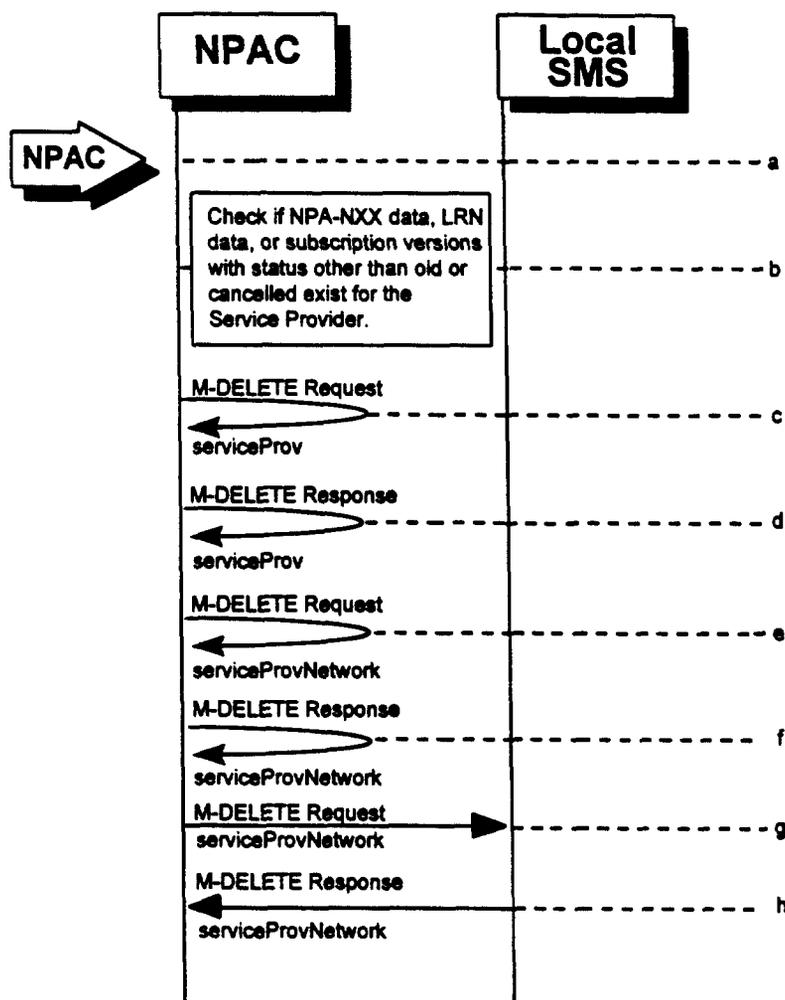


6.3.2. Service Provider Deletion by the NPAC

In this scenario, the NPAC SMS deletes data for an LNP service provider with no network data.

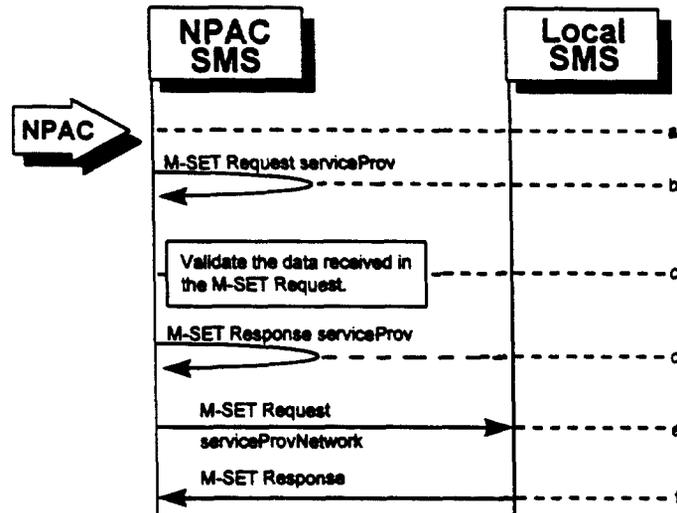


- a. Action is taken by NPAC SMS personnel to delete an existing service provider.
- b. Check the database to see if the service provider has associated with it NPA-NXX data, LRN data, or subscription versions with status other than old or canceled. If so, deny the request.
- c. Issue a local M-DELETE request for the serviceProv object to/from the NPAC SMS. This will attempt to delete the serviceProv object on the NPAC SMS.
- d. The M-DELETE response is received on the NPAC SMS indicating whether the serviceProv object was deleted successfully.
- e. If the serviceProv object was deleted, issue a local M-DELETE request for the serviceProvNetwork object to/from the NPAC SMS. This will attempt to delete the serviceProvNetwork object on the NPAC SMS.
- f. The M-DELETE response is received on the NPAC SMS indicating whether the serviceProvNetwork object was deleted successfully.

- g. If the serviceProvNetwork object was deleted, the NPAC SMS sends an M-DELETE request for the serviceProvNetwork object to each of the Local SMS(s).
- h. The Local SMS(s) will respond by sending an M-DELETE response back to the NPAC SMS.

6.3.3. Service Provider Modification by the NPAC

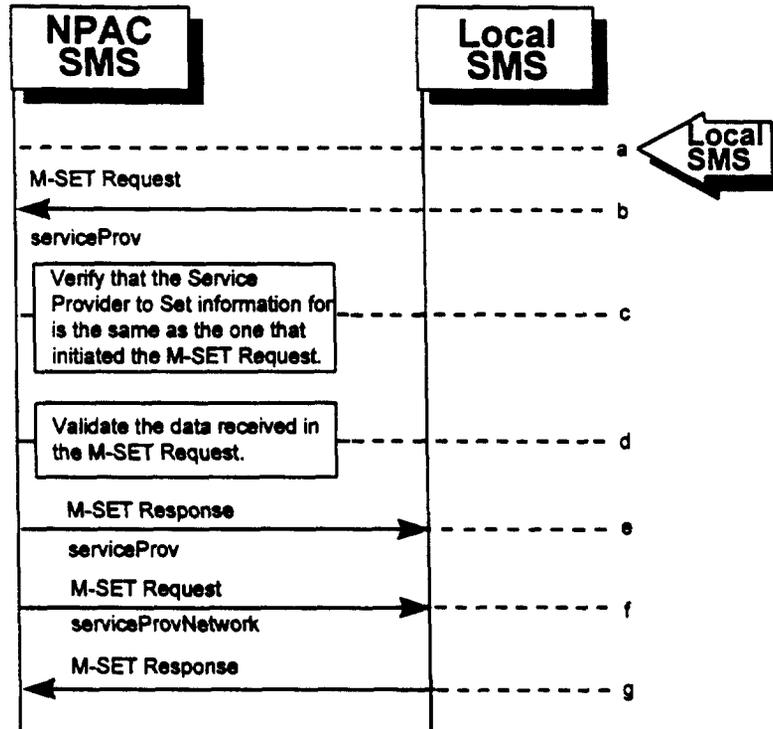
In this scenario, the NPAC SMS modifies the LNP service provider data.



- a. Action is taken by the NPAC personnel to modify data for an existing service provider.
- b. Issue a local M-SET request for the serviceProv object to/from the NPAC SMS. This will attempt to set the specified information on the NPAC SMS.
- c. Validate the data to be set in the M-SET request. An M-SET Error Response of invalidArgumentValue is returned if any data is deemed invalid.
- d. The M-SET response is received on the NPAC SMS indicating whether the serviceProv object was modified successfully.
- e. NPAC SMS performs an M-SET to all the Local SMSs if the service provider name changed.
- f. The Local SMSs respond.

6.3.4. Service Provider Modification by the Local SMS

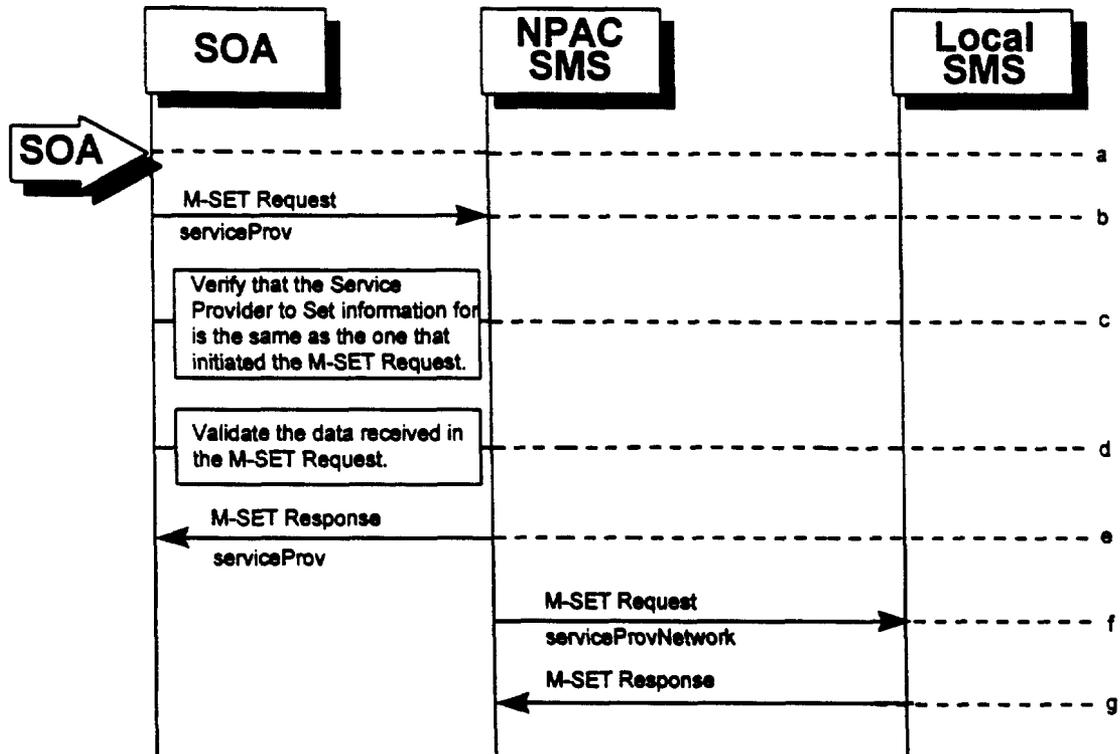
In this scenario, the Local SMS modifies its own service provider data.



- a. Action is taken by the Local SMS personnel to modify their own service provider data.
- b. The Local SMS sends an M-SET request to the NPAC SMS to modify their service provider information.
- c. The NPAC SMS verifies that the service provider to be modified is owned by the service provider that initiated the request. If not, an access denied M-SET Error Response of invalidArgumentValue is returned.
- d. Validate the data to be set in the M-SET request. An invalidArgumentValue M-SET Error Response is returned if any data is deemed invalid.
- e. The NPAC SMS sends an M-SET response back to the Local SMS that initiated the request.
- f. NPAC SMS performs an M-SET to all Local SMSs if the service provider name changed.
- g. The Local SMSs respond.

6.3.5. Service Provider Modification by the SOA

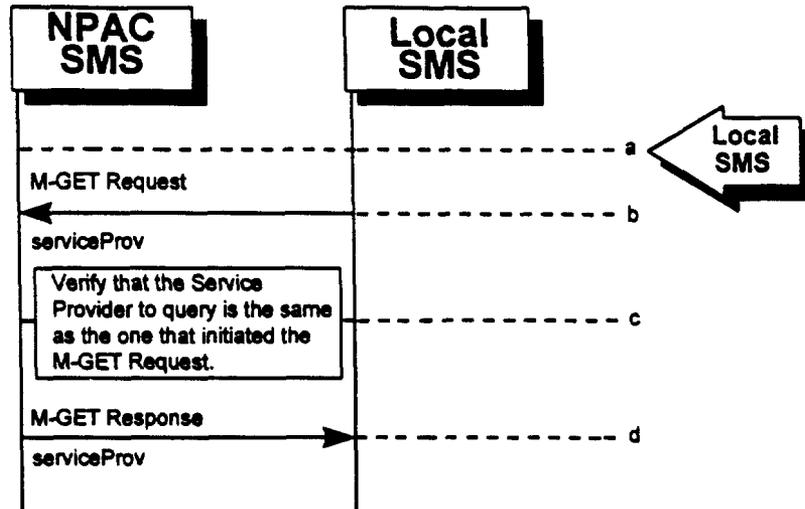
In this scenario, the SOA modifies its own service provider data.



- a. Action is taken by the SOA to modify their own service provider data.
- b. The SOA sends an M-SET request to the NPAC SMS to modify their service provider information.
- c. The NPAC SMS verifies that the service provider to be modified is owned by the service provider that initiated the request. If not, an access denied M-SET Error Response is returned.
- d. Validate the data to be set in the M-SET request. An invalidArgumentValue M-SET Error Response is returned if any data is deemed invalid.
- e. The NPAC SMS sends an M-SET response back to the SOA that initiated the request.
- f. NPAC SMS performs an M-SET to all Local SMSs if the service provider name changed.
- g. The Local SMSs respond.

6.3.6. Service Provider Query by the Local SMS

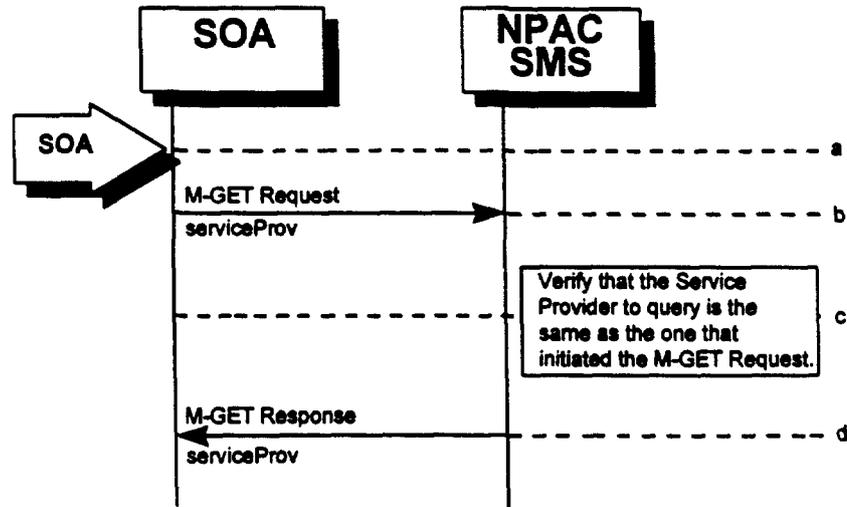
In this scenario, the Local SMS queries their own service provider data.



- a. Action is taken by the Local SMS personnel to query their own service provider data.
- b. The Local SMS sends an M-GET request to the NPAC SMS requesting their own service provider information.
- c. The NPAC SMS verifies that the service provider information to be retrieved is owned by the service provider that initiated the request. If not, an M-GET Error Response of accessDenied is returned if the two service providers do not match.
- d. The NPAC SMS sends an M-GET response containing the requested service provider information back to the Local SMS or SOA that initiated the request.

6.3.7. Service Provider Query by the SOA

In this scenario, the SOA queries their own service provider data.



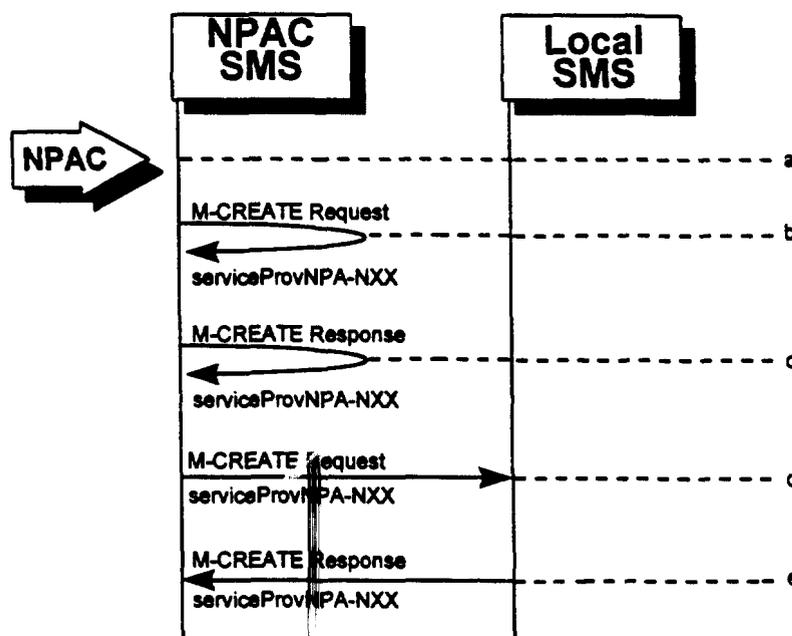
- a. Action is taken by the SOA or SOA personnel to query their own service provider data.
- b. The SOA sends an M-GET request to the NPAC SMS requesting their own service provider information.
- c. The NPAC SMS verifies that the service provider information to be retrieved is owned by the service provider that initiated the request. If not, an M-GET error response of accessDenied is returned if the two service providers do not match.
- d. The NPAC SMS sends an M-GET response containing the requested service provider information back to the SOA that initiated the request.

6.4. Service Provider Network Data Scenarios

6.4.1. NPA-NXX Scenarios

6.4.1.1. NPA-NXX Creation by the NPAC

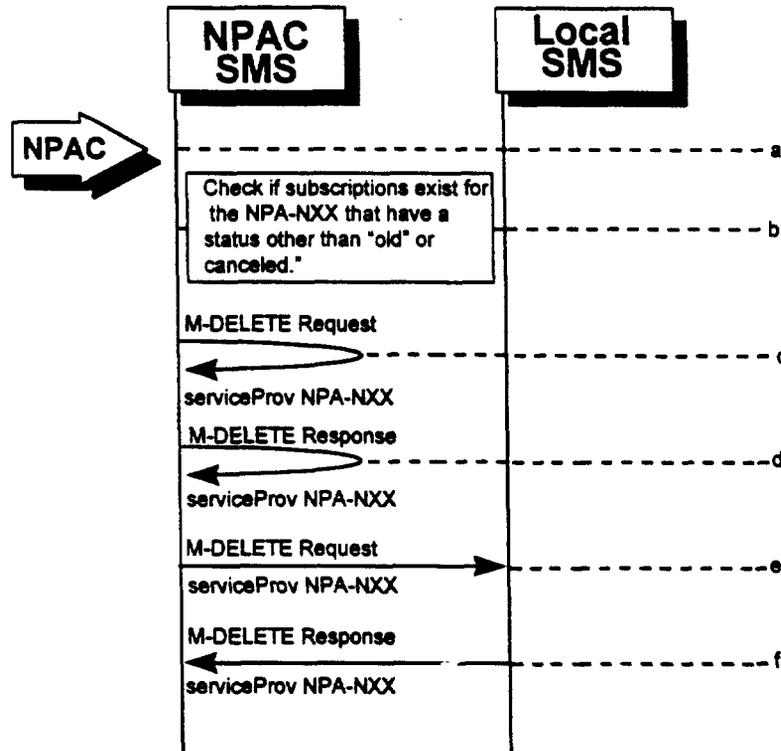
In this scenario, NPAC SMS creates new NPA-NXX data for an LNP service provider.



- a. Action is taken by the NPAC Personnel to create an NPA-NXX for a specified service provider.
- b. The NPAC SMS sends an M-CREATE request to itself in order to create a local serviceProvNPA-NXX object.
- c. The NPAC SMS receives the M-CREATE response indicating whether the serviceProvNPA-NXX object was created successfully.
- d. If the serviceProvNPA-NXX object was created, the NPAC SMS sends an M-CREATE request to all Local SMS(s) for the serviceProvNPA-NXX object.
- e. The Local SMS(s) respond by sending an M-CREATE response indicating whether the serviceProvNPA-NXX object was created successfully.

6.4.1.2. NPA-NXX Deletion by the NPAC

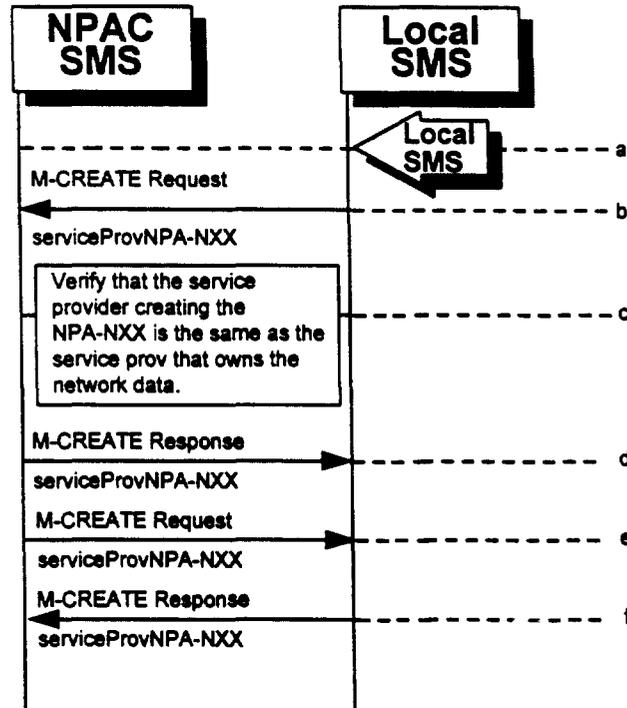
In this scenario, NPAC SMS deletes an NPA-NXX for an LNP service provider.



- a. Action is taken by NPAC SMS personnel to delete an NPA-NXX for a specified service provider.
- b. Check the subscriptions database to see if subscriptions exist with this NPA-NXX that have a status other than "old" or "canceled." If so, terminate processing at this point.
- c. The NPAC SMS sends an M-DELETE request to itself in order to delete the local serviceProvNPA-NXX object.
- d. The NPAC SMS receives the M-DELETE response indicating whether the serviceProvNPA-NXX object was deleted successfully.
- e. If the serviceProvNPA-NXX object was deleted, the NPAC SMS sends an M-DELETE request to all Local SMS(s) for the serviceProvNPA-NXX object.
- f. The Local SMS(s) responds by sending an M-DELETE response to the NPAC SMS indicating whether the serviceProvNPA-NXX object was deleted successfully.

6.4.1.3. NPA-NXX Creation by the Local SMS

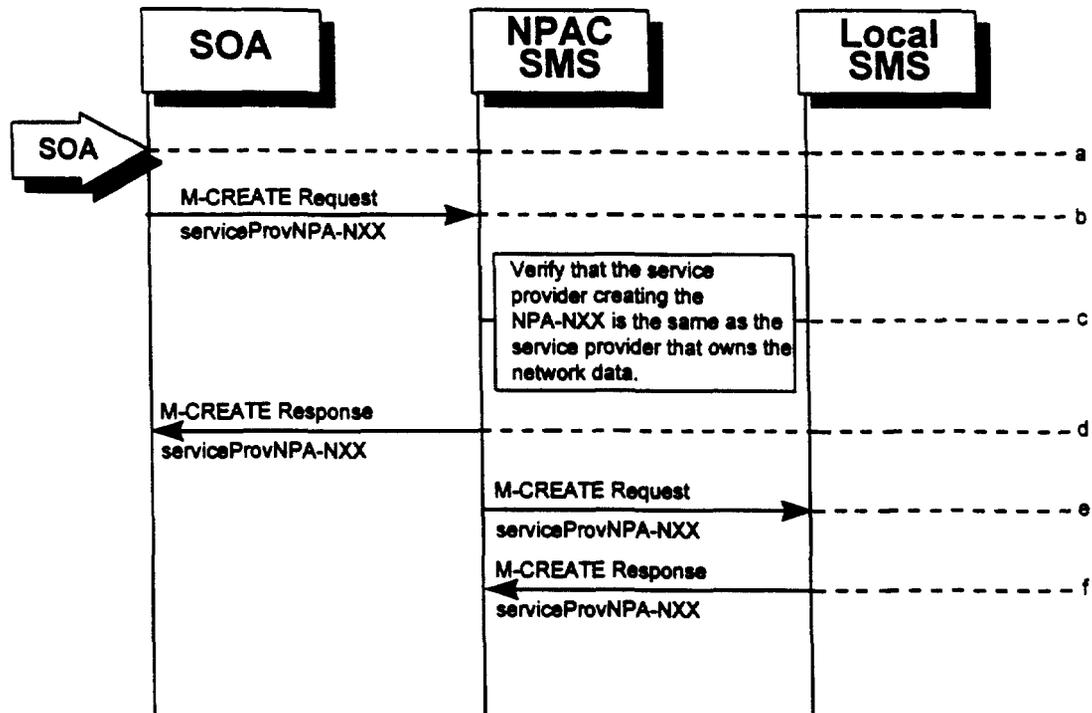
In this scenario, the Local SMS creates a new NPA-NXX for its own service provider network data.



- a. Action is taken by the Local SMS personnel to create an NPA-NXX available for porting in their own service provider network.
- b. The Local SMS sends an M-CREATE request to the NPAC requesting that an NPA-NXX object be created for their own service provider network.
- c. The NPAC SMS verifies that the service provider creating the NPA-NXX information is the same as the service provider that owns the network data. If not, then an access denied M-CREATE accessDenied Error Response is returned.
- d. The NPAC SMS responds by sending an M-CREATE response to the Local SMS that initiated the request indicating whether the serviceProvNPA-NXX object was created successfully.
- e. If the serviceProvNPA-NXX object was created, the NPAC SMS sends an M-CREATE request to all Local SMS(s) for the serviceProvNPA-NXX object.
- f. The Local SMS(s) responds by sending an M-CREATE Response indicating whether the serviceProvNPA-NXX object was created successfully.

6.4.1.4. NPA-NXX Creation by the SOA

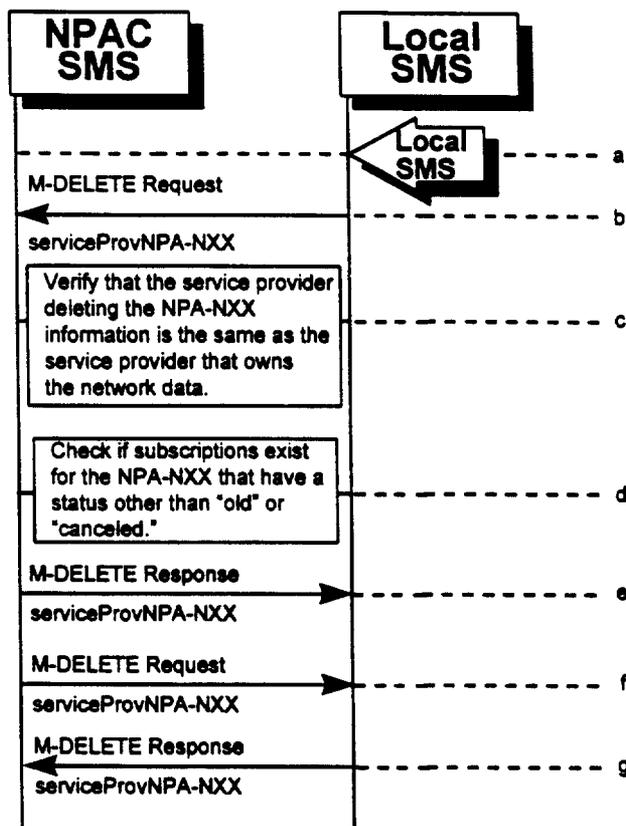
In this scenario, the SOA creates a new NPA-NXX for its own service provider network data.



- a. Action is taken by the SOA personnel to create an NPA-NXX available for porting in their own service provider network.
- b. The SOA sends an M-CREATE request to the NPAC requesting that an NPA-NXX object be created for their own service provider network.
- c. The NPAC SMS verifies that the service provider creating the NPA-NXX information is the same as the service provider that owns the network data. If not, then an access denied M-CREATE response is returned to the SOA that initiated the request.
- d. The NPAC SMS sends an M-CREATE response back to the SOA for the serviceProvNPA-NXX object.
- e. The NPAC SMS sends an M-CREATE request to all Local SMS(s) for the serviceProvNPA-NXX object.
- f. The Local SMS(s) responds by sending an M-CREATE response indicating whether the serviceProvNPA-NXX object was created successfully.

6.4.1.5. NPA-NXX Deletion by the Local SMS

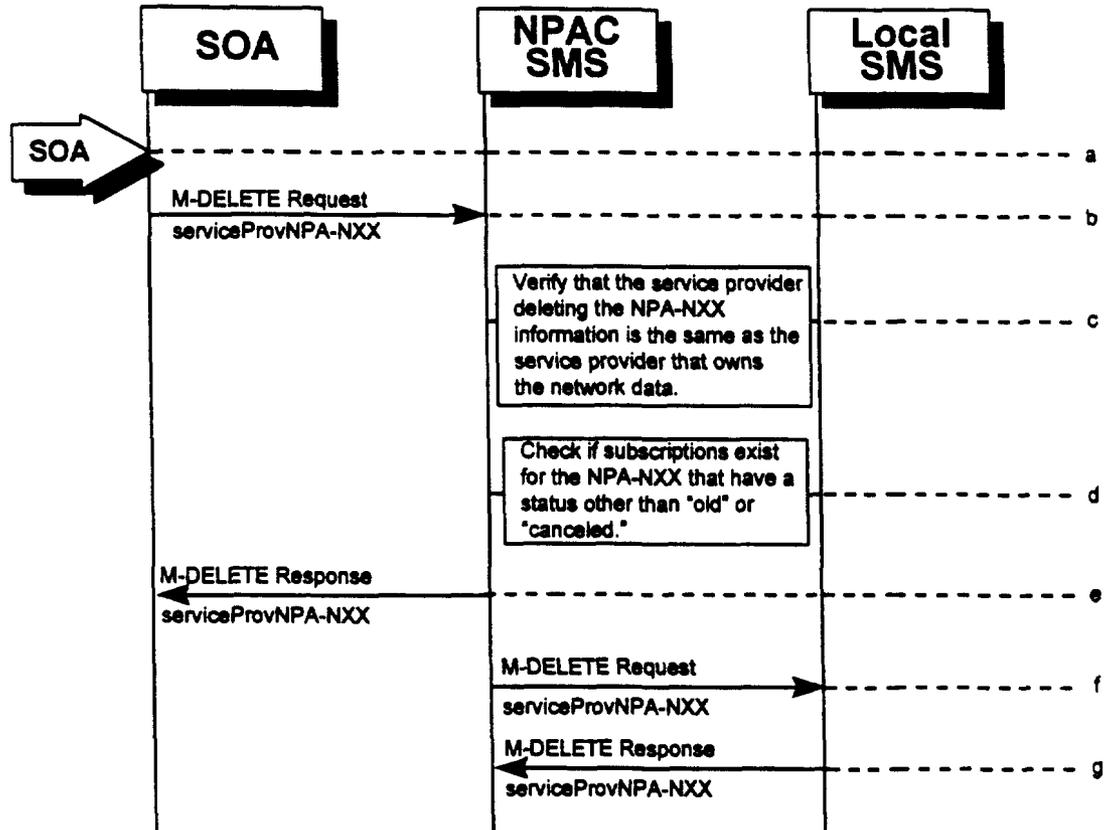
In this scenario, the Local SMS deletes an NPA-NXX in its own service provider network data.



- a. Action is taken by the Local SMS personnel to delete an NPA-NXX for their own service provider network data.
- b. The SMS sends an M-DELETE request to the NPAC SMS requesting that an NPA-NXX object be deleted for their own service provider.
- c. The NPAC SMS verifies that the service provider that owns the NPAC-NXX information to be deleted is the same as the service provider that owns the network data. If not, then an M-DELETE accessDenied error response is returned.
- d. Check the subscriptions database to see if subscriptions exist with this LRN that have a status other than "old" or canceled." If so, terminate processing at this point.
- e. The NPAC SMS responds by sending an M-DELETE response indicating whether the serviceProvNPA-NXX object was deleted successfully.
- f. If the serviceProvNPA-NXX object was deleted, the NPAC SMS sends an M-DELETE request to all Local SMS(s) for the serviceProvNPA-NXX object.
- g. The Local SMS(s) responds by sending an M-DELETE response indicating whether the serviceProvNPA-NXX object was deleted successfully.

6.4.1.6. NPA-NXX Deletion by the SOA

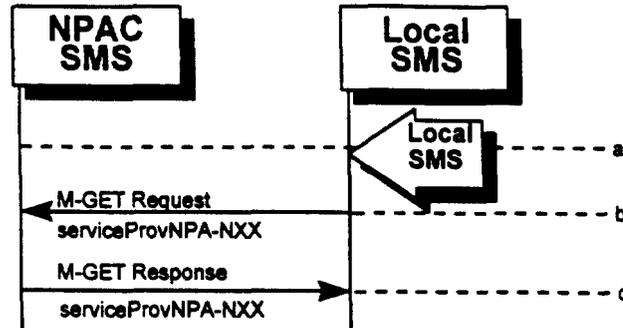
In this scenario, the SOA deletes a new NPA-NXX for its own service provider network data.



- a. Action is taken by the SOA personnel to delete an NPA-NXX for their own service provider network data.
- b. The SOA sends an M-DELETE request to the NPAC SMS requesting that an NPA-NXX object be deleted for their own service provider.
- c. The NPAC SMS verifies that the service provider that owns the NPA-NXX information to be deleted is the same as the service provider that owns the network data. If not, then an M-DELETE accessDenied Error Response is returned.
- d. Check the subscriptions database to see if subscriptions exist with this NPA-NXXLRN that have a status other than "old" or "canceled." If so, terminate processing at this point.
- e. The NPAC SMS responds by sending an M-DELETE response indicating whether the serviceProvNPA-NXX object was deleted successfully.
- f. The NPAC SMS sends an M-DELETE request to all Local SMS(s) for the serviceProvNPA-NXX object.
- g. The Local SMS(s) respond by sending an M-DELETE response indicating whether the serviceProvNPA-NXX object was deleted successfully.

6.4.1.7. NPA-NXX Query by the Local SMS

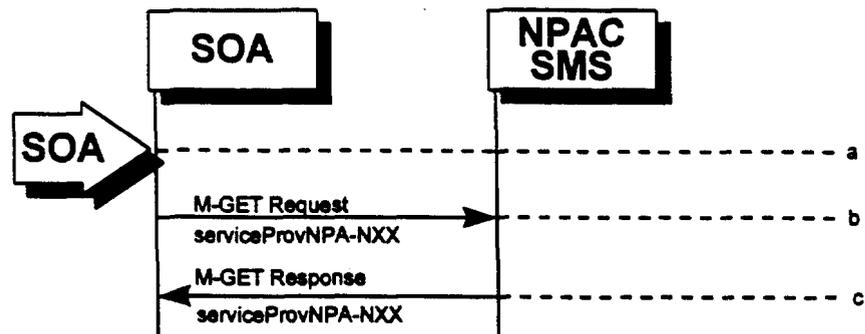
In this scenario, the Local SMS queries for NPA-NXX data.



- a. Action is taken by Local SMS personnel to query for a serviceProvNPA-NXX.
- b. The Local SMS sends an M-GET request to the NPAC SMS for the serviceProvNPA-NXX object.
- c. The NPAC SMS responds by sending an M-GET response containing the NPA-NXX data back to the Local SMS.

6.4.1.8. NPA-NXX Query by the SOA

In this scenario, the SOA queries for NPA-NXX updates.

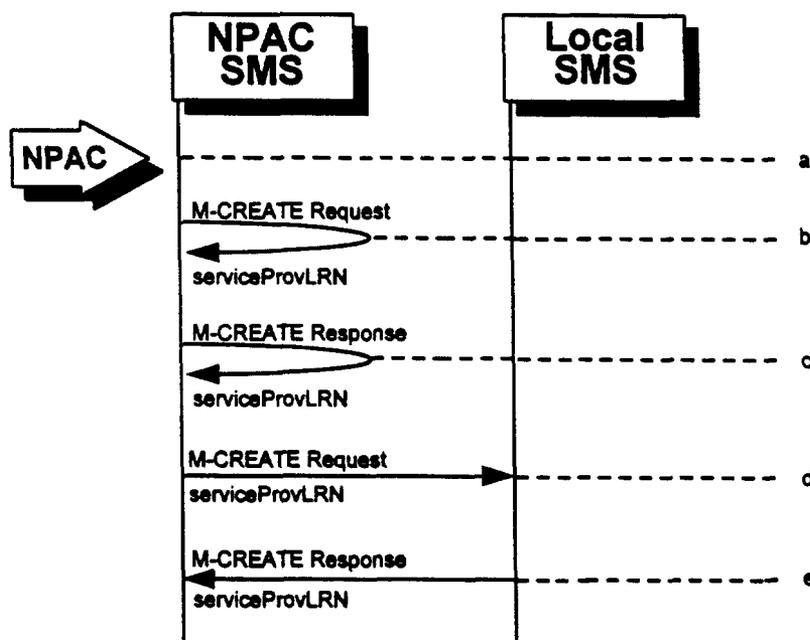


- a. Action is taken by SOA personnel to query for a serviceProvNPA-NXX.
- b. The SOA sends an M-GET request to the NPAC SMS for the serviceProvNPA-NXX object.
- c. The NPAC SMS responds by sending an M-GET response containing the NPA-NXX data back to the SOA.

6.4.2. LRN Scenarios

6.4.2.1. LRN Creation by the NPAC

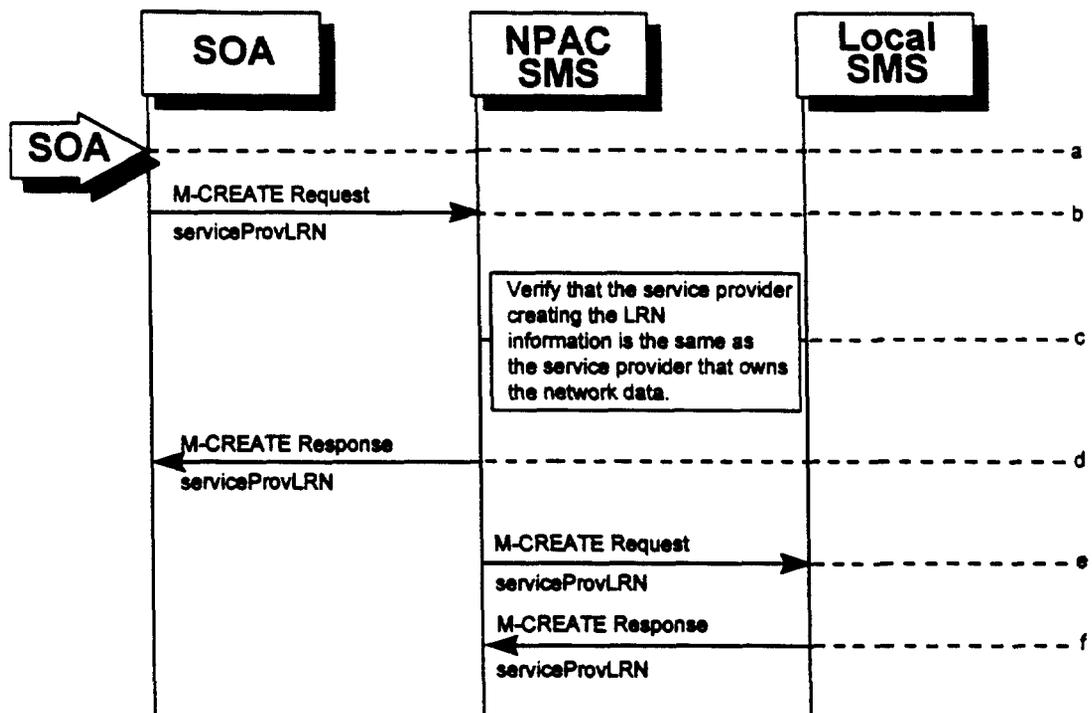
In this scenario, the NPAC SMS creates an LRN for an LNP serviceProvNPA-NXX.



- a. Action is taken by the NPAC personnel to create an LRN for an existing service provider.
- b. The NPAC SMS sends an M-CREATE request to itself in order to create a local serviceProvLRN object.
- c. The NPAC SMS receives the M-CREATE response indicating whether the serviceProvLRN object was created successfully.
- d. If the serviceProvLRN object was created, the NPAC SMS sends an M-CREATE request to all Local SMS(s) for the serviceProvLRN object.
- e. The Local SMS(s) responds by sending an M-CREATE response indicating whether the serviceProvLRN object was created successfully.

6.4.2.2. LRN Creation by the SOA

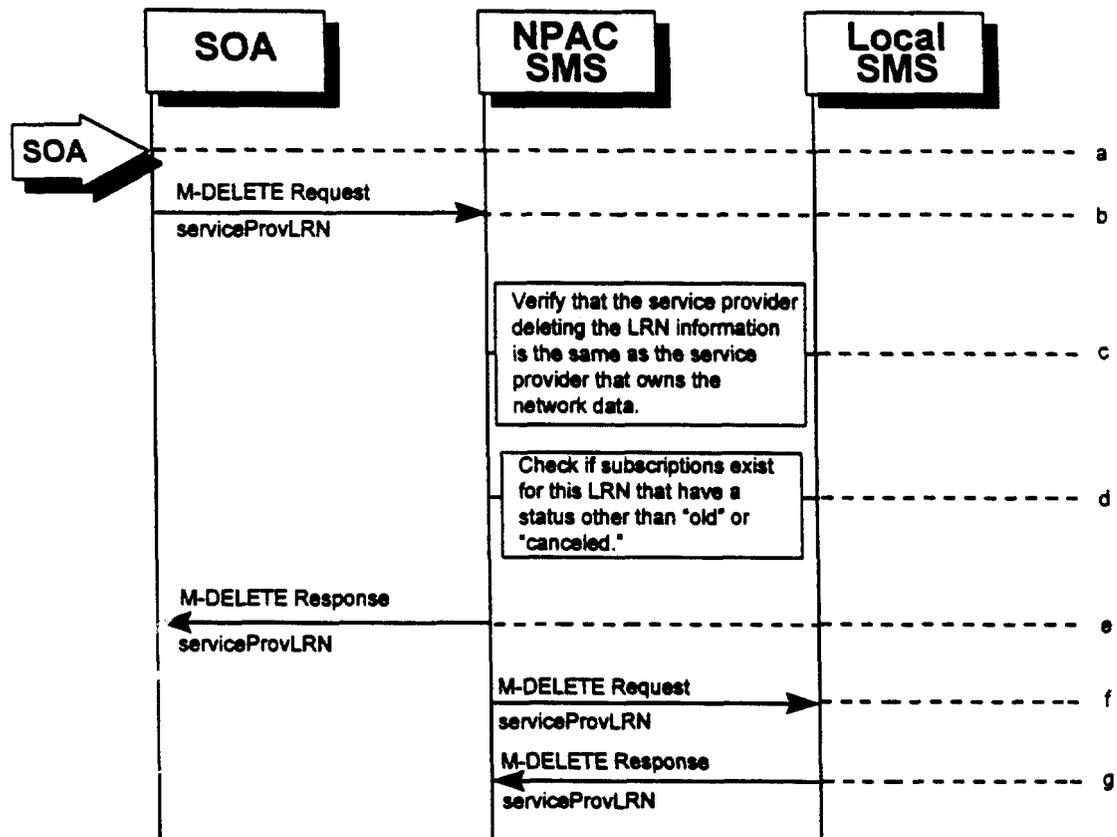
In this scenario, the SOA creates an LRN for its own service provider network data.



- a. Action is taken by the SOA personnel to create an LRN for their own network data.
- b. The SOA sends an M-CREATE request to the NPAC SMS requesting that an LRN object be created for their own network data.
- c. The NPAC SMS verifies that the service provider creating the LRN information is the same as the service provider that owns the service provider network data. If not, then an accessDenied M-CREATE Error Response is returned.
- d. The NPAC SMS responds by sending an M-CREATE response back to the SOA that initiated the request, indicating whether the serviceProvLRN object was created successfully.
- e. The NPAC SMS sends an M-CREATE request to all Local SMS(s) for the serviceProvLRN object.
- f. The Local SMS(s) respond by sending an M-CREATE response indicating whether the service provider LRN object was created successfully.

6.4.2.3. LRN Deletion by the SOA

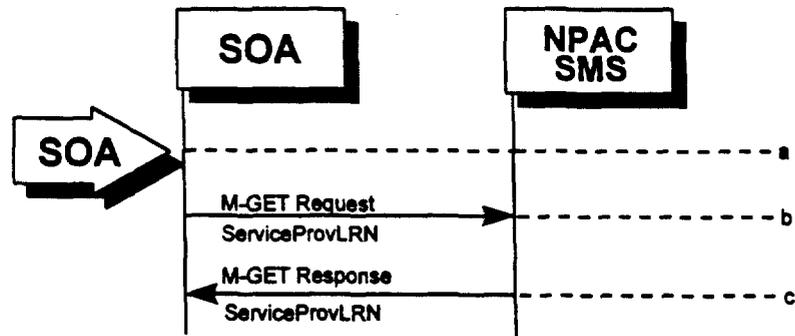
In this scenario, the SOA deletes an LRN for their own service provider network data.



- a. Action is taken by the SOA personnel to delete an LRN for their own network data.
- b. The SOA sends an M-DELETE request to the NPA requesting that an LRN object be deleted.
- c. The NPAC SMS verifies that the service provider deleting the LRN information is the same as the service provider that is associated with the network data. If not, then an accessDenied M-DELETE error response is returned.
- d. Check the subscriptions database to see if subscriptions exist with this LRN that have a status other than "old" or "canceled." If so, an M-SET error response complexity limitation is returned.
- e. The NPAC SMS responds by sending an M-DELETE response indicating whether the serviceProvLRN object was deleted successfully.
- f. The NPAC SMS sends an M-DELETE request to all Local SMS(s) for the serviceProvLRN object.
- g. The Local SMS(s) responds by sending a message indicating whether the serviceProvLRN object was deleted successfully.

6.4.2.4. LRN Query by the SOA

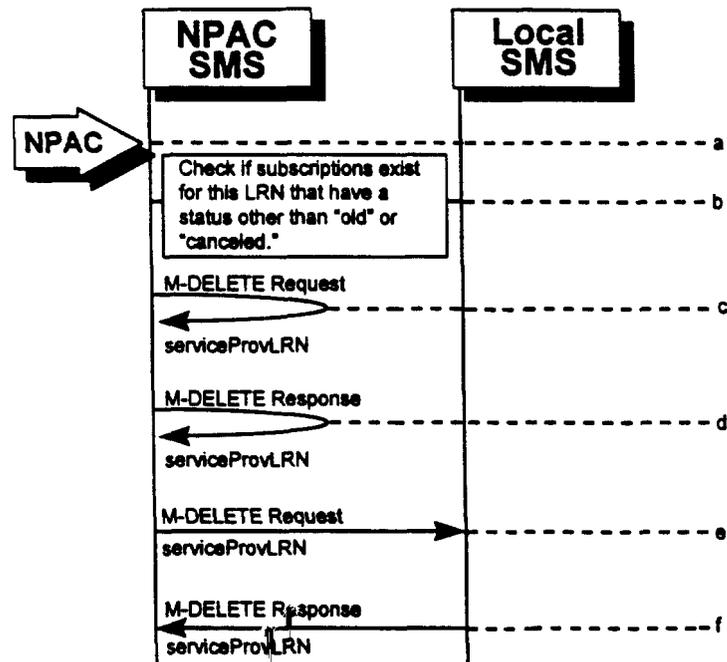
In this scenario, the SOA queries LRN data.



- a. Action is taken by SOA personnel to an LRN for a specified service provider.
- b. The SOA sends an M-GET request to the NPAC SMS for the serviceProvLRN object.
- c. The NPAC SMS responds by sending an M-GET response containing the data back to the SOA.

6.4.2.5. LRN Deletion by the NPAC

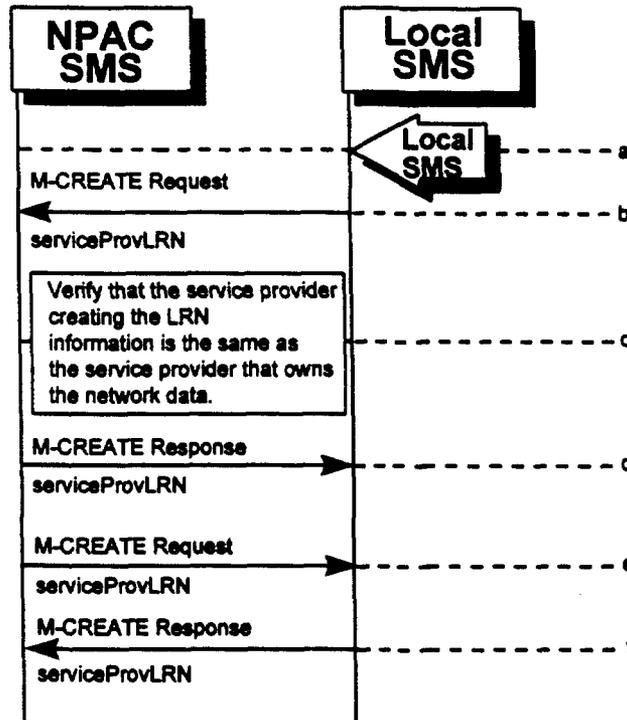
In this scenario, the NPAC SMS deletes an LRN for an LNP serviceProvNPA-NXX.



- a. Action is taken by the NPAC SMS personnel to delete an LRN for a service provider.
- b. Check the subscriptions database to see if subscriptions exist with this LRN that have a status other than "old" or "canceled." If so, terminate processing at this point.
- c. The NPAC SMS sends an M-DELETE request to itself in order to delete the local serviceProvLRN object.
- d. The NPAC SMS receives the M-DELETE response indicating whether the serviceProvLRN object was deleted successfully.
- e. If the serviceProvLRN object was deleted, the NPAC SMS sends an M-DELETE request to all Local SMS(s) for the serviceProvLRN object.
- f. The Local SMS(s) responds by sending an M-DELETE response indicating whether the serviceProvLRN object was deleted successfully.

6.4.2.6. LRN Creation by the Local SMS

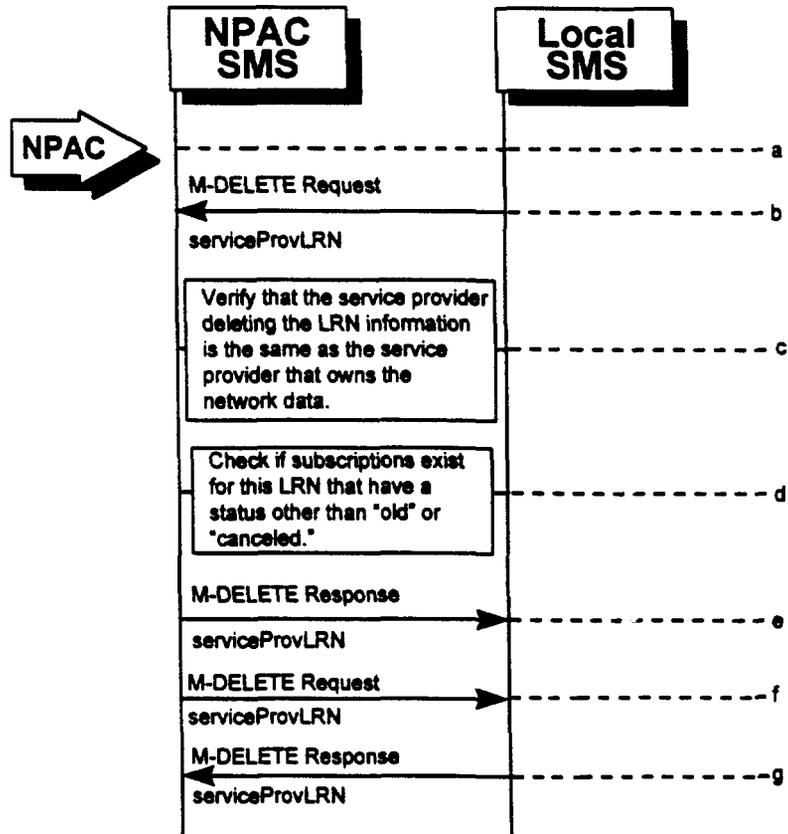
In this scenario, the Local SMS creates an LRN for its own service provider network data.



- a. Action is taken by the Local SMS personnel to create an LRN for their own network data.
- b. The SMS sends an M-CREATE request to the NPAC requesting that an LRN object be created for their own network data.
- c. The NPAC verifies that the service provider creating the LRN information is the same as the service provider that owns the service provider network data. If not, then an accessDenied M-CREATE error response is returned.
- d. The NPAC SMS responds by sending an M-CREATE response back to the Local SMS that initiated the request, indicating whether the serviceProvLRN object was created successfully.
- e. If the serviceProvLRN object was created, the NPAC SMS sends an M-CREATE request to all Local SMS(s) for the serviceProvLRN object.
- f. The Local SMS(s) responds by sending an M-CREATE response indicating whether the serviceProvLRN object was created successfully.

6.4.2.7. LRN Deletion by the Local SMS

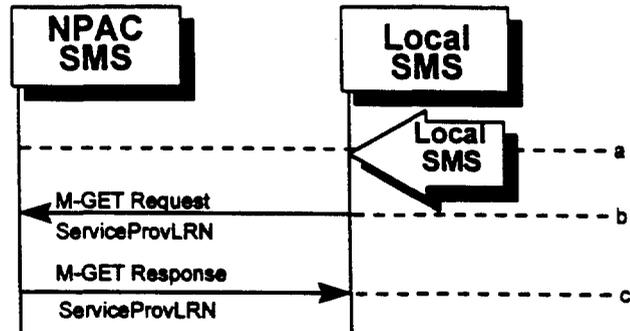
In this scenario, the Local SMS deletes an LRN for their own service provider network data.



- a. Action is taken by the Local SMS personnel to delete an LRN for their own network data.
- b. The Local SMS sends an M-DELETE request to the NPAC requesting that an LRN object be deleted.
- c. The NPAC SMS verifies that the service provider deleting the LRN information is the same as the service provider that is associated with the network data. If not, then an accessDenied M-DELETE Error Response is returned.
- d. Check the subscriptions database to see if subscriptions exist with this LRN that have a status other than "old" or "canceled." If so, an M-SET Error Response complexity limitation is returned.
- e. The NPAC SMS responds by sending an M-DELETE response indicating whether the serviceProvLRN object was deleted successfully.
- f. If the serviceProvLRN object was deleted, the NPAC SMS sends an M-DELETE request to all Local SMS(s) for the serviceProvLRN object.
- g. The Local SMS(s) responds by sending a message indicating whether the serviceProvLRN object was deleted successfully.

6.4.2.8. LRN Query by the Local SMS

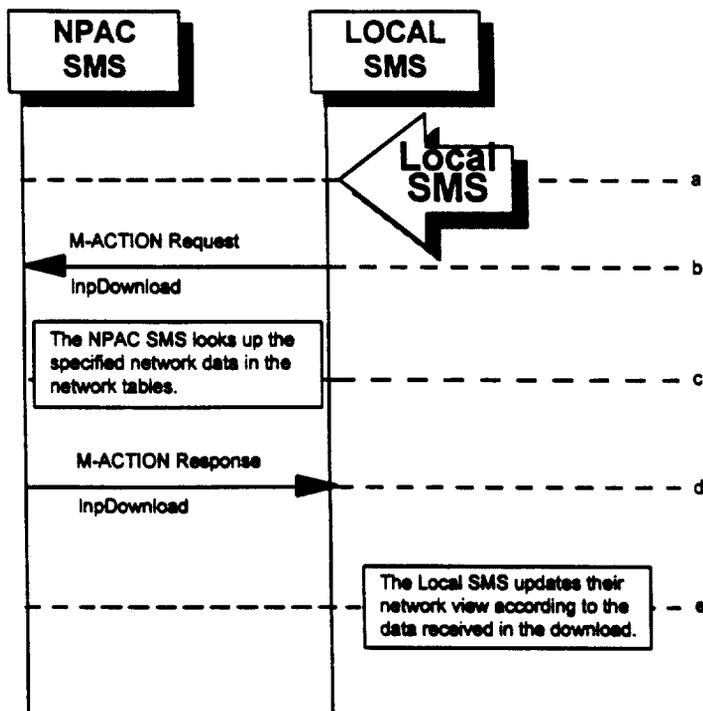
In this scenario, the Local SMS queries LRN data.



- a. Action is taken by Local SMS personnel to query an LRN for a specified service provider.
- b. The Local SMS sends an M-GET request to the NPAC SMS for the serviceProvLRN object.
- c. The NPAC SMS responds by sending an M-GET response containing the data back to the Local SMS.

6.4.2.9. Network Data Download

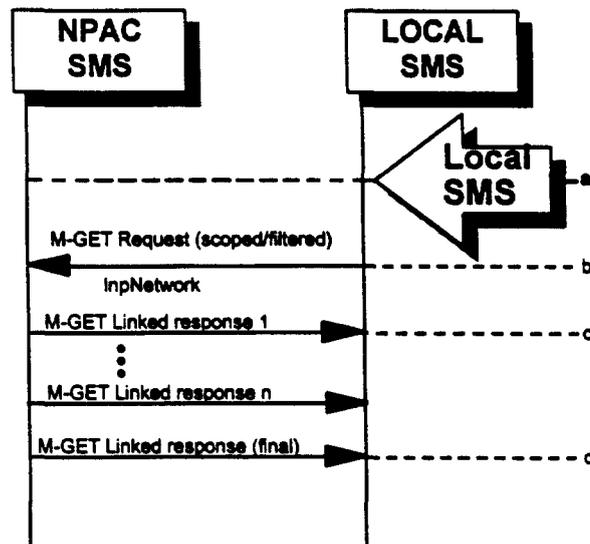
This scenario shows a Local SMS request for network data download in order to update their view of this data.



- a. Action is taken by the Local SMS personnel to request a network data download. The criteria to decide which network 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 InpNetwork object requesting a network data download.
- c. The NPAC SMS looks up the network data in the network 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 network data.
- e. The Local SMS must take appropriate action to update their view of the data.

6.4.2.10.Scoped/Filtered GET of Network Data

This scenario shows a request for network data via a scoped/filtered M-GET. In this case, scoping is done from the InpNetwork object. However, scoping and filtering can be done from serviceProvNetwork and serviceProvNPA-NXX objects.



- a. Action is taken by the Local SMS personnel to request network data via a scoped/filtered M-GET request.
- b. The Local SMS sends a scoped/filtered M-GET request to the NPAC SMS.
- c. The NPAC SMS sends network data objects (serviceProvNetwork, serviceProvNPA-NXX, serviceProvLRN) that pass the scope/filter criteria to the Local SMS that initiated the request.
- d. A final M-GET response is sent to the Local SMS that initiated the request once all scoped/filtered network objects have been returned.