NANC CHANGE ORDER SUMMARY
FOR
NPAC SMS FUNCTIONALITY

Rev: 57

2/1/99

based on results of January – Atlanta meeting

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Open Change Orders

Chg Order #	Orig / Date	Description	Priority	Category	Proposed Resolution	Level of Effort	
						NPAC	LSMS SOA
	ATT / 10/15/96	Round Robin across LSMS associations The NPAC SMS would support the adding of additional LSMS associations and manage distributing transactions in a round robin algorithm across the associations. For example, due to performance an LSMS may want to start another association for network/subscription downloads...the NPAC SMS would accept the association, manage security, and distribute network/subscription PDUs across the 2 or more associations using the round robin algorithm (One unique PDU will be sent over one association only.)	Medium / Low	NPAC SMS functionality / IIS	This feature may already be implemented in the Lockheed Martin developed NPAC SMS.	?	N/A ?
ILL 8	Lockheed Martin Team / 10/17/96	Portability Areas Establishment of State Portability Areas.	Low	NPAC SMS functionality	Detailed requirements have been developed. Related to ILL 9 and ILL 10.	High	N/A
ILL 9	Lockheed Martin Team / 10/17/96	Portability Area Specific Tunables Establishment of portability area Tunable Parameters to allow timing and feature functionality to vary by portability area within a Regional NPAC to satisfy potential regulatory differences.	Low	NPAC SMS functionality	Detailed requirements have been developed. Related to ILL 8.	High	N/A
ILL 10	Lockheed Martin Team / 10/17/96	Billing Enhancements Performance of Cost Reapportionment and billing on a portability area basis to allow for different cost recovery methods employed or mandated by regulatory agencies, if applicable.	Low	NPAC SMS functionality	Detailed requirements have been developed. Related to ILL 8.	High	N/A

ILL 17	Ameritech 10/15/96	Report Size Warning A request was made to warn the user of the NPAC Operational GUI of the size of a report before its creation to prevent accidental creation of large reports.	Medium	NPAC SMS report functionality	A report size warning would be displayed to the user of the NPAC SOA Low-tech or NPAC Administrative Interface before the report is created in number of pages. The user would then be given the option to continue or cancel. If the user chooses to cancel then they should be returned to the report generation screen and be allowed to modify the report options or exit.	Med	N/A
ILL 23	External Design Meeting 10/15/96	Detailed Integrity Sample Results Report A request was made for an additional NPAC SMS report for detailed integrity sample results. This report would list all of the discrepancies found for a given Data Integrity Sampling by service provider. The data integrity report is used to determine the percentage of synchronization between the NPAC SMS and Local SMS. The report is run at a tunable frequency (default 1 week) for a random sample of a tunable number of TN's (default of 1000).	Medium	FRS	Requirements would be added to the FRS. There is also an issue being discussed on whether the discrepancies found should be fixed. There was a request that the M&P support be discussed.	?	N/A

ILL 58	Ameritech 10/29/96	Single Audit Report Modification For each discrepancy listed in the single audit report the service provider serving the TN should be specified in addition to the service provider who has a discrepancy for that TN. A service provider to insure that audits requested by their personnel are only run on TN's owned by that service provider could use this information.	Low	FRS/IIS	Update FRS requirement R8-21.2 as follows: R8-21.2 Audit Report Contents NPAC SMS shall generate an audit report containing the following information: ?1 Audit request parameters, which identified the scope of the audit. ?2 Date and Time of Audit. ?3 Progress indication. ?4 Service Provider network, which contains database conflict. A difference indicator which indicates one of the following: ?5 Mismatch between the NPAC SMS and local SMS ?6 Record missing in local SMS ?7 An audit failure ?8 No discrepancies found would be modified to add a bullet as follows: ?9 Identification of SP owning the TN for which the discrepancy was found.	Low	N/A
ILL 130	AT&T 1/6/97	Application Level Errors Errors in the SOA interface are being treated as CMIP errors and it may sometimes be difficult for a SOA to know the true reason for an error from the NPAC SMS and therefore indicate a meaningful error message to its users. It has been requested that application level error be defined where appropriate and returned as text to the SOA.	High	IIS	Application level errors would be defined in the IIS.	High	High

ILL 183	MCI 2/14/97	Download of Service Provider Data ASN.1 Issue
		
		The NetworkDataDownload ASN.1 definition is as follows:
		
		NetworkDownloadData ::= SET OF SEQUENCE {
		   service-prov-data [0] SEQUENCE {
		      service-prov-id ServiceProvId,
		      service-prov-name ServiceProvName OPTIONAL
		   },
		   service-prov-npa-nxx-data [1]
		      NPA-NXX-DownloadData OPTIONAL,
		   service-prov-lrn-data [2] LRN-DownloadData OPTIONAL
		}
		
		NPA-NXX_DownloadData and LRN-DownloadData both have download reason which basically specify whether to add, delete or modify instances, however, service_prov_data does not. There is no way to indicate that a serviceProvNetwork object has been deleted in a network data download.
			Medium	IIS	It is proposed that since service provider deletion is not a frequent activity that addition of this functionality be added in a later release.
					
					The ASN.1 would be modified as follows:
					
					NetworkDownloadData ::= SET OF SEQUENCE {
					   service-prov-data [0] SEQUENCE {
					      service-prov-id ServiceProvId,
					      service-prov-name
					         ServiceProvName OPTIONAL,
					      Service-prov-download-reason
					         DownloadReason
					   },
					   service-prov-npa-nxx-data [1]
					      NPA-NXX-DownloadData
					         OPTIONAL,
					   Service-prov-lrn-data [2]
					      LRN-DownloadData OPTIONAL
					}
						Med	Med

ILL 187	2/22/97 AT&T	NXX split handling for 6 digit Currently there are no requirements or functionality in the NPAC SMS to address NPA-NXX splits, only NPA splits. Further investigation and requirement development needs to be done to support this functionality.	Hold	NPAC SMS	This feature has been requested for a future release. Detailed requirements need to be developed. This change has not been associated with a group. Change order withdrawn by the originator. This change order has been reopened and placed on hold due to issues raised in the Western Region.		
NANC 34	Perot 3/17/97	AuditServiceProvIdRange ASN.1 Modification It has been suggested that serviceProvName be modified to be ServiceProvId. ServiceProvId is guaranteed to be unique.	Medium	IIS ASN.1	Detailed requirements have been developed. A request has been made to Lockheed and Perot to provide information on what would occur today if a name were ambiguous. It has been indicated that the vendors may already use the Service Provider Name if it is submitted in the serviceProvName.	Med / Low	Med / Low ASN.1

| NANC 44 | World Com 3/24/97 | Effective Release Date Validation

The effective release date is on optional value that can be used in conjunction with a disconnect. This is the date the NPAC removes the subscription from the LSMSs. Without this date the NPAC doesn't do any data validation on the customer disconnect date but does an immediate broadcast to remove the subscription from the LSMSs. If a subscription is erroneously entered without this date a customer would be removed from the LSMSs in error. It has been decided that the NPAC will validate the effective release date to insure that it is greater than or equal to the disconnect date. If the effective release date is not greater than or equal to the disconnect date then the disconnect request will be rejected with an invalid attribute for the effective release date. If the effective release date is not specified it is assumed to be the date of the request. | High | FRS | Detailed requirements have been developed. | Med / Low | N/A |
|---|---|---|---|---|---|---|---|
| NANC 46 | NANC meeting 3/24/97 | NPAC to NPAC

NPAC to NPAC exchange of information has been requested as a potential NPAC SMS enhancement. Currently this issue is being investigated and framed for the group. | Hold | FRS | This feature has been requested for a future release. Detailed requirements need to be developed. This change has not been associated with a group.

The working group is working on this from paragraph 22 2nd report and order (the order number is 97289). The report is now available.

This change order remains on hold due to the fact that it may be needed to support location portability. | | |
| NANC 87 | Lockheed Martin Team 4/30/97 | RR5-39 requirement modification

The inclusion of the cancelled state in RR5-39 we believe is in error. We believe that the only valid states that a non-old or new SP should be able to view is old or active. No previously pending version should be viewable. | Medium | FRS | | Med / Low | Low / N/A? |

NANC 98	Lockheed Martin Team 5/22/97	TSAP data required in FRS Table 3-4 in the FRS, NPAC Customer Network Address Data Model, indicates that the TSAP is a required field, like the other selectors. The table should be changed to make the TSAP field optional due to the fact that some SOA/LSMS vendor implementations do not use TSAP addresses.	Low	FRS	Both vendors currently have a work around to the problem that allows the TSAP address to be optional.	Low	Recom pile
NANC 103	AT&T 5/23/97	Increase in OSI Selector Size Currently in the IIS and FRS the OSI TSAP, SSAP, and PSAP sizes are limited to 4 characters. It has been requested that these be increased in size.	Low	IIS/ASN.1/ FRS	The selector would be defined as a range from 4…16 or 20.	Med / High-?	Med / Low
NANC 119	Lockheed Martin 6/27/97	Additional Requirement to View State Portability Area It has been requested that the following requirement be included for state portability areas in addition to the requirements to add, delete, and modify: RR3-24 Viewing of a State Portability Area NPAC SMS shall allow NPAC personnel to delete a state portability area supported by the NPAC SMS.	Low	FRS	This change order is related to change order ILL 8.		
NANC 122	AT&T 7/17/97	Enhanced Key Expiration Strategy It has been requested that the key exchange strategy be revised for a more secure implementation. The strategy would be as follows: NPAC would expire its key when: 　?10 an abort from a service provider occurs on an active association. 　?11 a key change is desired. Service Providers would expire their key when: 　?12 an abort from the NPAC occurs on an active association. 　?13 when accessDenied is returned. 　?14 a key change is desired. This change request is related to the Release 1 change order NANC 112.	Medium	FRS/IIS	The group is unsure of the need to change the key exchange strategy at this time.	?	?

NANC 129	8/5/97 AT&T	<u>End User Location Type and Value Definition</u>
		
		In the NANC IIS V1.2 the following ASN.1 definitions are found:
		
		EndUserLocationType ::= CHOICE {
		  value [0] NumberString(SIZE2)),
		  no-value-needed [1] NULL
		}
		
		EndUserLocationValue ::= CHOICE {
		  value [0] NumberString(SIZE(1..12)),
		  no-value-needed [1] NULL
		}
		
		However, in the FRS V1.2 the following is found in Table 3-5:
		End User Location Type C(2)
		End User Location Value C(12)
		where "C" is defined as "Character or Alphanumeric Strings".
			Hold	IIS - GDMO/ ASN.1	IIS should be changed to make these fields character. However, at this time since these fields are not being used this change order is on hold. For the interim change order NANC 155 will be used to sync the FRS with the IIS.		

NANC 147	AT&T 8/27/97	<u>Version ID rollover strategy</u> Currently there is no strategy defined for rollover if the maximum value for any of the id fields (sv id, lrn id, or npa-nxx id) is reached. One should be defined so that the vendor implementations are in sync. Currently the max value used by Lockheed is a 4 byte-signed integer and for Perot it is a 4 byte-unsigned integer.	High	FRS	A strategy on how we look for conflicts for new version id's must be developed as well as a method to provide warnings when conflicts are found. Oct LNPAWG (Kansas City), it was requested that we begin discussing this in detail starting with the Jan 99 LNPAWG meeting. Beth will be providing some information on current data for the ratio of SV-ID to active TNs (so that we can get a feel for how much larger the SV-ID number is compared to the active TNs).	High	High?
NANC 153	Bellcore 10/1/97	<u>Download file creation by SP for application of Filters</u> It has been requested that subscription version down load files used for disaster recovery be created by specification of SPID so that the SP's filters can be applied. This would create a file only for all the NPA-NXX's the service provider is interested in.	Medium	FRS	The team has agreed to this functionality.	Low	N/A

NANC 168	AGCS 10/18/1997	SOA Bulk Download Files NPAC bulk data down load files are designed for LSMS. If a SOA needed them for re-sync purposes, they could only resync active subscription versions. These files should be modified to include the different SV states if it is being created for SOA resynchronization.		FRS	AGCS to review. Reopened: AGCS still wants the change order open. On a SOA, if you wanted to re-sync your database or initialize you database, you would need subscriptions in pending, conflict, cancel-pending, active, and disconnect pending.		
NANC 169	Bellcore 5/23/97	Delta Download File Creation by Time Range for SVs It has been requested that a requirement be added to the FRS to allow for creation of a delta download file by date and time range, for SVs. (continued)	Medium	FRS	This item is on hold until further experience is gained with download. This change is expected to help with a service provider catch-up faster after an extend outage when the database becomes large. It was indicated that this functionality is already available in the Lockheed Martin NPAC SMS implementation. Delete Pending (continued)	Low	N/A?

NANC 169 (con't)	Continued	During Dec Natl N Pool meeting, discussed need to change functionality when requesting SV BDD with a time range. Currently, the NPAC provides all "active" SVs based on Activation Broadcast Complete Timestamp. This creates an issue for modifications that are within the specified time range window, but the Activation was prior to the specified time range. There is also an issue for Activation Failures.
		
		During Jan LNPAWG meeting, proposed changes to handle two issues, include:
		1. Incorporate the start and end time ranges into the file name.
		2. Need to capture all SV activity (activation, modification, disconnect) into the file, when doing time range.
		
		    For #1 (new words in *larger print italics***), in FRS Appendix E, Download File Examples,**
		Subscription versions in the download file are selected by an NPA-NXX begin and end range. The file name for the Subscriptions
		download file, *where a time range is NOT selected***, will be in the format:**
		NPANXX-NPANXX.DD-MM-YYYYHH24MISS
		The NPANXX-NPANXX values map to the selection criteria and the time stamp maps to the current time.
		The Subscriptions file given in the example would be named:
		        303123-303125.10-13-1996081122
		
		(continued)
				Dec LNPAWG (Atlanta), verify start and end timestamps embedded in filename. Update documentation to state Activation Broadcast Complete Timestamp is used for comparison.
				
				Update: The start and end timestamps are NOT embedded in the filename.
				
				The proposal from the Natl N Pool Sub-Committee is to use the Last Modified Timestamp attribute in the SV, to determine whether or not an SV fits in the specified time range.
				
				Jan LNPAWG (Atlanta), proposed changes were discussed. CMA will include proposed changes in next version of the change management list.

| NANC 169 (con't) | Continued | *In the case where a time range is selected, the file name for the Subscriptions download file with a time range, will be in the format:*
NPANXX-NPANXX.DD-MM-YYYYHH24MISS. DD-MM-YYYYHH24MISS. DD-MM-YYYYHH24MISS
The NPANXX-NPANXX values map to the selection criteria, the first time stamp maps to the current time, the second time stamp maps to the start time range, and the third time stamp maps to the end time range.
The Subscriptions file with a time range given in the example would be named:
     303123-303125.10-13-1996081122.10-10-1996000000.10-12-1996115959

Also for #1, no functional requirements or IIS flows are affected by this change.

For #2, new requirements are proposed (see next page)

(continued) | | |

NANC 169 (con't)	Continued	**Req 1** **Subscription Version Information Bulk Download File Creation – Subscription Versions** NPAC SMS shall allow NPAC personnel to request a bulk data download file for Subscription Version data via the NPAC Administrative Interface. (existing NPAC SMS functionality) **Req 2** **Subscription Version Information Bulk Download File Creation – Selection Criteria** NPAC SMS shall include the Requesting Service Provider, Active and Partial Failure Subscription Versions Only or Latest View of Subscription Version Activity Choice, Time Range in Central Time, and TN Range as Selection Criteria fields for the Subscription Version bulk data download file via the NPAC Administrative Interface. **Req 3** **Subscription Version Information Bulk Download File Creation – Active and Partial Failure Subscription Versions Only or Latest View of Subscription Version Activity Choice** NPAC SMS shall allow NPAC Personnel to select either *Active and Partial Failure Subscription Versions Only* or *Latest View of Subscription Version Activity*, and shall use the selected choice, for Subscription Version data. **Req 4** **Subscription Version Information Bulk Download File Creation – Data in Active Subscription Versions Only Choice** NPAC SMS shall use the *Active and Partial Failure Subscription Versions Only* selection to only include Subscription Versions with a status of either Active or Partial Failure in the Subscription Version Bulk Data Download file. (continued)

NANC 169 (con't)	Continued	**Req 5** **Subscription Version Information Bulk Download File Creation – Data in Latest View of Subscription Version Activity Choice** NPAC SMS shall use the *Latest View of Subscription Version Activity* selection to include all Subscription Versions, regardless of status, in order to capture activation, modification, and deletion transactions for Subscription Version data, but only include the latest instance of the Subscription Version in the Subscription Version Bulk Data Download file, for a given NPA-NXX, when a Subscription Version has more than one activity (e.g., addition, then modification) within the specified time range. **Req 6** **Subscription Version Information Bulk Download File Creation – Time Range Fields** NPAC SMS shall use the first Time Range entry field as an inclusive start range, and the second Time Range entry field as an inclusive ending range, for Subscription Version data that were broadcast during the specified Time Range. **Req 7** **Subscription Version Information Bulk Download File Creation – TN Range Fields** NPAC SMS shall use the first TN Range entry field as an inclusive start range, and the second TN Range entry field as an inclusive ending range, for Subscription Version data. (continued)

NANC 169 (con't)	Continued	**Req 8** **Subscription Version Information Bulk Download File Creation – Selection Criteria Combinations**
		
		NPAC SMS shall edit the selection criteria combination as shown in the table below:
		
		                                     | Time Range | TN Range
		-- 	
		Active and Partial Failure SVs Only | Required | Optional
		Latest View of SV Activity | Required | Optional
		
		Such that a combination of:
		
		    ?15 Active with a Time Range shall be rejected.
		
		    ?16 Latest View shall require a Time Range.
		
		    ?17 TN Range shall be optional for both Active and Latest View.
		
		Req 9 **Subscription Version Information Bulk Data Download – Subscription Version Results**
		
		NPAC SMS shall provide a bulk data download file, based on the selection criteria, that contains all Subscription Versions in the NPAC SMS.
		
		Req 10 **Subscription Version Information Bulk Data Download – Subscription Version Results Sort Order**
		
		NPAC SMS shall sort the Subscription Version Bulk Data Download file, in ascending order based on the value in the TN attribute.
		
		(continued)

NANC 169 (con't)	Continued	**Req 11 Subscription Version Information Bulk Data Download – Filters for Subscription Versions** NPAC SMS shall apply NPA-NXX Filters to Subscription Versions in the creation of bulk data download files. **Req 12 Subscription Version Information Bulk Data Download – FTP Sub-Directory** NPAC SMS shall automatically put the bulk data download file into the FTP sub-directory of the Service Provider, based on SPID, that requested the creation of the bulk data download file.					

NANC 174	NANC T&O 11/14/97	Removal of SOA and LSMS combined association
		
		The ASN.1 for system type would be changed from:
		
		SystemType ::= ENUMERATED {
		    soa(0),
		    local-sms(1),
		    soa-and-local-sms(2),
		    npac-sms(3) --value is only valid for AccessControl
		        definition
		}
		
		to:
		
		SystemType ::= ENUMERATED {
		    soa(0),
		    local-sms(1),
		    npac-sms(3) --value is only valid for AccessControl
		        definition
		}
			Medium	IIS/ASN.1	ASN.1 Change. Lockheed will need to change code to remove this functionality. This change order is also linked to ILL 181.	Low (Lock heed only)	Recom pile

| NANC 175 | ESI 11/15/97 | Timestamp default when not set

Lockheed uses a 'not specified' format 00000000000000.0Z to indicate a timestamp that has not been set, Perot uses 1/1/90 00:00. There is currently no reference in the IIS or FRS as to what the default should be. | High | IIS | Submitter requests that the value 00000000000000.0Z be used and documented in the IIS.
Rec. X.208: 1988, Specification of ASN.1 references ISO 8601 for the established date format. ISO 8601 defines acceptable date formats. However per ISO 8601, all zeros (0) for year, month, etc. are invalid values. Therefore, by the definition of the ISO standard 00000000000000.0Z is an invalid date/time stamp. The IBM stack will not allow the .0Z date/time stamp since they conform to the specifications. To comply with the .0Z date/time stamp would require a IBM TMN stack change.
Lockheed initial feeling is that to conform to the 1/1/90 00:00 timestamp would not be a huge effort but would require database changes.
The NPAC vendors will not change in release 1 timeframe. Different solutions were discussed and it was decided that conditional packages for the timestamps should be added to the GDMO. | Med | Med |
| NANC 179 | Lockheed Martin 11/25/97 | TN Range Notifications

Currently notifications for TN range related operations come as individual notifications for each TN in the range. It has been suggested that the notifications for all TN's in a range be combined into one notification.

After further analysis, it was determined that this should be revised to include "pending" and "sending" status attribute value changes and attribute value changes, plus return to donor notifications. | Medium | IIS | An additional write-up of this change order implementation was provided to the group. Lockheed is currently doing some preliminary sizing.

SPs should be discussing the downsized version internally. | | |

NANC 180	Perot Team 12/7/1997	Key Exchange Security Strengthening Proposal A: The Key Interval will be turned off on the NPAC software and each SP must change public keys every 3 months (complete the key exchange process with new listids with the NPAC). OR Proposal B: The SP's software and the NPAC software will change the Interval every 7 days. The SP software will need to be enhanced. This is full-protected asymmetric encryption.	Hold		Modification of the M&P will be worked in other arenas. There has been a request to automate the functionality requested in this change order. This change order is being moved to the hold list until needs are identified by other industry teams. Reference table 11-5 for the key change interval tunable. Perot has provided a write up that will be discussed at the NANC T&O meeting in Dallas on February 12th and 13th.		
NANC 186	AT&T 1/7/98	Linked Notification Recovery Reply It has been requested that the notification recovery action reply be a linked reply. This would be done to control the size of the response sent back to the Local SMS systems.	Medium	IIS	Related to ILL 79, NANC 183, and NANC 184. As a work around to the large PDU size in the interim. It is suggested that service providers that can not handle large PDUs should request notification recovery in smaller time intervals.		
NANC 187	AT&T 1/7/98	Linked Action Replies It has been requested that all action replies be reviewed to determine if they should be linked replies.	Medium	IIS	Related to NANC 186 and NANC 183. Actions that were identified as issues were the network and subscription version recovery actions. It is suggested that service providers that can not handle large PDUs should request network or subscription version recovery in smaller time intervals. A request has been made to Lockheed to document this in M&P.		

| NANC 189 | ESI 1/19/1998 | Service Provider Allowable Functions Modification

NPAC FRS requirement R4-15.1 - where it states - NPAC SMS shall allow Service Provider data to be modified or added to the Service Provider data with the exception of the data listed in table 3-2.The Allowable Functions is part of table 3-2. However, in the GDMO for the IIS the allowable functions are defined as GET-REPLACE.

Functionality needs to be verified by both NPAC vendors to determine the actual functionality that was implemented and the action that needs to be taken. | Low | IIS/ FRS | Lockheed and Perot to verify their implementations. Specifically vendors must determine if they allow allowable functions to be changed over the CMIP interface and what the behavior would be if the data were changed. For example, would the association be aborted or would the change take effect for future associations?

Lockheed does not support the changing of the data over the CMIP interface. Perot does support this functionality. The group determined that the FRS takes precedence. This functionality is not anticipated to be needed in the future for live operations. The IIS GDMO should be changed to GET from GET-REPLACE for this attribute.

This change order is a low priority. | | |
|---|---|---|---|---|---|---|---|

| NANC 191 | Ameritech 1/19/1998 | DPC/SSN value edits

It has been requested that DPC and SSN values be edited to make sure that if a SSN is specified that the DPC is specified. This functionality was requested due to a problem with a large port were the DCP and SSN information entered by the originator was invalid. Currently the NPAC SMS does no validity checks on the SSN and DPC information other than it is of the format and type defined in the IIS and FRS. | Medium | FRS | The edits need to be verified by industry experts to insure they are correct. Gary Sacra has taken an action item to obtain more information from T1/S1.6.

The following information was provided by Gary for DPC/SSN edits:

?18 The 9-digit point code (DPC) is broken down into three components: 3-digit

0 Network ID - valid range=001-255

1 3-digit Cluster ID - valid range=000-255

2 3-digit Member number - valid range=000-255

?19 Subsystem Number (SSN) is a separate three digit number with a valid range of 000-255.

?20 It does not make sense in the network to have a DPC without an SSN or vice versa. | | |

NANC 192	T&O Conference Call 1/23/1998	NPA Split NPAC SMS Load File It was requested that a file be used to load NPA Split information into the NPAC SMS. This would prevent manual data entry that could introduce errors when entering the NPA Split information.			John Malyar from Bellcore gathered some information for the group as to the whom, how, and when for files containing the data that are distributed in the industry currently. John indicated that NANPA identifies and announces the split. The LERG has tools to pull data for a split and distribute it electronically. This is one source from which a file can be obtained.		
NANC 195	Tekelec 1/28/1998	CMIP Object Class Filter Support It has been requested that CMIP object class filter support be supported by NPAC SMS vendors over the CMIP interface.		IIS	Lockheed does not support object class filters. This type of filter is being used to perform a query based on the TN (NPA-NXX,LRN, SPID) value which is useful when a user wants to see an object at the NPAC that is not in the LSMS database. If the LSMS does not have the object, we do not know the version ID so cannot perform a query based on ID. If the service provider is trying to track down a problem, it is useful to be able to perform this type of query to determine if the NPAC has data that the LSMS does not. Query example: I have an LSMS that does not have the serviceProvNPA-NXX in my system. I want to know IF I should have it. My ServiceProvId = 1717. I want to launch a query using, baseManagedObject : ServiceProvNetwork baseManagedObjectInstance: (dn), LnpSMS-Name="1717-Northeast Regional NPAC SMS" , ServiceProvNetwork=1717 AccessControl = n/a, Synchronization = best effort, scope = 1 (go down 1 level), filter = OR item EQUALITY, attribute Id = ServiceProvNPA-NXX-value, attributeValue = 919460		

NANC 199	AGCS 2/28/98	Attribute Value Change Notifications for Mass Update When a Mass Update is performed it has been requested that the SOAs receive a notification of what changed. Specifically if LRN or GTT data changed the SOA should be notified with an attribute value change notification.		FRS/IIS	A concern was raised that this would cause a lot of message traffic that may affect performance.		
NANC 200	AGCS 2/28/1998	Notification of NPA Splits It has been requested that to facilitate synchronization during NPA split, the NPAC via the mechanized interface should notify the SOA and LSMSs. The preferred method would be to have a new managed object that contains all split information. It would still be up to the respective system to perform the splits, but all systems would be in sync. A second alternative would be to have the NPAC issue a notification that states the NPAC is start/ending split processing.		FRS/IIS	This change order is related to change order NANC 192 that proposes getting the split information from the LERG.		

NANC 217	Sprint 5/22/1998	Mass Update of SPID		IIS/FRS/ GDMO/ ASN.1	After much discussion on the 7/8/98 telecon, it was decided that the scope of this change order is huge, and it's frequency of use is undetermined at this point in time (speculation is relatively small).	High	N/A
		It has been requested that Mass Update functionality be enhanced to allow SPID to be changed for all network data and subordinate subscription data. The current NPAC functionality allows mass updates to LRN, GTT data, and optional data (e.g., billing ID) for all active subscriptions currently serviced by that specific Service Provider, by NPA-NXX.					
		Having this functionality would facilitate a situation where one Service Provider (SP1) purchases/merges with another Service Provider (SP2), and all LNP data needs to be consolidated into a single SPID (on the NPAC).			Additionally, AT&T requested that all SPs look at the possibility of performing some type of database migration/conversion instead of having the NPAC perform all of the updates, then have to broadcast to all SPs. The database migration/conversion could potentially be accomplished by using a new NPAC "bulk download file" to update the local database.		
		Today, the NPAC requires all active subscriptions to be disconnected, and all pending subscriptions to be cancelled, by NPA-NXX for all NPA-NXXs owned by SP2. Next, SP2 would delete all LRNs, then delete all NPA-NXXs. SP1 would then have to add the NPA-NXXs and LRNs that were just deleted by SP2. Finally, the pending and activated SVs would need to be "re-created" under the presumption that SP1 is now the code holder for the NPA-NXXs.			The current position for this change order is to have a brief discussion at the Wed, 7/15 meeting in Chicago. The group will seek volunteers for a sub-committee to further analyze this change order in the context of how to accomplish a "merger" using today's functionality, and investigate potential solutions using a "bulk download file" approach, and a full NPAC solution with notifications across the interface.		
		The proposed solution with this change order is the NPAC would perform all of this processing "under the sheets", and not require SP1 and SP2 to perform all of these steps.			July T&O (Chicago). Beth Watkins (AT&T) agreed to coordinate the first telecon for this sub-committee.		
		The issue of notifications (whether to send or suppress) is NOT addressed at this point in time.					
					(continued)		

| NANC 217 (con't) | Continued | After further analysis it was determined that the current NPAC implementation includes 23 tables that contain a customer SPID. Each will have to addressed (at a business level) to determine correct NPAC processing should the SPID be modified.

The other issues to determine include:
1. length of time to complete this update.
2. which notifications need to be sent out over the SOA interface, since we are modifying numerous objects.
3. what do we do with current Network and Subscription records (update them with new SPID; or create new ones for the new SPID, and move the previous ones to OLD). | | Sep LNPAWG (Seattle), a telecon has been scheduled for 9/29, 1p Central, 2 hours. In this initial telecon, the sub-committee will determine the scope of the discussion, and set ground rules for subsequent meetings on this change order.

Participants include, AT&T (Beth), Bellcore (John), ESI (Jim), GTE (Gene), MCI (Gustavo), PacBell (Jackie), and Sprint (Dave). Others are welcome to join.

The sub- committee will also talk about the potential of a "partial cut" from one SPID to another (possibly do it on a market by market basis, or NPA by NPA basis).

Oct LNPAWG (Kansas City), the 9/29 telecon was cancelled. The make-up call is 10/21, 1p Central. Beth to send out bridge info.

Nov LNPAWG (Dallas), The 10/21 call did not have any Lockheed representation, so discussion did not get far. The next call is scheduled for Mon, 11/23, 1p Central, 2 hours.

During the 11/23 telecon, it was determined that Beth's proposed short term solution would not be easy to accomplish. Details on the telecon will be available at the Dec LNPAWG meeting.

Dec LNPAWG (Atlanta), Mass update is the long term solution, but wanted to have short term solution. In the case of MCI and Brooks, they deleted the SVs, deleted the network data, then put it back out there under the new SPID.

(continued) |
|---|---|---|---|---|

| NANC 217 (con't) | Continued | | | | What we looked at for an NPAC manual update, then produce BDD, would require code changes. Plus, BDD would be all records instead of just changed ones. Also, SVs would be modified instead of activated, so the current BDD by time range would NOT pick these up.

Current solution is customer impacting. Two long term options are the actual mass update of this change order, or having the NPAC internally update the SPID, then create appropriate BDD files that capture the changes within the time range.

Leave on open list for now.

Jan LNPAWG (Atlanta), Beth to set up another telecon (possibly end of Jan) to discuss next step.
    During follow-up discussion with several members of the 217 analysis group, bandwidth (for meeting) was limited, due to Natl N Pool meetings. | | |
| NANC 218 | Sprint 6/5/1998 | **Conflict Timestamp Broadcast to SOA**

It has been requested that when a subscription gets placed in conflict, that the time that the subscription version was placed into conflict be broadcast in the status attribute value change notifications to the SOA. Currently it is defined in the IIS on page 262 (version 1.8) that NPAC is not required to send the timestamp information. This change would prevent the service provider SOA from having to query the NPAC anytime they need to retrieve a timestamp. This conflict timestamp is needed so that the new service provider knows when the 6-hour timer has expired and so that they can remove it from. Also the presence of this timestamp indicates if the subscription has been placed into conflict before. | | FRS/IIS/ GDMO | It was noted that a SOA could work around this issue, by automatically querying the NPAC for the conflict timestamp, anytime the SP receives a conflict status for an SV.

Leave on open list for now. | | |

NANC 237	ESI 9/15/98	Duplicate PSAP and Key List for different NSAP Related to ILL 181-2. The NPAC SMS Administrative GUI does not support a duplicate PSAP and Key List for different NSAP addresses.			Oct LNPAWG (Kansas City), this is related to ILL-181. However, ILL-181 was closed in Documents Version 1.9. Currently, we have a work around for this problem, but the GUI does not allow multiple copies of the same PSAP, even with different NSAP addresses. This is an issue for any SP on a distributed platform with duplicate PSAPs for different NSAPs. Jim stated that this is related to ILL-181 because the NPAC now uses PSAP as a primary key along with the SPID (instead of just the SPID). This change order should be implemented to close the loop on the work around, that is listed in ILL-181 Rev 2. Leave on open list for now, since no urgency, and not sure who is going to pay for this.		
NANC 239	National Number Pooling Sub-Committee 9/25/98	Document the current process for Resynchronization While reviewing the Natl N Pool requirements, it was noted that the resynchronization functionality is NOT documented in the FRS. It has been requested by the Sub-Committee to update this information in the FRS.		FRS	This will be put into the queue of CMA updates to the FRS. No date has been scheduled.		
NANC 247	National Number Pooling Sub-Committee 11/19-98	Document the current functionality for audit processing of "in-progress" SVs While reviewing the Natl N Pool requirements, it was noted that the audit processing for "in-progress" SVs is NOT documented in the FRS. It has been requested by the Sub-Committee to update this information in the FRS.		FRS	In the 1.4 version of the NPAC SMS, an audit request for an SV with a status of Sending is skipped by the NPAC (i.e., no query requests are sent to the LSMSs) and reported back to the requesting SOA as "no discrepancies found" for the audited TN. This will be put into the queue of CMA updates to the FRS. NO date has been scheduled.		

| NANC 251 | National Number Pooling Sub-Committee 12/17/98 | Documentation Change to the GDMO Behavior
The following discrepancies should be updated in the GDMO documentation.

Under the subscriptionVersion object (20.0 LNP subscription Version Managed Object Class):

*Correct the definition in behavior to read:
subscriptionVersionBehavior BEHAVIOUR
  DEFINED AS !
    Local SMS Managed Object **used for the NPAC SMS**
    to Local SMS interface.

*Correct activation time stamp description to read:
    The subscriptionActivationTimeStamp is set by the
    NPAC SMS as the
    current date and time when the subscriptionVersion
    activation
    request is received from the new service provider.

Under the subscriptionVersionNPAC object (21.0 LNP NPAC Subscription Version Managed Object Class):

*Correct the disconnect complete time stamp description to read:
    When the subscription version is **being**
    disconnected **and the first**
    successful response is received from the Local SMS
    to the subscription
    version disconnect request, the
    subscriptionDisconnectCompleteTimeStamp
    is updated with the current system time.

*Correct the failed SP List description to read:
    When a subscription version **broadcast is not**
    successful to all
    service providers, the subscriptionFailed-SP-List is
    populated with a list of the failed service providers.

(continued) | | | **Jan LNPAWG (Atlanta), group requested that the actual changes be identified in the text (i.e., bold).** | | |

NANC 251 (con't)	Continued	Under Attribute 48 – subscriptionActivationTimeStamp
		
		*Correct behavior to read:
		    This attribute is set by the NPAC SMS as the time and date
		    that the subscription version activation request was received
		    from the new service provider.
		
		Under Action 1 – lnpDownload
		* Correct this behaviour sentence to read:
		    Time range requests
		    will be limited to a tunable range specified in the NPAC SMS
		    and must be specified in Coordinated Universal Time (UTC).
		
		Under Action 2 – lnpRecoveryComplete
		* Add to behaviour:
		    The NPAC SMS will queue up all new events while the Local SMS is
		    in recovery mode and send them to the Local SMS after responding
		    with the lnpRecoveryComplete action reply.
		
		 Under Notification 11 - subscriptionVersionAttributeValueChange
		* Correct behaviour sentence to read:
		    Failed lists will also be potentially sent for subscription versions
		    with statuses of **active, failed, partial-failure,** disconnect-pending
		    and old.
		
		Under Action 11 - subscriptionVersionCreateAction, the subscriptionWSMSC-DPC and SSN should be moved from the list of required attributes and instead put in a paragraph that states:
		
		  If the SOA WSMSC DPC SSN Data Indicator is set in the service
		  provider's profile, the following attributes should be provided:
		
		  subscriptionWSMSC-DPC
		  subscriptionWSMSC-SSN				

| NANC 254 | LNPA WG 1/12/99 | **NPAC Requirements - Subsequent Ports of Active SV with a Failed SP List**
The Failed SP List should be zeroed out (on the old SV), once the new SV gets activated.

Req 1 – NPAC SMS shall remove a Service Provider from a Subscription Version's Failed SP List, where the Subscription Version's status is Old, once a subsequent port for that TN has been successfully activated for that given Service Provider.

A Service Provider should only be allowed on the Failed SP List for 1 (one) SV for any given TN.

Req 2 – NPAC SMS shall allow a Service Provider to only be on the Failed SP List for one Subscription Version, for a given TN, at any given point in time. | | FRS | **Jan LNPAWG (Atlanta). This change order was opened to replace its "sister" change order, NANC 245.** | | |
| NANC 256 | ESI 1/12/99 | **First Port Notifier for New NPA-NXX in an NPA Split**
Jim Rooks requested that we discuss/document the behavior for the current functionality of the first port notifier. Currently, the NPAC sends out a first port notification of an SV Create for a New NPA-NXX involved in a split, regardless of SVs that may have been moved from the Old NPA-NXX at the start of PDP.

This new requirement will go in the same FRS section as RR5-3, which defines first port notifiers (the <u>underlined</u> words define the differences between the existing requirement and the proposed new requirement).

Req 1 – Create Subscription Version – Notify NPA-NXX First Usage <u>of a New NPA-NXX involved in an NPA Split</u>

NPAC SMS shall notify all accepting Local SMSs and SOAs of the NPA-NXX, effective date, and owning Service Provider when a <u>New </u>NPA-NXX <u>involved in an NPA Split</u>, is being ported for the first time, <u>after the start of Permissive Dialing,</u> immediately after creation validation of a Subscription Version. | | FRS | **Jan LNPAWG (Atlanta), John will write up description for next meeting.** | | |

NANC 257	Natl N Pool Sub-Com'ttee 1/28/99	**GDMO Documentation Change**
		In the R2 version of the GDMO, the description of the Create Action (11.0 LNP New Service Provider Subscription Version Create) should be changed to reflect the dependency on the SP's indicator flag for WSMSC data.
		
		The new service provider must specify valid values for the following attributes, when the service provider's "SOA WSMSC DPC SSN Data" indicator is TRUE, and must NOT specify these value when the indicator is FALSE:
		
		   subscriptionWSMSC-DPC
		   subscriptionWSMSC-SSN
				GDMO, IIS			

<div align="center">Accepted Change Orders</div>

Accepted Change Orders							
Chg Order #	**Orig. / Date**	**Description**	**Priority**	**Category**	**Proposed Resolution**	**Level of Effort**	
						NPAC	**LSMS SOA**
NANC 35	Perot 3/17/94	ContactPagerPin ASN.1 Modification In IIS 1.5 contactPagerPIN is a digit string without length. It has been requested that this be bound to the length of 10 as specified in the FRS.	Low	IIS/ ASN.1	Detailed requirements have been developed. This is an "OLD" Release 2.0 change order that has been moved into the "Accepted" category, awaiting prioritization.	Low	Low

| NANC 138 | CMA 8/11/97 | Definition of Cause Code Values – REVISITED

NANC 54 defined the cause code values and the FRS was to be updated. Due to an oversight this update was not made in the FRS. The change was going to be applied in FRS 1.4 and 2.2. However, a discrepancy as found. The defined values specified in NANC 54 where are as follows:

The values less than 50 were reserved for SMS NPAC internal use.

Other defined values are:

0 – NULL (DO NOT MODIFY)
1 -   NPAC automatic cancellation
50 -   LSR Not Received
51 -   FOC Not Issued
52 -   Due Date Mismatch
53 -   Vacant Number Port
54 -   General Conflict

In table in the FRS the following cause code is defined:
NPAC SMS Automatic Conflict from Cancellation

There is no corresponding code defined in Change Order NANC 54. Is there a numeric value or is this cause code valid?

(continued) | Medium Low | FRS | Update to be made to the FRS.

Pending review by the vendors. Lockheed does not set a cause code when the NPAC SMS automatically puts a cancelled order into conflict. Perot is reviewing their implementation.

There is not a requirement in the FRS for a cause code of NPAC SMS Automatic Conflict from Cancellation.

Operations flows are being reviewed. In figure 6, box 3.

Perot like Lockheed does not use the cause code in question.

A SOA vendor has been asked to evaluate the impact of not receiving a cause code value with a status of conflict.

Flows in Appendix A also need to be updated.

Sizing from NPAC vendors. And validation of functionality (reference existing requirements) of from cancellation to conflict.

(continued) | Low | Low |

NANC 138 (cont.)	Continued	Requirements for the cause code addition would be as follows: RR5-36 should be renumbered to RR5-36.2. RR5-36.1 Cancel Subscription Version – Cause Code for New SP Timer Expiration NANC SMS shall set the cause code to "NPAC SMS Automatic Conflict from Cancellation" after setting the Subscription Version status to conflict from cancel-pending when the new Service Provider has not acknowledged cancellation after the Cancellation-Final Concurrence Window. 2 will be the value defined for the "NPAC SMS Automatic Conflict from Cancellation" cause code.			SOA vendors heard from to date do not have a problem with the cause code not being present. This is an "OLD" Release 2.0 change order, that has been moved into the "Accepted" category, awaiting prioritization		
NANC 146	Bellcore 8/27/97	SP Contact Data Handling Currently there is no way to delete or blank out Service Provider contact data in the profile. The attributes do not have a NULL or absent setting. The ANS.1 should be changed for the address information to be a choice of the address information or NULL.	Medium	IIS/ASN.1	The Lockheed implementation requires that all attributes be sent at one time for modify, delete, or addition of contact data. If a contact address is not specified it is assumed to be deleted and is removed from the NPAC database. Perot would also require a change in the ASN.1 and requirements. A work around could be to over-write the fields with spaces that would give the appearance of empty records, but if printed, the empty records (with blanks) would print. The ASN.1 will be changed. This is an "OLD" Release 2.0 change order, that has been moved into the "Accepted" category, awaiting prioritization	Med / Low	Med / Low
NANC 148	Bellcore 8/25/97	LNPType in SV Object Creation Notification It has been requested that "LNP Type" be added to the subscription version object create notifications.	Medium	IIS/ASN.1/ GDMO	This is an "OLD" Release 2.0 change order, that has been moved into the "Accepted" category, awaiting prioritization	Med / Low	Med / Low

NANC 151	Bellcore 9/4/97	TN addition to attribute value change notification It has been requested that the TN for the subscription version to be added to the attribute value change notifications from NPAC. It is possible for a SOA in a disconnect or modify-active situation, to not have the SV record in their database. Therefore, when the attribute/status change notification comes from NPAC, there is no way to correlate its version id with the TN on the disconnect or modify request in SOA.	Medium	IIS	This would be a deviation from the standard since the TN would not have been an attribute has changed. This is an "OLD" Release 2.0 change order, that has been moved into the "Accepted" category, awaiting prioritization	Low	N/A-?
NANC 177	Tekelec 11/25/97	Clarification to ILL3 It has been noted that the wording for Assumption 3 is unclear and may not be the behavior that is desired. The assumption states "NPAC SMS in the case of overlapping filters will use the more restrictive filter."	Low	FRS	It has been suggested that the wording be changed as follows: "NPAC SMS in the case of overlapping filters will use the superset of the filter defined." The group has accepted this change. Submission to the LLC's has occurred. This is an "OLD" Release 2.0 change order, that has been moved into the "Accepted" category, awaiting prioritization		

NANC 181	AT&T 12/8/1997	Tag Value Addition to the ASN.1 for NANC 146
		
		It has been suggested that tag values be added to the ASN.1 for NANC 146 as follow:
		
		AddressInformation ::= CHOICE {
		  ContactInfo [0] SEQUENCE {
		      line1 GraphicString40,
		      line2 GraphicString40,
		      city GraphicString20,
		      state GraphicString(SIZE(2)),
		      zip GraphicString(SIZE(9)),
		      province GraphicString(SIZE(2)) OPTIONAL,
		      country GraphicString20,
		      contactPhone PhoneNumber,
		      contact GraphicString40, contactFax
		PhoneNumber OPTIONAL,
		      contactPager PhoneNumber OPTIONAL,
		      ContactPagerPin DigitString(SIZE(1...10)) OPTIONAL,
		      contactE-mail GraphicString60 OPTIONAL
		      },
		  no-value [1] NULL
		}
			Medium	IIS	This change would be a recompile only from the original ASN.1.
					
					The group has accepted this change. Submission to the LLC's has occurred.
					
					This is an "OLD" Release 2.0 change order, that has been moved into the "Accepted" category, awaiting prioritization		

NANC 193	NANC T&O 1/23/1998	TN processing during NPAC SMS NPA Split Processing There was group consensus that NPAC behavior would not change until the start of permissive dialing. An example would be an audit that occurred during split processing one-minute before the start of permissive dialing. The NPAC should act as if permissive dialing has not yet started for the audit initiated during split processing. The Split processing should have no effect on operations of the system. <u>A clarification requirement should be added as follows:</u> NPAC SMS shall processes requests during split processing prior to the start of permissive dialing as if the split processing has not yet occurred. Additional clarification requirement: NPAC SMS shall in a download request made after permissive dialing start for subscription version data sent prior to permissive dialing start, return the new NPA-NXX for subscription versions involved in an NPA Split. The above requirements do not reflect the current Lockheed NPAC SMS implementation.	Medium High	FRS	Lockheed in release 1.2 currently holds requests until the NPA Split processing completes (regardless of the NPA or NPA-NXX). Nortel/Perot rejects the requests during NPA split processing. It was not clear if errors were for all requests or just requests related to the NPA or NPA-NXX being split. Desired behavior would be to have no errors occur. Requests put on hold or queued would only be those related to NPA-NXX's involved in the NPA split being processed. Lockheed in Release 1.3 will perform NPA- NXX locking. The following questions need to be answered by vendors: What will the SOA do if it sends an old NPA-NXX prior to PDP and the NPAC returns the new SV with the new NPA-NXX? What would happen for a create/audit/query? What will LSMS systems do if an audit is sent for new NPA prior to PDP? Are there LSMS that will not be able to handle audits on new NPA-NXX right at the start of PDP? (continued)		

| NANC 193 (con't) | Continued | | | How long does it take for NPAC/SOA/LSMS to split an NPA-NXX? What is the NPAC behavior for recovery spanning time before & after PDP? If NPAC splits starting at midnight and SOA sends new NPA-NXX for an NPA-NXX not in split what would happen? After reviewing the above questions. It was determined that the NPAC should act as if the split had not occurred during split processing prior to permissive dialing. A matrix of answers received above has been created. It was discussed that this requirement would have to be implemented by SOA, LSMS, and NPAC vendors. This requirement would shorten the window when errors could occur for the change of an NPA. It was requested that we review and document on behavior in the following situations: When the NPAC receives a request sent before the splits after the split start, how should it respond? Also when an SOA or LSMS receives a request sent before the split after the split start, how should it respond? IIS flows for error scenarios will be created. If an active is received by the NPAC SMS before PDP it will be rejected. If the old SP is received after the end of PDP it will be treated as the old NPA-NXX if that NPA-NXX is still a valid portable NPA-NXX in the NPAC SMS otherwise it will be rejected. Download requests after the start of PDP for information occurring before PDP should reflect the new NPA-NXX for subscription versions involved in a Port. The matrix was finalized on the 5/22 T&O call. |

NANC 198	Bell Atlantic 2/23/98 & Sprint 8/10/98	Unique Cancellation Notifications		FRS/IIS			
		It has been requested that the NPAC generate a unique cancellation notification in the case of a subscription version being cancelled. Currently the NPAC sends the same informational notification to designate a cancel status, regardless of the circumstances leading to the cancellation. There is no way to differentiate between a cancellation that requires subsequent action (i.e. NEWP did not send a corresponding subscription) and a cancellation requiring no further action (i.e. self-initiated Cancel). The result is, all cancel notifications must be reviewed to determine if any action is required. 8/10/98 -- Sprint has requested that the NPAC set the cause code to indicate that the NPAC automatically cancelled this SV because the New SP didn't send up a matching CREATE (within the 18 hour window).			The existing requirement should be enhanced to include the status change cause code when setting to cancel for this reason (new text in *larger print italics*). R5-23.4 New Service Provider Fails to Authorize Transfer of Service NPAC SMS shall set the Subscription Version status to cancel *and the status change cause code to a value that equates to "NPAC SMS Automatic Cancellation Missing New SP Create"* when the Final Concurrence Window tunable parameter expires and a new Service Provider has not sent authorization for the transfer of service. Sep LNPAWG (Seattle), the group agrees that this change order should state that the cause code should be sent for this situation. All SPs will discuss internally if they want a specific cause code (listed above) for this case, or if one of the existing cause codes (as listed in the SV data model), "1 - NPAC SMS Automatic Cancellation" is sufficient.		

(continued)

NANC 198 (con't)	Continued				Oct LNPAWG (Kansas City), the group has decided to accept the change order, and would like the new functionality in *larger print italics* that is listed in the proposed new text for R5-23.4 (the existing cause code was NOT deemed sufficient). This has been moved into the "Accepted" category, awaiting prioritization.		
NANC 204	NANC T&O 3/2/1998	<ins>Inter Service Provider Communication Process</ins> Subscriber Name, Address, City, State, Zip have been requested as information to be exchanged between old and new SP's when creating a pending port. This information originates from the new service provider only. This data would not remain in the NPAC SMS after the port has been activated or cancelled. Data would be needed in the T1 and T2 notifications. The object creation notification (initial creation notification) will also need the information added. Other notifications need to be analyzed. It is believed at this time that the address information definition in the NANC IIS for the NPAC SMS customer contact data is sufficient for wireless use. The current definition is as follows: Name – 40 char Address Line 1 – 40 char Address Line 2 – 40 char City – 20 char State – 2 char Zip – 9 digits Country – 20 char Province – 2 char	Low		This change order is considered to be a Phase 2 business requirement. It was suggested that a front-end solution be considered where new FOC/LSR type information is sent in messages prior to the create process. The group is investigating other options. A question was raised as to whether social security number and tax ids were also needed in this information. See wireless change order detail file. This has been moved into the "Accepted" category, awaiting prioritization.		

NANC 219	AT&T 6/5/1998	NPAC Monitoring of SOA/LSMS Associations		FRS/IIS	Sep LNPAWG (Seattle), discussed various options for working the problem of dropped associations (i.e., causes partial failures for the new SP trying to activate).		
		It has been requested that NPAC Monitoring of SOA and LSMS associations be put into the NPAC SMS at the application (CMIP) layer. The approach suggested by the requestor would be to alarm whenever aborts are received or sent by the NPAC. When these alarms occur then have the NPAC Personnel contact the affected Service Provider to work to insure the association is brought back up.					
					Options include,		
					1.) sending a notification to all SPs that "an SP is currently not associated", then another notifications once it is back up, "all SPs associated".		
					2.) stopping an activation request, because an association is down.		
					3.) sending a notification to the New SP when an activate is received, that an association is down, "do you still want to activate?".		
					NEXT STEP: all SPs should consider issues and potential options for activates during a missing association that will cause a partial failure.		
					Oct LNPAWG (Kansas City), the conversation migrated away from the three options discussed in Seattle, and back to the NPAC proactively monitoring the association. This would require the NPAC to provide an attendant notification that a Service Provider is down, then notifying them of their missing association.		

| NANC 219 (con't) | Continued | | | | So, anytime the NPAC receives an abort from a Service Provider, an NPAC alarm should be triggered, and an M&P should kick in where NPAC personnel notify the downed SP.

This has been moved into the "Accepted" category, awaiting prioritization. |

| NANC 227 | MCI 8/7/98 | 10-digit TN Filters (previously know as "Ability to Modify/Delete of Partial Failure SV")
OLD TEXT: The NPAC SMS currently rejects a request to "modify active" or "delete" an SV that has a partial failure status. Nothing can be done to the SV until the discrepant LSMS(s) come back on line, and either recover the broadcast, or accept a re-send from the NPAC.

OLD TEXT: A business scenario arose whereby a partial failure was affecting a customer's main number, and the New SP couldn't do anything to the SV until the partial failure was resolved.

NEW TEXT: The NPAC should provide a mechanism that allows 10-digit filters, in order to clean up partial failure SVs that need to be subsequently modified or deleted, by the New SP. | | IIS/FRS | Discussed during 8/12/98 face-to-face T&O meeting (Detroit).

OLD TEXT: It was determined that the business scenario was primarily human error, and the NPAC should NOT be modified to allow a partial failure to go to active, but still have out-of-sync LSMS(s).

OLD TEXT: A workaround (available with 1.3 [with the exception of PTO]) would be to temporarily set up a filter for the discrepant LSMS(s), do a re-send which would clear up the failed-SP-List and set the SV to active, then remove the filter.

OLD TEXT: NEXT STEP: all SPs and vendors should evaluate if this is an acceptable solution.

OLD TEXT: Sep LNPAWG (Seattle), this potential M&P work-around has been forwarded to NPAC Operations (Jan Trout-Avery) for further analysis, and will be discussed at the x-regional in New Orleans.

OLD TEXT: This change order will be left open pending the discussion in New Orleans. | | |

NANC 227 (con't)	Continued				Oct LNPAWG (Kansas City), after discussions in New Orleans at the x-reg meeting, it was requested by Service Providers that Lockheed use the M&P for "partial failures where the customer is out of service" only.
					Jan will be doing an M&P on this, and will accumulate data on the frequency of this situation. Everyone should be aware that the risk for the M&P is that any other SVs that are coming down in the NPA-NXX will NOT be sent to the LSMS. From an NPAC functional perspective, a potential problem is the complexity of having to keep "versions" of versions, when you have an activate that fails, then allow a modify on top of this.
					Jim Rooks provided info on this, to state that he is uncomfortable with the modify of a partial failure. We further discussed the potential of a 10-digit filter that would override the existing 6-digit filter. This should be the same change order, but will replace the title from modify partial failure to 10-digit filter.
					Nov LNPAWG (Dallas), re-capped discussion from KC. Desire of this functionality is to have NPAC Personnel perform this activity (of putting up 10-digit filters), and NOT allow SPs to send this over the interface.
					This has been moved into the "Accepted" category, awaiting prioritization. The group will flush out the details once this gets placed into a specific release.

| NANC 230 | Sprint 8/12/98 | Allow a Donor SOA to Create a Port-to-Original on an intra-service provider port

The current NPAC SMS functionality does not allow a Donor SOA to create a PTO SV with LNPType = LISP.

The business scenario is that a customer is "home'd" to switch A, then moves down the street and is "home'd" to switch B (still in same rate center, so was LISP-ed to switch B), then moves back up the street (and needs to be re "home'd" to switch A, but is still a working number).
In this scenario, the SP should send an LISP PTO create and activate. | | IIS/FRS | August T&O (Detroit). This change order was opened to replace its "sister" change order, NANC 223.

NEXT STEP: all SPs and vendors should evaluate if this is an acceptable solution, or if there are any operational issues with sending an LISP PTO.

Sep LNPAWG (Seattle), All SPs are O.K. with this change order.

Jim Rooks will look at this, since there may be an NPAC issue. In some current processing the NPAC needs the LNP type and if it is not available, the NPAC looks at the SPID values, and if they are the same, then the NPAC assumes it is LISP. Jim's point is that there may be an interface change. He will report at the next meeting.

Oct LNPAWG (Kansas City), Jim reported that this will NOT require an interface change. It does, however, require a change to the NPAC processing rules. Some of the changes for Pooling help to minimize changes to the NPAC.

This should be moved into the "Accepted" category, awaiting prioritization | | |

| NANC 232 | MetroNet 8/14/98 | Web Site for first port notifications
Currently all SOAs and LSMSs receive "first port" notifications. A request has been submitted to provide this information on the NPAC Web Site.

Sep LNPAWG (Seattle). This change order was introduced by MetroNet as a means for LTI users to obtain "first port" notifications.

The current process does NOT send this information to the LTI user (unlike SPs that have a CMIP-based SOA), but requires the LTI user to "query" the NPAC for notifications contained in the NPAC notification log (for that specific SP). Currently, this log contains the most recent 25 notifications for that SP. The user may also generate an NPAC report of all notifications for that SP.

The desire is to have these "first port" notifications on the web, similar to the NPA-NXX openings that are on the web today. | | | Sep LNPAWG (Seattle). This change order was discussed by those in attendance. It was agreed that this change order was acceptable, and should be moved to the "Future Release CLOSED" List, and await prioritization from the group.

NOTE: This change order is similar to the existing requirements, R3-10 and R3-11 (Web bulletin board updates of NPA-NXXs and LRNs). | | |

| NANC 235 | ESI 9/3/98 | Modification of NANC 204 for GDMO Change
A new ASN.1 structure was added which affects the GDMO attribute definition for the nameAndAddress structure.

This should replace the use of the existing AddressInformation which contained additional information that is not being used on the subscription version attribute.

GDMO Change (ASN.1 used to be AddressInformation):

-- ??.0 LNP Subscription Version Subscriber name and address

subscriptionNameAndAddress ATTRIBUTE
  WITH ATTRIBUTE SYNTAX LNP-
ASN1.NameAndAddressInformation;
  MATCHES FOR EQUALITY;
  BEHAVIOUR subscriptionNameAndAddressBehavior;
  REGISTERED AS {LNP-OIDS.lnp-attribute ??};

subscriptionNameAndAddressBehavior BEHAVIOUR
  DEFINED AS !
    This attribute is used to specify the subscriber name
    and Address information for inter-service provider
    communication.
!;

ASN.1 Addition:

NameAndAddressInformation ::= SEQUENCE {
  name GraphicString40,
  line1 GraphicString40,
  line2 GraphicString40,
  city GraphicString20,
  state GraphicString(SIZE(2)),
  zip GraphicString(SIZE(9)),
  province GraphicString(SIZE(2)) OPTIONAL,
  country GraphicString20
} | | | Oct LNPAWG (Kansas City), this has been moved into the "Accepted" category, awaiting prioritization.

It must be grouped with NANC 204. | | |

| NANC 240 | LNPA WG 10/15/98 | No cancellation of SVs based on expiration of T2 timer
During the discussion of NANC 198, it was mentioned that Service Providers end up doing more work if the NPAC cancels an SV, at the expiration of the T2 timer, when a New SP does NOT send up a matching Create message.

Therefore, this change order has been opened to explore the possibility of changing the NPAC to cancel the SV, "*at some later date*", than the expiration of T2, which is what the current functionality requires (R5-23.4 New Service Provider Fails to Authorize Transfer of Service). | | | Jim will look into NPAC functionality to determine if there are any issues.

Service Providers should evaluate internal issues with the LSR/FOC process, as well as operational impacts that may occur if this change order is implemented. Specifically, the New SP should evaluate if they could use the T1 expiration timer notification, as a mechanism to take an action, and send up the matching Create message to the NPAC.

MCI has requested that the following be considered for the processing steps:

When the T2 timer expires before a new SP Create message is received by NPAC, the NPAC shall:

1. send notification to both old SP and new SP that T2 timer has expired, and

2. start the T3 timer (tunable).

Upon receipt of the new SP create before expiration of the T3 timer, the NPAC shall stop the T3 timer.

(continued) | | |

NANC 240 (con't)	Continued				Upon expiration of the T3 timer before new SP create message is received by NPAC, the NPAC shall: 1. cancel the pending SV, and 2. send notification to both old SP and new SP that pending SV is canceled due to missing new SP create. Nov LNPAWG (Dallas), spirited discussion by the group. One thing to keep in mind that if we determine we do NOT want the NPAC to auto cancel at the expiration of T2 (and want some later date), then we need to separate this from the T2 timer. Need to add the option that we may need to incorporate this auto cancel into some type of housekeeping, and not have it scheduled like today's T1 and T2 timers. Move to accepted, even though the words are still very uncertain, we haven't decided on the actual solution, and we need to perform further analysis. The T3 option proposed by MCI is just one of several potential options that need to be hashed out when this change order gets prioritized to a specific release.		
NANC 246	National Number Pooling Sub-Committee 11/19/98	**NPA-NXX Filters for Bulk Data Download files of SVs** When the NPAC generates Bulk Data Download (BDD) files of SV data, NPA-NXX filters for a Service Provider are NOT incorporated in the BDD file generation process. It has been requested that the NPAC be changed to incorporate the filters when generating the SV BDD files.		FRS	Dec LNPAWG (Atlanta), accepted as is. However, low priority.		

| NANC 249 | Sprint 12/9/98 | Modification of Dates for a Disconnect Pending SV

The NPAC should be changed to allow a Service Provider to modify the CDD (Customer Disconnect Date) and ERD (Effective Release Date) for an SV that has a status of "disconnect pending". | | FRS/IIS/GD MO/ASN.1 | The current Service Provider would send a subscriptionVersionModify using an M-ACTION.

subscriptionCustomerDisconnectDate and subscriptionEffectiveReleaseDate would need to be added as modifiable attributes.

A new IIS flow needs to be developed (Subscription Version Modify Disconnect Pending Version Using M-ACTION by a Service Provider SOA).

If the newly modified ERD is the current date or a previous date, the NPAC will follow the "immediate disconnect" flow (6.5.4.1). Otherwise, it's BAU for the future dated ERD (6.5.4.2).

R5-25 needs to be changed to allow for a modification of an SV with a status of disconnect pending.

R5-36 and R5-38.1 needs the CDD and ERD attributes added to the list.

R5-41 and RR5-41.x need to perform exception processing (i.e., NOT send to LSMSs at this time) of modifications where the new ERD is a future date.

(Continued) | | |
| NANC 249 (con't) | Continued | | | | New requirements:
1. NPAC SMS shall reject a modification request of an SV with a status of disconnect pending, where the CDD value is zero.

Jan LNPAWG (Atlanta), group O.K. with this change order. Move to accepted list. | | |

NANC 252	MetroNet 12/23/98	Improved Notification Process for LTI Users			It is proposed that regularly scheduled polling of notifications by the NPAC SMS, for all SPIDs, whether required or not, be abandoned. In place of this it is proposed that LTI users be able to query the notification data in the NPAC SMS directly, on demand.		
		The current notification process for LTI users in the NPAC SMS has three significant shortcomings, two of which preclude the LTI's usefulness in a Service Provider's environment. These are as follows:					
		1. the same notification may be returned over several pollings, and there is no easy way of recognizing notifications that have already been read;			The new functionality would provide LTI users with a query screen. This screen would allow users to query for notifications addressed to their SPID. Time range and number of records tunables would be required to manage the volume of data returned, as well as the impact on NPAC SMS resources. The screen would contain an active button, labeled "more", if one or more unread notifications remained beyond the limits set by the tunables.		
		2. there is an arbitrary and rather low limit (currently 100) to the number of notifications that the NPAC SMS provides to the LTI server during a polling interval, and any additional notifications during the interval are lost;					
		3. polling by the NPAC SMS is carried out on a scheduled rather than a demand basis, and is done whether it is required or not.			Once the results of the query had been presented to the user, the user would have the ability to mark the notifications as "read". Conversely, the user would have the ability to leave the notifications as "unread", and this would be the default state.		
		The first two shortcomings undermine the viability of the LTI as a production environment tool. The third shortcoming wastes NPAC SMS resources.					
					In responding to a query, notifications marked "read" would not be returned by the NPAC SMS. This would eliminate the need to generate and send useless data, as is currently the case.		
					(continued)		
NANC 252 (con't)	Continued				**Jan LNPAWG (Atlanta), group O.K. with this change order. Move to accepted list. Will flush out specific requirements when this change order gets placed into a specific NPAC release.**		

Chg Order #	Orig. / Date	Description	Priority	Category	Proposed Resolution	Level of Effort	
						NPAC	LSMS SOA

Pending - Delete Change Orders

| NANC 245 | AT&T 11/12/98 | Subsequent Ports of Active SV with a Failed SP List
While performing 1.4 testing, AT&T ran into a situation of a subsequent port (from a currently active Subscription Version with LNP Type of POOL), with a Failed SP List. The Illinois Pooling (NPAC 1.4) and existing NPAC functionality (FRS 1.10) allow this subsequent port to occur.

Should this be allowed under all conditions?

Arguments **for** allowing the subsequent port:

?21 The NPAC should NOT restrict a customer's ability to port their number to another provider, just because an SP didn't successfully process the modify active request.

?22 Even if this data was re-sent or re-synced at a later time after the subsequent port, the previous SV would have migrated to "Old", and the new/current SV would not be affected.

(continued) | | FRS | Nov LNPAWG (Dallas), John will provide a separate write-up for Service Providers to take back internally and discuss.

Dec LNPAWG (Atlanta), discussed separate write-up.

This also applies for Old with a Failed SP List, so it really is just for Failed SP List, and not tied to any specific status. We should NOT allow any subsequent activity (other than resend or resync) as long as Failed SP List. Also, no network data mods of NPA-NXX or LRN data for this one.

MCI, still leave on open list. Discuss next time.

Jan LNPAWG (Atlanta), still want to allow the subsequent port (even if have Failed List). Want to keep the two bullet points of NPAC consideration, but put into new change order.

So, this change order is closed out. Refer to "sister" change order, NANC 254 for new NPAC requirements on Failed SP List of subsequent ports. | | |

NANC 245 (con't)	Continued	Arguments **against** allowing the subsequent port:	
		?23 One or more SP's networks are out of sync, and the NPAC should clean up the failed SP List before allowing more activity on the TN(s).	
		?24 The NPAC will need to add additional functionality to clean up the Failed SP List for the currently active SV, when a subsequent Activate is sent by the New SP. This is needed to prevent the re-send or re-sync from being sent to the discrepant SP.	
		?25 If the Failed SP List is not cleaned up, then a re-send or re-sync creates meaningless traffic over the NPAC SMS to Local SMS Interface, for the modify active request (since this SV has migrated to "Old").	
		NPAC SMS considerations:	
		?26 If the subsequent port is allowed, the Failed SP List should be zeroed out (on the old SV), once the new SV gets activated.	
		?27 A Service Provider should only be allowed on the Failed SP List for 1 (one) SV for any given TN.	

Current Release Change Orders

Current Release Change Orders							
Chg Order #	Orig. / Date	Description	Priority	Category	Proposed Resolution	Level of Effort	
						NPAC	LSMS SOA
		See Implemented List for details					

Next Documentation Release Change Orders

Next Documentation Release Change Orders

Chg Order #	Orig. / Date	Description	Priority	Category	Proposed Resolution	Level of Effort	
						NPAC	LSMS SOA

| NANC 228 | AT&T 8/10/98 | Maximum ID Value
With the increase in porting activity, AT&T feels that we need to start addressing the NPAC's maximum ID value for SVs, LRNs, NPA-NXXs, etc. | | FRS | Discussed during 8/12/98 face-to-face T&O meeting (Detroit).

Jim stated that the NPAC allows a value up to $2^{(32)}$, which equates to 2.14B (signed 32-bit integer).

Sep LNPAWG (Seattle), the issue is that the NPAC (2.14B, signed 32-bit integer) and SPs (16M, un-signed 32-bit integer) that use version 1 of the DSET Toolkit have a different maximum value. At some point in time, this will become an issue, since the NPAC and the SP could be out of sync on the max value (so NPAC could send an ID that is greater than what a local SP can support).

This change order will update the IIS to state the current limitations, so that SP technical staff will be aware of this situation, and be able to plan accordingly.

Oct LNPAWG (Kansas City), it was requested that Jim and John get together to provide words for this. The proposed text is shown below.

(continued) | | |

| NANC 228 (con't) | Continued | | | | In the IIS, section 2.3 and 2.4, the following text should be added as a new paragraph at the end of the section, prior to sub-sections 2.3.1 and 2.4.1.

"The NPAC SMS currently uses a 32-bit signed integer for the Naming ID Value. The maximum value is ([2**32] – 1) or 2.14B. It is anticipated that all Service Providers will be able to successfully handle Naming ID Values up to this maximum".

In the GDMO/ASN.1, it has been requested that the behavior state that the NPAC is using a 32-bit signed integer.

This will undergo approval during the Nov LNPAWG meeting.

Nov LNPAWG (Dallas), this has been approved by the group. This change order now moves to future release, and will be included in the next release of the documentation. |

| NANC 231 | BellSouth 8/12/98 | Request for "Assurance of the Sequence of Transaction Processing", documentation update
The CMA will investigate the documentation updates to state that the NPAC is operating in Confirmed Mode over the stack, and that an SP should not send more than one message for a single object at a time (i.e., wait for a response on the first message, before sending the second message for the same object). | | IIS | August T&O (Detroit). This change order was opened to replace its "sister" change order, NANC 229.

Sep LNPAWG (Seattle), CMA is working with Lockheed to determine best place to insert new text regarding "confirmed mode and transaction processing".

Oct LNPAWG (Kansas City), Kayla has had discussion with Mark Foster on this issue.

The proposed changes are to section 2.1, first paragraph, after the sentence "...*fully supported in a confirmed mode.*"

The additional text is, "*Thus, the sequencing of operations is implied by the receipt of the confirmation or operation response, and NOT by the sequence that the operation request is received.*"

Nov LNPAWG (Dallas), this has been approved by the group. This change order now moves to future release, and will be included in the next release of the documentation. | | |

NANC 241	LNPA WG 10/15/98	Documentation change for NANC 108 IIS Discrepancy with R5-26 The IIS needs to be updated to specify when the status is required and when optional.		IIS	This will be put into the queue of CMA updates to the IIS. No date has been scheduled.		
NANC 242	TSE 10/20/98	Documentation Change to FRS for R7-96 The FRS incorrectly lists the elements of the digital signature. It states: unique id of sender, generalized time of msg issuance, sequence number, key id, key list. The list should be as stated in the IIS: system ID, system type, user ID, departure time, sequence number.		FRS	The documentation should be updated in the next version of the FRS.		
NANC 248	AT&T 12/4/98	GDMO Behavior and IIS Updates There are four proposed updates to the GDMO. 1) Need to define the usage of the lnpDownload reply errors. The following needs to be added to the GDMO behavior. "The following errors can be returned in the InpDownloadReply: criteria-too-large - Too many records are being returned. This is determined by the MAXIMUM NUMBER DOWNLOAD RECORDS tunable on the NPAC SMS. time-range-invalid - The time range given exceeeds the MAXIMUM DOWNLOAD DURATION tunable on the NPAC SMS. no-data-selected - No criteria selected in request. failed - Failed for other reasons. " 2) Reference Requirement 4 of NANC 79 in the GMDO for Release 2 under InpNotificationRecovery action: "The recovery of the SOA and LSMS notifications are independent requests". 3) Need to update and document the following item in the IIS/GDMO: "Notifications can be recovered until they are purged from the database. The tunable used to determine when to purge notifications is 'Notify Log Retention Period' which defaults to 90 days. " (continued)			**Jan LNPAWG (Atlanta), group O.K. with this change order. Move to next doc category.**		

NANC 248 (con't)	Continued	4) Need to update and document the following item in the IIS/GDMO: "The purge of audits are based on the tunable 'Audit Log Retention Period' which defaults to 90 days." Also specify in the audit flows, the M-DELETE does not occur until 90 days after the audit.				
NANC 250	National Number Pooling Sub-Committee 12/17/98	Documentation Change to the FRS During the National Number Pooling requirements review, the following documented areas were addressed: 1. SV data model. The three "… Broadcast Complete Timestamp" attributes need to have the "or retries are exhausted" text removed, in order to align with current NPAC SMS behavior. 2. SV data model. The status change cause code text needs to have #55 removed, in order to align with current NPAC SMS behavior.		FRS	This will be put into the queue of CMA updates to the FRS. No date has been scheduled. **Jan LNPAWG (Atlanta), group O.K. with this change order. Move to next doc category.**	
NANC 253	ESI 12/23/98	Documentation Change to the FRS During the review of the 2.0 FRS, several issues were raised with the current documentation: 1. RR5-38.4 should have the modify active portion removed from the requirement. 2. A new requirement should be added to reflect the modify active portion of RR5-38.4. 3. A new requirement should be added (like RR5-38.8) to reflect the resend of the modification request.		FRS	This will be put into the queue of CMA updates to the FRS. No date has been scheduled. **Jan LNPAWG (Atlanta), group O.K. with this change order. Move to next doc category.**	

| NANC 255 | ESI 1/7/99 | **GDMO Documentation Changes**
  The following changes were discovered during the R2 review.

1. **In all the behavior for DPC attributes:**
    The data is stored in BCD (e.g., a value of FFF would be displayed as 255.255.255).

    Change FFF to FFFFFF

2. **Under the lnpDownload Action definition, it should state (new words in *larger print italics*):**
    The lnpDownload action is the action that is used by the Local SMS *and SOA* to specify the objects to be downloaded from the NPAC SMS. | | GDMO, IIS | Jan LNPAWG (Atlanta), John will write up description.

Group O.K. with this change order. Move to next documentation list. | | |

Release 3.0 Change Orders

Release 3.0 Change Orders							
Chg Order #	**Orig. / Date**	**Description**	**Priority**	**Category**	**Proposed Resolution**	**Level of Effort**	
						NPAC	**LSMS SOA**

| NANC 109 | NANC 6/9/97 | Number Pooling

Number Pooling has been requested for a future NPAC release. E-mail has been sent to the group to begin initial discussion. | High | FRS | This change has been requested for a future release. Pending INC decision.

A separate sub-committee has been formed to address National Number Pooling.

During August T&O (Detroit), it was requested that this change order be included when the Mass Update by LNP Type change order (NANC 216) is submitted to the LLCs.

Dec Natl N Pool (Las Vegas), the documentation suite (FRS, IIS, GDMO, ASN.1) was finalized. Submission by the LLCs to Lockheed is expected on 12/28/98. Move to Release 3.0 list. | | |

| NANC 216 | AT&T 5/15/1998 | Mass Update by LNP Type

It has been requested that LNP Type be added as a selection criteria for subscription versions to the mass update functionality. | | FRS | Discussed on 7/8/98 telecon. This would be a complement to either Number Pooling or NANC 68 (whichever is implemented first). The SPs would like this implemented as soon as possible.

During 7/15/98 face-to-face T&O meeting, Lockheed reported that too far along in the process of the "new" 2.0 release, to include this change order. Possibly include with the National N Pool release.

During August T&O (Detroit), it was requested that this change order be included when the National Number Pooling change order (NANC 109) is submitted to the LLCs.

Dec Natl N Pool (Las Vegas), The functionality requested in this change order has been rolled into National Pooling. Refer to the Pooling FRS requirements, B-760 and B-761. Move to Release 3.0 list. | Y | N/A |

| NANC 243 | National Number Pooling Sub-Committee 10/29/98 | Removal of NPA-NXX or LRN from NPAC
The NPAC SMS and the FRS need to be updated to further define the condition where NPA-NXXs or LRNs can be deleted from the NPAC SMS.

The current NPAC SMS functionality and the FRS states, "*shall allow the removal…only if no Subscription Versions, except for Old or Cancelled Subscription Versions exist…*".

The correct behavior should be "*…except for Old with NO Failed SP List or Cancelled…*". | | FRS | Nov LNPAWG (Dallas), yes this is a problem that needs to be fixed. This has been moved to the "Accepted" category, awaiting prioritization.

Dec LNPAWG (Atlanta), this has been grouped with National Number Pooling (need consistent behavior for SVs that are defined for Blocks). Detailed requirements will be written up and distributed by the CMA. Move to Release 3.0 list. | | |

| NANC 244 | National Number Pooling Sub-Committee 11/4/98 | <u>Removal of an Old NPA-NXX involved in an NPA Split at the end of PDP</u>
The NPAC SMS does NOT automatically remove an Old NPA-NXX involved in an NPA Split after the end of the permissive dialing period has been reached. Currently, this is handled via M&P, where the Code Holder either calls the NPAC to have this data deleted, or sends up an NPA-NXX delete request for the Old NPA-NXX.

Jan LNPAWG (Atlanta), John agreed to e-mail the specific requirement to the group, for the desired behavior, (Removal of an Old NPA-NXX involved in an NPA Split at the end of PDP).

The proposed new requirement is shown below (taken from very similar words for Number Pooling NPA-NXX-X "auto deletion" of an Old NPA-NXX at the end of PDP). With the proposed change below, the NPA-NXX will have identical behavior to the Number Pooling NPA-NXX-X (i.e., auto delete of the Old at the end of PDP).

Req-1   NPA Splits - Deletion of Old NPA-NXX at the end of permissive dialing

NPAC SMS shall automatically delete the old NPA-NXX from the Portable NPA-NXX Information in the NPAC, upon reaching the end of the permissive dialing period for the old NPA-NXX involved in an NPA Split. | | FRS | The NPAC shall delete the Old NPA-NXX, and broadcast a delete request to the Service Providers, upon reaching the end of PDP.

Nov LNPAWG (Dallas), spirited discussion by the group (got into potential problems with municipal splits like Minny/St.Paul).

Move to accepted, even though we haven't decided on the actual solution, and we need to perform further analysis. We may possibly have a flag per NXX, so when setting up a split, the NPAC Personnel can flag or not flag each NXX for deletion at the end of PDP. Also, the NPAC will broadcast the deletes.

Dec Natl N Pool (Las Vegas), attempted to reach resolution on implementation in order to include with NANC 109. However, actual solution still needs discussion, so it will be discussed at Jan LNPAWG meeting.

Jan LNPAWG (Atlanta), group decided that auto delete was preferred method. Not sure of the need for the flag, so it was dismissed.
John will send out new words.
Marilyn will submit request to LLCs from WG. Move to R3 list. | | |

MR Change Orders

MR Change Orders						
Chg Order #	**Orig. / Date**	**Description**	**Priority**	**Category**	**Proposed Resolution**	**Level of Effort**

						NPAC	LSMS SOA

Release # / Target Date	Change Orders	Backwards Compatible
Open	ILL 5 – Round Robin LSMS ILL 8 – Establish Portability Areas ILL 9 – Portability Area Specific Tunables ILL 10 – Portability Area Billing Enhancements ILL 17 – Report Size Warning ILL 23 – Detailed Integrity Sampling Report ILL 58 – Owning SP for TN in Audit Report ILL 130 – Application Level Errors (ASN.1 impact) ILL 183 – Download of Service Provider Data (ASN.1 impact) ILL 187 – NXX Split Handling for 6 digits NANC 34 – AuditServiceProvIdRange (ASN.1 impact) NANC 44 – Effective Release Date Validation NANC 46 – NPAC to NPAC NANC 87 – RR5-39 Requirement Modification NANC 98 – TSAP data requirement in FRS NANC 103 – Increase in OSI Selector Size NANC 119 – Additional Requirements to View State Portability Area NANC 122 – Enhanced Key Expiration Strategy NANC 129 – End User Location Type and Value Definition NANC 147 – Version ID rollover strategy NANC 153 – Download file creation by SP for application of Filters NANC 168 – SOA Bulk Download Files NANC 169 – Delta Download File Creation by Time Range for SVs NANC 174 – Removal of SOA and LSMS combined association NANC 175 – Time Stamp default when not set NANC 179 – TN Range Notifications NANC 180 – Key Exchange Security Strengthening NANC 186 – Linked Notification Recovery Reply NANC 187 – Linked Action Replies NANC 189 – Service Provider Allowable Functions Modification	

	NANC 191 – DPC/SSN Value Edits NANC 192 – NPA Split NPAC SMS Load File NANC 195 – Class Filter Support NANC 199 – Attribute Value Change Notification for Mass Update NANC 200 – Notification of NPA Split NANC 217 – Mass Update of SPID NANC 218 – Conflict Timestamp Broadcast to SOA NANC 237 – Duplicate PSAP and Key List for different NSAP NANC 239 – Document the current process for Resynchronization NANC 247 – Document the functionality for audit processing of "in-progress" SVs NANC 251 – Documentation Change to the GDMO Behavior NANC 254 – NPAC Requirements – Subsequent Ports of Active SV with a Failed SP List NANC 256 – First Port Notifier for New NPA-NXX in an NPA Split NANC 257 – GDMO Documentation Change	
Accepted	NANC 35 – ContactPagerPin (ASN.1 impact) NANC 138 – Definition of Cause Code Values-REVISITED NANC 146 – SP Contact Data Handling NANC 148 – LNP Type in SV Object Creation Notification NANC 151 – TN addition to attribute value change notification NANC 177 – Clarification to ILL 3 NANC 181 – Tag Value Addition to the ASN.1 for NANC 146 NANC 193 – TN Processing during NPAC SMS NPA Split Processing NANC 198 – Unique Cancellation Notifications NANC 204 – Inter Service Provider Communication Process NANC 219 – NPAC Monitoring of SOA/LSMS Associations NANC 227 – 10-digit TN Filters (previously know as: "Ability to Modify/Delete of Partial Failure SV") NANC 230 – Allow a Donor SOA to Create a Port-to-Original on an intra-service provider port NANC 232 – Web Site for first port notifications NANC 235 – Modification of NANC 204 for GDMO Change NANC 240 – No cancellation of SVs based on expiration of T2 timer NANC 246 – NPA-NXX Filters for Bulk Data Download Files of SVs NANC 249 – Modification of Dates for Disconnect Pending SV NANC 252 – Improved Notification Process for LTI Users	

Pending Delete	NANC 245 – Subsequent Ports of Active SVs with a Failed SP List	
Current Release	See Implemented List for details	
Next Documentation Release	ILL 75 Rev 2 – Validate Due Date is > than, or equal to, the NPA-NXX effective date upon SV Creation NANC 228 – Maximum Subscription Version Value, and Rollover Processing NANC 231 – Request for "Assurance of the Sequence of Transaction Processing", documentation update NANC 241 – Documentation Change for NANC 108 IIS Discrepancy with R5-26 NANC 242 – Documentation Change to FRS for R7-96 NANC 248 – GDMO Behavior and IIS Updates NANC 250 – Documentation Change to the FRS NANC 253 – Documentation Change to the FRS NANC 255 – GDMO Documentation Changes	
Release 3.0	NANC 109 – Number Pooling NANC 216 – Mass Update by LNP Type NANC 243 – Removal of NPA-NXX or LRN from NPAC NANC 244 – Removal of an Old NPA-NXX involved in an NPA Split at the end of PDP	
MR		