LNPA WORKING GROUP July 8-9, 2014 Meeting FINAL Minutes

Portland, OR

Host: T-Mobile

TUESDAY July 8, 2014 Attendance

Attendance				
Name	Company	Name	Company	
Kayla Sharbaugh	10xpeople (phone)	Bridget Alexander	JSI	
Lonnie Keck	AT&T	Karen Hoffman	JSI (phone)	
Penn Pfautz	AT&T	Lynette Khirallah	NetNumber (phone)	
Ron Steen	AT&T	Bill Reidway	Neustar	
Teresa Patton	AT&T	Fariba Jafari	Neustar	
Dean Long	AT&T	Gary Sacra	Neustar	
Mark Lancaster	AT&T (phone)	Jim Rooks	Neustar	
Renee Dillon	AT&T (phone)	John Nakamura	Neustar	
Tracey Guidotti	AT&T (phone)	Lavinia Rotaru	Neustar	
Jackie Voss	ATIS (phone)	Mubeen Saifullah	Neustar	
Lisa Jill Freeman	Bandwidth.com	Paul LaGattuta	Neustar	
Christy Permenter	Bright House (phone)	Dave Garner	Neustar (phone)	
Allyson Blevins	Bright House (phone)	Marcel Champagne	Neustar (phone)	
Matt Nolan	Bright House (phone)	Shannon Sevigny	Neustar Pooling (phone)	
Jacques Sarrazin	Canadian LNP	Ramesh Chellamani	Oracle Communications	
Jan Doell	CenturyLink (phone)	Suzanne Addington	Sprint	
Mary Retka	CenturyLink (phone)	Rosemary Emmer	Sprint (phone)	
Brenda Bloemke	Comcast	Darren Post	Synchronoss	
Dena Hunter	Cricket (phone)	Jeanne Kulesa	Synchronoss	
Linda Peterman	Earthlink Business (phone)	Rosalee Pinnock	Syniverse	
Wendy Trahan	GVNW (phone)	Michael Rothchild	Telesmart/ATL	
Chris Drake	iconectiv	Luke Sessions	T-Mobile	
George Tsacnaris	iconectiv	Paula Campagnoli	T-Mobile	
Joel Zamlong	iconectiv	Cathie Capita	T-Mobile (phone)	
John Malyar	iconectiv	Deb Tucker	Verizon Wireless	
Natalie McNamer	iconectiv	Imanu Hill	Vonage (phone)	
Steven Koch	Iconectiv	Scott Terry	Windstream	
Michael Iacovelli	iconectiv (phone)	Dawn Lawrence	XO	
Kim Isaacs	Integra (phone)			

NOTE: ALL ACTION ITEMS REFERENCED IN THE MINUTES BELOW HAVE BEEN CAPTURED IN THE "May 13-14, 2014 WG ACTION ITEMS" FILE AND ATTACHED HERE.



LNPA WORKING GROUP MEETING MINUTES:

March 4-5, 2014 Draft LNPA WG Meeting Minutes Review:

The May 13-14, 2014, meeting minutes were reviewed and approved with a minor change.

Updates from Other Industry Groups

<u>OBF Ordering Solutions Wireless Service Ordering (WSO) Subcommittee Update – Deb</u> <u>Tucker:</u>

The Wireless Service Ordering Subcommittee met June 3, 2014. The Subcommittee continues to watch the progress being made by the LSO Subcommittee on Issue 3450 with respect to changes that may be needed to the WICIS standard. Current work activities of WSO are dependent on the resolution of this Issue, so the next meeting of WSO will be subsequent to the next LSO meeting.

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 August 22, 2014.

Additionally, the ATIS OBF Ordering Solutions (OS) Committee will be meeting jointly with the Metro Ethernet Forum Service Operations Committee to create a new International Ethernet Ordering standard. The Ordering Solutions Committee welcomes input from Metro Ethernet Forum Subject Matter Experts. The Service Operations Committee will host a joint working session with the OS Committee during the 3Q Annual MEF Members meeting in Santa Clara, CA from July 28 – 31, 2014. See Issue 3507, OS: Create an international Ethernet Ordering specification based on MEF-defined Ethernet service attributes.

<u> OBF Local Service Ordering Subcommittee – Linda Peterman:</u>

OBF

ORDERING SOLUTIONS COMMITTEE LOCAL SERVICE ORDERING SUBCOMMITTEE

Since the May, 2014 LNPA WG meeting, the status of Issue 3450 has remained the same as the team has been focusing on the publication of the 2014 LSOG document, which has now been completed..

Issues in Final Closure: None.

Issues Withdrawn: None.

Issues in Initial Closure or Initial Pending: None.

Participants prioritized the 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 REQTYP "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 meetings scheduled:

DATE	CALL DETAILS	
7/31/14	LSO Virtual Meeting	
11 AM -1 PM	Agenda:	
ET	• Review and complete Issue 3450	
September 22-	LSO Meeting Overland Park, KS	
25, 2014	Agenda:	
	• Issue 3373	

INC Issues Report

LNPA WG Meeting – July 2014

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

- PSTN Transition Numbering Testbed Workshop agenda and information. A high level list of numbering system functional requirements for the numbering test bed was developed and submitted as an Ex Parte to the FCC CTO, Henning Schulzrinne, on 3/31/14. The requirements addressed components of number administration that needs to be included in the testbed functionality, such as assignment of numbers, transferring numbers, returning numbers, security, etc. During the May meeting, which was held in conjunction with ATIS AMOC, Dr. Schulzrinne briefly visited with INC and indicated the requirements provided in the Ex Parte will be useful input to the work that needs to be accomplished.
- The topic of geographic vs non-geographic numbering was discussed relative to rate centers and LATAs. Discussion included items such as elimination/consolidation of rate centers, i.e.: moving to each State as a unit --- one rate center per state, need for Tariff modifications to accommodate, uniform 10-digit dialing implementation within the State, numbering resources assignments associated with a state, etc. INC continues to consider development of a white paper which would include recommendations on the consolidation of rate centers. If developed the white paper could list the steps and/or items to be done in order to accomplish rate center consolidation such as; Tariff modifications, notification to customers, recommendations on a timeline, etc.

INC Issue 778: Update INC Guidelines to identify Permitted Company Code (OCN) Category Types Appropriate for Assignment of Numbering Resources

Issue Statement: Service providers (SPs) entering into the telecom/VoIP industry require a NECA assigned Company Code (OCN) in order to receive numbering resources from NANPA or Pooling Administration. The OCN must be assigned to a NECA Category Code type that is

permissible to receive numbering resources; however, the list of permissible categories has never been clearly defined. This has resulted in SPs ordering an OCN with an incorrect category type for numbering resources, which may not be determined until the SP attempts to obtain numbering resources. And, this may cause a significant delay to the SP in establishing services. As well, some SPs may attempt to change the category type of their OCN after numbering resources have been assigned to it. Should this occur, the NANPA and the PA have no mechanism today to be notified of such a change to determine if the SP is permitted to retain currently assigned numbering resources and/or to deny requests for future numbering resources.

Suggested Solution: Update sections 4.1.1, 6.1.1, 8.1 and 8.2 in COCAG and sections 4.3, 4.4, 9.1.2 and 9.2 in the TBPAG to add reference of the permitted OCN category types for numbering resources and to require SPs to notify NANPA and the PA of OCN category changes to their OCN after the OCN has been added to NAS/PAS.

At the May INC meeting, the issue was discussed and agreement was reached to work the issue. INC agreed to list the permissible Company Code category types in the guidelines to support existing NANPA and PA processes to deny requests when an inappropriate NECA Company Code category type is used. It was decided, that along with changes in the COCAG and TBPAG, INC needs to make corresponding changes in other INC guidelines that deal with OCNs, example 5XX, 9YY and p-ANI. It was also noted that this agreement applies only to the U.S. and its' territories.

Once this issue is approved and closed, INC will advise NECA of the OCN's that can be directly assigned numbering resources from NANPA and/or the PA and ask them to update their website and documentation to help new entrants determine the appropriate Company Code category type.

NANC Future of Numbering WG Update – Suzanne Addington:

See the embedded PowerPoint presentation:



Change Management – Neustar

Discussion of Change Orders

John Nakamura reviewed changes made to update the FRS document. (Document not embedded due to size. It was sent to distribution prior to meeting.) Items updated are as follows:

- 1. Title page, version, date.
- 2. TOC re-gen.
- 3. Section 0.1, Appendix A definition.
- 4. Section 2, Business Process Flows, removed multiple references to flows in Appendix A.
- 5. 3.1.2, NPAC Customer Data Model, added two new entries for Sending/Failed SV Query Reply Boolean.
- 6. R3-9, RR3-66, changed "may include" to "are", added note for items that apply to Creation only.
- 7. 3.17, new section for Onboarding.
- 8. R4-8, two new entries for Sending/Failed SV Query Reply Boolean.
- 9. Appendix A, added reference note, removed old flow diagrams.
- 10. Appendix B, Glossary, updated time zone info, added XML.

Changes to the Onboarding feature were reviewed. There were no questions or comments.

The outdated Operations Flows in Appendix A were removed and replaced with a link to the latest NANC Porting Flows on the NPAC web site.

Error and Message Flow Document Discussion

John Nakamura led a discussion of changes to the Error Flow Diagrams (Appendices A and B to the NPAC IIS document). (Document not embedded due to size. It was sent to distribution prior to meeting.) Changes include:

- Title page name, version, date update.
- TOC re-gen.
- Status correction (from disconnect-pending to sending), B.5.4.1, picture and text.
- Removal of notification (there is no disconnect-pending SAVC sent to the current SP), B.5.4.1.
- Status correction (from sending to disconnect-pending), B.5.4.2, just text (picture already had disconnect-pending).
- Arrow direction correction (correct direction is NPAC to SOA), B.5.5.5, step 5.
- Re-added flows in section B.7 (incorrectly removed in previous version of flow document).
- Added XML reference, B.8.5.1, SPID Migration.

Change Management Summary Document (including Service Provider, Local System Vendor and Neustar Action Items



Action Item 051314-02 – Syniverse to determine if change order NANC 417 is still needed.

Syniverse reported that this change order is no longer needed. It will be moved to Cancel Pending.

This action item is closed.

Action Item 051314-03 – Service providers are to determine if change orders NANC 431 and 432 should stay on the candidate list.

Service Providers consensus is that 431 and 432 are no longer needed. They will be moved to Cancel Pending.

This action item is closed.

Action Item 051314-04 – Local systems vendors to provide level of effort (LOE) for the open change orders to the LNPA WG Tri-Chairs by June 18, 2014.

Local systems vendors who participate in the Working Group have supplied LOE.

This action item is closed.

Action Item 051314-07 – Neustar to prepare a table showing level of effort (LOE) for the open change orders after the information is provided by the local system vendors.



The vendors present agreed to the accuracy of the table.

This action item is closed.

- **NEW ACTION ITEM 070914-04** Neustar to update the "Level of Effort" table including removal of NANC 431 and 432 by **August 27, 2014**.
- **NEW ACTION ITEM 070914-05** Neustar to provide list of LSMS/SOA vendors connected to NPAC in order to identify any that don't attend the WG meetings. If inappropriate to share the list, then Neustar will contact them individually to obtain the needed LOE information.

Notification Suppression

This change order would allow service providers to have notification category suppression on a per request basis. This change was requested by a service provider.



John Nakamura led a discussion of the changes made to the data models since the last review.

Discussions about the features and needs led to some changes that John will make to be reviewed at the next meeting. Further updates for XML will be offered at the September meeting. For example:

- Pool Block data needs to be added to the Data Model.
- Need to add capability for OSP to suppress when they send their Create in addition to the capability for the NSP.
- Can a project ID be used to tie multiple requests together?
- What happens when OSP and NSP don't agree in overlapping requests?
- Can the suppression indicator be modified? (Currently not being considered.)

Changes will be reviewed at the September WG meeting.

NEW ACTION ITEM 070914-06 – Neustar to update the schema and XIS document to include changes to NANC 458 and distribute by **August 1, 2014**.

NEW ACTION ITEM 070914-03 – Local systems vendors are to provide level of effort required to implement NANC 458 to Paula Campagnoli by **August 20, 2014**.

Determine what NPAC Functionality should be considered for sunset list

Action Item 051314-01 – At the July 2014 LNPA WG meeting, service providers are to be prepared to discuss their company positions about sun setting of the CMIP interface.

AT&T feels that CMIP should be sunset some time in the future rather than permanently maintaining both CMIP and XML interfaces. CenturyLink feels that XML was implemented as an optional alternative to CMIP. Therefore, we should maintain both interfaces. Integra, Comcast, Verizon, XO, T-Mobile, Windstream, and Earthlink agreed with CenturyLink.

Consensus was to not set a date to sunset the CMIP interface at this time.

This action item is closed.

Action Item 051314-05 – Neustar to provide details of the billing categories/billing data sunset item (item 9.3) by May 30, 2014.

This action item is closed.

The details of the billing categories/billing data sunset item are provided in the embedded file below. Neustar marked file with recommendations for striking some of the requirements.



NEW ACTION ITEM 070914-02 – Service providers are to be prepared at the **September 2014** meeting to discuss their company positions on which line items of the billing categories/billing data highlighted in the embedded attachment can be sunset.

New Business

Mobile Virtual Network Provider (MVNO)

Gary Sacra introduced an issue where wireline SPs are providing PSTN connectivity and TNs to MVNOs for use for wireless service to the MVNOs' customers. These MVNOs are getting their wireless spectrum from facilities-based wireless SPs. Because these TNs are associated with wireline SPIDs in the NPAC, they are not reflected on the Intermodal Ported Number lists, which are used by telemarketers to assist in determining which numbers they can and cannot call. Some of these wireline SPs have requested wireless SPIDs in the NPAC for these TNs but they had to be converted to wireline SPIDs because they could not produce the required wireless radio license. As a result of the SPID Type change, over 1 Million TNs dropped off the wireline-wireless Intermodal Ported Number list. Telemarketers could be liable for fines if they call these TNs. Neustar is investigating a fix to incorporate SV Type in the search criteria for producing the Intermodal lists. In the proposed fix to address this issue, the SV Type would be set to 1

(wireless) for these TNs even though the SPID Type is still wireline. The search criteria for populating the Intermodal Ported number lists would be modified to incorporate the SV Type. SPs need to determine if setting the SV Type to 1 in the NPAC for these TNs would cause any issues in their local systems. SV Type is an optional field and not all SPs support or use it.

NEW ACTION ITEM 070914-01 – In order to address the issue of telephone numbers obtained by Mobile Virtual Network Operators (MVNOs) from wireline SPs not being populated on the Intermodal Ported Number Lists (used by telemarketers to assist in determining which numbers can and cannot be called), Service Providers are to determine if modifying the SV Type in NPAC for these numbers to 1 (wireless) but maintaining the SVs' association with a wireline SPID in NPAC, will result in any issues within their systems. Responses should be sent to the Co-Chairs by Wednesday, August 6, 2014.

Neustar will also send this information to the NPAC Cross Regional list with responses to be furnished back to them by **August 6, 2014**.

Wireless SPIDs with long timers

Lonnie Keck asked if Neustar could provide a list of wireless providers who use long timers. Neustar to see if they can provide such a list.

NEW ACTION ITEM 070914-07 – Lonnie Keck, AT&T, asked if Neustar could provide a list of wireless providers that use long timers. Neustar will investigate to determine whether or not this is confidential information that can be provided.

Sending of Concurring SVs

Verizon asked at last meeting if there is a way to get concurring SVs to be sent. An idea is to have a profile option for the OSP to indicate that they don't send concurrences but they are ok with the NPAC doing the concurrence for them.

There was no consensus to move forward with this issue.

FCC Ruling on BP 30 and BP 65

FCC approved BP 65, but refrained from approving BP 30 as they wanted to leave NPA Splits decisions to the state regulators.

Vanity Number Ports

Suzanne Addington mentioned that Sprint sees Vanity Numbers porting in and then porting out immediately, and asked if anyone had any information that could be shared. Several service providers mentioned that they see similar activity. It is largely attributed to theft of vanity numbers.

August Conference Call

There will be no conference call in August.

WEDNESDAY July 9, 2014 Attendance

Attendance					
Name	Company	Name	Company		
Kayla Sharbaugh	10xpeople (phone)	Kim Isaacs	Integra (phone)		
Lisa Marie Maxson	10xpeople (phone)	Bridget Alexander	JSI		
Lonnie Keck	AT&T	Karen Hoffman	JSI (phone)		
Penn Pfautz	AT&T	Lynette Khirallah	NetNumber (phone)		
Ron Steen	AT&T	Brian Rosen	Neustar		
Teresa Patton	AT&T	Dave Garner	Neustar (phone)		
Dean Long	AT&T	Fariba Jafari	Neustar		
Mark Lancaster	AT&T (phone)	Gary Sacra	Neustar		
Renee Dillon	AT&T (phone)	Jim Rooks	Neustar		
Tracey Guidotti	AT&T (phone)	John Nakamura	Neustar		
Jackie Voss	ATIS (phone)	Kristen Hamilton	Neustar (phone)		
Lisa Jill Freeman	Bandwidth.com	Lavinia Rotaru	Neustar		
Denise Potvin	Bell Canada (phone)	Mubeen Saifullah	Neustar		
Allyson Blevins	Bright House (phone)	Paul LaGattuta	Neustar		
Matt Nolan	Bright House (phone)	Shannon Sevigny	Neustar Pooling (phone)		
Christy Permenter	Bright House (phone)	Ramesh Chellamani	Oracle Communications		
Jacques Sarrazin	Canadian LNP	Stephanie Maeda	Oregon PUC		
Jan Doell	CenturyLink (phone)	Steve Hayes	Oregon PUC		
Mary Retka	CenturyLink (phone)	Suzanne Addington	Sprint		
Karin Fahrenbruch	CenturyLink (phone)	Karen Riepenkroger	Sprint (phone)		
Dennis Rose	CHR Solutions (phone)	Shaunna Forshee	Sprint (phone)		
Brenda Bloemke	Comcast	Darren Post	Synchronoss		
Beth O'Donnell	Cox (phone)	Jeanne Kulesa	Synchronoss		
Jennifer Hutton	Cox (phone)	Rosalee Pinnock	Syniverse		
Suzanne Howard	Cox (phone)	Margie Mersman	TCA (phone)		
Joan Bridgeman	Cricket (phone)	Michael Rothchild	Telesmart/ATL		
Dena Hunter	Cricket (phone)	Luke Sessions	T-Mobile		
Linda Peterman	Earthlink Business (phone)	Paula Campagnoli	T-Mobile		
Wendy Trahan	GVNW (phone)	Cathie Capita	T-Mobile (phone)		
Chris Drake	iconectiv	Barry Orrel	tw telecom (phone)		
George Tsacnaris	iconectiv	Jason Lee	Verizon (phone)		
Joel Zamlong	iconectiv	Dana Crandall	Verizon Wireless (phone)		
John Malyar	iconectiv	Deb Tucker	Verizon Wireless		
Natalie McNamer	iconectiv	Imanu Hill	Vonage (phone)		
Steven Koch	Iconectiv	Scott Terry	Windstream		
Michael Iacovelli	iconectiv (phone)	Dawn Lawrence	ХО		

Discussion of IP Transition Effects on Number Portability

IP Network Architecture Presentations

IP and SIP Basics - Neustar - Brian Rosen

NOTE: Due to the size of Brian's presentation, I had to break it out of the document and send as a separate email. File name is "Rosen Presentation-VoIPforLNPA-BR 070214a.pptx".

IP/SIP Interconnection - AT&T - Penn Pfautz



- Penn stated that the ATIS/SIP Forum NNI Task Force is studying use of a simple registry approach that maps an individual TN to SBC IP addresses via a SIP URI in the NPAC SV. Paula Campagnoli asked when this was going to be brought before the LNPA WG. Natalie McNamer (iconectiv) said that information was planned to be shared this past February. Paula stated that nothing has been received by the WG and it would be better if the WG's input was solicited earlier so the WG could also drive the discussion at ATIS.
- Bandwidth stated that with peering arrangements, spoofing possibilities are intensified. Also, on-net routing could result in attempts to complete the call to the former SP even though the number has ported due to a lack of synchronization.
- Jan Doell referenced the 15 minute network element update goal when numbers are porting and said that the NNI should be taking this into consideration in their discussions. It was stated later that the existing ENUM DBs would not be meeting their SLAs if they were not updated within 15 minutes.

ENUM - iconectiv – Chris Drake



- SPIDs for MMS and SMS portability correction are derived from NPAC SPIDs. 4-digit NPAC SPIDs are turned into a 5-digit SPID.
- Penn stated that in all of the 6 solutions discussed in the industry today, for security reasons, we do not want to perform the URI to IP address resolution in the public domain. Brian said that we can look up IP addresses today so it isn't really a concern. Just knowing the IP address doesn't equate to being able to get to the IP address.

Transition Impacts on LNP – Neustar



Round Table – Brian Rosen, Penn Pfautz and Chris Drake

- In response to a question about global ENUM and portability, Penn stated that what should take place is that we develop a sensible solution in the U.S. and then work to develop international standards that can be developed to for global application.
- Jan asked Brian if Neustar has a global database with all porting data, e.g., U.S., Canada, UK, etc. Brian responded that Neustar does and so does iconectiv. It was clarified that these DBs do not contain every countries' ported number data and there are some holes in what data the DBs contain.
 - Ron asked what kind of data is in these databases. Brian responded that the majority of the data consists of a translation of the NPAC SPID.

The AT&T, iconectiv, and Neustar presentations were helpful in educating WG participants in the topology of an IP network. The design of the network is still in the developmental stages. The presenters had differences of opinion about some of the details that still need to be worked out.

The ATIS/SIP Forum NNI Task Force is working to formulate the approach to map individual TNs to a SIP URI. Information was to be shared in February 2014, but the committee is still working to provide the information. At that time, the LNPA Working Group should be able to begin assessment of the impacts to number portability.

Penn suggested that it would be good for the NNI to send a liaison and initial report to the WG teeing up what it needs from the WG and asking how the URI fields in the NPAC could be utilized and what NPAC changes would be necessary, but the NNI is not ready to send a liaison yet.

IP Transition effects on Number Portability

Non-geographic Porting Sub-Team Readout

Teresa Patton reported for the sub-team. They have held 2 calls to date. They plan to create a white paper of pros, cons, considerations, issues. There is no completion date established at this time.

Discuss Agenda Items for Future Meetings

LNPA Working Group participants should send any items that they would like on the September agenda to Paula Campagnoli as soon as possible.

IP Transition will continue to be a standing agenda item.

Develop LNPA WG Report to NANC – NANC Meeting September 17, 2014

Ron and Paula will develop the NANC report and send out to the WG for review and comment.

Review of 2014 Meeting Schedule

MONTH	NANC	LNPA WG	HOST	MEETING
(2014)	MEETING	MEETING/CALL	COMPANY	LOCATION
	DATES	DATES		
January		$7^{\text{th}} - 8^{\text{th}}$	iconectiv	Scottsdale, AZ
February		11 th Canceled		Conference Call
March		$4^{\text{th}} - 5^{\text{th}}$	Comcast	Denver, CO
April		8 th Canceled		Conference Call
May		$13^{th} - 14^{th}$	Neustar	Miami, FL
June		10 th Canceled		Conference Call
July		$8^{\text{th}} - 9^{\text{th}}$	T-Mobile	Portland, OR
August		5 th Canceled		Conference Call
September		$9^{\text{th}} - 10^{\text{th}}$	CenturyLink &	Denver, CO
_			Verizon	
October		7 th		Conference Call
November		$4^{\text{th}} - 5^{\text{th}}$	AT&T	Atlanta, GA
December		9 th		Conference Call

2014 Meetings and Conference Calls

Tentative Dates for LNPA WG Face to Face Meetings in 2015

January 6-7	March 3-4
May 5-6	July 7-8
September 1-2	November 3-4

Next Conference Call ... August 5, 2014 This call is canceled. Next Meeting ... September 9-10, 2014: Location...Denver, CO ...Hosted by CenturyLink and Verizon