

**North American Numbering Council
Meeting Transcript
June 29, 2017 (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. Henry Hulquist | AT&T Inc. |
| 3. Greg Rogers | Bandwidth.com, Inc. |
| 4. Philip Linse | CenturyLink |
| 5. Timothy Kagele | Comcast Corporation |
| 6. Courtney Neville | Competitive Carriers Association |
| 7. Beth Carnes | Cox Communications, Inc. |
| 8. Matthew Gerst | CTIA |
| 9. David Greenhaus | 800 Response Information Services, LLC |
| 10. Chris Shipley | INCOMPAS |
| 11. Scott Seab | Level 3 Communications, LLC |
| 12. Hon. Paul Kjellander | NARUC – Idaho |
| 13. Jerome Candelaria | NCTA |
| 14. Brian Ford | NTCA |
| 15. Richard Shockey | SIP Forum |
| 16. Rosemary Leist | Sprint |
| 17. Michelle Thomas | T-Mobile USA, Inc. |
| 18. Robert Morse | Verizon |
| 19. Darren Krebs | Vonage |

Special Members (Non-voting):

- | | |
|----------------|-----------------|
| John Manning | NANPA |
| Amy Putnam | PA |
| Garth Steele | Welch & Company |
| Jackie Voss | ATIS |
| Joel Bernstein | Somos |

Commission Employees:

- Marilyn Jones, Designated Federal Officer (DFO)
Michelle Sclater, Alternate DFO
Ann Stevens, Deputy Chief, Competition Policy Division
Sanford Williams, Competition Policy Division
Carmell Weathers, Competition Policy Division

III. Estimate of Public Attendance. Approximately 20 members of the public attended the meeting as observers.

IV. Documents Introduced.

- (1) Agenda
- (2) NANC Meeting Transcript – March 28, 2017
- (3) North American Numbering Plan Administration (NANPA) Report to the NANC
- (4) National Thousands Block Pooling Administrator (PA) Report to the NANC
- (5) Numbering Oversight Working Group (NOWG) Report
- (5a) Report on Foreign Ownership of Interconnected Voice over Internet Protocol Applicants
- (6) Toll Free Neutral Administrator Report
- (7) Billing and Collection Agent Report
- (8) Billing and Collection Working Group (B&C WG) Report to the NANC
- (9) North American Portability Management (NAPM) LLC Report to the NANC
- (10) Report of the Local Number Portability Administrator (LNPA) Transition Oversight Manager
- (11) LNPA WG Status Report to the NANC
- (12) Future of Numbering (FoN) Working Group Report to the NANC
- (13) Industry Numbering Committee (INC) Report to the NANC
- (14) Status of the ATIS IP Transition: Testbeds

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VI. Summary of the Meeting

Announcements and Recent News

Betty Ann Kane: I want to call to order the meeting of the North American Numbering Council, our quarterly meeting. For the record, it is Thursday, June 29th and it is 11:15 AM. I'm Betty Ann Kane, chairman of the commission and we're meeting in the FCC Hearing Room. You should have all received materials, I hope almost all in at least by email sent out. We're really trying to get those out ahead of time. I want to thank all the workgroup and committee chairs who have complied in trying to get that out, get it in to Carmell, so we can get it sent back out to you, and we will start then with the agenda. I don't have any recent news or announcements. Marilyn, do you have any recent news or announcements?

Marilyn Jones: Sure.

Betty Ann Kane: Thank you.

Marilyn Jones: I just want to let everybody know this is our last NANC meeting under the current charter. Our next NANC meeting is September 21st tentatively, and we are working with the bureau and the division of re-chartering the NANC before that meeting happens.

Betty Ann Kane: Marilyn, does that mean that everybody has to get reappointed?

Marilyn Jones: Yes, that's what it means, reappointment.

Betty Ann Kane: Okay. So, I would put that alert to everyone. They know we're going into the summer vacation time, but just be on the lookout for any communication that comes or needs to go to your higher-ups to get approval, whatever needs to be done so that we can stick to our schedule and hopefully have the September 21st meeting with everybody back in place on an official basis.

The next item is to say who is here, so I'm going to start over with AT&T. If you'll just identify yourself and remember, again, just know we got new people, but give a pause once the technician in the window there will see who's going to speak. Put your card up. You don't need to put your card up to do the roll call, but if you're going to speak and then just kind of count to ten so we can connect you because, otherwise, the microphones are dead. Go ahead.

Henry Hultquist: Okay. So, I'm pausing and now, I guess I'm not. Hank Hultquist, AT&T.

Phil Linse: Phil Linse with CenturyLink.

Greg Rogers: Greg Rogers with Bandwidth is here.

Betty Ann Kane: Okay. I'm going to get to the people on the phone after I go around the room. Okay?

Greg Rogers: Okay. I apologize.

Betty Ann Kane: That's all right.

Greg Rogers: Thanks.

Betty Ann Kane: Glad to know you're here. Go ahead.

Tim Kagele: Tim Kagele with Comcast.

Courtney Neville: Courtney Neville, Competitive Carriers Association.

Matthew Gerst: Matt Gerst with CTIA.

Christopher Shipley: Christopher Shipley with INCOMPAS.

Paul Kjellander: Paul Kjellander from Idaho.

Brian Ford: Brian Ford with NTCA - the Rural Broadband Association.

Richard Shockey: Rich Shockey with SIP Forum.

Rosemary Leist: Rosemary Leist with Sprint.

Robert Morse: Robert Morse, Verizon.

Darren Krebs: Darren Krebs, Vonage.

Marilyn Jones: Marilyn Jones, FCC.

Betty Ann Kane: Okay. Now, I know we do have people on the bridge, if you'd start.

Jerome Candelaria: Jerome Candelaria, NCTA.

Paula Campagnoli: Paula Campagnoli, I'm a tri-Chair of the LNPA Working Group.

Suzanne Addington: Suzanne Addington, FoN Working Group tri-chair.

Laura Dalton: Laura Dalton, Verizon and also co-chair of the NOWG.

Bonnie Johnson: Bonnie Johnson, Minnesota Department of Commerce.

Lisa Jill Freeman: Lisa Jill Freeman, Bandwidth.

Carolee Hall: Carolee Hall, Idaho PUC staff.

Kim Hua: Kim Hua, California Public Utilities Commission staff.

David Greenhaus: David Greenhaus, 800 Response.

Rebecca Beaton: Rebecca Beaton, Washington State PUC staff.

Cullen Robbins: Cullen Robbins, Nebraska PSC and FoN tri-chair.

Beth Carnes: Beth Carnes and Sandra Jones, Cox Communications.

Mark Lancaster: Mark Lancaster, AT&T.

Linda Hymans: Linda Hymans, Pooling Administration.

Bridget Alexander: Bridget Alexander, JSI.

Betty Ann Kane: Very good.

Female Voice: [Cross-talking] Verizon.

Betty Ann Kane: I'm sorry. I didn't hear that last one.

Allyson Blevins: Allyson Blevins, Charter Communications,
FoN tri-chair.

Kathy Troughton: Kathy Troughton, Charter Communications.

Jay Carpenter: Jay Carpenter, PHONEWORD.

Betty Ann Kane: Okay. But, I'm also going to ask as we
always do, the people who are on the bridge, if you would email
in to Carmell, we are recording it obviously, but it's better if
we have your email to indicate that you're on there so we'll get
your name spelled right and the affiliation correct, et cetera.
Thank you.

Good morning, Chairman Kane. It's Michele Thomas with T-
Mobile, voting member.

Betty Ann Kane: Oh, very good. Thank you, Michele.

Scott Seab: And Scott Seab with Level 3 Communications.

Jennifer Penn: Jennifer Penn, T-Mobile, NOWG.

Approval of Transcript

Betty Ann Kane: All right. We have a very large
contingent on the phone and lots of participation, very good.
The next item on our agenda is approval of the transcript of the
last meeting that was sent out. Anybody have any additions,

corrections, questions about it? All right, then by consent, we will assume that is correct and it will be posted. The next item is the NANPA Report. John Manning.

Report of the North American Numbering Plan Administrator
(NANPA)

John Manning: Good morning everybody, John Manning with the North American Numbering Plan Administration Group. This morning's report consists of the typical items that we cover during our NANC meetings. Let me go ahead and start our first review of our central office code assignment activity for the first five months of 2017.

One item I would note right off the top is that our January through May 2017 assignments are nearly 400 less than what we experienced for the same time period in 2016 as well as in 2015. When you take that figure and you annualize that, we're looking at an assignment rate of somewhere between 2,700 and 2,800 central office codes this year. Compare that to 2016 which was 3,400 and 2015 3,700. So, we're tracking significantly under the quantities we've seen over the last couple of years.

Also, on the chart in front of you for the quantity of denials so far this year, you'll see a significantly higher number than normally is the case. This was due primarily to returns of the carrier going out of business and those returns

had to be denied as they reported TNs that had to have the code transferred.

In terms of area code relief activity since our last meeting at the end of March, we've had two new area codes be assigned: New Jersey 640 for the 609 area code, which occurred in April; and in May we assigned the 820 area code in relief of the 805 area code in California. Also, since our last meeting, we've had two area codes go into service, one nongeographic area code being the 833 toll-free NPA, which took place on June the 3rd. And on June the 10th, we had the addition of the 332 area code to the 212/646 area code complex in New York. Continuing on area code relief planning on page 3, the first item is the 323/213 NPAs. That's the boundary elimination that's taking place in California and that's scheduled to go in effect on August 1st of this year.

And now, for the remainder of the page, these are all projects that I've reviewed in the past. You'll note, of course, Washington 360 will get its new area code in August. We have three area codes in Idaho, New York and Pennsylvania, which will have new area codes introduced, all these overlays in September. And then on October, Texas 210 will also be overlaid and effective October the 23rd.

Finally, a couple of projects that have been underway for some time. Pennsylvania, 215/267 will have the 445 area code

added to the complex in March of 2018. And also in March, we're going to have the 279 area code overlay the 916. That's effective in March 10, 2018.

So, new activities since our last meeting. At the top of page 4, California 619/858 is again a boundary elimination overlay. We're going to begin permissive dialing, 1 + 10-digit dialing in November of this year, mandatory dialing in May of next year, and the implementation of the elimination in June of 2018.

I mentioned earlier that we had assigned an area code in relief of the 609 in New Jersey. That project is now going to have a start of permissive 10-digit dialing in January of 2018, mandatory dialing in August, and the implementation of the new 640 area code in September of 2018.

Also, previously mentioned, the 805 area code relief project with the 820 overlay, permissive 1 + 10-digit dialing will start in December this year with mandatory dialing in June of next year, and the in-service date of June 30, 2018.

Finally, both of the Canadian situations I've mentioned previously, both of those new area codes going into play, into effect in November of 2018.

Betty Ann Kane: Let me pause there a moment. Are there any questions about the area code? John, on Canada, I know you've mentioned that before. Do we see the same trend in

Canada in increasing number of area codes as we do in the United States? What is the situation there?

John Manning: Well, Canada in some situations some years seemed to have a few more implementations than we have here in the U.S., and then the follow-up years, they only implement one or two. So, from their track record over the past three, four, five years, we don't see anything generally out of line with what we've been seeing in the past. Canada is typically doing area code overlays and in many instances, they're adding new area codes to their area code complexes.

Betty Ann Kane: And their process in Canada is different in terms of -- I know they're close to the States. Is there [cross-talking]?

John Manning: Well, in terms of their area code relief planning?

Betty Ann Kane: Yeah and the decision whether it's going to [inaudible].

John Manning: Generally, the same process, they go through the industry recommendations, and of course, my understanding is they get the regulatory approval, and then they move forward with the implementation timeframes. There may be some nuances in there that we don't necessarily see in the U.S. and vice versa, but for the most part, they follow the same guidelines that we follow here in the U.S.

Betty Ann Kane: Thank you.

John Manning: Two projects I want to mention that are fairly new. In June 2016, we conducted a relief planning meeting for California 210 and it was recommended for an all-services overlay. Just last month on May the 19th, an application for relief was filed with the California Public Utilities Commission. And also in California 909, on October of 2016, we had a relief planning meeting consensus again to recommend an overlay. An application was actually filed although not noted in the report. It was just filed on June the 23rd. Again, for that relief for the overlay and that application file with the California commission. Any other questions with regard to area code relief planning?

Betty Ann Kane: Anyone on the phone? Thank you.

John Manning: Okay. Let me update the NANC on two NANPA change orders. The first one would be a NANPA Change Order 6. This is we're moving the NANP Administration System, NAS, to the cloud. I had reported that back in September of last year the FCC had approved this change order and on April the 29th, the NANP Administration System did migrate to the Amazon Web Services or AWS cloud platform. The process started with NANPA taking down the website and secure site approximately 10:00 AM on a Saturday morning. We did the update, the migration necessary to the cloud. At approximately 12:04, NAS was up and

running in the cloud. Now, we didn't send formal notification to the industry because some of the testing was conducted by NANPA staff over the next three hours. But on 3:00 that afternoon, we announced that the NAS, both public website as well as secure site, were available for external use. So, that transition went very, very smoothly and we're pleased to note that we've been operating in the cloud now since that timeframe with minimal issues.

The second change order is a change order just submitted this month. It's in response to INC issue 830. This change order is proposed email and report enhancements to both the Pooling Administration System as well as the NANP Administration System. Specifically, INC issue 830 proposes modifications to three NAS-generated emails. I've listed them here, but generally, the response form that NANPA sends when anybody sends in an application for the assignment of a CO Code also is a Part 4 email, which is the email that we send out. They're saying that the Part 4s are due as well as a Part 4 reminder or delinquent email. We want at least -- the INC issue is proposing some additional information be included in the subject line of that email that is generated by NAS.

In addition, the issue includes modifications to four NAS reports. I've listed those reports: central office code utilization code report for both the secure site of NAS as well

as on the public website, the submitted Part 1s reports and submitted Part 4s reports which is used by carriers who are submitting applications for CO Codes into the system, as well as the assignments needing the Part 4 report.

Finally, just some other NANP and NANPA related news. We did post our 2016 NANPA annual report on March the 31st, which was just a few days after our last NANC meeting. We also posted the April 2017 NPA, NANP and 5XX NPA exhaust projections. As a reminder, our next Numbering Resource Utilization Forecast cycle begins in just a few days on July 1st. Service providers will be submitting both utilization and forecast information on or before the close of business, August 1, 2017, reporting utilization as of June 30th of this year.

Finally, also, we've sent out a reminder of the need for carrier identification reports, which are submitted semiannually covering the period of January 1 to June 30. They are due to NANPA no later than July 31, 2017.

Any questions on my report? The last page is merely a summary of those area codes projected to exhaust in the next 36 months. Any questions on that portion of my presentation? Okay. Madam Chairman, I got a statement I'd like to read just to put into the record here in recognition.

Betty Ann Kane: Certainly.

John Manning: One of our NANPA team members, Mr. Joe Cocke will be retiring effective tomorrow, Friday after nearly 55 years of working in the telecom industry, the last 19 with NANPA. Joe joined the NANPA team in November of 1997 and is considered the expert in area code relief planning. Joe's vast knowledge and experience in working with multiple entries to include both state regulators and service providers allowed him to be very successful in leading to industry consensus on numerous relief planning recommendations. Joe specialized in western states, and a lot of work done in California, but also involved in relief projects all around the country.

I want to take this opportunity to publicly thank Joe for his service to NANPA and the telecommunications industry and to recognize his significant contribution to the numbering world. Thank you.

Betty Ann Kane: Thank you. Thank you.

John Manning: Thank you.

Rosemary Leist: This is Rosemary Leist with Sprint and I just wanted to also say thanks to Joe Cocke and got me a little choked up. I didn't know this news so congratulations to him for the record and thank you so much.

John Manning: Thank you.

Betty Ann Kane: Thank you and thank you for bringing that to our attention. A thank you will be sent unanimously from the entire NANC.

John Manning: Thank you.

Betty Ann Kane: Thanks for his service. I think that's someone who should do an oral history of the changes over 55 years in the telecom industry.

John Manning: He could do it.

Betty Ann Kane: He could do it. I think we need to preserve some of that history.

John Manning: Thank you.

Betty Ann Kane: I think we will number your report, the NANP report as item number 3 for the record, and going back, the minutes, the transcript will be item 2 in the agenda, item 1 for the record. All right, the next item is the report from the - our discussion of the National Thousands-Block Pooling Administrator report, Amy? Thank you.

Report of the National Thousands Block Pooling

Administrator (PA)

Amy Putnam: Thank you. As always, Pooling is fine. All right, the first chart that we have in the Pooling presentation is the rolling 12th month PA activity summary data. Although, this is broken out by month, our total for 2017 so far is 68,340 Part 3s processed. That's actually 28 percent higher than the

end of May 2016. That's 15,011 more than 2016 for this, the end of May. Our last record year, as you recall, was 2015. In 2015, the total by the end of May was 64,769. So we're actually ahead of 2017 for the end of May. But, in 2017, in June, we got 24,285 Part 3s, and this year, we only have 9,190 as of yesterday. So although we are progressing well, it does not look as if we are going to get enough Part 3s this year to have another record year, unless you guys get busy and do some network cleanups or, you know, some other fun thing.

Which brings me to the p-ANI summary data, you'll notice that in May, our figures went way up for our Part 3s and our returns, and the number of new p-ANI assignments made, and that was a network cleanup.

The next chart is the PAS Part 3 summary data. Again, this is all 12-month running total. So for the last 12 months, we've processed 138,642 Part 3s. We opened 2,990 NXX codes. We have no particular change in the number of rate centers that move generally from -- move into the optional category, because another carrier is coming into the rate center.

Our reclamation summary is also pretty routine. With respect to the Pooling Administration System performance, we have had no outages since last October, and for the last 12 months we had only eight minutes of unscheduled downtime. We have been in the cloud, and it is working well for us. For

RNAS, we've had only 15 minutes of unscheduled downtime in the last 12 months.

Other Pooling related activities, we filed all of our contractually required reports on time, and they were posted to the website. We also posted our annual report at the end of March. For p-ANI administration, we continued working on reconciling existing data discrepancies. It seems like there will always be data discrepancies. We attended ESIF at AMOC in May. For the NOWG, we participated in the regular monthly meetings. We've received a rating of "met" requirements and expectations from the NOWG in our annual review. We did have an issue on the NOWG survey with one regulator on the p-ANI side, and we have fully briefed the FCC on that matter.

With respect to change orders, we are proceeding with Change Order Number 3B, and working on implementation of that change order. We also filed Change Order Number 4 earlier this month in reference to INC issue 830, as John mentioned, with respect to NANPA, modifying email subject matters and other automated reports. And that presently is with the NOWG and the FCC.

With respect to the VoIP order, we have listed the status of applications here for the 26 companies that have now filed. Once again, we had some question about how we get this. The VoIP applications are located in various places on the FCC

website depending on their status. So, when an application is initially filed, it's available in Docket Inbox - 52.15. Linda Hymans from the Pooling Group checks the FCC website daily to see if there are any new applications in the inbox. Currently, there are six applications in that docket. Bartel, TeleSmart, Invoxia, ShoreTel, HD Carrier [phonetic], and BluIP.

So, I'm going to skip to the top 100 MSA list, and we had two changes to that, because the Census Bureau released the new population figures. The Census Bureau released the 2016 population estimates and we monitor that and format the data summary. Some review the county data estimates based on which counties are in the existing MSAs, and compare the top 100 MSA data from last year to this year. We do this every year and make any necessary changes so that we know which MSAs have moved into the top 100 MSAs. Although, we say sometimes that an MSA moves out of the top 100, actually, based on FCC requirements, once an MSA has been in the top 100 for pooling purposes, it stays there. So we now have roughly 130 MSAs in the top 100.

Does anybody have any questions?

Tim Kagele: Amy, just a quick question.

Betty Ann Kane: I'm sorry, would you identify yourself for the transcript?

Tim Kagele: Tim Kagele, with Comcast, sorry. Pooling Order 3B, it says status is in process. Can you advise if it's on track?

Amy Putnam: Yes it is.

Tim Kagele: Thank you.

Betty Ann Kane: Any other questions? Thank you. Amy?

Amy Putnam: Thank you, and I apologize.

Betty Ann Kane: That will be item number 4 for our transcript. All right, now we will have the Numbering Oversight Working Group. We've got two reports from the NOWG, one, the regular report, and then the special report that was asked for on foreign ownership of VoIP. We'll take your regular report out first.

Report of the Numbering Oversight Working Group (NOWG)

Karen Riepenkroger: Good morning. My name is Karen Riepenkroger, and I co-chair the NOWG, along with Laura Dalton at Verizon. Our report this month is a little longer, because we are also reporting on the PA and the NANPA performance reports.

So, on slide 2 we're going to review the 2016 performance reports and surveys for the NANPA and the PA; then we'll go into the specific 2016 NANPA performance report; the 2016 PA performance report, which also includes the RNA; and then we'll have the NANPA and PA technical requirements documents; the

interconnected VoIP foreign ownership referral; NANPA Change Orders; PA Change Orders; and then we have a couple of slides at the end on the meeting schedules and the participating entities.

So on slide three - the annual performance assessment for the NANPA and the PA. We have a list of criteria that we use. We use the 2016 performance feedback surveys. We have our monthly reports from the NANPA and the PA throughout the calendar year. We have our annual operational reviews. And then we have our just normal observations and interactions with the NANPA, the PA, and the RNA throughout the calendar year.

On slide four is a definition of each category that we utilize. We have the "met", and the "not met." The "met" is performance was competent and reliable, and decisions and recommendations were within requirements. The "not met" was performance was unreliable and commitments were not met, and decisions and recommendations were inconsistent with requirements.

On slide five, we're going to start with the NANPA survey. This is the total number of respondents to the 2016 NANPA survey. As you'll note, it is up from 2015 with an increase in the regulatory responses. This chart reflects a trend over the last ten years for the NANPA survey. Are there any questions on this chart?

Okay, on the next slide are the NANPA survey results. We had eight sections within the survey. There was one question within each section, and at the end of the survey was a section where they could provide their comments. This chart here on this slide represents the aggregated results of that, of that survey. In the sections we covered were CO Code NXX administration, NPA relief planning, NRUF, other NANP resources, NANP administration system, NANPA website and reports and industry activities, and then the overall assessment of the NANPA. Are there any questions on the aggregated results?

On the next slide, the NANPA survey results, we reviewed the written comments and as in previous years we continued to see significant praise for the NANPA staff. The comments included praise for the individual staff members, and also appreciation for the quality of the service that is provided by the NANPA. We just listed a few of the adjectives and phrases that were used by respondents. These include: They were proactive; they were responsive; they provided excellent customer service; they were knowledgeable, and they were accurate; they were well-organized.

On the next slide, the 2016 survey results: Comments suggesting improvements were mostly isolated and did not show any consistent performance issues for the NANPA. Comments

pertain to use of the online NRUF Form 502, and suggestions to enhance content of the system-generated Part 4 emails.

On the next slide are our observations. The NOWG concluded that the survey quantitative results and written comments did indicate a high level of satisfaction by those who interacted with the NANPA. And the NANPA also actively participated in industry forums, and promptly addressed any issues that were brought to their attention. Also, they promptly addressed any suggestions that were brought to them by the NOWG. As in previous years, the NANPA does continue to consistently and effectively demonstrate their expertise in all areas in which they are involved.

So some highlights for the NANPA for 2016, included, conducted a one-on-one NRUF training, and posted a "Getting Started" information sheet to assist the newly authorized interconnected VoIP providers in applying for and obtaining NANP resources. They also completed a significant two-year project to reclaim 555 line numbers, and to implement the sunset of the 555 NXX assignment guidelines. They also submitted and implemented change orders that resulted in changes to the NAS system. And then they also provided industry leadership and support in NPA relief planning, NRUF, other NANP resources and code administration.

So on slide 11, the rating for the NANPA for 2016 was "met," and again we listed the definition of the "met" category.

Betty Ann Kane: Are there any questions, so far? Thank you, Karen.

Karen Riepenkroger: Thank you. Okay, so slide 12 is recommendations. NOWG is making the following recommendations to the NANPA. We're asking them to provide details of the type of modifications being made to NAS, and the notices sent to the users when events are scheduled to implement software builds or other improvements. This is particularly when changes may impact FTP users or users with automated processes. We're asking them to continue to offer NRUF training sessions via WebEx, which would include navigation and functionality of the online NRUF Form 502. And then we ask that they hold a NANPA website refresher training session via WebEx, or possibly an unstructured NANPA website Q&A session. And also to continue to proactively search for ways to improve processes, educate the customers, and enhance system functionality. And we ask that they document those efforts where NANPA has gone above and beyond to assist its customers. Are there any questions on the NANPA?

Okay, moving on to the PA, and I know this is long, but we're working our way through this, so, sorry about that today. So, the total number of respondents to the 2016 PA survey was

down slightly from 2015, and this chart here reflects the trends, again, for the past ten years. Are there any questions on this chart?

Okay, the next slide is the survey results. Again, this survey results is for the PA. The RNA has a separate survey because it's a different audience. So there were six sections with this survey, and within each section there was one question, and at the end there was a section for comments. So this chart shows the aggregated results for the PA. The sections that were covered were Pooling Administrator, Pooling Administration System, PA website, miscellaneous PA functions, PA industry activities, and overall assessment of the PA.

On the next slide is a summary of the written comments that were provided, and again, significant praise for the PA staff. It was a consistent theme throughout the surveys. Compliments and comments included, again, praise for the individual staff members, and appreciation for the quality of service that the PA provides. Again, we listed some adjectives and phrases that were used by multiple respondents. They had personable, knowledgeable, friendly, willing to help, pleasant to work with, problem solvers, proactive, and patient.

On the next slide, comments suggesting improvements were mostly isolated and did not indicate any consistent performance issues. Comments pertain to more advanced notice of PAS changes

that may impact automated processes, suggested PAS enhancements to add additional information to the subject line of Part 4 reminder/delinquent email notices, and a more thorough review of Part 1A supporting documentation prior to issuance of a Part 3 denial. Are there any questions on the PA survey results?

Okay, so we'll move to the RNA survey results. The total number of respondents to the 2016 RNA survey was up from 2015. The chart reflects the trend since the inception of the RNA survey. This is the 5th year that we have been conducting an RNA survey.

On the next slide are the aggregated survey results. There were five sections, again, with one question per section, and a section at the end for comments. The survey, this again is the aggregated results. We covered the sections were Routing Number Administrator; Routing Number Administration System; RNA website; RNA industry activities; and, overall assessment of the RNA. Are there any questions on the survey results?

Betty Ann Kane: Karen, there's one that's indicated "not met." Was that all from the same responder --

Karen Riepenkroger: Yes, it was.

Betty Ann Kane: -- you spoke to before that had been addressed?

Karen Riepenkroger: Right. This is what Amy spoke to in her presentation.

Betty Ann Kane: Thank you.

Karen Riepenkroger: Okay, slide 19, RNA survey results, the summary of written comments. They were, again, praised for the RNA staff. It was a consistent theme, except for the one respondent. Again, that was noted by Amy, and they have addressed this. The following adjectives and phrases were used: dependable, helpful, speedy, and responsive. Based on the results of the 2016 RNA performance survey, the industry overall appeared satisfied with the PA's RNA performance and they had no suggested improvements.

Observations by the NOWG concluded that the PA and RNA survey quantitative results and written comments did indicate a high level of satisfaction by those who interacted with the PA and RNA throughout 2016. And the PA and RNA actively participated in industry forums, and they quickly addressed issues brought to their attention. They assisted and educated the newly-authorized interconnected VoIP providers in obtaining numbering resources directly from the PA.

Highlights for 2016 included: RNAS and PAS successfully moving to the cloud - Amazon Web Services; PAS and RNAS both exceeded the required metric of 99.9 percent availability in 2016; the implementation of the Direct Numbering Access Interconnected VoIP Order; educated interconnected VoIP providers on requirements for application processing with the

proper supporting documentation, and on the information needed in 30-day notification letters.

On slide 13, the rating for the PA for the 2016 performance year was determined by consensus to be met, and again, we've listed the "met" requirements. The recommendations for the PA and RNA are to continue to have internal training sessions with the PA and RNA personnel. This ensures consistency in understanding the processes when they respond to service providers and regulators. We asked that they provide details of the type of modifications being made to PAS and NAS and the notices sent to users when events are scheduled. This is to help particularly when changes may impact FTP users or users with automated processes. We asked that they review the performance survey comments for possible future enhancements to PAS and RNAS, and also to continue to proactively search for new ways to improve processes, educate the customers, and enhance system functionality.

So at this time, the NOWG is requesting the NANC's approval of the NANPA and PA performance report, and request that the NANC chair to transmit to the FCC. Once approved, we will remove the draft watermark and resend you a clean copy of the reports for transmittal.

Betty Ann Kane: Very good. We have a request for action by the NANC to approve the NANPA and PA performance reports. Is

there any discussion of that request? Anyone on the phone? I will take it that that is unanimous consent to approve those reports, and I will transmit them to the commission. Thank you for all that work on that evaluation.

Karen Riepenkroger: Thank you. I want to thank all of the NOWG members for all of their hard work in getting these reports completed.

Okay, moving on. We've just got a few more slides here. NANPA PA technical requirements document, the NOWG has completed its review and update of the NANPA TRD. However, the work on the PA TRD has been put on hold for several months while we work on the performance reports and also addressed the interconnected VoIP foreign ownership referral. The NOWG now plans to resume its review and update of the PA TRD.

If it's okay, I'd like to save this interconnected VoIP foreign ownership slide until last, and finish the review of our presentation.

Betty Ann Kane: Yes, yes, we will need some discussion on that. Thank you.

Karen Riepenkroger: So, if we can move to the NANPA Change Orders, I know that John did review these, but I wanted to note on Change Order 7, that the NOWG has met to discuss this change order, and we currently have our recommendation being prepared

and circulated for NOWG review and approval, and then it will be sent to the FCC.

And on the next slide is the PA Change Orders, again, Amy did review these PA Change Orders, but on Change Order 4, it's the same scenario for the NOWG is met [sounds like]. They have talked about this change order. The recommendation is being prepared and circulated for NOWG approval and submission to the FCC.

And then the next slide is just a list of the upcoming meetings. We do have to let you know on the following slide that we do have meetings, that we do schedule interim meetings to discuss things like the TRDs. And that there's a list of the co-chairs and the co-chairs email addresses, in case you have any questions. Then the last slide is a list of the participating entities.

So if we can go back to slide 27, this is the Interconnected VoIP Foreign Ownership Referral. The FCC requested the NANC identify and evaluate concerns that may be raised by foreign ownership of VoIP applicants seeking numbering authorization from the FCC. Specifically directing the NANC - and it had three action items for the NANC - to identify what issues foreign ownership of interconnected VoIP providers seeking to obtain numbering resources may present; provide information about NANC member experience with foreign-owned

carriers obtaining telephone numbers from the NANP and/or use of those numbers outside the United States; and number 3, make specific recommendations about how to address foreign ownership of interconnected VoIP providers that seek to obtain numbers directly.

The NANC chair did refer this request to the NOWG, requesting that we conduct an assessment with assistance from the ATIS INC on potential issues related to the foreign-owned interconnected VoIP service providers that are seeking the FCC's authorization for direct access.

The NOWG also reached out to the NANPA and the PA for their feedback. To obtain even broader input, the NOWG asked the NANC chair to send a request to the NANC and its working groups, such as the FoN working group. The NOWG did conduct their assessment and incorporated input received from the ATIS INC, NANPA, PA, and FoN working group into a single report. This report was provided to the NANC chair on June 21, 2017.

Betty Ann Kane: Thank you, Karen, and thank you for that report, which I think we will now turn to, but first I want to particularly thank everyone who worked on this. I received the email from Kris Monteith, who at the time was the acting chief of the Wireline Competition Bureau on April 24th, which gave us about two months to complete this assignment.

I want to particularly thank the NOWG tri-chairs, the FoN Working Group co-chairs, and the members of all the working groups for their thorough and thoughtful attention to this referral request, the ATIS INC, NPA, and the PA for their assistance in preparing this report and for getting it to us. It was sent out to everyone on Monday. I believe it was sent out Monday. I hope everyone has received it. It is before us for discussion and potential submittal to the FCC. So the report is now open for any discussions, any questions, et cetera, anyone?

We did receive one comment, if I can find where it is now in this little electronic system I have here from -- Kerry [phonetic] will help me out -- from --

Male Voice: NTCA.

Betty Ann Kane: From NTCA. Thank you. From Steve, thank you. We went to the cloud with the DC Public Service Commission, too, as well as going to Office 365, and something else with the phone system, all while I was on vacation, so we'll get it straightened out.

Anyway, Steve Pastorkovich from NTCA has a question or a comment, I guess, on page 5 of the report, which is in respect to the point of traditional carriers being required to have domestic presences to obtain OCNs, and thus get numbers. He asks, "Might granting numbers directly to foreign-owned entities

introduce additional challenges with regard to policing and managing spoofing?" There's a reference there to spoofing. And he says, "Considering that this is still a work in progress domestically," that is, spoofing, "are we able to identify any specific aspects of foreign ownership for FCC consideration?" Simply his comment, I just want to put his comment on the record.

Is there any objection to forwarding this report to the commission?

Jerome Candelaria: This is Jerome Candelaria, NCTA. I just had a threshold question. I was looking for a common definition or working definition of foreign ownership. For those who participated, was there a common understanding of what was meant by foreign ownership, a specific definition or at least a common understanding of who and what type of company that might entail?

Betty Ann Kane: Anyone? Yes?

Greg Rogers: Jerome, this is Greg Rogers, of Bandwidth. I'll jump in. The common understanding is the very same that it always has been with the commission's rules, right? I mean they have rules in place to determine foreign ownership today. I think in our discussions, we generally assume that those would be the same rules to dictate what foreign ownership was in this context as well.

Jerome Candelaria: Right. I assumed that ultimately, that would be the case, but having a working definition would have, I think, helped define the scope of what was being discussed. But thank you. I appreciate that.

Betty Ann Kane: Yes, I'll point out that the email from Kris Monteith to me simply said foreign ownership. Is everyone agreeing that to reference that we are speaking of the current FCC rules to define that? We have a comment here from Verizon.

Robert Morse: Yes, Robert "Rob" Morse from Verizon. I think the general understanding was that the commission does have existing rules, whether it's for the wireless rules, or the Part 63 International 214 rules that look at foreign ownership. And I think that there is just a general assumption that there are ways to look at foreign ownership. I think we're just sort of looking at that not necessarily a particular standard was required. Just that the commission -- it was something that the commission has looked at another context I think is really the extent at which we looked at it.

Betty Ann Kane: Okay. Thank you. Anything else? All right, then by unanimous consent, I will forward the report to the commission, and again, thank you for all the work that you've done on this. Thank you for meeting that very tight timetable.

Report of the Toll Free Neutral Administrator (TFNA)

All right, moving on, Toll-Free Numbering Administrator. So let us mark - what are we up to now - this would be document 5, the NOWG report. Yes. And then I'm going to label the separate report on Interconnected VoIP Foreign Ownership, that specific report as 5A. It was embedded in the report, but the document itself is separate from the slide.

Joel Bernstein: All right?

Betty Ann Kane: Yes, we are ready.

Joel Bernstein: Hi, I'm Joel Bernstein, with SOMOS, the Toll-Free Neutral Administrator. You'll notice on page 2, something John Manning referred to, and that is we opened the 833 code on June 3rd. Normally, on our chart we do it the end of the month, but because we don't have time - it's not the end of the month right now - I asked our folks to pull a number as soon as they could on June 10th. You see that the total on the spare pool is a lot larger because almost 8 million numbers were added to the pool when 833 opened.

And if you can go to page 3, you can see where we opened the code on 2017. On page 4, this is only for the first ten days or first, actually, week of opening 833. We have already 2.2 percent of the code was open. I'm going to speak to how the code was opened in a moment.

And then on the fifth page, our normal chart showing the trends, we'll see as they go out, we'll see, you know, in months coming on, how that trend goes with 833, and as well how it may affect the 844 and 855.

So, the most exciting thing of course is the 833 opening. Normally, we ask the FCC to waive the rules - the first come, first served rule - so we can limit the numbers that are taken by any one entity during the code opening on the first X amount a day. So it had been the first 30 days, 100 per entity for the last two code openings.

ATIS, SNAC - the SMS Numbering Administration Committee - asked the FCC to alter those rules slightly. They had asked the FCC to then create what we call an affiliation rule. If a company was affiliated with more than one Resp Org, the limit of whatever that may be was to that affiliation group. So, if a company had, you know, a carrier may have had three or four Resp Orgs because they consolidated, that would count as one for the opening purposes.

Betty Ann Kane: Otherwise, we'd have a real land rush here, is that [cross-talking]? It will overwhelm the system.

Joel Bernstein: Well, it happens. The larger carriers were getting a lot more numbers, the ones who had multiple Resp Orgs. Some felt, the smaller Resp Orgs thought that was unfair. So the FCC then was asked also to cut the allocation day from 30

to 20 in a way to sort of ameliorate that way the large carriers would be able at day 21 to get all the numbers that they needed.

We, ATIS, SNAC asked for this around April of 2016. The FCC, in looking at the code openings past, decided they wanted to figure out what numbers were wanted by many telecom, by many Resp Orgs, so were sort of the highly valued numbers.

The FCC asked us to do a pre-code opening period, where Resp Orgs would ask for, they said it was 2000 numbers, during that time period. That was the equal to the 100 per day times 20, and each affiliation group were allowed one set of numbers. Those were put in through our systems. We evaluated and looked at which ones were asked by only for a single Resp Org, and those that were asked by for multiple Resp Orgs. The FCC asked us the ones who were asked for multiple Resp Orgs to be put aside for a future proceeding, for the FCC at that point will determine what to do with these. We call them, you know, from the broadcast term borrowed mutually exclusive numbers.

So, during the pre-code opening period, we had requests for about 72,000 numbers, of which a little over 17,000 were mutually exclusive. The other 54,000-plus, 54,000 and a half were single Resp Org requests. We assigned those to the Resp Orgs during the period riding up to the code opening of June 3rd. So we were signed on June 1st and 2nd, and then on June 3rd we opened the code for everybody. On that June 3rd code

opening, we had about 64,000 numbers assigned on that one day. Over the first week, you saw there's about 200,000 numbers assigned, which is roughly in line with previous code openings.

But for this code opening, as we said, there's a pre-code opening period, where they pushed to the side those mutually exclusive numbers. There's a lot of interesting things about that. There's 17,000 numbers that were mutually exclusive. The one number that was requested by the most Resp Orgs, obviously, would be 833-333-3333. More than half of the Resp Orgs asked for that. Eighty-five of the 147 Resp Orgs who participated asked for that. That 147 Resp Orgs represents about 28 percent of all Resp Orgs, so it was a pretty good participation, about the same we see in code openings before.

And of the top 100 numbers at least 25 percent of the Resp Orgs asked for those numbers. So 40-some odd up through 80 asked for the top 100 numbers. And now we'll just wait for the FCC. They're going to put out a notice, plus we're making our notice of inquiry - we're not sure yet, that's up to the FCC - to determine how to best allocate these mutually exclusive numbers. That's all I have. Any questions?

Betty Ann Kane: Thank you. Any questions? All right. This will be document number 6.

Joel Bernstein: Thank you.

**Report of the North American Numbering Plan Billing and
Collection Agent Report (NANP B&C Agent)**

Betty Ann Kane: Thank you. All right, the North American Numbering Plan Billing and Collection Agent Report.

Garth Steele: Good morning. It's Garth Steele. I'm with Welch LLP. We act as the billing and collection agent for the North American Numbering Plan fund. There are two elements to the report today. The first is the usual which gives you a status update on the balance in the fund as of the most recent month then, which is May 31, 2017. The second part of the report is to look at, and hopefully get your approval, we're making a recommendation for your approval on the contribution factor, for the contributions to the fund for the coming funding year.

So we'll start with a look at the fund balance, where it's at, at the end of May or the most recent year end. The first page there is the statement of financial position that shows the fund balance of \$2.069 million made up of cash in the bank of \$2.4 million, receivables from various sources of \$142,000, less accrued liabilities owing to various suppliers at the end of May of \$538,000. So the fund balance at the end of May was just over \$2 million.

If we flip to the next page, you'll see a number of columns there - one for each month in the current funding year, and the

funding year ends at the end of September 2017. The first eight columns are actual figures up to the end of May. The next four columns are projections for what we anticipate the expenses and revenues to be for the remaining four months in the funding year. So if you look at the total column of those, the third column from the right-hand side, you'll see that we anticipate ending the year with a surplus of \$377,000 which is down from our budget where we anticipated ending the year at \$500,000 that being the contingency, the unaccounted for expenses that we built into the budget. So we'd hope to end the year with a \$500,000 surplus. It looks like we're going to end the year with a \$377,000 surplus.

The box in the bottom right-hand corner of that page explains the variants from budget to projection, and of course there's many moving parts in this thing. To be able to come in within \$100,000 of the budget, given that our revenues are budgeted at about \$6 million, is pretty good. So we're fairly close to where we anticipated we'd end up for the year.

The next page is the statement of anticipated expenses over the next six months. Broken down by supplier, you'll see that they're very consistent generally speaking from one month to the next. There's no unanticipated expenses because all of the expenditures, our suppliers are under contract with the fund, essentially fixed price contracts with some variable components.

The next page, called deliverables report, talks about the status of sending out invoices, and collecting, and that type of thing. Nothing major to report there. So that's the first part of the report, the status of the fund at the end of May. We'll just pause and ask if there are any questions up to there. All right. Hearing none, then we'll continue on to look at the proposed contribution factor for the fund for the coming funding year.

That year runs from October 1, 2017 to the 30th of September 2018. We've got two columns on this report. The column on the right-hand side is the current year for comparative purposes, and the left-hand column of numbers is the projection that we'll use for our budget for the coming year. You'll see that they're the usual components to revenue. We expect that after we subtract the contributions from Canada and the Caribbean countries and before we apply the surplus that we have carried forward from the current year, we expect that we're going to need to raise \$6.8 million of actual expenditures that we know of at this point. We're able to take off the surplus that we anticipate having at the end of the current fiscal year of \$384,000. That's going to leave us with the balance to be funded before the contingency allowance, which I'll talk about in a minute, of \$6.5 million. You'll see that's up from the year before when it was \$5.2 million.

Now, if you flip to the next page, there are a number of assumptions that are listed there. I'll leave you to read those at your leisure. Let's carry on to the next page called the contribution factor determination where we pick up that \$6.5 million expense that needs to be funded by U.S. carriers, and we add on to that the contingency allowance. The working group worked with us on three scenarios, a contingency allowance of \$500,000, which we've typically used in the past. We looked at an allowance of \$750,000 and an allowance of \$1 million. It was determined with the assistance of the working group that we should be using a contingency allowance of \$1 million, and that's because there are a number of contracts that are coming due in the current year whose contracts have not been negotiated yet.

There's a significant likelihood there would be an increase in costs. Hard to determine what those would be. It would seem prudent to build in a contingency allowance that should be more than enough to cover off any cost increases in the contracts so that we don't run out of money halfway through the year or three quarters of the way through the year and have to go back for an additional funding request.

So the recommendation that we'd like to make today is that we build into our funding requirement a contingency allowance of \$1 million, which means that the U.S. carriers will be required

to contribute \$7.5 million. When we divide that into the anticipated contribution base for the year, which we'll see at the bottom of that page, it's about \$145 billion down from the year before, that our contribution factor will end up being 0.0000518. That compares to the current year where the contribution factor was 0.0000368. So, the contribution factor's going up, and that's a factor of increased expenditures that we're aware of, plus a higher than usual contingency allowance. I'll stop there and ask if there are any questions about that.

Betty Ann Kane: Any questions? So in addition to anticipated expenses, relatively known expenses going up, there's the potential for the unknown to go up too in the contingency. What are the major known expenses? I'm trying to look at the 2017-18 versus the 16-17 budgets. Anything that stands out? I see for example in carrier audits, that's going down.

Garth Steele: The major expense that's gone up is, under Pooling Administration, there was Change Order 3B that I've noted in Note 3. There's a significant increase in costs over the current fiscal year that has been approved by the FCC.

Betty Ann Kane: There's no cost for that, right, in the current year?

Garth Steele: There was none budgeted for although some of the costs have been incurred in the current year, and that's one of the reasons that we're running into a small deficit this year.

Betty Ann Kane: On the contingency. We're using the contingency to cover that. That's \$741,000. Just for the record, it looks like it's the biggest increase on the others. Yes, CenturyLink.

Phil Linse: Phil Linse with CenturyLink. One thing to point out as well is, when you look at the fundamental number at the bottom there, we're going from \$157 billion down to about \$145 billion. That in and of itself increases that contribution rate too, in addition to those additional costs.

Betty Ann Kane: Any other questions? Verizon.

Robert Morse: Robert Morse, Verizon. Do we expect the past practice to continue of, in the event there's a surplus at the end of the coming fiscal year, it would be applied to the -- I guess it would be the 2018-2019?

Garth Steele: Absolutely.

Betty Ann Kane: Then for next year, those contracts that are expiring, you will have a better handle on what the actual costs are.

Garth Steele: Yes, we would hope to.

Betty Ann Kane: We would hope that those contracts be expressed on behalf without even asking for unanimous consent I know that these contracts that are coming up, they need to be renewed. We would certainly hope that whatever process within the commission is needed, to get those done and get them out and get them considered and get them approved on time. It would be extremely appreciated, it would be extremely helpful to the budgeting process and to the carriers that have to pay this contribution factor that we could know what those numbers are before we do the next year's budget. So that the people who are going to be delivering the services will also know whether or not they are going to be delivering the services or there'll be new people coming in, that this is done in a timely manner. We know we've got some new folks at the FCC, plus a new commissioner's coming on, et cetera. I'm going to be sending that message again as we get ready for the next year, as we get ready to be re-chartered. Thank you.

Any other questions? So we are to approve. You have a recommendation to approve this contribution factor. Is that what's before us? Just for the record?

Garth Steele: Yes. Thank you.

Betty Ann Kane: All right. Any objection to approving this proposed contribution factor? By that, we say it is approved. Thank you. Thank you for all your work on this.

Garth Steele: Thank you.

Report of the Billing and Collection Working Group (B&C WG)

Betty Ann Kane: That will be document number 7. Moving right along, the Billing and Collection Working Group.

Rosemary Leist: This is Rosemary Leist with Sprint. I co-chair this group with Phil Linse with CenturyLink. Garth has already presented pretty much my whole entire deck, so we will go very quickly.

Page 2. The Billing and Collection Agent Working Group is responsible for overseeing the performance of the functional requirements provided by the B&C agents. We review the performance of the agent, which we did last month. We submit reports to the NANC on that and we identify the financial impact of initiatives that might be included in the budget, which is what we're doing or what we did just now.

The B&C Working Group is currently overseeing the monthly collections, the monthly deliverables that he just went over. We meet privately to go over the monthly deliverables. We monitor their contracts. We have been working very diligently on that budget and contribution factor that he just talked about. As far as the contract renewal, their contract expired in October of 2009 and they're extended through June 30, 2017.

Betty Ann Kane: Which is tomorrow.

Rosemary Leist: Which is tomorrow. So we're expecting a contract extension again soon. The budget and contribution factor, I'm not going to go over that whole thing again because he's already gone over it. But if you have any questions after the meeting about this, please feel free to reach out to Phil or myself.

Page 6. It's a historical slide that shows I guess the last, I don't know, a long time, ten years of the contribution factor. Fourteen years. If you have any questions about that, please feel free to let us know. Our membership is on page 7. You can see that we don't have as many members that join the B&C Working Group that are at this table right now. So if you would like to become a member of the B&C Working Group, please let Phil and I know. We can get you in touch with the FCC for vetting. Our meeting schedule is on page 8. We only meet once a month for an hour. Are there any questions? Thank you.

Report of the North American Portability Management (NAPM)

LLC

Betty Ann Kane: Thank you very much, Rosemary. This will be document number 8. All right. The NAPM LLC. Tim.

Tim Kagele: Good morning everybody. My name is Tim Kagele. I'm a co-chair of the NAPM LLC. I work for Comcast. I share this responsibility with my AT&T colleague, Teresa Patton.

I'm pleased to give you the summary of the NAPM LLC's activities for the past quarter.

In the report that we distributed under statements of work and amendments, Amendment 3 to the iconectiv Master Services Agreement, updates to the acceptance, terms and conditions for ancillary services was approved by the NAPM LLC. Also SOW 4, Amendment 3 has been received from iconectiv. That carries for the FRS sunset items contained under NANC 460, and that remains under review by the NAPM LLC.

Under the general category, the NAPM LLC remains open to new members. As an incentive to encourage new membership, the NAPM LLC approved to waive the new membership initiation fee of \$10,000 through January 31, 2018. We are optimistic that that may incent some service providers that have been on the fence about joining the NAPM LLC to take the plunge, and we would certainly welcome new membership. If you have questions about membership, feel free to see me after the meeting or reach out to my co-chair colleague, Teresa. Our contact information is on page 3.

Also under the general category, the NAPM LLC approved iconectiv's request to engage Deloitte & Touche, LLP as its neutrality auditor and also the law firm of Lawler, Metzger, Keeney, and Logan, LLC to issue its neutrality opinions. Let me pause there and see if there are any questions so far.

Betty Ann Kane: Let me ask a question just again for the record.

Tim Kagele: Yes, ma'am.

Betty Ann Kane: In waiving the new membership initiation fee of 10,000, for the record, what is the membership fee?

Tim Kagele: Please do not quote me on an exact number. I want to say it's around \$73,000.

Betty Ann Kane: Annual.

Tim Kagele: Annual, yes.

Betty Ann Kane: I just want to have that on the record as we're encouraging members to join.

Tim Kagele: That number's variable based on the budget and so forth, but I believe that is the current.

Betty Ann Kane: So the more members there were --

Tim Kagele: The lower that number would be.

Betty Ann Kane: Thank you.

Tim Kagele: Yes. Great question. Thank you, Chairman Kane. Okay.

Under the FoNPAC report, no report this time. Under the LNPA transition activities, inadvertently we omitted a key activity that I'd like to read into the record. That pertains to on May 26, 2017 the United States Court of Appeals for the District of Columbia denied Neustar's petition to review the FCC Local Number Portability Selection Order and concluded the FCC's

process and recommendation were proper exercises of the FCC's authority. I wanted to read that into the record under the section of our report, LNPA transition.

Betty Ann Kane: Thank you. I'll simply add that if you would file an amended report that would include that in the written section.

Tim Kagele: Yes, ma'am.

Betty Ann Kane: That would be important. Otherwise, it will only be in the transcript and not the report. That was a very important development.

Tim Kagele: Yes, it was. We'll be happy to do that.
Okay.

The first item that is in the report, the NAPM LLC reviewed and approved the iconectiv-provided form of ELEP and WDNC service agreements to be used in support of the onboarding of ancillary services users. Also a kickoff meeting was held on May 9th between the NAPM LLC Security Advisory Council, or SAC, and the FCC Public Safety and Homeland Security Bureau to discuss development of an operating framework with respect to managing iconectiv compliance to the security requirements enumerated in the Master Services Agreement. The framework is under development.

As a follow-up to Neustar's request to accelerate handoff of their industry custodial responsibilities for NPAC change

management, the NAPM LLC reached agreement with iconectiv to accept the handoff effective August 1, 2017. We thank iconectiv for that agreement. That was an accelerated agreement, so we appreciate their flexibility very much.

In preparation for the transition, the NAPM LLC, Neustar, iconectiv, and the TOM continue to finalize deliverable term sheets for all of the parallel operations needs. In this regard, the NAPM LLC approved the data migration term sheet which was a very large effort and so far has been very successful. In accordance with the terms set forth in PwC's letter of engagement to service the TOM, the NAPM LLC approved the third quarterly extension through October 31, 2017.

Next to the last, the NAPM LLC continues to file monthly LNPA transition status reports with the FCC on the last day of each month and began filing these reports on the docket in July of 2015.

Last item, the NAPM LLC continues to meet regularly with the FCC and the TOM to provide transition status, as well as apprise the FCC of issues or concerns pertinent to the transition. Let me pause there and see if there are any questions. Hearing none, thank you, Chairman Kane.

Report of the Local Number Portability Administration
(LNPA) Transition Oversight Manager (TOM)

Betty Ann Kane: Thank you very much. We will label that document number 9. Now the report of the TOM.

Greg Chiasson: Good morning, Chairman Kane and distinguished members of the NANC. Thank you for the opportunity to address you today. My name is Greg Chiasson. I'm a partner at PricewaterhouseCoopers or PwC. I'm here today representing the Transition Oversight Manager or the TOM. I'd like to give you a brief update on the status of the LNPA transition, our recent accomplishments, and our planned next steps.

First we'll briefly review the latest Transition Outreach in Education Plan or TOEP events. Then we'll provide a transition update including a view into the key activities and accomplishments across the four primary transition work streams. I'll also briefly touch on vendor testing and other activities since our last update. Then we'll cover the planned next steps, as well as outreach in education events that provide additional opportunities for stakeholders interacting with the TOM.

Let's start with recent outreach events. Since our last NANC report in March, we held one in-person event at the INCOMPAS trade show on August 4th and 5th.

Betty Ann Kane: I think you mean April.

Greg Chiasson: I'm sorry. April, yeah. Sorry. Thank you. We conducted three TOEP webcasts, each attended by about 200 participants. We also attended the May and June LNPA Working Group meetings.

The most recent TOEP webcast was held on June 14th. We provided an update on the status of key transition activities, our review of onboarding and testing activities with a particular focus on vendor testing that's currently under way. We also talked about the plans for our outreach activities and held a webcast question and answer session. For those that missed it, the materials for the webcast are available on the LNPA Transition tab of the napmlc.org website. We're using the site to archive all of the transition materials.

So let's move on to Section 2 to review progress and accomplishments across the transition work streams. The top level transition dashboards are provided in our report. Each row corresponds to one of the major transition work streams. If we take them one by one - within the NPAC SMS platform build work stream, production data center construction is on track. Release A development and iconectiv testing is complete. This portion of the NPAC software has now progressed on to industry testing.

Correspondingly, development focus is now squarely on Release B. Since our last report in March, we completed a

relook at the development schedule for this portion of the code. The attempt was to realign coding and iconectiv testing activities to best support required timelines while incorporating the plan changes we've discussed in previous TOEP webcasts.

Based on the relock, we're not changing any of the key dates associated with the transition or the amount of time available for Release B industry testing. However, the new plan requires iconectiv to compress certain development activities and to apply additional development resources to Release B. Additionally, that contingency or buffer originally allocated to Release B development has been essentially consumed. Therefore, we changed the status indicator of this work stream to at-risk. To be clear, this is not because the key dates for activities, like regional migrations, are in jeopardy. The at-risk status reflects the fact that there isn't any slack in the Release B schedule and, correspondingly, there's little ability to absorb changes in requirements or other unplanned events. The TOM will continue to monitor Release B and provide updates through our transition outreach program. As development and testing progress, we'll reevaluate the status of this work stream.

Within the onboarding and outreach work stream, initial efforts have been focusing on service providers, service bureaus, providers of telecom-related services, and vendors and

we've been making great progress. Approximately 64 percent of these users have started the onboarding process, and as of June 16th, 951 users have fully completed registration. The exciting news in industry testing is that vendor testing is well underway with six systems under test having started and one fully completing certification as of June 16th. Additionally, seven acceptance test plans have been approved by the NAPM in coordination with the FCC. The ATPs are staged, and the next two are working through the approval process now.

Finally, in the data migration and go-live work stream, progress is being made in building out the detail requirements for parallel operations activities which define how the transition will work with both iconectiv and Neustar performing some tasks. These are the term sheets Tim referred to. The first requirements document is complete and was used in the LNPA-to-LNPA data migration test which started last month and concluded earlier in June. Those with good memories may recall that we flagged this work stream as at-risk in our last report to the NANC. Subsequently, we updated the risk status of this work stream to on-track because our concern regarding the interface between the NPAC and the Pooling Administrator has been successfully mitigated with the stage delivery schedule for the API. That was part of the 3B Change Order.

So let's go on to the details. In Section 2.1 on the NPAC platform build, as I said, data center construction and configuration is proceeding well against the plan to complete by October. The TOM, the NAPM precision team, as well as public safety stakeholders have all inspected the data centers. I've been pleased with the amount of progress in the construction, configuration, and implementation of operational procedures.

Software is being developed in two major releases to facilitate testing. Release A, which contains CMIP and core NPAC functionality, has completed development in iconectiv internal testing. This release has now moved on to industry testing. Release B - which includes XML, ancillary services and back office functionality - is in progress and is tracking to revise plans. As I described, the Release B project plan is tight and we'll be closely monitoring development efforts over the next few months.

In Section 2.2, which is on outreach and onboarding, they said approximately 64 percent of service providers, service bureau, and PTRS users have started the onboarding process. This corresponds to about two-thirds of SPIDs. The large majority of those in the process are service providers, and 951 users have fully completed the registration. Additionally 12 of 13 service bureaus and 20 of 21 mechanized users, as well as all five LSMS and SOA vendors have started onboarding. Since the

beginning of the second quarter there's been an increasing focus on ancillary services onboarding. Initial outreach for WDNC and ELEP users has been completed, and the registration site for these users opened on March 28th. With SOA service providers, there's been a good initial uptake. For Wireless Do Not Call, 21 entities have started registration. Six are complete as of June 16th.

If we go on to 2.3 on industry testing, as you can see, vendors are the first group to test. This testing began last month with six SOA and LSMS, CMIP vendors having started testing by June 16th. Mechanized user testing follows in July. As we've discussed in the past, testing is mandatory for mechanized users and optional for those interfacing throughout other interfaces.

The first seven acceptance test plans have been prepared and approved. These include the overall NPAC, SMS, ATP, as well as ATPs for data migration, Wireless Do Not Call, IVR, LTI, business continuity, and performance. ELEP and billing are the next two ATPs working through the approval process, and we expect this to be complete before the end of July.

In Section 2.4, on data migration and go-live, the TOM continue to work on the development and definition of how operational activities will be divided between Neustar and iconectiv while Neustar is operating certain regions and

iconectiv operating others; what we call parallel operations. The first requirement is a document on data migration and it has been approved. We're in the process of reviewing the balance with the parties to gain agreement on the remainder. Additionally, the testing and test planning for the LNPA-to-LNPA cutover is under way.

As we've covered previously, for some time now, we've been exchanging NPAC data from Neustar to iconectiv using the EBDD or enhanced bulk data download file specification. The testing which began last month and the phase 2 testing, which is planned for next month, will be more reflective of the conditions associated with the actual cutover. The testing in July, in particular, will be in actual during the maintenance window dress rehearsal for the regional cutovers.

If we go on to Section 2.5, a few additional accomplishments and transition support. TOM has been monitoring vendor testing by attending daily testing calls and facilitating reviews of test results and exceptions. We've also continued updating the frequently asked questions list, publication-authorized questions log, and we've been posting additional materials to the transition website. We've been conducting weekly meetings with the NAPM, iconectiv and Neustar to coordinate activities and communication across the parties, as well as to address ad hoc issues. And we've been preparing

monthly reports on the LNPA transition for the FCC. Going forward, we'll continue to monitor testing and other measures of transition progress and communicate the status to all transition stakeholders as appropriate.

I'd like to cover some of the upcoming TOEP events. Over the next month, the TOM's planning a number of TOEP events that would provide a variety of opportunities to interact with stakeholders. On July 11th and 12th we'll attend the next meeting of the LNPA Working Group with an interactive contingency rollback planning session to follow the conclusion of the working group meeting on July 12th. We'll also host the next three TOEP webcast before the next NANC meeting - so one on July 19th, on August 16th, and September 6th. We're also planning to attend the LNPA Working Group meetings on August 9th and September 11th and 12th. Additionally, the TOM is preparing a Web-based transition stakeholders survey similar to the one we issued in November. We'll launch this one at the second part of next month.

Additionally, I'll note that you could submit questions or comments directly to the TOM to the comments feature that's listed on the left-hand side of the NANPM-LNPA transition page. I certainly would encourage you to use this feature if you wish to reach the TOM between NANC meetings. This will conclude my prepared remarks. I'm happy to take any questions.

Betty Ann Kane: Thank you very much. Are there any questions, any comments, or reactions on this report?

Male Voice: This is John Howardson [phonetic] from Cincinnati Bell Telephone. I'd like to know how the TOM is managing any defects the cut [sounds like] discovered during the testing. Can they provide us with any kind of a detailed understanding of what's been discovered so far and how the TOM and the industry intend on resolving these problems? Then how is iconectiv, if they have to make any changes, going to retest all of this with our vendors?

Greg Chiasson: Sure. I'm happy to address that. The TOM is receiving a variety of reporting on the progress of the vendor testing, both from iconectiv and the vendor. We're meeting individually with both those parties, as well as facilitating three-way calls to just discuss any outstanding issues, the various ways they might be resolved, the impact of resolving them such that we can come to a conclusion on the best way to address anything that stands out.

In terms of the way the testing is being conducted, there are confidentiality agreements in place so we're not disclosing individual vendor test performance or test results. We can't speak specifically on the particular test results, but I would say overall the testing is going about how you'd expect it to. There are certainly issues that are being found and addressed

from connectivity to performance on test cases. There are a number of things that have been satisfactorily resolved.

There are a list of issues that the TOM is maintaining with iconectiv and the vendors in regards to outstanding issues, things that are under investigation and haven't settled yet, as those become either systematic or a concern in regards to the schedule we'll certainly provide greater visibility to those through the TOEP webcast and the other outreach events that we have.

Betty Ann Kane: Any other questions?

Male Voice: Thank you. This is John Howardson again from Cincinnati Bell. I have one additional question that revolves around the rollback seminar you've got in July. You also mentioned the session with the LNPA Working Group. Will the rollback testing plan be part of the LNPA Working Group or the experts are - the subject matter experts - or is that rollback test plan going to be developed by the TOM?

Greg Chiasson: Yeah. The rollback working meeting is going to follow the conclusion of the LNPA Working Group session. It's not part of that meeting. We're just trying to take advantage of the fact that a number of the stakeholders are co-located in one spot. That will be held in July. We'll be partly in-person, but we'll also have an audio bridge or a teleconference for those that can't attend in person. We've set

it up in a way that will hopefully allow a bit more interactivity than we can get in a normal TOEP webcast. There'll be an operator facilitating question and answer capability. For anyone who's attending by phone, they will be able to ask and submit their questions.

Male Voice: Will the TOM then be documenting that test plan rather than the LNPA Working Group?

Greg Chiasson: I'm not sure exactly which test plan you're talking about now.

Male Voice: The rollback.

Greg Chiasson: Yeah. What we're going to do in this meeting in July, John, is to share. This is the first of several meetings we're going to have with the industry to discuss rollback and how it would work if we were to need it. The intent of this meeting is to provide an introduction to what do we mean by rollback, what might trigger a rollback, how we would make decisions on a rollback, and then view how we could implement that. Essentially, I would look at this as the introductory meeting, and then we'll get feedback in the course of this meeting and from the industry afterward.

We'll take that feedback. Our intent is to have another discussion in August following the TOEP session and we'll go through that feedback - what we heard, what conclusions we can draw from it, any changes or modifications to the approach that

might be necessary based on that feedback. Once we have that detail in place, then we'll be in a better position to define a full test plan and understand what might be required to test a contingency rollback approach.

Male Voice: Thank you.

Betty Ann Kane: John, I wanted to ask whether your question went to, given the fact that it's after the LNPA Working Group meeting, as to who would be participating in the meeting.

Male Voice: Whether it would be the TOM in any LNPA Working Group meeting members that can join the call. The final question I would have then with the rollback looking at --

Greg Chiasson: John, let me just make sure I answered your question.

Betty Ann Kane: John -- that was the question. So I want to get an answer.

Male Voice: Okay. I'm sorry.

Greg Chiasson: Any interested stakeholder can join this call. We've been publicizing it through the entire TOEP mailing list we have which has about 10,000 points of contacts on it. So certainly you don't need to be an LNPA Working Group member to attend. I think, when I last checked, we had over 120 people registered so far for the session.

Betty Ann Kane: Thank you.

Male Voice: Gregg, do you see that rollback, with working on it in July and August, possibly impacting the timeline?

Greg Chiasson: No. I think it fits into the timeline. We're going to see what feedback we get to people, but we've got I believe a plan that fits within the time constraints associated with the transition to do with the final acceptance in May of next year.

Male Voice: Thank you.

Betty Ann Kane: Thank you. Thank you for the good questions. Any other questions? Comments?

I want to thank you. It had been benched a couple of times now participating in the LNPA Working Group. I think we've had an improvement in how that's all working. I want to thank the LNPA Working Group folks, too, for working with us to make sure that everyone who's got an interest has access to information and can participate. That seems to be doing well now. All right. Thank you. Your report will be number 10, the TOM. We're looking forward to your report in September.

Report of the LNPA Working Group

Now the LNPA Working Group, which we have referred to several times. Thank you.

Deborah Tucker: Hello. I'm Deborah Tucker with Verizon. I'm one of the three tri-chairs of the LNPA Working Group, along with Paula Campagnoli from T-Mobile and Glenn Clepper from

Charter. My report today will cover a few items. We had a tri-chair election. We worked on Best Practice 73. We discussed and approved change management flows and narratives, and we also have an item about LNPA transition.

For the tri-chair election, the election was held to fill the vacant CLEC tri-chair position. Nominations were received prior to the meeting for Anna Kafka with Bandwidth and Glenn Clepper from Charter. A vote was held and Glenn Clepper was elected as the third tri-chair.

Best Practice 73. The LNPA Working Group participants collaborated on determining the best approach for service providers to follow when dealing with out of service situations or unauthorized ports. They agreed upon a flow that provides a detailed outline for carriers to follow to resolve customer complaints. Service providers should follow the outline flow to resolve any ports believed to be unauthorized, disputed, fraudulent, or inadvertent. The working group recommends using this best practice as the master best practice over the other associated PIMs or best practices dealing with unauthorized, disputed, fraudulent, or inadvertent ports.

Best Practice 73 and its associated flows and summary documentation can be found at a link that I included in the report. It's on npac.com, under the LNPA Working Group LNPA

best practices. And it is number 73. Are there any questions about that?

Change Management Flows and Narratives. A team of working group participants proposed updates to the existing change management process documentation. We found that it was quite old and needed to be dusted off and updated. The flows and narratives were accepted without further changes and finalized documents are placed on the npac.com website at the URL included in the report, which is under the LNPA Working Group and problems and issues management link. And I also included addresses for the specific documents. Any questions about change management?

Regarding the transition, pursuant to the NANC chair's request, the LNPA Working Group continues to discuss possible areas where the LNPA Working Group could be involved in the transition. The LNPA Working Group Testing Sub-Team was reactivated for the purpose of reviewing existing group and round robin test cases to determine how best to apply the test cases for the LNPA transition during the service provider testing period. Renee Dillon with AT&T leads the sub-team's efforts, and Anna Kafka with Bandwidth is helping. Meetings are being held with interested LNPA Working Group participants.

The LNPA Working Group Architecture Planning Team continues to review current test cases and develop any new test cases that

may be needed for the LNPA transition. John Malyar with iconectiv and Teresa Patton with AT&T lead the APT. The LNPA transition testing is now a recurring item on the LNPA Working Group agenda. The tri-chair has announced that the change management administration function will transition away from Neustar to iconectiv after the July LNPA Working Group meeting document updates are complete. Our next face-to-face meeting is July 11th and 12th in Durham, North Carolina hosted by Bandwidth. Are there any additional questions?

Betty Ann Kane: Okay. Thank you very much.

Deborah Tucker: Thank you.

Report of the Future of Numbering Working Group (FoN WG)

Betty Ann Kane: That will be document number 11. The Future of Numbering Working Group.

Suzanne Addington: Good morning, Chairman Kane. This is Suzanne Addington. Can you hear me okay?

Betty Ann Kane: Yes. You are coming through loud and clear.

Suzanne Addington: Perfect. I am one of the tri-chairs for the FoN Working Group, along with Allyson Blevins from Charter Communications and Cullen Robbins from Nebraska PSC.

On page 2 is a reminder of our mission and our scope, which is to explore changes to the environment; including any new and future technologies, and the impact of marketplace and

regulatory changes, and innovations on telephone numbering. It slides right into number 3 which, on May 19th, the Future of Numbering Working Group received a referral from Chairman Kane and the NOWG regarding foreign ownership of interconnected VoIP applicants who were seeking to obtain numbers directly. The FoN met several times in June to discuss the requests, and we provided our input back to the NOWG by June 19th as requested. And I want to thank all the participants who attended those conference calls. There were several of them. Sometimes those calls took place on very short notice, so thank you to everyone who took the time to attend those spur of the moment calls.

The FoN Working Group continues to receive updates from other industry forums to keep the members informed, including ATIS Testbed Activities; INC, also with ATIS; LNPA Working Group; and the ATIS/SIP Forum NNI group. Nationwide ten-digit dialing continues to be on the open portion for any future meetings.

On page 4 is a list of all of our attendees from different organizations, states, and vendors. On page 5 is a list of special information. We have our normal next conference call on August 2nd. We met on April 12th as a regular working group call, but we had several meetings in June as you can see from an auxiliary perspective to discuss the foreign ownership of VoIP. If there's anyone who's interested in attending our future

meetings, please feel free to reach out to any of the tri-chairs. The information is listed here on this page. Are there any questions?

Status of the Industry Numbering Committee (INC) Activities

Betty Ann Kane: Any questions for Suzanne? Okay. Thank you very much. I accept your report, and that is document number 12 on the agenda. Moving on to the INC.

Dyan Adams: Good afternoon. My name is Dyan Adams. I work for Verizon Communications. I am a co-chair of the ATIS Industry Numbering Committee. I'm going to take a moment to announce that Connie Hartman has moved on to a new role. INC is very grateful to Connie for her contributions over the past several years at the INC and she will be greatly missed.

We have one open co-chair position. The nomination period has been open since I believe June 14th. Nominations close at 1:00 PM tomorrow. We do have one nomination received so far. As I understand it, if there is only one nomination, the election may be made by acclamation.

We provided our normal general information about INC. Our previous and upcoming meetings I'm going to discuss in a little bit more detail. Issue 830, that you've heard about already. And we have provided the issues in initial closure, initial pending status and tabled status, as well as final closure status and the normal web pages.

Slide 3 is just our general information about membership. The URL is provided. Also some information can be found on the website about how INC operates. Slide 4 lists our meetings. Since the previous NANC meeting, we met in May at the AMOC. And our future meetings are listed below. Our next meeting is in Denver the week of July 24th. On slide 5 we have information about Issue 830, again, which you've heard about from the NANPA, the PA, and the NOWG.

This might provide a little bit more detail. NAS and PAS users received various emails, automated emails, that lack specificity in the subject lines and/or the body of the email resulting in users having to either log into PAS or NAS or various other systems to determine what type of action needs to be taken. INC added text to the TBPAG and COCAG to provide guidance to the administrators that emails and reports, and should contain additional data points for clarity. INC recommended specific data points to be included on certain emails and reports such as the NPA, NXX, Block, State, and Rate Center and shared this information with the NOWG. As we know, the resolution of this issue has generated NANPA Change Order 7 and PA Change Order 4 which are pending review by NOWG.

Slide 6 lists our issues, and initial closure, and table status. Slide 7 lists the issues in initial pending, and final

closure status. And, finally, slide 8 provides our relevant INC webpages. Any questions?

Betty Ann Kane: Any questions? Good. Thank you.

Dyan Adams: Thank you.

Status of the ATIS IP Transition: Testbeds

Betty Ann Kane: Your report will be number 13. We have one more report, which is the ATIS report. On the bridge, Jim?

Jim McEachern: Yes. Jim McEachern on the bridge.

Betty Ann Kane: Very good. Thank you.

Jim McEachern: If everyone can hear me, I'll go straight to slide 2. Basically I want to apply a little bit of context in terms of the ATIS Testbeds Focus Group. We started by looking at a number of potential test areas or areas where the industry is interested in testing. We narrowed that down to three broad areas: just-in-time numbering; LERG routing enhancements, basically allowing the LERG to assist in IP routing; and the SHAKEN dealing with robocalling type issues.

The key point here is that in January we tried with Neustar to launch the ATIS Robocalling Testbed. That testbed is specific to the SHAKEN test plan. The other potential test plans would have different testing by the interested industry participants. A number of people were confused, that's why I wanted to just clarify that relationship.

If you go to slide 3, basically what we're doing in the testbed focus group is the three broad areas: the just-in-time testing, the LERG routing -- it's true, I've already covered that. Each of those has its own test plans that are being developed and their own timeline for testing. The one that obviously is in the lead is the STIR/SHAKEN testing.

Slide 4 makes the point that the testbed focus group is really looking at testing a proof of concept testing for concepts that the industry is interested in exploring and understanding if and how they might work. It's not meant to imply that there's any industry acceptance around that, only a recognition that the ideas can be tested. Then based on those results, the industry can decide what to do. And ATIS is not in any way, shape, or form judging the validity of the proposals merely providing a forum where they can be tested to see if and how they work in the network.

Slide 5. We get into the specifics of the testing. The just-in-time use case is really aimed at testing the concept of assigning or allocating numbering resources on a real-time basis and on a per customer basis, and seeing how that would work in the network. Neustar is a lead contributor. Neustar and JSI are the participants. There are a number of other companies that are interested in observing, but at this stage not interested in actively testing.

The proposals that came in on this had in the final stage the possibility of testing some of this in live network configurations. There was a lot of discussion around that and contributions to ensure that if we did go to that stage, that all the relevant stakeholders were consulted and that it was an explicit decision to go forward given that it would touch the live network. It was also suggested that we split it into very clear phases where the initial phases would be done in a lab environment, and then the information on the feasibility that came from that would be used to make an explicit go or no-go decision on whether or not it was appropriate to test in live systems as a final stage. We're currently at the phase 1 and 2 testing. It's what we're looking at in there.

Slide 5 lays out the IP LERG use case that we're looking at. And, again, here it is really just updating or enhancing the LERG to provide information that could be used for IP-based routing using fully qualified domain names. iconectiv and Inteliquent are the contributors and the participants in that. Again, there are a number of companies that are interested in observing that, but not interested in actively participating.

Finally, on slide 7, not surprisingly given all the visibility it's having, the one that has the most attention and progress is around the STIR/SHAKEN testing. In that case, the lead contributors have been Comcast, InCharge Systems, and

Neustar. You can see we have a number of participants who are interested in testing. The testing actually has already started this month and we'll expand as we go forward. The timeframe, in fact the pretesting, that actually began last year. But the formal testbed, it's been underway this year.

The other part I'll make on that is that although we have a test plan, this is very much an evolving test plan. As we conduct tests, we learn about what needs to be tested and what should be done and modify and update the test plans accordingly so that we're tracking the evolving spec and the implementations. So we have been updating the test plans based on that. Of course, this was begun in the ATIS Testbeds Focus Group, but it also benefited from and inspired from the interest of the robocalling strike force. That is all I have. I'll pause for questions.

Betty Ann Kane: Are there any questions on this report?
Anyone on the phone? Okay. Thank you very much, Jim.

Jim McEachern: Okay.

Summary of Action Items

Betty Ann Kane: We will label that document number 14 for the record. This brings us to the summary of action items just for the record, actions that were taken at the meeting today. We approved the transcript. We approved the NOWG performance reports on NANPA and PA, and that will be sent to the FCC. We

approved the new contribution factor. We approved the report on the foreign ownership access to numbers by foreign-owned VoIP providers. That will also be submitted to the commission.

Public Comments and Participation

Public comments and participation. Is there anyone from the public? Yes. Come forward.

James Falvey: Jim Falvey on behalf of LNP Alliance. I think it was Tim Kagele that mentioned that they're going to waive the new entrant fee for the NAPM. That's good news, \$10,000 new carriers don't have to pay. I hesitate to ask this because you said you weren't sure of the number. But I was surprised at the annual fee on the website. It says that the average fee over the last seven years has been \$34,000. Off the top of your head, you said that it was \$72,000 which is almost -- it's actually more than twice what's listed on the website. So I'm wondering if the number of members has declined or if, for other reasons, that there has been a significant increase in the fee. I know that there's been the Verizon-AOL merger and some other things. So there's some reason to think that the number of members may have declined.

Betty Ann Kane: Tim, could you answer that?

Tim Kagele: Tim Kagele, Comcast and NAPM LLC. Speaking on behalf of the NAPM LLC, Jim, yeah, there are two factors. One there has been some membership erosion. And there have been a

number of escalating operational cost to the NAPM associated with legal fees, et cetera, attributed to the LNPA transition.

James Falvey: Do you expect that this as an anomaly, maybe? That they might go back down again, is that what you're suggesting?

Tim Kagele: Yes. Absolutely. I would say this is a painful blip on the radar.

Betty Ann Kane: Thank you for your clarification. And thank you for your question.

James Falvey: Okay. I have one further, which is more of a comment than a question. It has to do with the foreign ownership restrictions with respect to interconnected VoIP providers. There was a question about what is the definition of foreign ownership. There was a response to that it's the same as in the 214 process which, if we have to explain what that test is, we'd be here for the rest of the afternoon.

But the comment I have is that interconnected VoIP providers don't go through the 214 process. That only applies to providers of telecommunication services. So we are now in a position where we have non-carriers with direct access to numbers who do not go through the 214 process. I wonder if you have any comment on that. Maybe am I wrong, that interconnected VoIP providers don't go through the 214 process. It may be

outside the ambit of what you viewed as your charter, if you will, in responding to the questions.

Robert Morse: This is Rob Morse of Verizon. I apologize for not being [inaudible]. You're right, this is the way we've looked at it. I think it's just the fact that Section 214 requirements don't apply to interconnected VoIP. They apply to interstate or international carriers. My point was that we just took as a given that there are foreign ownership-based requirements in the commission's rules and under the Communications Act. We just took that as a given based on Kris Monteith's letter to the NANC Chair. All I was intending was to reference to what's an existing law. I think the people or the folks who worked on the report just kind of took that as a given.

James Falvey: I know. It's a valid answer to the question. I'm just pointing out that there may be a gap and maybe it's an issue to be brought up directly with the FCC with respect to foreign ownership.

Betty Ann Kane: Thank you. My intention is we submit the report to let the commission know that the assumption that the group used was that whatever definitions there are in current FCC law and regulation for foreign ownership, that's what was assumed to be the operative meaning. Thank you.

Other Business

Any other business from anyone? All right then. It is 12:15. I want to thank everyone for a very efficient and effective meeting. I wish you a happy summer, a happy Fourth of July. I hope you all get a chance to have a real vacation from something although looking at all these meetings going on in July and August and the work, come back a little bit rested. Hopefully we will come back on our September 21st meeting well-rested and all reauthorized. The meeting is adjourned.

[End of file]

[End of transcript]