NPAC SMS Release 3.4.8 Turn Up Test Plan Release 3.4.8a May 8, 2015 **Publication History** 

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3.4.8a May 8, 2015 Initial draft of NPAC Release 3.4.8 Test Cases.

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# Preface

## Purpose of this Document

The purpose of this document is to identify the NPAC Release 3.4.8 Test Cases. These Test Cases are based on NPAC SMS Release 3.4.8 requirements (Service Provider-requested Notification Suppression).

Actual Entrance and Exit criteria for test execution/completion are an agreement between individual Service Providers and the NPAC SMS vendor based upon the functionality supported by the local Service Provider SOA and/or LSMS systems.

This Test Plan contains Test Cases per functional component of the Software Release. The Test Cases cover basic Success and Error scenarios. Test Case Priority is indicated by the systems that participate in each respective Test Case. It is assumed that the NPAC SMS/NPAC personnel participate in every Test Case of the Turn Up Test Plan. If the Test Case Priority for a system is marked as **Required** that system shall participate as the Test Case describes. A Test Case Priority of **Conditional** for a system means that the system shall participate in the Test Case as described, if the respective functionality has been implemented for that system. When the Test Case Priority is marked as **Optional** for a system to participate in the Test Case as described. Finally, the Test Case Priority may be marked as N/A for a Service Provider system, which means that the functionality tested in this Test Case does not apply to this respective Service Provider system.

The different NPAC regions will turn-up Release 3.4.8 software at different times. As a result Service Providers that operate in multiple regions will need to determine when to begin using the Service Provider-requested Notification Suppression feature. This test plan does not include any guidelines or test cases for the purpose of testing backward compatibility between NPAC SMS releases.

### Assumptions

All Test Cases should be executed where the Service Provider profile attributes are set such that they emulate the Service Provider's production environment unless otherwise stated in an individual test case.

Please refer to the NPAC/SMS User Profile – U.S. Mechanized User Readiness Form for the complete list of SOA and LSMS Service Provider Configurables. For Canadian Users, refer to the Canadian Mechanized User Readiness Form.

## Audience

The intended audience for this document is NPAC SMS, SOA and LSMS system testers and anyone who is involved with NPAC SMS, SOA and LSMS Turn Up Certification testing. It is assumed that individuals using this test plan have an understanding of Local Number Portability, Number Pooling and related specification documents. The Test Cases are written from the XML Interface Specification (XIS) perspective so users should have an understanding of this document specifically.

# Conventions Used in this Document

#### Test Case Template

Test Cases are the bulk of the information presented in this document. Test Cases are comprised of the following information:

#### TEST IDENTITY

Test Case Number:

Α.

Unique Test Case Identifier

Objective:

в.

REFERENCES NANC Change Order Revision Number: NANC FRS Version Number: NANC IIS Version Number: Test Case Objective. The Title specifies re-

If a change order revision is relevant – it's FRS version is indicated here. IIS version is indicated here.

<b>A</b> .	TEST IDENTITY				
<b>C.</b>	PREREQUISITE				
	Prerequisite Test Cases:	Test Case, if any, to be successfully execu			
	Prerequisite NPAC Setup:	Steps to be executed by NPAC personnel p			
	Prerequisite SP Setup:	Steps to be executed by Service Provider p			
D.	TEST STEPS and EXPECTED RESULTS				
Row #	NPAC or SP	Test Step			
1.	[system indicated here]	This test step is described here.			
Е.	Pass/Fail Analysis, TC #				
Pass	Fail	NPAC personnel performed the test case a			
Pass	Fail	Service Provider personnel performed the			

#### Test Case Numbering

Test Case Numbers are alphanumeric numbers that identify the sections of functional component based on the respective Change Order to ensure a unique Test Case number. Below is a table identifying the Change Orders that are included in this release and their associated alphanumeric numbering prefix. These test case numbers are assumed to be static:

Numeric Prefix	<b>Respective Functional Component</b>
NANC 458	Service Provider-requested Notification Suppression

#### **Test Case Priority**

Each Test Case will have an associated Test Case Priority.

**Required:** This Test Case represents required functionality and shall be executed by the respective Service Provider system and/or NPAC SMS Vendor.

**Conditional:** This Test Case represents optional functionality. If a Service Provider has implemented the suggested functionality for this respective Service Provider system in the Test Case, they shall execute the Test Case as written. If there are not any Service Providers that have implemented the functionality, and therefore cannot verify the NPAC SMS behavior, the NPAC personnel shall execute the Test Case with the use of simulators.

**Optional:** Service Provider may execute the Test Case as written if they have implemented the suggested functionality for this respective system. Typically 'optional' Test Cases verify 'additional' attributes of a requirement.

**N/A:** This Test Case does not apply to this Service Provider system. Thus the Service Provider does not need to test this respective system during this Test Case.

#### **Test Case Prerequisites**

Each Test Case contains a section for Prerequisites including Prerequisite Test Cases and/or Prerequisite NPAC Setup and/or Prerequisite SP Setup. When Prerequisite Test Cases are identified this is simply referencing a Test Case that, when appropriately executed, will setup the proper scenario for executing that respective Test Case. Prerequisite Test Cases are not a good source for Test Case ordering to ensure efficient execution. Ordering of Test Cases for efficient execution should be reviewed on a Service Provider by Service Provider basis, based on their specific suite of Test Cases for exiting Turn Up Test.

#### Test Case Steps and Expected Results

Test Case steps and Expected results have fields to indicate the respective systems, test steps and their expected results.

#### Pass/Fail Analysis

Each Test Case contains a general analysis of either Pass or Fail.

#### **Related Documents**

North American Number Council (NANC) Functional Requirements Specification Number Portability Administration Center (NPAC) Service Management System (SMS), Release 3.4.8a

NPAC SMS XML Interface Specifications NANC Version 1.6

### **Document Structure**

This document is organized into sections as defined below:

 Preface (1)
 This section describes the purpose and structure of the section describes the purpose and structure o

RSMS 3.4.8 Turn Up Test Cases (Section 2) Test Cases – one section for each change order

Preface (1)	This section describes the purpose and structure of t
Appendix A	Test Case Matrix including a List of Objectives and I
Appendix B	Issues [indicate open/date and closed/date]

# **Requirements for Turn-Up Testing**

TUT, which includes both new NPAC/SMS Software release functionality testing and regression testing, must be performed on a developer's local system software and (optionally) on a User's local system software anytime a change is made to the interface (XSD, GDMO or ASN.1) of either the NPAC/SMS or the local system. In the event that the interface change is initiated by the NPAC/SMS, both the local system developers and (optionally) Users shall perform Turn-Up testing on each version of the local system software that a User potentially may use with the new NPAC/SMS interface.

The following sets forth the required level of testing for specific scenarios:

- a. When a local product (SOA/LSMS) is compiled with the current interface model, and a new local feature (SOA/LSMS feature) is implemented that does NOT involve a change in the use of the interface model, and the NPAC/SMS is compiled with the current model, then Turn-Up Testing is optional. Test cases to be performed at the discretion of local system developers and (optionally) Users. In this situation **standard regression test cases** shall be performed.
- b. When a local product (SOA/LSMS) is compiled with the current interface model, and no new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the new interface model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, standard regression test cases shall be performed.
- c. When a local product (SOA/LSMS) is compiled with the new interface model, and no new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the new interface model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, standard regression test cases shall be performed.
- d. When a local product (SOA/LSMS) is compiled with the new interface model, and new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the new interface model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases and new functionality test cases** shall be performed.

- e. When a local product (SOA/LSMS) is compiled with the current interface model, and new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the current model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases and new functionality test cases** shall be performed.
- f. When the operating system software of a local product (SOA/LSMS) is upgraded, and this results in any OSI stack or CMIP toolkit change, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, standard regression test cases shall be performed.
- g. When the operating system of a local product (SOA/LSMS) is changed (e.g. OS vendor A to OS vendor B), then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.
- h. When the hardware of a local product (SOA/LSMS) is changed, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.

#### **Turn-Up Testing Execution Considerations**

No special test execution consideration related to R3.4.8.

# RSMS 3.4.8 Turn Up Test Cases

# NANC 458 – Service Provider-requested Notification Suppression

Tests should be executed in two cycles:

- 1. Set up as a SPID in a Regular configuration (standalone SPID)
- 2. Set up as a SPID in a Delegation configuration (Grantor-Delegate)

For the Delegation configuration, submit the Request multiple times (variety of no suppression, single suppression, and multiple suppression) to cover the following scenarios:

- 1. suppress to self (Initiator SPID)
- 2. suppress to parent Grantor (if Initiator SPID is a Delegate)
- 3. suppress to Delegates(s) (if Initiator SPID is a Grantor or one of several Delegates related to a parent Grantor)
- 4. suppress to the Other SPID
- 5. suppress to the Other SPID's Delegate(s)

No new test cases for Service Provider-requested Notification Suppression are required. All certification testing for Service Provider-requested Notification Suppression will use existing Turn-Up Test Cases as listed below for New Service Provider and Old Service Provider:

- NSP SV Create with notification suppression TRUE.
   NANC 201-1 SOA New Service Provider Personnel create an Inter-Service Provider Subscription Version for a single TN when the New Service Provider 'Port In Timer' and 'SP Business Type' are set to 'SHORT' and the Old Service Provider 'Port Out Timer' and 'SP Business Type' are set to 'SHORT', let the Initial Concurrence and Final Concurrence timers expire prior to Old Service Provider Concurrence – Success
- NSP SV Modify with notification suppression TRUE.
   8.1.2.2.1.2 Modify optional fields for a single TN 'pending' port for a New Service Provider. Success
- NSP SV Cancel with notification suppression TRUE.
   8.1.2.5.1.2 Subscription Version Cancel With Only One Create Action Received (New Service Provider SOA Mechanized Interface). – Success
- NSP SV Cancel Concurrence with notification suppression TRUE.
   8.1.2.5.1.7 Subscription Version Cancel by Service Provider SOA After Both Service Provider SOAs Have Concurred (New Service Provider's SOA Mechanized Interface)
- 5. NSP SV Cancel Un-Do with notification suppression TRUE. NANC 388-1 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
- 6. NSP SV Conflict Resolution with notification suppression TRUE. NANC 201-25 SOA – New Service Provider Personnel remove a Subscription Version from Conflict when the Timer Type and Business Type are set to 'LONG' (after the Conflict Resolution New Service Provider Restriction Tunable has expired) – Success
- NSP SV Activate with notification suppression TRUE.
   2.8 SOA Service Provider Personnel activate a single SV. Their Customer TN Range Notification Indicator is set to their production value. Even

though this is a single SV, the activate request results in a range notification. - Success

- NSP SV Disconnect with notification suppression TRUE.
   2.19 SOA Service Provider Personnel perform an immediate disconnect of a single active SV. Their Customer TN Range Notification Indicator is set to their production value. – Success
- 9. NSP Pool Block Create with notification suppression TRUE.
   4.1.1 SOA Service Provider Personnel create a non-contaminated Number Pool Block - Success
- NSP Pool Block Modify with notification suppression TRUE.
   4.2.1 SOA- Service Provider Personnel 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

Also perform test 4.2.1 with SOA Origination Indicator set to TRUE

- OSP SV Create with notification suppression TRUE.
   8.1.2.1.1.32 Create inter-service provider 'pending' port (concurrence) of a single TN via the SOA Mechanized Interface. Success
- 12. OSP SV Modify with notification suppression TRUE. 218-1 SOA – (Old) Service Provider Personnel submit a single TN, subscription version modify request specifying Authorization (FALSE) and a valid status change cause code, setting the subscription version status to conflict after both Service Providers have created/concurred to the port, and prior to the Conflict Restriction Window - SUCCESS
- OSP SV Cancel with notification suppression TRUE.
   2.27 SOA Old Service Provider Personnel cancel a single SV. Their Customer TN Range Notification Indicator is set to their production value. In the pre-requisite create process only the Old SP has submitted a create request. Even though this is a single SV, the cancel request results in a range notification. - Success
- OSP SV Cancel Concurrence with notification suppression TRUE.
   8.1.2.5.1.6 Subscription Version Cancel by Service Provider SOA After Both Service Provider SOAs Have Concurred (Old Service Provider's SOA Mechanized Interface)
- 15. OSP SV Cancel Un-Do with notification suppression TRUE. NANC 388-1 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

Optionally, regression tests may be executed with Notification Suppression set to FALSE.

# Appendix A: Test Case Matrix

NANC 458 – Service Provider-requested Notification Suppression

Test Case Priority

Test Case # Test Case Description

	1	11		
SOA -			Exist-ing	NANC 201-1
Required			0	${ m SOA}-{ m New}$
1				Service
				Provider
				Personnel
				create an
				Inter-
				Service
				Provider
				Subscription
				Version for a
				single TN
				when the
				Nor Corrigo
				Drage der
				Provider
				Port In
				Timer' and
				SP Business
				Type' are set
				to 'SHORT'
				and the Old
				Service
				Provider
				'Port Out
				Timer' and
				'SP Business
				Type' are
				set to
				'SHORT', let
				the Initial
				Concurrence
				and Final
				Concurrence
				timers
				expire prior
				to Old
				Service
				Provider
				Concurrence
				- Success
				8.1.2.2.1.2
				Modify
				optional
				fields for a
				single TN
				'pending'
	12			port for a
	± <b>=</b>			New Service
				Provider –
				Success
				819519
				0.1.4.0.1.4

NANC 458 – Service Provider-requested Notification Suppression

Success 8.1.2.5.1.2 Subscription Version Cancel With

NANC 458 – Service Provider-requested Notification Suppression

 $\overline{\mathrm{LSMS} - \mathrm{N}/\mathrm{A}}$ 

SOA -		Exist-ing	4.1.1 SOA -
Required			Service
			Provider
			Personnel
			create a non-
			contaminated
			Number
			Pool Block –
			Success
			4.2.1 SOA-
			Service
			Provider
			Personnel
			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
			Also
			perform test
			4.2.1 with
			SOA
			Origination
			Indicator set
			to TRUE
			8.1.2.1.1.32
			Create
			inter-service
			provider
			'pending'
			port (concur-
			rence) of a
	14		single TN
			via the SOA
			Mechanized
			Interface. –
			Success
			218-1 SOA –

(Old) Service

NANC 458 – Service Provider-requested Notification Suppression

LSMS - N/A

# Appendix B: Test Plan Issues

Following are issues related to the NPAC Release 3.4.8 Test Plan:

# Date Issue Status