

Methods and Procedures for NPAC Release 4.0

**Prepared for NeuStar, Inc.
March [231](#), 2000
Version [0.23](#)**

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

No change required. Current M&P does not address Failed SP List. The text below supercedes the “No change required.” listed in the R4 Change Order document (2/24/00) for M&Ps of this change order.

For Failed TN Problems, there are two parts that need to be covered in the M&P – Re-Send Exclusion and Reports. These are described in the following sections.

2.1.1 Re-Send Exclusion

(The following is a new section in 4.13, Provisioning.)

In instances where a subscription version contains a partial failure status, and the TN needs to be subsequently modified (i.e., routing data), or subsequently ported, the NPAC SMS allows the Failed SP List for the subscription version to be cleaned up in order to allow the subsequent activity. This is accomplished via the Re-Send Exclusion functionality within the NPAC SMS, which removes the discrepant Service Provider from the Failed SP List, but does not re-send the subscription version to the discrepant Service Provider.

The current Service Provider will initiate this process by contacting a User Support Analyst at 888-NPAC-HEL(P) to initiate the re-send process.

NPAC Personnel will call the discrepant Service Provider(s) to find out the reason they are not associated to the NPAC SMS.

If the discrepant Service Provider(s) is/are still experiencing problems, NPAC Personnel will initiate the re-send process and exclude the discrepant Service Provider(s) that is/are experiencing problems. If the discrepant Service Provider(s) is/are NOT experiencing problems, the normal re-send or recovery process will remove them from the Failed SP List, once they successfully process the applicable request.

2.1.2 Excluded Service Provider Report

Section 10.2 – Service Provider Reports in the current M&P needs to be updated to include the following:

Service Provider Reports

The following table lists the reports available for creation by an NPAC Service Provider, and those reports available only upon request.

<u>Report Types</u>	<u>Report Name</u>	<u>Party who can access</u>	<u>Function</u>
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Service and Network Data	System Tunables	Service Provider	Allows the inspection of the tunable parameters in the NPAC SMS. The administrator can view the current values of all tunable parameters. Tunables are broken into five categories: subscriptions, communication, audits, logs and security.
	NPAC Service Provider LRN Report	Service Provider	Displays a list of all the LRNs currently defined for a given Service Provider.
	Open NPA-NXX	Service Provider	Shows all the NPA-NXXS defined for a Service Provider.
	NPA Split	Service Provider	Lists data concerning a single NPA split.
Service Provider	NPAC Service Provider Profile	Service Provider	Shows all data defined for an NPAC Service Provider (Service Provider's own data only).
	Summary Subscription	Service Provider	Shows TN, Status, Activation Time stamp and LRN by selected Service Provider (Service Provider's own data only).
Subscription Data	Detail for each Subscription Version	Service Provider	Queries for all data concerning subscription version(s).
	Summary for each Subscription Version	Service Provider	Presents a subset of subscription information for a single TN or a range of TN's.
	Active Status	Service Provider	Shows: TN, Current Service Provider, Activation Time stamp, LRN and Version ID.
	Cancel Status	Service Provider	Shows: TN, Version ID, New Service Provider, Old Service Provider and Cancellation Date.
	Conflict Status	Service Provider	Shows: TN, Version ID, New SP, Old Service Provider and Conflict Date.
	Disconnect Pending Status	Service Provider	Shows TN, Version ID, Current Service Provider, Service Provider Disconnect Date and Effective Release Date.
	Failed Status	Service Provider	Shows: TN, Version ID, New Service Provider, Old Service Provider and Broadcast Time stamp.
	Partial Failure Status	Service Provider	Shows: TN, Version ID, New Service Provider, Old Service Provider, Broadcast Time stamp and Failed LSMs.
	Pending Status	Service Provider	Shows: TN, New Service Provider, New Due Date, Old Service Provider, Old Due Date, Version ID and LRN.
Audit	Audit Summary	Service Provider	Generates summary reports on audits performed.
	Single Audit	Service Provider	Performs network data comparisons and displays discrepancies between NPAC attribute data and LSMS attribute data for a given date range.
System Statistics	NPAC SMS Performance (Transmissions/second)	NPAC only	Gives an idea of the efficiency and load of the network interfaces.
	NPAC SMS Performance (TN's Downloaded per second)	NPAC only	Reflects the number of TN's broadcast to a LSMS in a given time period.
	NPAC SMS Performance (Subscription Activation Time)	NPAC only	Portrays the amount of time the NPAC SMS takes to propagate subscription version activation messages to the LSMSs and receive responses.
System Statistics (cont'd)	Storage Utilization	NPAC only	Outputs the database storage statistics.

	Overall CPU System Utilization	NPAC only	Presents the machine processing usage for the entire NPAC system.
	NPAC SMS Database Sample	NPAC only	Provides results of the periodic statistical sampling of the NPAC database.
Security	User	NPAC only	Creates a list of all users, along with related user information. The report is generated on a selected User Group or all User Groups.
	Security Log	NPAC only	Shows user actions that result in illegal access attempts or operations that should only be performed by authorized personnel.
	Encryption Key	NPAC only	Inspects the key list status of mechanized interfaces with each Service Provider. From this report the administrator can determine if more keys should be exchanged with any given Service Provider.
Log File	History	NPAC only	Events logged by the NPAC SMS for any of the Service Providers.
	Error Log	NPAC only	Generates report on the contents of the NPAC SMS error logs. Any error that affects the NPAC Sims's ability to process requests and commands, after it receives the requests and commands, is identified and placed in an error log. This does not include front end, field-level validations that are trapped and displayed by the OpGUI.
	Notification Log	NPAC only	Will report extracts from NPAC SMS notification log based on notification type and Service Provider.
	Service Provider Administration	NPAC only	Details the events related to NPAC Service Provider functions which have occurred during a given time period.
	Subscription Administration	NPAC only	Shows Service Provider, Event Type (create, modify, activate, etc.), Version ID, TN and Time stamp.
	Subscription Transaction Report	NPAC only	
	Excluded Service Provider	Excluded Service Provider Report – Single Service Provider	NPAC only
	Association Log Report – All Service Providers	NPAC only	Shows current SPID, TN, date/time, excluded SPID, SV-ID

[Section 10.4, a new sub-section, 10.4.x Excluded Service Provider Report, will need to be added with a screen capture of the report request screen and a sample report. Each field in the report request screen will need to be defined/explained.](#)

[Section 10.5 – NPAC SMS Reports Accessible by Request from NPAC Personnel in the current M&P will need to be updated to include the following:](#)

[NPAC SMS Reports Accessible by Request from NPAC Personnel](#)

Provided in this section, are the type of reports available to Service Providers upon request made to NPAC Personnel. In addition to a listing of the reports available, a brief description of each report will be given, as well as detail regarding the information necessary to be submitted to the NPAC for the processing of the requested report. Sample reports are also provided. The reports available upon request by type are:

- ***System Statistics Reports***
 - NPAC SMS Performance (Transmissions/Second)
 - NPAC SMS Performance (TN's Downloaded/Second)
 - NPAC SMS Performance (Subscription Activation Time)
 - Storage Utilization
 - CPU Utilization
 - NPAC SMS Database Sample Report

 - ***Security Reports***
 - User Report
 - Security Log Report
 - Encryption Key Report

 - ***Log File Reports***
 - History Report
 - Error Log Report
 - Notification Report

 - ***Service Provider Administration***

 - ***Subscription Administration Report***
- (new text is shown below)*
- ***Excluded Service Provider Report***
 - Single Service Provider Report
 - All Service Providers Report

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 ~~capable of being sent to in the form of a pager to for~~ 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 will 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 will then work together to resolve the cause of the abort and establish a new association.

2.2.2 Association Aborts/Binds Reports

Section 10.2 – Service Provider Reports in the current M&P needs to be updated to include the following:

Service Provider Reports

The following table lists the reports available for creation by an NPAC Service Provider, and those reports available only upon request.

<i>Report Types</i>	<i>Report Name</i>	<i>Party who can access</i>	<i>Function</i>
Service and Network Data	System Tunables	Service Provider	Allows the inspection of the tunable parameters in the NPAC SMS. The administrator can view the current values of all tunable parameters. Tunables are broken into five categories: subscriptions, communication, audits, logs and security.
	NPAC Service Provider LRN Report	Service Provider	Displays a list of all the LRNs currently defined for a given Service Provider.
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	Summary Subscription	Service Provider	Shows TN, Status, Activation Time stamp and LRN by selected Service Provider (Service Provider's own data only).
Subscription Data	Detail for each Subscription Version	Service Provider	Queries for all data concerning subscription version(s).
	Summary for each Subscription Version	Service Provider	Presents a subset of subscription information for a single TN or a range of TN's.
	Active Status	Service	Shows: TN, Current Service Provider, Activation Time stamp,

Report Types	Report Name	Party who can access	Function
		Provider	LRN and Version ID.
	Cancel Status	Service Provider	Shows: TN, Version ID, New Service Provider, Old Service Provider and Cancellation Date.
	Conflict Status	Service Provider	Shows: TN, Version ID, New SP, Old Service Provider and Conflict Date.
	Disconnect Pending Status	Service Provider	Shows TN, Version ID, Current Service Provider, Service Provider Disconnect Date and Effective Release Date.
	Failed Status	Service Provider	Shows: TN, Version ID, New Service Provider, Old Service Provider and Broadcast Time stamp.
	Partial Failure Status	Service Provider	Shows: TN, Version ID, New Service Provider, Old Service Provider, Broadcast Time stamp and Failed LSMSs.
	Pending Status	Service Provider	Shows: TN, New Service Provider, New Due Date, Old Service Provider, Old Due Date, Version ID and LRN.
Audit	Audit Summary	Service Provider	Generates summary reports on audits performed.
	Single Audit	Service Provider	Performs network data comparisons and displays discrepancies between NPAC attribute data and LSMS attribute data for a given date range.
System Statistics	NPAC SMS Performance (Transmissions/second)	NPAC only	Gives an idea of the efficiency and load of the network interfaces.
	NPAC SMS Performance (TN's Downloaded per second)	NPAC only	Reflects the number of TN's broadcast to a LSMS in a given time period.
	NPAC SMS Performance (Subscription Activation Time)	NPAC only	Portrays the amount of time the NPAC SMS takes to propagate subscription version activation messages to the LSMSs and receive responses.
System Statistics (cont'd)	Storage Utilization	NPAC only	Outputs the database storage statistics.
	Overall CPU System Utilization	NPAC only	Presents the machine processing usage for the entire NPAC system.
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Security	User	NPAC only	Creates a list of all users, along with related user information. The report is generated on a selected User Group or all User Groups.
	Security Log	NPAC only	Shows user actions that result in illegal access attempts or operations that should only be performed by authorized personnel.
	Encryption Key	NPAC only	Inspects the key list status of mechanized interfaces with each Service Provider. From this report the administrator can determine if more keys should be exchanged with any given Service Provider.
Log File	History	NPAC only	Events logged by the NPAC SMS for any of the Service Providers.
	Error Log	NPAC only	Generates report on the contents of the NPAC SMS error logs. Any error that affects the NPAC Sims's ability to process

<i>Report Types</i>	<i>Report Name</i>	<i>Party who can access</i>	<i>Function</i>
			requests and commands, after it receives the requests and commands, is identified and placed in an error log. This does not include front end, field-level validations that are trapped and displayed by the OpGUI.
	Notification Log	NPAC only	Will report extracts from NPAC SMS notification log based on notification type and Service Provider.
	Service Provider Administration	NPAC only	Details the events related to NPAC Service Provider functions which have occurred during a given time period.
	Subscription Administration	NPAC only	Shows Service Provider, Event Type (create, modify, activate, etc.), Version ID, TN and Time stamp.
	Subscription Transaction Report	NPAC only	
<i>Association</i>	<i>Association Log Report – Single Service Provider, Summary or Detail</i>	<i>NPAC or LTI user</i>	<i>Shows association log data for bind, recovery complete, and abort.</i>
	<i>Association Log Report – All Service Providers, Summary or Detail, SPID values displayed</i>	<i>NPAC only</i>	<i>Shows association log data for bind, recovery complete, and abort.</i>
	<i>Association Log Report – All Service Providers, Summary or Detail, SPID values encoded</i>	<i>NPAC only</i>	<i>Shows association log data for bind, recovery complete, and abort.</i>

Section 10.4, a new sub-section, 10.4.9x Association Log Report, will need to be added with a screen capture of the report request screen and a sample report. Each field in the report request screen will need to be defined/explained.

Section 10.5 – NPAC SMS Reports Accessible by Request from NPAC Personnel in the current M&P will need to be updated to include the following:

NPAC SMS Reports Accessible by Request from NPAC Personnel

Provided in this section, are the type of reports available to Service Providers upon request made to NPAC Personnel. In addition to a listing of the reports available, a brief description of each report will be given, as well as detail regarding the information necessary to be submitted to the NPAC for the processing of the requested report. Sample reports are also provided. The reports available upon request by type are:

- ***System Statistics Reports***
 - NPAC SMS Performance (Transmissions/Second)
 - NPAC SMS Performance (TN's Downloaded/Second)
 - NPAC SMS Performance (Subscription Activation Time)

Storage Utilization
CPU Utilization
NPAC SMS Database Sample Report

- ***Security Reports***
 - User Report
 - Security Log Report
 - Encryption Key Report
- ***Log File Reports***
 - History Report
 - Error Log Report
 - Notification Report
- ***Service Provider Administration***
- ***Subscription Administration Report***

(new text is shown below)

- ***Association Log Report***
 - [Single Service Provider, Detailed Report](#)
 - [Single Service Provider, Summary Report](#)
 - [All Service Providers, Detailed Report](#)
 - [All Service Providers, Summary Report](#)

2.3 NANC 240 – No SV Cancel on T2 Expiration

Note: The current M&P does not address timer expirations/notifications, therefore information on the T2 Expiration will not be added.

Section 4.13.3 – Canceling a Subscription Version in the current M&P needs to be updated as shown below:

Canceling a Subscription Version

The [NPAC](#) 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 from the Service Provider who originated the request (and the other Service Provider has not concurred) to port or release the TN, the [NPAC](#) SMS cancels the subscription version and notifies both Service Providers. If the cancellation request came after both Service Providers have concurred, the status of the subscription version is set to cancel pending.

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

Section 19.6.3 -- Provisioning Flow and Section 19.6.4 --Provisioning Flow Text, Step 22 of the current M&P will need to be updated to show that if the New Service Provider has not submitted its create when the T2 timer expires the subscription version will remain in 'pending' status for a tunable amount of time.

Provisioning Flow

**INTER-SERVICE PROVIDER LNP OPERATIONS FLOWS
- PROVISIONING -**

4/8/97 NANC ISSUE 1.0;
4/10/97 Midwest Issue 1.0

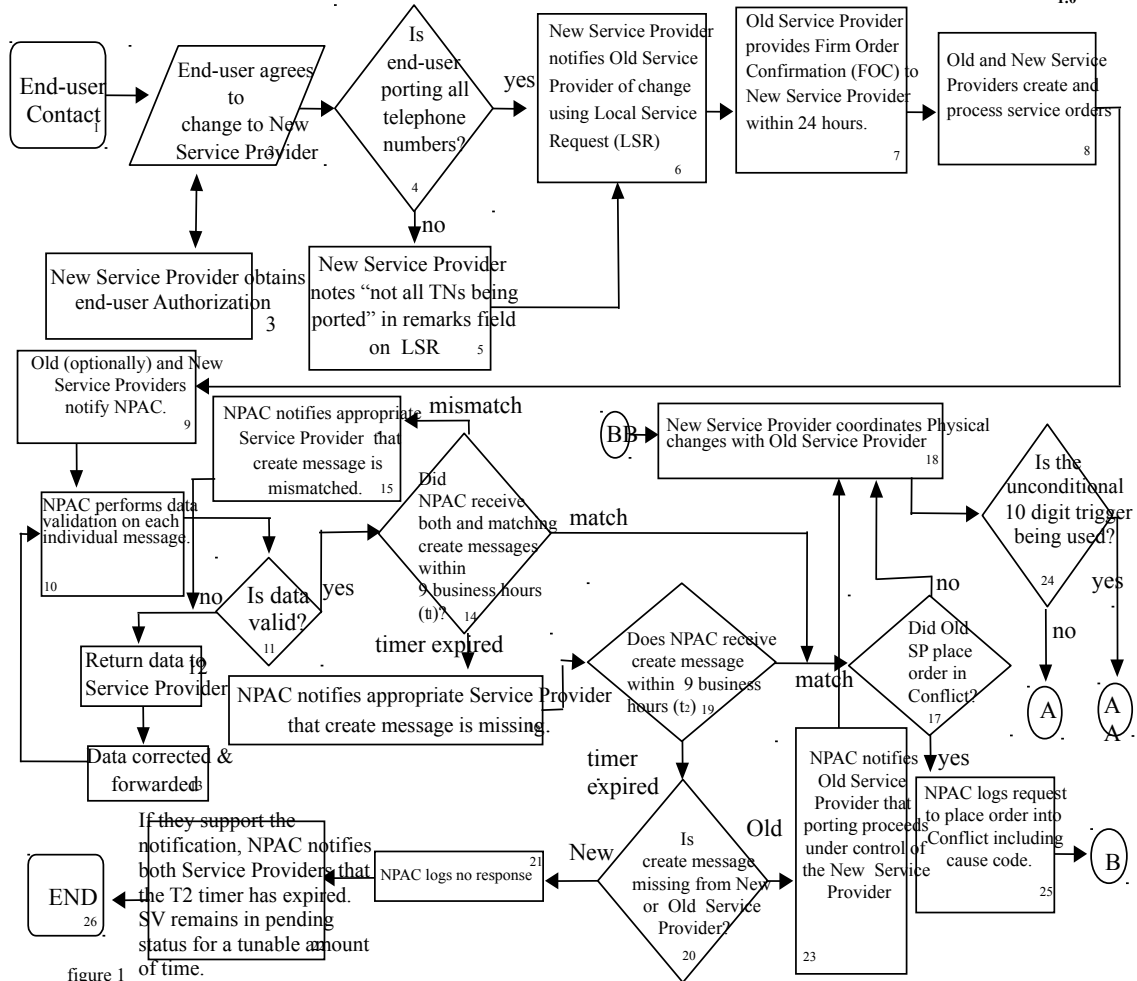


figure 1

2.3.1 Provisioning Flow Text (only row 22 is updated for this change order)

Step	Description
22. <u><i>If they support the notification.</i></u> NPAC notifies both Service Providers that the T2 timer has expired.	<ul style="list-style-type: none"> The subscription version remains in 'pending' status for a tunable amount of time.

The following needs to be added to the current M&P:

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** support the “New Service Provider Final Create Window Expiration Notification” in 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

The text below supercedes the “No change required.” listed in the R4 Change Order document (2/24/00) for M&Ps of this change order.

The following [tunables](#) needs to be added to the current M&P ([appendix I, System Tunables](#)):

- [CLASS SSN Edit Flag Indicator](#)
- [LIDB SSN Edit Flag Indicator](#)
- [CNAM SSN Edit Flag Indicator](#)
- [ISVM SSN Edit Flag Indicator](#)
- [WSMSC SSN Edit Flag Indicator](#)

2.4.1 ~~Modify the “Class SSN Edit” Indicator in a Service Provider Profile~~

~~To modify the “Class SSN Edit” 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 “Class SSN Edit” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** support the “Class SSN Edit” Indicator.~~
- ~~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 “Class SSN Edit” 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.~~

2.4.2 ~~Modify the “LIDB SSN Edit” Indicator in a Service Provider Profile~~

~~To modify the “LIDB SSN Edit” 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 “LIDB SSN Edit” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider **does not** support the “LIDB SSN Edit” Indicator.~~

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 "LIDB SSN Edit" 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.

2.4.3 Modify the "CNAM SSN Edit" Indicator in a Service Provider Profile

To modify the "CNAM SSN Edit" 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 "CNAM SSN Edit" Indicator. Valid values for this Indicator are "TRUE" or "FALSE". The value is automatically defaulted to "FALSE" indicating that the Service Provider **does not** support the "CNAM SSN Edit" Indicator.
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 "CNAM SSN Edit" 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.

2.4.4 Modify the "ISVM SSN Edit" Indicator in a Service Provider Profile

To modify the "ISVM SSN Edit" 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 "ISVM SSN Edit" Indicator. Valid values for this Indicator are "TRUE" or "FALSE". The value is automatically defaulted to "FALSE" indicating that the Service Provider **does not** support the "ISVM SSN Edit" Indicator.
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 “ISVM SSN Edit” 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.

2.4.5 ~~Modify the “WSMSC SSN Edit” Indicator in a Service Provider Profile~~

To modify the “WSMSC SSN Edit” 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 “WSMSC SSN Edit” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider ~~does not~~ support the “WSMSC SSN Edit” Indicator.
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 “WSMSC SSN Edit” 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.

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 [\(also update block reference when R3 M&P are incorporated\)](#):

- 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. The current M&P does not address what is sent in recovery.

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 SMS 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 SMS 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.

The NPAC SMS 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 **SMS** 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 automatically generated by the NPAC SMS~~ prior to the NPA Split.

NPAC **SMS** 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 **Service Provider**. 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 **SMS** 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~~ that has not already been scheduled in the NPAC SMS, already exists.
- ✓ 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.

If the Permissive Dial Period Start Date (PDP Start) is modified to a closer in effective date, the NPAC SMS will automatically delete the scheduled split data. NPAC Personnel shall then delete the new NPA-NXX, then re-add the new NPA-NXX with the new closer in effective date. Following successful addition of the new NPA-NXX, NPAC Personnel shall initiate the re-processing of the NPA Split Load File.

2.7 NANC 299 – NPAC Interface Heartbeat

This change order was removed from Release 4.0 consideration.

2.8 NANC 301 – NPAC Monitoring of SOA and LSMS Associations via NPAC TCP Level Heartbeat (transport layer)

No M&P required. If the TCP Keepalive feature detects an inactive association it will issue an abort and the abort will be logged. Change Order 219 covers logging of association aborts and binds and there is an M&P for this.

2.9 NANC 230 – Donor SOA PTO

No change required. The current M&P does not address PTO. It is assumed that NPAC user documentation (i.e. NPAC SMS User's Guide) provided to NeuStar by [it'sits](#) vendor covers PTO.

2.10 NANC 249 – Modification Disconnect Pending Date

No change required. The current M&P does not address Disconnect Pending Dates. It is assumed that NPAC user documentation (i.e. NPAC SMS User's Guide) provided to NeuStar by [it'sits](#) vendor covers Disconnect Pending Dates.

2.11 NANC 294 – Due Date Edit (7PM)

No change required. The current M&P does not address Due Dates. It is assumed that NPAC user documentation (i.e. NPAC SMS User's Guide) provided to NeuStar by [it'sits](#) vendor covers Due Dates.

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.

The following needs to be added to the current M&P:

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** support 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** support 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

When resolving errors with an SP, USAs will need a list of all potential errors. When the application level errors have been defined in a table in the IIS, the table will be copied to the M&P document and explanations added as needed.

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 Service Providers to change the SPID on network data (NPA-NXX, LRN and NPA-NXX-X) and subscription versions. Examples that cause this situation for Service Providers 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 down. 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.

The following section needs to be added to Chapter 8 in the current M&P:

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~~**Current** 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 the~~ New (Other) 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 concurs, the request is processed.
NOTE: If the current Service Provider is the same as the New Service Provider, then there is no need to perform this step (since data is not migrating from one Service Provider to another, but rather within a given Service Provider).
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 for verification by the requesting Service Provider.
5. The requesting Service Provider reviews the SIC-SMURF and authorizes the migration.
6. ~~NPAC Personnel monitor/check that the TNs involved are active with an empty failed-SP list.~~
7. Since the migration takes place during the agreed upon downtime (e.g., Service Provider Maintenance Window), the amount of migration downtime to perform the Mass Update of SPID is agreed upon by the NPAC and all Service Providers involved.
8. At the beginning of the Service Provider Maintenance Window, NPAC Personnel monitor/check that the TNs involved are active with an empty failed-SP list.
9. During the selected Service Provider Maintenance Window, all Service Providers use the same SIC-SMURF files to migrate their own data in their local database.
NOTE: Service Providers should be aware that NPA-NXX filters are not applied to the SIC-SMURF files, and therefore, there may be NPA-NXXs that they don't have in their local system (which is a valid scenario, if the NPAC SMS has a filter for that Service Provider with that NPA-NXX).
10. During the selected Service Provider Maintenance Window and 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.
11. 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).

12. 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

[The text below supersedes the “No change required.” listed in the R4 Change Order document \(2/24/00\) for M&Ps of this change order.](#)

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

Network, Subscription, and Notification Recovery

SOA systems are able to request recovery of all notifications *and network data* sent to them during a time range limited by the maximum download duration tunable. *LSMS systems are able to request recovery of all notifications, network data, and subscription data sent to them during a time range limited by the maximum download duration tunable.* The request for recovery is sent across the CMIP interface. The response to the recovery request is sent across the CMIP interface *as a linked response if the “SOA/LSMS Linked Replies-Notification” Indicator is set to TRUE and as a non-linked response if the “SOA/LSMS Linked Replies-Notification” Indicator is set to FALSE.*

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

The following needs to be added to the current M&P:

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’s SOA **does not** support recovering notification data and network data as linked replies. 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’s LSMS **does not** support recovering notification data, network data, and subscription data as linked replies. 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.

[The following tunables need to be added to the current M&P \(appendix I, System Tunables\):](#)

- [Network Data Linked Replies Blocking Factor](#)
- [Subscription Data Linked Replies Blocking Factor](#)
- [Notification Data Linked Replies Blocking Factor](#)
- [Network Data Maximum Recovered Objects](#)
- [Subscription Data Maximum Recovered Objects](#)
- [Notification Data Maximum Recovered Notifications](#)

2.16 NANC 285 – SOA/LSMS Query Size

[The text below supercedes the “No change required.” listed in the R4 Change Order document \(2/24/00\) for M&Ps of this change order.](#)

[\(The following is a new section in 4.13, Provisioning.\)](#)

2.16.1 [SOA/LSMS Query Size](#)

[SOA and LSMS systems are able to request subscription version queries in ranges. If the number of subscription versions that meet the range criteria exceed the Maximum Subscription Query](#)

tunable value, the returned data is limited to this tunable value. The SOA or LSMS system should then send subsequent queries to retrieve additional data.

Refer to the NANC IIS for more details on subscription version queries.

~~In section 10.4.1 the Systems Tunable Report Screen will need to be updated so that the Subscriptions Tunable section shows the new value for the maximum subscription query.~~

Systems Tunable Report Overview

~~The System Tunables report allows a User to inspect the tunable parameters in the NPAC-SMS. From this report the User will be able to view the current values of all tunable parameters. The System Tunables Report Window shown allows the User to generate the tunables report.~~

Sample Report

```

10/14/1997          System Tunables Report          Page 1 of 1
17:25
          NPAC system tunable parameters

TUNABLE TYPE
-----
TUNABLE TAG          TUNABLE   METRIC   VALID
                     VALUE      RANGE
-----
Subscriptions Tunables
Initial Concurrence Window          18      hours   1-72
Final Concurrence Window            18      hours   1-72
Conflict Expiration Window          30      days    1-180
Maximum Subscriber Query            50      records 10-150
Pending Subscription Retention       90      days    1-180
Cancellation-Initial Concurrence Window 4      hours   1-72
Cancellation-Final Concurrence Window 4      hours   1-72
Old Subscription Retention           18      months  1-36
Cancel-Pending Subscription Retention 90      days    1-360
Cancel-Conflict Subscription Retention 30      days    1-360
Cancel-Disconnect Pending Retention  90      days    1-360
Subscription Activation Retry Attempts 3      attempts 1-10
Subscription Activation Retry Interval 2      minutes 1-60
Subscription Modification Retry Attempts 3      attempts 1-10
Subscription Modification Retry Interval 2      minutes 1-60
Subscription Disconnect Retry Attempts 3      attempts 1-10
Subscription Disconnect Retry Interval 2      minutes 1-60
Communications Tunables
Local SMS Retry Attempts             3      attempts 1-10
Local SMS Retry Interval             2      minutes 1-60
SOA Retry Attempts                  3      attempts 1-10
SOA Retry Interval                  2      minutes 1-60
Maximum Number of Download Records  10000   records 1-200000
Maximum Download Duration            60      minutes 1-1440
Audits Tunables
Canceled Audit Retention Period      30      days    1-360
Data Integrity Sample Size           1000    SVs     1-5000
Data Integrity Sample Interval        30      days    7-360
Logs Tunables
Audit Log Retention Period            90      days    1-360
Error Log Retention Period            90      days    1-360
History File Data Storage             365     days    1-365
Local SMS Activation Log Retention Period 90     days    1-360
Usage Log Retention                   90      days    1-360
Security Tunables
Key Change Interval                  7      days    1-365
Failed Login Attempts                 3      attempts 0-10
Failed Login Shutdown Period          60      seconds 0-300
Unused User ID Disable Period         60      days    1-360

```

2.17 NANC 169 – Delta Bulk Data Download for Subscription Versions

This change order was removed from Release 4.0 consideration.

2.18 NANC 179 – TN Range Notifications

~~No change required. The current M&P does not address notifications to this detail.~~
The text below supercedes the “No change required.” listed in the R4 Change Order document (2/24/00) for M&Ps of this change order.

The following needs to be added to the current M&P:

2.18.1 Modify the “TN Range Notification” Indicator in a Service Provider Profile

To modify the “TN Range 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 “TN Range Notification” Indicator. Valid values for this Indicator are “TRUE” or “FALSE”. The value is automatically defaulted to “FALSE” indicating that the Service Provider’s SOA **does not** support receiving notification data in ranges, but will receive them as individual TNs.
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 “TN Range 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.

2.19 NANC 232 – First Port Notification on Web BB

No M&P required. Posting First Port Notifications on the Web BB will be an automated process.

2.20 NANC 287 – ASN.1 Notification Recovery

No M&P required. ASN.1 recompile only.

2.21 NANC 218 – Conflict Timestamp Broadcast SOA

No change required. The current M&P does not address things at the timestamp level.

2.22 NANC 138 – Definition of Cause Code

No change required. The current M&P only addresses cause codes that a Service Provider can utilize.

Document Issues Log:

	<u>Issue</u>	<u>Notes/Resolution</u>	<u>Status</u>
1	<u>NANC 217 – Mass Update of SPID. When migrating data from one SPID to another, part of the process requires the NPAC SMS to generated a SIC-SMURF file that provides migration data. The issue is that this file can be automatically put into the FTP directory of the SPID requesting the operation, but once approved, this file needs to be available to all other Service Providers as well.</u>	<u>This is an implementation issue that needs to be addressed. The proposed solution will be provided to the industry at a later date.</u>	<u>Open</u>