GEOFF HUSTON: Kim is absent at this point, Dan. Kick us off and let's get going.

DANIEL GLUCK: Hi, everyone. Let's do it. So welcome to the RZERC Meeting. This is, I believe, RZERC meeting #51. It is the 15th of October. This call is recorded and subject to the ICANN Expected Standards of Behavior and Community Anti-Harassment Policy. With that, Geoff, let me open up the sharing map. I'm not sharing the agenda. Let me get that open. I guess the first thing we have is our call to order and then our roll call. So, just want to get us started, Geoff.

GEOFF HUSTON: Well, I'm taking from the chat list. Every member is here with the exception of Carlos from the ASO. You know that. And what else have we got on the agenda?

DANIEL GLUCK: Right.

GEOFF HUSTON: Okay, the RZERC response, and you can put that up on the screen, that would be good. I'd like to discuss this response and then secondly, get an indication from each of the members of RZERC what you want to do next. Because this is now the completion of the work we started in April to consult the three major stakeholders here. The IANA/PTI or PTO is it? The Root Zone Manager and RSSAC. And we have now got in all three

responses. The first one that is kind of the latest is the RSSAC response. Liman, do you have any more data to add to the letter from Jeff Osborne?

LARS-JOHAN LIMAN: Thanks. I'm not sure I do, actually. This is, as you say, we talked about this back and forth, and it's a bit of a slightly mixed feeling among the root server operators. But we kind of landed in a general well. Yeah. If people really want this, we're not against it, but we don't really see the full benefits of it.

So, it's an abstention from voting, if you want. We landed in these four bullets that took us to the conclusion that, yes, if the rest of the community wants to sign, have the root zone signed, the root server operators will be quite capable to handle that. And we see no reason to strongly disagree with this proposal. We see no strong reason to support the proposal. So, it's a meh in the middle.

GEOFF HUSTON: Right. Thank you. Any other responses to the RSSAC response?

WILLEM TOOROP: Well, yeah. So, I also sent an email. So, with respect to the first bullet point and the second sentence, resolvers that do validate DNSSEC do not rely on the mapping between server name and IP address for DNS service for DNS reliability. I think that sort of depends what is meant by DNS reliability.

So, if this sentence is saying DNSSEC validating resolvers will validate DNSSEC signed data anyway, and therefore it's reliable, then that is, of course, true. But they are still, if they are not revalidating or they don't do local route, susceptible to redirection attack. And therefore, the non-DNSSEC data, there's still some room for improvement there.

GEOFF HUSTON: Right. And by redirection, I mean, I take it you mean, if you take the priming query and take the user all the way over to somewhere else, it's impossible for the client to tell. That's what you mean by redirection. Yes?

WILLEM TOOROP: Yes, that's what I meant.

GEOFF HUSTON: Okay.

WILLEM TOOROP: Thank you.

GEOFF HUSTON: Lars-Johan?

LARS-JOHAN LIMAN: Thank you. I agree with your technical sentiment. Definitely, you're quite right there. But I think what was put into this sentence is that

resolvers that don't validate DNSSEC don't rely on the mapping between a name. The name is kind of irrelevant in the lookup process. It's the IP address that you want to go for. And what DNSSEC does is to tie a name to an IP address, this part of the process. And in my view, the resolvers that don't validate, and when you are talking to a root name server at that point, and you don't validate the mapping, the name doesn't matter.

The only thing that matters is the IP address. And Willem is quite right that you cannot know that you have the correct IP addresses. You can be misled. You can be redirected. But DNSSEC or not is not going to help you at that point because you're not validating. So, therefore, in that situation, DNSSEC doesn't help you because you're not validating anything. So, that's the point we want to drive here, if I remember correctly. Thanks.

WILLEM TOOROP: Yes. Shall I raise my hand?

GEOFF HUSTON: Oh, no. Carry on. I just raised my hand to say I had a response as well. But please continue.

WILLEM TOOROP: Yes. So, there are some resolvers that actually do look up root server.net addresses, which is not resolver as part of the priming process. So, they would benefit from signed root server.net data. And

also unbound configure to revalidate would look up the root server addresses. And its possibly more resolvers in the future will revalidate.

GEOFF HUSTON: So I was going to make the comment here that if I'm subject to a redirection attack, presumably I'm placed in a new DNS environment where literally nothing is signed. And therefore, my knowledge of the root zone KSK doesn't matter because a priori, I have no knowledge of when it should be applied because I've been led astray right at the root point. And in that case, I will be living in a false universe and unable to tell that fact.

That is my understanding of what you mean by a redirection attack in its full glory. And the implication of that is that once you get redirected in such a manner, you cannot expect DNSSEC to flag that issue. But I'll now run through the queues. So, who was next? Lars-Johan.

LARS-JOHAN LIMAN: Yes, thank you. Just in response to Bill and that. Yes, you mentioned a few cases where resolvers actually do validate. And we do agree that in those cases, it will be valuable. But the bullet starts with resolvers that don't validate so that it only pertains to resolvers that don't validate. For validating resolvers, that bullet is entirely moot. Thanks.

GEOFF HUSTON: Thank you. Duane.

DUANE WESSELS: Thanks, Geoff. So, I think your description of a redirection attack is maybe one type of attack, but I think there's another which is still relevant, which is more of what you might consider like a privacy attack. So, your queries can be redirected, but still given correct answers and still validate and everything. It's just that the redirectee or the redirector, whoever that is, knows your lookups now and can see them. And maybe they can do really clever things like most of the responses are correct and valid, but every now and then one special response is given a wrong answer somehow. So, I consider it more of a privacy attack really than like an attack on the data integrity. Okay.

GEOFF HUSTON: Any other comments on this? Lars-Johan.

LARS-JOHAN LIMAN: Thank you, Duane. But I do agree with your description of that type of attack, but DNSSEC is not going to help you there much, is it? Because DNSSEC isn't there to protect your integrity. It's there to protect the data validity of the response, not to, in any way, hide your queries.

So, I think the only thing with integrity is that in the normal case that your queries would end up with your roots or operators, which may or may not be more trusted than the false roots that you might be led astray to use. So, again, DNSSEC is not really the tool for preventing against that is my gut feeling, but that's Liman speaking and not RSSAC. Thanks.

GEOFF HUSTON: Peter.

PETER KOCH: Thanks, Geoff. I have a question about the fourth bullet item, where it says it is important for the stability of the DNS that root servers.net, signed or unsigned, remain operational in perpetuity. Does that suggest that any change of the namespace or the names of the servers would be impossible?

I'm thinking in the direction of a disadvantage of the current situation is that the primary response cannot really be self-contained, like containing the whole chain, because net, of course, isn't served and so on and so forth. Which I guess was discussed, could be mitigated by changing the names and so on and so forth. But does this fourth bullet item mean to state that root servers.net can't go away or is it meant to mean that even if it is no longer used, it has to be there and point to something? Can somebody clarify? Anybody clarify that?

GEOFF HUSTON: Lars-Johan?

LARS-JOHAN LIMAN: Thank you. The meaning is that we don't know if we will go to a future where we want to change the names of the root servers themselves in order to move them to a different zone and change the signing or not signing of that. But regardless of whether we do that or don't do that, so they remain in root servers.net, root servers.net will probably have to operate for a very long time going forward, just like most of the old IP

addresses for root servers still respond to or at least register incoming queries. Because we do see a lot of old resolvers out there with old priming data in them and we want them to get back on the track. We want them to be able to continue to work.

And for that reason, we see that or we believe that root servers.net will have to keep operating, even though it's not officially in use anymore, should the names be changed. Of course, if the names are not changed, then of course it will have to continue to have its current status, which is still we need to operate it. So, that's my explanation for that. Thanks.

PETER KOCH: Thank you, Liman.

GEOFF HUSTON: Yes, I also had my hand up and I think this issue was also referred by the IANA in its response to us, where it noted that the deliberate split to the root server name schemes where the names of the root servers are inside .net may add operational complexity and also made the observation. And Kim, you can correct me if I'm mischaracterizing this response, that this does not preclude any subsequent name change, but it does mean that the signing issues would carry through to the study of any potential name change were it to go forward. Have I got that right, Kim? I did read your response an hour or so ago, just to refresh myself.

KIM DAVIES: It didn't sound wrong. It's been a few months since I wrote it. I think one of the things I've mentioned in the past, whether it was in the letter

or a call, I don't recall, but if the naming schema of the root servers is under re-evaluation, this work might be moot when that happens. And so, is there a benefit to doing that exploration on the other issue, assuming that implementing this introduces new complexity and challenges and costs? If it's going to be thrown away, it might not be valuable.

GEOFF HUSTON: Sorry, Lars. You go. I'll raise my hand. I'll do the right thing.

LARS-JOHAN LIMAN: Just even here quickly. I just want to reinforce that that our sack agrees with that there's no tie between signing the current route service of net and exploring new names or not exploring names that there's no, no prevention and no game so we can do one, we can do the other or we can do both and they were they are disjunct from each other, so to speak. They are not connected. Thanks.

GEOFF HUSTON: The point that I was going to make is it actually aligns with your earlier point, Lars-Johan, that once signed, dependent parties that validate that will hang around forever. It'll remain signed for quite some time, even if the naming system changes, because there will be old primary responses circling around that effectively have these names. And there may well be behaviours that go, I need to validate this because my expectation is that it is signed. So I'm not sure this disappearance

would be sudden or even in a small lifetime. It might need to hang around as a function for many, many years.

Any other comments on this RSSAC response? Okay. I am happy to write a response to effectively agree that, thank you for their observations. And we find agreement with these that they are important points. And I don't think we've surfaced anything that we have a substantive point of difference between those reasons for those conclusions. And I think the observation that limited benefit and small additional risks was covered in the original study.

And I think that is still true. And I think to that extent, we can say, well, thank you. And we're then left with, I think, a bigger issue, which I'd now like to turn to. We have now completed what we promised to ourselves we were going to do in April, which was take a proposal to actually let sign this to IANA, the Root Zone Manager and RSSAC.

The RSSAC response has been, as you see here, look, if the community want it, you're not going to put a bullet in the DNS. It's not going to kill it. And we can adapt. The benefits are slight. The risks are also there. The quantum of additional risk. The IANA response was, I think, similar insofar as it was an enthusiastic, yes, let's do it. It's important. We can cope. It's not an issue. There may be some small operational matters to resolve. But largely, this is a task for the Root Zone Manager in the current naming scheme, and we don't see this.

There is an ancillary comment that Kim included from OCTO, which while we didn't formally solicit, I think is worth considering. And the quote was, it came to the conclusion that signing Root Service.net

would have almost no noticeable impact. So, OCTO questions why this is being requested at this time. Fair enough.

And lastly, we have a response from the Root Zone Manager. VeriSign remains in favor of signing the Root Service.net zone as we originally proposed in May 2020. Thank you, Daniel. Yeah, that's one there. 23rd of April.

So I suppose the question to the group, and I really have this is I'm completely guided by you folk, what do you want to do? Options. Drop it. Option: proceed with a letter to ICANN saying we have consulted with the others; here's what we've found. C: Go down a Public Comment period and open up a proposal to the Board for Public Comment through the ICANN Public Comment process and then go to the Board.

I don't think I have an option D, but someone else might. That's kind of where we're sitting at the moment. And I would be extremely interested in everybody's views. So, I will wander down the list unless someone has their hand up and ask. Daniel, you've got your hand up.

DANIEL GLUCK: Yeah, so I spoke with Danielle. They used to be on the support staff for the RZERC on, I guess, what would she like to, like, how would she, how would she proceed with this? And what she recommended would be something like a Strawman. So, the RZERC presenting a Strawman and then a new report. This new report, which is a follow on saying that, going from what Willem discussed in the NLNets report, that one, we take that and the RZERC can then, I guess, justify their recommendation.

And then after that, the RZERC could then proceed with a Public Comment before presenting it to the Board.

GEOFF HUSTON: Right. Which is, I suppose, largely encompassed in what I said of Public Comment and then the Board.

DANIEL GLUCK: Right.

GEOFF HUSTON: But we would flesh out what we're proposing in terms of what you say is suggested as a Strawman. The proposal to sign it and the references as to why.

DANIEL GLUCK: Yes.

GEOFF HUSTON: Okay, thank you. My list here is not alphabetical. And, oh, it is too. It's alphabetical by first name. So, I'm going to go in reverse. And I'll start at Willem. What would you like to see us do, Willem?

WILLEM TOOROP: Yeah, that's a good question. But what Dan just proposed sounds reasonable to me. Okay. A Public Comment and then the Board.

GEOFF HUSTON: Thank you, Willem. Wes?

WES HARDAKER: Well, as a liaison from the Board, I do not come here to participate and come here to observe, to transcribe information back and forth. So, I will not come in today. Thanks.

GEOFF HUSTON: Very proper. Thank you. Peter?

PETER KOCH: I don't think there's a specific ccTLD or ccNSO position on this particular question, except that some might be more conservative operators and some might lean into the other direction. What I've heard is that a couple of entities have said, well, yeah, we don't really see the need. But if everybody else, well, not everybody, but if a majority wants it, we won't get in the way. And we got that a couple of times. And then we seem to have a few but convinced supporters.

And translating that into a question for a Public Comment, I think, is really difficult. We can try. But what exactly is the question? What would we want from people without making that or having that Public Comment degenerate into a whatever hidden voting scheme or beauty contest or something?

One discussion we had was around the so and so many percent risk is mitigated or is increased or decreased or something. And the question is always, okay, do we come with a threshold before we do the measurements or do we do measurements and then the threshold? That's already passed. But I'm really stuck. Doing something in Public Comment would prolong this. I have no idea what the exact question would be.

I would tend to, well, we can't pause it, but I tend to say that, well, we don't have consensus moving forward. But I'm interested in other voices as well. Thank you.

GEOFF HUSTON: Thanks, Peter. Again, still moving backwards. Lars-Johan.

LARS-JOHAN LIMAN: Thank you. I am in a bit of the same position as Wes, because I'm also just a liaison here. That said, I actually do have an opinion. And I think it comes to that. My first proposal would be to just drop the proposal and make that an official decision by RZERC and motivate it in the minutes so that people can follow the reasoning and saying that. And the reason for having that position is that I don't see any strong driving force for doing this. And then I would rather preserve status quo.

My second alternative would be to go for the public commenting, but I kind of concur with Peter that I don't really know what to ask of people to comment on. So, that's my stance. Thank you.

GEOFF HUSTON: Thank you. I've been good at going in reverse order here so far. Oh, yes, right. Kim, you're next on the list.

KIM DAVIES: I think procedurally Peter makes a very good point. Like just having a general public consultation without any sense of what you're trying to achieve by it is probably a recipe for getting answers that are not that helpful. But other than that, if RZERC felt it had a proposal that it was confident in but wanted to vet in some way, then I think Public Comment proceeding is the right way to do it.

I think in terms of the substance of signing Reservist.net, I mean, I think in our letter, I said that IANA has no opinion. So, I think officially that is true.

On a personal level, I kind of echo what Liman said, which is I'd probably summarize the position of folks here as apathy. Like there's no one's banging the drum that this is really essential or needed. And since we're all kind of hemming and hawing about its benefits, it doesn't feel to me it's been convincingly, the case has been convincingly made within RZERC. So, to me, I wouldn't lose any sleep if the proposal was dropped.

GEOFF HUSTON: Thank you. Kalina.

KALINA OSTALSKA: Hi, this is Kalina Ostalska. So, Public Comment sounds reasonable, because as Daniel, I think it was Daniel, suggested we would have to develop the Strawman, which would help us understand what our questions really are. So, I would probably spend the time on the Strawman. And if we have trouble developing the Strawman, this is when we can drop it, before going into Public Comment.

GEOFF HUSTON: Thank you. Duane.

DUANE WESSELS: Thanks, Geoff. I think a lot of what I would say has already been said, maybe, like Peter and others, when you talked about Public Comment, I initially kind of struggled with what exactly would we be asking for comment on. So, maybe that's future work for RZERC.

It seems to me that, on the surface, it's a pretty simple question, do this or don't do this. There's not a lot of subtlety or complexity into the details of, signing the zone. It's either sign it or don't sign it. So, I would support a Public Comment period, for sure, if that's where we want to go. I'm also hearing folks saying drop it and I understand the reasons for those opinions. So, yeah, thanks.

GEOFF HUSTON: Thank you. You place me as the chair in, I suppose, a difficult position in some ways, and I will refrain from voicing an opinion. I think it's best to, at this stage as chair, I try and represent the group, because in theory,

you're all here as liaisons/representatives from the various sort of parties with an interest in this.

And I'm certainly hearing a Public Comment would be a good way to checkpoint, I suppose, “the feedback of what to the community feel true”. But at the same time, to paraphrase Peter originally, what would it actually do? Because in some ways, this is a highly technical question. And realistically, it's hard to actually understand if a Public Comment would elicit the kind of thoughtful analysis that might provide better impetus to this. However, on the balance, I've heard Lars preferring to just drop it.

Kim, if I've got you right, it's, look, it's more apathetic. It's kind of, there's no driving factor. Dropping it would not be harmful either. We looked at it. We couldn't find compelling reasons.

From Willem, from Kalina, from Duane, I'm kind of hearing, well, Public Comment isn't going to do any harm. And quite frankly, airing this out might be a good way of doing it. Even with the Strawman included going, well, this is what would happen and why. But referring to the report, there is only a marginal increment and some degree of downsides. I think it's a balance of what I'm hearing from Willem, Kalina and Duane.

By sheer numbers, you kind of seem to be leaning towards Public Comment at this stage. Lars-Johan, you have your hand up.

LARS-JOHAN LIMAN: Yeah, thank you. I would actually view it in a slightly different way. I don't hear consensus for driving it forward. Therefore, we shouldn't. That's my conclusion. But you will have your chair's prerogative to interpret it that differently.

GEOFF HUSTON: 3-2 in terms of which way to go between the options is not consensus. That is certainly true. And although it's a small group, it's not one where I think we're well unified and going, well, this is really worth doing. Let's go forward. And the other option is at this point to drop it, give our reasoning, put that in the minutes and to convey that message back to the three parties we consulted saying, we do think if you considered responses, et cetera, there does not seem to be an overwhelming case to do this. And therefore, we will let this go at this point.

And I suppose tag the fact that were the names of the root servers and that issue revived again, then it is likely that this topic would also resurface at that time.

Now, there are a number of ways of doing a call here. But the first thing is, if this were how we decide, then is someone unable to live with that? Is there a strong opposition to that as a consensus call?

PETER KOCH: Okay. Geoff, I mean, I may make a suggestion that maybe we not try to decide on this call because none of us have had a chance to consult with

our constituents on this yet. So, maybe this is for the next meeting to make a decision.

GEOFF HUSTON: Look, absolutely. We've waited long enough that there is no urgent pressing matter here. So, let me then defer this matter with a proposal for a consensus call to drop this for something for each of you to consider. And we will make that call at the next meeting with a footnote that at the same time, and I can certainly write a draft both ways, Public Comment to draft Public Comment versus drop it and publish the reasoning as an RZERC document as options in either case, so that you will have something to consider at the next meeting between those two paths. And we will put that to the meeting at the next scheduled meeting.

I think that's reasonable, Duane. Thank you very much for that suggestion. Thumbs up from Peter Koch. No. Oh, thumbs up from Willem and Lars-Johan.

Look, I'm happy to proceed on those lines then. And I think that's a decent call from today. So, we will do that at the next meeting in the interim. I will prepare two rough drafts for you to consider as the consequences of whichever way we decide as a consensus and do that.

So, that brings us close to the end of item three on the agenda. I will write a response to RZERC thanking them for this and saying we will further consider this and come to a consensus position at our next meeting to at least acknowledge the work they did on this in the last month.

Item four then. Any Other Business?

PETER KOCH: I've got a question, I guess, that fits under Any Other Business. This is Duane. Are there any plans for an RZERC meeting in Dublin at the next ICANN meeting? This is something that sort of used to happen on an annual basis. There were public meetings. I'm trying to remember if it's encoded in the procedures or the charter or whatnot, but I'm just curious if it's on anyone's radar to have an open meeting.

GEOFF HUSTON: The silence is impressive. All of us are here as volunteers and therefore I rely on my employer to fund my travel. I have to say that 2025 is one of the years where I have busted my budget. The last few trips will drain me down to negative numbers for the year, which will get frowny faces from my management. So, I had no plans to actually be in Dublin, but I can certainly do it virtually if that's what the group wants, but I do not believe it was scheduled. I don't believe we had. Lars-Johan?

LARS-JOHAN LIMAN: Yeah, just as a half serious alternative. It doesn't seem that we have a lot of pressing things to discuss that we need to meet physically for and I don't see that we at this point have any important messages to the general constituents. So, why don't we just gather in the bar for a beer? Those of us who happen to be in Dublin one of the evenings and just say hello.

GEOFF HUSTON: Fine by me. Kim?

KIM DAVIES: I was just going to make the observation that we did have an annual meeting of RZERC in person at an ICANN meeting and if I recall, I don't recall if it was a written requirement that we had since 2016 or not, but I do recall that each time we had one it was only RZERC members there and otherwise Cricket. So, we were there to sort of engage the community and the community didn't show up.

So, I think that is why we haven't done that in recent years and why any obligation we have has since been strucken from our charter or our procedures. So, I agree with any an informal meeting would be nice.

GEOFF HUSTON: Okay, thank you. Wes, I think you were next. Yes.

WES HARDAKER: I think procedurally it's way too late to schedule a meeting and you get a lot of pushback from even trying. The scheduling team is pretty adamant that things should be solidified by now. RZERC actually tried to swap to and we got told that that's probably, they'll do it for us but it's not two ideal things to do. So, I encourage you not to try and schedule something with such a short schedule.

GEOFF HUSTON: So, noted. Andrew.

ANDREW MCCONACHIE: I just wanted to confirm that after looking through the operational procedures there's no requirement for the RZERC to meet in public once a year or anything like that. Well, there is a requirement for the RZERC to meet at least once a year but not physically in an ICANN meeting or anything like that. So, there's nothing in the operational procedures that would compel this group to meet.

GEOFF HUSTON: Okay. So, look for those of you in Dublin and good luck to you and I hope you enjoy the Guinness, enjoy the bar. I may or may not be around if it's three o'clock in the morning my time. I definitely won't be. I'll be sleeping. I need my beauty sleep and we will reconsider this as proposed at the next regularly scheduled meeting. So, Any Other Business? Daniel.

DANIEL GLUCK: Yeah, I'd just like to remind RZERC members to check in on their appointments. I know that we're coming up on a few including the registries and the ccNSO. So, always good to check back with Homebase and make sure that we have your appointment letters in by the, I guess, the whenever your group has last submitted their appointment letter. So, yeah, I've been on my end. I've been working with Claudia from the ccNSO and Sue from the registry side to check in on that but always good to check in on your end as well.

GEOFF HUSTON: Thank you. Any other items in today's meeting? None? Well, I think that brings us to the end of the meeting. Thank you very much for your time and participation. My particular appreciation to the folk in Europe. It's a ghastly hour and, I understand your pain. I've had it a lot myself. So, thank you very much and we'll see you in at the next meeting which is in around a month, I believe. We'll send out a message in any case. So, thanks. With that, Daniel, I think we can close the meeting

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