

Vendor Certification: ITP Testing – User M&P

Purpose and Scope

This document describes the tasks associated with Vendor Certification of local (SOA/LSMS) systems for use by NPAC Users with the NPAC SMS.

The Interoperability Testing ("ITP") process is used to ensure that Vendor systems do not adversely impact the NPAC SMS, and other providers. All software vendors must certify their systems with the NPAC when a new NPAC SMS release is issued, or when releasing a new version of their SOA/LSMS system, or upgrading local features.

Procedure Overview

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Procedure Background

All software vendors must have their systems certified with the NeuStar Test Lab, as Mechanized Interface Users must use a certified SOA or LSMS system for association with the NPAC. To certify, Vendors are required to complete **Interoperability Testing ("ITP").** Users must then complete Turn-Up Testing to use their installation of the certified system in the Production environment. (To prevent any delays in production turn-up, NeuStar recommends that vendors test their solutions in advance of an NPAC User's 'Live / Activation Date'.)

Software Vendors are required to have a completed Non-Disclosure Agreement, and New User Application, on file with the NPAC prior to certification of their systems. Questions should be addressed to the NeuStar Customer Coordinator at cc@neustar.biz or 571-434-5434.

For additional information please refer to the **New User Provisioning** and **Testing Overview** documents posted on the NPAC Secure Site, under the "NPAC User M&Ps" button. You can access the secure site from the NPAC Public Site (www.npac.com) and login into the secure area by clicking on the "Secure Site" button.

Interoperability Testing (ITP)

Software Vendors test protocol-level messaging and compatibility of their SOA and LSMS systems with the NPAC using pre-defined test cases. Test cases are defined by the LNPA Working Group, and are posted for reference on the NPAC public web site at http://www.npac.com. The Interoperability testing is triggered by the following events (see Table 1 below):

- 1. New vendor entrant in systems market New SOA and LSMS vendors must test their systems for interoperability with current NPAC/SMS software release. Users may not connect SOA or LSMS products until ITP testing has been completed successfully. The initial certification charge is \$32,000 for a SOA product and \$48,000 for an LSMS product. If the testing requires more than three weeks for SOA (or five weeks for LSMS) to complete, a charge for the additional time of \$2,700 per day is imposed.
- 2. Existing Vendor, new system Existing SOA and LSMS vendors must test their new systems for interoperability with current NPAC/SMS software release. Users may not connect SOA or LSMS products to the NPAC/SMS until ITP testing has been completed successfully. The initial certification charge is \$32,000 for a SOA product and \$48,000 for an LSMS product. If the testing requires more than three weeks for SOA (or five weeks for LSMS) to complete, a charge for the additional time of \$2,700 per day is imposed.
- 3. New NPAC/SMS Software Release All vendors must test their systems for interoperability with each new NPAC/SMS software release if there is a change in the GDMO/ASN.1 specifications. ITP testing is not required for NPAC/SMS software releases where there is no change in the GDMO/ASN.1, such as is the case for Release 3.2.2 (Oracle Conversion) and Release 3.2.3 (Linux Release). Test cases for both the current and new release are executed. ITP testing is charged at US\$2,700 per day.
- 4. **Vendor Software Release, existing system** It is the industry's expectation that SOA and LSMS vendors' new software releases will be tested for interoperability with current NPAC/SMS software release. Such ITP testing is charged at \$2,700 per day.

Vendor Certification is performed on NPAC's ITP simulator, not on the NPAC testbed. Upon successful completion of ITP testing, NPAC certifies that the Vendor's SOA or LSMS system passed Interoperability Testing.

Table 1 - Requirements for ITP Testing

Requirements for Interoperability Testing

- New Vendor entrants into the systems market must perform ITP
- ITP must be performed on a SOA/LSMS system any time that a change is made to the NPAC SMS interface (GDMO or ASN.1).
- The SOA/LSMS vendors shall perform ITP on each version of their SOA/LSMS product

Procedure Detail

Customer Connectivity Services ("**CCS**") will coordinate all testing resources for Vendor Certification. The Customer Connectivity Services team is available during Normal Support Hours for CCS (Monday – Friday 8:00 a.m. – 5:00 p.m. Central Time).

A Dedicated Test Engineer provides dedicated support for Vendor Certification. The Dedicated Test Engineer performs ITP Testing one-on-one, solely for the requesting Vendor, on the ITP simulator. This type of resource is required for Vendor Certification. Dedicated Test Engineer support resources are charged directly to the requesting Vendor for ITP Testing.

<u>NOTE</u>: Dedicated Test Engineer support for Vendor Certification must be scheduled in advance. There is no minimum advance notice period, however, Users are encouraged to schedule as early as possible to ensure resource and system availability during their requested date and time.

Vendor Certification Requests – General

Software Vendors shall adhere to the following guidelines for submitting Vendor Certification requests:

- 1. Software Vendors contact NPAC to request Vendor Certification by:
 - a. Sending e-mail to cc@neustar.biz
 - b. Calling Customer Connectivity Services at 571-434-5434

<u>NOTE:</u> CCS acknowledges all e-mail received by the CCS Mailbox (as above) within 12 business hours of receipt, during Normal Support Hours (Monday – Friday 8:00 a.m. – 5:00 p.m. Central Time)

2. CCS verifies that Vendor has completed Non-Disclosure Agreement, and New User Application, on file with the NPAC prior to initiating Vendor Certification.

NOTE: <u>NO</u> Vendor Certification activities will occur until Vendor provides NPAC with completed documentation, as required. CCS will provide Vendor with required documentation for completion prior to commencing Vendor Certification activities.



- 3. Vendor submits completed ITP Testing Registration Form to CCS (in addition to any other documentation) to initiate Certification. Vendors can access this Form from the NPAC Public Site, at http://www.npac.com, under the "Documents" button.
- 4. CCS contacts NPAC Applications Manager to request a Dedicated Test Engineer resource for Vendor Certification based on date/time requested and NPAC system and resource availability.
- 5. CCS contacts the Vendor if a dedicated resource is not available for the requested date/time, and provides an alternate date/time(s) based on system and resource availability.
- 6. CCS sends an e-mail confirmation to Vendor once resource is scheduled and assigned.
- 7. Dedicated Test Engineer completes ITP Testing with Vendor, at the scheduled date/time. Based on the Vendor's ITP Testing Registration Form, the appropriate ITP Test Cases are completed (see Table 2 below).
- 8. CCS provides Vendor with a confirmation of their Certification status, upon successful completion of ITP Testing.
- 9. NPAC bills Vendor for the ITP Testing / Vendor Certification of their SOA or LSMS product (see "Billable Charges" section below).

ITP Testing Levels for Vendor Certification

<u>Table 2</u> outlines the required level of ITP testing for specific scenarios.

Table 2 - Required ITP Testing Level for Specific Scenarios

	Testing Level	
Scenarios for ITP	Interoperability Testing?	Test Cases
When a Vendor product (SOA/LSMS) is compiled with the current interface model, and no new Vendor features are implemented that involve the interface, and the NPAC SMS is compiled with the new interface model (new release).	ITP is required.	 ITP standard regression test cases.
When a Vendor product (SOA/LSMS) is compiled with the new interface model, and no new Vendor features are implemented that involve the interface, and the NPAC SMS is compiled with the new interface model (new release).	ITP is required.	 ITP standard regression test cases.
When a Vendor product (SOA/LSMS) is compiled with the new interface model, and new Vendor features are implemented that involve the interface, and the NPAC SMS is compiled with the new interface model (new release).	ITP is required.	 ITP standard regression test cases ITP new functionality test cases.

	Testing Level	
Scenarios for ITP	Interoperability Testing?	Test Cases
When a Vendor product (SOA/LSMS) is compiled with the current interface model, and new Vendor features are implemented that involve the interface, and the NPAC SMS is compiled with the current model (current release). Note: The ITP regression test cases would have been addressed when the Vendor upgraded their product to the current version of the NPAC SMS interface model.	ITP is required.	 ITP new functionality test cases.

Completion of ITP Testing: Vendor Certification

Vendors' local products (SOA/LSMS) will be certified upon successful completion of required ITP test cases. NPAC dedicated testing support personnel are responsible for validating the passed test cases associated with the ITP testing levels required for Vendor Certification.

Vendors will be provided with confirmation of their Certification after ITP Testing is completed.

<u>ATTENTION:</u> Vendors should note that their signed NPAC Users are required to complete Turn-Up Testing after their Vendor Certification of their SOA/LSMS product is completed with the NPAC. For more information, please refer to the Testing Overview User M&P, located on the NPAC Secure Site.

Escalation Path

Level	Name	Phone	Mobile / Pager	Email
1	Manager, CCS	571-434-5652	240-401-2688	ccs.mgr@neustar.biz
2	Director, Applications Support	571-434-5443	202-320-6860	apps.dir@neustar.biz
3	Sr. Director, Applications Support	571-434-5460	571-216-3211	apps.srdir@neustar.biz

Billable Charges

Initial Certification

New vendors entering the systems market must test their SOA/LSMS product for interoperability with NPAC's current release. NPAC Users may not use vendor products that have not passed ITP testing. There is a direct charge to the new Vendor for initial certification. This charge is paid directly by the requesting Vendor, and is billed as follows:

- SOA \$32,000 plus \$2,700 per day for time in excess of three weeks
- LSMS \$48,000 plus \$2,700 per day for time in excess of five weeks

ITP Testing Support

New NPAC release testing requires a dedicated resource to validate and certify that Vendor system(s) have successfully passed the required test cases. There is a direct charge to the Vendor for dedicated testing support. This charge is billed at the rate of \$2,700 per 8-hour segment of ITP support.

After-Hours Scheduling Support

After hours scheduling support is <u>not</u> available for this procedure. Vendors should contact CCS for assistance Monday – Friday 8:00 a.m. – 5:00 p.m. Central Time.

Document History

Version	Date	Change Author	Description of Change
DRAFT 0-1	September 9, 2004	Donald Munthali	Initial version
DRAFT 0-2	October 12, 2004	Donald Munthali	Update from review with NW, JJ, KJ, - and comments from RC, AH, SA
Version 1-0	December 10, 2004	Donald Munthali	Minor edit from PE mtg; first version approved
DRAFT 1-1	January 10, 2005	Donald Munthali Steve Addicks	Edits from internal review; Required form updated (ITP Test Plan/Appendix A)
Rev 1-2	February 4, 2005	Donald Munthali	Minor edits from PE review; supplement charges added; approved by PEs 2/8
Rev 1-3	February 28, 2005	Donald Munthali Steve Addicks	Change to clarify when ITP Testing is not required; approved by PE 3/8

Documentation Approval / Signoff

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Name	Role	Date	Signature
Rob Coffman	NPAC Applications Support	2/28/05	Rob Coffman
Shellie Hanowell	NPAC Customer Connectivity Services	2/28/05	Shellie Hanowell
Steve Addicks	NeuStar Project Executive	2/28/05	Steve Addickş
Various	U.S. Project Executives (PEs)	03/08/05	U.S. Project Executives
-	Canadian Project Executive	03/08/05	Canadian Project Executive