**Origination Date:** 4/24/18

**Originator:** iconectiv

### Change Order Number: NANC 523

**Description:** Implicit NPAC SMS Requirements

**Functional Backwards Compatible:** Yes

**IMPACT/CHANGE ASSESSMENT**

|  |  |  |
| --- | --- | --- |
| DOC | FRS | IIS |
| Y | N |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| CMIP | GDMO | ASN.1 | **Neustar NPAC** | iconectiv NPAC | SOA | LSMS |
| N | N | N | Y | N | N |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| XML | XIS | XSD | **Neustar NPAC** | iconectiv NPAC | SOA | LSMS |
| N | N | N | Y | N | N |

**Business Need**

Some NPAC SMS requirements are implicit in that the explicit behavior of the NPAC SMS needs to be inferred from narratives defined in non-FRS NPAC SMS documents, such as in error code descriptions or in attribute descriptions in interface specifications. Explicit definintion of the requirements is needed, as defined in PIM 110 as it applies to NPAC SMS behavior for processing certain error responses from broadcasts to LSMSs as well as other conditions..

**Description of Change:**

Changes detailed below.

**FRS Changes:**

Add new requirements to indicate that on activation of a subscription version or a number pool block, an LSMS error response of “duplicate managed object” or “object already exists” will not be treated as an error response, but will be treated as a success response from that LSMS. These error responses indicate that the LSMS already has an SV with the same SV ID or a Number Pool Block with the same Block ID in its database.

In **Section 3.13.2** on **Block Holder General**:

[snip]

**RR3-134** **Number Pooling Block Holder Information – Failed SP List Update for Block for Local SMS**

NPAC SMS shall consider a Local SMS to be discrepant and shall update the Block Failed SP List, based on a Local SMS failing to process the Block Object, for an addition, modification, deletion, re-send, resync, or mass update. (Previously B-140)

**RR3-134.1 Number Pooling Block Holder Information Creation Broadcast – Error Response Exception**

NPAC SMS shall not consider a Local SMS to be discrepant and shall not put the Local SMS on the Failed SP List when the Local SMS responds with an Error Response to an NPAC SMS Number Pool Block create broadcast when the error response indicates that the Number Pool Block aready exists on the Local SMS. The NPAC SMS shall behave as if it received a successful response from that Local SMS.

[snip]

In **Section 5.1.2.2.4** on **Subscription Version Activation**:

[snip]

**R5-58.5** **Local SMS Activation Message Log - Viewing**

NPAC SMS shall allow NPAC personnel to view the Local SMS Activation Message log.

**RR5-230** **Local SMS Activation Error Response – Exception**

NPAC SMS shall not consider a Local SMS to be discrepant and shall not put the Local SMS on the Failed SP List when the Local SMS responds with an Error Response to an NPAC SMS Subscription Version create broadcast when the error response indicates that the Subscription Version aready exists on the Local SMS. The NPAC SMS shall behave as if it received a successful response from that Local SMS.

**R5‑59.1** **Activate Subscription Version - Set Status of Current to Active**

NPAC SMS shall, upon receiving successful activation acknowledgment from all involved Local SMSs, set the sending Subscription Version status to active.

[snip]

Add a new requirement to indicate that on the disconnect of a subscription version or number pool block, an LSMS error response of “no such managed object” or “object not found” will not be treated as an error response, but will be treated as a success response from that LSMS. These error responses indicate that the LSMS does not have the specified SV or Number Pool Block in its database.

In **Section 3.13.2** on **Block Holder, General**.

[snip]

**RR3-134** **Number Pooling Block Holder Information – Failed SP List Update for Block for Local SMS**

NPAC SMS shall consider a Local SMS to be discrepant and shall update the Block Failed SP List, based on a Local SMS failing to process the Block Object, for an addition, modification, deletion, re-send, resync, or mass update. (Previously B-140)

**RR3-134.2 Number Pooling Block Holder Information Creation Broadcast – Error Response Exception (see above)**

**RR3-134.2 Number Pooling Block Holder Information Deletion Broadcast – Error Response Exception**

NPAC SMS shall not consider a Local SMS to be discrepant and shall not put the Local SMS on the Failed SP List when the Local SMS responds with an Error Response to an NPAC SMS Number Pool Block deletion broadcast when the error response indicates that the Number Pool Block does not exist on the Local SMS. The NPAC SMS shall behave as if it received a successful response from that Local SMS.

**Section 5.1.2.2.5 on Subscription Version Disconnect**

[snip]

**R5-65.6** **Disconnect Subscription Version - Set to Sending**

NPAC SMS shall set a Subscription Version status to sending upon sending the disconnect messages to the Local SMSs.

**RR5-231** **Local SMS Disconnect Error Response – Exception**

NPAC SMS shall not consider a Local SMS to be discrepant and shall not put the Local SMS on the Failed SP List when the Local SMS responds with an Error Response to an NPAC SMS Subscription Version deletion broadcast when the error response indicates that the Subscription Version does not exist on the Local SMS. The NPAC SMS shall behave as if it received a successful response from that Local SMS.

**R5‑66.2** **Disconnect Subscription Version Complete - Set Disconnect Complete Date**

NPAC SMS shall update the Disconnect Complete timestamp of the previously active Subscription Version upon completion of the broadcast, and the FIRST successful response from a Local SMS.

[snip]

**EFD Changes:**

Add a new section to the EFD to identify the NPAC SMS behavior of handling LSMS error responses indicating the Subscription Version or Number Pool Block object requested to be created already exists or the Subscription Version or Number Pool Block object requested to be deleted does not exist. Such error responses will be treated as success responses.

B.1.3 Local LSMS Error Responses Handled as Success Responses

The NPAC SMS will treat LSMS Error Responses to Number Pool Block broadcasts or Subscription Version broadcasts as if the LSMS sent a Successful Acknowledgement Response in the following situations. This behavior is true for both the CMIP and XML interfaces.

1. When the NPAC SMS broadcasts a Number Pool Block Create or Subscription Version Create to the Local SMS and the Local SMS responds with an error indicating the object already exists (duplicate managed object instance), the NPAC SMS shall treat the Local SMS error response as if a successful acknowledgement was received and not place the LSMS on the Failed SP List for the Subscription Version or Number Pool Block Object.
2. When the NPAC SMS broadcasts a Number Pool Block Delete or Subscription Version Delete to the Local SMS and the Local SMS responds with an error indicating the object does not exist (no such object instance), the NPAC SMS shall treat the Local SMS error response as if a successful acknowledgement was received and not place the LSMS on the Failed SP List for the Subscription Version or Number Pool Block Object.

**XIS Changes:**

**Section 2.12** **on Error Handling**, add an entry to Table 2 that describes Errors in Synchronous Acknowledgements for SOA or LSMS messages to the NPAC to account for the following condition: when a message is received from a SOA or LSMS and the origination timestamp is later than the departure timestamp, fail the request and return an error in the synchronous acknowledgement.

|  |  |  |  |
| --- | --- | --- | --- |
| **Error Scenario** | **basic code** | **status code** | **status info** |
| HTTP message is not “POST HTTP/1.1” | access denied | 14517 | Only POST-HTTP/1.1 accepted - received XXX-YYY |
| Certificate CN is not the connection SPID | access denied | 14512 | Client certificate validation failure |
| Certificate OU is not the connection system type | access denied | 14512 | Client certificate validation failure |
| Certificate L is not the connection region | access denied | 14512 | Client certificate validation failure |
| Certificate not found/supplied | access denied | 14513 | No inbound client certificate |
| Message header fields (schemaversion, spid, key, region, message direction) not valid | access denied | 14514 | MessageHeader schema, spid, key, region, msgXtoY validation failure |
| Message batch count too large | results too large | 14515 | Payload message count of 99999 exceeds limit of 99999 |
| Message size too large | results too large | 14516 | Payload message size of 99999 exceeds limit of 99999 |
| Departure time invalid | invalid data values | 9001 | Departure time XXXXXX is not valid/UTC format |
| Departure time out of range | invalid data values | 14506 | Departure time XXXXXX not within 999 seconds of YYYYYY |
| Origination time later than Departure time | invalid data values | 14510 | The message origination TS is greater than the departure time |
| Too many XML connections established | too many connections | N/A | N/A |
| System needs to retry connection to same host | try same host | N/A | N/A |
| System needs to try connection to other host | try other host | N/A | N/A |

Table 2 – Detailed SyncAck Error Scenarios