FRED BAKER:	Good morning or good evening, wherever you happen to be. Let me call the first RSSAC meeting of the year to order.
	Our first point of the agenda is to call the roll. So, Cogent. Who's here?
PAUL VIXIE:	Vixie.
FRED BAKER:	DISA. Who's here?
KEVIN WRIGHT:	This is Kevin Wright.
FRED BAKER:	ICANN. Who's here?
MATT LARSON:	HI. It's Matt Larson.
FRED BAKER:	ISC. Jeff are you here?
JEFF OSBORN:	I'm here, Fred.

FRED BAKER: Okay. So that's two of us. NASA?

BARBARA SCHLEKSER: Barbara Schlekser is here.

FRED BAKER: Okay. Netnod?

LARS-JOHAN LIMAN: Liman is here.

FRED BAKER: Okay. RIPE-NCC. Kaveh is driving.

KAVEH RANJBAR: Yes, I'm here. And Happy New Year, everyone.

FRED BAKER: University of Maryland.

KARL REUSS: Karl is here.

FRED BAKER: USC ISI.

WES HARDAKER: Wes and Suzanne are both here.

FRED BAKER: Okay. ARL.

KEN RENARD: Ken is here.

HOWARD KASH: Howard is here.

FRED BAKER: Verisign.

BRAD VERD: Brad is here.

FRED BAKER: WIDE.

HIRO HOTTA: Hiro is here.

FRED BAKER: Okay. And then various liaisons. Kaveh is here. Liman?

LARS-JOHAN LIMAN: Yes, I am here.

FRED BAKER: Okay. Daniel Migault?

DANIEL MIGAULT: Yes, I'm here.

FRED BAKER: Russ Mundy?

RUSS MUNDY: Morning. Russ is here.

FRED BAKER: IAB. You're still here. Okay. IANA functions operator?

JAMES MITCHELL: James is here.

FRED BAKER: Yeah. And the root zone maintainer.

DUANE WESSELS: Duane is here. Good morning.

FRED BAKER: Okay. And then staff. Who do we have?

OZAN SAHIN: I think Steve is here. Ozan, Andrew, and Danielle. I think all of us are here.

FRED BAKER: Okay, cool. So we're all here. Ryan apparently sent in apologies.

You're looking at the agenda that was e-mailed out last week, I believe. Anybody have any comments, proposed changes, or whatever to the agenda?

Failing that, we'll consider this the agenda. So, Ozan, you're first up.

OZAN SAHIN: Thank you, Fred. Hello, everyone. Happy New Year. I circulated the draft minutes from the December two weeks ago on the RSSAC mailing list. We haven't received any requests for revisions, amendments, or any questions. So I'll stop here to see if you have any at this point.

And if not, the minutes from the December is a vote item today.

FRED BAKER: I'm talking to my mute button. So does anybody have any objections or proposed changes to the minutes?

Not hearing any, does anybody plan to abstain in voting here?

Then I believe that we have accepted these minutes.

UNIDENTIFIED MALE: Excuse me, Fred. I was fighting with my mute button. I have to abstain since I was not present.

FRED BAKER: Oh, okay. Well, we'll allow that this time. So, yeah, you can note that, Ozan.

So, at any rate, the next step, I believe, is that, Jeff, this is your part of the meeting.

JEFF OSBORN: Actually, I asked in advance—I hope he got the e-mail … Ozan is so much more on top of this. Rather than have him spoon-feed it to me, Ozan, would you mind covering this?

OZAN SAHIN: Thank you, Jeff. I'd be happy to. So the first thing on the 4B piece of the agenda is the 2021 ICANN Community Excellence Award selection panel appointment or appointments. This is one of the community recognition programs available at ICANN. The award is presented to an ICANN community member who excelled in the multi-stakeholder model and contributed to the model. What makes it unique is that, in this

community recognition program, there is a community selection panel, and the community selects who will get the award.

Last year, RSSAC appointed Abdulkarim Oloyede to represent RSSAC on the selection panel. Recently, ICANN Org asked the chairs of SOs and ACs to appoint up to two members to this panel for the 2021 award and gave a deadline of, I believe, the end of January.

So that's why we have this item on the agenda. We had two candidates: Abdulkarim Oloyede, who also served last year, and also Amir Qayyum. I believe the RSSAC Caucus Membership Committee are fine with both candidates as per the discussions they had in their December meeting. Please correct me if I'm wrong, Jeff, on this.

JEFF OSBORN: That's absolutely right.

OZAN SAHIN: So this is a vote item for today. We have two candidates. If there are any discussions on these candidates, I think this is the right moment now.

FRED BAKER: Okay. So the intention is to accept one or both?

OZAN SAHIN: Correct.

FRED BAKER: Okay. Now, Abdulkarim is right now chairing one of our work parties, [he kind of is the shepherd.] Amir has been active in ICANN activities on RSSAC's behalf for several years now.

Does anybody have any questions about either one of them?

LARS-JOHAN LIMAN: It's just a question for information. Isn't Amir Qayyum our representative on the ICANN NomCom?

FRED BAKER: Yes, I believe he is.

UNIDENTIFIED FEMALE: Yes.

LARS-JOHAN LIMAN: And Abdulkarim Oloyede is already our representative on this committee?

OZAN SAHIN: Hi, Liman. He served last year on the committee. So the committees are formed on an annual basis. He served on the 2020 committee, but the 2021 committee is being formed at the moment.

LARS-JOHAN LIMAN:	Ah, right. It's not a standing committee. It restarted every year, right?
OZAN SAHIN:	Correct. Yes.
LARS-JOHAN LIMAN:	Okay. Thank you.
FRED BAKER:	Okay. So …
LARS-JOHAN LIMAN:	If one of the options was to appoint both, why don't we?
FRED BAKER:	Well, yeah, that's kind of what I'm asking myself here—should I ask for the names individually? How should I go about that? So we have three options: to appoint Abdulkarim, to appoint Amir, and to appoint both. And I propose to appoint both. Is there any discussion on that?
JEFF OSBORN:	I think it's a—
LARS-JOHAN LIMAN:	I will second your proposal.

FRED BAKER: Okay. Somebody started to speak there, and Liman was speaking at the same time. Who was that?

JEFF OSBORN: That was Jeff. I was trying to second, but as in all things, Liman gets ahead of me.

FRED BAKER: Okay. So we have a second second. Does anybody have any objection to having the two guys representing us on this committee?

Is anybody abstaining from the ballot?

Based on that, I would assume that we have accepted both as our appointments to—what is it?—the ICANN Community Excellence Award selection panel.

Moving on to the ICANN Fellowship Program, Jeff, do you want to talk about that?

JEFF OSBORN: Again, I think Ozan is much more on top of this than I am, so I'm just going to defer to other experience.

OZAN SAHIN:	Thank you, Jeff and Fred. So, as you may know, the Fellowship Program is designed to increase participation from underdeveloped regions to ICANN work.

Another call for volunteers was on the RSSAC Caucus mailing list for two roles for the Fellowship Program: one for the Fellowship Program mentorship role and then the Fellowship Selection Committee membership role. We received some applications for each of these roles, so I prepared a Google spreadsheet for those applications, which was linked to today's agenda. For the Fellowship Program mentor role, we received four applications.

Naveed Bin Rais is still serving in this role. His appointment is through ICANN72, ending by ICANN71.

I also noted a few other data points which could be relevant for you while making a decision. I noted the dates each of the applicants joined the RSSAC Caucus and also any roles that they've been serving or some of the awards they received in the past.

So one thing to note is that, out of the four volunteers to serve as the Fellowship Program mentors from ICANN72 to 74—Naveed Bin Rais, Ramanou Biaou, Ignatius Nkrumah, and Afifa Abbas—this role includes travel support to attend ICANN public meetings if travel actually happens for these three meetings, starting with ICANN72, again, noting Naveed Bin Rais is the current representative on this mentorship committee. We received two applications, one from, again, Ignatius Nkrumah, and Amir Qayyum, who is the current representative to the

Fellowship Selection Committee, to serve in this role starting with ICANN72.

So I think now I'll just pause to see if there are any discussions around these volunteers, but again, the RSSAC Caucus Membership Committee, in its December meeting, decided to recommend RSSAC to proceed with the current representatives, as there are on restrictions on the terms for these representatives—so with Naveed and Amir. But if there's any discussions around these appointments, I'll pause now.

FRED BAKER: Okay. Now, I have a question about your spreadsheet. Column D: Appointment by RSSAC for the role. Are you saying that, yes, Naveed was appointed in the past and the other three were not?

OZAN SAHIN: Correct.

FRED BAKER: Okay.

OZAN SAHIN: Naveed was appointed twice, consecutively, from June 2019 through June 2020, and then from June 2020 through June 2021.

FRED BAKER: Okay. And now help me understand. What committee recommended these?

OZAN SAHIN: The RSSAC Caucus Membership Committee.

FRED BAKER: Okay. And the recommendation of the committee was to ask to task Naveed and Amir, respectively, with these.

OZAN SAHIN: Correct. Jeff, if you'd like to add anything to the decision taken by the— yeah.

JEFF OSBORN: Yes. We discussed that last year, went through the process of deciding who to recommend for it, and then that was presented last fall in this meeting. I recall there was not much discussion and we recommended them.

FRED BAKER: Okay. So let me, for completeness if nothing else, ask why you wanted to go with the incumbents rather than changing them.

JEFF OSBORN: That was an interesting discussion. [Alphonso,] David, and I were all there for it, as well as Ozan. Given that there was no term limit, we kind

of just sat there and effectively looked at each other and said, "There's somebody doing it who has been good at it, and there is no term limit. They seem to be better qualified than the other candidates. Why wouldn't we simply keep them on the same horse?" That literally, I think, was the wording used and was the thinking.

So, if there's some reason why we would want to vary these more frequently, that's direction I would take back to the membership committee, but at the time, it seemed like, because these are all voluntary jobs, there's value in continuity.

FRED BAKER: Okay.

LARS-JOHAN LIMAN: If I may.

FRED BAKER: Liman, go ahead.

LARS-JOHAN LIMAN: Thanks. There is value in what you say, Jeff. On the other hand, we do have term limits on some of our other positions. So I think we should be careful about what principles we want to use in these cases. As you all know, I'm a person who is in favor of rotation—and not quick rotation but slow rotation. So we may want to think about how we want to

proceed here; to have—I wouldn't say a "policy" because that's a very high-level word—a way of thinking for how we appoint these people.

And I can't help noting that we have a couple of people who indeed are doing a good job but have been working with these positions for a couple of years, and I really don't want to cast that in stone.

And I also note that we actually have a young woman in here who I happen to know somewhat. That's a very [inaudible] young lady who really is eager to take part and participate in the various works here. She's also from a part of the world where economy isn't a strong factor. She's from Bangladesh, I happen to know.

So I want to put a few weights on the other side of the scale, but I see the value in what you said, Jeff, as well. So I'm just putting seeds here for further thought. And maybe we should think about this for next year so that, when we face this situation next year, we have a bit of plan, a bit of thinking, for how we want to do and what we want to do. Thank you.

JEFF OSBORN: Liman, I've got to say that I agree. I think maybe I bring an American prejudice into this, where two terms is a norm. So because each of them had served one and was looking at a second, I think that's what made us feel like, "Why change horses arbitrarily?" I think, for a third term, what you're saying absolutely makes sense because then you're no longer just well in your lane but in a rut. And that is to be avoided. So I think that's good guidance. And we would bring it up [inaudible] in another one of these [inaudible].

LARS-JOHAN LIMAN: [Thank you].

JEFF OSBORN: Also [inaudible] previously of traditionally dis-included people, I think, is a valuable thing for us to keep an eye on.

LARS-JOHAN LIMAN: Thank you. I'm fully with you there. So, if we share these thoughts, I'm happy to go forward with the proposed persons.

JEFF OSBORN: Okay. Thank you.

FRED BAKER: Okay. Speaking for myself, I noticed Afifa's name here. She has been wanting to make some contribution, so I was interested in giving her that option. From my perspective, it would be interesting to go ahead and accept the recommendation but then include, in the minutes, a note that, next year, we'd like to rotate the membership or rotate the representation.

JEFF OSBORN: Ozan, have the candidates or volunteers been notified of any of this recommendation to date?

OZAN SAHIN: No, not yet, Jeff.

JEFF OSBORN: Well, okay. Fred, if what you're talking about is changing the recommendation, I think I can speak for all of the membership committee that we were not virulently opposed to anyone or wildly in favor of [inaudible]. I think, if it's not too late to change at this point, that might be a valuable thing to do. And perhaps Afifa should be offered that role when it starts up this summer.

FRED BAKER: Well, no, that wasn't what I was saying. What I was saying was that we could go ahead and accept the committee's suggestions, which is Naveed and Amir, respectively, but then put, in the minutes (or just note) that we had this discussion and thought that rotation might be a good thing to do in third year, which would be next year. And that's not a hard position, obviously.

JEFF OSBORN: Let me bring it up one more time—this was previously determined to be something that the Membership Committee should bother coming up with a recommendation on. I know I speak for the other two when I say this was not a strong recommendation with a whole lot of backing. It was sort of an "Oh, what the hell. The guy there might as well serve another term."

So, if our recommendation is met with, "Gee, why don't we try to rotate more frequently," I don't think anybody on the membership committee

would feel undercut or anything else to say, "Good thinking. Great idea. Let's go with that then."

FRED BAKER: Well, on the other hand—here, Liman, I'm quoting you, and if I'm misquoting you, I need to know that—Naveed and Amir have done this for one year, and the usual rotation for our activities is two terms. Actually, Naveed, you having … Ozan, you note that he has had two terms. This is his second term that we're talking about now, right?

OZAN SAHIN: Fred, actually, the Fellowship Program mentor role is for three ICANN meetings, so that's one year. So he has served two terms in this sense—two consecutive years. Whereas the Fellowship Selection Committee Program is for six public meetings—for two years. So in this sense, Amir has served only one term and will have served one term by June 2021.

FRED BAKER: But Naveed will have served two terms.

OZAN SAHIN: Correct.

JEFF OSBORN: I misspoke there, Fred. I must have confused the two-year terms in that. So that even more speaks to what we were saying—that two terms

seemed reasonable and three is too much. But I was thinking in two-year terms.

FRED BAKER: Well, in any event—once again, I'm not trying to contradict the committee at all; I'm discussing its recommendation—by that logic, having Amir continue for a second term in the Fellowship Selection Committee makes all kinds of sense. For the mentors, it might be interesting to rotate that set of people, effective—what's that?—June 2021.

JEFF OSBORN: Hearing what we've heard today from the whole group, I agree with your [inaudible]. I think that makes sense.

FRED BAKER: Okay. Then let's separate these into two discussions. For the Fellowship Program mentors, what I think I'd like to do is refer this back to the committee, ask them next month to bring us a recommendation, and we can discuss that at that time. For the Fellowship Selection Committee, then we can vote to accept this.

Does that work for everybody?

JEFF OSBORN: That works fine, Fred. Thanks. The membership committee can take that up in our next meeting.

FRED BAKER:	Okay. So, fine. Fellowship Program mentors we're referring back to the committee. The Fellowship Selection Committee candidates are Ignatius and Amir. Amir has done it and seems to have done it reasonably well. I have concerns no with them.
	If we're discussing rotation, then that basically says, "Let's not choose Amir. Let's go with Ignatius," if I'm pronouncing his name correctly.
LARS-JOHAN LIMAN:	I disagree. Sorry.
FRED BAKER:	Go ahead, Liman.
LARS-JOHAN LIMAN:	And Danielle has had his hand up for quite a while.
FRED BAKER:	I'm sorry.
LARS-JOHAN LIMAN:	So he's in line before me.
FRED BAKER:	Okay.

DANIEL MIGAULT: Please go, Lars.

FRED BAKER: For some reason, I don't see your hand, Daniel.

DANIEL MIGAULT: Oh, okay.

FRED BAKER: Oh, I'm expecting it to be blue. It's yellow. Okay. Whatever.

LARS-JOHAN LIMAN: It's running out of blood. I was just saying that it does make sense to me to appoint Amir for a second term because he has only been through one term—it's s a two-year term, but only term. Jeff and yourself, I think two terms is fine. We just happen to be looking at the different term lengths for the different positions.

FRED BAKER: Okay.

UNIDENTIFIED MALE: [Agreed].

FRED BAKER: Apologies. That's my error. So, Daniel, did you have a comment?

DANIEL MIGAULT: Yes. I had two comments. Since that was quite a while ago that I raised my hand, yeah, we probably should have a discussion not only based on … gender is one reason, but the involvement with RSSAC and these kinds of things. We need probably have some criterias and maybe make it clear which criterias we're going to be considering for the selection or future selection.

And another point I'd like to also raise is that it might be also helpful for these people to let them know if we're expecting something from them. It might be helpful to expect, actually, something from them.

FRED BAKER: Okay. Kaveh?

KAVEH RANJBAR: Thank you. I'm still driving, so sorry for the noise. I just wanted to make an additional suggestion. Maybe we take a note for the next revision of RSSAC 000. Maybe it's good to clarify furthermore what we expect from the membership committee and how we expect [to receive decisions] from them and also if there's any criteria we care about or not. But I think it's good to clarify it there because what I sense here is that, for us to make these decisions right now, even if you have the documentation, it might be too much detail for RSSAC. It's good if we have a clear recommendation in an expected format from the membership committee, and then we can make these decisions here. And of course,

the decision at the end lies with RSSAC. But I think, if we get a strong recommendation with these rationales or expect that from the membership committee, that would be the way to go for the future.

So my suggestion is to note that somewhere and then, with the next revision of 000, we reconsider that.

FRED BAKER: Okay. Now, as I'm starting at the screen, I realize I got the two committees backwards. The one to refer back to the Fellowship Committee, and they ask for another suggestion would be the Fellowship Selection Committee because Naveed has been in his position for two terms. Am I correct in that?

LARS-JOHAN LIMAN: No. It's the Program Mentors Committee because that's where Naveed has been doing two terms.

FRED BAKER: Yeah. Didn't I say that? I thought I did.

Okay, Barbara, you have your hand up.

BARBARA SCHLEKSER: Did I hear correctly that we're considering gender in membership or appointment?

FRED BAKER:	I don't believe they were formally considering gender, but Liman noted that Afifa is female.
BARBARA SCHLEKSER:	Okay. I don't know how she feels, but I would hope that my gender doesn't play ever into a role that I'm assigned for. I don't know that gender is a qualifier. [I think we're best serving] people by selecting people [not] based on gender. It should be based on skillset.
FRED BAKER:	Okay. Thank you. Liman, did you want to comment on that?
LARS-JOHAN LIMAN:	I would. Thank you, Barbara. I struggle with how to address this in the most appropriate way. I strive for balance. That's the thing I strive for. Balance has many directions and many vectors in all these circles. I am painfully aware that I am a member of the group, "white male middle-aged man from the western hemisphere." I really look for opportunities to involve more people with different backgrounds than my own. One is geographical location. One is age. One is gender. And there are various other versions, go[ing] down to really a political view [or] color. There are so many variants. I strive for diversity because I think that is a very important factor in all these international bodies that strive for cooperation and coordination. So please help me to find the best way to create this balance. I think I'll stop there.

FRED BAKER: Okay. Suzanne?

SUZANNE WOOLF: Thank you, Fred. I think this is not a great place to rehash the full discussion on diversity, which RSSAC has had and pretty much every other group I'm part of has had. But I'd like to point out that what we're talking about here is choosing among candidates we already decided have the requisite skillset and background. We're not talking about someone without the skills. We're talking about deciding among candidates we've agreed are qualified. Thanks.

FRED BAKER: Daniel?

DANIEL MIGAULT: The reason I just raised my hand is that I pronounced the word "gender," so I don't know if I was the reason Barbara raised this comment. But I think my position is similar to what Suzanne and Lars mentioned. Yeah, it's one of the parameters. I'm not saying we should go in one way or the other. That's something we may have a discussion on. Maybe not today.

FRED BAKER: Well, yeah, there's room for discussion there, but I don't know where to refer it to.

                        Barbara, your hand is still up.

BARBARA SCHLEKSER: Sorry. I'll lower it. I would just say that I think national diversity is very important because it gives different viewpoints or whatever. I just feel like we take that a little [too far.] But that's fine.

FRED BAKER: Okay. So, having heard this discussion, Jeff, could you take both of these selections back to the committee and make a recommendation next month?

JEFF OSBORN: Yes, I'll do that. Thanks.

FRED BAKER: Okay. Thank you. And in that, I don't view the committee as particularly interested in or rejecting anybody. This isn't a positive comment, nor is it a negative one. It's just: you guys go have that discussion, come back, and make a recommendation to the RSSAC.

JEFF OSBORN: We'll do that. Thanks.

FRED BAKER: Okay. Let's move on. So the next item is work items, and the first of those is a tool that I suggested, which was to have some kind of review of the existing statistics, and this in the direction of trying to identify a

statistic that tells us something that might be useful in predicting a failure. I have a problem here in that I tried to print off from Excel the graphic that I produced, and Excel failed on me. It had done so three times this morning. I'm a little bit frustrated.

At any rate, the question was originally raised by RSSAC and was also raised by SSAC and was commented on in the recent OCTO work paper on the root server system. It basically said it would be nice to have a way to detect the onset of a possible failure condition. The assumption is that this would somehow show up in statistics that we are already taking or could be added to the statistics that we're taking.

What I'll do is I'll put the Excel spreadsheet up, which bas basically all of the statistics that we have downloaded for quite some time. Then, among the traffic levels, traffic volumes, there's a graphic. I didn't do more than that because I ran into a limitation on Excel. And there's probably a better way to do that, anyway.

But that's where we're at. I've downloaded the statistics and put together a spreadsheet—downloaded statistics, by the way, from Duane. Duane in GitHub has a place where he loads them.

I'm not sure what to further say about that because we haven't done anything with this. So let me ask. We have not formally accepted this as a work item. I've kicked it out. Is it something that we want to take as a work item?

Daniel?

DANIEL MIGAULT: So I think I pointed [out] a comment regarding this work party. My main concern is, if we're doing some statistical work, do we have the expertise in statistics and measurements? I—

FRED BAKER: Well, to be perfectly honest, my first question is, do we have the statistics and, if so, what are we looking for?

DANIEL MIGAULT: Okay.

FRED BAKER: So I'm not sure that we do.

DANIEL MIGAULT: Yeah.

FRED BAKER: But I'm not sure what else to collect. So what I had done was sent a note to the caucus suggesting that perhaps somebody—a post doc or somebody in a similar position—could take this up as an exploratory item and make a suggestion as to how to approach it. I've gotten essentially not response to that. So that's where it stands.

Liman, your hand is up.

LARS-JOHAN LIMAN: Thank you. This is probably my bad memory playing games with me, but I can't remember seeing this before. But I probably have. But what's the driving force for this work? Who is asking for what, and why should we produce this?

FRED BAKER: Well, frankly, we are. In RSSAC031, I believe, we said that it would be nice to be able to detect the onset of a condition that would cause failure to the RSS. If there is such a condition, then we should be watching for it and should not be surprised by it. SSAC echoed the suggestion in, I think, SAC101 or something like, and OCTO recently mentioned it in their paper.

So my though, the reason I raised the question, is, if we're going to have that three sets of committees talking about it, maybe we somebody should go look at the statistics and see if there's anything to learn. That's the extent of my reasoning there.

LARS-JOHAN LIMAN: And that's good. That's quite fair. I'm just wary. When you start to express things that involve risk, you have to be very careful how you phrase your statements because people are not well-equipped to deal with the concept of mathematical risk.

FRED BAKER: Understood.

LARS-JOHAN LIMAN: Thanks.

FRED BAKER: Okay, Ken. You've had your hand up forever.

KEN RENARD: Thanks. Not to dive too much into the topic, but what might be important for the success or scoping of such a work party is defining what types of failures are possible. That could be an infinite number. Is that something that could be discussed independently, or are we looking for specific types of failures that would make such a work party manageable? Thanks.

FRED BAKER: Okay. Then, Russ, you had your hand up briefly.

RUSS MUNDY: Thank you, Fred. I just wanted to add that this really started as far as back as the first expansion of TLDs and the studies that went on there. One of the recommendations from the SSAC at that point that has been reiterated several times is what was referred to an early warnings system.

So just to add some further context to Liman's question, it is in response to the question that was asked or raised a long time ago with respect to expansion of the root zone and has shown up in various forms over time

about how and is it possible to determine if there is an impending failure of the RSS.

So I believe it's a quite longstanding but not well-formed question. It's more a broader concern. I think people are trying to get their head around, is there an answer to this concern? Thanks, Fred.

FRED BAKER: Okay. Daniel?

DANIEL MIGAULT: My opinion—it's very personal—is I think, while it's very interesting studies, to have an output with a certain quality, we have to put together some DNS folks, networking guys, I would say, and statistics people. I think we don't have the statistics people or the measurements people.

So I fear that we may end up in some of the discussions we found during the metrics, and I am not sure we can output a document of quality without statistics expertise. So I don't know if we could hire post-docs or students in that field, but I think, if we don't have it, it's hard to start.

FRED BAKER: Okay. I'm not sure I disagree. And let me add a personal recollection. This question is probably as old as ICANN. Within a few months after ICANN was created, I at that time was the Chair of the IETF. Mike Roberts, who at the time was the CEO of ICANN, sent me a note saying, "What does the IETF have as a recommendation? Is there a maximum

number of TLDs that we could have?" with the idea of, "Let's just throw the doors open, and if people want to have 25,000 TLDs in the root zone, fire away!"

My response was that that was actually not a technical question. It was a busines question. The TLDs that are in the root zone should be those that have a reasonable business plan and a set of people that are interested in putting names there. If that's not true, there's not a whole lot of point of having the name in the root zone or anywhere else.

The question actually came up twice or three times during that first year: "So what number should we recommend?" I recommended that they stay with seven. They already had seven. There was no reason to add names. Frankly, that remains my viewpoint. Most of the TLDs in the root zone, from my perspective, have no reasonable business plan. But speaking very strictly for myself, that's kind of my view.

Daniel, you've left your hand up. Liman has put his hand up. So, Daniel … Well, Liman, do you want to comment?

LARS-JOHAN LIMAN: Yes. I wrapped my head around this for a bit, so now I realize what we're talking about is expansion of the root zone rather than the root server system. So I think we might want to change the title of this from "Prediction of failure of the root server system" back to what it was. I'm with you, Fred, this has been around for ages. I was a member of the root scaling study team back in—when was that?—2009? 2010? So I think I object to the word "failure" in the title. Can we please find a better title for this?

FRED BAKER: Okay. I think we took the title from RSSAC031.

LARS-JOHAN LIMAN: Pardon. That wasn't necessarily a good idea.

FRED BAKER: Okay.

LARS-JOHAN LIMAN: I'm talking about optics here.

BRAD VERD: Can I be added to the queue?

FRED BAKER: Sure. Whose voice is that?

BRAD VERD: That was Brad.

FRED BAKER: Okay, Brad. Go ahead.

BRAD VERD: So I'm listening to this conversation and I'm trying to think of the right word to say here. I feel like we've, in this cycle, talked ourselves out of doing this.

Let me, Liman and Daniel and others, just share my point of view on it, which is you guys all run your own cloud for your own identity, and I assume that you guys know the health of that cloud—all your systems. You know the speeds and feeds. You know what's going on. You know the health of that system. So you know what normal looks like on your systems so that, when something weird happens—some anomaly, some malicious intent; anything—you have a feeling of how good you can handle it or how things are going to be before you hit a failure point.

So, in that assumption—let's just keep that in that frame of mind—put everything else aside. Put aside scaling, put aside whatever else. Think root server system. We do not have a view of the root server system. We don't have that. We all have our individual views of our individual clouds. We do not have one view of the root server system. But yet all our documents call out the root server system—early warning for the root server system and everything else.

So I kind of feel that we don't necessarily need a statistician. One would be helpful. We don't necessarily need experts all over the place. I feel that maybe we pull in one or two people on this type of stuff, but all we have—I'll be honest with you; I've given up on real-time elements of monitoring of the root system; I've talked about it for years with the RSOs, and it just doesn't seem like that's possible—is 002 data, which is behind us. It's delayed on purpose by a number of different people for different reasons, but it seems like we could take what we have, those

stats, and maybe whatever is collected in the metrics piece and start putting together a database of metrics, of stats, that we've collected. We can start to baseline what the root server system looks like. We have all these stats, but they're all on their own little islands. As Fred said, Duane has pulled all the stats into a GitHub, so it's in one location. But we don't trend that data. We don't look at it. It's more for research than it is for operations.

What I think needs to happen is we need to start building systems for operations so that we can start to answer these questions of, well, what's the health of this system? What does it look like? I think you have to do that before you ever get to answering that question, Liman, of, where is the root going to break based upon so many TLDs? If we aren't even looking at what the root looks like today, there's no way we're going to be answer that question.

So we've got to create what things look like today, what normalcy looks like, so that, when something odd happens, we can be like, "Hey, what happened there? Let's go look at that," even if it was just a few days ago. I think we'd be in a much better-off place than where we are today.

So, before we talk ourselves out of it, I hope people take that into account and think about that for a bit. Thanks.

FRED BAKER: Okay. Paul, you have your hand up.

PAUL VIXIE: Thank you, Fred. As of the last couple of years, we have an RFC that describes so-called hyperlocal root service, where you actually make a recursive solver a stealth server for the root, which then prevents it from ever transmitting any cache miss to a system where an RSO can then count it. There is no formal, no informal, no nothing. There's no way currently for us to know what traffic we are therefore not seeing, and that is one of two things that complicates the goal that Brad just laid out.

The other thing that complicates it is we don't have a model, so we don't know how to interpret the RSSAC002 data that we're collecting today. So, as an example, there are buggy recursive resolvers that will send us the same cache miss over and over again, even though we've given them an answer. There are maybe some that use domain name minimization so that our cache miss is only for the label that is in our zone and, therefore, we won't see the whole name in that case. In that case, we can send a negative answer saying that TLD does not exist. In that case, our model does not yet reflect how much negative caching there is and how many times a query name minimizer stupidly asks us the same question.

So I think I agree with Brad that we do have the ability to study some data right now. Delayed or not does not matter all that much.

But in terms of the old root scaling question, you want to know—I think ICANN should want to know this; it's a duty that they have as custodian of this resource—what will be the impact of, let's say, adding more top levels. We don't know. We don't even know what we don't know. But we certainly cannot study it until we do have a model.

Now, let me say that there's a woman, [Samaneh,] who was recently hired by the ICANN OCTO, who would be perfect for working on this kind of thing. We don't have to ask, "Well, gee, who from RSSAC is going to be able to study this?" No, I think ICANN is filling out a good cadre of people. What we need to do, what I think our role would be, is to direct the study and say, "These are the inputs to the question, 'Can we add another 2,000 (or 20,000 or whatever)? What will the impact be?'" But, in the very best case where we guess correctly on that matter and then we study it competently, we still won't have an answer because of hyperlocal.

I remember all the years that Brad was trying to get us to participate in real-time accounting, but the situation is much worse now than it was then.

So I guess what I'd like to know is, why are we studying this, who is directing the study, and how will the results be used? And is it pointless to consider any of that in a hyperlocal root world? Thank you.

FRED BAKER: Okay. Now, I have—Liman, I see that your hand is up—a couple of comments in the chat. Duane needs to get his word in edgewise, and Matt has a comment. So let me call them before I come to you, Liman. Duane, what did you have to say?

DUANE WESSELS: Thanks, Fred. My comment is about that, in the document that's on the screen, the second paragraph references the existing data that we have,

and it says that we have 047 metrics. They may help, but they may not be predictors of scaling problems. It's really hard for me to imagine any situation in which those metrics would not show evidence of scaling problems. I guess, if that's true, then we've probably failed in our goal of defining these 047 metrics for the root server system.

So I guess, if people really think that that statement is true, I would like to know more about in what ways could there be a scaling problem or some kind of failure that is not evidenced by the 047 metrics that we've defined. Thanks.

FRED BAKER: Okay. Matt?

MATT LARSON: Thanks, Fred. My comment in the chat basically says what I wanted to say, which is just to remind everyone that OCTO has developed—by "OCTO," I mean Paul Hoffman has done most of the work—a system monitoring the 047 metrics. I don't see any reason, as that approaches production quality, that we can't make that data available. It's public data, after all. That's the intent.

But as long as you called on me and as long as Duane made the comment that he did, I guess I feel—maybe this goes to Paul's comment about a model—like we have this data, but can we envision scenarios where particular scaling problems are revealed by the data that we know we're collecting? I feel like we don't have a sufficient grasp on the behavior of different parts of the system, and part of that is because it's

so complicated and there's so many different, for example, kinds of software in use in the root server system.

But I guess I feel like, until we can do some research and connect and go, "Okay. This particular scaling problem is revealed in the data we're collecting in this way," I'm sort of dubious, as much as it pains me to take an opposite position from Duane Wessels. Until we can show that we have the ability to predict scaling problems, I'm not convinced that we do.

FRED BAKER: Okay. Thank you. Speaking for myself, I would agree with you there. To me, this is just an open question. We don't have an answer until somebody looks at it and we agree that they came up with an answer.

And I'm not quite sure how to proceed at this point. This is obviously something for a fair amount of discussion. Could I suggest we take this to the list and simply discuss it on the list? I could call a meeting, but I'm not even sure I would make be the agenda of the meeting at this point. So I'll tell you what. I with ill post something to the list and we can discuss it there and see how to proceed. Does everybody buy that?

Hearing and seeing, in the chat, no response to that, I'm going to suggest that I send an e-mail to the list and we can go from there.

Ozan, what's the next item on the agenda?

Okay. Ken, can you talk about the local perspective?

KEN RENARD:

Yes, as soon as I can find my unmute button. So, of the two work parties going, the Local Perspective Work Party met in mid-December, trying to simplify things significantly. This may be reduced down to just saying, "Well, query all the root server identities and tell us your response time," which seems overly trivial. So hopefully we can come up with something more substantial than how to interpret those results—things like that. So a couple of us are going to meet on the 12th [as] the admin committee of the working group to get the things moving in the right direction. The next meeting of the work party is on the 25th of January. I invite everyone to join in on the call, take a look at the document, and make suggestions on the document.

The other work party, on the rogue operators, again, met in mid-December. We were taking a different approach to defining rogue operations—more of an objective approach; really what you can measure. To me, it seemed to miss the mark. We're not looking for RSSAC047-type measurements and boundaries and thresholds here. We're looking to define this towards another group that will interpret the results, the DRF (Designated Removal Function) or the SAPF, however those play out down the road. So we may be going back to the principle-based definitions or at least some kind of combination there of principle and objection. The next meeting for that group is on the 26th of January. Again, I invite anyone to look at the document as well as [join in on] our meeting.

And that's it for the work parties. Thanks.

EN

FRED BAKER: Do we have any questions or discussions for Ken then?

Failing that, we go on to various reports. I have forwarded to the RSSAC list. If you're following comments that are coming out on the ICANN site, you've seen discussion of the conditions under which ICANN restarts meetings. They have a document out for doing that, which I think is open for comment. But they haven't actually opened a public comment proceeding. That's really the only thing that I would mention from a chair report perspective: ICANN is asking itself that question.

Looking at the world around me and reading the newspaper and such, I suspect that's going to happen is—ICANN has already decided that the March meeting is going to be virtual—the next possible one would be one in the northern hemisphere in the summertime, and I suspect that that will involve a call to have people that attend get vaccinated. If you're not vaccinated, from a safety perspective, they're not going to let people come.

Besides that, I'm not sure I have anything to report. Brad, do you have anything in mind?

BRAD VERD: No, I think you got it. Thanks.

FRED BAKER: Okay. Let me ask, does anybody have any comment on that beyond what I've said?

DANIEL MIGAULT: But is there a document or something to look at?

FRED BAKER: Well, yeah. The ICANN Board put together a document which Ozan is showing us right now.

DANIEL MIGAULT: Okay.

FRED BAKER: So that includes the block schedule and that kind of thing.

Kaveh, you're actually next on the agenda, and you have a view on the Board. Would you like to comment on this?

KAVEH RANJBAR: Hi. First of all, thank you, Fred. I don't have any additional comments from the Board side. Nothing happened related to RSSAC, so nothing to report. On that document, I think everything that has to be said is there, and then you also mentioned it, Fred. So I think the formal decisions still have to come, but I think you identified the trend properly. The idea is that the Board is looking for maximum input mainly from the different SOs and ACs to form a decision.

One thing which I heard consistently, which might be useful—I think you all expect that—is the expectation, for future meetings, even in person, that the quality of remote participation—and everything included; it's not just the technicalities but also the facilities for participation—should

be on par between the virtual and physical. So for the foreseeable future, what the Board sees—this is what the Board hears a lot; what the expectation is—is it should be equal inclusion for the virtual. At least all the facilities should be there. That might be useful.

But that's it.

FRED BAKER: And I'll comment. Having been both in face-to-face meetings and virtual meetings for some time, it's hard to equate in-person conversations and virtual conversations simply because you can't go get a cup of coffee. There's a whole dimension to being in person that is difficult to accomplish in anything resembling a virtual thing. So saying that they have to be equivalent is setting a bar that may be impossible to reach.

KAVEH RANJBAR: Fully agreed, Fred. Let me just clarify a bit. I think that the expectation is, at least there are no barriers on the minimum requirement to participate. Of course, it doesn't suggest that people should join remotely, but there shouldn't be a systematic difference between at least the minimum facilities required to participate. So if there's a vote that's going to happen or if there's a meeting on the fly that's going to happen and there is not enough time for also providing it virtual, that's a no-go, definitely, for example. So for this type of stuff, at least at the bare minimum, it shouldn't exclude people just because they're virtual. The minimum facilities should be available to them equally. I think that's the gist of the request.

FRED BAKER: Okay. So Ozan notes in the chat that, on the 8th of December, at least in my time zone, I posted the document. I would be interested in people's comments on it. Either I can reflect them up to the Board or you can send it directly.

DANIEL MIGAULT: So we send the comment to you—I mean, the mailing list, or …

FRED BAKER: Why don't you send it to the RSSAC mailing list?

DANIEL MIGAULT: Okay. Yeah, sure.

FRED BAKER: Okay. Kaveh, I kind of semi-hijacked your section here. Do you have any other things you want to bring up.

KAVEH RANJBAR: No. As I've mentioned, nothing new to add. Thank you.

FRED BAKER: Okay. So let's move ahead. Liman, what do you have from the CSC?

LARS-JOHAN LIMAN: Very little, actually, this time. The CSC didn't have the telephone conference in December. There's virtually nothing on our desk for the moment, expect for the monthly report from the PTI, which was its normal, boring, 100% of all the SLAs met. So congratulations again. And that's about it. Thanks.

FRED BAKER: Okay. Daniel, comments from the RZERC?

DANIEL MIGAULT: From RZERC, I basically sent an e-mail in December. RZERC is sharing with the SSAC, the SSAC caucus and other organizations the two documents they intend to publish. One is the recommendation on signing root zone nameserver data, and the other one is an advisory on adding zone data protection in the root zone. So I sent those documents—these are PDF documents—and I expect feedback or any comments if you have them by January 15 because RZERC is meeting on January 19, I guess. I don't see anything alarming raised by those documents, so I am also taking that no comment is expected. But if you have any, there's still time to provide some. I'm happy to receive those personally or you can send it to the RSSAC mailing list because I'm not going to [hide you the main Drive where those documents][inaudible]. And I think that's all for RZERC.

FRED BAKER: Okay. Russ, comment from SSAC?

RUSS MUNDY: Nothing particular to report this month. SSAC was looking at some of the same set of issues. I expect we will be sending some kind of response on the meeting planning and possibly some of the other items that we're discussing today—one of them in particular being related to the early warning system, since so much of that ties to earlier SSAC recommendations. But that's it. Nothing of particular individual note this time. Thank you.

FRED BAKER: Okay. James? IANA functions operator.

JAMES MITCHELL: Hi. The only thing I have to report is that the KSK Ceremony 42 has been scheduled for the 11th of February, 2021. It's going to be held similar to the last ceremony in a restricted fashion—so only, again, three quarters of keys taking us through to Q4 2021. The attendance is, as I said, in person is restricted, but there'll be remote participation for those that are interested. That has all been announced on the KSK announcement list. That's it from me.

FRED BAKER: Okay. Thank you. Duane, do you have anything? Root zone maintainer.

DUANE WESSELS: No, not really. Just to say that, as James said, we're preparing the next set of keys for the key-singing ceremony. That's about it.

FRED BAKER:

Okay. GWG. Brad, do you have any comments, or do any of the three of you have comments from the GWG?

HIRO HOTTA:

Okay. Let me try. The GWG, during our last one month, was focused on agreeing on the framework of the RSO funding. Although it's not final, the direction so far is something like [PRS,] public root services, works as a conduit to convey the funding from ICANN to each RSO[—]the same amount of money [for every] RSO who wants funding. Funding is grant-based. It means RSO need not commit to anything on top of SLE, except a rough report to PRS about the usage of the fund. Maybe a term unit of the grant is three years. Besides the grant, there is fund for emergency. The budget for the funds is incorporated in ICANN's budget. I think these are the main things.

So, from now, GWG will [wrap] the results of the discussions so far together to fit them into a single proposal. The GWG will meet on Thursday, I think—yes, Thursday—next week. Brad and Liman, please help me if I misunderstand or I missed something. Thank you.

LARS-JOHAN LIMAN:

No, I think you've got it quite right. We should probably add that we've had a fairly long gap here over Christmas, so we haven't had a meeting in a couple of weeks' time. But I think Hiro nailed it very well. Thank you.

BRAD VERD: Yeah, I think Hiro got it. Building on that is that, on the finance piece, when it first came out, I think we reported here a month or two ago that they were looking at the grant-based model and people could spend it how they saw fit. After talking with the finance department and some legal, it was determined that ICANN, because of their 501(c)(3) status couldn't just give money away and not show where it's going. So there is some reporting on where the money is spent, but it's pretty high-level. That was it.

FRED BAKER: Okay, Brad. I couldn't understand most of what you just said. You appear to be far from your microphone.

BRAD VERD: Sorry. Can you hear me?

FRED BAKER: Just barely?

BRAD VERD: Is that better?

All right. Well, there's nothing [inaudible] material. I'll just leave it with Hiro and Liman.

FRED BAKER: Okay. Thank you. So with that, I think we've finished the agenda. I have a couple of e-mails to send. I'll be looking forward to people's responses.

DANIEL MIGAULT: Maybe a note on IAB?

FRED BAKER: Did I miss the IAB? Oh, yeah, I missed it. Daniel?

DANIEL MIGAULT: Okay. Regarding DNS, the IAB was discussing how private TLDs should be handled. So currently there is a proposal in DNSOP which is .zz, which is related to ISO. So the DNSOP working chairs are in discussion with ISO, and the IAB is in discussion with ICANN on how to oversight or manage the introduction of new TLDs when the authority is shared between ICANN and IETF. So that's the private TLD things. It's not finished yet.

Then the IAB also has an IANA program that is ongoing, but it has been started for the NTIA transition. Now they are reviving that program. Things should be announced shortly, maybe tomorrow during the next meeting. But so far, I haven't seen that on the agenda.

Another thing is, at the IETF DNSOP, there is some discussions on the requirements for having code points registered to the IANA registries associated to cryptographic algorithms. So that's something that might be concerning the root zone as well. And that's all from me.

FRED BAKER: Okay. Now, does anybody have anything else that they would like to bring up at this point?

So, failing that, then our next call will be on the 2nd of February. Are we going to run into Chinese New Year in any respect with that?

OZAN SAHIN: Hi, Fred. After a quick Google search, it shows on my computer that the Chinese New Year would start by the 12th of February, but, frankly, I haven't considered that yet.

FRED BAKER: Okay. Yeah, I was expecting it to be mid-February. Okay, if there are no obvious impacts, then let's assume that, for the moment, we aren't predicting any. So the next call will be on the second of February. We'll all get notes on that. So let's call this meeting adjourned.

[END OF TRANSCRIPTION]