CHANGE ORDER SUMMARY – OPEN COs

FOR

NPAC SMS FUNCTIONALITY

**Rev: 200
February 8, 2022
(Conference Call)**

# Preface

*Originally commissioned as a working group under the NANC (North American Numbering Council) the LNPA WG (Local Number Portability Administration Working Group) dealt with Number Portability issues, processes/procedures and changes to the NPAC SMS. In December 2018 it was renamed the TOSC (Transition Oversight Sub Committee) and managed issues/changes related to the transition of NPAC from the previous vendor to iconectiv.*

*After the re-chartering of the NANC, the group became The Informal LNP Team until November of 2020 when the group restructured into the NPIF (Number Portability Industry Forum). The NPIF works with the NAOWG (Number Administration Oversight Working Group) on any issues that require the involvement of NANC and continues its mission to manage processes/procedures, changes to the NPAC SMS and issues related to Number Portability.*

*This Change Order Summary document tracks the status of all Change Orders that were opened as part of, or after NPAC Transition (5-25-18). Information on Change Orders Implemented/Closed prior to Transition (5-25-18) and not part of Release 3.4.8 baseline, can be found in the Change Order Summary Pre Transition – Implemented COs document located on the numberportability.com website. Information on Change Orders opened after Transition and Implemented/Closed after Release 3.4.8 baseline can be found in the Change Order Summary Post Transition – Implemented COs document located on the numberportability.com website*

# Legend

* ***Release #/Target Date*** *– Number and date of development release in which changes will be made to support Change Order*
* ***Change Order Number – Description/Name*** *– Number and name assigned by CMA after CO has been accepted.*
* ***Originator –*** *Company that created the Change Order*
* ***Date Accepted –*** *Date the Change Order was accepted by NPIF (Number Portability Industry Forum)*
* ***Description*** *– Name of the Change Order and the Business Need as defined in the Change Order itself*
* ***Category –****Category where Change Order currently resides in the process*
	+ *Open*
	+ *Accepted*
	+ *Next Doc Release*
	+ *Development Release*
	+ *Awaiting SOW*
	+ *Approved SOW*
	+ *Cancel-pending*
* ***Status –*** *Status of Change Order shown on NPAC website*
	+ *Closed – The Change Order was considered and rejected.*
	+ *Open – The Change Order has been considered and there may be further discussion.*
	+ *Requested - The LNPA TOSC has reached agreement on the Change Order and either a SOW may be requested or the requirements updates (Doc Only) will be included in a future version of the Industry Document(s).*
	+ *Implemented – The Change Order was adopted and has been implemented in the NPAC system. It will remain in the Change Order Summary – Open COs for 1 cycle then be moved to the Change Order Summary – Implemented COs document*
* ***Notes –*** *Additional detail on the Change Order status*
* ***NPAC Level Of Effort*** *– This field defines the Level of Effort to implement the Change Order (Low, Medium or High)*
* ***Systems Impacted*** *– CMIP or XML –This field indicates if there is an impact to the Local System (SOA or LSMS). Choices are: Yes or No*
* ***PIM #*** *- This is the Problem Identification Management number of the PIM associated with the Change Order.*
* ***Go To Link –*** *This is a link to the actual Change Order Detail.*

| **Change Order Summary** |
| --- |
| **Release #/ Target Date** | **Change Order # - Description/Name** | **Category** | **Status** | **PIM #** | **Go To Link** |
|  | NANC 447 – NPAC Support for CMIP over TCP/IPv6 | Accepted | Open |  | [NANC447](#NANC447) |
| R5.102/06/22 | CO 554 - XML LSMS Query Recovery | Approved SOW | Requested | 130 | [CO554](#CO554) |
|  | CO 555 – Turn-Up Test Plan – Doc Only | Next Doc Release | Requested | 135 | [CO555](#CO555) |
|  | CO 556 – New SV Download Reason | Accepted | Open | 139 | [CO556](#CO556) |
|  | CO 557 - SPID Level Outbound Flow Control Tunables | Accepted | Requested |  | [CO557](#CO557) |
|  | CO 558 - Scheduled NPBs during SPID Migrations – Doc Only | Next Doc Release | Requested |  | [CO558](#CO558) |
|  | CO 559 - Limit Delegation Configuration – Doc Only | Next Doc Release | Requested | 140, 141 | [CO559](#CO559) |
|  | CO 560 – SMURF File EOL – Doc Only | Next Doc Release | Requested |  | [CO560](#CO560) |

| Change Order Details |
| --- |
| CO # | Originator | Date Accepted | Description | Category | Notes | NPAC LevelOfEffort | Systems Impacted |
|  |  |  |  |  |  |  | CMIP | XML |
|  |  |  |  |  |  |  | SOA | LSMS | SOA | LSMS |
| NANC 447 | AT&T | 11/01/11 | **Name:****NPAC Support for CMIP over TCP/IPv6****Business Need:**Currently the NPAC supports IPv4 as the Internet addressing protocol. Due to various corporate initiatives, several Service Providers have inquired about the desire and timeline of the NPAC supporting IPv6 addresses. The purpose of this change order is to request analysis to determine the feasibility and timing of adding support for IPv6.**Link to Change Order:**[NANC 447](https://workinggroup.numberportability.com/nanc-change-orders/?search=NANC+447&return-url=%2Fnanc-change-orders%2F&start_date=&end_date=) | Accepted | Func Backward Compatible: YesNov ’11 LNPAWG, discussion:A walk-thru of the proposed change order took place. The group accepted the change order.Mar ’12 LNPAWG, discussion:The group agreed to forward the change order to the NAPM LLC, to request an SOW from Neustar.Jan ’13 status update:The NAPM LLC has withdrawn the SOW request. This change order moves back into the Accepted category. |  | Yes | Yes | No | No |
| [CO 554](#CO554) | iconectiv | 10/6/20 | Name:XML LSMS Query Recovery**Business Need:**When an XML LSMS is not responding to NPAC SMS download messages for either a period of time or after a certain volume of messages are queued to be sent, NPAC SMS operations staff may disable downloads to the XML LSMS or change the state of the XML LSMS to Inactive. When this occurs, the only mechanisms for XML LSMS systems to recover missed downloads are either * by requesting and processing a BDD file for the time range when the XML LSMS downloads were disabled or the XML LSMS was in an Inactive state or
* performing queries to obtain the missed data while simultaneously processing new downloads.

Having a mechanism that is analogous to the CMIP interface’s recovery functionality would allow for XML LSMS systems to recover missed data without the need for a BDD file or querying data while processing downloads from the NPAC SMS. Also see PIM 130. **Link to Change Order:**[CO 554](https://workinggroup.numberportability.com/documents/7466/CO_554_-_XML_LSMS_Query_Recovery_v2.docx) | Approved SOW | 10/06/2020 LNP Informal MeetingThis CO was reviewed, accepted, assigned CO 554 12/08/2020 NPIF Meeting* Consensus was reached to move this CO to status=Requested
* New AI – Tri-chairs to have the NAPM to request an SOW from the vendor

10/06/2020 NPIF Meeting* CO TBD – XML LSMS Query Recovery
* Steve Koch (iconectiv) reviewed the draft CO
* This draft CO was accepted and assigned CO 554
* Version 2 will be sent out with corrections to the steps

12/8/2020 NPIF Meeting* Steve Koch reviewed the updated Change Order
* Consensus was reached to move this CO to status=Requested
* New AI – Tri-chairs to have the NAPM to request an SOW from the vendor

01/05/2021 NPIF Meeting* 12082020-02 - Tri-Chairs to ask NAPM to request an SOW of vendor for CO 554
* The Tri-Chairs sent a request to the NAPM to send a request to the vendor for an SOW
* This Action Item is now closed

02/2021 * SOW approved

06/08/2021 NPIF Meeting* CO being worked at APT

12/07/2021 NPIF Meeting* This CO is in Requested status and is scheduled for implementation in R5.1 on February 6th, 2022
 |  | N | N | N | Y |
| CO 555 | iconectiv | 07/06/21 | Name: Turn-Up Test Plan – Doc Only **Business Need:**Test the ability of local systems (SOA and LSMS) to accept an incoming message from NPAC when the Schema Version minor value is greater than the current minor version.**Link to Change Order:****[CO 555](https://workinggroup.numberportability.com/documents/7741/CO_555_-_Turn-up_Test_Plan_-_Doc_Only_v2.docx)** | Next Doc Release | 07/06/2021 NPIF MeetingThis CO was reviewed, accepted, assigned CO 555iconectiv will update the Vendor Certification and Regression test plans in track changes mode for review at the August NPIF meeting08/03/2021 NPIF meeting* CMA reviewed updated Vendor Certification and Regression Test Plan – Chapter 17.
* Consensus was reached on updates
* CMA to post to website

09/07/2021 NPIF meeting* Consensus reached on proposed wording changes to CO.
* CO status changed to Requested
 |  | N | N | N | N |
| CO 556 | 10X People | 09/17/21 | Name: New SV Download Reason Business Need:* When a Delete SV message is sent from the NPAC to the LSMS, it is not clear as to why the number is being removed. The two options are:
* because the number has been disconnected and is no longer in service, or
* it is a Port-to-Original of a still-working TN and is reinstating default routing.
* Due to the complex interactions with Service Provider OSS/BSS systems in the porting workflow, the removal of the TN from the network does not provide the reason for the delete message, and carriers could erroneously remove a still-working TN from OSS/BSS systems or leave a disconnected-service TN in an OSS/BSS system when it should be removed. Since OSS/BSS Systems need to treat the two options differently, knowing whether or not the number is still in service makes updates to internal carrier systems more efficient and accurate. See also PIM 139

[CO 556](https://workinggroup.numberportability.com/documents/7929/CO_556_-_New_SV_Download_Reason_v2.docx) | Accepted | 09/07/2021 NPIF MeetingThis CO was reviewed, accepted, assigned CO 55610/04/2021 NPIF Meeting* John N. (10X People) –to add language to the Change Order to clarify that this update only applies to XML
* For Audits, if the NPAC identifies a discrepancy and sends an update to the local system with the discrepancy, the download reason will not show new “delete pto”
* If a Local system wants more information on download reason they would need to query the NPAC
* 10X People to make updates discussed to Change Order

12/07/2021 NPIF Meeting* Consensus was reached to move this CO to Requested status
* 12072022-01 - NPIF tri-chairs to request NAPM LLC to request an SOW for CO 556 from iconectiv
* CMA to change status of CO 556 to Requested on website

1/11/2022 NPIF Meeting* Consensus was reached to change status of this CO back to open to discuss proposed changes
* Consensus was reached on proposed changes to this CO which were reviewed by 10X People and iconectiv.
* 12072021-01 - NPIF tri-chairs to request NAPM LLC to request an SOW for CO 556 from iconectiv
* NPIF Tri-chairs sent request to NAPM LLC chairs
* NPIF tri-chairs will retract request made to NAPM chairs re: SOW
* CMA will post updated CO to website and change status back to Open
 |  | N | N | N | Opt |
| CO 557 | iconectiv | 10/04/21 | Name: SPID Level Outbound Flow Control tunablesBusiness Need:Currently the NPAC has one set of tunables for outbound flow control, which are specified at the system level. Having system tunables at the SPID level would allow for increased flexibility. Initially, these SPID-level tunables could be defaulted to different values for CMIP versus XML systems, as the two interface types have different aspects to consider as related to outbound flow control. For example, the XML interface allows for batching of multiple requests (current maximum is 100) into a single XML document, and as such, a single XML document sent from the NPAC to a local system could instantaneously cause the NPAC to invoke outbound flow control processing for the local system. The CMIP interface does not support batching, and as such, it requires multiple protocol-level messages to be sent from the NPAC before outbound flow control processing is invoked. While a new set of system tunables could be introduced to address the differences between the CMIP and XML interfaces, changing the tunables from system tunables to SPID-level tunables allows for the most flexibility going forward, including using different values for SOA systems versus LSMS systems.[CO 557](https://workinggroup.numberportability.com/documents/7933/CO_557_-_SPID_Level_Outbound_Flow_Control_Tunables_v1.docx) | Accepted | 10/04/2021 NPIF MeetingThis CO was reviewed, accepted, assigned CO 55712/07/2021 NPIF Meeting* Consensus was reached to move this CO to Requested status
* 12072021-02 - NPIF tri-chairs to request NAPM LLC to request an SOW for CO 557 from iconectiv
* CMA to change status of CO 557 to Requested on website
 |  | N | N | N | N |
| CO 558 | iconectiv | 11/02/21 | Name:Scheduled NPBs During SPID migrations – Doc OnlyBusiness Need:Currently the NPAC SMS updates the Block Holder SPID of Scheduled Block Create and Scheduled Block Modify requests when migrating an NPA-NXX-X or Number Pool Block during a SPID Migration, but this functionality is not captured in the FRS. For example, if an NPA-NXX-X has been created in the NPAC SMS, and the Number Pool Block Create has been scheduled for a future date/time, and a SPID Migration updates the SPID on that NPA-NXX-X before that scheduled date/time, NPAC SMS will also update the Block Holder SPID on the Scheduled Number Pool Block Create.The FRS should describe how the NPAC SMS handles scheduled Number Pool Block Creates and Modifies when related to a SPID migration.[CO 558](https://workinggroup.numberportability.com/documents/7997/CO_558_-_Scheduled_NPBs_During_SPID_Migration_-_Doc_Only.docx) | Next Doc Release | 11/02/2021 NPIF MeetingThis CO was reviewed, accepted, assigned CO 558AI 10042021-01 – iconectiv to draft a Doc Only Change Order to describe the current functionality related to scheduled pool block activities and SPID migrations is now closed12/07/2021 NPIF Meeting* Consensus reached to change status to Requested
* CMA to updated status on website
 |  | N | N | N | N |
| CO 559 | iconectiv | 12/07/21 | Name: Limit Delegation Configuration – Doc Only**Business Need:** As described in PIM 140, service provider SPIDs are currently allowed to be delegates of other service provider SPIDs. However, no two service provider SPIDs have entered into a delegation arrangement since the delegation functionality was introduced in late 2013. Supporting the ability of service provider SPID to be a delegate of another service provider SPID requires relatively complex processing logic for notifications in the NPAC. This complex processing has not been utilized for 8 years. During meetings of the APT in 2021, no member of the group could determine a business scenario that would utilize the ability of a service provider SPID to be a delegate of another service provider SPID.In discussions at the APT, the group agreed to recommend updates to M&Ps that would prohibit a service provider SPID – based on Service Provider Type – from being a delegate of another service provider SPID. This change contains updates to the FRS document to note that the ability of a service provider SPID to be a delegate of another service provider SPID may be limited by M&Ps.This change does not affect the ability of non-service-provider SPIDs to be delegates of service provider SPIDs. As described in PIM 141, there is currently no limit to the number of delegate SPIDs that may be configured for a single grantor SPID. Adding delegate SPIDs can significantly increase the overall volume of notifications generated by the NPAC, as notifications to a grantor SPID may also be sent to each of its delegate SPIDs.In discussions at the APT, the group agreed to recommend updates to M&Ps that would limit the quantity of delegate SPIDs that can be configured for a single grantor SPID. This change contains updates to the FRS document to note that the quantity of delegate SPIDs that may be configured for a single grantor SPID may be limited by M&Ps.This change does not affect the quantity of grantor SPIDs to which a single delegate SPID may be associated.[CO559](https://workinggroup.numberportability.com/documents/8034/CO_559_-_Limit_Delegation_Configurations_-_Doc_Only.docx) | Next Doc Release | 12/07/2021 NPIF MeetingThis CO was reviewed, accepted, assigned CO 559Consensus reached to move to Requested status01/11/2022 NPIF MeetingCMA reviewed updated FRS in track changes mode.Consensus reached on changesCMA to post updated version of FRS to website |  | N | N | N | N |
| CO 560 | iconectiv | 12/07/21 | Name: SMURF File EOL - Doc only**Business Need:**Currently the FRS states that the EOL character for Selection Input Criteria SPID Migration Update Request (SIC-SMURF) Files is a carriage return (CR). The FRS should state that the End of Line (EOL) character is a line feed. This is the value that is being used in the current implementation of the NPAC SMS and by all NPAC SMS Service Providers.[CO560](https://workinggroup.numberportability.com/documents/8018/CO_560_-_SMURF_File_EOL_-_Doc_Only.docx) | Next Doc Release | 12/07/2021 NPIF MeetingThis CO was reviewed, accepted, assigned CO 560Consensus reached to move to Requested status01/11/2022 NPIF MeetingCMA reviewed updated FRS in track changes mode.Consensus reached on changesCMA to post updated version of FRS to website |  | N | N | N | N |
|  |  |  |  |  |  |  |  |  |  |  |