

LNPA WORKING GROUP
January 7-8, 2014 Meeting
FINAL Minutes

Scottsdale, AZ	Host: iconectiv
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TUESDAY January 7, 2014
Attendance

Name	Company	Name	Company
Lonnie Keck	AT&T	Dave Garner	Neustar
David Alread	AT&T	Fariba Jafari	Neustar
Teresa Patton	AT&T	Gary Sacra	Neustar
George Guerra	AT&T (phone)	John Nakamura	Neustar
Mark Lancaster	AT&T (phone)	Larry Vagnoni	Neustar
Renee Dillon	AT&T (phone)	Lavinia Rotaru	Neustar
Ron Steen	AT&T (phone)	Mubeen Saifullah	Neustar
Tracey Guidotti	AT&T (phone)	Paul LaGattuta	Neustar
Lindsey Carr	Bandwidth.com	Ed Barker	Neustar
Lisa Jill Freeman	Bandwidth.com	Jim Rooks	Neustar (phone)
Marian Hearn	Canadian LNP (phone)	Marcel Champagne	Neustar (phone)
Jan Doell	CenturyLink	Steve Addicks	Neustar (phone)
Brenda Bloemke	Comcast	Shannon Sevigny	Neustar Pooling (phone)
Linda Birchem	Comcast (phone)	Ramesh Chellamani	Oracle Communications
Beth O'Donnell	Cox (phone)	Chad Younger	Sprint
Dena Hunter	Cricket (phone)	Rosemary Emmer	Sprint
Linda Peterman	Earthlink Business	Suzanne Addington	Sprint
Joe Mullin	Edge Communications	Karen Riepenkroger	Sprint (phone)
Wendy Trahan	GVNW (phone)	Shaunna Forshee	Sprint (phone)
George Tsacnaris	iconectiv	Jeanne Kulesa	Synchronoss
Joel Zamlong	iconectiv	Rosalee Pinnock	Syniverse
John Malyar	iconectiv	Jesse Ochoa	T-Mobile
Kathy Timko	iconectiv	Luke Sessions	T-Mobile
Steven Koch	Iconectiv	Paula Campagnoli	T-Mobile
Kayla Sharbaugh	iconectiv (phone)	David Lund	US Cellular (phone)
Pat White	iconectiv (phone)	Deb Tucker	Verizon Wireless
Kim Isaacs	Integra (phone)	Imanu Hill	Vonage (phone)
Bridget Alexander	JSI	Scott Terry	Windstream
Lynette Khirallah	NetNumber (phone)	Dawn Lawrence	XO (phone)
Bill Reidway	Neustar		

NOTE: ALL ACTION ITEMS REFERENCED IN THE MINUTES BELOW HAVE BEEN CAPTURED IN THE “January 7-8, 2014 WG ACTION ITEMS” FILE AND ATTACHED HERE.

[January 7-8, 2014 LNPA WORKING GROUP ACTION ITEMS.XLS](#)

LNPA WORKING GROUP MEETING MINUTES:

November 5-6, 2013 Draft LNPA WG Meeting Minutes Review:

The November 5-6, 2013, meeting minutes were reviewed and approved with a minor change. The first Sunday of September SPID Migration Blackout date was inadvertently omitted from the schedule. This has been corrected. The minutes will be marked as FINAL and distributed.

Updates from Other Industry Groups

OBF Ordering Solutions Wireless Service Ordering (WSO) Subcommittee Update – Deb Tucker:

The Wireless Service Ordering Subcommittee met December 5, 2013, and discussed progress made to date by the OBF OS Local Service Ordering (LSO) Subcommittee on Issue 3450. It was noted that a proposed change to the LSO NPQTY field in Issue 3450 revises the usage from being Optional to Conditional. The condition note listed states: “Prohibited when the request is for a simple port, otherwise required.” Such a change will have an impact on Wireless porting systems. Although the NPQTY field is defined as being Optional in the WICIS guidelines, the Wireless community populates this field on both simple and complex port requests and does not want to see this field prohibited for simple ports. The WSO will work with the LSO to gain agreement to maintain this field as Optional when REQTYP = C for all ports.

Issue 3429 – WICIS Review for Alignment and Business Practices. This is a blanket issue opened to review the WICIS document for any needed updates and it remains open.

The next meeting is scheduled for March 11, 2014.

OBF Local Service Ordering Subcommittee – Linda Peterman:

OBF
ORDERING SOLUTIONS COMMITTEE
LOCAL SERVICE ORDERING SUBCOMMITTEE

Since the November 5, 2013, LNPA WG meeting, two virtual Local Service Ordering Subcommittee (LSO) meetings have been held. Work related to publication of a new LSOG, tentatively targeted for the end of 1Q14 has been the primary topic discussed.

Issues in Final Closure: None.

Issues Withdrawn: None.

Issues in Initial Closure or Initial Pending: None.

Prioritized Open LSO Issues:

High Priority

1. Issue 3477, LSOG: Standard field length minimums identified and repeating/# of occurrences on each field (next LSOG publication dependent on this Issue)
2. Issue 3450, LSOG: Standard Validation and Submission fields for REQTYPE “C” Simple and Non-Simple Port Orders

Medium Priority

1. Issue 3443, LSOG: Increase the Name fields’ length in the 71 and 72 practices (to be worked after Issue 3450)
2. Issue 3373, LSOG: Standardization of RT of “Z” in the 099 practice for REQTY “C” to be utilized by all providers

Low Priority

1. Issue 3478, LSOG: Replace LALO with LD/LV fields on Directory Listing form

It was noted that Issues 3448, LSOG – Add new Line Activity (LNA) value to require disposition of each Telephone number when converting, and 3449, LSOG – Allow for multiple Pilot Numbers on Hunt Group (HGI) form, are on hold pending internal review.

New Issues: None

The LSO has the following meeting scheduled:

DATE	CALL DETAILS
01/28/14	LSO Virtual Meeting Agenda: <ul style="list-style-type: none"> • Work on next LSOG Release to ready for publication
02/24-27/14	LSO Face-to-Face Meeting Agenda: <ul style="list-style-type: none"> • Any remaining LSOG Release publication work • Return to work on Issue 3450UOM discussion on NP, EU and LSR Forms

INC Update – Dave Garner:

INC Issue 748: Assess Impacts on Numbering Resources and Numbering Administration with Transition from Public Switched Telephone Network (PSTN) to Internet Protocol (IP)

Issue Statement: As the industry and regulatory bodies move from the current Public Switched Telephone Network (PSTN) towards Internet Protocol (IP), consideration needs to be given to the numbering scheme. Will the current telephone number format be utilized, in whole or part, in the IP environment or will some other numbering addressing format be used? It is necessary for INC to be aware of regulatory mandates and industry activities addressing the numbering protocol to be used for IP technology as well as numbering impacts during the PSTN to IP transition in order to update or create new numbering guidelines.

At the December INC meeting, INC continued to discuss developments regarding the PSTN to IP transition, including:

- Received a presentation, *2020 Vision for Telephone Numbers*, from Henning Schulzrinne, FCC CTO. The presentation contained material and addressed subjects in prior presentation to the industry. It also listed the following as, “Tentative high-level goals”:
 - Do not interfere with technology transition
 - While avoiding unnecessary legacy upgrades
 - separate policy & mechanism > policy agility
 - make old look like new (legacy network gateways)
 - Competition, competition, competition
 - Simplify overall system
 - lower complexity in allocation & databases
 - new services (video, HD audio)
 - easier to understand for consumers & providers
 - Security: prevent spoofing & other fraud
 - Accountability
 - Who & what (M2M, people, services?) are using numbers?
 - Maintain or increase number utilization
 - Avoid premature splits & overlays
 - Avoid sudden surprises
 - “oops, smart (parking) meters just gobbled up the 405 area code”
- Conferred with Henning Schulzrinne and Bob Cannon, Office of Strategic Planning, on topics related to numbering and the role of INC via a presentation, *Transition to all IP Network*.

Topics of the presentation were:

- ATIS Support Industry Numbering
 - INC Relationship with NANC
 - Role of INC
 - INC Activity related to PSTN Transition
 - Areas of Discussion based on INC's PSTN-Related Activities
 - Areas for Further INC Analysis
- Received a presentation, *Number Allocation and Conservation 2013*, from Tom McGarry, Fellow and VP, Advanced Technology Group, Neustar. The presentation basically mirrored the information presented at the November LNPA WG meeting. Major topics were:
 - Potential impacts to numbering demand
 - Evidence of increased demand
 - Concepts – allocation and conservation
 - Pooling Options Analysis
 - Assumptions for all methodologies –
 - Enabling an immediate effective date (INC issues)
 - Enabling the NPAC to store inventory (LNPA issues)
 - Provisioning model
- Received a presentation, *Using NPAC as the ENUM Registry*, from Penn Pfautz, Director of Product Development, AT&T. The presentation outlined the use of the NPAC as follows:

NPAC as ENUM Registry:

 - NPAC capabilities can be used to instantiate a combined Tier 0/1 ENUM registry for the US
 - Existing VOICEURI field is re-purposed to contain NS record(s) which point to the Tier 2 ENUM server of the service provider of record for number
 - NS records are populated into NPAC by the serving provider SOA and distributed to each provider LSMS

- Providers then populate the NS records in their internal ENUM servers
- Originating provider queries its ENUM server and obtains the NS record resulting in a query to the Tier 2 ENUM server of the destination carrier.
- The response to the Tier 2 query provides NAPTR records that identify the ingress SBC to be used to deliver the call to terminating provider.

INC Issue 759: Updates to the block expedite timeframe due to upcoming changes to the NPAC 5 Business Day First-Port Notification

Issue Statement: As indicated in the notice NPAC sent to its users: At its May 8, 2013 meeting, the LNPA Working Group re-considered the first port notification process and concluded that while the first port notification should be retained, the delay interval imposed on the activation of an SV or thousand block should be eliminated. Effective Sunday, July 14th, the 5 business day minimum interval will be reduced to 0 for initial porting activity in a code where it is the port of a telephone number that triggers the process. The minimum interval for creation of a block, where it is a block that represents the first porting activity in the NPA-NXX, also will be reduced. However, because coding is required to bring the interval all the way down to 0, the interval for a block's activation will drop to 1 business day. This minimum interval for block activation eventually will be reduced to 0 as well, but not until the coding necessary to accomplish the change is performed. We will provide notice when the block's interval can be reduced to 0.

With this change to the first port interval, INC may consider shortening the block expedite timeframes.

At the December INC meeting, INC was advised that NPAC Release 3.4.6 was implemented in all US NPAC Regions on November 3rd and as part of that release the block's activation interval was lowered to 0 business days, thus eliminating the delay. INC was also advised that on November 4th, the NPAC Pooling operation team started using the revised language which removed the reference to the 1st Port delay time, in the e-mail they send to the Block Holder and Pooling Administrator (PA), when a Block cannot be created because the code has not been created in the NPAC database. The sentence in the e-mail now reads, " If the code isn't loaded into the NPAC by your block's assigned effective date of MM/DD/YYYY, then your NPAC block's effective date will be delayed."

Based on these activities being complete, the INC updated the TBPAG and COCAG documents removing any reference to the 1st Port delay time.

INC Issue 769: Direct Petition by NANPA for Overlay NPA Codes – New or Additional and Addition of LNPA WG Best Practice Supporting the utilization of overlays as the preferred form of area code relief.

Issue Statement: New Sections (5.6. 1 and 5.6.2) should be added to the NPA Code Relief Planning & Notification Guidelines, to reflect a streamlined process when the NPA overlay alternative is the only relief that meets the Section 5.0. This streamlined process would be used when an additional NPA is required for (a) an existing overlay complex, or (b) a single NPA area and NANPA has determined that only an overlay alternative will meet the guidelines; the Initial Planning Document and relief planning meeting and consensus are not required. NANPA should directly petition the appropriate regulatory agency when NPA relief is needed and notify the industry. Once regulatory approval has been received, NANPA shall proceed with the implementation process as usual. This will simplify the relief planning process by reducing the number of industry meetings/conference calls.

The LNPA Working Group of the FCC Advisory Committee’s North American Numbering Council, has provided a recommendation supporting the utilization of overlays as the preferred form of area code relief, and this documentation should be added as reference to Section 6.3 of the NPA Code Relief Planning and Notification Guidelines.

At the December INC meeting, the issue was reviewed and accepted for consideration to update the NPA Code Relief Planning and Notification Guidelines as proposed in the Issue and Contribution.

NANC Future of Numbering WG Update – Suzanne Addington:



FoN Report to the LNPA WG- Jan 2014.i

December 10, 2013 NANC Meeting Read Out

Meeting was cancelled due to weather.

Review Neustar Proposed 2014 SPID Migration Black-Out Dates

DATE	REASON
January 5	First Sunday
February 2	First Sunday
March 2	First Sunday
April 6	First Sunday
May 4	First Sunday
May 25	Memorial Day
June 1	First Sunday
July 6	First Sunday
August 3	First Sunday
August 31	Labor Day
September 7	First Sunday
October 5	First Sunday
October 19 (tentative)	Annual Failover Exercise
November 2	First Sunday
December 7	First Sunday
December 28	New Year

The 2014 Annual Failover Exercise date is now firm, so the October 19 blackout date is no longer tentative. No additional dates were added to the schedule. The schedule was approved by the LNPA Working Group.

Change Management – Neustar

John Nakamura and Jim Rooks went over the following change orders:

NANC 372, XML Interface.

John pointed out the seven items that were updated in the delta FRS.

Service providers can only view SPID, SP Name, and SP Type of other service provider's information in a query.

There is concern about whether or not an IP address is sufficient to designate the XML connection address.

Action Item 010714-01 – All service providers and vendors who plan to implement the XML interface are to notify Neustar if an IP address is not sufficient to designate the XML connection address, and if not, why not and what designation would be preferable (e.g., URL)?

Jim reviewed revisions to Version 1.5 of the XML Schema. The changes are:

- QueryExpression now has a minimum length of 1.
- Download_reason has been added to QuerySpidData.

Jim reviewed Version 1.5 of the XIS. Requesting an XML certificate replaces the generation of a set of public and private keys. There were questions as to whether or not this approach is secure enough. The following action item was given to service providers and vendors:

Action Item 010714-02 REVISED – Service Providers and Vendors should review the M&P for certificate-related activities in the NPAC XML interface. The M&P can be found on the NPAC secure web site at the following URL:

<https://www.npac.com/npac-user/access-connectivity/npac-xml-certificate-trust-authority>

Additionally, section 3.3 (NPAC Use of Certificates) in the XIS describe how this works from an application perspective.

Reviewers should consult with their information security teams to make sure these procedures are acceptable. In the current process, the User supplies basic information to the NPAC Certificate Authority (CA) via email. This basic information makes up the distinguished name of the certificate, and includes the SPID, region and system type. The NPAC CA creates a User within the system for this request, and the requestor receives the logon URL and the login credentials in separate emails. Upon login, JavaScript code is downloaded to the User's web browser. This JavaScript code calls APIs within the User's browser to generate a public/private key pair. The public portion of this key pair is then sent to the NPAC CA. The NPAC CA combines this public key with the information associated with the User to generate a signed certificate that includes the public key and the distinguished name information (the spid, the region, and the system type). This signed certificate is then downloaded to the User's machine, where it is combined with the private key. The private key is generated on the User's machine and is never transmitted to the NPAC CA.

Industry test documents for the XML interface

John reviewed revisions to the XML interface test document and captured new revisions. He will reissue Section 17 of the document.

NANC 449, Active-Active SOA

Documents were updated to reflect application to both CMIP and XML applications. NANC 449 was accepted to be worked at the LNPA WG, but it has not been prioritized and ranked for inclusion in a future release.

NANC 457, SPID Migration Limits – Increase Regional TN Threshold

The count method was revised to include the number of pooled blocks (counted as 1 each) in addition to the number of ported SVs. This will be added to the list of candidates for ranking of the next NPAC/SMS release.

2014 Meeting Schedule

2014 Meetings and Conference Calls

MONTH (2014)	NANC MEETING DATES	LNPA WG MEETING/CALL DATES	HOST COMPANY	MEETING LOCATION
January		7 th – 8 th	iconectiv	Scottsdale, AZ
February		11 th <i>Canceled</i>		Conference Call
March		4 th – 5 th	Comcast	Denver, CO
April		8 th		Conference Call
May		13 th – 14 th	Neustar	Miami, FL
June		10 th		Conference Call
July		8 th – 9 th	T-Mobile	Seattle, WA
August		5 th		Conference Call
September		9 th – 10 th	CenturyLink	Denver, CO
October		7 th		Conference Call
November		4 th – 5 th	AT&T (<i>tentative</i>)	TBD
December		9 th		Conference Call

The 2014 Meeting and Conference Call schedule was reviewed.

- The February 11 conference call has been canceled.
- The March meeting will be hosted by Comcast in Denver, CO.
- The May meeting will be hosted by Neustar in Miami, FL.
- **The location of the July meeting may not be in Seattle, WA, due to the high cost of hotels.**

DA 13-2367 FCC Request for Comments on NANC Proposals Regarding Premature Activation of Ports and Area Code Relief Options

Paula Campagnoli reported that if there are objections filed to the FCC on the Best Practice 30 recommendation to do overlays rather than NPA splits, the CTIA would likely file comments on behalf of the wireless industry.

Jan Doell reported that CenturyLink would likely file clarifying comments concerning BP 65 and 67.

WEDNESDAY January 8, 2014

Attendance

Name	Company	Name	Company
Lonnie Keck	AT&T	Bill Reidway	Neustar
David Alread	AT&T	Dave Garner	Neustar
Teresa Patton	AT&T	Fariba Jafari	Neustar
Mark Lancaster	AT&T (phone)	Gary Sacra	Neustar
Penn Pfautz	AT&T (phone)	John Nakamura	Neustar
Renee Dillon	AT&T (phone)	Larry Vagnoni	Neustar
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Joe Mullin	Edge Communications	Karen Riepenkroger	Sprint (phone)
Wendy Trahan	GVNW (phone)	Shaunna Forshee	Sprint (phone)
George Tsacnaris	iconectiv	Jeanne Kulesa	Synchronoss
Joel Zamlong	iconectiv	Rosalee Pinnock	Syniverse
John Malyar	iconectiv	Jesse Ochoa	T-Mobile
Kathy Timko	iconectiv	Luke Sessions	T-Mobile
Steven Koch	Iconectiv	Paula Campagnoli	T-Mobile
Kayla Sharbaugh	iconectiv (phone)	Sebastien Couture	Ubity (phone)
Natalie McNamer	iconectiv (phone)	David Lund	US Cellular (phone)
Kim Isaacs	Integra (phone)	Deb Tucker	Verizon Wireless
Bridget Alexander	JSI	Scott Terry	Windstream
Karen Hoffman	JSI (phone)	Dawn Lawrence	XO (phone)
Lynette Khirallah	NetNumber (phone)		

Discussion of IP Transition Effects on Number Portability

Penn Pfautz, AT&T, shared a presentation that was given to ATIS PTSC on using NPAC as an ENUM Registry. His presentation is attached below. Discussion was as follows:

- Would leverage existing capabilities (Voice URI field) and providers' existing interface to NPAC.
- Paula Campagnoli asked why destination carrier's information contained in their Tier 2 server can't be stored in NPAC in order to eliminate a query to their Tier 2 server. Penn responded that in theory you could but he doesn't feel this is a good idea. See slide 8 of Penn's slide deck as to why he feels a tiered architecture is better which requires the second query during call setup. Jan Doell had same concern with additional query and possible post-dial delay.
- Penn stated that destination carrier might want to provide different routes based on policy and interconnect agreements they might have with originating carriers.
- Paula Campagnoli stated that she is in agreement that information should be in NPAC.
- Penn stated that FCC CTO has said that all DBs associated with numbering might be consolidated into one very large database.
- Edge Communications stated that an LRN should be assigned to every number and URI information associated with each LRN could be populated in the LERG and carriers could migrate that information into their networks for routing.
- Tekelec stated that there could be LSMS implications depending on how the URI fields are implemented in local systems, e.g., supporting the fields in each SV record or implementing pointers to the set of carrier's URI fields.
- Paula asked Penn how he sees the LNPA WG moving forward.
- Rosemary Emmer asked what other industry groups he has given this presentation to and who has the authority to determine if the WG should work on this.
 - He has given it to ATIS PTSC and SIP Forum.
 - Tekelec asked if Penn could share meeting minutes from groups where he has given this presentation.
- Jan said that any discussion about NPAC development needs to be brought to the LNPA and vetted here and run through our process.
- Natalie McNamer stated that the PTSC is preparing a liaison letter to the LNPA regarding this.
- Mary Retka suggested that the LNPA let the NANC know that we consider this to be our work and to let the Bureau know.



NPAC as ENUM
Registry -LNPA.pptx

Just in Time (JIT) Number Provisioning Discussion (Continued from Previous Meetings)

Regarding JIT, Paula asked Mark Lancaster how JIT would slow down the exhaust of the NANP. Mark responded that instead of requesting numbers in blocks of a thousand, numbers would be requested as needed and would not strand any numbers in a rate center.

- Paula stated that when T-Mobile has a customer in a store who is signing up for service, they need an inventory of numbers available for immediate assignment. The customer would not want to wait for service until a number is available. Other providers expressed concerns with not having numbering resources when needed, losing control of the

process, and having awareness of whether or not numbers are available in a particular rate center.

- Mark said that the allocation process would have to be designed to ensure numbers are immediately available when needed. NRUF, Code Assignment groups, TN inventory groups, and number assignment groups would no longer be needed by SPs.
- Concern expressed as to how a trial could be set up and work without massive changes to current inventory and assignment systems to support the trial.

IP transition effects on LNP will remain an agenda item.

Determine if there is NPAC/SMS Functionality that Should be Sunset

- John Nakamura and Jim Rooks developed a list of possible items to discuss for potential sunsetting. This is not a Neustar recommendation but just a list of items for ongoing discussion.
- Neustar suggested approaching this list like we do with ranking Change Orders. Give an action item to all SPs, vendors – SOA, LSMS, and NPAC- to do a benefit analysis of each and a level of effort for software change for further discussion in order to see which may be selected for sunsetting. For discussion at March meeting.
- Teresa Patton suggested that some functionality could be left in CMIP but not carried forward in XML.
- Neustar action item to provide a short descriptive paragraph for each. And identify those that were not carried forward in XML. Due by January 24, 2014. Neustar will send out over distribution list.

Action Item 010714-03 – Neustar to provide an updated list of NPAC features that they consider possibilities for sun-setting by January 24, 2014. The list should include updates from the January 2014 LNPA WG discussion and a short descriptive paragraph for each. They will also identify the CMIP features that are not carried forward to XML. Neustar will send this out via the LNPA WG distribution list.

The updated list is included here:

NPAC- Potential Sunset List

LNPA WG Agenda Item – Determine what NPAC Functions

October 2013 Disaster Recovery Failover Exercise

Gary Sacra reported that the Failover Exercise went well and that Neustar certifies that recovery plans are fully operational. Gary’s presentation is embedded here:



NPAC Disaster
Recovery Fail Over E:

Discussion of 2014 Meeting/Call Agenda Items

The embedded “Brainstorming” file was reviewed. There were no changes at this meeting.

BRAINSTORMING OF POSSIBLE FUTURE
INPA WG AGENDA ITEMS

*Next Conference Call ... February 11, 2014 **This call is canceled.***

Next Meeting ... March 4-5, 2014: Location...Denver, CO ...Hosted by Comcast