

**North American Numbering Council
Meeting Transcript
Tuesday, December 4, 2018 (Final)**

I. Time and Place of Meeting. The North American Numbering Council Meeting (NANC) held a meeting commencing at 9:30 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. Honorable Travis Kavulla | NANC Chairman (NARUC - MT) |
| 2. Diane Holland | USTelecom |
| 3. David Greenhaus | 800 Response Information Services, LLC |
| 4. Susan Gately | Ad Hoc Telecommunications Users Cmte |
| 5. Jacquelyne Flemming | AT&T |
| 6. Jacqueline Wohlgemuth | ATIS |
| 7. Greg Rogers | Bandwidth.com |
| 8. Beth Choroser | Comcast Corporation |
| 9. Courtney Neville | Competitive Carriers Association |
| 10. Matthew Gerst | CTIA |
| 11. Craig Lennon | Google |
| 12. Honorable Paul Kjellander | NARUC - ID |
| 13. Barry Hobbins | NASUCA |
| 14. M. Teresa Hopkins | Navajo Nation TRC |
| 15. Brian Ford | NTCA |
| 16. Julie Oost | Peerless Network |
| 17. Paul Nejedlo | TDS Telecommunications |
| 18. David Casem | Telnyx |
| 19. Bridget Alexander White | USConnect |
| 20. Dana Crandall | Verizon |
| 21. Robert McCausland | West Telecom Services |
| 22. Professor Henning Schulzrinne | |

Special Members (Non-voting):

- | | |
|-------------------|-----------|
| 1. Glenn Reynolds | iconectiv |
| 2. Ann Berkowitz | Somos |

Commission Employees:

Marilyn Jones, Designated Federal Officer (DFO)
Michelle Sclater, Alternate DFO
Carmell Weathers, Special Assistant to the DFO, CPD, WCB

Ann Stevens, Deputy Chief, Competition Policy Division (CPD), WCB
Myrva Charles, Contracting Officer Representative, CPD, WCB

III. Estimate of Public Attendance. Approximately 10 members of the public attended the meeting as observers.

IV. Documents Introduced.

- (1) Agenda
- (2) NANC Meeting Transcript – September 13, 2018
- (3) Nationwide Number Portability Technical Sub-Committee Report
- (4) North American Portability Management (NAPM) LLC Report
- (5) Secure Telephone Identity Governance Authority (STI-GA) Report
- (6) Toll Free Assignment Modernization Report on the Report and Order

V. Table of Contents.

1. Welcoming Remarks/ Announcements & Recent News/ Approval of Transcript	2
2. Numbering Administration Oversight (NAO) Working Group (WG) Report on the Nationwide Suicide Hotline Improvement Act.....	6
3. Discussion of Transition of North American Numbering Plan and Pooling Administrations.....	10
4. Discussion of Nationwide Number Portability (NNP) Technical Subcommittee Report... ..	14
5. Remarks by FCC Chairman Ajit Pai	18
6. Discussion of the North American Portability Management LLC (NAPM LLC) Report	22
7. Discussion of the Secure Telephone Identity – Governance Authority.....	26
8. Overview of the Toll Free Assignment Modernization Report and Order	31
9. Public Comments and Participation.....	39
10. Other Business.....	42

VI. Summary of the Meeting

Welcoming Remarks/Announcements & Recent News/

Approval of Transcript

Diane Holland: Good morning everyone. I'm Diane Holland, and Travis Kavulla is in Montana. He has a hearing this morning. That's going to start a little later but he should be with us on the bridge. Did we confirm that?

This is the final meeting of 2018 at the NANC. Welcome everyone. I'm going to turn to Travis first for announcements, if he is with us. If not, I will turn to Marilyn. We'll come back to Travis.

Just a couple of preliminary things. We will have some remarks by Chairman Pai this morning. He had a meeting this morning but he is on his way here, or he should be. So whenever he comes in, we will interrupt the programming and allow him to say a few words. With that, I'll turn to you, Marilyn, if you want to go ahead and make your announcements. One second. I hear the bridge coming up. So welcome everyone.

Travis Kavulla: Hi, Diane. This is Travis on behalf of the bridge.

Diane Holland: Hi, Travis.

Travis Kavulla: Hello.

Diane Holland: Hi. Thanks. We are just going to move on, but I'm going to turn to you first for any remarks and announcements you have.

Travis Kavulla: Sure. As you can see, I'm not there in the room today. Regrettably I'm having to chair a hearing in much colder Helena, Montana at my home commission. I know you guys have a busy agenda. I'm happy to leave that up to Diane. It looks like we have a new referral, albeit one that was foreshadowed last meeting, the three-digit number designation for the national suicidal hotline. I noticed that it's a pretty quick turnaround, so I'm eager to hear about progress that's made on that.

We also have a few items to report on implementation, the numbering plan and PA transition, toll free number assignment, and call authentication. That last item continues to get a lot of attention and a lot of focus by consumers. I can tell you personally it's the only time any journalist, other than the trade press, has ever reached out to the chair of the NANC. It has been about that particular item. I personally and the FCC remain very focused on seeing that implemented in a way that works for consumers.

On a personal note and in terms of leadership of the NANC, I think some of you know that my service on the Montana PSC concludes at the beginning of next year. I'm actually moving to Washington D.C. to join you all. I'll be working at the think tank, the R Street Institute, which focuses on topics of administrative law and regulation. What that means for NANC

leadership isn't 100 percent fully resolved at the moment, but hopefully the FCC will have an announcement on that soon.

On that note, Diane, I will turn it over to you. I will remain on the line for as long as I can. I hope all of you have a productive meeting. Thank you.

Diane Holland: Thank you, Travis. Marilyn, do you have any announcements?

Marilyn Jones: Yes, I do. Just a brief announcement about the upcoming 2019 NANC meeting dates. I haven't had a chance to post this yet, but they will be posted on the NANC webpage. The first meeting is going to be on February 5th. That's just going to be a brief conference call so that we can discuss and vote on the National Suicide Hotline Improvement Act report. Then our next meeting face-to-face is going to be on March 28, 2019. Then the next quarter is going to be on June 20, 2019. Our final meeting for this charter will be September 12, 2019.

Diane Holland: Thanks, Marilyn.

Marilyn Jones: You're welcome.

Diane Holland: I have no announcements. I just want to briefly note that we will be moving through the agenda much like the last time. It's likely that we won't need the entire day. We will play lunch by ear. If we go long and need a lunch break, we'll take one. But if not, we'll slog right through.

The first order of business is to approve the transcript or the minutes from our last NANC meeting. Hopefully everyone had an opportunity to review the minutes. Are there any questions or discussions on the minutes? Hearing none, may I have a motion to approve the minutes?

Robert McCausland: Bob McCausland moves to approve the minutes.

Diane Holland: Thank you. Is there a second?

Jackie Flemming: Jackie Flemming seconds.

Diane Holland: Thank you. The minutes are approved. As I noted, Chairman Pai will arrive hopefully shortly. At whatever point he comes in, we will take a brief pause to hear from him.

Let's move on through the agenda. The first item is the discussion of the Numbering Administration Oversight Working Group to report on the Nationwide Suicide Hotline Improvement Act by Commissioner Kjellander.

**NUMBERING ADMINISTRATION OVERSIGHT (NAO) WORKING GROUP
(WG) REPORT ON THE NATIONWIDE SUICIDE HOTLINE IMPROVEMENT ACT**

Paul Kjellander: Thank you. The Numbering Administration Oversight Working Group has been busy with two items. One of them was referenced by Commissioner Kavulla and that is, pursuant to the FCC's N11 code National Suicide Hotline Improvement Act of 2018, the group has been having working conference calls and are creating a paper by the upcoming

January 11, 2019 due date. I've already seen comments come in from the Veterans Administration and others as I look at potential N11 designation. The group will be meeting again on Thursday for another call as they begin to discuss issues related to data and culminating that final report. I know there will be a lot of work between now and January 11th in order to try to meet that deadline. So that's one of the issues the numbering oversight working group has been involved with.

The other is connected to the work of the Contract Oversight Subcommittee. That has been looking at -- Billing and Collections Agent presented a discrepancy in the current contribution factor due to the bridge contract between the NANPA/PA and Somos. The B&C Agent met with the Contract Oversight Subcommittee and presented two options for the committee's consideration. Those options were then brought to the Numbering Administration Oversight Working Group on November 20th. The group met and discussed the two B&C options from the working group or the subcommittee, and the group agreed to accept the contingency plans pending the final assessment approval of the contract agent with the FCC. Here to give us a little bit more insight on how that's moving forward is Phil Linse.

Phil Linse: Good morning. I'm Phil Linse. I'm one of the co-chairs for the Contract Oversight Subcommittee. Two options

pretty much are presenting themselves based on the difference between the two contracts, the bridge contract and the current contract. The shortage that we would be experiencing, which would be about 1.25 million. Those options would either be a mid-year contribution factor increase or some sort of a balloon payment near the end of the term of the bridge contract which would then fall within the 2019-2020 contribution factor period, which would be then calculated on the upcoming May timeframe. Those are essentially the two options that are available. That's just pending FCC approval and the contracting agent. Thanks.

Paul Kjellander: Unless there are questions for Phil, that would conclude our report.

Diane Holland: Thank you, Commissioner. Any questions or comments?

Karen Charles Peterson: Karen Charles Peterson of Massachusetts. I'm so sorry that I'm not there in person. I just wanted to ask that when we have speakers speaking, if they can speak into the phone. It's really hard to hear.

Diane Holland: Okay. We will try and do better.

Karen Charles Peterson: Thank you.

Diane Holland: Any comments or suggestion on that presentation?

Susan Gately: Hi. Susan Gately here representing Ad Hoc. I have a general question not related to the presentation. But I think this is the right group for it, to go to the Oversight Group. As a relatively new person dealing with numbering issues, I feel a little bit at a loss. There's no information that I've been able to uncover as to how many numbers are active now, how many are unassigned, where they're sitting in their pools. There used to be reports like that that came out fairly regularly. Now all the information is related to the new assigned mechanisms by blocks and by NPA so that you can see the scarcity. But I don't have a sense of the overall volume of numbers we're using, how many are left, et cetera. I don't know whether it's the oversight committee that would have that information or where that would come from. Just anybody.

Phil Linse: Phil Linse with CenturyLink, again co-chair of the contract subcommittee. On a monthly basis we receive reports from the NANPA and the PA. Those have details in those reports specific to some of the questions you are asking. Then we file those or post those on the NANC chair website once we obtain and finalize our notes for those months so.

Susan Gately: So [off-mic/inaudible] a summary of that in your report?

Phil Linse: It's not a summary in the text of the report, but those reports are attached to the notes that are posted at the NANC chair website.

Susan Gately: Okay. Thank you. I will look there.

Phil Linse: Sure.

Diane Holland: Thanks very much. Moving on to the next item, the discussion on the transition of North American Numbering Plan and Pooling Administration, John Manning.

DISCUSSION OF THE TRANSITION OF NORTH AMERICAN NUMBERING

PLAN AND POOLING ADMINISTRATIONS

John Manning: Good morning everybody. My name is John Manning, senior director with Somos. Some of you I recognize. I've been coming to this organization for quite some time informally as the director with the NANPA organization and with NeuStar. In the June timeframe I retired from NeuStar and had an opportunity to come over and work with Somos with regard to the NANPA and PA contracts. With that opportunity, on October the 10th of this year Somos was awarded both the NANPA and Pooling Administration contracts.

What I'd like to do today is kind of review for you what activity has been taking place over the last several weeks and what would be coming up here fairly shortly with regard to the transition of those contracts over to Somos. As I mentioned in October, Somos was awarded both the NANPA and PA contracts.

Consistent with the transition plans developed by those organizations, Somos met with NeuStar, the incumbent administrators, as well as with the FCC to initiate transition activities.

In those very first meetings we established various subgroups that would be looking at aspects of the transition. Those subgroups included items dealing with finance, specifically items dealing with invoicing and billing; and, with regard to the NANPA contract, the administrative operating company number clients that NANPA has an enterprise service serves on an ongoing basis with regard to updating the information in iconectiv BIRRD system. We have been transitioning those entities over to Somos as part of this transition, signing up to new contracts and helping them understand that the service they previously or currently getting from NeuStar and NANPA will be provided as Somos NANPA.

We had a human resources subteam formed looking primarily at the onboarding of an incumbent NeuStar, NANPA, and Pooling Administration personnel. As part of this whole transition, we're trying to retain those services due to the vast knowledge and experiences people have in overall number administration to make it a very smooth transition. We like to retain that knowledge and have it come over to Somos, and I'll briefly update you on that activity.

We had operation subcommittee. We've had security subcommittees. We have a back office support committee looking at things such as telephone number changes, email changes, Internet interconnectivity changes and a wide variety of other transition elements associated with the systems themselves. That is moving the emails and other system-related documentation from NeuStar over to Somos. That group has been meeting on a fairly regular basis to ensure smooth transition of all of that documentation flow.

Finally, there is a technical subcommittee. This technical subcommittee is focused on the transition of the Routing Number Administration System or RNAS, the NANPA Administration System or NAS, and the Pooling Administration System or PAS from NeuStar over to Somos. Over the past several weeks we have actually gone ahead and stood up all three systems in an Amazon Web services or AWS cloud platform in a Somos account. During that timeframe we have been doing functional testing, as well as opened up both the NAS and PAS for interconnectivity testing for external FTP users. As part of the PAS transition, we are also working with iconectiv with regard to the API that exists between the pooling administration system as well as the impact to ensure that proper transfer of information will occur when the pooling administration system cuts over formally to Somos.

With regard to the system themselves, we've been sending out notifications to systems users about events that will be taking place over the next several weeks. The RNAS is scheduled to transition over to Somos this weekend, 12/06 to be specific. With regard to that, we will have a moratorium in place - meaning no activity in the system starting on 8:00 p.m. Thursday 12/06. Then transition will be occurring over that weekend with service being established no later than Monday 8:00 a.m.

PAS and NAS will follow the following weekend. Transaction activity will begin on 12/07, that's a Friday, but we again will experience a moratorium on both of those systems. Excuse me, transition will occur on 12/14 with the moratorium beginning at 8:00 p.m. on Thursday December the 13th. No activity in those systems as well until we actually bring the Somos, AWS, NAS, and PAS online no later than 8:00 a.m. the following Monday. Like I've said we've been doing functional testing. We've been testing with the external users, primarily our FTP users as well as with iconectiv on the pooling administration system. I am happy to report things are doing well.

With the transfer of the systems mid-December, the remaining part of the transition will include the actual onboarding of NeuStar NANPA and PA personnel over the remainder of the month with their service beginning with us beginning on 01/01/19. So to be clear, NeuStar will continue to provide

NANPA, PA, and RNAS services all the way through the end of this month. They will be using Somos RNAS, Somos NAS, and Somos PAS beginning mid this month.

I mentioned staffing. We had been in contact with all identified incumbent NeuStar NANPA, PA, and RNA staff through the month of November. We are actually in the process right now of going back to them with formal offers for employment. We're very confident that we'll get at all, if not all, of those individuals to come over to the Somos team and as I said begin their work with us on 01/01/19.

Final note of particular interest here to the NANC is that part of the system transfer of course are the systems themselves, including the public website associated with those systems. Included in that is the transfer of hosting the NANC-chair.org website which NANPA has the responsibility to do. That responsibility will transition over the Somos. We will take control of that website by the end of this month. Once that does occur, we will send appropriate notification to the FCC to the NANC members so that you know that URL which currently works today will be working in a Somos environment when that transition has occurred. That's basically a summary of the NANPA, PA, and RNA transition. I certainly welcome any questions that you might have.

Diane Holland: Thank you, John. I'm happy to hear that things are going well. That's a quote from you. Seeing no questions, we're going to move on to the next item. Discussion of Nationwide Number Portability Technical Subcommittee Report, Courtney Neville and Mary Retka.

DISCUSSION OF THE NATIONWIDE NUMBER PORTABILITY (NNP)

TECHNICAL COMMITTEE REPORT

Courtney Neville: Mary is going to lead the charge on this. I just want to say, on behalf of Rich and I, thank you to all of the members of the subcommittee. I know it's been quite a bit of work in a short amount of time, so we really appreciate all of your efforts here. I will hand out it to Mary.

Mary Retka: Thanks, Courtney. Mary Retka from Somos. All of you may remember that as a result of the larger Nationwide Portability Committee that Courtney and Richard Shockey - who is not able to be here today - had led and the recommendations that were provided that you've all seen and the FCC and the NANC had read and reviewed, the FCC came back to ask for a bit more work particularly in regards to the costs and benefits and what the technical solutions need to be.

We have on this subcommittee representation from the wireless, wireline, interconnected Voice over Internet Protocol, and cable industries. One committee member's name is not shown on the report. That's just due to a little mix up that we had.

Glenn Clepper is also on that committee. I didn't have time to revise the report, but please do know that he's also in this committee. Everybody on the subcommittee was a part of the previous work and so they're all very familiar with previous work effort.

An initial concern that you might expect came up just as it did in the initial committee about how parties could share information regarding cost which is one of the factors that the letter from Kris Monteith at the Wireline Competition Bureau asked us to take a look at. We did work through Zachary Ross, our FCC attorney that's on the committee, and Marilyn and requested the capability to be able to have some cover to share the cost. As a result, we got the report back from Zachary that we could share the cost under individual NDAs between the parties.

So that opportunity was raised. At this point in the discussions that hasn't been invoked. As we get closer to actual cost sharing, that will likely be the means that is used for us to share information regarding cost. That may result in some means that we'll have to work with the FCC about our final report on and we're all aware of that. Obviously the request was to investigate the technical requirements and get the necessary requirements to support NNP from a technical

perspective who bears the burden of the cost and who gains the benefit of that. So that's what we're working on.

We decided as a team. We talked a lot about how we were going to be able to approach this issue and try to get at it very quickly. We wanted to start with something we already had in the original NNP report, which are the call flows. Getting through the call flows will allow us to see all the technical aspects that we might need to look at it from a cost and benefits perspective.

We had the two proposals, the national LRN and the non-geographic LRN. We started out looking at the call flows for the national LRN. We want to look at those from all different modalities, so we started with wireline and have gone into the Voice over Internet Protocol. Wireless and cable will be coming up next. All of those will be looked at in depth and we will get the analysis from each architectural type. From that look of the call flows we're going to be able to then determine what aspects will engage some cost, whose going to pay that cost, and then who bears the benefit.

That's how we plan to get to the final report that we will present at the NANC. I believe that would be at the NANC. That is scheduled for March. So the report will be provided too. Per the new direction from Marilyn, the report will be provided one month in advance so you'll have time to sift through it. I

just wanted to make sure everybody will have that information and look forward to getting a chance to get up here and walk through that report with you. Any questions? Yes, ma'am.

Bridget White: This is Bridget White with USConnect. I have a question about the role of prospective rural carriers. Do you all plan to reach out to some of the rural carriers or associations to get their perspective on when you're considering these questions?

Male Voice: Can you speak at the microphone? Otherwise, we cannot hear you.

Bridget White: Oh. Sorry. My question was whether or not the technical working group plans to reach out to some of the larger rural carriers or to some of the rural associations to get their perspective on some of the items you have to consider.

Mary Retka: Thanks, Bridget. Yeah. In fact, one of the members of the committee has already been in contact with Bryan Ford to seek input. If you're also interested in discussing some of that with any of our members, we're happy to have that input.

Diane Holland: Absolutely.

Mary Retka: Thanks.

REMARKS BY FCC CHAIRMAN AJIT PAI

Diane Holland: We're going to pause for one second. Thank you. Thanks for the question and response. Because Chairman

Pai has arrived, so we're going to give him the opportunity to come and give some remarks.

Ajit Pai: Thanks so much. Sorry to parachute in and interrupt. Good morning to everybody, especially Vice Chair Holland. Or Diane, as I prefer to say. Like Cher and Madonna, Diane. In the lexicon, it's that you just need one word. But thanks to members of the NANC for being here and allowing me to intrude for a moment. I just wanted to come to acknowledge and to thank you for all the work you've done this past year. As you know, Peter Parker and Spiderman once said that with great power comes great responsibility. You have certainly discharged your responsibilities with aplomb in 2018, first and foremost earlier in the year helping to shepherd through a successful LNPA transition. A transition that was remarkable after the fact for the fact that nobody talked about it but it didn't have to that way. Thanks to your efforts, it was a very smooth transition.

You also made recommendations that helped industry and ATIS come up with a governance authority to help oversee the implementation of the SHAKEN and STIR framework, a framework that I hear about all the time. Not so much by name but in terms of the complaints of my family members and friends who always complain about robocalls and the need to do something

about it. Well, thanks to your efforts, we are starting to do something about it by getting this framework off the ground.

You also made helpful recommendations in our toll free modernization proceeding which was something that we were actually quite excited about. The opportunity to introduce the market-based reform there is something that we found very appealing. I'm glad that, thanks in part to your legwork, we're now going to be using an auction to distribute some of those numbers. And also you helped the Commission consolidate our contract with the North American Numbering Plan and Pooling Administrators. This is sort of good government effort. By consolidating these contracts, that will allow us to be more cost efficient and more effective with the combined administrator.

As every good regulator will do, we are going to penalize you for your competence by giving you even more responsibility in 2019. Among other things, we do hope you'll be taking a look at some of the implementation issues that will arise from the National Suicide Hotline Improvement Act. I recently had the chance to meet with Senator Hatch from Utah and Congressman Chris Stewart from Utah. They helped shepherd that legislation through. They underscored to me how important they thought it was to help folks, especially veterans and others who are struggling with some issues to find the help they need. They

believe, as do we, that we need to make an effort to identify if there's a three-digit number that could be useful for folks who are struggling with situations like that. So your work in helping to implement this critical legislation will be very much appreciated in the time to come.

Also we look forward to hearing from the NANC about the continuing progress you're making towards nationwide number porting. I think your ongoing effort to explore some of the technical solutions here necessary to support it would be vital in making the reality for all American consumers. So in sum, thank you once again for all the work you've done in 2018. We look forward to working with you in 2019. In the meantime, I hope we have a wonderful holiday. I hope you celebrate as I will not just the spirit of the season but also the Kansas City Chiefs' upcoming Super Bowl victory. Thank you. You've been great.

Diane Holland: If I could ask a quick question.

Ajit Pai: Sure. And you're wearing Kansas City Chiefs color. So thank you, Diane, for that.

Diane Holland: Accidental. I just want to know if we could get a preview of your presentation on Thursday night, perhaps?

Ajit Pai: Yes. Oh, do you actually want it now?

Diane Holland: Yes. No, thank -- go ahead.

Ajit Pai: No, no, no, no. I had the most stressed day ever. I could talk to roomful of a thousand people about the nuances of Part 32 accounting rules. Trying to be funny is not what I do. I'm a boring telecom lawyer by nature, as you know. I just have to have a flask with me to help loosen myself up.

Diane Holland: No. Thank you so much. We appreciate the acknowledgement of all the work that NANC has been doing. I think we appreciate that you're going to give us even more work for next year. Thanks for stopping by.

Ajit Pai: My pleasure. Thank you all for your work. I appreciate it.

Diane Holland: Okay. So let's pick back up on the presentation on the NNP Technical Subcommittee. Your question was responded to, I'm assuming. I didn't see any more placards up. I just wanted to ask briefly, other than the assistance on the NDA issue and the sharing of information, do you anticipate you'll need any more from this body or from the FCC to complete your work?

Mary Retka: Thanks for the question. We have a gentleman by the name of Zachary Ross who's on our committee. He's actually been very active in every one of our calls. So I think as we need anything, we'll raise it through Zach.

Diane Holland: Good. Thanks for the presentation.

Mary Retka: Thank you.

Diane Holland: Moving along. Next we're going to have the discussion of the North American Portability Management LLC, the NAPM LLC, by Teresa Patton.

DISCUSSION OF THE NORTH AMERICAN PORTABILITY MANAGEMENT LLC

REPORT

Teresa Patton: Good morning everyone. My name is Teresa Patton. I'm with AT&T and I'm also a co-chair of the NAPM LLC. Before I begin the formal report, I just wanted to share with everyone that we just completed six months of operations on the new iconectiv NPAC. During that time period, NPAC has handled over 92 million unique transactions for both porting and pooling. Okay.

The following work is what we've been focused on since we last met. We've done a couple of statements of work. NeuStar provided new letters of credit as part of their continuing obligations under Change Order #6. That obligation is set to expire the second quarter of 2019. iconectiv provided new letters of credit in accordance with the provisions in the master services agreement. Two iconectiv SOWs were approved, SOW19 which extended the dates for the GEP audit completion and SOW17 which implemented three change orders requested by the TOSC.

The NAPM LLC is considering a proposal from iconectiv for development of a new ancillary service offering which would

promote use of limited set of NPAC-derived data for purposes of protecting against account takeover fraud. The Contract Implementation Committee, or CIC Team as we refer to them, reviewed a nine findings report of non-service providers requesting access to NPAC data and additionally recommended changes to the NNPs for Service Level Requirement 18. The gateway evaluation process audit metrics document is under review. iconectiv is in the process of making the requested revisions which will add additional information defining the administrative service level requirements.

In November the NAPM LLC held officer positions. Myself, I was re-elected as a co-Chair, and Joy McConnell-Couch was re-elected as treasurer. The position of secretary is currently open. The NAPM LLC has restructured its operating agreement and is eliminating the initiation fee of \$10,000. New membership dues will never be less than \$10,000 per member and will be subject to proration based on the annual budget. And in November the NAPM members did approve the 2019-2020 operating budget. Any questions?

Henning Schulzrinne: Just a clarification question because that seems like an interesting thing. I was unaware of the account takeover prevention. Could you talk about that a little bit? Because I might actually be a consumer and my interest, given the significant risk, that that's been incorrect.

Teresa Patton: Sure. There's been a lot of discussion amongst the NAPM members regarding issues where, when the customers port their telephone numbers, sometimes there's fraud that goes on with that. So iconectiv had come to us and presented the data that they were able to come up with and had proposed a potential solution that the various companies across the industry could use to determine if a number has been ported within a certain period of time. If that's the case, then they can take different action versus sending a text message to your phone with a code that you can use. Does that help?

Henning Schulzrinne: A follow up question. This would be primarily for mobile-to-mobile ports because you mentioned text message or would that apply also, given that we're talking about NNP just now, would apply to landline-to-mobile or landline-to-landline ports?

Teresa Patton: It would apply to all of that, yeah.

Henning Schulzrinne: Okay. Thank you.

Diane Holland: Could you say your name, please.

Beth Choroser: It's Beth Choroser from Comcast. Is that then a commercial product that's funded by the users of that service?

Teresa Patton: That's what we're looking out right now. No firm decision has been made as to exactly how that's going to be implemented, but that's up for consideration currently.

Diane Holland: Thank you. Yes?

David Casem: David Casem from Telnix. Just a quick question on the nine findings reports of providers of telecommunications-related services. What was the outcome of that? Will PTRS users still have access?

Teresa Patton: Yes. All nine were approved to have access to the NPAC data, yes.

Diane Holland: Seeing no additional questions or discussion. We are not taking a lunch break now, we're going to move on to the discussion of the Secure Telephone Identity GA report. Tom Goode, general counsel for ATIS.

DISCUSSION OF THE SECURE TELEPHONE IDENTITY GOVERNANCE

AUTHORITY REPORT

Tom Goode: Thank you. Good morning everyone. Hopefully you can hear me. I'm giving the second update on the progress the industry has made in establishing the ecosystem for the SHAKEN specification and call authentication. Basically the biggest update we have today is to announce that we have issued the RFP to establish or identify the policy administrator. That is ongoing. We have just issued it in November, I believe, in accordance with the NANC Working Group report - the timeline established for that. We have slides up. You can go to slide #2. So yeah, we're providing an update.

Before I get started officially, I want to make one announcement. Brent Struthers, who's back in this case, has now taken over responsibility for the STI directorship. So he'll be leading ATIS' efforts on this, the industry's efforts to help develop this. He's just started. I appreciate the effort. I look forward. You'll be seeing him do these presentations next time. So you can expect an improvement.

As I mentioned, on November 15 the industry issued the RFP for the policy administrator. The policy administrator obviously oversees and actually turns the crank for this. The GA is the governance authority or policy administrator who actually verify or issue the tokens, verify and approves STI-CAs and certificate authorities. He makes sure they meet all the requirements and securely maintain a trusted STI-CA list. So it's actually a very important and key role to the SHAKEN ecosystem.

The RFP is broken into three different sections. The first section is the RFP itself, if you will. Another section is the respondent qualification. The third section is a technical document providing more of the technical details. Each of these sections needs to be completed as part of the overall overarching RFP. The RFP has been posted publicly. The website is www.atis.org/sti-ga/rfp for those that want to see it. If there are questions, we've asked that questions be submitted to

this specific email address by December 10th. If we receive any, we'll make adjustments and provide some further information in response to those questions.

I kind of gave away most of this timeline already. So November 15 we issued the RFP press release. Announcements went out, letter was filed in the docket. December 10th is the deadline to submit questions. February 4th is the deadline for the submission of the responses. More vague, May 2019 is the selection of the PA by the GA. We expect to have that done and then we begin the negotiation for contract obviously.

Just to keep you up to date on other works that's being done, the board, obviously its main focus has been the RFP and has established an RFP task force to look at that. But it also has a technical committee. That's the permanent committee liaison with the IP-NNI and the PTSC too on technical issues and then two other task forces that the board created. One is the corporate structure task force looking at potentially moving this into a separate corporate structure like an LLC or a C Corp. Another is the contribution recruitment task force which is looking broadly at how the GA will be funded and also whether these contributions made by the companies identified in the NANC Working Group that have contributed to the significant upkeep cost or the development cost, whether they can somehow recoup those through credits or something else. So it's a little more

investigatory, but it's something we're still looking at. Obviously the key aspect to that is how is the GA going to continue or how it will be funded going forward.

Basically right now our future work is focusing on the RFP, looking at responses/questions we may get. We're formulating a criteria for the scoresheet and whatnot. That is all ongoing and we expect to have to move quickly once we get the responses in on the 4th. So hopefully we'll get numerous responses to the RFP. Any questions or comments? I knew, Henning.

Henning Schulzrinne: Henning Schulzrinne. I don't know if you can say that or if you know even. Do you have a rough estimate in terms of the ongoing operating cost of the GA? I mean how many zeroes do you put.

Tom Goode: I don't expect it to be significant, but we don't know. Part of this is what this turns out to be. Obviously it's going very smoothly so far. If it continues to go smoothly, you wouldn't expect significant cost. But if this blows up in any way, if there are regulatory changes, if the bad guys start changing their methods such that we have to start investigating further changes in the technical arena to change things, it could make things more significant. So at this point I can't. I don't want to estimate it because it would be too speculative. I wouldn't expect it to be enormously significant,

but at the same time it all depends on what happens in the next two years.

Henning Schulzrinne: Does ATIS anticipate charging for its staff time, like your successors, as part of that or is everybody volunteering contributions in terms of staff time?

Tom Goode: We've been very clear. ATIS is a broad organization with numerous members, not all of which are involved in this particular aspect of it. So we have made it a point not to make those members that are not interested in this effort or not focused on this because they have other focuses to have to contribute or fund this. So yes, there will be a separate fund simply to keep the members from having to subsidize this - the members that aren't interested.

Chris Drake: Chris Drake, iconectiv. Tom, you didn't speak to the Go Live. What is the objective of the GA with respect to launching this?

Tom Goode: Basically we're scheduled on the NANC report to pick the PA in May. Then it would be negotiations for the contract. The expectation is to do it very quickly. Part of this is, you know, I hate to think that we have to go through multiple rounds in RFP but I don't know enough right now to give specifically. The goal would be next summer. I mean definitely as quickly as possible. As soon as we can. As soon as we announce the identification of that, we'll do that. But then

we'll have to contract before they become sort of go live, as you say. So I'd expect next summer, but that all depends on whether there are any complexities that I don't know about. One of the complexities could be if something happens, a hiccup in the RFP that required something else. I don't anticipate that at this point so I would expect that shortly after we begin, in the May timeframe, we begin discussing with the identified PA and then as quickly as possible get live over the summer.

Diane Holland: I just have a question about whether you have received any questions. I know there's almost a week. If so, could you describe the nature?

Tom Goode: I did not check before I came here this morning, but as of yesterday we've not received any questions.

Diane Holland: Okay. Good.

Tom Goode: I agree with you, good.

Diane Holland: Thanks for the report.

Tom Goode: Sure.

OVERVIEW OF THE TOLL FREE ASSIGNMENT MODERNIZATION REPORT

AND ORDER

Diane Holland: We're going to move next to the discussion of I guess, yeah, the overview of the Toll Free Assignment Modernization report in order. Matthew? Just an aside, I'm very happy to see my former colleague, Matthew, giving this report.

Matthew Collins: Good to see you.

Diane Holland: Good to see you too.

Matthew Collins: Hi. Good morning.

Diane Holland: Good morning.

Matthew Collins: My name is Matthew Collins. I'm an attorney in the Competition Policy Division here. I work closely on the Toll Free Assignment Modernization, we call it TFAM, proceeding about the 833 option. So let's get started here.

Just by way of background, of course the first-come, first-served rule was established in 1998 and used for assignments of the 888 through 844 codes. There were some exceptions throughout the way to limit a number of reservations per day for openings in 855 and 844 and some other releases mainly because some RespOrgs were really dominating each release. They were trying to more fairly allocate those numbers.

We opened the 833 code in April of 2017. We established a new process by which RespOrgs could express interest in numbers that were made available in the code. You know that 150 RespOrgs participated. They requested over 72,000 numbers, 17,000 of those were what we called mutually exclusive which means that more than one RespOrgs expressed interest in the number. We set them aside or rather we directed Somos to set them aside for use in potential auction.

We released NPRM in September of 2017. So you can comment on using an auction-based mechanism to assign these numbers. We received comments from a number of stakeholders, RespOrgs, service providers, companies that have built their business around toll free calling. Of course the NANC Working Group report on these issues is addressing three questions; mainly, what rule should the Commission change to promote market-based assignment. So the Commission revised its current rules to promote development of a secondary market and should the Commission set aside certain desirable toll free numbers for public interest use.

We received that report in June of this year. Very helpful in the process of working on the R&O. We released the R&O this past September. In terms of next steps, we'll be issuing two public notices to further elaborate on what the procedures for the forthcoming 833 auction will look like.

The first thing the R&O did was to revise our toll free assignment rule in the manner up on the screen here. The main difference being that it allows the Commission to assign toll free numbers by competitive bidding; first-come, first-served basis; or, an alternative assignment methodology which determined that. That met the test of 251(e) requiring that toll free number assignment be orderly, efficient, and fair.

The R&O further established an auction of these 17,000 mutually exclusive numbers in the 833 code. These auctions are like an experiment to determine how to most effectively use competitive bidding to assign toll free numbers. Although the forthcoming public notices will elaborate on what these procedures look like, the R&O establishes a high level framework mainly as displayed up here. It will be a single round and sealed-bid Vickrey auction which is to say that the highest bidder will obtain the number but they will pay the second highest bid price. Any party can bid either on their own or through a RespOrg which is intended to facilitate participation by the most number of interested parties.

They'll have to go through an application process which comes with certain disclosures about ownership and certifications which is limiting how many people, how many numbers you can bid on as an entity. Let me put that more clearly. Not that there's any cap on how many numbers you can bid for, but rather a RespOrg can only bid for one number on behalf of one entity. Still there'll be certifications, I would say, making sure the people are not sort of behaving in a manner that might lead to conflicts of interest. Then, consistent with other Commission auctions, there'll be a prohibitive communications rule. We require upfront payments and default

payments although this will be fleshed out in the forthcoming public notices.

Somos was established as the auctioneer for the forthcoming auction. Most of the duties for Somos here will be laid out in these PNs. The R&O establishes a few things that Somos will do such as establish auction infrastructure and outreach to bidders, application review and working with bidders in the course of the auction. The Commission will exercise oversight throughout the 833 auction. The R&O further establishes that auction proceeds will offset the cost of numbering administration first, and then with the TFNA and the Toll Free Numbering Administration cost. Then in case of a pretty large windfall here, that will go towards the NANPA administration costs.

Process by which numbers can be set aside from the auction for use by 501(c)(3)s and government entities. The process there will be to file a petition seeking that a number will be set aside. The bureau will put that petition up for comment and apply the standard of Commission precedent which is a pretty unusual and compelling standard. Under what we have done in the past and if in the case that multiple entities meet that standard, we will assign the number via lottery. Consistent with the NANC Working Group's recommendation, the auction will be trademarking. We won't be giving trademark holders any

special treatment in this process. Of course trademark law continues to apply outside of SIP [sounds like] auction.

The R&O also establishes a secondary market for numbers assigned in an auction. This is only applied to numbers assigned via an auction. So this 17,000 number, to the extent that they're assigned, will be eligible for this exception to the brokering and hoarding and warehousing rules. The main goal here is really just to facilitate the success of the auction. We think it's pretty important to make sure that when we get to the other side of the auction, people have the ability to look at what happened in the auction and reassign numbers as necessary via the secondary market.

Finally, the R&O revised our toll free numbering rules in a number of ways consistent with the NANC's recommendations. Here it's very helpful to us to understand how to make rules consistent with allowing for a market-based approach to assignment and just generally to modernize our rules. As we list up here, we replaced the NASC with the TFNA. We established a new transitional status for numbers disconnected for less than four months but for which no exchange carrier intercept recording is being provided. We replaced the DSMI with TFNA. In the 52.101 NASC, we update out toll free subscriber definition to make that consistent with allowing for a market-based approach to assignment. We allow numbers to go

from disconnect to unavailable or spare which again will help with facilitation of an auction.

In terms of the next steps, we'll be releasing what we call an auction comment public notice which proposes and seeks comment on a number of different procedures that will be used in the forthcoming auction. After a comment period on that PN or at least the procedure's PN, which will finalize what the procedures for the 833 auction will look like, then we'll go through applications. There will be an application period, an opportunity for review, and then Somos or the Commission will notify the qualified bidders.

Then finally we'll have the auction that we want around the biddings since it's simply a single round auction. Once it's been complete, there'll be a PN announcing who the winners are. Then Somos will activate the numbers in the toll free database. So with that, if anyone has any questions, I'm happy to address any questions or concerns that you have. Thanks again for the working group report.

David Greenhaus: This is David Greenhaus from 800 Response. This may be something that I overlooked, but is there an analysis of the review of the various stakeholders who submitted comments initially and the reasons for their comments? Is there analysis of the Commission's view of those various

comments and how the decision process was made to go ahead in this manner?

Matthew Collins: Sure. And Heather, if you have any thoughts, you can jump in. But certainly, with respect to each and every position throughout, we responded to what the record has to say on each of the topics and issues.

David Greenhaus: Is this something in writing?

Matthew Collins: It's in the R&O

David Greenhouse: In the R&O?

Matthew Collins: Yes. In each section we go through which comments or said things are in support and which comments or said things are in opposition and what our take is on these thoughts.

Diane Holland: I have one question. If you have enough information to give us a sense of the timing for the next step's PNs and when the auction might actually get underway.

Matthew Collins: Sure, yeah. No.

Diane Holland: I thought I'd try. Okay, seeing no other questions -- oops, I'm sorry.

Susan Gately: Susan Gately from Ad Hoc. Do you have a plan to release a list of the numbers? I know that the auction will allow non-RespOrgs to bid as well, that NGOs or customers would be able to participate in the auction. It's a really novel concept for them to be able to participate in getting

numbers that way. Will the 17,000 numbers be identified in the PNs so that there's lead time for that process to begin internally?

Matthew Collins: Yes, they will.

Susan Gately: They will, okay. I have one other question. You talked about what would happen to funds from the auction in excess of the cost of the auction. What if the auction doesn't raise enough funds to cover its cost? How will those costs be covered?

Matthew Collins: The R&O establishes the process for that as well. They will be covered by and recouping them in Somos' tariff.

Susan Gately: Okay. Thank you.

Diane Holland: Thanks very much for the presentation.

Matthew Collins: Thank you.

PUBLIC COMMENTS AND PARTICIPATION

Diane Holland: So we are at the end of our substantive presentations. I want to provide an opportunity for public comments. Please introduce yourself and limit your comments to five minutes.

Rich Fruchterman: Hi. I am Rich Fruchterman with NeuStar. I want to start today by echoing the comments that John Manning made a few minutes ago about the transition from NANPA to the PA and PA over to Somos. It is in fact going very, very well.

NeuStar is particularly pleased that Somos is planning to transition our NANPA and pooling teams over to Somos. I think that'll help with continuity not only for the employees but also for the industry, to be able to be dealing with a lot of the same people.

There is one person, however, that I know that will not be continuing on with NANPA and pooling. That person deserves some recognition and thanks for her service to the industry. Almost 19 years ago Amy Putnam joined NeuStar to stand up and manage the Pooling Administrator. She's done that well over those 19 years. When John Manning left NeuStar in May, Amy also took over the management of the NANPA and did that well. The capstone of her career at NeuStar and in numbering here in the industry will be the successful transition of these two services, NANPA and PA, over to Somos.

Amy is not here today but I know she's on the phone. I want to thank her in behalf of NeuStar for all that she did for us and for the industry. And I hope others will join me in that. I want to end these comments by saying that, thanks to Amy, I'm going to use the phrase that she's used over the years when she gave her reports here. Thanks to Amy, Pooling is fine.

Rosemary Leist: This is Rosemary Leist for the bridge. I mean for the queue [sounds like].

Diane Holland: Thank you, Amy. On behalf of Commissioner Kavulla and myself and this body, we very much appreciate the years of work that you've put in on these numbering issues. Marilyn did you want to say anything more?

Marilyn Jones: Yes, thank you. Amy, this is Marilyn. On behalf of myself and my colleagues here at the FCC, we want to thank you for all your hard work in Pooling, in Numbering Administration, and for being our partner in Numbering. We greatly appreciate it and we will miss you. Thank you, Amy.

Amy Putnam: Thank you, Marilyn. It has been a pleasure to work with FCC staff on all the exciting issues that have developed in the numbering world in the last 19 years. I am grateful to have had the opportunity. I had a wonderful team and, if I do say so myself, Somos is very lucky to be getting them. Thank you.

Diane Holland: Any other remarks, announcements, comments?

Rosemary Leist: Rosemary Leist on the bridge for the queue.

Diane Holland: Go ahead.

Rosemary Leist: Hi. Thanks everyone. It's Rosemary Leist with T-Mobile. As Rich said, Amy Putnam deserves our appreciation and our recognition. Amy Putnam has been instrumental in the numbering world under the NANC for as long as I have. She was counsel with the PA Commission years ago.

In the early days of figuring out porting and overall number exhaust, she worked with us the overall concept of pooling. She attended the hearings in the state on pooling. We used to travel together in the state well before the actual trials of actual pooling began, let alone before the FCC awarded the contract to NeuStar in pooling. I just wanted to quickly bring that to the attention of the NANC.

I wanted to thank Amy Putnam for her tireless effort over the years in the numbering space. She's been an instrumental player and her skillset will be very missed. I'm sure Pooling will be fine as it moves forward under John Manning's capable hands. Thank you, Amy.

Amy Putnam: Thank you, Rosemary. Florence Weber will be stepping up to manage the pooling contract for Somos. I have no doubt that Florence will do an excellent job.

Diane Holland: Thank you for those comments. We have another comment in the room?

Philip Linse: Phil with CenturyLink. I'm one of the co-chairs for the Contract Oversight Subcommittee. Amy, I want to thank you for all your efforts, the relentless efforts on providing all the reports on a monthly basis. I know your job is much, much more than just the reports that we see on those monthly basis. I appreciate all your work and all the efforts

you provided in the customer service for all the service providers in the industry, so thank you.

Amy Putnam: Thank you, Phil. It has been a pleasure to work with you.

OTHER BUSINESS

Diane Holland: Any more comments from those on the bridge? So thank you. Marilyn, do you have any other business to cover other than announcing, re-announcing I guess, the next call and meeting?

Marilyn Jones: No, other than letting everybody know the next meeting is going to be February 5th conference call. Right now we have a schedule, from 9:30 to 11:30. We're going to WebEx it so everyone can share their documents. The follow up meetings for the rest of the charter are going to be on March 28th, June 20th, and September 12th. All of those on Thursdays.

Diane Holland: Last call. So thank you all for your attention and your patience although, let's see, I just have 10:35. Hearing no other calls for comment, we are adjourned.