**Origination Date:** 2/24/2011

**Originator:** Neustar

### Change Order Number: NANC 444

**Description:** LTI Enhancements

**Functionally Backward Compatible:** Yes

## IMPACT/CHANGE ASSESSMENT

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| FRS | IIS | GDMO | ASN.1 | NPAC | SOA | LSMS |
| Y | Y | N | N | Y | N | N |

**Business Need:**

LTI Customers have asked for consideration of a number of enhancements to the LTI GUI that will increase efficiency and provide greater flexibility for their porting operations.

Service Providers have asked about a more efficient way to schedule, perform, and monitor technology migrations and large porting projects.

**Description of Change:**

This change order is being created to address both LTI functionality enhancements and mass update/mass porting efficiencies.

LTI GUI Enhancements will:

* Provide a Single LTI Login
* Provide greater search flexibility for service providers
* Provide the ability to export query results to a file
* Add detail to porting notifications

LTI GUI Enhancements Overview:

* NPAC LTI Users will use a Single LTI Login across all NPAC Regions (eliminate the need to login multiple times and maintain passwords for all regions for the same GUI User ID).
* NPAC LTI Users will have the capability for a Single LTI Login (service bureau) to change access from one SPID to another SPID.
* TN search functionality enhanced to provide ability to copy/paste a list of TNs and a list of TN Ranges.
* Subscription Version query results enhanced to allow e-mail or export-to functionality.
* Notification functionality enhanced to allow better notification management via a new “View All Notification Details” enhancement:
  + Determine all of the attributes present in the notifications that were selected.
  + Present this list of attributes to the user so they can select which attributes they want to view.
  + Display each notification on a separate line.
  + Allow the user to select notifications and copy them to the windows clipboard. The clipboard can then be pasted into a data file and imported/opened in Excel, or sent via e-mail.

Service Provider Self Service capabilities will allow Service Providers to:

* Manage to a single interface versus calls and e-mail correspondence with the NPAC Help Desk
* Enable quicker turnaround and approval of jobs
* View history and transaction volumes for their own porting projects
* Manage and schedule Mass Updates/Mass Ports for their own porting projects

Service Provider Self Service Overview:

* User Management that identifies authorized Users for the Self Service tool.
* Users will see only their own data.
* Ability for Users to create jobs.
* Users will have two choices in creating jobs:
  + NPAC Processing = Job will be scheduled by NPAC personnel.
  + Self Service Processing = Job will be scheduled by the Service Provider.
* For Self Service Processing the following job types will be allowed: Mass Update (including Pool Blocks), Mass Create, Mass Release, Mass Activate, Combined Mass Create-Activate, Mass Disconnect, Mass Cancel.
* Ability to upload a file when entering a job request.
* Optional fields are not supported for Self Service Processing.
* Service providers can manage their self-service scheduled jobs.
* Job may be monitored via e-mail notifications or via the LTI.
* Dashboard will be available where Users can view jobs they entered using Self Service Processing (Number of SVs/Blocks processed, Number of jobs completed, Number of jobs/SVs/Blocks waiting to be run).
* Job requests will be FIFO processed (First In / First Out).

**FRS: (additions in yellow highlight)**

3.2, NPAC Personnel Functionality

The following requirements describe the functionality required by the NPAC SMS to support the daily operation of the Regional LNP SMS support staff, and the Service Provider Personnel that use the NPAC Low-Tech Interface. These requirements define the high level functionality required by the system with the specifics of each requirement defined in more detail in sections and .

R3-7.1 Select Subscription Versions mass changes for one or more Subscription Versions

NPAC SMS shall allow Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC personnel, via the NPAC Administrative Interface, to select Subscription Versions for mass update which match a user defined combination of any of the following: SPID, LNP Type (any single LNP Type or none), TN, TN range (NPA-NXX-xxxx through yyyy, where yyyy is greater than xxxx), LRN, DPCs, SSNs, Billing ID, End User Location Type or End User Location Value~~, on the NPAC Administrative Interface~~. (Previously part of B-760 and B-761)

Note: If a single LNP Type is selected, then only that LNP Type will be used, otherwise, if no LNP Type is selected, then no restriction is imposed on the LNP Type as a selection criteria.

Note: Only NPAC Personnel can specify SPID. Service Provider Personnel will use their default SPID value.

R3-7.2 Administer Mass update on one or more selected Subscription Versions

NPAC SMS shall allow Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC personnel, via the NPAC Administrative Interface, to specify a mass update action to be applied against all Subscription Versions selected (except for Subscription Versions with a status of old, partial failure, sending, disconnect pending or canceled) for LRN, DPCs, SSNs, SV Type, Alternative SPID, Last Alternative SPID, Alt-End User Location Value, Alt-End User Location Type, Alt-Billing ID, Voice URI, MMS URI, SMS URI, Billing ID, End User Location Type or End User Location Value. (reference NANC 399)

Note: Service Provider Personnel are limited to LRN, DPCs, SSNs, and SV Type.

R3-7.8 Mass Update Exception Report

NPAC SMS shall produce an exception report for Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC Personnel when requested that lists the Subscription Versions that were exceptions not processed during Mass Update processing.

RR3-550 Mass Update Pending and Active Subscription Versions – DPC-SSN Field-level Data Validation

NPAC SMS shall perform field-level data validations to ensure that the values for the following input data, if supplied, is valid according to the Service Provider DPC-SSN source data, when performing a Mass Update of Pending and/or Active Subscription Versions via the NPAC Administrative Interface or NPAC Low-Tech Interface: (previously NANC 427, Req 6.8)

1. Class DPC
2. Class SSN
3. LIDB DPC
4. LIDB SSN
5. CNAM DPC
6. CNAM SSN
7. ISVM DPC
8. ISVM SSN
9. WSMSC DPC
10. WSMSC SSN

RR3-551 Mass Update Pending and Active Subscription Versions – Validation of DPC-SSNs for Mass Update

NPAC shall reject Mass Update requests of Pending and/or Active Subscription Versions from the NPAC Administrative Interface or NPAC Low-Tech Interface if a DPC-SSN is specified and a valid DPC-SSN reference does not exist in the Service Provider DPC-SSN source data. (previously NANC 427, Req 6.9)

RR3-552 Mass Update Pending and Active Number Pool Blocks – DPC-SSN Field-level Data Validation

NPAC SMS shall perform field-level data validations to ensure that the values for the following input data, if supplied, is valid according to the Service Provider DPC-SSN source data, when performing a Mass Update of Pending and/or Active Number Pool Blocks via the NPAC Administrative Interface or NPAC Low-Tech Interface: (previously NANC 427, Req 6.10)

1. Class DPC
2. Class SSN
3. LIDB DPC
4. LIDB SSN
5. CNAM DPC
6. CNAM SSN
7. ISVM DPC
8. ISVM SSN
9. WSMSC DPC
10. WSMSC SSN

RR3-552.5 Mass Update Pending and Active Number Pool Blocks – Validation of DPC-SSNs for Mass Update

NPAC shall reject Mass Update requests of Pending and/or Active Number Pool Blocks from the NPAC Administrative Interface or NPAC Low-Tech Interface if a DPC-SSN is specified and a valid DPC-SSN reference does not exist in the Service Provider DPC-SSN source data. (previously NANC 427, Req 6.11)

Req-1 Mass Update File Upload Capability – Template

NPAC Low-Tech Interface shall accept file data from a spreadsheet template as input data for a Mass Update request.

Note: The accepted formats will be all standard MS-Excel (xls, xlsx, csv).

Note: The file layout will include:

* Header Data
  + Job Type
  + SPID
  + Select By (TN/PB List)
  + SV Status (Active-like or Pending-like)
  + Scheduled Date (mm/dd/yyyy hh:mm)
  + Case Number
  + Job Name
  + Suppress Notification to Old SP
  + Suppress Notification to New SP
* Detail Data:
  + One line per TN/TN Range or PB/PB Range
  + TN example: 1112223333 or 11122233334444
  + PB example: 1234567 or 1234567-8
  + Update data will be column positional (for example):
    - Column D – LRN
    - Column E – LIDB DPC
    - Column F –CNAM DPC

3.2.1, Block Holder, Mass Update

RR3-210 Block Holder Information Mass Update – Update Fields

NPAC SMS shall allow Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC Personnel, via the NPAC Administrative Interface, when performing a mass update, to update the block holder default routing information LRN, DPC(s), SSN(s), SV Type, Alternative SPID, Last Alternative SPID, Alt-End User Location Value, Alt-End User Location Type, Alt-Billing ID, Voice URI, MMS URI, and SMS URI for a 1K Block as stored in the NPAC SMS. (Previously B-762, reference NANC 399)

RR3-211 Block Holder Information Mass Update – Block Intersection Rejection

NPAC SMS shall reject a mass update request by Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC Personnel, via the NPAC Administrative Interface, and issue an error message, if the TN Range and LNP Type of either POOL or none, is entered as Selection Criteria, for the requesting Service Provider, and intersects an existing 1K Block, for that requesting Service Provider, as stored in the NPAC SMS, other than Blocks with a status of old. (Previously B-763)

3.5.2, Block Holder, NPA Splits

RR3-49 NPA Splits and the Number Pool Block Holder Information – Mass Update that includes one or more Blocks for an NPA-NXX involved in an NPA Split

NPAC SMS shall accept a ***mass update*** request from Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC personnel, via the NPAC Administrative Interface, that spans one or more Blocks that are part of an NPA Split that is currently in permissive dialing only when the new NPA-NXX is used.

7.4, Access Control

Access to the NPAC SMS and other resources will be limited to those users that have been authorized for that specific access right.

7.4.1, System Access

7.4.2, Resource Access

New requirements will be added to sections 7.4.1 and 7.4.2.

Reqs for the ability to have a single LTI GUI Logon for all 7 NPAC Regions:

**Req-2** Single GUI Login Session

The NPAC SMS shall provide Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC Personnel, via the NPAC Administrative Interface, support for one user id that can be configured to allow access to any and all US NPAC Regions.

**Req-3** Region Selection - Navigation

The NPAC SMS shall provide a mechanism that allows Service Provider Personnel, via the NPAC Low-Tech Interface, and NPAC Personnel, via the NPAC Administrative Interface, to select and navigate to any other NPAC region main menu screen they are configured for access without requiring additional authentication.

**Req-4** Common Authentication Database

The NPAC SMS shall use a common authentication mechanism that is available to all US Regions and Canada for Service Provider Personnel using the NPAC Low-Tech Interface, and NPAC Personnel using the NPAC Administrative Interface.

**Req-5** Cross-Regional Session Timeout

The NPAC SMS shall expire a user’s cross-regional session within a tunable time period, regardless of user activity and require re-authentication when navigating to a different region for Service Provider Personnel using the NPAC Low-Tech Interface, and NPAC Personnel using the NPAC Administrative Interface.

**Req-6** Cross-Regional Session Timeout – Tunable Parameter

The NPAC SMS shall provide a Cross-Regional Session Timeout tunable parameter that specifies the maximum duration a user may continuously use a Cross-Regional GUI session.

**Req-7** Cross-Regional Session Timeout – Tunable Modification

The NPAC SMS shall allow NPAC Personnel via the NPAC Administrative Interface to update the Cross-Regional Session Timeout tunable parameter.

**Req-8** Cross-Regional Session Timeout – Tunable Parameter Default

The NPAC SMS shall default the Cross-Regional Timeout tunable parameter to 1440 minutes (24 hours).

Note: a value of zero for this tunable will turn off the Cross-Regional Session Timeout.

**Req 9** Client Session Timeout Warning

The NPAC SMS GUI shall provide a cross regional session timeout warning a tunable time period prior to the system expiring their GUI session due to inactivity.

**Req-10** Client Session Timeout Warning – Tunable Parameter

The NPAC SMS shall provide a Client Session Timeout Warning tunable parameter that specifies the time in minutes the user is notified before their GUI session is expired due to inactivity.

**Req-11** Client Session Timeout Warning – Tunable Modification

The NPAC SMS shall allow NPAC Personnel via the NPAC Administrative Interface to update the Client Session Timeout Warning tunable parameter.

**Req-12** Client Session Timeout Warning – Tunable Parameter Default

The NPAC SMS shall default the Client Session Timeout Warning tunable parameter to 2 minutes.

Reqs for the ability to have a service bureau user act on behalf of subordinate service providers:

**Req-13** The NPAC Low-Tech Interface shall display a list of secondary SPIDs of a primary SPID once a user of the primary SPID is logged into the NPAC Low-Tech Interface.

**Req-14** The NPAC Low-Tech Interface shall allow selecting a secondary SPID from the secondary SPID list to act on behalf of that secondary SPID.

**Req-15** The NPAC Low-Tech Interface shall use the selected SPID (i.e., secondary SPID value) for all the NPAC administrative interface requests once the primary SPID makes the secondary SPID selection.

NOTE: For example, pending SV query will be filtered by the selected secondary SPID not the logged in users SPID (i.e., service bureau’s SPID).

**Req-16** The NPAC SMS shall allow a Low-Tech Interface only SPID to be a primary SPID.

**IIS:**

Sections 2.3.4 and 2.4.2, Service Provider Data Administration.  
Mass changes must be initiated by the service provider contacting the NPAC personnel directly, or by performing self-service in the Low-Tech Interface.

Flow B.8.3, Mass Update.

Intro paragraph.  
NPAC SMS personnel using the NPAC Administrative Interface or Service Provider personnel using the Low-Tech Interface can perform a mass update on subscription data.

Action is taken by the NPAC SMS personnel using the NPAC Administrative Interface or Service Provider personnel using the Low-Tech Interface to request that a mass update be performed on active subscription data.

Flow B.8.3.1, Mass Update for a range of TNs that contains a Number Pool Block.

Intro paragraph.  
NPAC SMS personnel using the NPAC Administrative Interface or Service Provider personnel using the Low-Tech Interface perform a mass update on on a range of TNs that includes a number pool block object.

Action is taken by the NPAC SMS personnel using the NPAC Administrative Interface or Service Provider personnel using the Low-Tech Interface to perform a mass update.

**GDMO:**

No changes required.

**ASN.1:**

No changes required.

**M&P:**

TBD