NANC 390

**New Interface Confirmation Messages SOA/LSMS- to- NPAC**

**Origination Date :**10/16/2003

**Originator:**Qwest

**Description:**

**Business Need:**

Service Provider systems (SOA/LSMS) need to know (in the form of a positive acknowledgement from the NPAC) that the NPAC has received their request message, so the systems (SOA/LSMS) do not unnecessarily resend the message and cause duplicate transactions for the same request.

Based on the current requirements for the NPAC, the NPAC acknowledgement message (generally referred to as "a response to a request" from the SOA/LSMS) is not returned until AFTER the NPAC has completed the activity required by that request.  During heavy porting periods, transactions that require many records to be updated may take longer than normal for a response to be received from the NPAC.  In the case of a delayed response, the SOA/LSMS may abort the association to the NPAC (e.g., after the 15 minute Abort timer expires).  When the association is re-established, the SOA/LSMS may resend messages to the NPAC because they haven’t received a response to the first message and thus believe the NPAC did not receive the original message.  This behavior can lead to a duplicate transaction for the same request thus:

 1.) Causing a heavy volume of transactions over the NPAC to SOA/LSMS interface

2.) Slowing Porting completion

3.) Causing an increase of porting costs

 4.) Causing duplicate message processing at the NPAC, and

5.) Possibly causing manual intervention by NPAC and Service Provider personnel, etc.

**Nov ’03 LNPAWG, discussion:**

Explained the current functionality, and the fact that higher priority transactions will be worked before other requested work, which can cause delays in responses.  In the case where previously submitted work was re-sent to the NPAC, the NPAC may have to re-do work it has already done.

Providers may see a backup in their SOA traffic, thereby causing them to process extra data as well.

A toggle would need to be added for Backward compatibility.  Providers that support the new confirmation message would use the new method/flow, and other providers would continue to use the current method/flow.  There is definitely a benefit to this, but to obtain the benefit would require changes to the SOA as well.

It was agreed that this would be accepted as a change order, and would continue to be worked with the Architecture group in December.

**Feb ‘04 –** Refer to the Architecture Planning Team’s working document for the latest information on this change order.

**Jul ’08 LNPAWG, discussion.**  Need to develop requirements for Sep ’08 review.  See below:

* Req-1  Service Provider SOA Interface Confirmation Message Indicator

NPAC SMS shall provide a Service Provider SOA Interface Confirmation Message Indicator tunable parameter which defines whether a SOA supports Interface Confirmation Messages.

* Req-2  Service Provider SOA Interface Confirmation Message Indicator Default

NPAC SMS shall default the Service Provider SOA Interface Confirmation Message Indicator tunable parameter to FALSE.

* Req-3  Service Provider SOA Interface Confirmation Message Indicator Modification

NPAC SMS shall allow NPAC Personnel, via the NPAC Administrative Interface, to modify the Service Provider SOA Interface Confirmation Message Indicator tunable parameter.

* Req-4  Service Provider SOA Interface Confirmation Message – Indicator set to FALSE

NPAC SMS shall process a Service Provider SOA request when a Service Provider SOA Interface Confirmation Message Indicator tunable parameter is set to FALSE, by using the following Interoperability Interface Specification flows:

* + B.2.1 – SOA Initiated Audit
  + B.2.2 – SOA Initiated Audit Cancellation by the SOA
  + B.2.3 – SOA Initiated Audit Cancellation by the NPAC
  + B.2.6 –Audit Query on the NPAC
  + B.2.7 – SOA Audit Create for Subscription Versions within a Number Pool Block
  + B.3.5 – Service Provider Modification by the SOA
  + B.3.7 – Service Provider Query by the SOA
  + B.4.1.4 – NPA-NXX Creation by the SOA
  + B.4.1.6 – NPA-NXX Deletion by the SOA
  + B.4.1.8 – NPA-NXX Query by the SOA
  + B.4.2.2 – LRN Creation by the SOA
  + B.4.2.3 – LRN Deletion by the SOA
  + B.4.2.4 – LRN Query by the SOA
  + B.4.2.11 – Scoped/Filtered GET of Network Data from SOA
  + B.4.3.4 – Service Provider NPA-NXX-X Query by the SOA
  + B.4.4.1 – Number Pool Block Create/Activate by the SOA
  + B.4.4.13 – Number Pool Block Modify by the Block Holder SOA
  + B.4.4.33 – Number Pool Block Query by the SOA
  + B.5.1.1 – Subscription Version Create by the Initial SOA (Old Service Provider)
  + B.5.1.2 – Subscription Version Create by the Initial SOA (New Service Provider)
  + B.5.1.3 – Subscription Version Create by the Second SOA (New Service Provider)
  + B.5.1.4 – Subscription Version Create by the Second SOA (Old Service Provider) with Authorization to Port
  + B.5.1.5 – Subscription Version Activated by the New Service Provider SOA
  + B.5.1.11 – Subscription Version Create for Intra-Service Provider Port
  + B.5.1.12 – Subscription Version for Inter- and Intra-Service Provider Port-to-Original
  + B.5.1.13 – Subscription Version for Inter- and Intra-Service Provider Port-to-Original: All LSMSs Fail
  + B.5.1.14 – Subscription Version for Inter- and Intra-Service Provider Port-to-Original: Partial Failure
  + B.5.1.17 – Subscription Version Port-to-Original of a Ported Pool TN Activation by SOA
  + B.5.1.17.13 – Subscription Version Port-to-Original of a Pool TN – Creation Prior to NPA-NXX-X Effective Date
  + B.5.1.18 – Subscription Version Inter-Service Provider Create by either SOA (Old or New Service Provider) with a Due Date which is Prior to the NPA-NXX Effective Date
  + B.5.2.1 – Subscription Version Modify Active Version Using M-ACTION by a Service Provider SOA
  + B.5.2.3 – Subscription Version Modify Prior to Activate Using M-ACTION
  + B.5.2.4 – Subscription Version Modify Prior to Activate Using M-SET
  + B.5.2.7 – Subscription Version Modify Disconnect-Pending Version Using M-ACTION by a Service Provider SOA
  + B.5.3.1 – Subscription Version Cancel by Service Provider SOA after Both Service Provider SOAs have Concurred
  + B.5.3.2 – Subscription Version Cancel: No Acknowledgment from a SOA
  + B.5.3.3 – Subscription Version Cancels with Only One Create Action Received
  + B.5.3.4 – Subscription Version Cancel by Current Service Provider for Disconnect-Pending Subscription Version
  + B.5.3.5 – Un-Do Cancel-Pending Subscription Version Request
  + B.5.4.1 – Subscription Version Immediate Disconnect
  + B.5.4.2 – Subscription Version Disconnect With Effective Release Date
  + B.5.4.7.1 – SOA Initiates Successful Disconnect Request of Ported Pooled TN
  + B.5.4.7.3 – Subscription Version Disconnect Request of Ported Pooled TN With Effective Release Date
  + B.5.4.7.14 – Subscription Version Immediate Disconnect of a Contaminated Pooled TN Prior to Block Activation (after Effective Date)
  + B.5.5.2 – Subscription Version Conflict Removal by the New Service Provider SOA
  + B.5.5.4 – Subscription Version Conflict by Old Service Provider Explicitly Not Authorizing (2nd Create)
  + B.5.5.5 – Subscription Version Conflict Removal by the Old Service Provider SOA
  + B.5.6 – Subscription Version Query
  + B.6.4 – lsmsFilterNPA-NXX Creation by the SOA
  + B.6.5 – lsmsFilterNPA-NXX Deletion by the SOA
  + B.6.6 – lsmsFilterNPA-NXX Query by the SOA
  + B.7.3 – Sequencing of Events on Initialization/Resynchronization of SOA
  + B.7.3.1 – Sequencing of Events on Initialization/Resynchronization of SOA using SWIM
  + Req-5  Service Provider SOA Interface Confirmation Message – Indicator set to TRUEB.2.1C – SOA Initiated Audit – Confirmed
  + B.2.2C – SOA Initiated Audit Cancellation by the SOA – Confirmed
  + B.2.3C – SOA Initiated Audit Cancellation by the NPAC – Confirmed
  + B.2.6C –Audit Query on the NPAC – Confirmed
  + B.2.7C – SOA Audit Create for Subscription Versions within a Number Pool Block – Confirmed
  + B.3.5C – Service Provider Modification by the SOA – Confirmed
  + B.3.7C – Service Provider Query by the SOA – Confirmed
  + B.4.1.4C – NPA-NXX Creation by the SOA – Confirmed
  + B.4.1.6C – NPA-NXX Deletion by the SOA – Confirmed
  + B.4.1.8C – NPA-NXX Query by the SOA – Confirmed
  + B.4.2.2C – LRN Creation by the SOA – Confirmed
  + B.4.2.3C – LRN Deletion by the SOA – Confirmed
  + B.4.2.4C – LRN Query by the SOA – Confirmed
  + B.4.2.11C – Scoped/Filtered GET of Network Data from SOA – Confirmed
  + B.4.3.4C – Service Provider NPA-NXX-X Query by the SOA – Confirmed
  + B.4.4.1C – Number Pool Block Create/Activate by the SOA – Confirmed
  + B.4.4.13C – Number Pool Block Modify by the Block Holder SOA – Confirmed
  + B.4.4.33C – Number Pool Block Query by the SOA – Confirmed
  + B.5.1.1C – Subscription Version Create by the Initial SOA (Old Service Provider) – Confirmed
  + B.5.1.2C – Subscription Version Create by the Initial SOA (New Service Provider) – Confirmed
  + B.5.1.3C – Subscription Version Create by the Second SOA (New Service Provider) – Confirmed
  + B.5.1.4C – Subscription Version Create by the Second SOA (Old Service Provider) with Authorization to Port – Confirmed
  + B.5.1.5C – Subscription Version Activated by the New Service Provider SOA – Confirmed
  + B.5.1.11C – Subscription Version Create for Intra-Service Provider Port – Confirmed
  + B.5.1.12C – Subscription Version for Inter- and Intra-Service Provider Port-to-Original – Confirmed
  + B.5.1.13C – Subscription Version for Inter- and Intra-Service Provider Port-to-Original: All LSMSs Fail – Confirmed
  + B.5.1.14C – Subscription Version for Inter- and Intra-Service Provider Port-to-Original: Partial Failure – Confirmed
  + B.5.1.17C – Subscription Version Port-to-Original of a Ported Pool TN Activation by SOA – Confirmed
  + B.5.1.17.13C – Subscription Version Port-to-Original of a Pool TN – Creation Prior to NPA-NXX-X Effective Date – Confirmed
  + B.5.1.18C – Subscription Version Inter-Service Provider Create by either SOA (Old or New Service Provider) with a Due Date which is Prior to the NPA-NXX Effective Date
  + B.5.2.1C – Subscription Version Modify Active Version Using M-ACTION by a Service Provider SOA – Confirmed
  + B.5.2.3C – Subscription Version Modify Prior to Activate Using M-ACTION – Confirmed
  + B.5.2.4C – Subscription Version Modify Prior to Activate Using M-SET – Confirmed
  + B.5.2.7C – Subscription Version Modify Disconnect-Pending Version Using M-ACTION by a Service Provider SOA – Confirmed
  + B.5.3.1C – Subscription Version Cancel by Service Provider SOA after Both Service Provider SOAs have Concurred – Confirmed
  + B.5.3.2C – Subscription Version Cancel: No Acknowledgment from a SOA – Confirmed
  + B.5.3.3C – Subscription Version Cancels with Only One Create Action Received – Confirmed
  + B.5.3.4C – Subscription Version Cancel by Current Service Provider for Disconnect-Pending Subscription Version – Confirmed
  + B.5.3.5C – Un-Do Cancel-Pending Subscription Version Request – Confirmed
  + B.5.4.1C – Subscription Version Immediate Disconnect – Confirmed
  + B.5.4.2C – Subscription Version Disconnect With Effective Release Date – Confirmed
  + B.5.4.7.1C – SOA Initiates Successful Disconnect Request of Ported Pooled TN – Confirmed
  + B.5.4.7.3C – Subscription Version Disconnect Request of Ported Pooled TN With Effective Release Date – Confirmed
  + B.5.4.7.14C – Subscription Version Immediate Disconnect of a Contaminated Pooled TN Prior to Block Activation (after Effective Date) – Confirmed
  + B.5.5.2C – Subscription Version Conflict Removal by the New Service Provider SOA – Confirmed
  + B.5.5.4C – Subscription Version Conflict by Old Service Provider Explicitly Not Authorizing (2nd Create) – Confirmed
  + B.5.5.5C – Subscription Version Conflict Removal by the Old Service Provider SOA – Confirmed
  + B.5.6C – Subscription Version Query – Confirmed
  + B.6.4C – lsmsFilterNPA-NXX Creation by the SOA – Confirmed
  + B.6.5C – lsmsFilterNPA-NXX Deletion by the SOA – Confirmed
  + B.6.6C – lsmsFilterNPA-NXX Query by the SOA – Confirmed
  + B.7.3C – Sequencing of Events on Initialization/Resynchronization of SOA – Confirmed
  + B.7.3.1C – Sequencing of Events on Initialization/Resynchronization of SOA using SWIM – Confirmed

**GDMO/ASN.1**

**Nov ’08 LNPAWG**, request to include [**GDMO**](https://numberportability.com/documents/1218/4520_LasWhrv)  and [**ASN**](https://numberportability.com/documents/1219/4521_AN3UH0O) :

* [**NANC 390\_gdmo**](https://numberportability.com/documents/1220/nanc390_gdmo_iXKFbBS.txt)

NANC 390 - GDMO

Download the document [**NANC 390\_gdmo**](https://numberportability.com/documents/1220/nanc390_gdmo_iXKFbBS.txt)

**Final Resolution:**

Moved to closed/no-action.

**Related Release:**

N/A.

**Status:** Closed