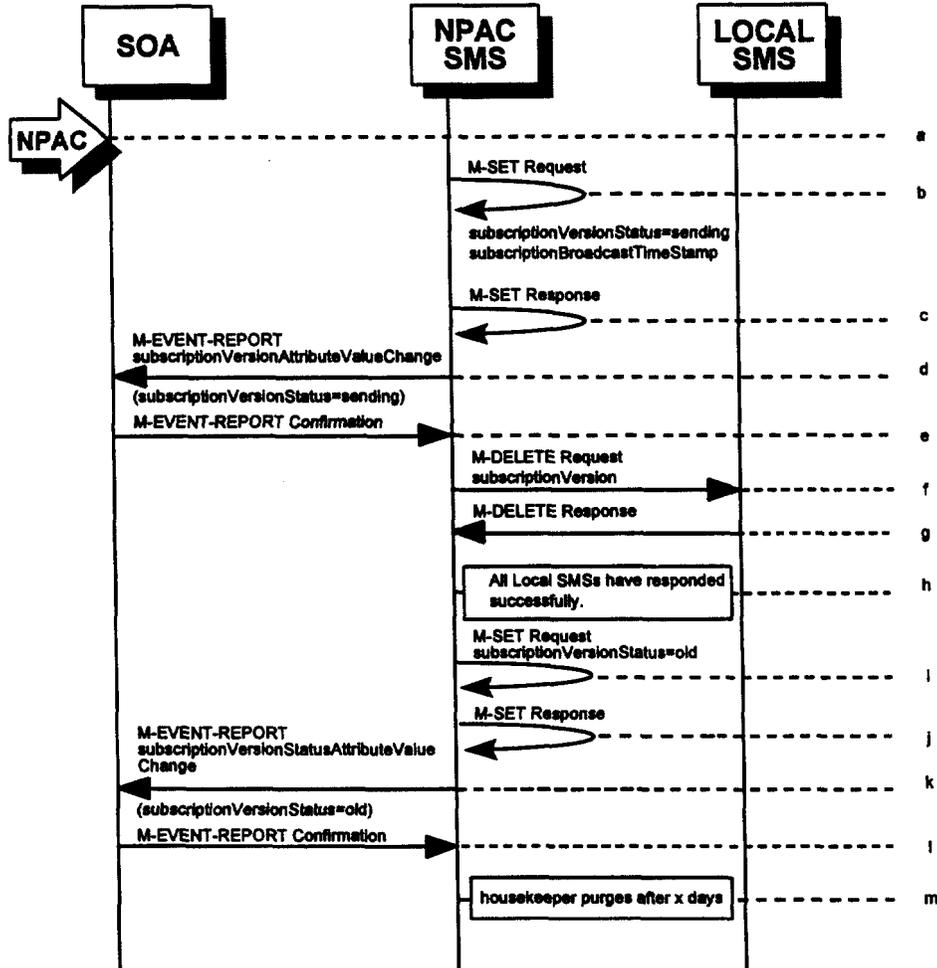


- f. No response or an error is received from at least one Local SMS.
- g. NPAC SMS issues the M-SET to update the current subscriptionVersionNPAC object's subscriptionVersionStatus to "old" from "sending". It will also update the subscriptionFailed-SP-List with the service provider ID and name of the Local SMSs that failed to successfully receive the broadcast.
- h. NPAC SMS responds to the M-SET.
- i. NPAC SMS sends the subscriptionVersionStatusAttributeValueChange M-EVENT-REPORT to the current service provider SOA with the current status and failedSP-List.
- j. Current service provider SOA issues the M-EVENT-REPORT confirmation.

6.5.4.5. Subscription Version Disconnect: Resend Successful to Local SMS

This scenario shows a successful resend of a disconnect for a subscription that fails to one or more of the Local SMSs. The resend of a failed disconnect can only be performed by authorized NPAC personnel.

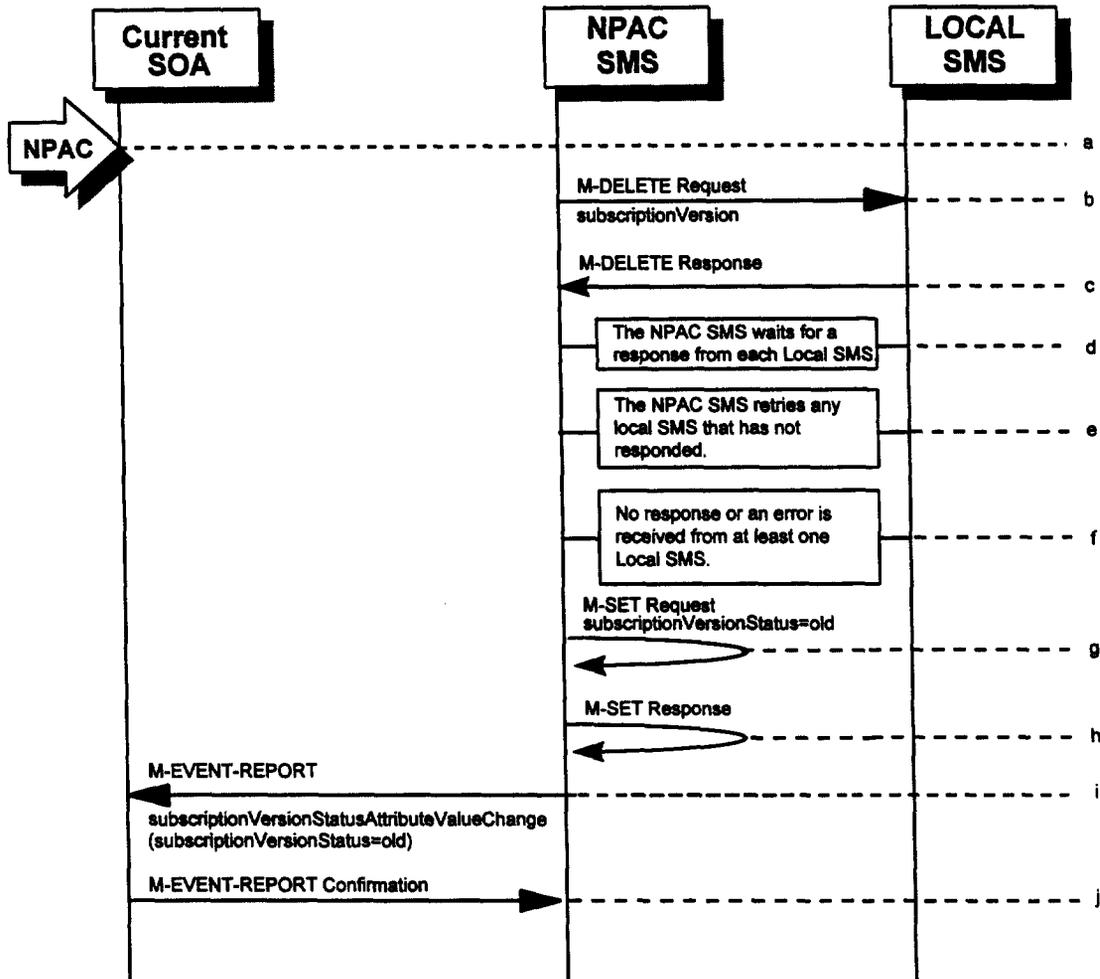


- a. NPAC personnel take action to resend a failed disconnect for a subscription version.
- b. NPAC SMS issues an M-SET to the existing subscriptionVersionNPAC object to set the status to "sending".
- c. NPAC SMS responds to whether M-SET was successful.
- d. NPAC SMS notifies service provider SOA of status change to "sending."
- e. Service provider SOA confirms event report.
- f. NPAC SMS sends out an M-DELETE on the subscriptionVersion to all previously failed Local SMSs.
- g. Each Local SMS responds with a successful M-DELETE reply.
- h. All Local SMSs respond successfully.

- i. NPAC SMS issues M-SET updating the subscriptionVersionStatus to old for subscriptionVersionNPAC objects. It also sets the subscriptionModifiedTimeStamp and subscriptionDisconnectCompleteTimeStamp.
- j. NPAC SMS responds to M-SET.
- k. NPAC SMS issues an M-EVENT-REPORT for the subscriptionVersionStatus equal to "old."
- l. Service provider SOA responds to M-EVENT-REPORT.
- m. After a tunable amount of days, the subscription version is purged by the NPAC SMS housekeeping process.

6.5.4.6. Subscription Version Disconnect: Resend Failure to Local SMS

This scenario shows a failure on a resend of a subscription disconnect that failed previously to one or more of the Local SMSs. The resend of a failed disconnect for a subscription can only be performed by authorized NPAC personnel.



- a. NPAC personnel take action to resend a failed disconnect for a subscription version.
- b. NPAC SMS issues the M-DELETE to all Local SMSs for which to the disconnect previously failed for the subscriptionVersion.
- c. Local SMSs should respond successfully to the M-DELETE.
- d. NPAC SMS waits for a response from each Local SMS.
- e. NPAC SMS retries any Local SMS that has not responded.
- f. No response or an error is received from at least one or all Local SMSs.
- g. NPAC SMS issues the M-SET to update the current subscriptionVersionNPAC object's subscriptionVersionStatus to "old" or "active" (if all Local SMSs failed) from "sending". It will also update the

subscriptionFailed-SP-List with the service provider ID and name of the Local SMSs that failed to successfully receive the broadcast.

- h. NPAC SMS responds to the M-SET.
- i. NPAC SMS sends the subscriptionVersionStatusAttributeValueChange M-EVENT-REPORT to the current service provider SOA with the current status and failedSP-List.
- j. Current service provider SOA issues the M-EVENT-REPORT confirmation.

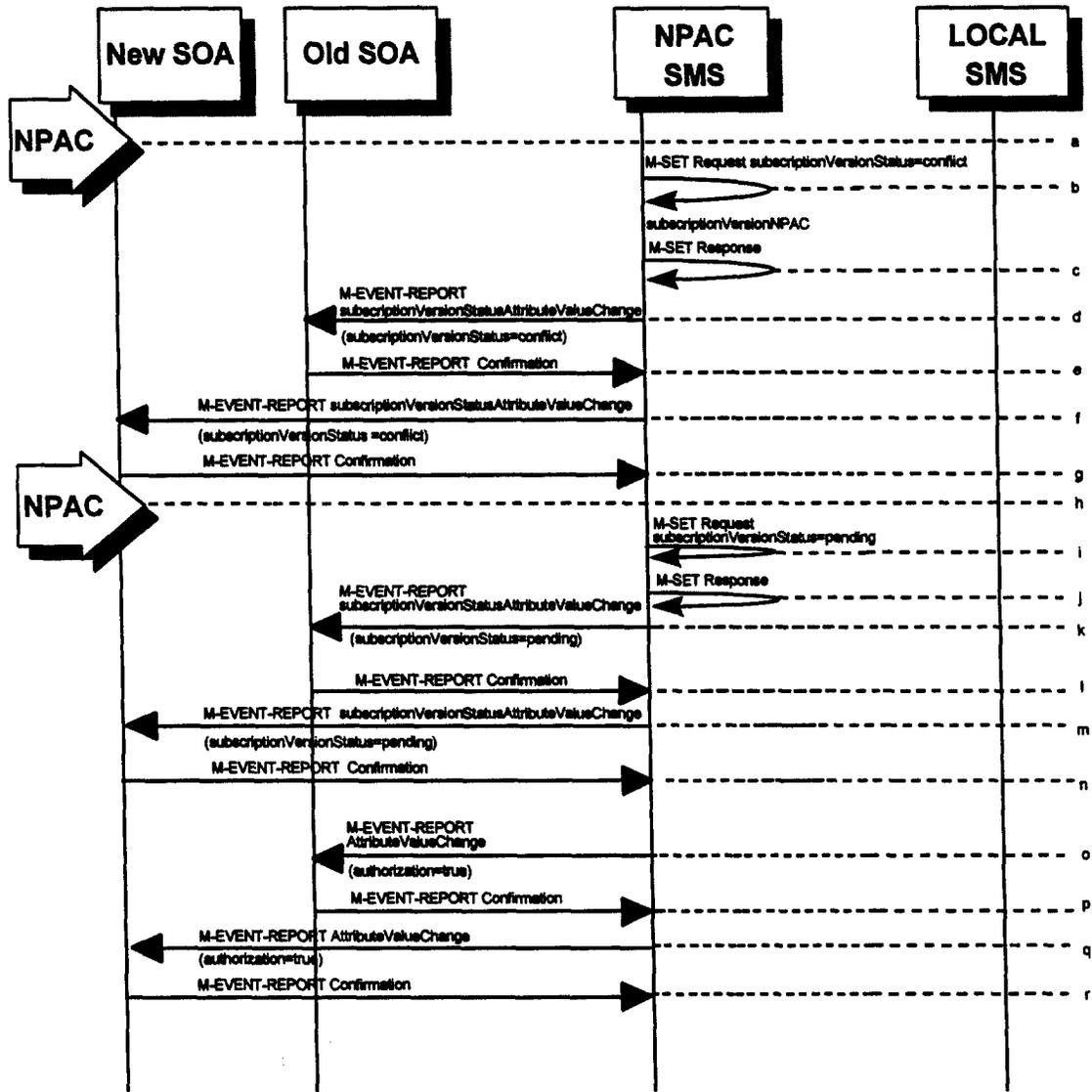
6.5.5. Conflict Scenarios

A situation has arisen which causes the NPAC SMS or NPAC personnel to place the subscriptionVersion into conflict.

A subscription version can be removed from conflict by the NPAC personnel or the new service provider SOA.

6.5.5.1. SubscriptionVersion Conflict and Conflict Resolution by the NPAC SMS

This scenario shows a version being placed into conflict and removed from conflict by the NPAC personnel.

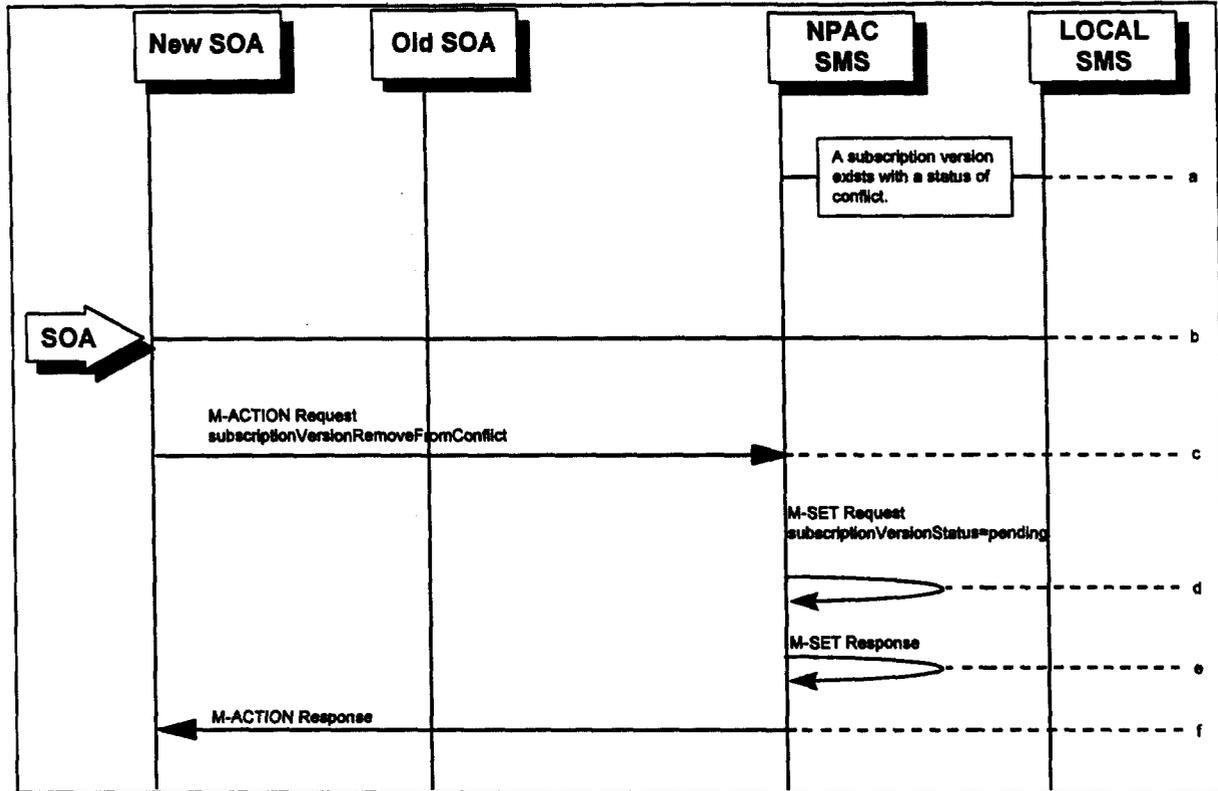


a. NPAC personnel or NPAC SMS take action to set the status of a subscription to "conflict."

- b. NPAC SMS issues M-SET request to update subscriptionVersionStatus to "conflict," subscriptionConflictTimeStamp, and subscriptionModifiedTimeStamp in the subscriptionVersionNPAC object.
- c. NPAC SMS issues an M-SET response. If the M-SET fails, processing for this scenario stops.
- d. NPAC SMS issues an M-EVENT-REPORT subscriptionVersionStatusAttributeValueChange to old service provider SOA.
- e. The old service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- f. NPAC SMS issues subscriptionVersionStatusAttributeValueChange for status to new service provider SOA.
- g. The new service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- h. Once the conflict is resolved, NPAC personnel take action to remove the subscriptionVersion from conflict.
- i. NPAC SMS issues an M-SET request to update the subscriptionModifiedTimeStamp and the subscriptionVersionStatus to "pending."
- j. NPAC SMS issues an M-SET response. If the M-SET fails, processing for this scenario stops.
- k. NPAC SMS issues subscriptionVersionStatusAttributeValueChange for the new status to the old service provider SOA.
- l. The old service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- m. NPAC SMS issues subscriptionVersionStatusAttributeValueChange for the new status to the new service provider SOA.
- n. The new service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- o. NPAC SMS sends a subscriptionVersionStatusAttributeValueChange to set the old service provider's authorization to "TRUE".
- p. The old service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- q. NPAC SMS sends an AttributeValueChange to set the new service provider authorization to "TRUE".
- r. The new service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.

6.5.5.2. Subscription Version Conflict Removal by the New Service Provider SOA

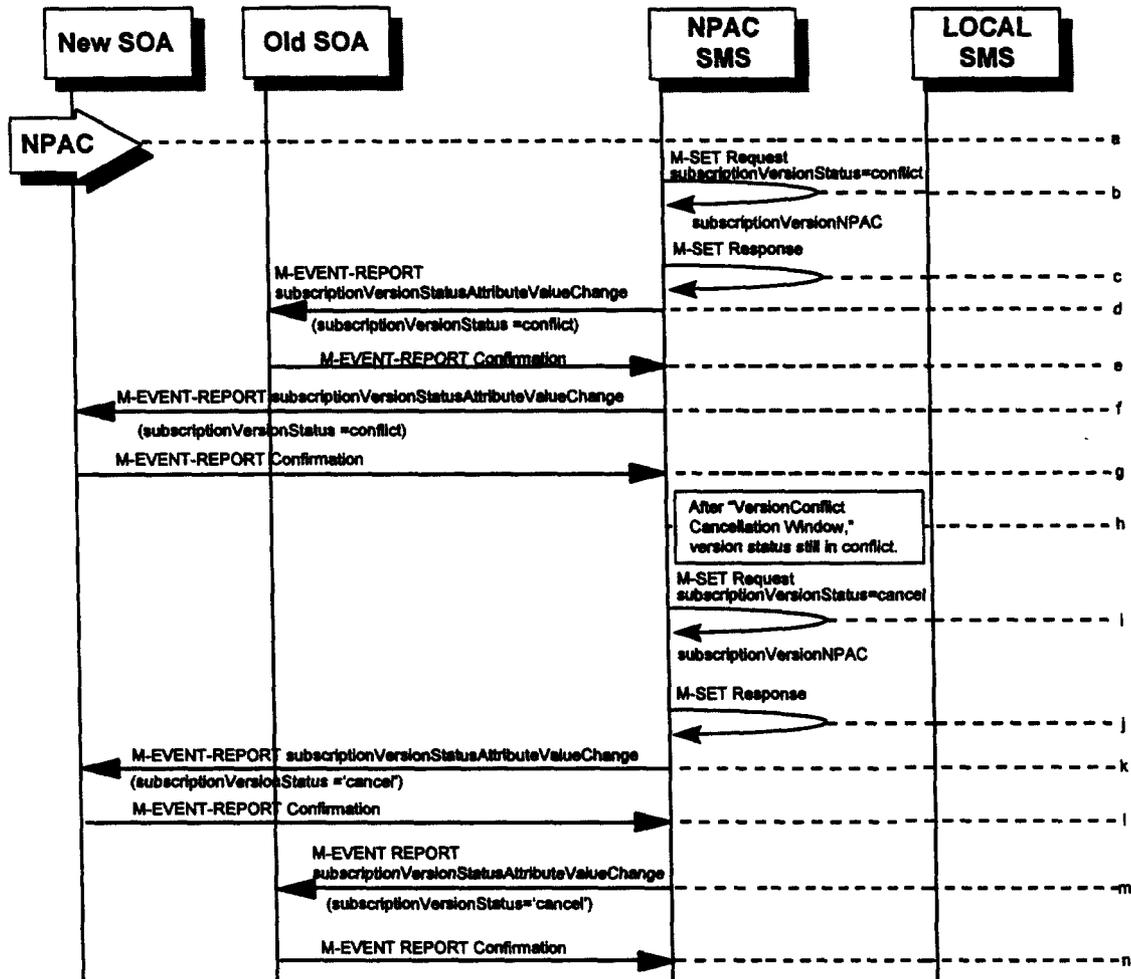
In this scenario, the new service provider elects to remove the subscription version from conflict.



- a. A subscription version exists on the NPAC SMS with a status of conflict.
- b. The new service provider SOA personnel take action to remove the subscription version from conflict.
- c. The new service provider SOA sends the M-ACTION `subscriptionVersionNewSP-RemoveFromConflict` specifying the `subscription_version_TN` and subscription version ID of the subscription version in conflict.
- d. If the request is valid, the NPAC SMS will set the status to "pending". The request will be denied and an error returned if the `subscriptionOldSP-Authorization` was set to conflict by the old service provider and the conflict restriction window has not expired.
- e. The NPAC SMS responds to its own M-SET.
- f. The NPAC SMS responds to the M-ACTION with success or failure and reason for failure. The processing now continues with the `subscriptionVersionStatusAttributeValueChange` notices going out to the new and old service provider SOAs.

6.5.5.3. SubscriptionVersion Conflict: No Conflict Resolution

This scenario shows the action taken at the NPAC SMS when service providers do not reach a conflict resolution.



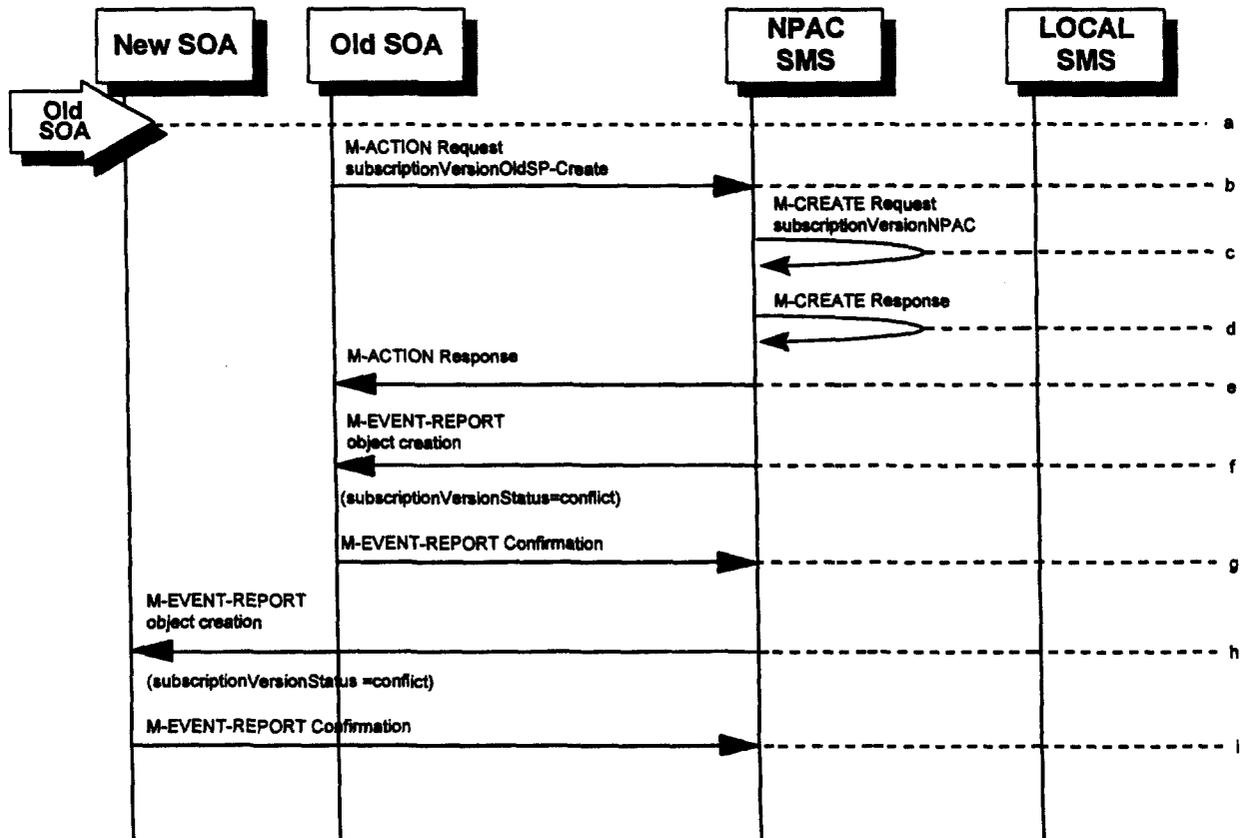
- a. NPAC personnel or NPAC SMS take action to set a subscriptionVersionStatus to "conflict."
- b. NPAC SMS issues an M-SET request to set the subscriptionVersionStatus to "conflict," the subscriptionConflictTimeStamp, and the subscriptionModifiedTimeStamp in the subscriptionVersionNPAC object.
- c. NPAC SMS responds to M-SET. If the M-SET fails, processing stops for this scenario until the M-SET completes successfully.
- d. NPAC SMS issues subscriptionVersionStatusAttributeValueChanged to old service provider SOA for the new "conflict" status.
- e. The old service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- f. NPAC SMS issues subscriptionVersionStatusAttributeValueChanged to new service provider SOA for the "conflict" status.

- g. The new service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- h. "Version Conflict Cancellation Window" expires without conflict resolution.
- i. NPAC SMS issues an M-SET request to set the subscriptionVersionStatus to "cancel" in the subscriptionVersionNPAC object and sets the subscriptionCancellationTimeStamp and subscriptionModifiedTimeStamp.
- j. NPAC SMS responds to M-SET. If the M-SET fails, processing stops for this scenario until the M-SET is successfully completed.
- k. NPAC SMS issues attribute value change for status to new service provider SOA for the "cancel" status.
- l. The new service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.
- m. NPAC SMS issues attribute value change for status to old service provider SOA for the "cancel" status.
- n. The old service provider SOA returns an M-EVENT-REPORT confirmation to the NPAC SMS.

6.5.5.4. Subscription Version Conflict by Old Service Provider Explicitly Not Authorizing (First Create)

The old service provider SOA can put a pending subscription version into conflict by setting its authorization flag to off. This can be done on the subscriptionVersionOldSP-Create action, subscriptionVersionModify action, or M-SET of the attribute on the subscription version object.

This scenario shows the old service provider putting a new pending subscription version into conflict by turning the authorization flag off on the subscriptionVersionOldSP-Create. In this case, the old service provider's create action is the first sent to the NPAC SMS.



- a. Action is taken by the old service provider to set a subscription version to conflict using the subscriptionVersionOldSP-Create action.
- b. The old service provider SOA sends M-ACTION subscriptionVersionOldSP-Create to the NPAC SMS InpSubscriptions object to create a new subscriptionVersionNPAC with the status of "conflict".

The old service provider SOA specifies the following valid attributes:

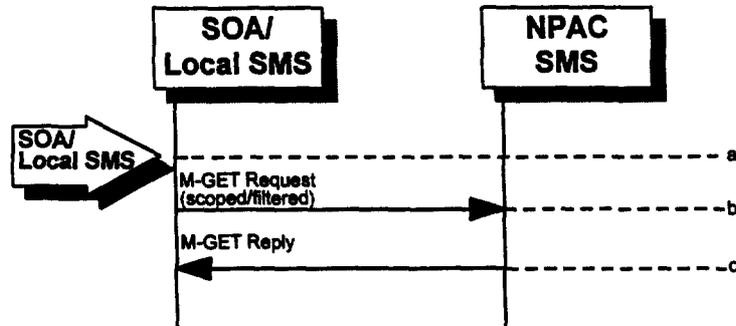
subscriptionTN or valid subscriptionVersionTN-Range
 subscriptionNewCurrentSP
 subscriptionOldSP
 subscriptionOldSP-DueDate
 subscriptionOldSP-Authorization
 subscriptionLNPTType

In this case, the subscriptionOldSP-Authorization is set to NO.

- c. NPAC SMS issues M-CREATE to create the subscriptionVersionNPAC with a status of "conflict" and sets all the other attribute values from the subscriptionVersionOldSP-Create action.
- d. NPAC SMS issues M-CREATE response.
- e. NPAC SMS returns M-ACTION reply. This either reflects a success or failure and reasons for the failure.
- f. If the action was successful, the NPAC SMS issues the M-EVENT-REPORT to the old service provider SOA notifying them of the object creation.
- g. The old service provider SOA confirms the M-EVENT-REPORT.
- h. If the action was successful, the NPAC SMS issues the M-EVENT-REPORT to the new service provider SOA notifying them of the object creation.
- i. The new service provider SOA confirms the M-EVENT-REPORT.

6.5.6. SubscriptionVersion Query

This scenario shows subscriptionVersion query from service provider systems to the NPAC SMS.



- a. Action is taken by either a service provider SOA or Local SMS for retrieving one or more versions of a subscription.
- b. The service provider SOA or Local SMS issues a scoped filtered M-GET from the InpSubscriptions object to retrieve a specific version for a subscription version TN or can request all subscription versions. However, the service provider SOA is limited by a scope and filter in their search capabilities. The filter will currently support all the attributes on the subscriptionVersionNPAC.
- c. The NPAC SMS replies with the requested subscriptionVersion data if the requested number of records is less than or equal to "Max Subscriber-Query" specified in the NPAC SMS. Otherwise a complexityresource-Limitation eError will be returned.

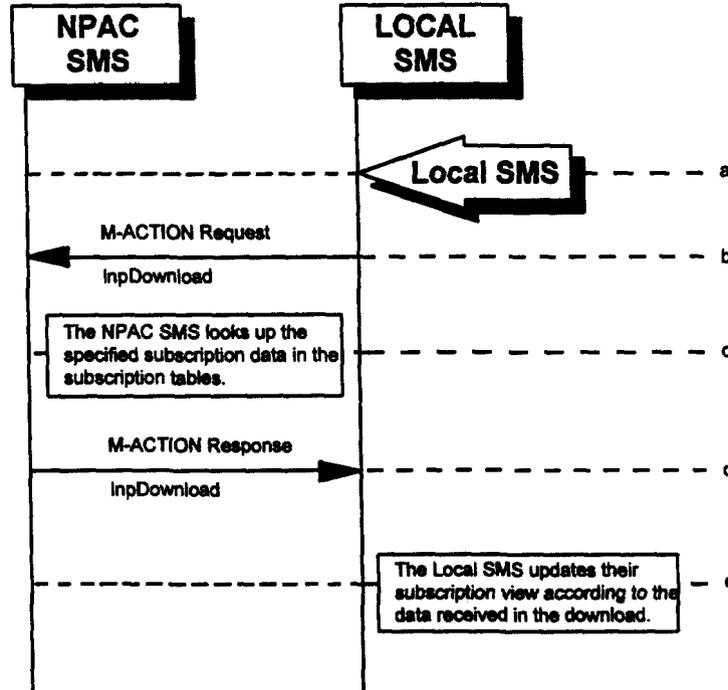
The query return data includes:

subscriptionTN
 subscriptionLRN
 subscriptionNewCurrentSP
 subscriptionOldSP
 subscriptionNewSP-DueDate
 subscriptionNewSP-CreationTimeStamp
 subscriptionOldSP-DueDate
 subscriptionOldSP-Authorization
 subscriptionOldSP-AuthorizationTimeStamp
 subscriptionActivationTimeStamp
 subscriptionBroadcastTimeStamp
 subscriptionConflictTimeStamp
 subscriptionCustomerDisconnectDate
 subscriptionDisconnectCompleteTimeStamp
 subscriptionEffectiveReleaseDate
 subscriptionVersionStatus
 subscriptionCLASS-DPC
 subscriptionCLASS-SSN
 subscriptionLIDB-DPC
 subscriptionLIDB-SSN
 subscriptionCNAM-DPC
 subscriptionCNAM-SSN
 subscriptionISVM-DPC

subscriptionISVM-SSN
subscriptionEndUserLocationValue
subscriptionEndUserLocationType
subscriptionBillingId
subscriptionLNPTType
subscriptionPreCancellationStatus
subscriptionCancellationTimeStamp
subscriptionOldTimeStamp
subscriptionModifiedTimeStamp
subscriptionCreationTimeStamp
subscriptionOldSP-CancellationTimeStamp
subscriptionNewSP-CancellationTimeStamp
subscriptionOldSP-ConflictResolutionTimeStamp
subscriptionNewSP-ConflictResolutionTimeStamp
subscriptionPortingToOriginal-SPSwitch
subscriptionFailedSP-List
subscriptionDownloadReason

6.5.6.1. Subscription Data Download

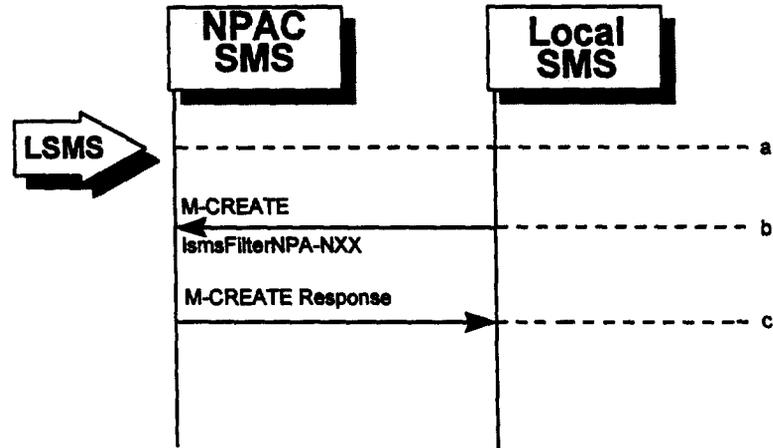
This scenario shows a Local SMS request for subscription data download in order to update their view of this data.



- a. Action is taken by the Local SMS personnel to request a subscription data download. The criteria to decide which subscription data is to be downloaded is specified by the Local SMS personnel.
- b. The Local SMS sends an M-ACTION request to the NPAC SMS InpSubscription object requesting a subscription data download.
- c. The NPAC SMS looks up the subscription data in the subscription database as specified by the criteria in the M-ACTION request.
- d. The NPAC SMS responds by sending an M-ACTION response to the Local SMS that initiated the request. The response includes the success/failure of the request along with the requested subscription data.
- e. The Local SMS must take appropriate action to update their view of the data.

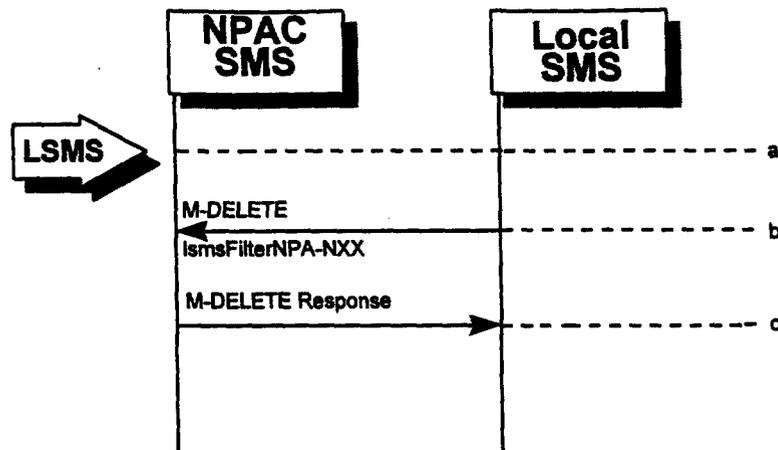
6.6. LSMS Filter NPA-NXX Scenarios

6.6.1. lsmsFilterNPA-NXX Creation by the Local SMS



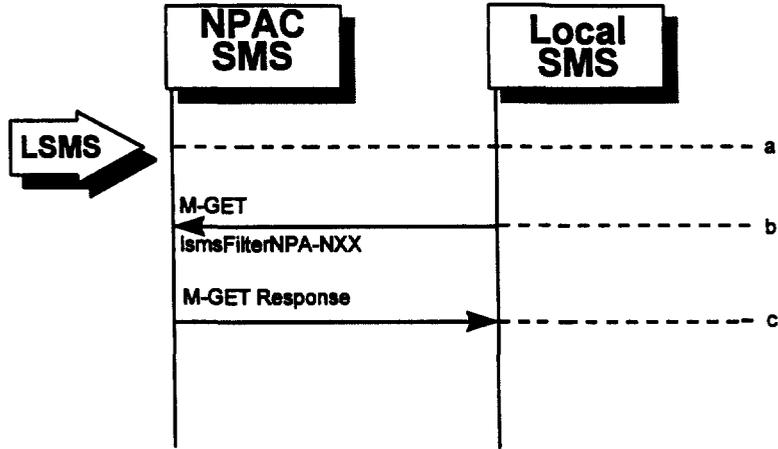
- a. Action is taken by the Local SMS personnel to create an lsmsFilterNPA-NXX object.
- b. The Local SMS sends the M-CREATE request to the NPAC for the lsmsFilterNPA-NXX object to be created.
- c. The NPAC SMS attempts to create the object. If successful, the M-CREATE response is returned. Otherwise, an error is returned.

6.6.2. lsmsFilterNPA-NXX Deletion by the Local SMS



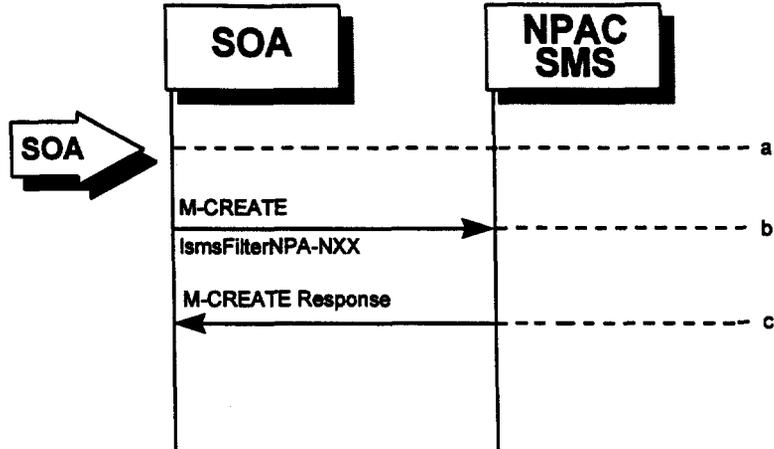
- a. Action is taken by the Local SMS personnel to delete an lsmsFilterNPA-NXX object.
- b. The Local SMS sends the M-DELETE request to the NPAC for the lsmsFilterNPA-NXX object to be removed.
- c. The NPAC SMS attempts to delete the object. If successful, the M-DELETE response is returned. Otherwise, an error is returned.

6.6.3. IsmsFilterNPA-NXX Query by the Local SMS



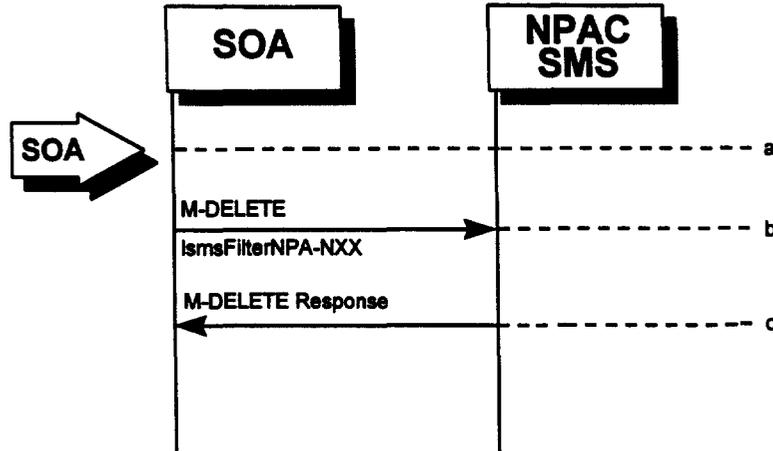
- a. Action is taken by the Local SMS personnel to query for one or all IsmsFilterNPA-NXX object(s).
- b. The Local SMS sends the M-GET request to the NPAC for the IsmsFilterNPA-NXX object(s).
- c. If the Service Provider ID was specified, all IsmsFilterNPA-NXX objects for that Service Provider are returned. If only one object was requested, that object is returned.

6.6.4. IsmsFilterNPA-NXX Creation by the SOA



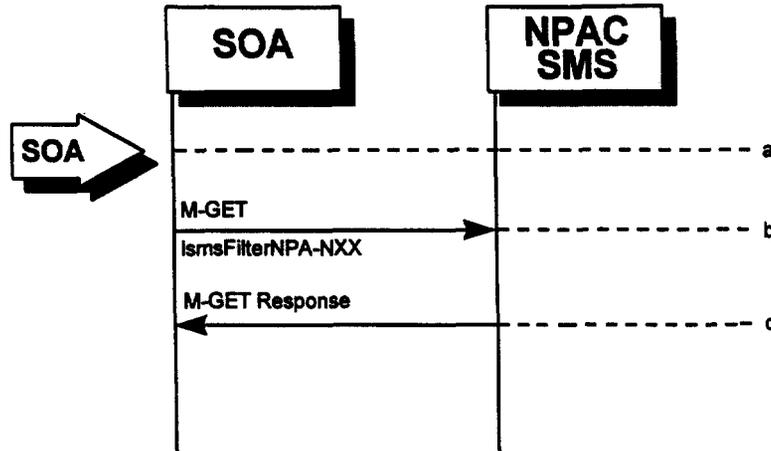
- a. Action is taken by the SOA personnel to create an IsmsFilterNPA-NXX object.
- b. The SOA sends the M-CREATE request to the NPAC for the IsmsFilterNPA-NXX object to be created.
- c. The NPAC SMS attempts to create the object. If successful, the M-CREATE response is returned. Otherwise, an error is returned.
- d. —

6.6.5. IsmsFilterNPA-NXX Deletion by the SOA



- a. Action is taken by the SOA personnel to delete an IsmsFilterNPA-NXX object.
- b. The SOA sends the M-DELETE request to the NPAC for the IsmsFilterNPA-NXX object to be removed.
- c. The NPAC SMS attempts to delete the object. If successful, the M-DELETE response is returned. Otherwise, an error is returned.
- d. —

6.6.6. IsmsFilterNPA-NXX Query by the SOA



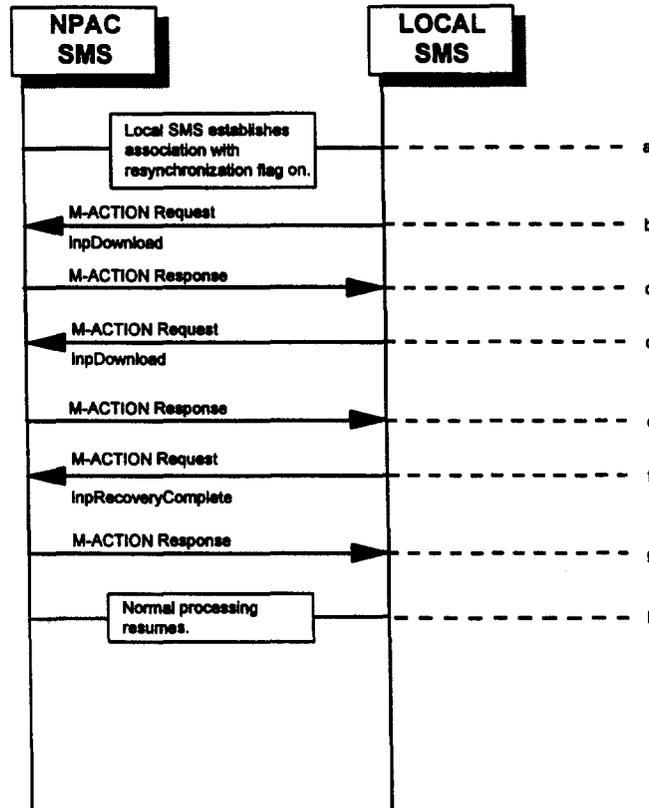
- a. Action is taken by the SOA personnel to query for one or all IsmsFilterNPA-NXX object(s).
- b. The SOA sends the M-GET request to the NPAC for the IsmsFilterNPA-NXX object(s).
- c. If the Service Provider ID was specified, all IsmsFilterNPA-NXX objects for that Service Provider are returned. If only one object was requested, that object is returned.
- d. —

6.7. Miscellaneous

6.7.1. Sequencing of Events on Initialization/Resynchronization of Local SMS

If the resynchronization flag is TRUE upon association establishment, the NPAC SMS will hold updates to the Local SMS until the flag is turned off. At that time all updates issued since the association establishment will be sent.

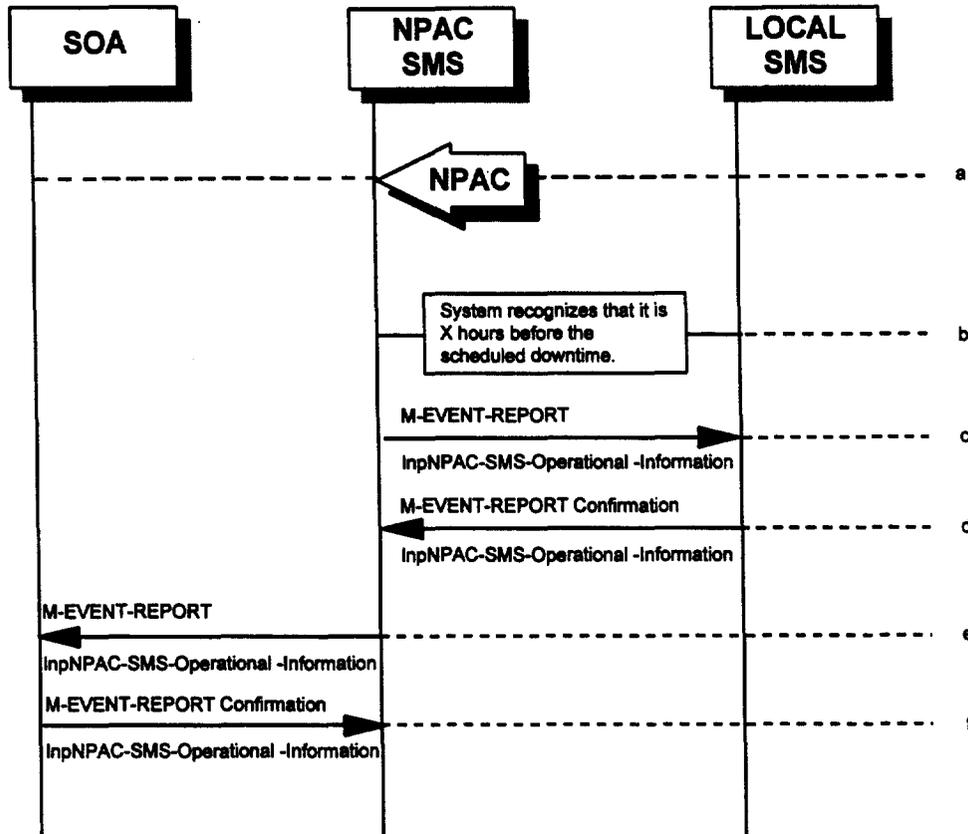
If any of the requests in this scenario fail, the Local SMS must correct the problem - retry the action instead of continuing.



- a. Local SMS establishes association with resynchronization flag on.
- b. Local SMS sends M-ACTION to start network data download. The Local SMS specifies the start time.
- c. NPAC SMS responds to M-ACTION with updates.
- d. Local SMS sends M-ACTION to start subscription data download. The Local SMS specifies the start time.
- e. NPAC SMS responds to M-ACTION with subscription version updates.
- f. Local SMS sends M-ACTION to set resynchronization flag off.
- g. NPAC SMS replies with data updates since association establishment.
- h. Normal processing resumes.

6.7.2. SOA/Local SMS Notification of Scheduled NPAC Downtime

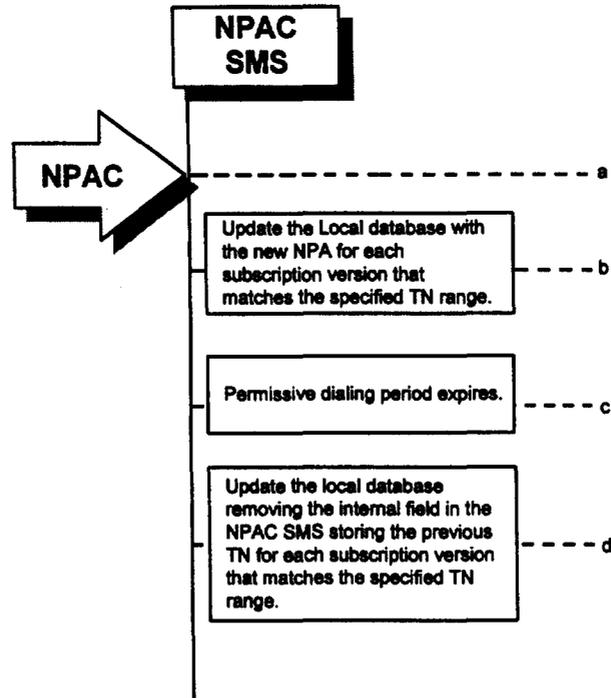
This scenario shows SOA/Local SMS notification of scheduled NPAC downtime.



- a. Action is taken by NPAC SMS personnel to schedule downtime for the NPAC SMS system.
- b. The NPAC SMS system recognizes that it is some tunable amount of time before a scheduled outage.
- c. The NPAC SMS sends an InpNPAC-SMS-Operational-Information M-EVENT-REPORT to the Local SMSs.
- d. The Local SMSs respond by sending an InpNPAC-SMS-Operational-Information M-EVENT-REPORT confirmation back to the NPAC SMS.
- e. The NPAC SMS sends an InpNPAC-SMS-Operational-Information M-EVENT-REPORT to all SOAs.
- f. The SOA(s) respond by sending an InpNPAC-SMS-Operational-Information M-EVENT-REPORT confirmation back to the NPAC SMS.

6.7.3. NPA-NXX Split

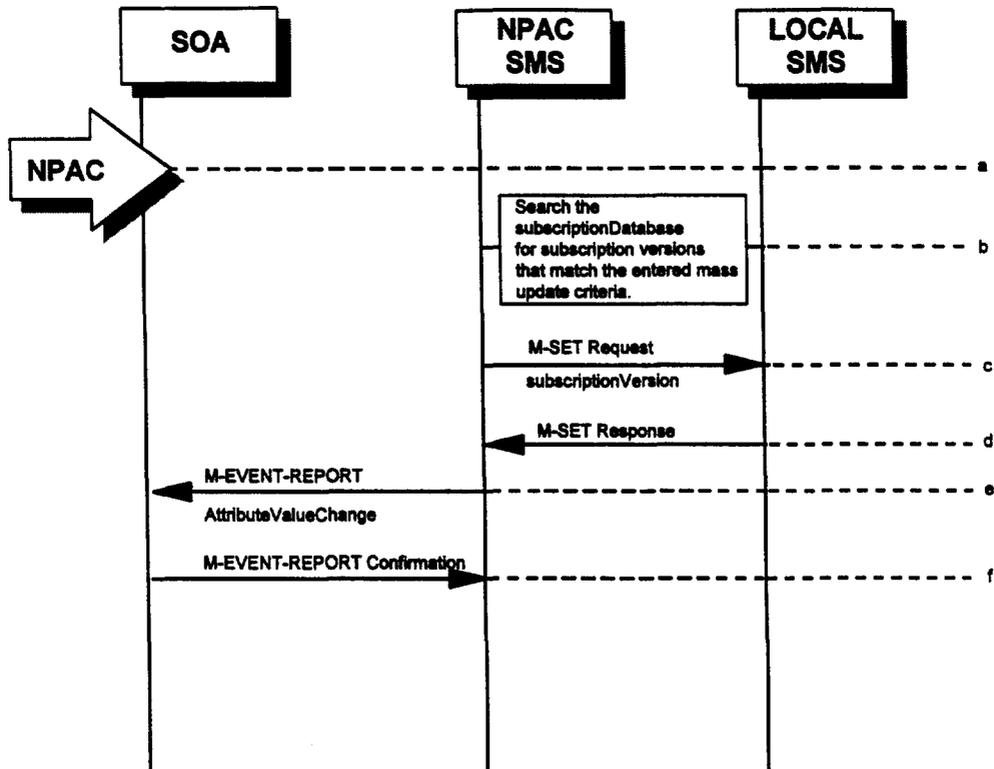
This scenario shows NPAC SMS personnel initiation of an NPA-NXX split.



- a. Action is taken by the NPAC SMS personnel to cause an NPA-NXX split.
- b. The NPAC SMS updates all subscription version records in its local database that match the specified TN range. The TN field will be updated with the new NPA, and a data field internal to the NPAC SMS will be set to the previous TN (old NPA).
- c. The permissive dialing period expires.
- d. The NPAC SMS updates all subscription version records in its local database that match the specified TN range. The internal field in the NPAC SMS storing the previous TN will be set to Null.

6.7.4. Mass Update

NPAC SMS personnel can perform a mass update on subscription data.



- a. Action is taken by the NPAC SMS personnel to request that a mass update be performed on active subscription data.
- b. Search the subscription database for subscription versions that match the specified mass update criteria. Perform steps c-f for the allowable range of subscription versions.
- c. The NPAC SMS sends an M-SET on the subscription versions to the Local SMS.
- d. The Local SMS replies to the M-SET.
- e. The NPAC SMS sends an attributeValueChange M-EVENT-REPORT to the current service provider SOA.
- f. The service provider SOA sends a confirmation to the M-EVENT-REPORT.