BRAD BELANGER: Call to order. Again, we have attendance sheets. So please sign, circle

your name, all that good stuff, so we know you're here. If you're not on the list, please add your name and email to it. And Andrew will be the police on that. If you don't know, this is Andrew. So, let's quickly look --

UNKNOWN SPEAKER: -- check marks, cross offs, circles.

ANDREW MCCONACHIE: Yeah, circle your name. And if your name isn't there, then just write it

somewhere.

BRAD BELANGER: And no circling of other people that aren't here. Since we've got this

room and it's not a ton of people, let's do some introductions. Let's just

hand the mic around and say who you are and your affiliation.

ANDREW MCCONACHIE: Andrew McConachie, ICANN staff. Want to start here?

DUANE WESSELS: Duane Wessels from Verisign.

DALE: Dale from Oracle.

Note: The following is the output resulting from transcribing an audio file into a word/text document. Although the transcription is largely accurate, in some cases may be incomplete or inaccurate due to inaudible passages and grammatical corrections. It is posted as an aid to the original audio file, but should not be treated as an authoritative record.

DANIEL MIGAULT: Daniel Migault, Ericsson.

KEVIN WRIGHT: Kevin Wright, [inaudible].

ROBERT STORY: Robert Story, USC, ISI.

MAGNUS SANDBERG: Magnus Sandberg, Netnod.

AMIR QAYYUM: Amir Qayyum, CoReNeT.

ASHLEY HEINEMAN: Ashley Heineman, NTIA.

DARREN KARA: Darren Kara, ICANN.

JOAO DAMAS: Joao Damas, APNIC.

JOE ABLEY: Joe Abley, PIR.

Daniel Karrenberg, RIPE NCC. DANIEL KARRENBERG: HARISH CHOWDHARY: Harish Chowdhary, National Internet Exchange of India. ANAND RAJE: Anand Raje, India Internet Foundation. Petr Špaček, CZ.NIC PETR SPACEK: HIRO HOTTA: Hiro Hotta, JPRS. AKIRA KATO: Akira Kato, WIDE Project. KAZUNORI FUJIWARA: Kazunori Fujiwara, JPRS. DI MA: Di Ma, ZDNS. BENNO OVEREINDER: Benno Overeinder, NLnet Labs.

KARL REUSS: Karl Reuss, University of Maryland.

KEN RENARD: Ken Renard, U.S. Army Research Lab.

LARS-JOHAN LIMAN: Lars-Johan Liman, Netnod.

PAUL HOFFMAN: Paul Hoffman, ICANN.

RAY BELLIS: Ray Bellis, ISC.

JASON CASTONGUAY: Jason Castonguay, Verisign.

SHUMON HUQUE: Shumon Huque, Salesforce.

GEOFF HUSTON: And Geoff Huston, APNIC.

ANDREW MCCONACHIE: Thank you, sir.

BRAD BELANGER: There's one or two others that came in. Anybody who hasn't spoken at

the mic, just raise your hand so we can... Just name and affiliation.

MALLORY KNODEL: Thanks. Mallory Knodel, Article 19.

ANDREW MCCONACHIE: Okay, thanks.

BRAD BELANGER: You like this one better? We can give it a shot. Is that better? Oh, so

much better. Okay. Well, thank you. Welcome, all. Let's run through

the agenda. So we're going to talk through caucus engagement, just

talk about the meetings and what's going on. We'll talk about the

RSSAC Organizational Review; I'll give an update on that. I'll also share

what's going on on 37 and 38. We will talk through some recent

publications. Andrew will help me with that. And then we'll run

through the work parties that we have happening.

So those of you who are on the agenda for leading the work parties, I

will task you guys to give an update. We'll talk through some tools and

any other business, and then we'll adjourn. So with that, I will ask is

there any other business we want to add to the agenda at this point?

No. There's some seats back there with an obstructed view. No? We're

all good? Okay. All right. This shouldn't take very long.

So caucus engagement. So we do this every caucus meeting. We talk about -- so this was voted on by the caucus. When you guys want to meet, and as it stands today, we meet at every even-numbered IETF and then we meet at the AGM of ICANN; it was at the end of end of the year, the fall ICANN meeting. So I will open that up for discussion. If anybody has something they want to say, something they want to change, or what not. But that has been voted on by the caucus and that is what we are executing at your request. Any comments? No? Okay.

So again, this is our even-numbered meeting. Our next meeting will be either at Singapore or at the AGM, which I'm not sure where it is in the fall. Montreal. Thank you. So we will have both meetings there. And the reason being -- the thought process -- I will channel the caucus. The thought process at the time of that was there were different people that attend IETF that attend the ICANN meetings, so to make sure that we were open and transparent to everybody. That's why that was chosen. We have an update from the membership committee. I'm going to give it to Andrew, let him --

ANDREW MCCONACHIE:

Yeah, sure. Thanks. So this is a standing item on the agenda for every caucus meeting. It's normally done by Matt Weinberg, but he couldn't be here. So I have a bit of an update. And the only update is that there have been two new SOIs received in the last two weeks. And those are the only two SOIs since the last caucus meeting at the ICANN AGM. That's it. Back over to you, although it looks like the next agenda item is me as well.

And this is basically just a reminder that the RSSAC Caucus is now using a Google calendar. There was a link sent to the list I think maybe February, a couple weeks ago. I'm not quite sure, but the point is that there's a Google calendar now with all the meetings for the RSSAC Caucus in it. If you don't have the link, I guess I'll send it to the list again. But that is the authoritative place for where all the meetings are. Now over to you, Brad.

**BRAD BELANGER:** 

Just a couple additions. The caucus is over 106 people, 100+ people right now, not including the two we've just received. In addition, I'll add, since we're in the engagement section of the agenda, the way we've changed doing work parties -- and this is not completely done yet, I don't think so, but this is where we're heading, and that is all technical discussion for the work parties will happen on the caucus list. So try to increase and encourage engagement from everybody in the caucus.

However, there is still a work party mailing list created for all the official work party members, and that is for scheduling meetings. We can't schedule a work party meeting with the whole caucus. So we create a mailing list with the work party members. We use that for scheduling the meeting of the work parties, but all the discussions, the technical discussions, happen on the main caucus mailing list.

Again, that was feedback from what was going on. And that was a change that that we've recently made. And I think -- is that how we're practicing now? Or we're working towards that?

ANDREW MCCONACHIE:

No, that is how we're practicing.

BRAD BELANGER:

Great. Okay.

ANDREW MCCONACHIE:

There are no technical discussions going out on the [inaudible].

BRAD BELANGER:

Great. Okay. Any questions around any of that? It's quiet. Okay, organizational review. So we have in the final swings of the RSSAC Organizational Review. The review has been completed. The independent examiner provided their recommendations to the board. The board shared with us their feasibility on how to move forward with it. We gave our official feedback. We, being RSSAC, gave our official feedback to them on the recommendations. And that now sits with the OEC, which is the Office of Effectiveness --

ANDREW MCCONACHIE:

Organizational Effectiveness --

**BRAD BELANGER:** 

Organization Effectiveness Committee. I fail a test of acronyms. That is with them right now for final implementation. So right now, RSSAC is kind of in just a wait-and-see period until they get to the final implementation of those recommendations. And we've been notified by the board that they haven't forgotten about us. They've just been --

their list of priorities is long, and ours moved down a little bit. Any questions about the review? All right.

We're halfway through. Recent publications. This was a piece of work that was done in -- I'm sorry, did I? Oh, I'm sorry. Thirty seven. I feel like I eat, sleep, and breathe this. So 37, 38. So RSSAC 37 and 38 piece of advice given from RSSAC to the ICANN Board last June. There was some back and forth, and I think that we have all figured out a way forward right now.

So what's going on? Our RSSAC 37 and 38 was handed over to the BTC, the Board Technical Committee, which is a subcommittee of the ICANN Board, and they in turn worked with ICANN Org to come up with what they're calling a concept paper. A cooperation and governance model for the Root Server System, which essentially is a concept paper on how to implement 37. And so we, RSSAC, asked the board to not go off into a room by themselves when coming up with this. And we asked for as much input as possible so that we could make sure that wherever we were going to end up, it was on the same trajectory.

So they came back to us in in Kobe. We spent a lot of time with the BTC, shared our thoughts on the paper, made a bunch of suggested changes. There was really no real debate. They were all pretty receptive to all of it. But we will see what happens. The next step right now is the BTC has the concept paper that is how to implement 37. They will be voting on that at the next workshop, which is in the first week of May. So we'll see what the final output of that document is then. The current timeline as it goes, assuming that they approve that concept paper in the first week of May, it would then be shared with

RSSAC, obviously, and we would share it with the whole mailing list, asking for feedback.

It would then be shared with the board, obviously, the whole board. And the board, in theory, would do a resolution at the next ICANN meeting to move to the next step, which would be to open the concept paper up for -- they'd create a resolution, go through the governance process there to create a resolution to put this out for public comment. The concept paper. This is ICANN's interpretation of 37 on how to move forward. They're not reinterpreting it, they're just saying, "This is how we believe we move this forward." And it'll open up to the community for input, comments.

And then -- I don't know what the timeline is on it. It's like 45 or 60 days. And then in theory, by the time we reach the AGM, there could be another resolution basically to incorporate the public comments into a final copy, which would then come up with the implementation forward. So this is the beginning step. This is one of many steps as we will have going forward, but I think it's in the right trajectory right now.

So when that comes out after or during Marrakesh, if you have comments, please share. Any questions around 37 and where that stands right now? Oh, someone's coming on the mic.

PAUL HOFFMAN:

Paul Hoffman. So since we have, we in the caucus, have not seen the concept paper yet such like that, which is fine, can you talk a little bit about just how it would affect the caucus? That is, is the caucus mentioned? Is it pushed forward or anything like that?

**BRAD BELANGER:** 

Yeah. So I mentioned the concept paper, and that was it has not been officially released. RSSAC has seen it because we asked. We said when we submitted 37, "Please don't go away and come back with something entirely different. We want to be involved in this. Kind of like if you have questions, let's go back and forth and do this iterative process." Which was grateful that the board was receptive to that and actually did it. So I think that's a big sign of trust and a great path forward.

So the first time it would be open to everyone will be after the BTC votes on it in May. Regarding RSSAC and they RSSAC Caucus, it doesn't specifically say what needs to happen other than the evolution. The RSSAC and the RSSAC Caucus will evolve. And what that means is really up to debate right now and up to feedback on the public comment on what actually happens. I know that when 37 was written, we, the RSSAC, talked about what would happen to RSSAC in this new governance model. And the collective sense and feel was that the RSSAC would fall into what has identified in 37 as the SAPF, which is the Strategic Architecture and Policy Function.

Now, that doesn't mean that RSSAC would cease to exist at all. RSSAC could continue to exist and be an advisory committee to the ICANN Board. But that expertise that also provides advice to the ICANN Board would best fit in the SAPF function. But all of that right now is kind of up for -- we need to talk about it. We need to see what the community thinks and what people think. So that raises a question, Paul. Maybe the next question you want to ask is, "What do people think?"

PAUL HOFFMAN:

It's more about hypocrisies [inaudible].

BRAD BELANGER:

It was both. My response I just gave you is both. Are there any questions or opinions on where RSSAC or the RSSAC Caucus should end up? No? Okay. Now, I'm not skipping over seven. I will go to seven on recent publications.

ANDREW MCCONACHIE:

Sure. So this is a standing item on the agenda for every RSSAC Caucus meeting, recent publications. The RSSAC hasn't actually had any publications since the last caucus meeting. But I put this onboarding document here just to have something, and because it is something that's a resource for caucus members. The caucus onboarding document is just something that contains information for new caucus members. It's like how the mailing lists are used, how parties are formed, how documents get produced, things like that. And it's something that's meant really just for new caucus members.

But of course, if anyone here has any interest in general caucus information, contact me and I'll send you another link to the caucus onboarding document. The link was sent to the full caucus I think in February, so it should be in your inbox if you're interested in reading it. But if you can't find it, you want to read it, just let me know. And it looks like now we're going over to Lima. You want to add something? Okay.

**BRAD BELANGER:** 

So just give you guys a little bit of context on that is we had a bunch of caucus members join, and it occurred to us that there was no one place to send a new person. On top of that, we had some turnover within RSSAC where the different RSOs appointed new members for RSSAC and we had the same challenge there, kind of like how to -- this is RSSAC. This is the caucus. This is what happens. This is what goes on. So, internally, we came up with these with these documents. They're not officially published anywhere, but they're just kind of like internal reference documents to be used for newcomers. Any questions? All right.

Well, let's get into the meat of the work that is actually happening. We've got three work parties, and then the ongoing tools work. So we'll start with the service coverage of the Root Server System. I'm going to turn to our shepherd, who is Lars Liman, to give us a quick update. This one works better.

LARS-JOHAN LIMAN:

No, this one is fine. So for those who haven't seen me, I'm Lars-Johan Liman. I'm one of the RSSAC members and also the shepherd for this specific work party. This hasn't been going so well. The issue of the service covering started out as a concern regarding geographic coverage. But we don't want to phrase it in the terms of geography, but in terms of topology, rather. So we've rephrased that into service coverage. This came out of the survey, if I remember correctly, that it

was put to the caucus for trying to identify prioritized work items and identified as such prioritized work item.

So we put together a statement of work and started to look for participants and specifically a work party leader. We've had a few willing participants. We haven't seen anyone step up to actually lead the work for this work party. This is more or less the second attempt at addressing these issues. Then we have a geographic something new. Then there was the any cast one, right. But the intent is on the same issues, I would say. So there seems to be somewhat of an underlying unrest that this is something that needs to be addressed, but no one has at least such a specific interest in this that they're willing to drive the issue.

So I'm a bit at a loss what to do with this. In order for there to be progress, we must have someone who can take a lead on this work and drag it forward. And it was seen as priority item by the collective you here, but still not enough for someone to step up and actually put the backpack on the shoulders to pull this forward.

So my question is actually to you, what should we do with this? There are a couple of obvious options: either someone steps up to take on the leadership. Second one is we close down this item, say we've tried twice. We'll put it on the hold until someone steps up and really steps in and says, "I want to do this work. Can I please?" Comments? Thoughts?

**RAY BELLIS:** 

Ray Bellis, ISC. I'm a member of this work party. If I have not stepped forward to try to lead it. I think one of the issues we've got with this one is that certain amount of this scope has now been subsumed, I think, by the metrics work party. I mean, specifically, item one of the scope talks about what's the threshold of define adequate service? So I think this group might have more chance of success if it were to be perhaps put on ice until the metric stuff is done. And that's not that far away. But I don't think it's useful to have two different work parties both trying to decide what is an acceptable figure or metric for measuring acceptable service.

LARS-JOHAN LIMAN:

That certainly makes a lot of sense to me. So, either do it as you propose, to put it on hold. Or do you think there is a way to merge the two? This is a very open question. Possibly not, or rather probably not.

**RAY BELLIS:** 

I don't personally think so. I think they have different thrusts.

**BRAD BELANGER:** 

Yes, I would be really concerned with merging the two. I think a number of you have heard me say this, I don't want one to become an effort to try to boil the ocean, because then we end up right where we are now with no progress. I will add that this is a systemic problem though. This is now our third work party that essentially has the potential for being closed without a conclusion. So we've already done

it to two, because of a lack of thrust, as the word that used. So I'd love to hear feedback on how to change that result.

**RAY BELLIS:** 

I personally think that scope of this one as currently written is too wide. Part of my reasons for not standing forward to lead it is that I think it's so wide that it's almost doomed to failure as currently specified. So I would consider stepping forward as and when the scope is reduced somewhat so that it is not trying to, for itself, make those judgment calls about acceptable levels of performance and just get around to saying, "Well, once we know what the acceptable level is, how can we figure out whether a particular topographical area is covered by that or not?"

**BRAD BELANGER:** 

I like the idea of putting it on ice until the metrics work party is kind of handled. I will add that the scopes that are written in the statement of works that are written can be changed by everybody right here. So if the scope of a statement of work or a work party has changed, the only thing we ask is that you explain why. "We changed it for X, Y and Z. We felt that it was too big and we wanted to narrow down on these five things. And we've left this out to be addressed at a later time." But the intent is not to be set in concrete. The intent is to spur thought, and those are the questions that were asked and put together in a statement of work. And if the statement of work is too broad, then we should change it. Real simple.

PAUL HOFFMAN:

Paul Hoffman. So two completely separate things. One is, having been the lead in a couple work parties, I just want to be clear that work party leads are expected also to, if not writing the document, pulling together enough people to write. And that's actually really difficult to get people to do that. I have a technical writing background, so it's not as bad for me. But I think that that's one of the things holding people back.

Having said that, there is a lot of staff support. They won't write it, but copy editing and things like that is well supported from ICANN, and we absolutely would do that for it. The second thing is, I'm a little bit concerned about what was just said about the metrics work party, because at the last metrics work party meeting, I think it was you, Brad, who said, "And we will get some of that stuff from this service work party." Oh, okay, great. So we're not going to hit a deadlock there.

**BRAD BELANGER:** 

Somebody, I think, last time said that we should merge these. And I said the same thing I said here, was like, "Absolutely not. I feel like that would be boiling the ocean."

**PAUL HOFFMAN:** 

Yeah. And then I agree with Ray that once some of those numbers are known, then doing measurements to those numbers, certainly more attractable.

**BRAD BELANGER:** 

Yeah, that's common sense.

PAUL HOFFMAN:

Right. Okay, thanks.

LARS-JOHAN LIMAN:

That makes a lot of sense to me. So unless someone protests vividly, I'm going to propose to RSSAC to more or less table this for the time being until these have results from the metrics work party. That's, I think, the American version of table. I am aware that there is a difference.

**BRAD BELANGER:** 

All right. Any other questions? Thank you, Liman. All right. Moving on. Studying modern resolver behaviors. Paul, if you could come back to the mic and give us a quick run-down on where we are there?

PAUL HOFFMAN:

Sure. So this work party has been going for a little bit and we're having a meeting tomorrow morning at 7:45, Verity Room. Where is it? I'm sorry? Eighth floor, but it's called the Verity Room? Okay, So the purpose of this work party -- not reading directly off the SOW, but the bigger picture is the root server operators want to know how do resolvers work with them. What kind of things can we learn about resolvers? So there's two parts to the work party, only one of which is active. And that's basically -- again, as the chair, it seems like I'm doing most of the work. I've gotten very few people actually getting involved.

And what you'll hear tomorrow in more detail is that I've set up a test bed that allows us to do, not live with really resolvers, but in a test environment, to look at how resolvers, for example, do priming with the root servers and how they do re-priming. So this is a test bed that anyone can set up themselves. Hopefully what we're getting is reproducible results. That is that one person can run them, another person can run them a different way, and we can see what's going on.

This is a test bed that one would be able to set up on their own work station. So some of the other questions we will hit is, for example, how does a resolver acts differently with the root servers if the resolver is or is not set up to do validation? Or with some of the common resolver software? What if you mess up your configuration of it? And that's sort of an interesting question, as we've just seen after the KSK rollover, is it's very clear that some resolvers go crazy at us in a certain way. And it would be lovely if we could find that out by using such a test bed and maybe doing Chaos Monkey on the configurations for things like that.

So I'll describe that more tomorrow. So that's part one, which is doing something in a test bed. Part two, which so far has gotten no activity, is doing essentially the same kind of thing that we've been hearing for years from Jeff Houston, which is testing the actual million or so resolvers out in the world, sending them tests, and then looking at how they react. So Jeff's been doing a lot of this. He publishes his results from APNIC. But the idea was that if we could do this, again, to get reproducible results, say, using a very different data set than Jeff did.

So far, there's been no activity on that in the working group other than Jeff and Joe publishing how they do things. Maybe that will spin up,

maybe not. That's not clear. So we'll talk about both of those tomorrow morning. Any questions on that for now? Okay. And I will post to the mailing list as we have steps that people can try themselves and such like that. Again, the discussion of work parties really happens on the main mailing list, not on the work party mailing list. So hopefully that'll spur some interest. Thanks.

BRAD BELANGER:

Thank you, Paul. All right, the Root Server System metrics. I know I'm listed on the agenda here, but we have one of the co-chairs of the work party. So I'm going to turn that over to Duane.

**DUANE WESSELS:** 

Thanks. So as Brad said, I'm a co-chair of this work party along with Russ Mundy. I don't believe Russ is here this week; I'm not sure. So this work party has been in existence, I don't know, maybe only three weeks, four weeks, something like that. It's born out of RSSAC 037, which one of its components was a performance and monitoring function. And so this work party is sort of designed to provide input into what that function would be doing in terms of metrics for the Root Server System as a whole and for metrics to individual root operators.

Where we're at right now is the work party has met once. It wasn't a super substantive meeting as far as I remember. We did talk about calls for chairs and that sort of thing. We are having another meeting actually on Wednesday morning in the Verity room also on the eighth floor, so you'd be welcome to participate in that. It's not too late to join this work party. If you think you might want to join, I would suggest

maybe get in touch with Andrew; he can add you to the list. The statement work really has three components. Number one is to come up with these metrics for the system as a whole. Number two is to come up with metrics for individual operators, and number three addresses something in the RSSAC's 037 document, which is a way of describing the capacity of root server operator in terms of bandwidth packets per second and queries per second.

So those are the three main tasks. We have asked the work party members to fill out a little spreadsheet, which they sort of answer their interpretation of the scope of work to get a sense if everyone's on the same page or not. We've also asked some other groups like the root server operators themselves what sort of metrics, what sort of things that they currently alert on and use as metrics. And I believe we're in the process of asking the same question to SSAC, although I don't believe that has gone out yet, but we're close.

So by the meeting on Wednesday, we hope to have the start of a list of metrics and talk more about that. And our big milestone is to have something ready for RSSAC to look at during its workshop in May. April. Sorry. Mid-April. Yeah.

**BRAD BELANGER:** 

I've been carrying the flag on this one, so I'll say it again. I'll say it in every room I'm in. I think this body of work is really, really important. Not that any of the other ones aren't, but this is, to me, the technical accountability for the Root Server System and the root server operators. While 37 and 38 give you the governance model, I feel like this output

here will define what good looks like. So please get engaged. With that

-- no other questions, right?

With that, moving on to --

**UNKNOWN SPEAKER:** 

We have a question. Any other questions about any other business?

**BRAD BELANGER:** 

No. Any other questions about the metrics work party? Okay. Now we're on our last agenda item, before any other business, which is tools. So, Andrew.

ANDREW MCCONACHIE:

Sure. Thanks. So this is Wes Hardaker's -- normally he's the one who speaks on this, but he couldn't be here today, so he sent me a brief update. There's really not much of an update. I'll just say that the RSSAC Caucus tools repository has five repositories in it. This is something that the RSSAC Caucus just uses as kind of a collection of tools that are developed throughout the work of the RSSAC Caucus. It's just to get up repository. If any person or project would like to contribute something to the RSSAC Caucus tools repository, please contact Wes Hardaker. Thanks.

**BRAD BELANGER:** 

All right now, any other business?

UNKNOWN SPEAKER: Just a simple question on -- so for basically a plain text agenda that goes

out in email, why's it in a PDF file and not just easy-to-use plain text?

Could that perhaps be changed for the future?

BRAD BELANGER: Sure. I'll bring it up with the admin committee.

UNKNOWN SPEAKER: Do you want a long usability list of what's wrong with PDF? The short

one is basically it takes you out of your normal operating environment to go into a separate application that has its own rules of behavior

where things work differently. So it's kind of a UIUX nightmare in

general, especially for something that doesn't have any need to be using

it.

BRAD BELANGER: Right. Any other business?

ANDREW MCCONACHIE: Just a quick reminder to please circle your name on this list if you

haven't already done so.

BRAD BELANGER: All right. Seeing or hearing nothing further, I will adjourn the meeting.

Thank you.

Yeah, I'll be staying at this --**UNKNOWN SPEAKER:** I'll hold you to that. UNKNOWN SPEAKER: ANDREW MCCONACHIE: Oh, you want to join the metrics work party? ANAND RAJE: Yeah, sure. What's your name? ANDREW MCCONACHIE: ANAND RAJE: Anand Raje. Oh yeah, sure. Are you -- there we go. Okay cool, sure. Let me put ANDREW MCCONACHIE:

metrics three so I don't forget it.

[END OF TRANSCRIPTION]