in the prerequisite data this information will be included in the numberPoolBlock-objectCreation and subscriptionVersion-objectCreation notifications. NOTE: If the SOA under test supports Medium Timer Indicator this attributes will be included in the subscriptionVersion-objectCreation notifications. • 1 First port of NPA-NXX notification. • 1 NPA-NXX create after recovery is complete • 1 Subscription Version activate after recovery is complete

E.	Pass/Fail Analysis, NANC 351-4	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

11. NANC 227/254 – Exclusion of Service Provider from an SV's Failed SP List and

NANC 300 – Resend Exclusion for Number Pooling

This testing is optional for the Service Provider. During testing, the Service Provider may choose to execute the test case where they are the New Service Provider and receive the updated SV/NPB and respective Failed SP-List after the resend; or where they are the Service Provider that is excluded from the resend and then recovers the SV/NPB that was resent during resynchronization. The Service Provider can choose to execute NANC 227-1 and 227-2 twice so that they can emulate both the New SP and Excluded SP scenarios.

A. TEST IDENTITY

Test Case Number:	NANC 227-1	SUT Priority:	SOA	Optional
			LSMS	Optional

Objective:	LSMS – NPAC SMS broadcasts a resend Intra-SP or Inter-SP Subscription Version activate request to a region whereby some SPs on the failed SP-List are excluded from the resend, some are included in the resend (and should be successful) and the current Service Provider receives a status update for the Subscription Version including an updated failed SP-List. The new/current Service Provider modifies the Subscription Version. The Service Provider that was excluded from the resend, recovers the latest attributes for the SV during resynchronization – Success

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 227/254
NANC FRS Version Number:		Relevant Requirement(s):	RR5-151
NANC IIS Version Number:		Relevant Flow(s):	B.5.1.9

C. PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that a failed Activate request for a ported TN exists. 2. Verify that the Service Provider systems that are going to be issued a resend in this test case are configured/connected to the NPAC SMS in order to successfully process the resend request.
Prerequisite SP Setup:	

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	NPAC	1. NPAC personnel take action to resend a Subscription Version Activate request to some but not all Service Provider's on the Failed SP-List (thereby excluding at least one Service Provider from the resend). 2. The NPAC SMS issues an M-CREATE for the Subscription	SP	Each Service Provider LSMS specified for resend in the NPAC SMS request and accepting downloads for the NPA-NXX of the Subscription Version receives the M-CREATE request from the NPAC SMS.

		Version to each of the Local SMSs specified for resend, and are accepting downloads for the NPA-NXX of the Subscription Version.		
2.	NPAC	1. The NPAC SMS waits for a response from each LSMS the Activate request was issued to. 2. The NPAC SMS retries any LSMS (M-CREATE to each of the LSMSs specified for resend and accepting downloads for this NPA-NXX) if they have not responded within a tunable amount of time.	SP	All of the LSMSs for which the Subscription Version M-CREATE Request was issued respond with a successful message (these LSMSs have successfully processed the request).
3.	NPAC	The NPAC SMS issues an M-SET Request subscriptionVersionNPAC to itself to set the Subscription Version status to Active, update the Failed SP-List and set the subscriptionModifiedTimeStamp to the current date and time.	NPAC	The NPAC SMS receives the M-SET Request and issues an M-SET Response.
4.	NPAC	If the Old Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the Old Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates the status is now Active.	SP	The Old Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.
5.	NPAC	If the New Service Provider's TN Range Notification Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionRangeStatusAttributeValueChange. If the New Service Provider's TN Range Notification Indicator is set to FALSE, the NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange. The M-EVENT-REPORT indicates	SP	The New Service Provider's SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back.

		the status is now Active.		
6.	NPAC	NPAC personnel perform a query for the Subscription Version that was resent in this test case.	NPAC	Verify that the Subscription Version exists with a status of Active and the Failed SP-List has been updated appropriately.
7.	SP	The New/Current Service Provider for the Subscription Version issues a Subscription Version Modify request (modify some attribute of the SV – e.g. LRN). The SOA issues an M-ACTION request subscriptionVersionModify to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION request to modify the Subscription Version and issues an M-SET Request and Response to itself to update the status to sending and set the modified timestamp.
8.	NPAC	The NPAC SMS issues an M-ACTION response to the New/Current Service Provider SOA.	SP	The New/Current Service Provider SOA receives the M-ACTION Response.
9.	NPAC	The NPAC SMS issues an M-SET request to all LSMSs in the region accepting downloads for this NPA-NXX to update the Subscription Version attributes.	SP	All LSMSs in the region accepting downloads for this NPA-NXX receive the M-SET request and issues an M-SET Response.
10.	NPAC	After all LSMSs in the region have responded to the M-SET request, the NPAC SMS issues an M-SET Request to itself to update the status to active.	NPAC	The NPAC SMS receives the M-SET Request and issues an M-SET Response to itself.
11.	NPAC	The NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange to the New/Current Service Provider indicating the status is now active.	SP	The New/Current Service Provider SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation.
12.	SP	The Service Provider who was excluded from the resend request establishes an association from their LSMS to the NPAC SMS with the resynchronization flag set to TRUE.	NPAC	The NPAC SMS receives the association bind request from the LSMS. Once the association is established, the NPAC SMS queues all current updates.
13.	SP	The EDR and/or non-EDR LSMS Service Provider issues an M-ACTION Request lnpDownload. If the Service Provider DOES NOT support SWIM recovery, issue lnpDownload (subscription data) to the NPAC SMS. If the Service Provider DOES support SWIM recovery, issue lnpDownload (swim: subscription data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request. If the Service Provider DOES NOT support SWIM recovery the NPAC SMS issues an M-ACTION response including the Subscription Version for which the Service Provider was excluded. If the Service Provider DOES support SWIM recovery the NPAC SMS issues a single, normal, M-ACTION, lnpDownload reply with a status of Success and an ACTION_ID, with the Subscription Version for which they were previously excluded from the resend request (prerequisite data). This is then followed by a non-linked, empty, normal response (indicating

				the end of the linked reply data) back to the LSMS. NOTE: Depending on what type of recovery the Service Provider supports and exactly what criteria they specify in the resynchronization request, they may receive additional data. These expected results only describe the expected response for the finite data documented in the prerequisites.
14. conditio nal	SP	If the Service Provider supports SWIM recovery, the LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 13 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the LSMS and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
15.	SP	The LSMS Service Provider issues an M-ACTION Request lnpRecoveryComplete to the NPAC SMS to set the resynchronization flag to FALSE.	NPAC	The NPAC SMS receives the M-ACTION Request from the LSMS and sets the resynchronization flag to 'off".
16. optional	SP	Service Provider personnel (that was excluded from the resend request), using the LSMS, perform a local query for the Subscription Version updated in this test case.	SP	Verify that the Subscription Version for which they were previously excluded from a resend request (prerequisite data) was sent and they received the latest Subscription Version attributes (those modified by the New/Current Service Provider).
17.	NPAC	NPAC personnel perform a Full audit for the Subscription Version that was activated during this test case.	NPAC	Using the Audit Results Log, verify that there were no updates made. If any updates were made as a result of running this audit, this test case fails.

E.   Pass/Fail Analysis, NANC 227-1

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	NPAC personnel verify that the resend request was only sent to Service Provider's specified for resend that are accepting downloads for the NPA-NXX of the TN used in this test case.
Pass	Fail	The Service Provider that was excluded from the resend was able to recover the SV during resynchronization with the NPAC SMS.

A.   TEST IDENTITY

Test Case Number:	NANC 227-2	SUT Priority:	SOA	Optional
			LSMS	Optional
Objective:	LSMS – NPAC SMS broadcasts a resend number pool block activate request to a region whereby some SPs on the failed SP-List are excluded from the resend, some are included in the resend (and should be successful) and the current Block Holder Service Provider receives a status update for the number pool block including an updated Failed SP-List. The Number Pool Block is modified. The Service Provider that was excluded from the resend request recovers the NPB (or 'Pooled' SVs) during resynchronization and receives the latest NPB attributes. – Success			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 300
NANC FRS Version Number:		Relevant Requirement(s):	RR3-472
NANC IIS Version Number:		Relevant Flow(s):	B.4.4.8, B.4.4.9

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that a failed Number Pool Activate request exists. 2. Verify that the Service Provider systems that are going to be issued a resend in this test case are configured/connected to the NPAC SMS in order to successfully process the resend request.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	NPAC	1. NPAC personnel take action to resend a Failed Number Pool Block Activate request to some but not all Service Provider's on the Failed SP-List (thereby excluding at least one Service Provider from the resend). 2. The NPAC SMS issues an M-SET to itself to modify the Number Pool Block status to Sending and update the Number Pool Block Modified and Number Pool Block Broadcast TimeStamp. 3. The NPAC SMS issues an M-SET to itself to modify the	NPAC	The NPAC SMS receives each of the M-SET Requests and issues an M-SET response to each.

		Subscription Version status to Sending for the Pooled Subscription Versions and set the Subscription Modified and Subscription Broadcast TimeStamp.		
2.	NPAC	1. The NPAC SMS issues a M-CREATE Request subscriptionVersionLocalSMS-Create request to each non-EDR LSMS specified in the resend request that is accepting downloads for this NPA-NXX. 2. The NPAC SMS issues an M-CREATE Request numberPoolBlock to each EDR LSMS specified in the resend request that is accepting downloads for this NPA-NXX. The NPAC SMS waits for a response from each LSMSs the Activate request was issued to. The NPAC SMS retries any LSMS if they have not responded within a tunable amount of time.	SP	All of the LSMSs for which Number Pool Block Create Request was issued respond with a successful message (these LSMSs have successfully processed the request).
3.	NPAC	NPAC SMS issues an M-SET Request to itself to update the status of the Number Pool Block to Active and set the Number Pool Block Modified TimeStamp. NPAC SMS issues an M-SET Request to itself to update the Pooled Subscription Version(s) status to Active and set the Subscription Modified TimeStamp.	NPAC	The NPAC SMS receives each of the M-SET Requests and issues an M-SET response to each.
4.	NPAC	If the SOA Origination Indicator is set to TRUE, the NPAC SMS issues an M-EVENT-REPORT numberPoolBlockStatusAttributeValueChange to the Block Holder SOA indicating the status is now Active.	SP	If the SOA Origination Indicator is TRUE, the Service Provider SOA receives the M-EVENT-REPORT and issues an M-EVENT-REPORT Confirmation.
5.	NPAC	NPAC personnel perform a query for the Number Pool Block that was resent in this test case.	NPAC	Verify that the Number Pool Block exists with a status of Active and the Failed SP-List has been updated appropriately.
6.	SP	The Block Holder Service Provider (or NPAC Personnel if the Block Holder SOA does not support the functionality) modify some attribute(s) of the Number Pool	NPAC	The NPAC SMS receives the M-SET request to modify the Number Pool Block and issues an M-SET Request and Response to itself for the modified NPB attributes and to update the status to sending.

		Block (e.g. – LRN). The SOA issues an M-SET request numberPoolBlockNPAC to the NPAC SMS.		
7.	NPAC	The NPAC SMS issues an M-SET Response to the Block Holder SOA.	SP	The Block Holder SOA receives the M-SET Response.
8.	NPAC conditional	If the SOA Origination indicator is set to TRUE, the NPAC SMS will issue an M-EVENT-REPORT numberPoolBlock-attributeValueChange notification for the updated attributes to the Block Holder SOA.	SP	The Block Holder SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC SMS.
9.	NPAC	NPAC issues the following messages to LSMSs in the region accepting downloads for this NPA-NXX. 1. If the LSMS is non-EDR, the NPAC SMS issues M-SET subscriptionVersion for the updated subscription version attributes. 2. If the LSMS is EDR, the NPAC SMS issues M-SET numberPoolBlock for the updated number pool block attributes.	SP	All LSMSs in the region receive the M-SET requests from the NPAC SMS and issue an appropriate M-SET response.
10.	NPAC	After the NPAC SMS has received the M-SET responses from all LSMSs in the region: 1. The NPAC SMS issues an M-SET Request subscriptionVersionNPAC to itself to update the status to active and set the subscription modified timestamp. 2. The NPAC SMS issues an M-SET Request numberPoolBlockNPAC to itself to update the status to active and set the number pool block modified timestamp.	NPAC	The NPAC SMS receives the M-SET Requests and issues M-SET Responses to itself.
11.	NPAC	The NPAC SMS issues an M-EVENT-REPORT numberPoolBlockStatusAttributeValueChange to the Block Holder SOA updating the status to Active.	SP	The Block Holder SOA receives the M-EVENT-REPORT and issues an M-EVENT-REPORT Confirmation.
12.	SP	The Service Provider that was	NPAC	The NPAC SMS receives the association bind request from the

		excluded from the resend establishes an association from their LSMS to the NPAC SMS with the resynchronization flag set to TRUE.		LSMS. Once the association is established, the NPAC SMS queues all current updates.
13. conditional	SP	The non-EDR LSMS Service Provider issues an M-ACTION Request lnpDownload. If the Service Provider DOES NOT support SWIM recovery, issue lnpDownload (subscription data). If the Service Provider DOES support SWIM recovery, issue lnpDownload (swim: subscription data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request. If the Service Provider DOES NOT support SWIM recovery the NPAC SMS issues an M-ACTION response including the Pooled Subscription Versions for which the Service Provider was excluded. If the Service Provider DOES support SWIM recovery the NPAC SMS issues multiple, linked, M-ACTION replies, lnpDownload with a status of Success and an ACTION_ID with the Pooled Subscription Versions for which they were previously excluded form the resend request. This linked reply is then followed by a non-linked, empty, normal response (indicating the end of the linked reply data) back to the LSMS.. NOTE: Depending on what type of recovery the Service Provider supports and exactly what criteria they specify in the resynchronization request, they may receive additional data. These expected results only describe the expected response for the finite data documented in the prerequisites.
14.	SP	If the Service Provider supports SWIM recovery, the LSMS issues an M-EVENT-REPORT SwimProcessing-RecoveryResults notification with the ACTION_ID from step 13 expected results to the NPAC SMS indicating the replies for this data were successfully processed.	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the LSMS and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success. The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
15. conditional	SP	The EDR LSMS Service Provider issues an M-ACTION Request lnpDownload. If the Service Provider DOES NOT support SWIM recovery, issue lnpDownload (number pool block data). If the Service Provider DOES support SWIM recovery, issue lnpDownload (swim: number pool block data) to the NPAC SMS.	NPAC	The NPAC SMS receives the M-ACTION Request. If the Service provider DOES NOT support SWIM recovery the NPAC SMS issues an M-ACTION response including the Number Pool Block for which the Service Provider was excluded. If the Service Provider DOES support SWIM recovery the NPAC SMS issues a single, normal M-ACTION, lnpDownload response with a status of Success and an ACTION_ID, indicating the Number Pool Block for which they were previously excluded from the resend request (prerequisite data) back to the EDR LSMS. NOTE: Depending on what type of recovery the Service Provider supports and exactly what criteria they specify in the resynchronization request, they may receive additional data. These expected results only describe the expected response for the finite data documented in the prerequisites.
16.	SP	If the Service Provider supports SWIM recovery, the LSMS issues an M-EVENT-REPORT	NPAC	The NPAC SMS receives the M-EVENT-REPORT from the LSMS and issues an M-EVENT-REPORT SwimProcessing-RecoveryResponse back to the LSMS with a status of Success.

		SwimProcessing-RecoveryResults notification with the ACTION_ID from step 15 expected results to the NPAC SMS indicating the replies for this data were successfully processed.		The NPAC SMS clears this downloaded data from the SWIM list for this Service Provider under test.
17.	SP	The LSMS Service Provider issues an M-ACTION Request lnpRecoveryComplete to the NPAC SMS to set the resynchronization flag to FALSE.	NPAC	The NPAC SMS receives the M-ACTION Request from the LSMS and sets the resynchronization flag to 'off'.
18. optional	SP	Service Provider personnel (that was excluded from the resend request), using the LSMS, perform a local query for the Subscription Versions or Number Pool Block (depending on what they support) updated in this test case.	SP	Verify that the Pooled Subscription Versions and/or Number Pool Block for which they were previously excluded from a resend request (prerequisite data) was sent and they received the latest Subscription Version/or Number Pool Block attributes (those modified by Block Holder Service Provider/or NPAC Personnel).
19.	NPAC	NPAC personnel perform a Full audit for the Pooled Subscription Versions/Number Pool Block that was activated during this test case.	NPAC	Using the Audit Results Log, verify that there were no updates made. If any updates were made as a result of running this audit, this test case fails.

E.	Pass/Fail Analysis, NANC 227-2	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	NPAC personnel verify that the resend request was only sent to the Service Provider's specified for resend that are accepting downloads for the NPA-NXX of the NPB used in this test case.
Pass	Fail	The Service Provider that was excluded from the resend was able to recover the NPB (or 'Pooled' SVs) during resynchronization with the NPAC SMS.

12. NANC 321 – Regional NPAC NPA Edit of Service Provider Network Data – NPA-NXX Data

A. TEST IDENTITY

Test Case Number:	NANC 321-1	SUT Priority:	SOA	Conditional
			LSMS	Optional
Objective:	SOA –Service Provider personnel attempt to create an NPA-NXX for an invalid NPA in a region – Error			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-441, RR3-444
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.4

C. PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX does not exist on the NPAC SMS that will be used during this test case execution.
Prerequisite SP Setup:	

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using their SOA System, the Service Provider under test attempts to submit a request to the NPAC SMS to create an NPA-NXX that doesn't yet exist on the NPAC SMS indicating an invalid NPA for the region for which the request is submitted. The Service Provider's SOA issues an M-CREATE Request serviceProvNPA-NXX to the NPAC SMS.	NPAC	The NPAC SMS receives the M-CREATE Request for the NPA-NXX from the Service Provider SOA and determines that the NPA specified is invalid for the region. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-CREATE Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the NPA-NXX.	NPAC	NPAC personnel verify that the NPA-NXX does not exist on the NPAC SMS.

4. optional	SP	Service Provider personnel, perform a local query for the NPA-NXX using their SOA system.	SP	Verify that the NPA-NXX does not exist in the local database.

E.   **Pass/Fail Analysis, NANC 321-1**

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   **TEST IDENTITY**

Test Case Number:	**NANC 321-2**	SUT Priority:	**SOA**	Conditional
			LSMS	Optional
Objective:	SOA – Service Provider personnel attempt to create 859-nxx that is associated with LATA ID 922, in a region other than Midwest – Error			

B.   **REFERENCES**

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 321
NANC FRS Version Number:		**Relevant Requirement(s):**	RR3-451
NANC IIS Version Number:		**Relevant Flow(s):**	B.4.1.4

C.   **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX does not exist on the NPAC SMS that will be used during this test case execution.
Prerequisite SP Setup:	

D.   **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using their SOA System, the Service Provider under test attempts to submit a request to the NPAC SMS to create an NPA-NXX that doesn't yet exist on the NPAC SMS indicating an 859-nxx NPA-NXX value that is associated with LATA ID 922 for an NPAC region *other than* MidWest. The Service Provider's SOA issues an M-CREATE Request serviceProvNPA-NXX to the NPAC SMS.	NPAC	The NPAC SMS receives the M-CREATE Request for the NPA-NXX from the Service Provider SOA and determines that the 859-nxx value specified is associated with LATA ID 922 and specified for an NPAC region *other than* the MidWest region. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-CREATE Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the NPA-NXX.	NPAC	NPAC personnel verify that the NPA-NXX does not exist on the NPAC SMS.
4. optional	SP	Service Provider personnel, perform a local query for the NPA-NXX	SP	Verify that the NPA-NXX does not exist in the local database.

		using their SOA system.
E.	**Pass/Fail Analysis, NANC 321-2**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	NANC 321-3	SUT Priority:	SOA	Required
			LSMS	Optional
Objective:	SOA – Service Provider personnel create 859-nxx that is associated with LATA ID 922 in Midwest region – Success			

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-448, RR3-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.4

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX does not exist on the NPAC SMS that will be used during this test case execution.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using their SOA System, the Service Provider under test submit a request to the NPAC SMS to create an NPA-NXX that doesn't yet exist on the NPAC SMS indicating an 859-nxx value associated with LATA ID 922 for the MidWest region. The Service Provider's SOA issues an M-CREATE Request serviceProvNPA-NXX to the NPAC SMS in the MidWest region.	NPAC	The NPAC SMS receives the M-CREATE Request for the NPA-NXX from the Service Provider SOA and issues an M-CREATE Response back to the SOA.
2.	NPAC	1. The NPAC SMS sends an M-CREATE for the serviceProvNPA-NXX object to all LSMSs that have their Network and Subscription Data Download Association Function set to 'ON' and are accepting downloads for this NPA-NXX according to their filters. 2. The NPAC SMS sends an M-	SP	1. All LSMSs in the region that are accepting downloads for the serviceProvNPA-NXX receive the M-CREATE Request from the NPAC SMS and issue an M-CREATE Response back to the NPAC SMS. 2. All SOAs in the region that are accepting downloads for the serviceProvNPA-NXX receive the M-CREATE Request from the NPAC SMS and issue an M-CREATE Response back to the NPAC SMS.

		CREATE for the serviceProvNPA-NXX object to all SOAs that have their Network Data Download Association Function set to 'ON' and are accepting downloads for this NPA-NXX according to their filters.		
3. optional	SP	Service Provider personnel query their SOA system for the NPA-NXX that they created.	SP	Verify that the NPA-NXX exists.

E.	**Pass/Fail Analysis, NANC 321-3**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.

A.   **TEST IDENTITY**

Test Case Number:	NANC 321-4	SUT Priority:	SOA	Required
			LSMS	Optional
Objective:	SOA – Service Provider personnel create 859-nxx that is associated with a LATA ID other than 922 in the SouthEast region – Success			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.4

Test Case removed from Turn Up Test since only one region is used during certification testing. Verified during system test.

A. **TEST IDENTITY**

Test Case Number:	NANC 321-5	SUT Priority:	SOA	Required
			LSMS	N/A
Objective:	SOA – Service Provider personnel attempt to create 859-nxx that is associated with a LATA ID other than 922 in a region other than the SouthEast – Error			

B. **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-448, RR4-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.4

Test Case removed from Turn Up Test since only one region is used during certification testing. Verified during system test.

A. **TEST IDENTITY**

Test Case Number:	NANC 321-6	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS –Service Provider personnel attempt to create an NPA-NXX for an invalid NPA in a region – Error			

B. **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-441, RR3-444
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.3

C. **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX does not exist on the NPAC SMS that will be used during this test case execution.
Prerequisite SP Setup:	

D. **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using their LSMS System, the Service Provider under test attempts to submit a request to the NPAC SMS to create an NPA-NXX that doesn't yet exist on the NPAC SMS indicating an invalid NPA for the region for which the request is submitted. The Service Provider's LSMS issues an M-CREATE Request serviceProvNPA-NXX to the NPAC SMS.	NPAC	The NPAC SMS receives the M-CREATE Request for the NPA-NXX from the Service Provider LSMS and determines that the NPA specified is invalid for the region. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-CREATE Response failure indicating an error with the request to the LSMS.	SP	The Service Provider LSMS receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the NPA-NXX.	NPAC	NPAC personnel verify that the NPA-NXX does not exist on the NPAC SMS.
4. optional	SP	Service Provider personnel, perform a local query for the NPA-NXX using their LSMS system.	SP	Verify that the NPA-NXX does not exist in the local database.

E.   Pass/Fail Analysis, NANC 321-6

Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider LSMS received the error response from the NPAC SMS and handled it appropriately.

A.   **TEST IDENTITY**

Test Case Number:	NANC 321-7	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS – Service Provider personnel attempt to create 859-nxx that is associated with LATA ID 922, in a region other than Midwest – Error			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.3

Test Case removed from Turn Up Test since only one region is used during certification testing. Verified during system test.

A.   **TEST IDENTITY**

Test Case Number:	NANC 321-8	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS – Service Provider personnel create 859-nxx that is associated with LATA ID 922 in Midwest region – Success			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-448, RR3-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.3

C.   **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX does not exist on the NPAC SMS that will be used during this test case execution.
Prerequisite SP Setup:	

D.   **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using their LSMS System, the Service Provider under test submit a request to the NPAC SMS to create an NPA-NXX that doesn't yet exist on the NPAC SMS indicating an 859-nxx value associated with LATA ID 922 for the MidWest region. The Service Provider's LSMS issues an M-CREATE Request serviceProvNPA-NXX to the NPAC SMS in the MidWest region.	NPAC	The NPAC SMS receives the M-CREATE Request for the NPA-NXX from the Service Provider LSMS and issues an M-CREATE Response back to the LSMS.
2.	NPAC	1. The NPAC SMS sends an M-CREATE for the serviceProvNPA-NXX object to all LSMSs that have their Network and Subscription Data Download Association Function set to 'ON' and are accepting downloads for this NPA-NXX according to their filters. 2. The NPAC SMS sends an M-CREATE for the	SP	1. All LSMSs in the region that are accepting downloads for the serviceProvNPA-NXX receive the M-CREATE Request from the NPAC SMS and issue an M-CREATE Response back to the NPAC SMS. 2. All SOAs in the region that are accepting downloads for the serviceProvNPA-NXX receive the M-CREATE Request form the NPAC SMS and issue an M-CREATE Response back to the NPAC SMS.

		serviceProvNPA-NXX object to all SOAs that have their Network Data Download Association Function set to 'ON' and are accepting downloads for this NPA-NXX according to the filters.		
3. optional	SP	Service Provider personnel query their LSMS system for the NPA-NXX that they created.	SP	Verify that the NPA-NXX exists.

E.	**Pass/Fail Analysis, NANC 321-8**			
Pass	Fail	NPAC personnel performed the test case as written.		
Pass	Fail	Service Provider personnel performed the test case as written.		

A.   **TEST IDENTITY**

Test Case Number:	NANC 321-9	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS – Service Provider personnel create 859-nxx that is associated with a LATA ID other than 922 in the SouthEast region – Success			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.3

Test Case removed from Turn Up Test since only one region is used during certification testing. Verified during system test.

A.   **TEST IDENTITY**

Test Case Number:	NANC 321-10	SUT Priority:	SOA	N/A
			LSMS	Conditional
Objective:	LSMS – Service Provider personnel attempt to create 859-nxx that is associated with a LATA ID other than 922 in a region other than the SouthEast – Error			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 321
NANC FRS Version Number:		Relevant Requirement(s):	RR3-448, RR4-451
NANC IIS Version Number:		Relevant Flow(s):	B.4.1.3

C.   **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	Verify that the NPA-NXX does not exist on the NPAC SMS that will be used during this test case execution.
Prerequisite SP Setup:	

D.   **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using their LSMS System, the Service Provider under test attempts to submit a request to the NPAC SMS to create an NPA-NXX that doesn't yet exist on the NPAC SMS indicating an 859-nxx NPA-NXX value that is associated with LATA ID *other than* 922 for an NPAC region *other than* SouthEast. The Service Provider's LSMS issues an M-CREATE Request serviceProvNPA-NXX to the NPAC SMS for the SouthEast region.	NPAC	The NPAC SMS receives the M-CREATE Request for the NPA-NXX from the Service Provider LSMS and determines that the 859-nxx value specified is associated with a LATA ID *other than* 922 and is specified for an NPAC region *other than* the SouthEast region. **(This violates system requirements).**
2.	NPAC	The NPAC SMS issues an M-CREATE Response failure indicating an error with the request to the LSMS.	SP	The Service Provider LSMS receives the M-ACTION Response.
3.	NPAC	NPAC personnel perform a query for the NPA-NXX.	NPAC	NPAC personnel verify that the NPA-NXX does not exist on the NPAC SMS.
4. optional	SP	Service Provider personnel, perform a local query for the NPA-NXX	SP	Verify that the NPA-NXX does not exist in the local database.

		using their LSMS.		
E.	**Pass/Fail Analysis, NANC 321-10**	
Pass	Fail	NPAC personnel performed the test case as written.
Pass	Fail	Service Provider personnel performed the test case as written.
Pass	Fail	Service Provider LSMS received the error response from the NPAC SMS and handled it appropriately.

13. NANC 399/400 – SV Type and OptionalData element testing

Service Provider's whose systems cannot create the 'failure' scenarios that follow pass these test cases be default. If their system does not 'stop' the invalid message before it goes across the interface, then their system must be able to successfully execute the test case and handle the failure response from the NPAC SMS.

A.   TEST IDENTITY

Test Case Number:	NANC 399-1	SUT Priority:	SOA	Conditional
			LSMS	N/A

Objective:	SOA – New Service Provider Personnel attempt to create a Subscription Version specifying SV Type and/or Alternative SPID information – Error Service Provider should attempt to submit a request with invalid data.

B.   REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 399
NANC FRS Version Number:	3.3.2a	Relevant Requirement(s):	R5-15.1, RR5-4, RR5-5,RR5-6.1, R5-18.1
NANC IIS Version Number:	3.3.2a	Relevant Flow(s):	B.5.1.2

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify the NPA-NXX exists and is open for porting for the TN that is going to be used during this test case. 2. Verify that the LRN exists for the Service Provider under test. 3. Verify that the SOA Supports SV Type and SOA Supports Alternative SPID indicators are set to production settings for the Service Provider under test.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	1. Using their SOA system, Service Provider Personnel submit a Subscription Version Create request for a single TN. 2. The SOA system sends an M-ACTION Request subscriptionVersionNewSP-Create to the NPAC SMS to create the subscriptionVersionNPAC (Subscription Version) on the	NPAC	The NPAC SMS receives the M-ACTION Request from the Request from the Service Provider's SOA and determines the following: The request contains invalid SV Type and/or Alternative SPID data. **(This violates system requirements.)**

		NPAC SMS. Specify the following information: • subscriptionTN or a valid subscriptionVersionTN-Range • subscriptionNewCurrentSP • subscriptionOldSP • subscriptionNewSP-DueDate (seconds set to zero) • subscriptionLNPType • subscriptionLRN • subscriptionNewSPMediumTimerIndicator – if supported by the Service Provider SOA • subscriptionVersionSVType – if supported by the Service Provider SOA • subscriptionCLASS-DPC • subscriptionCLASS-SSN • subscriptionLIDB-DPC • subscriptionLIDB-SSN • subscriptionCNAM-DPC • subscriptionCNAM-SSN • subscriptionISVM-DPC • subscriptionISVM-SSN • subscriptionWSMSC-DPC - if supported by the Service provider SOA • subscriptionWSMSC-SSN - if supported by the Service Provider SOA • subscriptionEndUser LocationValue • subscriptionEndUser LocationType • subscriptionBillingID • subscriptionVersionAlternative SPID – if supported by the Service Provider SOA • subscriptionOptionalData – all elements supported by the Service Provider SOA		
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC Personnel perform a query for the Subscription Version.	NPAC	NPAC Personnel verify that the Subscription Version does not exist on the NPAC SMS.
4.	SP	Service Provider Personnel, perform a local query for the Subscription Version.	SP	Verify that the Subscription Version does not exist on the local database.

E. **Pass/Fail Analysis, NANC 399 - 1**

Pass	Fail	NPAC Personnel performed the test case as written.
Pass	Fail	Service Provider Personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	**NANC 399-2**	**SUT Priority:**	**SOA**	Conditional
			LSMS	N/A
Objective:	SOA – New Service Provider Personnel attempt to modify SV Type and/or Alternative SPID information for a Pending Subscription Version – Error Service Provider should attempt to submit a request with invalid data.			

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 399
NANC FRS Version Number:	3.3.2a	**Relevant Requirement(s):**	5-27.1, R5-28, R-29.1
NANC IIS Version Number:	3.3.2a	**Relevant Flow(s):**	B.5.2.3 or B.5.2.4

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that the SOA Supports SV Type and SOA Supports Alternative SPID indicators are set to production settings for the Service Provider under test. 2. Verify that the Pending Subscription Version exists that is going to be used during this test case.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider Personnel, submit an M-SET subscriptionVersionNPAC or M-ACTION subscriptionVersionModify Request to the NPAC SMS to modify the SV Type and/or Alternative SPID for a Pending subscription version.. Specify the following attributes: • subscriptionLRN • subscriptionNewSP-DueDate • subscriptionSVType – if supported by the Service Provider SOA • subscriptionCLASS-DPC • subscriptionCLASS-SSN • subscriptionCNAM-DPC • subscriptionCNAM-SSN • subscriptionISVM-DPC	NPAC	The NPAC SMS receives the M-SET or M-ACTION Request from the Service Provider's SOA to modify the Pending Subscription Version and determines the following: The request contains invalid SV Type and/or Alternative SPID data. **(This violates system requirements.)**

		• subscriptionISVM-SSN • subscriptionLIDB-DPC • subscriptionLIDB-SSN • subscriptionWSMSC-DPC – if supported by the Service Provider SOA • subscriptionWSMSC-SSN – if supported by the Service Provider SOA • subscriptionEndUserLocationValue • subscriptionEndUserLocationType • subscriptionBillingID • subscriptionAlternativeSPID – if supported by the Service Provider SOA		
2.	NPAC	The NPAC SMS issues an M-SET or M-ACTION Response (respective to the original Service Provider request) failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the respective M-SET or M-ACTION Response.
3.	NPAC	NPAC Personnel perform a query for the Subscription Version Service Provider personnel attempted to modify during this test case.	NPAC	NPAC Personnel verify that the Subscription Version was not modified on the NPAC SMS.
4.	SP	Service Provider Personnel, perform a local query for the Subscription Version they attempted to modify during this test case.	SP	Verify that the Subscription Version was not modified on the local database.

E.	**Pass/Fail Analysis, NANC 399-2**

Pass	Fail	NPAC Personnel performed the test case as written.
Pass	Fail	Service Provider Personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   **TEST IDENTITY**

Test Case Number:	**NANC 399-3**	**SUT Priority:**	**SOA**	Conditional
			LSMS	N/A
Objective:	SOA – New Service Provider Personnel attempt to modify SV Type and/or Alternative SPID information for an Active Subscription Version – Error Service Provider should attempt to submit a request with invalid data.			

B.   **REFERENCES**

NANC Change Order Revision Number:		Change Order Number(s):	NANC 399
NANC FRS Version Number:	3.3.2a	Relevant Requirement(s):	R5-36, R5-37, R5-38.1
NANC IIS Version Number:	3.3.2a	Relevant Flow(s):	B.5.2.1

C.   **PREREQUISITE**

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that the SOA Supports SV Type and SOA Supports Alternative SPID indicators are set to production settings for the Service Provider under test. 2. Verify that the Active Subscription Version exists that is going to be used during this test case.
Prerequisite SP Setup:	

D.   **TEST STEPS and EXPECTED RESULTS**

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider Personnel, submit a M-ACTION subscriptionVersionModify Request to the NPAC SMS to modify an Active Subscription Version. Specify the following attributes: • subscriptionLRN • subscriptionSVType – if supported by the Service Provider SOA • subscriptionCLASS-DPC • subscriptionCLASS-SSN • subscriptionCNAM-DPC • subscriptionCNAM-SSN • subscriptionISVM-DPC • subscriptionISVM-SSN • subscriptionLIDB-DPC • subscriptionLIDB-SSN • subscriptionWSMSC-DPC – if	NPAC	The NPAC SMS receives the M-ACTION subscriptionVersionModify Request from the Service Provider's SOA and determines the following: The request contains invalid SV Type and/or Alternative SPID data. **(This violates system requirements.)**

		supported by the Service Provider SOA • subscriptionWSMSC-SSN – if supported by the Service Provider SOA • subscriptionEndUserLocationValue • subscriptionEndUserLocationType • subscriptionBillingId • subscriptionAlternativeSPID – if supported by the Service Provider SOA		
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC Personnel perform a query for the Subscription Version Service Provider personnel attempted to modify during this test case.	NPAC	NPAC Personnel verify that the Subscription Version was not modified on the NPAC SMS.
4.	SP	Service Provider Personnel, perform a local query for the Subscription Version they attempted to modify during this test case.	SP	Verify that the Subscription Version was not modified on the local database.

E.	Pass/Fail Analysis, NANC 399-3

Pass	Fail	NPAC Personnel performed the test case as written.
Pass	Fail	Service Provider Personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	**NANC 399-4**	SUT Priority:	**SOA**	Conditional
			LSMS	N/A
Objective:	SOA – New Service Provider Personnel attempt to create a Number Pool Block specifying SV Type and/or Alternative SPID information - Error Service Provider should attempt to submit a request with invalid data.			

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	
NANC FRS Version Number:	3.3.2a	**Relevant Requirement(s):**	RR3-79.1, RR3-149
NANC IIS Version Number:	3.3.2a	**Relevant Flow(s):**	B.4.4.1

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that the SOA Supports SV Type and SOA Supports Alternative SPID indicators are set to production settings for the Service Provider under test. 2. Verify that the NPA-NXX exists and is open for porting for the Number Pool Block that is going to be used during this test case. 3. Verify that the NPA-NXX-X exists respective to the Number Pool Block that is going to be used during this test case. 4. Verify that there are no contaminated TNs or 'pending-like' Subscription Versions for the range of TNs in the NPA-NXX-X.
Prerequisite SP Setup:	1. Verify that the NPA-NXX-X exists for the Number Pool Block that Service Provider Personnel will create during this Test Case. 2. Verify that the current date is equal to or greater than the NPA-NXX-X Effective Date.

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider Personnel, submit a M-ACTION numberPoolBlock-Create Request to the NPAC SMS to create a Number Pool Block. Specify the following attributes: • numberPoolBlockNPA-NXX-X • numberPoolBlockSPID • numberPoolBlockLRN • numberPoolBlockSVType – if supported by the Service Provider SOA • numberPoolBlockCLASS-DPC • numberPoolBlockCLASS-SSN • numberPoolBlockCNAM-DPC	NPAC	The NPAC SMS receives the M-ACTION numberPoolBlock-Create Request from the Service Provider's SOA and determines the following: The request contains invalid SV Type and/or Alternative SPID data. **(This violates system requirements.)**

		• numberPoolBlockCNAM-SSN • numberPoolBlockISVM-DPC • numberPoolBlockISVM-SSN • numberPoolBlockLIDB-DPC • numberPoolBlockLIDB-SSN • numberPoolBlockWSMSC-DPC – if supported by the Service Provider SOA • numberPoolBlockWSMSC-SSN – if supported by the Service Provider SOA • numberPoolBlockAlternativeSPID – if supported by the Service Provider SOA		
2.	NPAC	The NPAC SMS issues an M-ACTION Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-ACTION Response.
3.	NPAC	NPAC Personnel perform a query for the Number Pool Block and respective 'Pooled' Subscription Versions Service Provider personnel attempted to schedule during this test case.	NPAC	NPAC Personnel verify that the Number Pool Block and respective 'Pooled' Subscription Versions do not exist on the NPAC SMS.
4.	SP	Service Provider Personnel, perform a local query for the Number Pool Block and the respective 'Pooled' Subscription Versions they attempted to schedule during this test case.	SP	Verify that the Number Pool Block and the respective 'Pooled' Subscription Versions do not exist on the local database.

E.	**Pass/Fail Analysis, NANC 399-4**

Pass	Fail	NPAC Personnel performed the test case as written.
Pass	Fail	Service Provider Personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A.   TEST IDENTITY

Test Case Number:	**NANC 399-5**	**SUT Priority:**	**SOA**	Conditional
			LSMS	N/A
Objective:	SOA – New Service Provider Personnel attempt to modify an Active Number Pool Block specifying SV Type and/or Alternative SPID information - Error Service Provider should attempt to submit a request with invalid data.			

B.   REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 399
NANC FRS Version Number:	3.3.2a	**Relevant Requirement(s):**	RR3-157
NANC IIS Version Number:	3.3.2a	**Relevant Flow(s):**	B.4.4.13

C.   PREREQUISITE

Prerequisite Test Cases:	
Prerequisite NPAC Setup:	1. Verify that the SOA Supports SV Type and SOA Supports Alternative SPID indicators are set to production settings for the Service Provider under test. 2. Verify that the Active Number Pool Block that is going to be used during this test case exists on the NPAC SMS.
Prerequisite SP Setup:	

D.   TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider Personnel, submit a M-SET numberPoolBlock Request to the NPAC SMS to modify an active Number Pool Block. Specify the following attributes: • numberPoolBlockLRN • numberPoolBlockSVType – if supported by the Service Provider SOA • numberPoolBlockCLASS-DPC • numberPoolBlockCLASS-SSN • numberPoolBlockCNAM-DPC • numberPoolBlockCNAM-SSN • numberPoolBlockISVM-DPC • numberPoolBlockISVM-SSN • numberPoolBlockLIDB-DPC • numberPoolBlockLIDB-SSN • numberPoolBlockWSMSC-	NPAC	The NPAC SMS receives the M-SET numberPoolBlock Request from the Service Provider's SOA and determines the following: The request contains invalid SV Type and/or Alternative SPID data. **(This violates system requirements.)**

		DPC – if supported by the Service Provider SOA • numberPoolBlockWSMSC-SSN – if supported by the Service Provider SOA • numberPoolBlockAlternativeS PID – if supported by the Service Provider SOA		
2.	NPAC	The NPAC SMS issues an M-SET Response failure indicating an error with the request to the SOA.	SP	The Service Provider SOA receives the M-SET Response.
3.	NPAC	NPAC Personnel perform a query for the Number Pool Block and respective 'Pooled' Subscription Versions Service Provider personnel attempted to modify during this test case.	NPAC	NPAC Personnel verify that the Number Pool Block and respective 'Pooled' Subscription Versions were not modified on the NPAC SMS.
4.	SP	Service Provider Personnel, perform a local query for the Number Pool Block and the respective 'Pooled' Subscription Versions they attempted to modify during this test case.	SP	Verify that the Number Pool Block and the respective 'Pooled' Subscription Versions were not modified on the local database.

E.	**Pass/Fail Analysis, NANC 399-5**	

Pass	Fail	NPAC Personnel performed the test case as written.
Pass	Fail	Service Provider Personnel performed the test case as written.
Pass	Fail	Service Provider SOA received the error response from the NPAC SMS and handled it appropriately.

A. TEST IDENTITY

Test Case Number:	NANC 400-1	SUT Priority:	SOA	C
			LSMS	N/A
Objective:	SOA - Service Provider Personnel submit an Intra-Service Provider Create request specifying at least one but not all Optional Data elements their SOA Supports- Success			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 399/400
NANC FRS Version Number:	3.3.2	Relevant Requirement(s):	R5-16, R5-18.1, RR5-5, RR5-6.1, RR5-185
NANC IIS Version Number:	3.3.2	Relevant Flow(s):	B.5.1.11, B.5.6,

C. PREREQUISITE

Prerequisite Test Cases:	Based on regression subscription version create test cases, like 6.2.8. This test case is a complex test scenario. If the Service Provider under test does not support Optional Data elements they do not need to execute this test case. If they only support one Optional Data element, they have verified their functionality by executing 6.2.8 (which is a regression test case), and need not execute this test case. If the Service Provider under test supports more than one Optional Data element, they must execute this test case and specify at least one but not all the Optional Data elements their SOA supports.
Prerequisite NPAC Setup:	
Prerequisite SP Setup:	1. The Service Provider under test is the assigned the code as indicated in the network data defined in the NPAC SMS OR the TN that will be used is currently an 'active' Subscription Version associated with the Service Provider under test. 2. Verify the SOA Supports SV Type and all Optional Data element Indicators are set to their production values for the Service Provider under test. **In this test case the service provider should indicate at least one but not all Optional Data elements they support and SV Type data (if they support it) for the subscription version.** 3. Verify the SOA Supports Medium Timer Indicator is set to the production value for the Service Provider under test.

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	1. Using the SOA, Service Provider	NPAC	The Service Provider SOA receives the M-

		Personnel submit a request to Create a 'pending', Intra-Service Provider, Subscription Version specifying a TN that is either already 'active' for their SPID OR is within an NPA-NXX associated with their SPID in the NPAC SMS network data. 2. The New Service Provider SOA sends an M-ACTION subscriptionVersionNewSP-Create to the NPAC SMS lnpSubscription object to create a new subscriptionVersionNPAC. The New Service Provider must specify the following attributes: • subscriptionTN or a valid subscriptionVersionTN-Range • subscriptionNewCurrentSP • subscriptionOldSP • subscriptionNewSP-DueDate (seconds set to zero) • subscriptionLNPType • subscriptionLRN • subscriptionSVType – if supported by the Service Provider SOA • subscriptionCLASS-DPC • subscriptionCLASS-SSN • subscriptionLIDB-DPC • subscriptionLIDB-SSN • subscriptionCNAM-DPC • subscriptionCNAM-SSN • subscriptionISVM-DPC • subscriptionISVM-SSN • subscriptionWSMSC-DPC - if supported by the Service provider SOA • subscriptionWSMSC-SSN - if supported by the Service Provider SOA The following attributes are optional: • subscriptionEndUser LocationValue • subscriptionEndUser LocationType • subscriptionBillingID • subscriptionOptionalData – at least one but not all elements supported by the Service Provider SOA.		EVENT-REPORT objectCreation from the NPAC SMS. **NOTE:** If the Service Provider SOA supports the Medium Timer Indicator, and it is provided in the create request, the NPAC SMS ignored this attribute for Intra-SP requests.

		• subscriptionNewSPMediumTimerIndicator – if supported by the Service Provider SOA •		
2.	NPAC	The NPAC SMS issues an M-CREATE subscriptionVersionNPAC to itself to create the Subscription Version and set the status to 'pending', as well as the subscriptionModifiedTimeStamp and subscriptionCreationTimeStamp to the current date and time.	NPAC	NPAC Personnel verify that the Subscription Version with LNP Type set to 'LISP' exists on the NPAC SMS. Specifically verify that the respective Optional Data elements that were specified in the request have been set appropriately.
3.	NPAC	The NPAC SMS issues a successful M-ACTION Response to the originating SOA.	SP	On the SOA, verify that the Subscription Version with LNP Type set to 'LISP' exists. Specifically verify that the respective Optional Data elements that were specified in the request have been set appropriately.
4.	NPAC	NPAC SMS issues an M-EVENT-REPORT objectCreation to the Intra-Service Provider SOA including the following information: • subscriptionTN • subscriptionNewCurrentSP • subscriptionOldSP • subscriptionNewSP-DueDate (seconds set to zeros) • subscriptionVersionStatus indicating this Subscription Version has been created on the NPAC SMS.	SP	Verify that the Subscription Version with LNP Type set to 'LISP' exists on the NPAC SMS. Specifically verify that the respective Optional Data elements that were specified in the request have been set appropriately.
5.	NPAC	NPAC Personnel perform a query for the Subscription Version.	NPAC	
6.	SP – Optional	Service Provider Personnel perform a local query for the Subscription Version.	SP	
7.	SP – Conditional	Service Provider Personnel perform an NPAC SMS query for the Subscription Version.	SP	

A. TEST IDENTITY

Test Case Number:	**NANC 400-2**	Priority:	**SOA**	C
			LSMS	R
Objective:	SOA/LSMS – Service Provider Personnel using their SOA (or NPAC Personnel using the NPAC SMS) modify at least one but not all Optional Data elements their SOA Supports on an Active Subscription Version – Success			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 399/400
NANC FRS Version Number:	3.3.2	Relevant Requirement(s):	R5-36, R5-37, R5-38.1
NANC IIS Version Number:	3.3.2	Relevant Flow(s):	B.5.2.1, B.5.6

C. TIME ESTIMATE

Estimated Execution Time:		Estimated Prerequisite Setup Time:		Estimated NPAC Setup Time:		Estimated SP Setup Time:	

D. PREREQUISITE

Prerequisite Test Cases:	Based on a regression test case like 8.1.2.2.1.31, but this is a more complex business scenario. If the Service Provider under test does not support Optional Data elements, the do not need to execute this test case. If the Service Provider under test only supports one Optional Data element, executing the regression scenarios sufficiently tests their functionality. If the Service Provider under test supports more than one Optional Data element, they need to execute this test case and in so doing modify (either modify attribute values and/or delete values for one Optional Data element and specify new values for another Optional Data element) more than one Optional Data element.
Prerequisite NPAC Setup:	1. Verify the SOA Supports SV Type and all Optional Data element are set to their production values for the Service Provider under test. In this test case the service provider should indicate at least one but not all Optional Data elements they support and SV Type data (if they support it) for the subscription version for modification. **In 'modifying' the attribute value cover both the scenarios where the value for one of the Optional Data elements is deleted and one of the Optional Data element values is modified.** 2. Verify the LSMS Supports Optional Data element Indicators are set to their production values.
Prerequisite SP Setup:	

E. TEST STEPS and EXPECTED RESULTS

	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	1. New Service Provider personnel, using their SOA system, modify at least one but not all Optional Data elements supported by their	NPAC	The NPAC SMS receives the subscriptionVersionModify M-ACTION Request from the Service Provider SOA and determines request is valid.

		SOA for an Active Subscription Version. The modification should cover the scenario where one of the element values are deleted from the record while another element value is actually modified. 2. The SOA system issues an M-ACTION Request subscriptionVersionModify to the NPAC SMS.		
2	NPAC	The NPAC SMS accepts the modify request and issues an M-SET to modify the requested attributes in the subscriptionVersionNPAC object and set the subscriptionModifiedTimeStamp.	NPAC	The NPAC SMS issues an M-SET response.
3	NPAC	NPAC SMS replies to the subscriptionVersionModify Request with a successful response.	SOA	SOA receives the response.
4	NPAC	NPAC SMS issues an M-SET to update the subscriptionVersionNPAC object's subscriptionVersionStatus to 'sending'.	NPAC	NPAC SMS responds to M-SET.
5	NPAC	The NPAC SMS issues an M-SET to all LSMSs who are receiving downloads for the NPA-NXX. If the LSMS supports WSMSC DPC and SSN Data, the M-SET will contain those attributes with NULL values.	LSMS	Each LSMS, who is accepting downloads for the NPA-NXX, responds successfully to the M-SET request.
6	NPAC	NPAC issues an M-SET to itself to set the subscriptionVersionStatus to 'active' and the subscriptionModifiedTimeStamp to the current date and time.	NPAC	NPAC SMS responds to M-SET.
7		NPAC SMS sends a subscriptionVersionStatusAttributeValueChange M-EVENT-REPORT to the New Service Provider SOA.		The New Service Provider SOA issues M-EVENT-REPORT confirmation to the NPAC SMS.
8.	NPAC	NPAC Personnel perform a query for the Subscription Version to verify that it was modified.	NPAC	The Subscription Version was modified. Specifically verify the Optional Data element values are updated as modified in the request.
9.	SP - conditional	Service Provider Personnel, using either the SOA/ SOA LTI or LSMS, perform an NPAC query for the Subscription Version to verify that it was modified.	SP	The Subscription Version was modified. Specifically verify the Optional Data element values are updated as modified in the request.
10.	SP - optional	Service Provider Personnel, using either the SOA or LSMS, perform a local query for the Subscription	SP	The Subscription Version was modified. Specifically verify the Optional Data element values

		Version to verify that it was modified.		are updated as modified in the request.
11.	NPAC	NPAC Personnel perform a full audit for the subscription version that was modified during this test case.	NPAC	Using the Audit Results Log verify that no updates were sent as a result of performing the audit. If updates were issues, the LSMS fails this test case.

A. TEST IDENTITY

Test Case Number:	**NANC 400-3**	SUT Priority:	**SOA**	C
			LSMS	R
Objective:	SOA/LSMS - Service Provider Personnel using their SOA, or NPAC Personnel using the NPAC SMS create a non-contaminated Number Pool Block with more than one but not all Optional Data elements their SOA supports – Success			

B. REFERENCES

NANC Change Order Revision Number:		**Change Order Number(s):**	NANC 399/400
NANC FRS Version Number:	3.3.2	**Relevant Requirement(s):**	RR3-149, RR5-91
NANC IIS Version Number:	3.3.2	**Relevant Flow(s):**	B.4.4.1,

C. PREREQUISITE

Prerequisite Test Cases:	Based on 4.1.1 in Chapter 10 which requires Service Provider to execute the test case specifying ALL Optional Data elements they support (either they don't support/specify any – or they specify all that they support). This test case is a different business scenario in that the Service Provider is supposed to specify some but not all of the Optional Data elements they support. If the Service Provider under test only supports one Optional Data element, executing 4.1.1 is sufficient. If the Service Provider under test supports more than one Optional Data element, they must also perform this test case which tests a more complex business scenario.
Prerequisite NPAC Setup:	Verify that there are no contaminated TNs or 'pending-like' Subscription Versions for the range of TNs in the NPA-NXX-X.
Prerequisite SP Setup:	1. Verify that the NPA-NXX-X exists for the Number Pool Block that Service Provider Personnel will create during this Test Case. 2. Verify that the current date is equal to or greater than the NPA-NXX-X Effective Date. 3. Verify the SOA Supports SV Type and all Optional Data element Indicators are set to their production values for the Service Provider under test. **In this test case the service provider should indicate at least one Optional Data element they support but not all Optional Data elements they support and SV Type data (if they support it) for the number pool block.** 4. Configure the SOA under test as the Block Holder SOA. 5. Verify the LSMS Supports Optional Data element Indicators are set to their production values.

D. TEST STEPS and EXPECTED RESULTS

Ro w #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	SP	Using the SOA, Service Provider Personnel, submit a M-ACTION numberPoolBlock-Create request to the NPAC SMS to create a Number Pool Block including the following attributes:	NPAC	1. The NPAC SMS receives the M-ACTION numberPoolBlock-Create Request. 2. The NPAC SMS verifies the following information: • The requesting SOA is the NPA-NXX-X Holder SOA. • The serviceProvNPA-NXX-X object exists for the NPA-NXX-X (respective NPA-NXX-X information). • All attributes specified are valid.

		• numberPoolBlockNPA-NXX-X • numberPoolBlockSPID • numberPoolBlockLRN • numberPoolBlockSVType – if supported by the Service Provider SOA • numberPoolBlockCLASS-DPC • numberPoolBlockCLASS-SSN • numberPoolBlockCNAM-DPC • numberPoolBlockCNAM-SSN • numberPoolBlockISVM-DPC • numberPoolBlockISVM-SSN • numberPoolBlockLIDB-DPC • numberPoolBlockLIDB-SSN • numberPoolBlockWSMSC-DPC – if supported by the Service Provider SOA • numberPoolBlockWSMSC-SSN – if supported by the Service Provider SOA • numberPoolBlockOptionalData – if supported by the Service Provider SOA • **Specify at least one but not all Optional Data attributes your SOA application supports.**		• A numberPoolBlockNPAC object does not already exist for the NPA-NXX-X (a duplicate Number Pool Block does not already exist). • The current date is greater than or equal to the NPA-NXX-X-EffectiveTimeStamp. • There are not any 'pending-like, no-active' Subscription Version objects within the given TN range.
2.	NPAC	1. The NPAC SMS issues an M-CREATE Request numberPoolBlockNPAC to itself. 2. The NPAC SMS sets the numberPoolBlockSOA-Origination Indicator to TRUE. 3. The NPAC SMS sets the numberPoolBlockStatus to 'sending'. 4. The NPAC SMS sets the following timestamps to the current date and time: • numberPoolBlockCreationTimeStamp • numberPoolBlockActivationTimeStamp • numberPoolBlockBroadcastTimeStamp • numberPoolBlockModifiedTimeStamp	NPAC	The NPAC SMS issues an M-CREATE Response numberPoolBlockNPAC to itself.
3.	NPAC	1. The NPAC SMS issues an M-CREATE Request subscriptionVersionNPAC to itself. 2. The NPAC SMS sets the LNP	NPAC	The NPAC SMS issues an M-CREATE Response subscriptionVersionNPAC to itself.

		Type to 'POOL' for the Subscription Versions it creates within the 1K Block. 3. The NPAC SMS sets the Subscription Versions to 'sending'. 4. The NPAC SMS sets the following timestamps to the current date and time for the Subscription Versions: • subscriptionModifiedTime Stamp • subscriptionActivationTim eStamp • subscriptionBroadcastTime Stamp • subscriptionCreationTimeS tamp		
4.	NPAC	The NPAC SMS issues an M-ACTION Response numberPoolBlock-Create to the respective NPA-NXX-X Holder SOA that initiated the Number Pool Block Create request.	SP	The NPA-NXX-X Holder SOA receives the M-ACTION Response from the NPAC SMS.
5.	NPAC	The NPAC SMS issues an M-EVENT-REPORT objectCreation for the numberPoolBlockNPAC to the NPA-NXX-X Holder SOA. The following attributes are sent in the objectCreation notification: • numberPoolBlockId • numberPoolBlockSOA-Origination • numberPoolBlockCreationTime Stamp • numberPoolBlockStatus • numberPoolBlockNPA-NXX-X • numberPoolBlockSPID • numberPoolBlockLRN • numberPoolBlockCLASS-DPC • numberPoolBlockCLASS-SSN • numberPoolBlockCNAM-DPC • numberPoolBlockCNAM-SSN • numberPoolBlockISVM-DPC • numberPoolBlockISVM-SSN • numberPoolBlockLIDB-DPC • numberPoolBlockLIDB-SSN • numberPoolBlockWSMSC-DPC – if supported by the Service Provider SOA • numberPoolBlockWSMSC-SSN – if supported by the Service Provider SOA	SP	The NPA-NXX-X Holder SOA issues an M-EVENT-REPORT Confirmation to the NPAC SMS.

		• numberPoolBlockSVType – if supported by the Service Provider SOA • numberPoolBlockOptionalData – if supported by the Service • the Optional Data elements that are specified in the request are set. This should be some but not all elements supported by the Service Provider under test.		
6.	NPAC	1. If the LSMS under test is non-EDR, the NPAC SMS issues an M-ACTION Request subscriptionVersionLocalSMS-Create to the LSMS. 2. If the LSMS under test is EDR, the NPAC SMS issues an M-CREATE Request numberPoolBlock to the LSMS.	SP	1. If the LSMS under test is non-EDR they receive the M-ACTION Request, verify that the action is valid and return an M-ACTION Response subscriptionVersionLocalSMS-Create. 2. If the LSMS under test is EDR they receive the M-CREATE Request, and return an M-CREATE Response numberPoolBlock. 3. A non-EDR LSMS proceeds to execute all the creates specified by the M-ACTION Request and issues an M-EVENT-REPORT subscriptionVersionLocalSMS-CreateResults specifying the Subscription Versions were successfully created. 4. The NPAC SMS waits for all subscriptionVersionLocalSMS-CreateResults notifications for a tunable amount of time.
7.	NPAC	Upon the first successful response from an LSMS, the NPAC SMS sets the following timestamps to the current date and time: • numberPoolBlockActivationCompleteTimeStamp • subscriptionActivationCompleteTimeStamp • numberPoolBlockModifiedTimeStamp • subscriptionModifiedTimeStamp	NPAC	The NPAC SMS responds to each of the M-EVENT-REPORT subscriptionVersionLocalSMS-CreateResults as it receives these notifications with M-EVENT-REPORT Confirmations.
8.	NPAC	1. The NPAC SMS issues M-SET Request subscriptionVersionNPAC to itself. 2. The NPAC SMS updates the following attributes for each Subscription Version within the 1K Block with LNP Type set to 'POOL': • sets the subscriptionVersionStatus to 'active'. • sets the Subscription Version Failed SP List to empty. • sets the	NPAC	1. The NPAC SMS issues an M-SET subscriptionVersionNPAC Response to itself. 2. The NPAC SMS issues an M-SET numberPoolBlockNPAC Response to itself.

		subscriptionModifiedTime Stamp to the current date and time. 3. The NPAC SMS issues an M-SET Request numberPoolBlockNPAC to itself to update the following attributes: • sets the numberPoolBlockStatus to 'active'. • sets the Number Pool Block Failed SP List to empty. • sets the numberPoolBlockModified TimeStamp to the current date and time.		
9.	NPAC	The NPAC SMS determines the SOA Origination Indicator is set to TRUE and issues an M-EVENT-REPORT numberPoolBlockStatusAttributeValueChange to the NPA-NXX-X Holder SOA to set the Number Pool Block status to 'active' and the Failed SP List to empty.	SP	The NPA-NXX-X Holder SOA receives the M-EVENT-REPORT from the NPAC SMS and issues an M-EVENT-REPORT Confirmation back to the NPAC SMS.
10.	NPAC	NPAC Personnel perform a query for the Number Pool Block and the 1K Block of Subscription Versions with LNP Type set to 'POOL' that Service Provider Personnel created during this Test Case.	NPAC	1. Verify the Number Pool Block exists with status of 'active' and an empty Failed SP List. 2. Verify the 1K Block of Subscription Versions exist with LNP Type set to 'POOL', a status of 'active' and an empty Failed SP List.
11.	SP – Optional	Service Provider Personnel perform a local query for the Number Pool Block and the 1K Block of Subscription Versions with LNP Type set to 'POOL' that Service Provider Personnel created during this Test Case.	SP	1. Verify the Number Pool Block exists with status of 'active' and an empty Failed SP List on the SOA. 2. If the LSMS under test is EDR, verify the Number Pool Block exists on the LSMS. 3. If the LSMS under test is non-EDR, verify the 1K Block of Subscription Versions exist with LNP Type set to 'POOL', a status of 'active' on the LSMS. 4. On the LSMS under test verify that the Optional Data elements are instantiated on the LSMS according to how their Optional Data element Indicators are configured.
12.	SP – Conditional	Service Provider Personnel perform an NPAC SMS query for the Number Pool Block and the 1K Block of Subscription Versions with LNP Type set to 'POOL' that Service Provider Personnel created during this Test Case.	SP	1. If the LSMS under test is EDR, verify the Number Pool Block exists on the NPAC SMS with status of 'active' and an empty Failed SP List. 2. If the LSMS under test is non-EDR, verify the 1K Block of Subscription Versions exist on the NPAC SMS with LNP Type set to 'POOL', a status of 'active' and an empty Failed SP List. 3. On the LSMS under test verify that the Optional Data elements are instantiated on the LSMS according to how their Optional Data element Indicators are configured.
13.	NPAC	NPAC Personnel perform a full	NPAC	Using the Audit Results Log verify that there were no updates

		audit for the Number Pool Block and respective POOLed Subscription Versions that were created during this test case.		issued as a result of performing the audit. If updates were made, the LSMS fails this test case.

A. TEST IDENTITY

Test Case Number:	NANC 400-4	SUT Priority:	SOA	C
			LSMS	R
Objective:	SOA/LSMS- Service Provider Personnel using their SOA or NPAC Personnel using the NPAC SMS modify an active Number Pool Block with the SOA Origination Indicator set to FALSE (and contains Subscription Versions with LNP Types of 'POOL', 'LISP' and 'LSPP'). - Success			

B. REFERENCES

NANC Change Order Revision Number:		Change Order Number(s):	NANC 399/400
NANC FRS Version Number:	3.3.2	Relevant Requirement(s):	RR3-157
NANC IIS Version Number:	3.3.2	Relevant Flow(s):	B.4.4.12, B.4.4.13

C. PREREQUISITE

Prerequisite Test Cases:	Based on 4.2.1 in Chapter 10 which requires Service Provider to execute the test case specifying ALL Optional Data elements they support for modification (either they don't support/specify any – or they specify all that they support). If the Service Provider under test only supports one Optional Data element, executing 4.1.2 is sufficient. If the Service Provider under test supports more than one Optional Data element, they need to execute this test case and in so doing modify (either modify attribute values and/or delete values for one Optional Data element and specify new values for another Optional Data element) more than one Optional Data element.
Prerequisite NPAC Setup:	1. Verify the Number Pool Block to be modified exists on the NPAC SMS with a status of 'active' and an empty Failed SP List. 2. Verify that the Number Pool Block SOA-Origination Indicator is set to FALSE. 3. Verify that LISP and LSPP Subscription Versions exist for some TNs in the 1K Block. 4. Verify the SOA Supports SV Type and all Optional Data element Indicators are set to their production values for the Service Provider under test. In this test case the service provider should indicate at least one Optional Data element they support but not all Optional Data elements they support and SV Type data (if they support it) for the number pool block. **In 'modifying' the attribute value cover both the scenarios where the value for one of the Optional Data elements is deleted and one of the Optional Data element values is modified.** 5. Verify the LSMS Supports Optional Data element Indicators are set to their production values.
Prerequisite SP Setup:	All Service Providers verify either the Number Pool Block or 1K Block of Subscription Versions with LNP Type set to 'POOL' to be modified exists locally.

D. TEST STEPS and EXPECTED RESULTS

Row #	NPAC or SP	Test Step	NPAC or SP	Expected Result
1.	NPAC	Using the SOA, Service Provider Personnel submit an M-SET Request numberPoolBlock to modify at least one but not all Optional Data elements	NPAC	1. The NPAC SMS receives the M-SET Request numberPoolBlock. 2. The NPAC SMS performs the following actions: • Updates the modified attributes in the Number

		supported by their SOA for a Number Pool Block. The modification should cover the scenario where one of the element values are deleted from the record while another element value is actually modified. The following attributes may be modified: • numberPoolBlockLRN • numberPoolBlockSVType – if supported by the Service Provider SOA • numberPoolBlockCLASS-DPC • numberPoolBlockCLASS-SSN • numberPoolBlockCNAM-DPC • numberPoolBlockCNAM-SSN • numberPoolBlockLIDB-DPC • numberPoolBlockLIDB-SSN • numberPoolBlockISVM-DPC • numberPoolBlockISVM-SSN • numberPoolBlockWSMSC-DPC – if supported by the Service Provider SOA • numberPoolBlockWSMSC-SSN – if supported by the Service Provider SOA • numberPoolBlockOptionalData – if supported by the Service Provider SOA • **Specify at least one but not all Optional Data attributes your SOA application supports.**		Pool Block object. • Sets the numberPoolBlockStatus to 'sending'. • Updates the numberPoolBlockBroadcastTimeStamp and numberPoolBlockModifiedTimeStamp to the current date and time.
2.	NPAC	The NPAC SMS issues an M-SET Response numberPoolBlock to the Service Provider SOA.	SP	The Service Provider SOA receives the M-SET Response numberPoolBlock.
3.	NPAC	The NPAC SMS issues an M-SET Request subscriptionVersionNPAC to itself to modify the attribute data on the corresponding subscriptionVersionNPAC object(s).	SP	1. The NPAC SMS issues an M-SET Response subscriptionVersionNPAC to itself. 2. The NPAC SMS performs the following actions: • Updates the modified attributes in the Subscription Versions within the 1K Block with LNP Type set to 'POOL'. • Sets the subscriptionVersionStatus to 'sending'. • Updates the subscriptionVersionBroadcastTimeStamp and the subscriptionVersionModifiedTimeStamp to the current date and time.
4.	NPAC	1. If the LSMS under test is non-EDR, the NPAC SMS issues an M-SET Request subscriptionVersion to update the attributes on all Subscription Versions in the 1K Block with LNP Type set to 'POOL'.	SP	1. If the LSMS under test is non-EDR, the LSMS receives the M-SET Request, verifies that the action is valid and returns an M-SET Response subscriptionVersion back to the NPAC SMS. 2. If the LSMS under test is an EDR LSMS receives the M-SET Request, verifies that the action is valid and returns an M-SET Response numberPoolBlock back

		2. If the LSMS under test is EDR, the NPAC SMS issues an M-SET Request numberPoolBlock to update the attributes on the Number Pool Block object.		to the NPAC SMS.
5.	NPAC	Upon receiving a successful response from the LSMS, the following occurs: 1. The NPAC SMS issues an M-SET Request subscriptionVersionNPAC to itself to set the Subscription Version Status to 'active', update the Failed SP List to empty, and update the subscriptionModifiedTimeStamp to the current date and time. 2. The NPAC SMS issues an M-SET Request numberPoolBlockNPAC to itself to set the Number Pool Block status to 'active', update the Failed SP List to empty and update the numberPoolBlockModifiedTimeStamp to the current date and time.	NPAC	1. The NPAC SMS issues an M-SET Response subscriptionVersionNPAC. 2. The NPAC SMS issues an M-SET Response numberPoolBlockNPAC.
6.	NPAC	The NPAC SMS determines the numberPoolBlockSOA-Origination indicator is set to FALSE, and further processing is terminated here.		
7.	NPAC	NPAC Personnel perform a query for the Number Pool Block and the 1K Block of Subscription Versions with LNP Type set to 'POOL' as well as 'LISP' and 'LSPP'.	NPAC	1. Verify the Number Pool Block and specifically only the respective, modified Optional Data elements were successfully modified and the status is set to 'active' with an empty Failed SP List. 2. Verify the Subscription Versions with LNP Type set to 'POOL' in the 1K Block were successfully modified and their status is set to 'active' with an empty Failed SP List. 3. Verify the Subscription Versions within the 1K Block with LNP Type set to 'LISP' and 'LSPP' have not been modified on any LSMS. 4. Verify the NPAC SMS generated a Number Pool Block with a unique ID, all attributes prior to modification, and the status is set to 'old' with an empty Failed SP List.
8.	NPAC	NPAC Personnel verify that the 'old' Number Pool Block that was created as a result of the modification, did not get broadcast.	NPAC	Verify the NPAC SMS did not broadcast the 'old' Number Pool Block.
9.	SP – Optional	Service Provider Personnel perform a local query for the Number Pool Block and the 1K Block of Subscription Versions with LNP Type set to 'POOL' as well as 'LISP' and 'LSPP'.	SP	1. If the LSMS under test is EDR, verify you received the modification for Number Pool Block and that it was modified appropriately. 2. If the LSMS under test non-EDR verify you received the modifications for the Subscription Versions with LNP Type set to 'POOL' in the 1K Block, and that the Subscription Versions were modified appropriately; only the respective Optional Data elements that were

				modified in this request were updated.. 3. On the LSMS under test verify that the Optional Data elements are instantiated on the LSMS according to how their Optional Data element Indicators are configured. 4. Verify the Subscription Versions within the 1K Block with LNP Type set to 'LISP' and 'LSPP' have not been modified on any LSMS.
10.	SP - Conditional	Service Provider Personnel perform an NPAC SMS query for the Number Pool Block and 1K Block of Subscription Versions with LNP Type set to 'POOL' as well as 'LISP' and 'LSPP'.	SP	1. Verify the Number Pool Block and specifically only the respective, modified Optional Data elements were successfully modified as specified in the request and the status is set to 'active' with an empty Failed SP List on the NPAC SMS. 2. Verify the Subscription Versions of LNP Type set to 'POOL' in the 1K Block were successfully modified and their status is set to 'active' with an empty Failed SP List on the NPAC SMS. 3. Verify the Subscription Versions within the 1K Block with LNP Type set to 'LISP' and 'LSPP' have not been modified on the NPAC SMS 4. Verify the Number Pool Block exists on the NPAC SMS with a unique ID, all attributes prior to modification, and the status is set to 'old' with an empty Failed SP List.
11.	SP – Conditional	Service Provider Personnel verify that the 'old' Number Pool Block that was created as a result of the modification, did not get broadcast.	SP	Verify the 'old' Number Pool Block did not get broadcast.
12.	NPAC	NPAC Personnel perform a full audit for the Number Pool Block and respective POOLed Subscription Versions that were modified during this test case. NPAC Personnel perform a full audit for the non-POOLed Subscription Versions respective to the Number Pool Block used during this test case.	NPAC	o Using the Audit Results Log verify that there were no updates issued to the Number Pool Block or respective POOLed Subscription Versions as a result of performing the audit. If updates were made, the LSMS fails this test case. o Using the Audit Results Log verify that there were no updates issues as a result of performing the audit of the non-POOLed Subscription Versions.