

**North American Numbering Council  
Meeting Transcript  
Monday, January 13, 2020 (Final)**

**I. Time and Place of Meeting.** The North American Numbering Council Meeting (NANC) held a conference call meeting commencing at 2:00 p.m., at the Federal Communications Commission, 445 12<sup>th</sup> Street, S.W., Room TW-C305, Washington, D.C. 20554.

**II. List of Attendees.**

Voting Council Members:

- |                                  |  |
|----------------------------------|--|
| 1. Jennifer K. McKee             | NANC Chair (NCTA)                      |
| 2. Honorable R. Bruce Williamson | NANC Vice Chair (Maine PUC)            |
| 3. Heather Barrows               | 800 Response Information Services, LLC |
| 4. Brian Hurley                  | ACA Connects                           |
| 5. Susan Gately                  | Ad Hoc Telecommunications              |
| 6. Jacqueline Wohlgemuth         | ATIS                                   |
| 7. George Guerra                 | AT&T                                   |
| 8. Greg Rogers                   | Bandwidth.com                          |
| 9. Betty Sanders                 | Charter Communications                 |
| 10. Timothy Kagele               | Comcast Corporation                    |
| 11. Alexi Maltas                 | Competitive Carriers Association       |
| 12. Matthew Gerst                | CTIA                                   |
| 13. Craig Lennon                 | Google                                 |
| 14. Christopher L. Shipley       | INCOMPAS                               |
| 15. Barry Hobbins                | NASUCA                                 |
| 16. Brian Ford                   | NTCA                                   |
| 17. Honorable Haley Williamson   | Nevada PUC                             |
| 18. Julie Oost                   | Peerless Network                       |
| 19. Richard Shockey              | SIP Forum                              |
| 20. Shaunna Forshee              | Sprint                                 |
| 21. Paul Nejedlo                 | TDS Telecommunications                 |
| 22. David Casem                  | Telnyx                                 |
| 23. Rebecca Murphy Thompson      | Twilio                                 |
| 24. Bridget Alexander White      | USConnect                              |
| 25. Dana Crandall                | Verizon                                |
| 26. Darren Krebs                 | Vonage                                 |
| 27. Robert McCausland            | West Telecom Services                  |

Special Members (Non-voting):

- |                  |           |
|------------------|-----------|
| 1. Chris Drake   | iconectiv |
| 2. Ann Berkowitz | Somos     |

Commission Employees:

Marilyn Jones, Designated Federal Officer (DFO)  
Jordan Reth, Deputy DFO  
Carmell Weathers, Special Assistant to the DFO  
Kris Monteith, Chief, Wireline Competition Bureau (WCB)  
Daniel Kahn, Associate Bureau Chief, WCB  
Pam Arluk, Chief, Competition Policy Division (CPD), WCB  
Heather Hendrickson, Assistant Division Chief, CPD, WCB  
Edward Krachmer, Assistant Division Chief, CPD, WCB  
William Andrle, Attorney-Advisor, CPD, WCB  
Janice Gorin, Attorney-Advisor, CPD, WCB  
Jesse Goodwin, Attorney-Advisor, CPD, WCB  
Michelle Sclater, Attorney-Advisor, CPD, WCB  
Karen Schroeder, Attorney-Advisor, Consumer and Governmental Affairs Bureau  
Darlene Biddy, Management Analyst, CPD, WCB

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

**IV. Documents Introduced.**

- (1) Agenda
- (2) December 16, 2019 Meeting Transcript
- (3) Reassigned Numbers Database (RND) Technical Requirements Document, December 16, 2019

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

### **WELCOME AND ATTENDANCE**

Jennifer McKee: Everybody welcome. Let's hit the gavel and start the meeting. Welcome to the January meeting of the North American Numbering Council. I think we're going to start. Marilyn, can you take roll call? We can see we have a lot of people on the phone today.

Marilyn Jones: Yes. Thank you. We have a handful of folks in the room with us. Let's start with the Maine PUC, Commissioner Williamson.

Bruce Williamson: Bruce Williamson. We're having a hard time hearing.

Marilyn Jones: My apologies. We're going to start the roll call with the Maine PUC. Commissioner Williamson, are you on the line?

Bruce Williamson: Yes, I am.

Marilyn Jones: Thank you. 800 Response?

Heather Barrows: I'm here, yes. This is Heather.

Marilyn Jones: Thank you. ACA Connects?

Brian Hurley: Yes. Brian is here.

Marilyn Jones: Ad Hoc Telecommunications?

Susan Gately: Yes. Susan Gately here.

Marilyn Jones: ATIS is in the room with us, Jackie. AT&T?

Male Voice: Now you put him on the line.

George Guerra: Yes, George is here.

Marilyn Jones: Thank you, George. Bandwidth?

Greg Rogers: Greg Rogers is on.

Marilyn Jones: Thank you, Greg.

Female Voice: [Cross-talking]

Marilyn Jones: Charter Communications?

Glenn Clepper: Hi. Glenn Clepper is on with Charter.

Marilyn Jones: Thank you, Glenn. Comcast?

Timothy Kagele: Yes. Tim Kagele is on.

Marilyn Jones: CCA Alexi is in the room with us. CTIA  
Matt Gerst is in the room with us. Google?

Craig Lennon: Yes. Craig Lennon from Google is on.

Marilyn Jones: INCOMPAS? NARUC? NASUCA? NTCA?

Brian Ford: Hey, Marilyn. Brian here.

Marilyn Jones: Thank you, Brian. Nevada Public Utilities  
Commission?

Hayley Williamson: Hi. Hayley Williamson here.

Marilyn Jones: Thank you, Commissioner. Peerless Network?  
SIP Forum?

Richard Shockey: Rich Shockey here.

Marilyn Jones: Sprint Corporation?

Shaunna Forshee: Shaunna is here.

Marilyn Jones: TDS?

Paul Nejedlo: Paul Nejedlo is here.

Marilyn Jones: Telnyx?

David Casem: David Casem here.

Marilyn Jones: Twilio?

Rebecca Thompson: Hi. Rebecca Thompson here.

Marilyn Jones: USConnect?

Bridget Alexander White: Hi, Marilyn. Bridget's here.

Marilyn Jones: Thank you, Bridget. USTelecom? Verizon?

Dana Crandall: Dana Crandall is here.

Marilyn Jones: Vonage?

Darren Krebs: Hi, Marilyn. Darren Krebs is here.

Marilyn Jones: Bob is here for West Telecom. iconectiv?

Chris Drake: Chris Drake is here.

Glenn Reynolds: And Glenn Reynolds is here.

Marilyn Jones: Ann Berkowitz is here for Somos, and so is Joel Bernstein. Okay. That concludes our roll call. Thanks everyone.

Christopher Shipley: Marilyn, hi. It's Chris Shipley from INCOMPAS. I think you started to say INCOMPAS and I didn't pick it up. So apologies. INCOMPAS is here as well.

Marilyn Jones: Thank you. Did I miss anyone else?

Julie Oost: Julie Oost with Peerless Network.

Marilyn Jones: Thank you, Julie.

George Guerra: George Guerra from AT&T.

Rosemary Leist: And Marilyn, this is Rosemary of T-Mobile. You know we're not a NANC member, but I'm here to support Philip in the RND.

Marilyn Jones: Thank you, Rosemary. I appreciate it.

Betty Sanders: Betty Sanders is on as well.

Marilyn Jones: Charter. Got you. Betty Sanders. Thank you, Betty.

Michelle Sclater: Marilyn, this is Michelle Sclater. I'm on the line.

Marilyn Jones: Thank you, Michelle. Did NASUCA? NARUC? Okay. Thank you everyone.

#### **ANNOUNCEMENTS & RECENT NEWS/ APPROVAL OF TRANSCRIPT**

Jennifer McKee: Next on the agenda are announcements and recent news. I have none so, unless anyone else has any, we will move on to the approval of the transcript from our last meeting. Did anybody have any edits or additions to the transcript that they wanted to make? No? Okay. Hearing none, would anyone like to approve the transcript?

Robert McCausland: I'll make a motion to approve the transcript. Bob McCausland of West.

Jennifer McKee: Great. Thank you, Bob. Okay. And anyone to second?

Timothy Kagele: I'll second.

Jennifer McKee: Okay. Then we will vote on the transcript. Anyone wants to approve it, please say aye.

Voices: Aye.

Jennifer McKee: Thank you. Okay. The transcript is approved. Now we'll get to the reason that we are really here this afternoon, and that is to talk about the technical requirements document for the reassigned numbers database administrator. And so do we have Phil on the phone?

Philip Linse: Yeah, Phil is on.

Jennifer McKee: Oh, great. Okay. Well, Phil, it's all you.

**OVERVIEW, DISCUSSION, AND APPROVAL OF THE TECHNICAL  
REQUIRMENTS DOCUMENT RECOMMENDED BY THE NUMBERING ADMINISTRATION  
OVERSIGHT WORKING GROUP FOR THE REASSIGNED NUMBERS DATABASE**

Philip Linse: Thank you. Well, just to kind of kick this off, on February 19th we kicked off the work for the TRD. Then in the subsequent months we had 63 two-hour meetings twice weekly with very limited exceptions. I mean there were a couple of holidays to which I think we took the opportunity to take a break but, otherwise, we were pretty intensive in working on the technical requirements for this. We completed that work on December 4th and submitted to this NANC council on December 13th.

Seeing that we submitted this to the NANC council on the 13th, I've only received one piece of feedback since with the exception of the amendment that everybody has seen associated with the initial submission. Thus, I think this should go pretty quick. I know I've been allocated an hour-and-a-half. Hopefully we don't need the entire hour-and-a-half since everybody's had a lot of time to review this stuff. It seems to be pretty tight and there should be very few questions I would think.

So the whole purpose of the RND technical requirement is to establish and maintain a single comprehensive database to enable callers to verify whether a telephone number has been permanently disconnected and is, therefore, eligible for reassignment before calling that number. Thus, although this is called a reassigned numbers database, it really contains numbers that have been essentially permanently disconnected. The function of the RND is when a caller queries the database using a NANPA number or a toll-free number and a date, the database would then respond with a yes, no, or no data. The TRD, well, this will explain whether or not the number has been permanently disconnected since the date provided by the caller.

I put in here kind of the philosophy that we followed or the main concepts that we were trying to adhere to when we went through the development, which is to economically maintain and



create a user-friendly database. The development assumptions were that this would be a federally procured and owned database. It would be provided through a contract, that is it provides both the NANPA functions and the RND function. It will also incorporate the operational objections of the order establishing the requirement for the RND.

One of the variances, and really the only variance from the order, would be the monthly data updates. Based on the philosophy and the objectives of the order, the order requires that service providers update the database on the 15th of each month. The slight variance to that is that, if that date falls on a weekend or a holiday, that it would be the next business day which is also consistent with other aspects of like the NANPA contract as well. Those kinds of things. It's not inconsistent with other federally procured contracts.

The API amendment was then provided on January 3rd based on some feedback in the last NANC meeting in December. Folks have seen that. I provided that in a red line to be easily identifiable. Then I had one additional piece of feedback which encompassed the precedents of the documents within the RND. Let me see if I can get that identified for folks. It's actually Section 1.1 of the document which lists the precedents of the different documents such as the Code of Federal Regulations, applicable FCC orders.

The order of that is slightly incorrect. The edit would suggest that any change orders that have been approved by the FCC be number 3. Any of the statements of work in the awarded contract would be 4. The amended RND TRD document would be number 5. The RND TRD document itself would be number 6. Then 7 and 8 would remain unchanged as industry guidelines for the disconnected numbers database being reported, and then related documents listed in section 10. With that, I will offer it up to the council for discussion.

Barry Hobbins: This is Barry Hobbins. I'm sorry I'm calling late. I just got out of another meeting. But I'm on the call now. Thank you.

Timothy Kagele: So, Phil, a question from the bridge please.

Philip Linse: Go ahead.

Timothy Kagele: I apologize to the group for just kind of coming into this cold. I have not had the benefit of all of the discussion for the development of the TRD, but just a couple of questions. In Section 1.2 under Scope, I'm assuming that the requirement is only directed to those service providers that have direct access to NANPA resources and that its understood or implied that resellers, although they may not directly access numbers, would also be bound to contribute information via their reseller arrangements. Is that a correct understanding?

Philip Linse: I believe the scope of this is for those that have direct access to telephone numbers.

Timothy Kagele: Okay. So the question would be I guess then should there be a reference to resellers as part of the scope or is that completely outside the scope of the order?

Philip Linse: I don't think that was necessarily a consideration other than whether or not those numbers were -- however it's reported into, if those entities are reporting through the NRUF, they would be accountable for this.

Timothy Kagele: Okay. Thank you, Phil. That answers that question I think.

Steve Johnson: Yeah. Phil, this is Steve Johnson with Neustar. I think if you look at the document and look at the definition of service provider, it includes those who get numbers directly and it also includes numbers that get phone numbers from other carriers.

Karen Schroeder: This is Karen Schroeder. Paragraph 21.

Timothy Kagele: Thank you very much. So, Phil, if I may then. Just continuing on one other question that's from Section 3.2., System Capabilities, specifically related to the ability to upload 50 telephone numbers at a time. I'm assuming there was significant discussion around how that number was arrived at. The question that I've had generated internally at Comcast

is is there any ability to increase that number or is there a technical limitation on that.

Philip Linse: These are recommendations. I mean that was what we came up with as a recommendation. I don't see any reason why it couldn't be a different number. But because this database doesn't exist today or anything like this database that exist today, that was one of the elements that we discussed and came up with.

Timothy Kagele: So if we wanted to consider a higher number, let's say 250 or 500, what would be the team's appetite to entertain that?

Philip Linse: What section are you in again? Can you direct me to the actual --

Timothy Kagele: Yeah. Section 3.2, System Capabilities. And it I believe was the fourth bullet down.

Rosemary Leist: Tim, this is Rosemary. I'm having trouble understanding exactly what the change is that you'd want to make. If you could repeat it, I would be grateful.

Timothy Kagele: Yeah. I just was asking if a number greater than 50 telephone numbers to be queried at one time, if that threshold is higher.

Rosemary Leist: Okay. Good. I was unsure if -- okay. Thank you.

Philip Linse: So 3.2 bullet, sub-bullet 4. I guess I'm not seeing where you're at and where that says 50.

Robert McCausland: Phil, this is Bob McCausland. The bullet point he's alluding to is the top one on page 28. It's not the fourth. It states accommodate the ability for a user, user agent, or the FCC to perform a Web GUI RND query request above the 50 individual TNs at a time.

Female Voice: This is not just submitted by the FTP - right, Phil - with this figure?

Philip Linse: Yeah. Yeah, of course. I guess I'm still not seeing where that is.

Timothy Kagele: Phil, it's actually at the top of page 28 as Bob mentioned. It's the very first bullet. The second bullet also on page 28 references the same 50 telephone number threshold.

Paul Nejedlo: Phil, this is Paul. It's bullet 12 in 3.2.

Philip Linse: Thank you, Paul. Okay. Finally, I was able to get it. It's page 29 on my document. Thanks, Paul. I guess part of the discussion was around how much time would it take someone to go through and input individual telephone numbers. We thought 50 was probably a reasonable number before you would want to do a bulk load. So that's kind of the justification there.

Timothy Kagele: Okay. That's helpful, Phil. Thanks. I was just looking for some background on how they arrived at that threshold.

Philip Linse: Yeah. I mean I think 250 was a bit over the top for someone who's doing data input. I would expect that you'd want a bulk process for something that's 250. That was kind of the logic. But again it's fairly subjective as to how we came with that other than it just seemed logical.

Timothy Kagele: Okay. Great.

Robert McCausland: Phil, this is Bob McCausland. If I may, I'll point out there was I recall some dialogue on this issue. And it was a consensus item. The number 50, as I recall - and correct me if I misstate anything, Phil - it wasn't arrived at lightly. There was dialogue among the participants. There was consideration of I think a higher number at one point, but ultimately I think the majority agreed that it made more sense to stick to a number like 50 for the reasons that Phil cited. Isn't that correct, Phil?

Philip Linse: Yeah.

Timothy Kagele: Well, thank you both. That clears up the questions that I had for that. Thank you.

Darren Krebs: Hey, Phil. Darren Krebs, Vonage. How are you?

Philip Linse: Hi. Hi, Darren.

Darren Krebs: Hey, how are you doing? I appreciate the email exchange we had. Just real quick. On 1.2, the scope, I just wanted to confirm I'm reading it correctly. I might not be but my read is, or at least the way that it's reading to me, is that the service provider is going to be responsible for providing the information on what I would call a regular number. But the toll-free administrator would provide the info on the toll-free number. Am I reading that correctly?

Philip Linse: That's correct. You can kind of cut it out there. But I believe, if I captured all of it, that's correct.

Darren Krebs: So I guess my question then is how does the toll-free administrator know when I have a customer who's abandoned the toll-free number and I've aged it X amount of days, whatever I do, and then put it back into my available inventory?

Philip Linse: From the way I understand the rules around toll-free numbers, and this isn't necessarily within the scope of this document, but those numbers go back to availability within the toll-free administrator once they are disconnected.

Ann Berkowitz: Phil, this is Ann from Somos.

Philip Linse: There isn't necessarily an inventory there. So go ahead, Ann.

Ann Berkowitz: Yeah. Darren, hi. We're able to provide it. We actually have real time disconnect data on toll-free

numbers in our database. That's how our system has always operated. So we're able to provide that information real time on behalf of [cross-talking].

Darren Krebs: Perfect.

David Casem: David Casem from Telnyx here. But ultimately that would require the service provider to actually issue the disconnect to Somos, right, via the SMS/800. Because if they just keep the number on their side and don't send a disconnect to Somos, then Somos will never know that it was disconnected.

Darren Krebs: David, great point. My understanding, and I'll confirm internally, I believe within Vonage that's exactly what we do.

Ann Berkowitz: I would assume you're talking about when Vonage may be listed as the end user. Not that you're sitting on a number.

Darren Krebs: Well, I mean I'll give you a real layman's example. A Vonage customer signs up for Vonage. They want a toll-free number and I give it to them. Sixty days later they decide they don't want to be a customer anymore. They terminate service. They don't port the number out, so they abandon it. When they abandoned that number, within my system I disconnected. But I don't really tell the industry. It just goes into an aging process within Vonage and, when that aging is



met, it then goes back into my available inventory for another customer to take that number.

Ann Berkowitz: I'm going to add Joel Bernstein into this.

Joel Bernstein: Thanks. The rules under toll-free are, if a subscriber doesn't use the toll-free number anymore, it's supposed to go to the spare pool first before it gets assigned to another subscriber.

Phil Linse: So what you mean by that, Joel, is the spare pool of the toll-free administrator?

Joel Bernstein: Yes. Correct.

Darren Krebs: Right. So in theory, other than aging a number in the hopes that that original customer decide they want to come back and they ask for their number, there's really no benefit in aging a number because I need to return it to Somos in this case.

Joel Bernstein: So you disconnect it first, you age it, then you spare it.

David Casem: I mean, Joel, I know that that's the rule. But in practice that's not what happens. It happens anywhere as far as I know.

Joel Bernstein: I tell you what the rules are.

Darren Krebs: Yeah, I don't believe that's what we're doing.

David Casem: Nobody does that because the amount of effort that goes into provisioning a toll-free number with the underlying CICs [sounds like] is particularly arduous. So those people don't want to go through the process of having to reprovision a toll-free number with all the underlying CICs again.

Joel Bernstein: Not everybody. I understand there's something and so you don't necessarily follow the rules exactly.

David Casem: Is there anything preventing those providers from just submitting service provider like Vonage? So submitting those alongside their local numbers.

Darren Krebs: Yeah, I kind of think that's where my original question was hopefully going. It was, if I would make a recommendation, I would recommend 1.2 be modified where the service provider is responsible for providing that information for both types of numbers. Who better than the service provider to know the current status of a number?

Philip Linse: Now, I mean if you look at the order, the order assumes that --

Karen Schroeder: Paragraph 23.

Philip Linse: Thank you, Karen. The order identifies Somos as that entity that is in the best position I believe. You said 23?

Karen Schroeder: Yeah.

Philip Linse: Thanks. I mean we didn't really have much discussion on that because the order was pretty clear on that.

Karen Schroeder: The order says we direct the toll-free numbering administrator to revise the service management systems tariff as appropriate to embody the responsibility of the toll-free numbering administrator to report the disconnect status of toll-free numbers to the reassigned numbers database.

Ann Berkowitz: This is Ann again. It's important to remember that not all companies who have access to toll-free numbers are service providers. You can be a responsible organization and can be a service provider, but many of them are not which is another reason why. So they wouldn't necessarily have access under the service provider definition.

Heather Barrows: This is Heather with 800 Response. Just to clarify, for the reassigned number database, for toll free it would be those that are marked in spare. Right? Not disconnect because they're not permanently disconnected and they're still being aged out. Is that accurate?

Ann Berkowitz: It would be the disconnected ones. The ones in the disconnect database.

Heather Barrows: The ones with the status of disconnect even though they're still being aged out?

Ann Berkowitz: Yes.

Male Voice: Because they're no longer in use.

Ann Berkowitz: Because they're no longer in use.

Heather Barrows: So if a number is incorrectly disconnected in Somos and a customer comes and wants that number reactivated, if it's still within that disconnect time, it could be reassigned to that customer. But you're saying you're reporting it as soon as it's disconnected, not once it's turned to spare. So that customer couldn't get that number back?

Ann Berkowitz: They could get the number back. We would just have to update the records.

Heather Barrows: But it gets put in this database.

Ann Berkowitz: But then the database could be updated.

Heather Barrows: Okay. Thank you.

Male Voice: Once it leaves disconnect and it's in use, that gets reported.

Ann Berkowitz: I mean this would be something to be figured out with the RND. In the SMS/800 database, it's very real time. I think the RND calls for a monthly upload of information. I suppose we could update more than monthly if we needed to. I don't know if that's been contemplated. Yes. Nothing is going to change in terms of how the SMS/800 operates.

Karen Schroeder: This is Karen Schroeder. The order specifically makes the clarification that it's talking about the permanent disconnect status. So we tried to make a distinction between when a number is temporarily suspended perhaps due to

nonpayment or for some other reason versus permanently disconnected. If it's in the status where it's disconnected but very likely to go back to the same party, I'm not sure if that would be considered a permanent disconnection or not.

Philip Linse: Yeah. So part of that discussion was at what point does that permanent disconnection occur. As part of that discussion we queried several service providers and there was kind of a variety of responses. But generally, the one that kind of stuck out was that most service providers, to the extent that that number has been placed into aging, if that previous customer were to come back and request that same number, that those service providers would make that number available back to that subscriber. Thus it was very difficult for us to designate a particular time when that number would be considered permanently disconnected because it could be different based on service providers, but could in some instances be upon completion of the aging interval.

Heather Barrows: Thank you. That makes sense. I think that was where I was going in terms of when it became a spare. Because when it's a spare, that to me is permanent.

Philip Linse: Yeah. All we've addressed on this is really the update of that database. So the interface that this database was going to have with service providers, including toll-free administrator, in that those entities need to identify

themselves exactly what constitutes that permanently disconnected number status. That's the information that then gets uploaded. We really didn't expand the scope of this to include how you define a permanently disconnected number.

We suggested that there is some sort of a user group, or not a user but a service provider guideline that says here are the considerations service providers need to make when they are updating this database. That effort has not been undertaken. I believe ATIS has suggested that they might be in a good position to be that entity, but that does not necessarily include on the user side of this.

So what we're looking at is a database with two interfaces and then user groups on both sides of this. So the FCC probably needs to look at how do you modify this database or what are the best practices for populating it, what are the best practices for querying it.

Timothy Kagele: Phil, Tim Kagele with Comcast. I want to just kind of explore that a little bit. I know that in section 3.1.3, under Systems Scalability and it's my page 24, the third bullet specifically says that a database shall be updated on the 15th of each month. Is that the only time that an upload can be done or can it be done continuously on a daily basis if we wanted to do that?

Philip Linse: Not based on the order.

Timothy Kagele: Okay. So once a month?

Philip Linse: Yeah, once a month.

Timothy Kagele: And if there is a mistake in the data, would that be treated in -- I think, probably it's the next bullet down the fourth bullet. Let's say there was an error on the data that got uploaded. Would that be treated as a helpdesk ticket to correct the error?

Philip Linse: Correct.

Timothy Kagele: Okay. Thank you very much.

Philip Linse: And that was specifically discussed.

David Casem: Phil, this is David Casem from Telnix. I think you're referring to section 39 of the report frequency, is that correct, of the second report and order.

Philip Linse: Paragraph 39?

David Casem: That's right.

Philip Linse: Yeah, it looks like that's it.

David Casem: Yeah. So as I read this paragraph, there is nothing in there suggesting that providers would not be able to report the data to the administrator more often than on the 15th day of each month. As long as they report on the 15th day of each month, they met their obligation there. That's section 39. But if --

Philip Linse: That's not how that was interpreted in the development of those documents.

Karen Schroeder: If you look at paragraph 40, the second sentence, it says: Moreover, we conclude that more frequent reporting is unnecessary because we also establish a minimum aging period of 45 days which will ensure that the database reflects current permanent disconnection information.

Philip Linse: Thank you, Karen.

David Casem: David Casem again. I'm referring to section 60 of the report and order where nearest to the bottom of the paragraph it says: In reading its recommendation, the council should consider the most cost-effective way of administrating the database with the goal of minimizing cost and burdens for all the users and providers while ensuring that we'll fully use it for the intended purpose.

We've seen the amendments now with the API for the user side. I think it was specified in more detail in the second report and order. But it would appear, based on this conversation, the scope of what is a service provider wasn't necessarily fully considered by the group. As it now appears, those do not submit via the NRUF and may have numbers as resellers too will have an obligation to report into the database. From it, it would appear they either have now a GUI which allows for 50 numbers to be submitted or would have to take on the burden of figuring out how to interface via a



technology from the '90s, a secure FTP, in order to submit the phone numbers.

Phil, could you speak to why the group did not allow for there to be an API endpoint for service providers to be able to update the database? I think it's particularly important to note that, again, most of the service providers will also be users or many will also be users. And now this, as a result of there being an API interface, they'll have to build out two interfaces rather than one. One to consume as a user using an API and then another using legacy technology, a secure FTP.

Philip Linse: Yeah, sure. So the concept behind here was, again, from the philosophy and the principles of how we looked at this from an economical perspective. Because this was, as Karen cited too in the order, a 15th of the month and a monthly update of the database, it did not make sense to provide such a dynamic interface. Because you're only going to be using it once a month, so we decided to minimize the cost further. Since there wasn't really a good reason to incorporate an API due to the infrequent update capability, we thought it was sufficient to put in the bulk upload type technology.

However, this is just the establishment of this database as well. I just want to make clear that these requirements are to get this thing up and running. Also it does not prevent either the users or the service providers from initiating change orders

in order to [audio glitch] the additional capabilities if necessary.

David Casem: Sure. But the order does say that there is a responsibility on the part of the council to minimize cost and burdens for all users and service providers. I mean, given that the definition of service providers was expanded, was there any survey conducted? What is the data supporting the fact that service providers are not looking for that sort of interface and, moreover, what is the --

Philip Linse: We weren't doing any formal surveys. However, the consensus of the group that was on there was that it was unnecessary to do an API for the service provider side of this. In the NANC meeting in December you and I had a discussion about specifically on the user side of this. I completely agree that the user side of this made sense to have that API because it could be so much more dynamic. That the users of this database are not required or only have access to this database on the 15th of the month, they could do it at any point throughout the month or year or whatever intervals you want to talk about. Therefore, an API was an attractive capability for the users. For the service providers, it did not make sense to go to that extent to create that functionality that would be essentially wasted due to the fact that the update is only once a month.

David Casem: Yeah. But to Tim's point, I mean with the secure FTP, you have no means of validating. You don't even know if the request is accepted. If there is something that needs to be changed, you now have to open the trouble ticket.

Philip Linse: That requirement is in here.

David Casem: What requirement is in here?

Philip Linse: To acknowledge the receipt of the update.

David Casem: For [audio glitch]?

Female Voice: Yes.

David Casem: Okay. How will that be done? Does anyone know?

Philip Linse: It will be done up to the vendor. The vendor will figure out how to accomplish that.

David Casem: I guess the other question is, are we 100 percent certain that it will cost more to include an API in the TRD? If the only reason is that it's going to be costly, then how certain are we that it's actually going to cost more?

Philip Linse: I don't think it's necessarily the cost. It's the frequency and use. An API is typically a dynamic interface where you would expect to see that interface used consistently throughout either a given day or a given month. Any of that, right? This is a once a month update. An API is way overkill for what this capability demands, once a month.

David Casem: The flipside of the argument is having to develop both an API and a secure FTP interface for service providers is unduly burdensome. If you have a single or unified API that can be used by service providers and users, that you potentially reduce the burden on those particular users that choose to interface via the API.

Glenn Clepper: Phil, this is Glenn Clepper with Charter. I believe we thoroughly discussed this during the numerous meetings we had, and I believe there was an opportunity at that time for all companies including the one making comments today to make comments at that time.

[Cross-talking]

David Casem: Glenn, I would agree. But from what I heard, it didn't sound like you took into account the fact that there are new service providers that are included in the scope of the definition. It was very clear in this conversation that the group did not consider the fact that resellers are going to be also submitting this information. So I would suggest that that be incorporated into the consensus part of the process because that was not included. That fact was not part of the conversation in the past.

Philip Linse: I disagree with you there. I guess many of the companies on the call have resell, provide resell services.

David Casem: Okay.

Robert McCausland: This is Bob McCausland. I agree with what Phil just stated. Of course the TRD will be put out for public comment and there will be an opportunity for the issue to be further dialogued through the public comment cycle. So I think if the concern persists, that would be a good avenue to address this further potentially.

Darren Krebs: Darren Krebs again. I'm going to bring it around full circle. One, thanks everyone for all the information. I guess just two quick things. I wanted to confirm that I understood correctly. As an example, if I age numbers 45 days and I have a customer who terminates and 45 days passes, the correct policy is, instead of me putting that toll-free number back into my available inventory, I am supposed to return that number to the administrator. Correct?

Philip Linse: And I think, Darren, if I'm understanding your question, you're referring to the toll-free administrator?

Darren Krebs: Correct. Sorry. Yes.

Philip Linse: Okay. I don't know if Ann, if you --?

Ann Berkowitz: Yeah. Sure, Phil. Darren, yeah, that is what the rule says.

Darren Krebs: Okay.

Ann Berkowitz: Joel and I are happy to chat with you maybe offline and do a little deeper dive on the toll free.

Darren Krebs: Absolutely. You know I don't want to take up everyone's time. I just want to make sure Vonage is doing it correctly.

Ann Berkowitz: Sure. I understand.

Darren Krebs: I'm slacking a bunch of people to make sure we're doing it correctly.

Ann Berkowitz: Okay. Thanks.

Darren Krebs: Thank you.

Philip Linse: Thanks, Darren. Any other questions?

Chris Drake: Phil, Chris here. I have a question just in terms of clarity. The first half of the document refers to the callers providing a date and simply that the response is yes, no, unknown depending on the date they provided - the date of the permanent disconnection. Later in the document there is a reference to a prior expressed written consent as the definition of the date, and again it ends up in the definitions at the very end.

Now our experience is that commercial callers want to provide you the date where they last had reasonable cause to believe this is the right party and implied that they didn't revoke consent at that time. That may not matter because in the end, if it's a yes, it's a yes; if it's a no, it's a no-no matter whether the date that the caller gave us as an RNDB would be the date of expressed consent which could be five years ago

on the account profile on the Web or it could have been last week when they last spoke to them.

So in the end, if permanent disconnection is later than the -- you know, either, it really doesn't matter. It's not the same person. And it really can't happen that the date would be later than the expressed written consent but not later than the last time they had reason to believe it was the right party. So it doesn't really create a functionality problem, but it's a bit confusing when the document says that the user agreement - and that's on page 12, 2.111 - is to provide a date. They reasonably believed that this was the right party versus, say on page 24, which says it's the date of prior expressed consent and then thereafter. That's what it says in various pieces of 3.1 in the glossary.

So I'm wondering if we just want to tune that up. Or because the answer will be the same either way, it's basically one-and-a-half [sounds like], it doesn't really matter and we just leave it. Somewhat confusing because it won't affect the service.

Philip Linse: I think you're correct there. I don't know if it would make that much difference. I mean we could tune it up but, again, I mean it's going to come down to the rule that has been identified in the order. This document doesn't necessarily address the rule specifically, but rather identifies

that there is a date that needs to be provided by the user. It doesn't define it for the user.

Chris Drake: I thought it was defining it. But if you don't believe so, that's good then.

Philip Linse: I mean this document, this TRD, does not provide the requirements for a user. It [audio glitch] requirements for the vendor that's going to be administering the database.

Chris Drake: Okay. Except for 2.111 which say the user agreement the administrator shall use shall have a phrase of this nature, which is the one that refers to the date reasonably believed to be the same party. It's not the clause that says expressed written consent. So I think if that's as close as it gets to user requirements, then we're fine because that's really the date I think 90 percent of users will bring to the API or to the query.

Philip Linse: Right. And that language is specifically taken from the order itself, right?

Chris Drake: That is correct. Yeah. From clause 19 I think, yes. So we don't vote. I think it's fine if we leave it. It could lend to a bit of confusion but in the end your yes, no, or unknown are all the same regardless of which definition you choose.



The only reason I bring it up, Phil, I guess is we've spoken to lots of commercial callers. Let's say banks especially. They have paper records which, when they got expressed consent to use a phone number, these could be a decade old. And it may not even be digitized. So the date they more likely know is last contact.

Philip Linse: Sure.

Chris Drake: So long as they can use last contact, they won't freak out that they can't figure out how to comply.

Philip Linse: Yeah. I mean this document is as clear, if not clearer, than the order. To the extent that that exists in this document, it exists in the order as well.

Chris Drake: Oh, it certainly does.

Philip Linse: You know what I mean. So it's kind of, again, this is not placing requirements on how an end user determines what date to provide. This just identifies that there needs to be a date and it's generally referred to those two ways in the order.

Chris Drake: That's true. So I think it's okay, but I thought I'd raise it.

Philip Linse: Thanks. Any other thoughts on that? Are there any other questions? If there are none, I turn it back to Chair McKee to do a vote of the members.

Jennifer McKee: Okay. No further questions? Okay.

Philip Linse: We can barely hear you, Jennifer.

Jennifer McKee: Sorry. Too far from the mic. Is that better?

Philip Linse: A little better.

Jennifer McKee: Okay. All right. Everyone has their questions asked and answered? Shall we vote to approve the document? All in favor, say aye.

Philip Linse: One second, Chair McKee. There is one contingency, which is the precedence of the documents that I read off earlier. So if we could phrase the vote to be contingent upon that change and any kind of administrative edits that might need to take place.

Jennifer McKee: Got it. Okay. So that was in section 1.1, contingency of the documents.

Philip Linse: Yes.

Jennifer McKee: You will make that edit to the document and we are voting on the document as amended, correct?

Philip Linse: Correct.

Jennifer McKee: Okay. Now has everyone approved the document with that clarification and correction? Please say aye.

Voices: Aye.

Jennifer McKee: Okay. Thank you very much, Phil. We really appreciate it. And thank you all to the working group

for the tremendous amount of work that obviously went into this document. We appreciate it.

Male Voice: Thank you very much.

Philip Linse: Thank you.

**SECURE TELEPHONE IDENTITY -GOVERNANCE AUTHORITY (STI-GA)**

**REPORT TO THE NANC**

Jennifer McKee: Okay. So next on our agenda for this afternoon, we have the STIGA report from ATIS. Brent is coming up.

Brent Struthers: Good afternoon. Brent Struthers with the STIGA. I'll be brief. My report is slightly shorter than the last 20 I dealt with, a lot shorter than the last 20 I dealt with. So as you know, as of the update last month, we went live on the 16th of December. Well, since then we've had 18 service providers and eight certificate authorities register. Quite a few more certificate authorities than we actually thought. Of those eight certificate authorities, we actually have two that are live and active - as of go live - to serve all the providers. We have two more that have already been approved to essentially serve their own needs, and we have four that are in the pending stages of approval. They've got to submit their what's called the certificate practice statement and be vetted by the STI-PA and members of our STIGA technical committee. So that's all undergoing right now.

We, the STI-GA board, STI-GA would consider the implementation to be a huge success. But the work of the STI-GA is not close to done. So 2020 will see us trying to ensure that the ecosystem remains stable throughout the year. Then we're also going to watch very closely what the illegal robocallers are doing, how they react to what we've implemented, and we will change our tactics accordingly. So this industry-led effort will continue to be led by the industry in terms of making changes to whatever we've done today.

I think that's pretty much about it for the report. We'll keep the NANC informed and the FCC informed with regular updates. I hope to have a little bit more detail with the update in February than we have on this one. But as it is, I'm still putting together a lot of the information from December. As you can imagine, the holidays kind of messed things up. So I'm still getting a lot of information together for the actual board and then we'll get that out to the NANC before the next NANC meeting. Any questions?

Robert McCausland: Brent, Bob McCausland. What surprises have you had? Have there been any significant obstacles identified that were unanticipated?

Brent Struthers: Obstacles, no. I think the one surprise I mentioned is that we've had so many more certificate authorities come forward than I thought. I figured we'd have

maybe three or four at the most. But as it is, I think we've got eight with four pending and I know of at least one more that expressed interest. So that was a big surprise to me. But in terms of obstacles, no surprises to report yet.

Robert McCausland: Good. Congratulations. Thank you.

Jennifer McKee: Thank you very much, Brent. Appreciate it.

Brent Struthers: You're welcome.

#### **PUBLIC COMMENTS AND OTHER BUSINESS**

Jennifer McKee: Okay, next. Do we have any public comment from anyone for the NANC while we have everyone together? Okay. Hearing none, we'll move to other business, which is just the announcement of our next meeting which has been put out in the public notice. It's February 13. Everyone mark your calendars for that. I have nothing else. Anything else, Marilyn?

Marilyn Jones: No. Thank you.

Jennifer McKee: Okay. Then thank you very much for your time everyone this afternoon. The meeting is adjourned.

Bruce Williamson: Thank you.