

**North American Numbering Council  
Meeting Transcript  
March 27, 2014 (Final)**

**I. Time and Place of Meeting.** The North American Numbering Council (NANC) held a meeting commencing at 10:00 a.m., at the Federal Communications Commission, 445 12th Street, S.W., Room TW-C305, Washington, D. C. 20554.

**II. List of Attendees.**

Voting Council Members:

- |                             |                                  |
|-----------------------------|----------------------------------|
| 1. Hon. Betty Ann Kane      | NANC Chairman (NARUC – DC)       |
| 2. Hon. Geoffrey G. Why     | NANC Co-Chairman (NARUC – MA)    |
| 3. Mark Lancaster           | AT&T Inc.                        |
| 4. Greg Rogers              | Bandwidth.com, Inc.              |
| 5. Mary Retka               | CenturyLink                      |
| 6. Valerie R. Cardwell      | Comcast Corporation              |
| 7. Karen Reidy              | CompTel                          |
| 8. Jose Jimenez             | Cox Communications, Inc.         |
| 9. Michael Altschul         | CTIA                             |
| 10. Scott Seab              | Level 3 Communications, LLC      |
| 11. Carolee Hall            | NARUC – Idaho                    |
| 12. Lynn Slaby              | NARUC – Ohio                     |
| 13. Hon. G. O’Neal Hamilton | NARUC – South Carolina           |
| 14. Wayne Jortner           | NASUCA                           |
| 15. Tom Dixon               | NASUCA                           |
| 16. Jerome Candelaria       | NCTA                             |
| 17. Stephen F. Pastorkovich | NTCA - The Rural Broadband Assn. |
| 18. Gina Perini             | SMS/800, Inc.                    |
| 19. Rosemary Emmer          | Sprint                           |
| 20. Michelle Thomas         | T-Mobile USA, Inc.               |
| 21. Thomas Soroka, Jr.      | USTA                             |
| 22. Ann Berkowitz           | Verizon                          |
| 23. Tiki Gaugler            | XO Communications                |

Special Members (Non-voting):

- |                 |                 |
|-----------------|-----------------|
| John Manning    | NANPA           |
| Amy Putnam      | PA              |
| Faith Marcotte  | Welch & Company |
| Jean-Paul Emard | ATIS            |

Commission Employees:

Ann Stevens, Deputy Chief, Competition Policy Division

Sanford Williams, Competition Policy Division  
Michelle Sclater, Competition Policy Division  
Henning Schulzrinne, Chief Technology Officer  
Carmell Weathers, Competition Policy Division

**III. Estimate of Public Attendance.** Approximately 25 members of the public attended the meeting as observers.

**IV. Documents Introduced.**

- (1) Agenda
- (2) NANC Meeting Transcript – September 18, 2013
- (3) North American Numbering Plan Administration (NANPA) Report to the NANC
- (4) National Thousands Block Pooling Administrator (PA) Report to the NANC
- (5) Henning Schulzrinne, Chief Technology Officer, FCC, Report on Numbering Testbed Workshop – March 25, 2014
- (6) Status of the Industry Numbering Committee (INC) activities
- (7) Numbering Oversight Working Group (NOWG) Report
- (8) Billing and Collection Agent Report
- (9) Billing and Collection Working Group (B&C WG) Report to the NANC
- (10) North American Portability Management (NAPM) LLC Report to the NANC
- (11) Local Number Portability Administration Working Group (LNPA WG) Status Report to the NANC
- (12) LNPA Working Group
- (13) Future of Numbering (FoN) Working Group Report to the NANC
- (14) Recommendations to the NANC

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## **VI. Summary of the Meeting**

Betty Ann Kane: Thank you. We are on now. I want to call this meeting to order. Welcome to the third day of NANC Week. Some of you were here for the testbed workshop on Tuesday, and there was a closed session of the NANC yesterday. Today we are assembled in our regular quarterly open meeting of the North American Numbering Council. For the record, today is Thursday, March 27, 2014. We are convening at 10:06 AM in the hearing room of the Federal Communications Commission in Washington, D.C. We do have a sign-in sheet that will go around. But first, I want to ask for the roll call and to announce your presence. I'm Betty Ann Kane, chairman of the NANC.

Sanford Williams: Sanford Williams, DFO.

Geoffrey Why: Jeff Why from Massachusetts DTC.

Mark Lancaster: Mark Lancaster, AT&T.

Greg Rogers: Greg Rogers with Bandwidth.

Mary Retka: Mary Retka from CenturyLink. Valerie and I were wondering if these other spots here were for some reason or there are middle seats on the airplane.

Valerie Cardwell: Valerie Caldwell, Comcast.

Betty Ann Kane: We thought those of you who have been here on your third day might need a little more time to stretch out.

Jose Jimenez: I would like the space but Comtel is coming, I think. Jose Jimenez with Cox Communications.

Michael Altschul: Michael Altschul, CTIA.

Carolee Hall: Carolee Hall, Idaho staff.

Jerome Candelaria: Jerome Candelaria, NCTA.

Lynn Slaby: Lynn Slaby, Public Commissioner of Ohio.

Betty Ann Kane: We'll wait for the people on the phone in just a minute, okay?

Lynn Slaby: Okay.

Gina Perini: Gina Perini, SMS/800, Inc.

Rosemary Emmer: Rosemary Emmer, Sprint.

Michele Thomas: Michele Thomas, T-Mobile.

Thomas Soroka, Jr.: Tom Soroka, U.S. Telecom.

Ann Berkowitz: Ann Berkowitz, Verizon.

Betty Ann Kane: Now, the folks on the phone, on the bridge.

Karen Reidy: Karen Reidy, with CompTel.

Thomas Dixon: Tom Dixon, with NASUCA.

Kathleen Bakke: Kathy Bakke with Wisconsin Public Service Commission.

Linda Hymans: Linda Hymans, with NeuStar Pooling.

Peter Jahn: Pete Jahn, Wisconsin Commission.

Male Voice: [Indiscernible]

Maryanne Townsend: Maryanne Townsend, Ohio Commission.

Betty Ann Kane: The person who spoke before Mary Ann, your transmission was garbled. Could you say your name again? The next to the last person. Okay, we will go on.

Gordon O'Neal Hamilton: This is Gordon O'Neal Hamilton, South Carolina PSC.

Betty Ann Kane: Anyone else?

Douglas Pratt: Doug Pratt, South Carolina Commission.

Betty Ann Kane: All right. I'm going to remind the folks who are on the bridge, if you would also send an email to Carmell Weathers so that we do have recorded your names, spelled correctly and the fact that you're here. And as I said, the sign-in sheet is going around. Also, remind folks, when you want to be recognized you have to put your card up and just pause, count to three, so that the guy in the booth can turn your microphone on because the microphones are turned off unless you're actually speaking.

You have before you the agenda that was mailed out for today's meeting. I want to make one change in the order of the items on the agenda. Item number 12 the report of the Status of the Industry Numbering Committee, the INC., Shaunna, who is going to make that report, Shaunna Forshee, has a plane to catch so we're going to move that up - if there's no objection - move item number 12 after item number 5. Are there any other additions, corrections to the agenda, Mary?

Mary Retka: We have an action item that isn't on the agenda per se. It could go with the summary of action item 14 if you want. It's the work that I did with Henning in regards to his items that need to be worked at the working group.

Betty Ann Kane: Yes. And that was sent out to everyone. That was circulated. The summary of action items is a summary of actions we've actually taken, so that needs to go on the agenda earlier. I think let's put it on after number 13. Added it in there after the report of the Future of Numbering working group, your report, and there will be some action required on that or action requested on that.

Mary Retka: Yes.

Betty Ann Kane: Thank you. Announcements and recent news, first, I did want to announce that yesterday, as I mentioned, NANC did meet in closed session. We did consider the report and recommendation from the selection working group in terms of selection of recommendation to the Federal Communications Commission for a local numbering porting administrator and that report will be sent to the commission. That remains an item that is under non-disclosure agreement. It remains an item that is confidential. Rosemary Emmer, you have some visitors you want to introduce.

Rosemary Emmer: Yes. Thank you. I just wanted everyone to know that one of my favorite cousins, the name is Chucky Handley [phonetic] and his daughter is here today, Meagan Handley [phonetic], and her friend Jasmine Kemp [phonetic]. They're students and they're from California. When I saw them a couple of days ago, I just happened to mention that we had this meeting, and I wasn't sure they would really be interested in coming. But I'm so thrilled that they're here to be able to see what we do. So if you would see them at break and say hello, I'd appreciate it. Thank you so much.

Betty Ann Kane: Thank you. And welcome to the next generation of numbering experts. All right, are there any other announcements? Sanford, you have some announcements or news? Yes.

Sanford Williams: Good morning. Welcome to our visitors. Hopefully, you won't fall asleep. This should actually be pretty interesting, I think. Welcome to our new members. We didn't meet in December. I have a list of three members who have joined the NANC since then, Scott Seab from Level 3, Mark Lancaster from AT&T, and James Caster [phonetic] from SMS/800 is the new alternate. We welcome all of them and I look forward to their contributions. On a personal note, I wanted to say that a friend of mine talked with Marilyn this weekend, Marilyn Jones, the current DFO. She's in Afghanistan. She's doing okay and looking forward to coming back. She relayed her wishes to everyone that she worked with at the NANC and at the Commission. So I'm just relaying that message. Thank you.

Betty Ann Kane: Thank you for that update, and welcome again to our new members. The next item is the approval of the transcript of the September 18th, 2013 meeting. That was sent out to everyone and it's posted electronically. Are there any additions, corrections or questions about the transcript, the minutes? Okay, then we will conclude. Anyone on the phone? That will be considered approved. Next item is the report of the North American Numbering Plan Administration, the NANPA, John Manning.

Thank you for reminding me. The agenda will be item number 1, for the record. The transcript of the September 18th meeting is item number 2 and this will be marked as item number 3.

John Manning: Good morning everybody. Just a couple of items here, understanding that we didn't meet. The last time we had a face to face meeting was in September. My report

was provided, as well as everybody else's, and is posted on the NANC-chair.org website. All those reports that we did not get to see because the meeting was cancelled are on that website. So that if indeed, you want to take a look at something up there, that's where it's posted.

With regard to the NANPA report, a number of items that were covered on that report, I'm not going to go over them here figuring that if you need to have that information, it's available to you. I will note that the NANPA report compared to previous reports is quite large. It's due to the fact that with each of the first meeting of the year, we do include an update on all of the NANP resources, the status of those resources which I'll cover here this morning. As well as we include the yearly NANPA highlights document which starts on page 11 of the report. If you want, I'll be happy to go page by page, line by line on that item. But I don't think that's necessary. We'll be doing that with the NOWG next month. But certainly, if you have any questions about that document or anything in there, feel free to ask me either now or during the break.

As I just mentioned, we're going to be providing you a summary of activities over 2013, from central office code activity to area code assignment, as well as area code relief activities, a yearend review of all the NANPA resources. I did want to touch on an item, our NANPA change orders which were completed last year, but I did want to make sure that NANC was aware of that and briefly review that item. Then finally, just some other NANPA or NANPA-related news.

So on page 2 of the report, 2013 we assigned a little over 2,700 central office codes and a total of 284 code returns were approved. I'll point your attention to the chart, you'll notice the total request process in 2013 were over 20,000 requests which is significantly higher than



previous years. That's due to one primary reason, and that reason being is that we process a large quantity of what we refer to as mass modifications. These are when carriers submit a lot of changes to their code assignment records and they can do that in a mass modification type format where they give us a spreadsheet of those changes and we process those changes. In the chart, you'll see we processed over 16,300 changes in 2013. This was due primarily to this mass modification changes that were used by just a few service providers. Net assignments for 2013 were a little over 2,400 codes and that is basically in line with what we've been experiencing over the past two to three years. You'll note that the quantity of code returns that were approved are less than in previous years. The past two years, we seem to have one or two service providers who, for whatever reason, was returning in a large quantity of codes. It didn't happen in 2013 so that figure is down somewhat.

Finally, I note in 2013, over 90 percent of all code requests were made in pooling areas. So when it comes to actual assignments, the vast majority of those assignments that we're making are what we commonly refer to as pooling pass throughs. The service providers are operating in a pooling rate area and they need to have a central office code assigned.

At the bottom of the report, I do provide you a list of reports that are available on the NANPA website. If indeed you're ever interested in terms of the quantities of assignments or who's receiving assignments or our quantity of available prefixes, certainly these reports are available to you. You can download them at any time, and they are updated daily.

On page 2, just a little synopsis of where our CO codes are going, top NPAs in states in terms of code assignments in 2013. I don't know if you want to refer to them as the winner or not, but Texas 713, 281 and 832, that is the Houston area, was a top area code complex to

receive the largest quantity of assignments. Texas also came in third in the Dallas area with the area code complex of 214, 469 and 972.

Interesting enough, West Virginia - proud and wonderful West Virginia - came in second in this list. And this an example of where a service provider has decided to enter in the market and gets a central office code and a variety of different rate centers. We've seen this in the past. It was more common in the past, but it still does take place where I see a service provider enters the market and they need a code. Whether the particular rate centers are in pooling or not in pooling, it is all dependent upon their situation of their specific rate centers.

You can see Ohio 440's in there and Michigan 906, which is also somewhat surprising. If you're not familiar with Michigan, this is the northernmost part of Michigan, the Marquette area. Another example of a service provider coming in and getting initial codes where they were as option pooling and they chose not to participate in pooling.

Moving down the list in terms of states, not surprisingly Texas is number one. California reappears on this report. In the past couple of years, California, due to the large quantity of returns, their net assignments were down. But in 2013, they came in second to Texas. Then you see remaining, the top five, Ohio, Illinois and New York. Any questions with regard to central office code assignment activity?

Betty Ann Kane: Any questions on the phone?

John Manning: Turning our attention to area code assignment activity. I typically keep the NANC informed on this activity at each NANC meeting. Just to review, in 2013, at the end of the year, 400 area codes were assigned in which 371 are in service. You see the breakdown there. Three hundred fifty-six are geographic area codes, 15 are non-geographic and 29 are waiting implementation, leaving us 281 area codes that are currently unassigned.

Eight area codes were assigned in 2013. And since the last time we met, and which again was in September, we had quite a number of codes that were assigned. The third bullet down, you talk about Tennessee, 629 overlaid the 615. Two area codes in Canada: in South Western Ontario and Alberta, Canada. We had the Ohio 220 to overlay the 740. South Carolina 854 over the 843, and finally, the 628 overlay of the 415 area code.

We had seven area codes placed into service in 2013. Since our last meeting, those two area codes, one geographic code would be in Pennsylvania. That's 272 overlay of the 570 area code. We also had the implementation of the next toll-free area code, the 844 that occurred in December of last year. And finally, as been previously reported, four area codes were moved to the reserved status: the 550, the 535, the 546 and 558 were moved from available to reserved status for future non-geographic 5XX-NXX code assignment.

For area code relief planning, 2014 as well as 2015, they're going to be fairly busy for us. We've already started in Kentucky 270 with the overlay of the 346 that took place earlier this month. Next stop is Nevada, 702 with the overlay of the 725. Permissive dialing already started in August of 2013. Mandatory 10-digit dialing will start in May and the in-service date for the new 725 is June of 2014.

Along with that, our Texas 281, 713, 832, the leading complex in terms of code assignments will be introduced in its fourth area code the 346. That will take place in July. In August, Kentucky 860 will have the 959 area code implemented. They already are doing 10-digit dialing so it's just basically network preparation for an effective date of August 30th of 2014. Then we have Indiana 812 with an overlay of 930, permissive dialing, 10-digit dialing started just this month. Mandatory dialing will begin in September, with an effective date of 930 in October of this year.

Betty Ann Kane: John, I'm sorry. Did you say that first one was Kentucky?

John Manning: Connecticut.

Betty Ann Kane: It's Connecticut. Thank you.

John Manning: Yes, thank you. Then finally, one note I did not have here on the report, our friends up north in Canada, in Nova Scotia, Prince Edward Island, the 902 area code, it will be overlaid with the 782 area code, mandatory 10-digit dialing starting in August, the in-service date of November 30, 2014.

Now, we turn to 2015. 615 will be overlaid with the 629. Permissive dialing will start in July of this year. Mandatory 10-digit dialing will be in February of 2015 with an effective date of March 28, 2015. The California 415 overlay with the 628 area code. Permissive 1+10-digit dialing will start in August this year. Mandatory 1+ dialing will begin in February of next year with an in-service date of March 2015. Ohio 740 overlay with the 220 NPA, permissive 10-digit dialing will begin in September of this year; mandatory 10-digit dialing in March of next year and effective date of April 2015. Finally, South Carolina 843 with the overlay of the 854 area code, permissive 10-digit dialing will start in March of 2015; mandatory in September of 2015, with an October of 2015 effective date.

The last two projects, New Jersey 609. NANPA filed on behalf of the industry a petition with the New Jersey Board of Public Utilities recommended an all-services overlay of the 609 area code. Finally, in North Carolina, 336, the North Carolina Utilities Commission will be holding some public hearings in June of this year to discuss the proposed all-services overlay of the 336 area code. Any questions on the relief planning activity?

Betty Ann Kane: Questions from the phone? Yes, Jerome.

Jerome Candelaria: Can you give me a sense of how many overlays as of this year we will have had in North America. I'm trying to get a sense of just how extensive overlaying will be.

John Manning: I think the short answer - it is predominantly the method of relief these days. The last split, if I have my dates correctly, was back in 2007 when we did a split down in New Mexico. Since then, everything - both in the U.S. as well as in Canada - have been overlays in the general sense now. Although they are looked at and NANPA does propose split alternatives whenever we're looking at particularly relief alternatives, assuming a split alternative is a viable alternative. We do propose that as part of the industry review. But for the most part, I can say now, generally it's nearly always going to be overlays in terms of a recommendation or consensus.

Jerome Candelaria: How about the number actually implemented if you find it?

John Manning: I'd have to go back and take a look at it but a great source is the NANPA 2013 annual report. In there, there is a chart of all of the overlays both the ones recently implemented, as well as all those that exist within North America and the North American Numbering Plan. You can certainly take a look at that document and give you the sense of the quantity. Also on the website, we have a listing of area codes implemented since 1995. If you would have looked at that chart in terms of overlay, it says yes or no. You'll see nothing but yeses in there. That's why I point you back to New Mexico 505, I believe it's 575, I can't recall exactly, was the last split that we had.

Betty Ann Kane: John, I have one question. If you'd explain, in what circumstances does a 1+10-digit dialing go into effect as opposed to just straight 10-digit dialing? I know 1+ is

for long distance, but when you're dialing on a wireless, you usually don't do the 1+. So what's the difference between the 1+ and a regular 10-digit?

John Manning: Typically, and in the overlay situations, you'll see most of the time it's just mandatory 10-digit dialing. What they're saying is a local call that used to be seven-digits is now a local call that must be dialed on a 10-digit basis. Toll calls are still 1+10 digit basis. In California, they've implemented the concept that anytime you dial 10-digit you must dial 1. So whether it's a local or a toll call, regardless, if you're dialing another area code you are required to dial the 1+10 digit.

Betty Ann Kane: Does that apply to landline only or to --?

John Manning: It's a generic dialing plan. It should be applied to all types of carriers as to the unique situation of those carriers and what they can do today. I'd have to turn to them to say specifically what they have implemented in those situations.

Betty Ann Kane: But that was a state decision?

John Manning: Yes, a state decision, yes.

Betty Ann Kane: Okay, thank you.

John Manning: Proceeding on page 6. Let's talk about some of the other NANPA resources. Feature Group B, as in Bravo, Carrier Identification Codes. No codes were assigned in 2013 and six were either returned or reclaimed. There are 264 total assignments and the potential exhaust of this resource is not a concern at this time. Feature Group D, as in David, Carrier Identification Codes. We assigned 33 of these CICs in 2013. Forty-nine of these CICs were either returned or reclaimed. You can see the end of the year a little over 2,000 Feature Group D CICs are assigned leading over 7700 available for assignment. I should note that the FCC currently limits all entities to receive only up to two CICs per entity.

Proceeding on page 7, the 5XX NPA resource, we assigned 341 5XX-NXX codes in 2013. Eleven codes were either returned or reclaimed in 2013. At the end of the year, 165 codes remained available for assignment. Just under 3,000 codes are currently assigned. In October, NANPA published a Planning Letter 458, where we basically announced to the industry that it looked like the 5XX NPA resource was going to exhaust some time in the first half of 2014 and that the next 5XX NPA will be the 577 area code. In February of this year, we published Planning Letter 464 which provided the status report on the current 5XX NPA resource, and announced that we expected that this resource was going to exhaust this quarter and that 577 assignments would start some time this quarter. At this time, we're still expecting that may still be the case, if not this quarter, shortly thereafter because at the present we only have two 5XX-NXXs available for assignment right now. So with the next request or several requests, we expect to be assigning 577 NXX here shortly.

The 900 resource, no codes were assigned in 2013. Forty-one of 900 NXX codes were returned or reclaimed. There are 60 codes assigned; 39 are reserved for Canadian use, leaving 693 available, 900 NXXs. The 555 line number resource, I give you the definition of what it's used for here, but there were no new 555 line number assignments and no 555 line number reclaimed or recovered.

On page 9, the 800-855 resource, that's again used for the purpose of accessing public services for the hearing impaired of the PTSN. One 800-855 line number was assigned in 2013. There are a total of 94 of these line numbers in service at the end of last year. The NPA 456 NXX codes, this is used or enable inbound international calls to carrier specific services. Four 456 NXX codes were recovered last year and resulting in just four assignments out of this area

code. To bring you up-to-date, we're now down to just three NXX assignments out of this area code.

Finally, the last-two vertical service codes and ANI or Automatic Number Identification digit payers, I gave you the service definition for these but there were no assignments of these resources. Are there any questions with regard to the other resources that NANPA administers?

Proceeding on to NANPA change order 1, this is a change order we implemented at the end of last year. This is where we changed not only these system capabilities associated with assignments of the 5XX NPA resource; it also changed the definition for which these resources could be used. On September 27th we implemented in the NANPA administration system the ability to submit an application for 5XX NPA. We followed it up in November of last year with some additional capabilities, and I've kind of highlighted them for you here. This was again included in my December 2013 report. But we have now implemented this in the system. Carriers are submitting the applications and receiving resources via the new capabilities within the NANP Administration System.

Also, we have implemented certain reports available on the public website, at the top of page 10, where you can get real time updates on the available codes. They utilize 5XX NPA codes as well as those that are aging. Finally, to assist in the processing the number of utilization and forecasting, we implemented the utilization missing reports for the 5XX area code, allowing those service providers who have those resources to file their utilization and forecast reports, and then check to make sure that they have indeed filed on all the resources that are assigned to them.

Lastly, on page 10, just a couple of other items here, just to make note, as we've done in previous years, the 2013 NANPA performance survey was posted to the NANPA website on January 2nd. Notices were sent out in coordination with the NOWG encouraging service



providers, regulators and other interested parties to submit their surveys. The 2013 NANPA annual report will be available. The plan is it will be available tomorrow on the NANPA website and it will be accompanied with a notice sent out to the industry about its availability. We did indeed at the beginning of January publish our fourth quarter newsletter, and we'll publish another newsletter in the first week of April of this year.

Finally, two items here, one of which is the NANPA operational review session which will take place on April 15th and 16th. Again, I point you to the document at the back end of this report. It is the highlights of NANPA in 2013 and we will be covering that in a fairly detailed presentation that will take place on the 15th. Finally, at the end of April, we will publish the April 2014 NPA NANP and 5XX NPA exhaust projections. They will be posted to the website with appropriate notifications sent out to the industry. That concludes the portion of the presentation that I wanted to cover. If there are any questions, I'm happy to address it.

Betty Ann Kane: Any further questions? Thank you, John.

John Manning: Thank you.

Betty Ann Kane: item number 4 on the agenda, report of the National Thousands-Block Pooling Administrator. We will mark this report as item number 4.

Amy Putnam: Good morning. I'm Amy Putnam. I'm the director of Thousands-Block Pooling and pooling is fine. On the first page of your report, the first slide is the 12-month running total of the PA activity summary data, March 2013-February 2014 as the NANC had requested, lo [sounds like], these many years ago. The year-to-year comparison, some of which John talked about are in several charts and graphs in our annual reports to the FCC which will be posted to the website very shortly. However, I will say that for January-February 2013, speaking of the activity, we processed 24,378 Part 3s. And for the same period in January 14, we are

down. We processed only 16,704 Part 3s, so we need to drum up some business. The next chart on the bottom of that slide is the p-ANI summary data. That's the information that shows the activity of the p-ANI administration.

The next chart is the Part 3 summary data. Again, a 12-month total showing how many Part 3s were approved, denied, suspended or withdrawn. The next chart breaks them out to show them sorted by type so that you could see what type of activity happened for each of the Part 3s. In the last 12 months, we opened 2,438 CO codes, NXX codes, for LRN's dedicated customers or pool replenishment.

The next chart shows the summary of rate center information changes. These are changes from optional to mandatory at the request of service providers or state regulated or related to delegated authority, for example, Montana. Montana just implemented mandatory pooling this year. You will note that we had significant increases in May and June and July and January. The May and June number of changes were due to MSA changes which I'll discuss a little bit later. And the others are addressed in the footnote in July. We changed 202 rate centers from excluded to optional at the request of state regulatory staff, and January was impacted by the pooling in Montana.

Next chart shows reclamation activity, and then the next two are the pooling administration system, the PAS performance and RNAS performance. In each case, we had downtime. In January, 56 minutes of downtime. At the end of January, we had a hardware issue with the shared firewall for PAS and RNAS. That did not impact any customers and was corrected promptly. Other pooling related activities, we filed all of our reports in the appropriate timeframe. As I noted, the pool start date for Montana was in January 13, 2014.

P-ANI Administration, p-ANI continues to process requests and also reconciles p-ANI data. Every new round of annual reports brings more interesting data. Those reports start coming in, in February. They are due by April 1st. We meet with the NOWG every month. Our operational review for 2013 will be next week in Concord, California. The only pending change order is part of Change Order 24. We completed the first part on July 19th, and the remainder has been rolled into the implementation of the PAS rollout. We are working on the second half of that. That was a no-cost change order. Special projects: we had a successful overall trial of the VoIP trial. At least we believe that it was successful. And we had an extension of our contract before it was renewed in July.

I'm not going to read through all of the Pooling Administration's highlights for 2013 which constitute the rest of the report. But I am going to draw your attention to a few of them, Pooling and p-ANI. This year we processed 137,375 Part 3s. That's the highest annual total of applications we've ever processed, and we processed all of them on time. If anybody is in a pool, California and Texas had the highest number of Part 3s and Texas 832 wins. So we're pleased with that. We're pleased to say that that was the highest number that we've processed ever.

On the next page I'd just like to draw your attention to the MSA name changes which I mentioned previously. That's one of those things that we do that just kind of happens and the amount of work behind it isn't always clear. But in February, OMB published the bulletin revising the definition of the MSAs - metropolitan statistical areas and combined statistical areas - and changed the names of 36 of the current top 100 MSAs. When that happens, we look at them. Then we have to cross-reference them with the county compositions of the MSAs and cross-reference that with the census bureau data on the size of the county, cross-reference that

with all of the rate centers that are in the new counties and figure out which ones are now in the top 100, which ones may have dropped out of the 100 top 100. But they never really dropped out of the top 100 because once you're in pooling you're always in pooling. There is a lot of work involved in that in order to assure that all rate centers that are identified on our website are properly characterized, are in the proper MSA, and are identified as optional, mandatory or state mandatory. Our quality assurance group works on that and it takes them a lot of time.

We're very proud of the VoIP trial. All the applications came through the pooling administrator. Even some that were processed through the NANPA 4 codes. We worked closely with the FCC on that. We met twice with the FCC prior to the start of the trial to assure that the processes that we were going to use were appropriate. And during 2013, we've spent a lot of time working on system enhancements for the new system that will be rolled out in January of 2014 pursuant to the FCC request. The pooling people had spent a lot of time writing requirements and doing testing. Again, that's something that is a lot of work that's behind the scenes that people may not realize, but we're proud of the result.

Betty Ann Kane: We stop there to see if there are any questions about the Pooling Administration highlights. Jose.

Jose Jimenez: Hi. I'm curious. You mentioned the trials and you mentioned a lot of work. Were there any lessons that you got from the trials that you can share with this group, any good things or interesting things or maybe not so good things?

Amy Putnam: From the trial?

Jose Jimenez: From the trial experience, yes, the fourth trial.

Amy Putnam: One thing I could share is that we're ready for anything. We worked closely - as did NANPA - we worked closely with the carriers. We spent a lot of time on the

telephone. Because these were people who were not used to the process and sometimes were frustrated with the process. Because of being VoIP carriers, they were used to -- I'm trying to figure out a delicate way to say it.

Betty Ann Kane: Having to deal with other entities?

Amy Putnam: They weren't used to legacy processes. There was some weeping and gnashing of teeth. But it worked and people got their numbers. So past the weeping and gnashing of teeth, it was a good thing.

Jose Jimenez: Did they raise some objections about their legacy processes that caused you or others that managed those processes to think perhaps those could change? I'm just curious. Was there a learning on your side as well?

Amy Putnam: All the learning that we did we shared with the FCC. And I think that your question is more properly addressed to the DFO.

Betty Ann Kane: You note, Amy, that the final trial report was issued by the FCC on February 1st with comments due on March 3rd. So are those questions that Jose asked perhaps answered in that report or dealt with in that report? Is that the kind of thing that that report might --

Sanford Williams: There's still nothing NPRM [phonetic], so going forward, we're still gathering information. But the report does allude to some of that information that was asked about. Thank you very much, Amy, for deflecting the question to me.

Betty Ann Kane: And of course, there are some other trials going on. I'm thinking of the scheduling maybe at our June meeting, having some from the commission come and brief us on what those results were. Could you just, Amy, mention just for the record which of the five

states were affected? You said there were five states commissions but there were nine states impacted. Do you remember which of the five were?

Amy Putman: Florida, California, Massachusetts, Arizona, and Georgia. Thank you everybody.

Betty Ann Kane: All right. Thank you very much. And you want the next, the p-ANI administration highlights.

Amy Putnam: Yes, P-ANI, I just wanted to comment once again that Florence continues to work on reconciling data, that we continue to get data through annual reports and through other system clean-ups that indicates double assignment or other things that predated our assumption of the role of national p-ANI. That continues to take her time. That, again, is a behind-the-scenes thing that people may not notice. But it is a lot of work, a lot of time talking to carriers on the phone and working with people to make compromises and go back and check their records. I don't want that to be overlooked. Thank you.

Betty Ann Kane: Thank you. Amy, I have one other question on the MSA name changes which of course were done by the Office of Management and Budget. The implication or the impact of moving into current top 100 MSAs, it means that area then or the carriers in that area will have to go into mandatory pooling. What is the impact on their numbering status when you're moved into a top 100 MSA?

Amy Putnam: For any carrier that is not already pooling, and many carriers are, they're already pooling in optional rate centers that are outside the top 100 MSAs. So for any carrier, we review the situation. For any carrier that is impacted who may not have been pooling in the past and may not be familiar with them, we contact them, ask them if they need assistance, provide them with assistance to get up to speed.

Betty Ann Kane: So when they move in to that category, it's mandatory?

Amy Putnam: Yes.

Betty Ann Kane: That's what you're saying. Was there any difficulty as the result of those changes?

Amy Putnam: number

Betty Ann Kane: Because those are changes that some other federal agency makes as a result of --

Amy Putnam: Yes. And we monitor the websites so that we're not caught off guard.

Betty Ann Kane: And you had adequate heads up on it. Thank you very much. Further questions on this item? Thank you, Amy. And just in time, we are moving on to item number 5, a report on the numbering testbed workshop which took place on Tuesday. And I want to welcome Henning Schulzrinne, who's the chief technology officer at the commission. Thank you.

Henning Schulzrinne: Thank you. I did have slides for that. I think we'll skip them because it will take too long to load them up.

Betty Ann Kane: Let me ask you then. If you could submit your slides though for the record, we can distribute them and I'll mark those slides then as item number 5.

Henning Schulzrinne: We had a numbering workshop on Tuesday that was an attempt to do something a little different than what we usually do for workshops. I suspect almost all of you have been at commission workshops where we typically have a table up here and we have five or six presenters discussing the panel format. The workshop was different in a sense that we were trying to get input from a broad active participation, from a much broader set of

participants in the numbering ecosystems. We had a total of about 80 or so people here in the room and about 45 more passive participants on the phone bridge that we had set up.

We looked at - after the kind opening remarks of the chairman - a broad range of topics, really trying to address long range engineering issues that we need to look at as we move to an all-IP network. My basic charge, if you like, to the workshop was the one argument that we didn't want to discuss is the variations on we've always done it in a certain way so we should continue to do it that way. I think I can say that we succeeded if nothing else for the workshop on pretty much keeping those type of arguments out of the discussions. So you can call it a green field or whatever approach, but our notion was a clean slate. Buzzwords to those effects were used.

Also, the second of our object was to the extent we could do that. It's not completely possible, but to the extent we could do that to separate policy concerns from technology concerns. The model that I posed was with some gross simplification that any previous model has often been as a policy objective, say, local number portability, all that could wiggle [sounds like] through the usual processes, NANC say or a commission rulemaking process. And then a change order or a work order is done, and then whoever the contractor happens to be implements those with some delay. I believe we were now at a time when at least on an all-IP network, we can try a somewhat different approach where we build a generic platform that allows a broad range, an infinite range obviously, but a broad range of policies to be implemented on a relatively short time scale by essentially turning knobs as opposed to writing completely new code that is from the unknown.

In particular, there seem to be some interest in exploring new models that were not bound by the current structure of the numbering database system which has evolved, as you know them



better based on your much longer history in this particular area. Essentially, somebody said to me afterwards was the current model or the historical model is new function, new database. If you needed a new data element, say you had caller name delivery, then you build new data names [sounds like], CNAM in that case. Nobody seemed to be too eager to replicate that particular model. It doesn't mean we couldn't have more than one database, but there is a notion that we should have a relatively flexible core database that provided the key functions that have to be centralized logically at least. And then allow other databases in a well-organized fashion to drive data, to provide additional value to that.

So what we looked at were two models, broadly speaking, that were discussed as possibilities. One is a more hierarchical model that is somewhat similar to the model that we have currently for domain names where we have domain name registry say for the .com, .org domain - those are different. And then registrars that deal with a more consumer interfaces or resources which could be carriers, say, in our case, those would maintain essentially a minimal set of attributes. Those largely fell [sounds like] based on the discussion into I would say three broad categories namely, reachability information that could be direct or indirect services, what currently is the LRN type of information, routing information, which would then be replaced by some pointer to some IP-based database, even so by one or more levels of indirection.

Attribution information so that it is clear who is the holder of record for that particular block of numbers or number as it may be. Who that might be, that could change, but that's a policy question and engineering question.

So in the current domain name system, we have something called the Whois [phonetic] database which was designed to provide exactly kind of a technical, administrative and billing

contact information for that. There is some interest in exploring, as to whether that model, not the detailed technology, but the type of information would be helpful or not.

There also was discussion that in all of those data access, we can separate out as to what data is stored and who has access to the data. So some data, for example, may only be accessible to say the commission and law enforcement and the originating entity, the carrier whoever that happens to be. Our information may be by choice or by mandate be made broadly available to the public or to carriers with need to know if you like and not to deal with call routing problem, rural call completion type problems that we have.

The third piece of information, logically there may be more than one instance of it is the notion of some kind of a proof of possession, namely a proof of assignment where an entity could prove to third-parties that they indeed are the current holder of that numbering resource. So this matter is for purposes of dealing with robocalling and similar issues where people can spoof numbers and the recipient and people in the organizations in the chain of the call delivery have no idea whether this entity is being honest about their numbering resource used or not. As many of you know, we've had a recent spate of very criminal, very fraudulent calls supposedly originating, presumably because what time of year it is, from the Internal Revenue Service that spoofs the local police station and threatens arrest and deportation, whatever else it happens to be for not paying fictitious taxes immediately by debit card.

We looked at these data elements. Then after discussing some of the details how these might be managed and separating access from the data itself, access issues, policies from the data itself, we then at the end of the day discussed how we could make progress on that. It was by the show of hands that I asked for -- I would say a large amount of interest from different participants to actually build what I would characterize as a distributed testbed. Namely, that

parties who wanted to participate, and those included carriers, service providers, RESPORGs [phonetic], the Mozilla Foundation that builds WebRTC type of products, obviously the numbering administrator type of entities that have some play today in one or more of the databases and others not as traditionally affiliated in the numbering space. They would contribute just by hosting it on some cloud server or an externally accessible computing resources in their own organization pieces of it, like a database administration piece, maybe a call routing piece using fictitious numbers that are not overlapping with some, let's say, somebody mentioned area code 100 type of thing. So it wouldn't really be connected to the existing system. It would be some other toy sandbox type of environment. The idea was we would have subgroups that we would organize. Set up a forum for people to essentially congregate around this type of structures so that we can very rapidly, probably not a matter of weeks but certainly well short of a year have something that we can demonstrate, that without making any policy decisions can explore what is technically possible.

Everybody I believe that spoke at least was advocating for simplifying the system. Seeing what are the key features that have to be in it and others that can be provided externally by third parties but don't have to be agreed upon by everybody. Have a system that can evolve, allows in some cases multiple solutions. So instead of spending years trying to agree on one, we just let a few flowers bloom at least. And the testbed would be a way to explore that and see which ones meet the needs of different constituencies, because in many cases you have people provide [sounds like] the server have to agree with different parties who would be clients in a technical sense and maybe in a business sense as well of those entities that build the server piece. It can't just be a unilateral decision of that.

That's a brief synopsis of what I felt was a very constructive, productive and collaborative discussion that we have. I'd be more than happy to answer any questions or go into more detail.

Betty Ann Kane: Questions? Mary.

Mary Retka: Thanks Dr. Schulzrinne. I thought that it was a very valuable use of our day. It did address a lot of the things that you had mentioned in last February's meeting with the NANC, as well as the meeting in September when you talked about the spoofing concerns. I would like to just also remind everybody that there are comments due on the docket, on the Testbed 14-5 that are due on Monday. I think parties could also comment in that docket as well on things that they may want to bring up now that they've been to the workshop. Or if they weren't able to be at the workshop, they may raise some of their concerns or issues or questions. I think that it's important for all of us to understand that we're really seeing an evolution of the type of -- I would call it addressing or indexing, as you've referenced it in some of the discussion yesterday. So I think people at this table will have a lot of interest in all of that as we move forward.

Henning Schulzrinne: Yes. I thank you for that additional comment. You made a very important point that I omitted to say namely, one vehicle - not the only one certainly - but one vehicle to delve into a little bit more detail. And you can do it at the microphone and the workshop, would be indeed to provide focus or broaden comments on specific aspects. A number of people, at least at the microphone, promised that they would do that. We look forward to receiving those.

An important additional comment that I think you made early on, as well as I want to reemphasize is we do see this very much as -- I mean I use at least the buzzword that you hear in

these type of things as a multi-stakeholder type of effort. We are trying very much, and this is for multi-stakeholder both individually and as an organization and so on, but also in terms of some of the convening bodies that we already have such as the NANC, such as ATIS, such as the IETF, such as other bodies that might have shown interest in that. Because it does affect a large number of people and organizations and we want to make sure that those get heard early on and that we can do this collaboratively.

My impression, my temperature reading was while there probably will be a fair amount of disagreement on some of the policy details as you would expect, it did seem to be a general willingness to at least entertain as much commonality as we could on the technical issues. As long as we are able to accommodate a reasonably broad range, we might actually be able to make some progress so that we can at least evaluate real prototypes as opposed to just PowerPoint slides.

Mary Retka: Dr. Schulzrinne, when we finished yesterday, you talked about the fact that you were going to provide a synopsis out of the workshop as well as a mailing list that would come out to all of us, and then you would determine what types of regular meetings would be held. Do you have any sense of when we might see some next steps or next meetings scheduled?

Henning Schulzrinne: Thank you for essentially calling me out in public on my commitments.

Betty Ann Kane: That's right. I was going to ask the same question, sort of about what are your plans.

Henning Schulzrinne: Exactly.

Betty Ann Kane: You mentioned a year management of it although it's going to set up maybe some additional groups of people who may be almost on their own getting together so it

remain managed under your office, et cetera. Where do we go from here and how do you see keeping the NANC informed, but eventually the product and our relationship to it?

Henning Schulzrinne: So you mentioned exactly some of the key next steps namely I'm under the hook to write the summary report. Fortunately Bob Cannon, who has been helping me with setting up a workshop and doing a lot of the work that led up to that, took copious notes that we'll incorporate into reports which I hope to do within the next few weeks. I won't give it a precise deadline because I don't want to be called on that one.

Secondly, I have already been in touch -- we have an external standard organization that has kindly offered -- they can set up a mailing list. Hopefully, that will happen very quickly. It's all easier logistically to do that through that organization. I don't want to name them right now because they haven't done it yet. Again, the idea would be that mailing list would be open archives, open access. Anybody could join in that, so that this is not restricted. I've had conversations also that we would want to make sure clearly that NANC is briefed.

I would be more than happy at whatever meeting you're willing to put up with my ramblings to have a status update and then also have discussions with FoN. It seems like a natural place, at least, until when you decide differently to at least do maybe a little bit more of a detailed discussion that go beyond the scope that we can reasonably do at a plenary NANC meeting as well. There was also a suggestion offered on the floor that is in the standard's body meeting that deals with many of the signaling and numbering issues in Toronto in July which is the next ITF [phonetic] meeting. We might have an open meeting there because many people more on the engineering side would be attending that meeting anyway. So that might be a convenient way to do that. But that's not an agreement yet.

But I do want to fairly rapidly try to identify kind of subgroups once we have the mailing list to see if we can set up a phone call that would indeed put deadlines on people so that that would happen. I've already had one large company that shall remain unnamed, say that they are working internally to get the resources to participate in testbed as well. So hopefully soon we'll have some people who are willing to, on their side, say, yes, we're willing to stand up something within a month or two in that. That will really determine how much progress we will make.

There was also a notion that people would often look on the docket, as well as in other suitable forums through NANC, through these tenuous [sounds like] organizations that I mentioned to submit more detailed technical contributions that would be more outlining some of their perspectives on some of the individual pieces that we had identified as the access to administrative information, the allocation issues, and the access to routing and delegation information that was discussed at the workshop.

Mary Retka: Just as a follow up, too, I know you mentioned one of the working groups. But after our discussion later today, we're going to go through the document that you and I and Sanford talked about, so the working groups can start our effort as well. So I think that means it's going to be really important to coordinate with you and the work you're doing in the testbed and in our follow-up meetings in the NANC.

Henning Schulzrinne: Most certainly.

Rosemary Emmer: I'm not sure if this is the time to talk about where the NANC might go with this or is it when we present this paper later. But at some point, either now or later, I would like to talk about where the NANC is going to go with this. Are we going to make an IMG, an issue management group, to talk just specifically about testbed or about how numbering is related to the new IP contributions that are coming in? That kind of thing.

Betty Ann Kane: We do have your various reports on the possible ways that NANC could deal with this, and I put that in to the agenda as number 14 after the report. Well, Henning was here just to ask from his point of view the ongoing relationship with the NANC and we certainly will have you back at future meetings to coordinate and give us an update. Yes, AT&T.

Mark Lancaster: Just one comment about the scope of this project, we had a visitor from the Canadian Regulatory Authority at the testbed workshop. And we should remain aware that there are another 18 countries involved and the North American Numbering Council is strategically positioned to be able to invite those other parties if they chose to participate in, for instance, an IMG or some way to get their voice into the discussion because obviously the impact is on the whole country code one numbering plan.

Henning Schulzrinne: Whatever structure we derive in terms of mailing list and other end users make it possible. And through our international bureau, for example, make sure that all those parties, particularly some -- we are already before the workshop [indiscernible] not so much because they've obviously been not a part of +1, but there's other national regulatory agencies that also have an interest in this effort because everybody is facing similar issues even if they happen to be in a different country code. And to the extent possible, we want to make sure that because the equipment and services that are provided are now no longer a domestic market issue and so we want to make sure that in order to have the most competition and the widest diversity of offerings that this is early on coordinated, certainly most immediately with our +1 partners, as well as with others who ought to be thinking along the same lines and can contribute resources of experience.

Certainly, any contact that you can provide, particularly people -- to be honest, my concern is that, as you hinted at, is we've had let's say different degrees of participation by



different +1 participants. The last thing I want is that one of them, for whatever reason, because they're busy with other things suddenly say, oops, what happened to you? That serves nobody to the extent you have contacts and ways of reaching out to those and to the extent that they need to. I mean in some cases, given their smaller sizes, in many cases not from the Canadians so much but from the other smaller participants. It may not be as necessary, but they have every opportunity to be at the virtual table at least even if they're not at the physical table.

Jose Jimenez: To add to Mark's point, I mean not only are there countries that need to be part of this discussion but if you are looking at a body that probably has the widest umbrella of interest so that the issues that affect the smaller providers and the mid-sized and the larger, NANC is probably in the best position to do that. We belong to some standards organizations, but not all of them. So it becomes an easier kind of forum to be here because this is where most stakeholders either directly or through the associations have some representations.

Henning Schulzrinne: Among the many roles that NANC serve is indeed exactly as a way of collecting, streamlining if you want, in the sense of making them accessible to people. I mean, we always have been involved in standards in technical work for a while. We always have this difficulty that we have and more policy bigger picture organizations more of the operational side that just does one thing - they want to keep their service network running. In the engineering software development side, sometimes they don't talk as often and early as they should. And so with one role in the FoN has already started certainly down that and has been very useful to early on make sure that we do two things. Namely, one is the requirements and needs of everybody - small or large, U.S., Canadian and others - are known. Secondly, those requirements can filter. It can be introduced in the most engineering-oriented aspect and that they can participate at least in some way. They may not actually build software but they should

be able to, for example, if they have a product internally that they might see an operations product or assess product or whatever that they might want to be able to talk to their vendors about early on. So those are both important aspects that we, at NANC, can essentially also provide an information dissemination role as well as gathering of requirements and experiences.

The other one, NANC, I think one of its values is a collective memory namely many of you have been in the numbering area much longer than I have certainly been and many of you are more recent arrival to the voice IP space for example. So you have a lot of the we've tried this one before, that really didn't work out so well. Or we wish we could have done X, but we never quite were able to do that thing that your long history can individually as well as an organization can exactly help us to find [indiscernible]. I'm all for experiments, but I'm not for making the same mistakes or rediscovering the same things again. That's a waste of resources.

So to the extent that you can formalize that within whatever appropriate body in that, that would also be quite helpful again because numbering, unlike many other things, touches entities that traditionally weren't in the same room and even more so and even beyond the NANC scope. Now suddenly, in order to be productive and to avoid splintering and kind of the bolting on things that we have seen in the past, we need to avoid the decline [sounds like]. We need to make sure that they're at least at the table early on.

Betty Ann Kane: Thank you very much. Particularly, that discussion of international, there's a question I want to ask of Sanford. This is the North American Numbering Council. Now, have we had representation? I don't recall active participation. There are some of the companies obviously. But representation from Canada, Mexico, the Caribbean, what is the status of that?

Sanford Williams: The NANC started in 1997. I haven't been here since then, but I do know there had been other countries that have participated. They kind of come in and out. But I think between the international bureau [sounds like] and the contacts we have here and the information that we have at the commission, we can try reaching out to some of those folks to see if they want to participate and contribute.

Betty Ann Kane: It seems to be now if we're going into this future of numbering, particularly some of these new issues and testbeds, it's kind of another new effort to reach out. I know Canada has an equivalent of NARUC, for example. Certainly, there are companies in Mexico and other places, we'd make it another effort maybe to see if there is some interest particularly around this issue to bring them in, in addition to what some of the, obviously, the member companies now that operate in those areas.

Rosemary Emmer: I just wanted to make a note that at the LNPA Working Group that Canada is represented pretty regularly.

Betty Ann Kane: Good. Okay, thank you. We're now going to move up which had been item number 12 on the agenda which I had moved up to make it item number 6 and the report of the status of the industry numbering community, the INC. Yes, and we will label this report then number 6.

Shaunna Forshee: Good morning. My name is Shaunna Forshee with Sprint. I am the INC co-chair along with Dyan Adams of Verizon. Slide 2 is just an overview of our presentation today about INC. INC is the Industry Numbering Committee. It provides an open forum to address and resolve industry-wide issues associated with planning, administration, allocation, assignment and the use of North American numbering plan and numbering resources within the NANP area.

Memberships, you can become an INC member through the ATIS website. There are commissions listed there. INC meetings, since the previous NANC meeting, INC has held four face-to-face meetings - October, December, February and also this week. The next INC meeting will be held in Denver, Colorado May 6th through the 9th. Also, we have virtual meetings scheduled for March 31st, May 1st, May 28th and June 12th. Details of all future meetings can be found at the INC-ATIS website.

Our first issue is Issue 740, which is in final closure. This allows pooled NXXs with ports to be returned via PAS when there are boxes assigned to other service providers. To facilitate the return of pooled codes in a process that is efficient and consistent for service providers, INC agreed to allow a code holder to return a pooled NXX code when the code holder has ported TNs but no blocks assigned. Blocks are assigned to other service providers.

The PA will solicit a new code holder from existing block holders. If no block holder submits an application to become a new code holder, the PA will solicit a new code holder from service providers with ported TNs within that code. If no block holders or service providers with ported TNs submit application, the NXX code return will be denied rather than NANPA involving a state commission. INC made edits to the CO code assignment guideline, Appendix C, which is procedures for code holder exit, and the Thousand-Block-Pooling Administration guidelines to outline these changes, as well as to clarify existing language.

The next issue is Issue 748, which remains open. This issue was opened to assess impacts on numbering resources and a numbering administration with the transition from the PSTN to the IP. Continued discussion on the transition to IP during our December meeting, INC received a presentation 2020 Vision for Telephone Numbers from Henning Schulzrinne. I

conferred with Henning and Bob Cannon on topics related to the numbering and the role of INC via presentation the transition to all-IP network.

INC sent a recommendation related to nationwide ten-digit dialing on January 28th and received a response on January 29th through Henning. During INC's meeting on February 6th, Henning also joined our conversation and we discussed the national numbering testbed and further discussed the correspondence regarding the nationwide ten-digit dialing. We also received a presentation titled Number Allocation Conservation 2013 from Tom McGarry with Neustar; and also a presentation Using the NPAC as the ENUM Registry from Penn Pfautz with AT&T.

INC is prepared to provide support to the numbering aspect of the FCC Order 14-5. In addition, the INC members did attend the numbering workshop that was held on Tuesday. We will continue working towards further recommendations in support of the transition. And then, with that regard, we did draft high level functional requirements for the testbed yesterday.

Issue 769 is in final closure. This is a direct petition by NANPA for overlay NPA codes - new or additional - in addition of LNPA Working Group's best practice supporting the utilization of overlays as a preferred form of area code relief. INC updated the NPA code relief planning and notification guidelines to streamline the process to be used when NPA relief is required for: (a) an existing overlay complex; or (b) a single NPA area. And NANPA has determined that the only overlay alternative that meets the guidelines is the overlay.

A footnote was added to reference the NANC-LNPA Working Group Best Practice 30 recommendations supporting the utilization of overlays as a preferred form of area code relief. Also another footnote was added to encourage service providers to make 1+10 digits dialing permissive when 10-digit local dialing is implemented due to an overlay. And just to clarify on

example A that overlay complex is like Texas 281, 713, and 832 where they already have several area codes. And example B was we found recently like in Tennessee 615 NPA. The national rates had a concentration of NXXs that made the overlay the only possible relief along with Nevada's -- in case 702 with the Las Vegas rate centers.

We have issues in initial pending, which is Issue 768 that updates the part 1B form. Issue 765 updates to the part 1A form. The first one's 1B and the second is 1A. Issue 770 updates the TBPAG Part 3 form, and Issue 772 is to update the TBPAG Appendix 3 for the Months to Exhaust and Certification Worksheet. And these are due to the past enhancements of the PA's implementing. Our issues on final closure then are on slides 10, 11, and 12. Any relevant INC web pages can be found on slide 13. Does anyone have any questions?

Mary Retka: Thank you, Shaunna, for the report. While we're talking about INC, I thought it might be a good time to recognize Jean-Paul Emard from ATIS who is a long-standing INCster and has been involved in the numbering group in NANC for many, many years who is about to retire. I think actually today is also his birthday. But this is his very, very last NANC meeting and so I thought it might be a good time to recognize someone who has been so impactful to our numbering world.

Betty Ann Kane: Is he here?

Mary Retka: Yes, he is.

Betty Ann Kane: Happy birthday and happy retirement, and thank you for all your work from all of us.

Returning to the agenda, the next item which will now be item 7 is the report of the North American Numbering Plan, Billing and -- NOWG, I'm sorry. Yes. I'm getting ahead because

break is next. Yes, the report of the NOWG. We'll mark that report item 7. Welcome. Thank you.

Laura Dalton: Good morning. I'm Laura Dalton from Verizon. I'm one of the co-chairs of the Numbering Oversight Working Group, which is the NOWG, along with Karen Riepenkroger from Sprint. For those of you who may not be familiar with the NOWG, our primary role is to oversee the operations and review the performance of the two numbering administrators, the NANPA and the PA. Oversight of the PA includes monitoring the activities of the RNA, which is the routing number administrator. They're the part of the PA that's responsible for administering p-ANIs.

Slide 2 lists the contents of our report today. The topics that I'll be discussing on the following slides are the 2013 annual performance surveys for the numbering administrators, the NANPA and PA performance evaluation process, followed by the NANPA and PA annual reports and change orders, and finally the last few slides contain a list of the NOWG participating companies and the schedule of our upcoming meetings.

Turning to slide 3, 2013 performance surveys, annually, the NOWG conducts three separate industry surveys to obtain information regarding the performance of the NANPA, PA and RNA. The surveys are the main source of industry input on the administrator's performance. Both the comments received and the quantitative results from the surveys weigh into the NOWG's performance evaluation. This year's surveys, which were for the 2013 performance year, were deployed on January 2nd and were open for a six-week period for responses to be submitted online. The survey respondents are divided into two categories - industry and other respondents, and regulator respondents.

This slide shows the number of entities that completed the three different surveys. Overall we received approximately the same amount of survey responses that we received last year. We're grateful to everyone who took the time to complete our surveys. The survey results will be provided in detail in the performance evaluation reports that will be presented to the NANC at the June NANC meeting. The annual surveys are just one aspect of the performance evaluation process.

Slide 4 outlines some of the other NOWG activities that go into preparing the NANPA and PA performance reports. As the timeline of activities on this slide shows, the March through May timeframe is a very busy time of the year for the NOWG. During this time we review the survey data and analyze the results. We attend the operational reviews that are conducted by the PA and the NANPA. We also work on drafting the various sections of the performance evaluation reports. Our approach is to try to directly involve as many NOWG participants as possible by asking everyone to volunteer to draft at least one section of the reports. These first draft sections are then compiled into the draft documents and we hold several meetings to thoroughly review and revise the drafts as a group.

So the performance report preparation is truly a collective effort of the NOWG participants. After agreeing upon the ratings for the NANPA and the PA, we complete the reports and we meet with the staff from the FCCs Wireline Competition Bureau to present our preliminary reports to them. This year the NOWG-FCC meeting is scheduled for June 2nd. We plan to present the performance reports to the NANC for approval at the June NANC meeting.

Turning to slide 5, annual reports, as John Manning and Amy Putnam mentioned earlier, the NANPA and PA annual reports will be published at the end of March. Both annual reports contain a wealth of information about the activities of each administrator for the prior year. The



NOWG was given a draft copy of each annual report prior to it being finalized for publication. We appreciate the NANPA and the PA giving us the opportunity to provide feedback, consider our suggestions and answer any questions.

Moving on to slide 6 and 7, NANPA and PA change orders. Whenever the NANPA and PA submit a change order proposal to the FCC, the NOWG reviews the change order and prepares a summary and recommendation. Since the last NANC meeting, no new change orders were submitted by either the NANPA or the PA. All previously reported NANPA change orders have been implemented so there are none currently outstanding.

The chart on slide 7 shows one PA change order, Change Order 24 that Amy Putnam mentioned earlier. That was approved in 2012 but is still outstanding because it has not been fully implemented yet. The PA Change Order 24 will add functionality to enhance the file transfer protocol or FTP interface with the pooling administration system. The implementation of the remaining FTP enhancements are targeted to be completed in January 2015.

Slide 8 shows the listed NOWG participants. We currently have representatives from 10 service providers and two state regulatory commissions who participate in the NOWG.

Slide 9 shows the NOWGs upcoming meeting schedule for our regularly scheduled meetings. Coming up very soon are the annual operational reviews of the PA and the NANPA. The operational reviews are onsite meetings conducted for the NOWG to review all of the activities for the prior year. Also listed on this meeting schedule are the NOWGs monthly conference calls that are held separately with the NANPA and the PA to review their activities. Each month following our calls with the two numbering administrators, the NOWG holds NOWG-only calls to discuss any issues that may require follow up.

The last slide, slide 10, notes that in addition to the monthly calls already mentioned, we hold other NOWG-only conference calls when needed especially during the time when we are preparing the administrator's performance evaluation reports. This slide also shows the contact information for the co-chairs so if anyone is interested in joining the NOWG, please feel free to contact us. Thank you.

Betty Ann Kane: Thank you, Laura. Are there any questions? All right, thank you. We have on the agenda now a break. I'm actually looking at - just a brief break, a 10-minute break - looking at the fact we do have about seven or eight more items and reports. We have one, the last issue added, we will need some discussion and some decision. I'm going to suggest a brief break for 10 minutes and come back 11:45. Thank you.

Okay, we'll come back together now. We're going to reconvene. We're back on the record at 11:49 PM (sic). I'm going to call up the next report which is now number 8 on the agenda and document number 8 which is the report of the billing and collection agent.

Faith Marcotte: Good morning. I'm Faith Marcotte with Welch LLP. We are the billing and collection agent. There are two parts to our report this month. The first part is our normal financial report, and the second part is the budget and contribution factor discussion for the next funding year.

I'll start with the normal financial report. Page 1 shows the statement of financial position of the fund at the end of February. It shows that we have \$1,798,000 in the bank, \$240,000 in receivables from the carriers which left assets of \$2,041,000. We have liabilities to the vendors for \$493,000 which would have been paid out the following month and they're listed below. That left the fund with a balance of \$1,547,000 at the end of February.

The next page shows the projection of the fund out to the end of the funding year, which is June 30th of 2014. It shows that we anticipate the fund balance will be \$342,000 at the end of the funding year. At the bottom right hand corner in the box, we show there the anticipated balance in the fund was \$1,250,000 which was the contingency allowance and we're much lower than that. We're going to be at \$342,000. As you can see, the bulk of that was due to the pooling contract. It came in at a higher amount than had been budgeted and that was partly why the contingency was so high because we knew that was a likelihood. That was partially offset by the carrier audits for \$300,000 which did not occur.

So the net between the two basically produced the difference down to \$342,000 which is what we are projecting now. On page 4, three of the reports we see the next year. It's an early projection up to June 2015 and we're looking at a contingency of a million. That's what we're anticipating which will be in our further discussions when we discuss the budget. On page 4 we show here what our forecast liability is, what we expect to spend over the next six months, just the normal vendor amounts. Page 5 is our normal processes that happen during the month or quarter. Nothing unusual happened. All the regular processes are in place. That's where things stand with the financial report. Are there any questions?

Betty Ann Kane: Questions on the phone? Thank you. Go ahead.

Faith Marcotte: Okay, so I'll move on to the budget which is the second part of the reports. If you turn to page 3, it's the one with the numbers. It shows the comparison of the 2015 versus 2014 fiscal years. So I'll just run through the numbers with you. In the NANPA administration, according to their contract it is anticipated that will be \$2,134,000. The international participants will fund \$124,000 of that so that will leave the U.S. carriers to pay for \$2,010,000.

The Thousands-Block Pooling, again according to the contract, that's \$2,800,062. And there's also the remainder of the contract for pooling to do the automated systems development and the balance of that contract is \$437,000, or it will be starting in July 2014. We've got another \$300,000 allocated for carrier audits and billing collection agent. That's just based on our contract again. It's our monthly process right now, it hasn't been renewed yet, but we have gotten an increase in price so they just keep extending it so we're okay. That's at \$340,000 anticipated.

Data collection agent, that is what the estimate from USAC was. Annual operations audit, that's \$44,000. Last year it was \$42,000 from Ernst & Young to do the audit. Billing charges, it's an estimate based on previous experience, same thing with bad debts, interest income and the fees for the late filing collection of those fees. So we have a net projected disbursement of \$6,041,000.

We've provided for a million in contingency which was at the working group's advice. That leaves us with a balance to be funded through reduction and surplus and U.S. carrier contributions of \$7,041,000. There is a projected surplus, as I mentioned before. When this budget was done it was sitting at \$319,000. That leaves us at the U.S. carrier contribution requirement of \$6,721,000.

We move to the next page. It shows what we are suggesting for contribution factors. So there's this \$6,721,000 to be funded. We've provided this year at the advice of the working group a range of revenue basis to look at so that if the NANC can approve within that range, or the working groups could be asking for this, to let you know what the contribution factors will be if we have a range between 184 billion up to 190 billion in revenue for when the carriers report

for 2013. This will be the range of factors that we can anticipate for the next year. Are there any questions on the budget?

Jose Jimenez: I understood that there had been a discussion within the working group about setting aside something for the numbering testbed. Is that what the one million contingency provision is for or is it something else?

Faith Marcotte: I think maybe I'll let the working group --

Rosemary Emmer: This is Rosemary Emmer with Sprint. The \$1 million contingency is what we always have every year. In the most recent IP, I guess you call it the testbed order, it was mentioned in there that this fund may be the fund used if there's going to be funding for a testbed. That was a very small minimal amount that was in the order. We did talk about that. We did due diligence. We talked about it. We ended up deciding, and I'll report, I mean really basically I just put it in the report, just one line in the report. I was going to just talk about it. But we decided that since we don't know how much it's going to be, we don't know if this group is even the right group to have it, we did not put an actual line item in the budget for it for this year. We have that \$1 million contingency just in case. If we were to have to use it, we will have that in there.

Faith Marcotte: I think it has been as low as 750, the contingency so there is certainly room in that million to help cover something like this.

Jose Javier: Okay. Thank you, Rosemary. And I thank you. You mentioned that the order from the FCC talked about this possibly being or was it more directive than that?

Rosemary Emmer: I don't believe it was more directive than that. I think they talked about it as, I believe, a possibility.

Betty Ann Kane: I'm going to ask Sanford if you're wondering [indiscernible].

Sanford Williams: First, thank you for being so diligent in noticing that line in the order. We got some discussions here at the FCC and I say it's highly unlikely that the funding would be used, so it's something that's good to note and be beware of but I highly doubt it would. And if it would be, it would be de minimis. When I say de minimis, I mean less than \$5,000 but it's highly unlikely this time that we'd use the fund for that purpose.

Mary Retka: I just wanted to remark too that even though that was in the order – and FYI again, comments are due on Monday - that it might be appropriate to recognize that parties who are participating in the testbed might not all be the parties that actually fund the B&C. So I appreciate Sanford's comments on that. Thank you.

Betty Ann Kane: It actually raised the question, not to open a can of worms, I was going to ask. But just in general, the entities that contribute to the fund are a set number of entities referred to as the carriers, the U.S. carriers. And there is a minimum amount and then there is an amount at a \$124,000 from the international carriers. Who determines what that amount is and what is that amount based on? It seems a very small amount compared to the overall budget.

Faith Marcotte: It's based on census figures and, I think, because Canada is the major part of that 124, has its own, I'm just trying the technical stuff here, but does part of the process themselves. They don't fund as much. They don't have a full participation.

Mary Retka: This is all part of the order that set it up, originally NBANC and now B&C agent and dependent on what aspect they use. As I recall, Canada only uses the CO portion of the work that the NANPA and the PA participate in. So that is why, I think, if I could I would reference back to the FCC's original order that set up who pays what for it. But very good information from the B&C agent as well can help them.

Betty Ann Kane: Thank you. That's the answer to that question. It's pursuant to FCC order that the allocation of costs among the various entities.

Mary Retka: For the parties that use the NANPA and the PA.

Betty Ann Kane: They use the different elements of --

Mary Retka: Right. And that's why I brought up the parties may participate in the testbed who don't normally fund that and use those resources.

Betty Ann Kane: Yes. And as we move into an IP world, there may be entities using numbers who are not now contributing, pursuant to the order similar to some of the things that state regulators have had to look at as to who contributes to various functions of state entities -- whether they're gas, electric or telephone as we moved in to more providers in those areas. Potentially interesting issue for the future about participation and contribution, that's all I'll say. Thank you.

Mary Retka: I just, you know, have to at every meeting ask this question so I'm going to ask it again. So Heather [phonetic], I see that your contract expiration date now is July 31, 2014 which, as I recall, is the final extension. Am I correct in that or is there further extension that could be done on that contract that expired on October 1st of 2009?

Heather: It keeps getting extended so I don't know if there is such a final, any final that is allowed.

Sanford Williams: The FCC work is a team here, and WCB works with the contracting office and we're here but they didn't tell us what they're going to do with the contract. So it's been extended and we will just follow the procedure. Right now they said they're going to extend it until July, and we'll go forth with what they direct us to do.

Betty Ann Kane: Thank you. Rosemary, which will be item number 9, and that is the report of the working group.

Rosemary Emmer: Good afternoon. It's noon. This is Rosemary Emmer with Sprint. I chair the Billing and Collection Working Group with Tim Decker, Verizon. The Billing and Collection Agent Oversight Working Group is responsible for overseeing the performance of the billing and collection agent. We identify the financial impact, initiatives and activities that might be included in the budget.

Today, I'm going to give an update on the contract, although we've already talked about that once, so we may not need to do that in much detail. The budget and contribution factors, we will be having to vote on that today or possibly come to consensus on that today. We're talking about a possible funding year move, so that will be a discussion. And we have completed our yearly vendor performance evaluation because it is the busy season right now to be in the working group just like it is at the NOWG.

So page 4, the contract renewal, again, the contract expired 2009 and Welch received an eight-month interim contract, so now we're good through July 31st this year. You go to page 6, the budget and contribution factor. Faith went over the contribution or she went over the budget in detail, so I won't do that. But as we did last year, we would like the NANC to reach consensus on an actual contribution factor range as opposed to an actual contribution factor since we're not sure what the numbers from USAC are going to come back at. So we're looking at a revenue base of between \$184 billion to \$190 billion. So the contribution factor would be somewhere between 0.0000365 and 0.0000354. So we're asking for the NANC to reach consensus on that particular contribution range.



We go to page 8. We're discussing moving our current funding year to align with the federal fiscal year, the fiscal year being September. Currently our funding year ends in June. We bill in June based on the revenue figures that we get in May. We begin collecting actually in July. We're just in the beginning stages of talking about moving the funding year. We will talk about this probably in greater detail at the next NANC meeting. Because we would have to actually set the contribution factor higher in order to carry us through a three or four-month timeframe for the following year, so we need to do this sort of a year in advance, if you will. So it won't be for this year, for this contribution factor. It would be possibly for next year. So it would just be an ideal situation if we could move this to September. Are there any questions on that?

Page 9, the billing and collection agent, Welch & Company, we developed the evaluation consistent with the monthly deliverable matrix. We do actually rate them monthly. The same rating schematic was used this year as was used in many previous years, which is either a met or a not met.

Page 10 details what we use to review and analyze their overall evaluation, but I won't read those. They're the same every year. Page 11, we're happy to report that Welch receives a met on a scale of a met to not met. The met performance requirement is being defined as that we're considering it successful. The performance was competent and reliable, and the decisions and recommendations were within the requirements and the expectations. They do an excellent job. So thank you Faith. Thank you, Welch.

So we have the two NANC action items. I did want to point out that on page 13 is the B&C Working Group membership. I did want to point out there's only six carriers. So when I was looking at the NOWG membership and they were bragging that they had 10 members, I

wasn't taking it personally, I promise. But on the last page is Tim Decker's and my email, and we would certainly like to have our number at 10 too. So, if you'd like to join, feel free to email us, and I'll let you know what the bridge is for our once-a-month call that lasts less than an hour generally.

Betty Ann Kane: Any questions on the report? Any questions on the phone? Rosemary, you have two action items for the group?

Rosemary Emmer: Yes. Page 12.

Betty Ann Kane: Page 12, approving the budget?

Rosemary Emmer: Yes, approve the billing and collection agent 2013 performance evaluation and approving the budget and contribution.

Betty Ann Kane: The budget and the contribution factor, we'll do those two things together. I would take up the first one, approving the billing and collection agent 2013, performance evaluation as submitted by the Billing and Collection Working Group. Somebody like to move that? It had been moved by Jose Jimenez. I need a second. And a second by Mary Retka of CenturyLink. Are there any discussions on the motion? Are there any objections to the motion? I will rule that's been passed unanimously.

The second item is to approve the budget and the resulting contribution factor which is recommended again to be a range rather than a set number. Are there any discussions on that? Are there any objections to that? Then that recommendation is also approved. Thank you.

Rosemary Emmer: Thank you everyone. One thing I forgot to mention to Chairman Kane prior to the meeting was the NANC training manual. That was on the agenda to talk about in the December meeting that got cancelled. I wanted everyone to know that you have the updated training manual in your email box from December. I believe it's also on the NANC

chair website updated already. I think this is the third version, I believe. Folks are already using it and referencing it. So thank you to Beth O'Donnell, and thank you to all the co-chairs and the folks that put input into this new revised updated document.

Betty Ann Kane: Thank you very much for mentioning that and pointing people to the website where it is available. All right, item number 10, the report of the NAPM.

Timothy Kagele: Good afternoon everybody. My name is Tim Kagele. I am one of the co-chairs of the NAPM LLC, along with my colleague Tim Decker from Verizon. For those that may not be familiar with the NAPM LLC, we are the contract administrator of the LNPA in all seven NPAC regions. As others have mentioned, since the NANC did not meet in December, a copy of the December 2013 NAPM LLC report can be found on the NANC's website. Our report is short and sweet today. There have been no new statements of work presented to the NAPM for consideration. The members though did approve the 2014-2015 budget which begins, the fiscal period begins April 1st.

The portion of the report that people are probably most interested in hearing about is the FoNPAC report. However, as Chairman Kane so eloquently stated earlier that process remains under a confidential nondisclosure process. However, the public portion of the NAPM LLC's website has been updated with new timeline information. So I'll be happy to answer any questions.

Betty Ann Kane: A question on the phone, someone is on the phone? Someone is on the phone trying to ask a question.

Male Voice: [Indiscernible]

Betty Ann Kane: If not, the folks on the phone, if you would, be sure that you're on mute so that if someone comes into your office, you need to talk to them, we don't overhear that also. Thank you.

Item 11 is the report of the LNPA Working Group. This is the LNPA Working Group. I'm sorry, SWG goes first. SWG is next, yes. I'm sorry.

Ann Berkowitz: Ann Berkowitz from Verizon along with Tiki Gaugler and Commissioner Why. I'm a tri-chair of the SWG. As Chairman Kane reported this morning, we met with the NANC in a closed session yesterday and our meeting and all the information is subject to NDA.

Betty Ann Kane: Thank you. So there's that document there for item 11, simply an oral report. Then item 12 on the agenda, which will be document number 11, is the LNPA Working Group.

Paula Campagnoli: Good afternoon everybody. My name is Paula Campagnoli. I'm one of the chairs of the LNPA Working Group along with Linda Peterman who I think is on the bridge and Ron Steen who is in the room.

Linda Peterman: I am on the bridge, Paula.

Paula Campagnoli: Thank you. Our report is short and sweet also. What we're going to talk today is the NANC 372 change order, which is the interface order and the transition to IP. Our next face-to-face meeting is May 13th and 14th in Miami, Florida. NANC 372, as you all know, has been going on for some time and we basically continue to work or to refine the technical requirements just to make sure that everything is documented properly and correctly so that the interface will work without any problems.

And then the PSTN to IP transition, we continue to work on that. It will continue to remain on our agenda until we come to a consensus on the process that we may need or will need for the IP transition as far as number portability is concerned. So we want to make sure that we get that information done correctly. That's it for the LNPA Working Group. Anybody have any questions?

Betty Ann Kane: Questions for the working group? Okay, thank you. The next item is the status of the INC, we did, so we have the future of Numbering Working Group report.

Suzanne Addington: Good afternoon, I am Suzanne Addington with Sprint. I hold the tri-chair position along with Kathy Bakke from the Wisconsin PSC and Mark Lancaster from AT&T. On page 2 of our report is our mission and scope. On page 3 begins our status. We received a new contribution from AT&T which was discussed regarding numbering testbed parameters. This was received prior to the announcement of the FCC numbering testbed workshop date. So this contribution has been put on hold until after the workshop when we meet again.

Our subcommittee updates, our subcommittees were created to allow for more detailed discussion for those who are interested. So each subcommittee champion reports back to the FoN working group at our monthly meetings. Our first one is FTN 4 for geographic issues. They've decided originating location is one of the attributes of the current architecture that should be retained on an all-IP architecture. Privacy or CPNI issues relating to location-based routing of toll-free calls are diminished as the need for callers' location information is limited to an isolated and minute instance in time in contrast with the carrier subscriber relationships of outbound wireless and roaming calls where they enable tracking of the exact location and movements of subscribers. So it's a little bit different.

The last bullet, toll-free carriers expect to obtain location information to a degree of accuracy similar to what's inherent in the current network today which is in NPA NXX and they hope to retain that under an all-IP network. Some of the questions we are also considering is where our rural location information actually come from and what technologies are currently available that would be able to provide that information going forward.

On page 4, we have routing standards. Late last year the FoN agreed to accept a new contribution from iconectiv to discuss routing standards in an IP-based environment. Since that time and over the last few months, the discussion of IP routing has taken place at the ATIS PTSC and the ATIS forum, NNI taskforce, so it's considered a duplicate work of the FoN. So in the last meeting we decided to stop discussing those and discontinue discussions regarding IP routing specifically, but PTSC updates will be provided to the FoN going forward.

Our last subcommittee is 7B Less-than-Thousands-Block Pooling Number Assignment. It was accepted as a contribution late last year as well. In light of the recent FCC announcements to hold the numbering testbed workshop, the contributions of Less-than-Thousands-Block Pooling and just in-time numbering have been withdrawn as a comparison to the contaminated block donations. However, over the last couple of months, a whitepaper has been created and distributed out to the FoN. But that discussion has been put on hold until after the workshops took place this week.

On page 5 is a list of our memberships. We don't have an issue with only 10 attendees. Thankfully, we're well represented I believe. And on page 6 is our conference calls that were held over the last three months. Our normally scheduled calls are the first Wednesday of the month from noon to 1:30. Our next call is next week, so it is an open membership. Anyone is welcome to join us. We have our contact information provided there, feel free to reach out to

anyone of us and we'll add you to our distribution list. Our meeting notes including our December report to the NANC is also included at the NANC website.

Betty Ann Kane: Thank you very much. Any questions on the report, all right, I think that's a very good segue into our next item which we have added to the agenda. It was circulated to you ahead of time. This is an update to a document that was provided at our September meeting, our last meeting, which -- to go through the presentation that Henning Schulzrinne made at our February meeting over a year ago to consider any items that NANC could provide guidance on in regard to the whole IP transition that is going on. Rosemary Emmer and Mary Retka undertook the task of looking at how some of these issues that were being dealt with would fit or would not fit with some of the existing NANC workgroups and with other entities so I picked up on our previous report. We don't want duplication but we want to be sure everything's covered, so we turn it over to Mary.

Mary Retka: Thank you, Chairman Kane. The presentation that was made in September was as a result of some work that Rosemary and I took on as an action item from the meeting I believe in May. We looked at the presentation that Henning Schulzrinne had done in February and specifically slide 4 of his document. He had on that slide broken down things in terms of recommendation or current and then near term and then longer term. So we divided this in that way as well. You should have a document in front of you that looks like this that gives the items on the left hand side and the recommendation on the right hand side.

As a result of the meeting that Henning Schulzrinne had with INC in January, he at the end of the meeting indicated that he would be interested in meeting with me and including Sanford. And we had a conference call on February 24th in which we walked through the document. Actually, I know, Chairman Kane, you had to leave in September for a funeral and

Dr. Schulzrinne was actually here when we walked through this. He had indicated that he wanted to talk about it a little bit further. As a result, we walked through it a bit more in that conference call on the 24th. What you'll see here is an update that reflects that conversation.

So, for example, let's start with the items under the title of Recommendation on his list. I had hoped he had indicated he was going to stay for this discussion but it looks like got pulled away.

Betty Anne Kane: Maybe, Carmell, you could email him or text him and see if he could come down, but go ahead.

Mary Retka: The first item we looked at is the LNP and ENUM integration. We talked about that this could be directed to the LNPA working group with a broadening of their work to include ENUM which has not been the subject of their major work at the LNPA working group. Dr. Schulzrinne thought that that could be a good broadening of their work and have them move to investigate that.

The second item is the toll free services. I also had been asked by Henning for some information and ATIS kindly provided that about the SNAC group, the SMS/800 Numbering Administration Committee. The discussion we had on the 24th of February indicated that he felt that would be them, the SNAC group at ATIS taking a longer term view. I've also recently had some quick discussions with ATIS. It may be something that would also from a more technical perspective fit in to PTSC. But I think ATIS could give us some good guidance on how we could work that.

The third item on the recommendation section of slide 4 of his document was future identifiers and support of industry trends beyond the E.164 numbering plan. We talked about this from a couple of different perspectives. Dr. Schulzrinne has met twice with INC, the



Industry Numbering Committee, and sees that as the group that can help him with the technical work related to that. And for policy considerations, the FoN group could also engage in issues such as - this was one of his suggestions - which functions should use E.164 numbers and/or non-E.164 numbers. An example he gave is that perhaps machine-to-machine numbers in the future when your smart TV calls your smart refrigerator and says Mary really likes Chobani yogurt, let's put some in the fridge. The fridge calls the local Safeway and says give Mary a coupon for Chobani when she walks in the door. That's the type of thing that doesn't need a telephone number and could use another different addressing resource. Those were the thoughts. I hope the illustration helps.

Those were the items we looked at under the recommendations section. I'll stop there. Are there any questions or concerns?

Ann Berkowitz: Ann Berkowitz, Verizon. With regards sort of specifically to the LNP and ENUM integration and also down with the ENUM model, I understand the ATIS-SIP Forum taskforce is already doing an analysis here. They're looking at several different proposals from different companies. I wondered if before we expand the scope of the working group if we should let ATIS-SIP do its analysis and complete their work so we're not doing redundant work.

Mary Retka: Thanks, Ann. I know that ATIS if I understand it, it's their IP interconnect and SIP Forum combined work recently was at the FCC - Sanford if you want to weigh in on that - made a presentation on that effort that they have going on.

Ann Berkowitz: But I understand that effort is still ongoing.

Mary Retka: Maybe there's somebody from ATIS here.

Betty Ann Kane: Somebody from ATIS here could speak to that. See, we still keep you working even though you're retiring.

Jean-Paul Emard: Jean-Paul Emard with ATIS. With regard to this particular point and also to the point previous that Mary made on toll-free services, yes, I think it behooves everybody not to reinvent the wheel. Your time is limited, the subject matter experts' times are limited and I think you get the best result by in some cases holding off. Most of you sit at least on some of those places so that your colleagues maybe if not yourselves are informed about what's going on. ATIS is also looking at putting together a briefing document that we're going to come out with probably on - I'm not sure yet - monthly, six weeks' time basis. It's going to pull in all the information that we're doing but also kind of highlighting what's going on at the FoN or with the SIP work that's being conducted. This will be available to everyone, so just to make sure that everybody understands where people are playing, and if anybody has questions, they can come to us. The bottom line is, yes, I would suggest that you sort of hold off on that. I would hate the LNPA to take on a new large work assignment that they may not be ready to conduct at this point. Better to gather all the information before you start down that path.

Again, to Mary's point, on the toll-free services, while SNAC, the ATIS-SNAC committee, is the one place where we would be talking about toll-free services, because of the IP transition as a whole - by the way, SNAC would also be part of that report as to what they're doing relative to IP transition -we want to make sure that the right people touch the right aspects. So while it says ATIS-SNAC, I would recommend to -- and thank Rosemary and Mary for their work in putting together this recommendation. If you noticed, on the last page, there is the repeated: "This is longer term work which could align with the work under ATIS." That's pretty much the attitude that we would take even with the recommendation and with short term things. We just want to make sure we do the right thing at the right place. We'll report that information out to the NANC.

Mary Retka: Thanks, JP. And I would just say though there's still a role at the LNPA working group to carefully monitor that because the real work is going to be done in the LNPA working group. While the upfront planning and advocacy piece may be underway, we do need to get at the more technical detail there.

Tiki Gaugler: Tiki Gaugler with XO. Jean-Paul, I think you answered this but I just wanted to clarify. For those of us who are not members of ATIS, you said the monthly reports that ATIS is planning will be shared with everyone publicly.

Jean-Paul Emard: That will be a public report, yes. And we would ask you to please join.

Tiki Gaugler: Great recommendation. So I would also echo what Mary said that there is certainly a role for the NANC and for those who are not members of ATIS.

Betty Ann Kane: Right, to monitor what's going on and to receive reports. Jose?

Jose Jimenez: By the way, thank you, Tiki. I think you make a very good point - Jose Jimenez, Cox - about membership in ATIS. We have a limited membership in the organization. We would have to struggle to have a voice so at least understanding what they're doing. But this discussion about what's playing where brings to mind something, Rosemary, you said about the need for maybe having - I think you call it an IMG. I like that. I think that's some other brand as well. But it makes sense for this body to kind of, if you will, a higher level committee that keeps track of what's working where on all of these issues. So I just want to put in, you know, a word for that idea.

Mary Retka: Okay, on the near-term items, the ENUM model came up again, and again, we have the LNPA working group. As we just spoke about, though, they would need to monitor the current efforts that are underway such as the ATIS-SIP Forum combined work and move in

there. On the toll-free issues, the next one was not just toll-free but it was also identify issues related to current dependence on LATA based routing and called party based charging. So we thought that there might be some policy pieces that could be worked in the Future of Numbering working group there as well.

And then when we talked about considering the identifiers outside of the E.164 numbering plan, again, this could be at the FoN group to consider which type of addressing resources best apply to what function, whether for example in my example the machine might need either an IP address, a DNS, et cetera. So those are some considerations.

Then determine the machine-to-machine impact, I raise this issue because I know that FoN has had an ongoing monitoring of machine-to-machine going on. So based on the previous item we talked about and the item we talked about in the recommendation, this could also go to the FoN group to look at.

In terms of creating an international data based strategy team, we talked about the fact that this could be outside the scope of the NANC groups. I will say in addition, we talked about perhaps that being worked in some forum like ITU-T. I know Study Group 2 is the one that FoN has been monitoring. But we also talked about this as a potential workshop item. Henning did have that in his workshop yesterday.

In terms of then - on the second page - the longer term, you'll see that the first item is: Set a schedule for nationwide 10-digit dialing. Of course this requires that the regulatory bodies are involved and they address that change. That would be the FCC and the state regulators. But it is as Henning has spoken off many times a critical item in the path to move to the all IP world.

Aligning LATAs and rate centers with the elimination of Bill and Keep in the implementation date of the transformation order, again, this would require the FCC to address that change.

Implementing non-geographic number portability which becomes possible with the elimination of the long distance specific charges to consumers, this could be worked at the LNPA working group. We did talk about the fact that non-geographic number porting really requires that we go to non-geographic number assignment because we don't want to create an arbitrage situation.

In the security anti-spoofing and privacy, again, this is longer term work which could align with work under ATIS. You'll see that for the next couple as well, the use of location data and the role of IPv6 and DNS in emerging identifiers.

One other thought that we may want to have that wasn't part of the discussion that I had on the 24th with Dr. Schulzrinne and Sanford Williams was perhaps we need to look at an IMG that monitors the testbed efforts. So we may want to consider something that keeps the NANC folks informed. I know that when he was here just a little bit ago, Dr. Schulzrinne said he would keep us informed. But given the breadth of all that he's going to have going on with that and everything else he has as the FCC CTO, there's probably a good idea to have some of the folks that are involved in the testbed that are NANC members in an issue management group that reach out to us on an ongoing basis.

Jose Jimenez: Mary, because I asked the question of Mr. Schulzrinne on Tuesday, I'll say that it may be good to also incorporating to this 911/N11 on what happens to that evolution. I think it's closely related to this world. So I would just add that as a topic.

Mary Retka: Thanks, Jose. Yes, I know in the workshop meeting there was constant reference to the next gen 911 efforts that are underway as well. It may be also something that our testbed IMG, it may be a good one if we do an IMG for the testbed.

Ann Berkowitz: Ann Berkowitz, Verizon. Thank you Mary and Rosemary for the effort in putting to this, I know on top of everything you've been working on, this has been a lot of work. With regards to the align LATAs and rate centers, while I think it looks fabulous on paper that we're going to be eliminating all rate centers, everybody's gung-ho for that. I think it may be a bit naïve and unrealistic to jump to that. I think we need a lot more investigation on the impact of that. It's simple to unpack that. And there's a lot of use for the rate centers in terms of product development and services. With Bill and Keep, it's really a payment arrangement between service providers that's sort of arbitrary to customers.

Mary Retka: Thanks, Ann. Yes, we talked about that at INC just this week. The words here are not mine in the left hand-side, those are Dr. Schulzrinne's. I appreciate though the thought. I agree with the concern. I know we've talked. Well, since AMOC last year, when we talked at the INC about what happens when there aren't rate centers and what breaks when those aren't around. I know that that's going to be something that a lot of us need to take a look at as service providers.

Ann Berkowitz: Perhaps, the FoN could look at that or maybe this new IMG.

Mary Retka: Well, I do know that INC will also be looking at it as well.

Betty Ann Kane: The rate centers are tied up with an awful lot of other things besides numbers. Yes, Valerie.

Valerie Cardwell: Valerie Cardwell, Comcast. Again, I can't thank enough Rosemary and Mary for taking the lead on doing this. I don't know what the process is for getting an IMG

- actually voted on or whatever - but I would like if it is the right process to formally put forth a motion to the NANC to consider as Mary recommended that the testbed be assigned an IMG from the NANC. I don't know if that's the right terminology, but I think you understand the concept, so I'd like to formally put that motion forward if I can.

Betty Ann Kane: Second to that motion to form an IMG which would be tasked with monitoring the testbed?

Tiki Gaugler: I second.

Betty Ann Kane: XO has seconded it. Discussion, Rosemary.

Rosemary Emmer: Sprint. I just want, for those you in the room that might be unclear as to what is the difference between a working group and an IMG under the NANC. This is in the training binder, clearly spelled out also. But because someone at break asked me this, a working group like the LNPA working group or the billing and collection working group - the NOWG - were put together to serve a purpose that can be many. An issue management group is an IMG. An issue management group is put together not for multiple purposes but for one purpose. So if this were to be an IMG versus a working group, we would specifically be talking about testbed activities. So we wouldn't be bringing in all these other things, we would just be focusing on the testbed. Thanks.

Betty Ann Kane: And monitoring what's going on with that issue.

Rosemary Emmer: Yes.

Betty Ann Kane: And reporting to this. Ann.

Ann Berkowitz: Rosemary, I'm going to ask for your help a little bit here because you understand the process of working groups. Maybe, should we consider as we're moving to an IP and a new technology as we talk about we don't want to necessarily do things the way they've

just been done. Creating a new group, a working group, a subgroup that deals with these issues overall. I don't know what type of group that would be but maybe it's time to instead of placing all those work in separate groups to look at a new IP working group.

Betty Ann Kane: An IP numbering working group as opposed to the Future of Numbering which is broader.

Ann Berkowitz: It's broader. And I don't know where it would place or what type of group it would be. I'm just throwing it out there.

Betty Ann Kane: Obviously, one of the considerations is as - again, thank you for this helpful chart here - a lot of these issues or portions of these issues are already being addressed by other groups. So the issues, what needs to be monitored, what needs to be kind of original work by a working group, what needs to be simply coordination, what needs to be done and is a monitoring group versus a working group the correct vehicle for doing that?

Mary Retka: Chairman Kane, I think one of the things we need to consider though is that if we don't give some clear direction, then everything gets worked in every working group which is kind of what's been going on.

Betty Ann Kane: Yes. So we have before us a motion that there be an issue monitoring group that's going to monitor what's going on with the testbed, workshop, and all of the work that is being done under Henning's direction for IP, the technical side of IP. We have a suggestion that instead of being an issue monitoring group it be a working group and then a suggestion that there perhaps be a broader working group that's not just focusing on testbed but all of the IP issues. Mark.

Mark Lancaster: Mark Lancaster, AT&T. I would speak in favor of the issues management group. In this case, there is a specific request for report and recommendation to



come from the NANC. I think if we find that the issues management group has legs, then we could turn it into a working group if we need to. But one of the advantages of an issues management group is they have historically tended to be attractive to participants that haven't operated in other functions at the NANC. Especially as we look at what took place on Tuesday at the testbed workshop. There was a very unrecognized group of participants there, and we would like to recognize them here. We'd like to welcome them into this setting. And I think an issues management group with a specific task of producing the report and recommendation would then be enabled to monitor the progress along the way and invite new parties in.

Betty Ann Kane: You're speaking then in favor of the motion that it be an issues management group monitoring the testbed as a way to start. Further discussion of that, Jose.

Jose Jimenez: Just to clarify one thing, one of the things that I would love to see is to have also some oversight of this process whether that's an issue management because there are issues being worked out, issues being worked at LNPA and FoN. To avoid that duplication, that strikes me as a different kind of charter than this issue management group that would oversee the testbed. It seems they're different, but maybe they're not. We're talking about two different things, right?

Betty Ann Kane: Or different scope.

Jose Jimenez: Are we talking then about possibly standing up two?

Betty Ann Kane: I think the issue for us is you put a finger on it. The issue management group, as the motion has been made, it would monitor the testbed or issues management group that would monitor the issues going on related to IP transition, all of the numbering issues related to IP transition.

Rosemary Emmer: I was just going to reiterate that. It's very frustrating for all of us out there that are industry members that go to these groups and we're talking about the same thing in all of these different committees. However, a lot of those contributions aren't necessarily numbering related. They're more routing related. We're in a kind of confusing time right now, so I would support Mark in his thought to have an IMG. And then, if we thought if these pieces evolve, the numbering pieces start to come together and these different contributions, then maybe we need to open it up and be a working group and maybe change the scope of the charter or whatever.

Betty Ann Kane: I'm hearing some consensus that what we create be an issues management group. I think the second issue is should it focus initially just on monitoring what's going on and managing the issues that come out, the numbering issues that come out of the testbed. Or should it have a broader scope which is to monitor and manage the issues, the numbering issues that may be also being addressed at primarily ATIS?

Jose Jimenez: Not just ATIS but the working groups of this body so that's the challenge I have, Rosemary.

Betty Ann Kane: Yes, the LNPA working group and the FoN.

Jose Jimenez: I feel it would be important to have both. Look what happened in the testbed because that's such a pie-in-the-sky long term stuff. But there are issues that are being worked today at the NNI task force at ATIS, FoN. I feel that there ought to be some coordination of those, so I think two groups may make sense.

Gina Perini: Gina Perini from SMS/800 Inc. I agree very much with what Jose is saying. I think there are a lot of different discussions happening. I would support either, whether we do two IMGs, I do like the idea of an IMG. However, I think it would make sense to do a broader

IP transition and numbering IMG. I think that would really monitor well all these various discussions. And if it needs to evolve into something different or change, that will give a better breadth and scope to what are occurring in these discussions.

Mary Retka: I think that right now all of the IP numbering work is centered on the testbed. I know we have a lot of work that's going on in different working groups as Jose represented. But at this point in time, I agree with Mark and Rosemary that we might want to start with more of a focus in the testbed. We could still have the group be an IP numbering group to monitor but the focus being on the testbed. That way we would start with the right sizing and the right focus, and then we could broaden this as things become more involved.

Tiki Gaugler: I think what I'm hearing Jose say which I share and I mentioned in the sideline to Mary is that perhaps a broader link. I think I would like to see this updated. I would like this group take on this chart and update it with not just proposals. Thank you to Mary and Rosemary for going through but let's know what's going on. Let's have more specific about what is the ATIS group doing. I think the monthly reports will be helpful perhaps incorporated in some way into this so that it's not a general this is going to be handled in these groups but really what's happening in those groups in a condensed form obviously so that we have a document that says this is where everything is happening and there is a group that takes on that responsibility for again monitoring. I agree with Mark that an IMG makes more sense than a working group so this group is not tasked with actually doing any of that work but monitoring and then tracking it so that we all know where it's going. So it's not just limited to the testbed to start with. I would hate to limit the scope and then the group be stymied by that.

Betty Ann Kane: I take that as an amendment to the motion.

Tiki Gaugler: Yes, friendly amendment.

Betty Ann Kane: Friendly amendment that the issues management group's scope be broadened to monitor and report and keep track of what's going on in numbering issues related to IP transition in various places with an understanding that probably two of their first tasks will be to really get set up to monitor what's going on in the testbed, to update this to get us an even larger list of who's doing what, who's dealing with what and then set up a process to monitor and report quarterly at the NANC meetings or in between if necessary what's going on and where things are. Just make a motion to agree to that amendment?

Female Voice: Yes.

Betty Ann Kane: We do have someone public who would like -- oh, I'm sorry, we have some members first. Rosemary, go ahead.

Rosemary Emmer: I was just getting some feedback from some of the co-chairs of our NANC working groups. And I just wanted to just clarify, again, that the working groups are already working on some things. They're doing a fantastic job. They already report on this stuff to us, so just to reiterate, this IMG is not going to be doing duplicative work. It wouldn't even necessarily mean depending on what company, what you decide for a company, your company decision as to who would join the IMG would be the company decision. But it wouldn't necessarily mean that we're just making this brand new group, and now we've got all this extra work that we're putting on the same people. Because it's monitoring, it's an issues management group but we're really monitoring.

Betty Ann Kane: So the things, for example, you pointed out that the LNPA is already doing and that will be coming up. That will still be the working group and work on those, but we'll get some kind of consolidated tracking of those issues. Yes, sir.

Jay Carpenter: Hello, my name is Jay Carpenter, Phoneword. I've been one of the active participants in the Future of Numbering working group since the inception. I've been the champion on a couple of the FTN issues, so I'm pretty familiar with the process. My question is could there be a middle ground? Couldn't there be something in between forming a new working group and forming an IMG? Specifically, what I have in mind is perhaps this would fit well within a new FTN issue under the Future of Numbering working group? You might be able to implement that much more rapidly than starting a whole new group from scratch. Because if I'm not mistaken, the Future of Numbering working group currently only has - what - one active FTN, is that correct?

So the geographic nature of numbering is the only FTN that's within about a 50, 60 person existing group with the existing infrastructure, processes, et cetera. So that might be something that's a bit more agile here and might leverage some infrastructure that's already in place. I also was a participant in the Tuesday numbering testbed workshop. I think your timeframe on this is pretty rapid, sort of the gun's already gone off at the starting line on this thing. Those are my comments, is there a middle ground?

Betty Ann Kane: Thank you. Further discussion on the amended motion, repeat again, we would establish an issue monitoring group to monitor and report on numbering related issues that are being considered by various working groups of the NANC and by other outside groups and the FCC's testbed workshop and that it would track and monitor those issues and report regularly, keep the full NANC up to date on what's going on. It would not be a working group. It would not work the issue or make recommendations but it would keep track of things. Is there any objection to that? Very well, then we will consider and go ahead and follow the proper

procedure to establish that having approved it and voted on it. We'll set it up which means we will need someone who will want to chair it or co-chair it or tri-chair it and some volunteers.

Rosemary Emmer: I'll be happy to facilitate it. I'm not necessarily wanting to chair it.

Betty Ann Kane: Well, maybe chair isn't the right word.

Rosemary Emmer: But if you would like for Mary and I to facilitate the actual nomination process of whoever wants to be -- I'll be happy to.

Betty Ann Kane: Standing it up and getting volunteers and some kind of process for gathering the information and being able to report to us.

Mary Retka: I think the best way to do that might be if we facilitated to hand off the document to the group. What we might want to ask is that everybody get back home, ask your company who you want to put on that, and then email it to Rosemary and I. Will that work?

Betty Ann Kane: Yes. And obviously, as we do it, some of our working groups too, it could be people who are not necessarily NANC members but who are very interested. I'm thinking a lot of the states. Look at all the people who are participating in the Future of Numbering group. The Future of Numbering working group, I think that group will have a lot more to do in the future and there's good participation. It's obviously a topic of great interest to a lot of people.

Mary Retka: Could I also suggest that the industry groups here get the word out to the people that are their members so that those folks can also have an opportunity to participate?

Betty Ann Kane: Thank you. The next item is just a summary of our actions items. We've taken three action items today to approve the performance evaluation of the billing and collection agent, to approve the budget and a range for a contribution factor, and to establish the

working group, an issue management group, non-working group, not that there's not going to be work involved.

We have now public comments and participation. Is there anyone? We have had, obviously, a couple of members, active participants already, anything else, anyone from the public. All right, Rosemary.

Rosemary Emmer: I just have one announcement to make for the record for the NANC members and the folks in the room that Sprint Nextel Corporation is no longer called Sprint Nextel Corporation. It's now called just Sprint or Sprint Corporation. I know I am still making the mistake pretty frequently of saying Rosemary Emmer with Nextel in the industry, but I did want to point out that we are now just Sprint. Thank you.

Betty Ann Kane: You're Sprint not just Sprint. Thank you all very much. Our next meeting is on June 17th at 10:00 AM. We will have no snow I promise and safe travel. Yes, I'm sure about June, no snow. Safe travel, have a good weekend.

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