

Methods and Procedures for NPAC Release 4.0

**Prepared for NeuStar, Inc.
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Version 0.1**

1. General Notes

This M&P is developed for the NPAC SMS, Release 4.0. This M&P is only for the Change Orders included in this release. This document will be folded into the existing NPAC Methods and Procedures for Service Providers document, once this release has been accepted.

1.1 Definitions

None.

1.2 Approach

This release contains a variety of changes to the NPAC SMS. The common approach for this release is to make it as backwards compatible as practical.

2. M&Ps For NPAC Release 4.0

2.1 NANC 227 – Failed TN Problems

TBD.

2.2 NANC 219 – NPAC Monitoring of Associations

(This would be a new section in the M&P.)

For NPAC monitoring of associations, there are two parts that need to be covered in the M&P – Alarm Handling and Reports. These are described in the following sections.

2.2.1 Alarm Handling for Association Aborts

The NPAC SMS will automatically generate a unique alarm in the form of a page to NPAC Personnel when a Service Provider association (SOA and/or LSMS) is aborted. The abort can be sent by the NPAC SMS or received from the Service Provider

When NPAC Personnel receive the page, they should verify that the Service Provider SOA and/or LSMS is not longer associated and contact the discrepant Service Provider. The NPAC Personnel and Service Provider should then work together to resolve the cause of the abort and establish a new association.

2.2.2 Association Aborts/Binds Reports

Chapter 10 – Reports in the current M&P needs to be updated to include the following:

- Section 10.2 – Service Provider Reports
 - Add the following Association/Bind Reports to the list of reports with report name, NPAC Personnel as the party who can access, and function of the report:
 - Detailed Report for a Single Service Provider
 - Summary Report for a Single Service Provider
 - Detailed Report for all Service Providers without encoding
 - Summary Report for all Service Providers without encoding
 - Summary Report for all Service Providers with SPID masked
 - Add the following Association/Bind Reports to the list of reports with report name, SOA LTI User as the party who can access, and function of the report:
 - Report for a Single Service Provider

2.3 NANC 240 – No SV Cancel on T2 Expiration

Section 4.13.3 – Canceling a Subscription Version in the current M&P needs to be updated. The part about canceling if the New Service Provider does not submit it's create within the allotted time is deleted. The re-write would read as below:

2.3.1 Canceling a Subscription Version

The SMS cancels a subscription version when the status of the subscription version is pending and one of the following occurs:

- The new Service Provider requests cancellation of its request to port.
- The old Service Provider requests cancel after its concurrence.

If the cancellation request came after both SPs have concurred, the status of the subscription version is set to cancel pending.

In this case the SMS waits for the other SP who did not initiate the cancel to acknowledge the Cancel Pending status with concurrence. If the new customer fails to acknowledge the new status, SMS places the subscription version in conflict. If the new customer acknowledges the impending cancellation but the old customer does not, the SMS cancels the subscription version. Any time the status of subscription version changes; the SMS will notify the customers via broadcasts.

2.3.2 Modify the “No New SP Concurrence Notification” Indicator in a Service Provider Profile

To modify the “No New SP Concurrence Notification” Indicator in a Service Provider Profile the following steps must be followed:

1. Service Provider Personnel will contact NPAC Personnel with a request to modify their “No New SP Concurrence Notification” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** want to see the “New Service Provider Final Create Window Expiration Notification” in the Notification data that is sent to their SOA.
2. NPAC Personnel shall validate the caller's name and authorization code against a list of authorized Service Provider Personnel. If the caller cannot be validated the request is denied. If the caller is validated, the request is processed.
3. NPAC Personnel, using the NPAC Administrative Interface, shall navigate to the appropriate Service Provider Profile and set the “No New SP Concurrence Notification” Indicator to the value requested by the Service Provider. The NPAC SMS will generate a confirmation message to the screen indicating the change has been made successfully.

2.4 NANC 191 & 291 – DPC/SSN Value Edit

Section 8.1 – Types of Mass Updates/Changes in the current M&P needs to be updated to read:

Types of Mass Updates/Changes

Examples of mass changes may include, but are not limited to: _

- Location Routing Number (LRN)
- Destination Point Code (DPC) and *Sub-System Number (SSN)* information
- Location values and type
- Billing ID

Section 8.2 – Procedures in the current M&P needs to be updated to read:

1.c The following Subscription Version data can be mass updated:

- LRN
- DPC Values (*required if SSN Value is to be updated*)
- SSN Values (*required if DPC Value is to be updated*)
- Billing ID
- End User Location Type
- End User Location Value

2.5 NANC 297 – Sending SVs in Recovery

No change required.

2.6 NANC 192 – NPA Split Load File

Both section 7.2 and 7.3 would be updated as follows:

7.2 Notice of Split to NPAC

The NPAC will be made aware of all NPA/NXXS that will be split by the Service Provider, *via the NPA Split Load File from the LERG (both monthly updates and emergency updates), during the nightly housekeeping process.* ~~NPAC requires 30 Days notice from the Service Provider for an up and coming split. The NPAC requires 30 days notice of the NPA that is Splitting, the actual NXX's of that split can be sent to the NPAC two weeks prior to the start of the permissive dialing period. PLEASE NOTE – if the official permissive dialing period is to start on a date that has already passed – i.e. NPAC can not input a split that is to begin PDP on 7/1 on 7/14. The NPAC would need to use 7/15 as the start of PDP. In this case NPAC and the Service Providers involved in that split would need to all agree on the date the NPAC will use for the Permissive dialing period and all involved in the split will need to enter in the same dates. These situations will be discussed on the Cross Regional calls and~~

~~agreed upon as an industry.~~ *When processing the NPA Split Load File*, the NPAC will modify all of the subscription versions associated with the split to associate the new TN with the Subscription Version to support the permissive dialing period. It is up to the Service Provider to enter the data on their side as well as, clean up their network data and delete the old NPAs.

This function of the NPAC interface is only available to NPAC Operations personnel. (A Service Provider can not perform a Split without the help of NPAC personnel.). No updates or information will be sent over the SOA interface or LSMS interface to indicate that a split is occurring. Split information will be accessible to Service Providers via the NPAC web site. ~~The NPAC SMS requires the following data for entry of NPA split information into the NPAC:~~

- ~~✓ The old and new NPA~~
- ~~✓ The affected NXX(s)~~
- ~~✓ The start date of the permissive dialing period~~
- ~~✓ The end date of the permissive dialing period~~
- ~~✓ The agreed upon date to install the split into the systems~~
- ~~✓ The Service Provider ID~~

Split information *processing from the NPA Split Load File* ~~input~~ will not be allowed if there are any partially failed or sending subscription versions associated with the old NPA-NXXs. All SVs must be in an active state or the split will not occur.

The NPAC modifies all of the subscription versions associated with the split to associate the new TN with the subscription version to support the permissive dialing period.

7.3 NPA Split Process

The NPAC SMS will obtain NPA Split information from the NPA Split Load File from the LERG. ~~Service Provider(s) responsible for the NPA split will call, email or fax the NPA split information into NPAC. NPAC personnel will enter the split information into the GUI.~~ The NPA split will reflect Midnight Central Daylight savings time (Chicago Time) and will be loaded into the GUI as Greenwich Mean time (UTC Time). ~~Therefore, the Service Provider must convert the time from their time zone to Central Daylight savings time (Chicago Time), when speaking to NPAC.~~

NOTE—Appendix O contains a time zone converter.

NPAC will verify that the new and the old NPA-NXX(s) involved in an NPA Split exist and are not currently involved in another NPA Split. New NPA-NXX(s) will be opened via normal processing prior to the NPA Split. NPAC will verify that the NPA Split has an effective date equal to the start date of permissive dialing. NPAC will post this information out on the web site. The Service Providers are responsible for adding, changing and removing old NPA NXX's from their networks. If needed, a mass update will be completed to update LRN information for a LSMS only not SOA. NPAC SMS can leave filters for NPA-NXX(s) involved in an NPA split unchanged if the Service Provider wants - this is up to the SP. Service Providers are responsible for setting filters appropriately.

Please note- NPAC SMS shall complete any needed NPA Split processing or activities by 00:01 CST on the start date of permissive dialing.

NPAC will reject a NPA Split if:

- ✓ Determining that the old NPA-NXX involved in an NPA Split does not exist when the split information is entered.
- ✓ Determining that a new NPA-NXX involved in an NPA split has an effective date not equal to the start date of permissive dialing.
- ✓ Determining that a new NPA-NXX involved in an NPA split is currently involved in another NPA Split.
- ✓ Determining that there are Subscription Versions with a status other than pending, old, conflict, canceled, or cancel pending in the new NPA-NXX split.

2.7 NANC 299 – NPAC Interface Heartbeat

TBD. Implementation needs to be determined before M&P can be written.

2.8 NANC 301 – NPAC TCP Level Heartbeat (transport layer)

TBD.

2.9 NANC 230 – Donor SOA PTO

No change required.

2.10 NANC 249 – Modification Disconnect Pending Date

No change required.

2.11 NANC 294 – Due Date Edit (7PM)

No change required.

2.12 NANC 200 – NPA Split Notification

Section 7.2.1 – NPAC Notice of Splits to Service Providers/Split Information should have the following description added at the end of the section:

For those Service Providers that support the NPA Split Information Notifications based on their customer profiles, a notification will be sent for each NPA Split activity that is processed by the NPAC (“PDP Start”, “PDP End”, “Remove NXX from Split”). The notifications will be sent to the SOA when the “SOA NPA Split Notification” Indicator is set to TRUE, and sent to the LSMS when the “LSMS NPA Split Notification” Indicator is set to TRUE.

2.12.1 Modify the “SOA NPA Split Notification” Indicator in a Service Provider Profile

To modify the “SOA NPA Split Notification” Indicator in a Service Provider Profile the following steps must be followed:

1. Service Provider Personnel will contact NPAC Personnel with a request to modify their “SOA NPA Split Notification” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** want to see the “NPA Split Information Notification” in the Notification data that is sent to their SOA.
2. NPAC Personnel shall validate the caller’s name and authorization code against a list of authorized Service Provider Personnel. If the caller cannot be validated the request is denied. If the caller is validated, the request is processed.
3. NPAC Personnel, using the NPAC Administrative Interface, shall navigate to the appropriate Service Provider Profile and set the “SOA NPA Split Notification” Indicator to the value requested by the Service Provider. The NPAC SMS will generate a confirmation message to the screen indicating the change has been made successfully.

2.12.2 Modify the “LSMS NPA Split Notification” Indicator in a Service Provider Profile

To modify the “LSMS NPA Split Notification” Indicator in a Service Provider Profile the following steps must be followed:

1. Service Provider Personnel will contact NPAC Personnel with a request to modify their “LSMS NPA Split Notification” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** want to see the “NPA Split Information Notification” in the Notification data that is sent to their LSMS.
2. NPAC Personnel shall validate the caller’s name and authorization code against a list of authorized Service Provider Personnel. If the caller cannot be validated the request is denied. If the caller is validated, the request is processed.
3. NPAC Personnel, using the NPAC Administrative Interface, shall navigate to the appropriate Service Provider Profile and set the “LSMS NPA Split Notification” Indicator to the value requested by the Service Provider. The NPAC SMS will generate a confirmation message to the screen indicating the change has been made successfully.

2.13 ILL 130 – Application Level Errors

Add table with errors and explanation after the errors have been defined.

2.14 NANC 217 – Mass Update of SPID

Chapter 8 – Mass Updates and Changes, should have the following description added at the end of the intro section (immediately before section 8.1):

In the case of Mass Update of SPID, refer to section 8.4. This functionality allows SPs to change the SPID on ported telephone numbers. Examples that cause this situation for SPs are mergers, service area trading, data system consolidations, etc. The Mass Update of SPID changes all network data and subordinate block/subscription data from one Service Provider (SP1) to another Service Provider (SP2). This activity occurs during an NPAC/SP agreed upon quiet time, when all associations are dropped. Upon completion of a full transfer, SP1 would not own any network data (NPA-NXXs, LRNs, or NPA-NXX-Xs), nor have any active blocks/subscription versions. SP1 would then be eligible to be changed to “inactive” in the NPAC SMS.

8.4 Mass Update of SPID

1. Service Provider Personnel will contact NPAC Personnel with a request for a Mass Update of SPID. Service Provider Personnel must provide the appropriate selection criteria and update information for the Mass Update of SPID to NPAC Personnel at the time of the request.
 - 1.a The following selection criteria is required:
 - Old Service Provider ID –**must be the same as the Service Provider requesting the Mass Update**
 - 1.b Additional selection criteria are available. Single or multiple items may be selected. Selecting multiple items will narrow the search. The additional selection criteria are:
 - New Service Provider ID
 - Choice of: all data, list of NPA-NXXs/NPA-NXX-Xs
2. NPAC Personnel shall validate the callers’ names and authorization codes against a list of authorized Service Provider Personnel. If the caller cannot be validated the request is denied. If the caller is validated, NPAC Personnel also contact to New Service Provider Personnel to validate the receipt of the network data and block/subscription data that is requested to be updated. If the New Service Provider is validated, the request is processed.
3. NPAC Personnel, using the NPAC Administrative Interface, will navigate to the **<Mass Update of SPID>** window, select the Service Provider ID of the requesting Service Provider and enter the other selection criteria as specified by the Service Provider. The NPAC SMS will generate all of the appropriate Selection Input Criteria SPID Mass Update Request Files (SIC-SMURF).
4. The generated SIC-SMURF files are placed in the requesting Service Provider’s FTP site.

5. The requesting Service Provider reviews the SIC-SMURF and authorizes the migration.
6. Since the migration takes place during the agreed upon downtime, the amount of migration downtime to perform the Mass Update of SPID is agreed upon by the NPAC and all Service Providers involved.
7. All Service Providers use the same SIC-SMURF files to migrate their own data in their local database.
8. Upon approval by the requesting Service Provider, NPAC Personnel initiate the update process in the NPAC SMS. This begins the change of all matching NPA-NXX, LRN, NPA-NXX-X, Block, and Subscription Version records, except for those with a status of old, partial failure, sending or cancelled. The NPAC SMS will initiate a confirmation message to the NPAC Personnel indicating that the Mass Update of SPID was performed successfully.
9. If there are matching Subscription Version records for the Mass Update that are currently in a state of sending, partially failed, disconnect-pending or cancelled the NPAC SMS create a log entry. In this event, proceed to the M&P titled, 'M&P for Mass Update Exception Processing' (section 8.2, Processing).
10. If "all data" was migrated, NPAC Personnel will update the Service Provider Active Indicator. Using the NPAC Administrative Interface, navigate to the appropriate Service Provider profile using the NPAC OP GUI. Set the Service Provider Active Indicator to FALSE. The NPAC SMS will generate a confirmation message to the screen indicating the change has been made successfully.

2.15 NANC 187 – Recovery Linked Replies

Section 4.13.1 – Notification Recovery in the current M&P needs to be updated to read:

Notification Recovery

SOA and LSMS systems are able to request recovery of all notifications sent to them during a time range limited by the maximum download duration tunable. The request for notification recovery is sent across the CMIP interface in a Network Notification Recovery Action. The response to the notification recovery request is sent across the CMIP interface in a Network Notification Recovery Reply *as a linked response if the SOA/LSMS Linked Replies Indicator is set to TRUE and as a non-linked response if the SOA/LSMS Linked Replies Indicator is set to FALSE.*

Refer to the NANC IIS for a list of all notifications that are subject to notification recovery.

2.15.1 Modify the "SOA Linked Replies Notification" Indicator in a Service Provider Profile

To modify the "SOA Linked Replies Notification" Indicator in a Service Provider Profile the following steps must be followed:

1. Service Provider Personnel will contact NPAC Personnel with a request to modify their “SOA Linked Replies Notification” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** want to receive linked replies in the Notification data that is sent to their SOA (would receive individual replies).
2. NPAC Personnel shall validate the caller’s name and authorization code against a list of authorized Service Provider Personnel. If the caller cannot be validated the request is denied. If the caller is validated, the request is processed.
3. NPAC Personnel, using the NPAC Administrative Interface, shall navigate to the appropriate Service Provider Profile and set the “SOA Linked Replies Notification” Indicator to the value requested by the Service Provider. The NPAC SMS will generate a confirmation message to the screen indicating the change has been made successfully.

2.15.2 Modify the “LSMS Linked Replies Notification” Indicator in a Service Provider Profile

To modify the “LSMS Linked Replies Notification” Indicator in a Service Provider Profile the following steps must be followed:

1. Service Provider Personnel will contact NPAC Personnel with a request to modify their “LSMS Linked Replies Notification” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** want to receive linked replies in the Notification data that is sent to their LSMS (would receive individual replies).
2. NPAC Personnel shall validate the caller’s name and authorization code against a list of authorized Service Provider Personnel. If the caller cannot be validated the request is denied. If the caller is validated, the request is processed.
3. NPAC Personnel, using the NPAC Administrative Interface, shall navigate to the appropriate Service Provider Profile and set the “LSMS Linked Replies Notification” Indicator to the value requested by the Service Provider. The NPAC SMS will generate a confirmation message to the screen indicating the change has been made successfully.

2.16 NANC 285 – SOA/LSMS Query Size

No change required.

2.17 NANC 169 – Delta Bulk Data Download for Subscription Versions

No change required.

2.18 NANC 179 – TN Range Notifications

No change required.

2.19 NANC 232 – First Port Notification on Web BB

No change required.

2.20 NANC 287 – ASN.1 Notification Recovery

No change required. ASN.1 recompile only.

2.21 NANC 218 – Conflict Timestamp Broadcast SOA

No change required. M&Ps do not currently address things at the timestamp level.

2.22 NANC 138 – Definition of Cause Code

No change required. M&Ps only address cause codes that a Service Provider can utilize.