ICANN72 | Virtual Annual General Meeting – RZERC Public Meeting
Thursday, October 28, 2021 – 12:30 to 13:30 PDT

DANIELLE RUTHERFORD: Hello, and welcome to the ICANN72 RZERC Public Meeting. My name is Danielle Rutherford, and I am the remote participation manager for this session. Please note that this session is being recorded and follows the ICANN expected standards of behavior.

During this session, questions or comments submitted in chat will only be read aloud if put in the proper form, as noted in the chat. I will read questions and comments during the time set by the chair of this session. If you would like to ask your question or make a comment verbally, please raise your hand. When called upon, kindly unmute your microphone and take the floor. Please state your name for the record and speak clearly at a reasonable pace. Mute your microphones when you are done speaking.

This session includes automated real-time transcription. Please note that this transcript is not official or authoritative. To view the real-time transcription, click on the Closed Caption button in the Zoom toolbar.

With that, I will hand over the floor over to Tim April.

TIM APRIL: Thank you, Danielle. Hi, everyone. My name is Tim April. I am the current chair of the RZERC. Here's the agenda of all the things we're going to cover today. I really don't expect this to take the full hour. So we can jump right into the introduction slide.

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.

The RZERC is a group that has members appointed from a handful of different organizations that we'll see on the next slide. Our purpose is to review architectural changes to the contents of the root zone, the systems and hardware that operate the root zone as well as a couple other things. You can read the full text here if you'd like to. So we're the group that handles questions and concerns about how the root zone is populated and pieces like that.

The membership, which I believe is the next slide, is the people listed here. And each of the appointing organizations is on the left-hand side here. I see a number of the members that are on the call right now.

And then the way we produce output and advice is through documents. And in the last year, we've gone from drafts to publications of two different documents that we'll talk a little bit about in the next couple of slides.

So I think the first one is RZERC002. So this was published earlier this year where the RZERC was looking at the root-servers.net zone which was introduced in 1985. This zone, for anyone who's not familiar with it, is mostly to provide the IP addresses for the root server instances that are operating as part of the Root Server System.

This zone currently isn't signed, and the document was the RZERC requesting to the ICANN Board that the ICANN board work with ICANN Org to investigate signing the root zone [inaudible] level of verification to the information stored in that zone.

So at the last public meeting, the document hadn't been published. But now it has. And if we can go to the next slide, we can see the recommendations that were presented.

The first basically summarizes to the RZERC which is for the Recommendation 2 from RSSAC028 to be brought back up and to be completed, and looking at the consequences of signing the root zone, understanding the behaviors that would be impacted by doing so.

And then hopefully moving on to the Recommendation 2 where the RZERC would like to have ICANN Org explore the costs and benefits and tradeoffs or risks of deploying DNSSEC signing to the root-servers.net zone. And I can't remember the exact date, but that was earlier this year when that was published.

Shortly thereafter, or I believe it may have been almost the same time, RZERC003—which is the next slide—was published where this document was suggesting that ICANN Org investigate the feasibility and safety of deploying the ZONEMD resource record type to the root zone to allow the contents of the root zone to be validated and to ensure that if you're transferring the zone between systems, you can validate that the full content were received.

This was published after the publication of RFC 8976 which seven of the people on the RZERC where authors of or co-authors of. And the recommendations for that are in the next slide.

So in Recommendation 1, we were asking the Root Zone Maintainer and the Root Server Operators to confirm that adding this record wouldn't negatively impact the Root Server System.

Recommendation 2 was to request that the ICANN Org work with the broader Internet community to publicize the fact that the zone may appear in the root zone and to encourage people to make use of it.

Recommendation 3 was also requesting that the developers of DNS software to know about and potentially implement the protections that would be afforded by implementing ZONEMD.

And then the final recommendation was to work with PTI and Root Zone Maintainer to work on a plan to develop and deploy ZONEMD into the root zone for distribution to the Root Server System.

So those were the two documents. We don't currently have any documents in the pipeline that we would expect. But there are no documents currently in the pipeline. But the primary work effort that's going on now is in the next slide where the RZERC is working on the 5-year review that was written into our charter back when the RZERC was created, a little bit over five years ago.

So part of our charter is that we have to review our charter and potentially produce a new one, if it's necessary, which would go to a public comment process. So we're just in the early phases of reviewing that and working with ICANN determine what the actual process looks like since we've never done this sort of process before.

But as part of this, we've begun a scoping discussion within the RZERC to determine what sorts of topics may be of interest to RZERC or within the RZERC scope that we may want to either clearly define as in scope or out of scope, especially since the DNS has changed so much in the last five years especially with the introductions of new forms of transport. And another example is the ZONEMD record being introduced that we had RZERC003 on.

So that process is undergoing. It's unclear exactly how quickly that will finish, but at this time that's the only other work that we have going on.

And then I think that was all we really had to discuss. If there any questions, please feel free to drop them in the chat or raise your hand.

DANIELLE RUTHERFORD: We have a question from Paul Hoffman. Paul, please feel free to unmute your microphone and speak your question.

PAUL HOFFMAN: It's not a question. It's actually a statement relative to our RZERC002 that you discussed. just based on timing. ICANN staff is working on the recommendations in RZERC002. And Request for Proposals for doing that study could have come out now, but, of course, with an ICANN meeting coming up, schedules all get shifted. But we expect next week to have the announcement of the RFP requesting bidders to be going out. Thank you.

TIM APRIL: Good to hear. Thank you for the update, Paul. Do we have any other questions or comments?

DANIELLE RUTHERFORD: I don't see anything in the chat box or in the queue. Any other final questions or comments from the audience? Liman has his hand raised. Liman, please go ahead.

LARS-JOHAN LIMAN: Thank you. This is Lars Liman from Netnod. Could you elaborate a bit on how the discussions went regarding the ZONEMD record? It seems like a small insignificant record in the zone, but if I get things right, you can actually trigger a lot of work on the recipient if you have large zones. Arguably the root zone is not a large one, but it can trigger work on the recipient and even with small zone transfers, incremental zone transfers.

So how did you discuss the tradeoffs in the circumstances? Thanks.

TIM APRIL: I was just trying to see of Duane was on the call. Most of that document was completed before I started on the RZERC, so I don't have a munch of the stake there.

LARS-JOHAN LIMAN: That's fair enough, then. I'll have a chat with Duane offline then.

PAUL HOFFMAN: Excuse me. Duane just messaged me separately that he is getting on quite soon.

LARS-JOHAN LIMAN: Thank you. So if you have any other business, do that first. Then we can see if Duane has any comments when he gets on.

DANIELLE RUTHERFORD: Peter has his hand raised. Peter Koch, go ahead.

PETER KOCH: Yeah, thanks. Peter Koch for the record, the ccNSO-appointed member to RZERC. I was taking advantage of the fact that we have an audience this time for change. And maybe we could elaborate on this, not preempting what Duane is going to say. But maybe as a member not speaking for the committee, shining some light on how we dealt with this.

Liman, you asked about potential consequences for other zones. The point here is that the task of RZERC is to specifically only deal with the root zone and architectural changes to the root zone and to the distribution mechanism. And what we might want to mention is that this whole idea came up in the context of what is called hyperlocal, or a different name. So enabling the distribution or encouraging the distribution of the resolution of information in the root zone even more decentralized than it is today, that is something that RZERC is also discussing or might discuss.

But this this whole proposal of ZONEMD is in that context. So it is not about increasing the resilience of the current system. It is designed to help random users of the root zone who would add the root zone to their local configuration to avoid traffic to the Root Server System for a variety of reasons to enable them to determine that the version of the root zone that they got is exactly that one that is distributed out there.

We did not look at the ZONEMD application to other zones, and neither would we make recommendations one way or another on the application of ZONEMD to say TLDs or second- or third-level zones. This is just about what consequences might arise from the ZONEMD record appearing in the root zone, the consumption by current users, and avoiding negative effects.

Not sure that helps, but trying to add a bit pf context to that. And I'm pretty sure that colleagues on the committee, other members of the committee, can improve that as well. Thank you.

LARS-JOHAN LIMAN: Thank you. That actually makes a lot of sense, so that's a good explanation. Thank you very much.

DANIELLE RUTHERFORD: Paul Hoffman, you've raised your hand.

PAUL HOFFMAN: Yes, responding to what Peter just said. Even though ZONEMD was initially designed with a strong focus in mind on the root zone and going

back to Liman's question of, well, if it appeared in other zones where there were zone transfers, it could cause a lot of work to be done on the client.

One thing that may or may not be applicable to RZERC in the future is the .arpa zone which is a small zone which has also been mentioned as a target for hyperlocal. That is that if somebody had if a resolver had the .arpa zone fully in its cache in the same way that it might be getting the root zone. I am not suggesting that this should or should not be in RZERC's mission because it is not the root zone, but it is tightly tied to it and it is one of the things that people have talked about for possibly doing hyperlocal.

So I just wanted to bring that up that in the last year or so since the ZONEMD RFC was published, people have talked about other uses that are not in large zones. Thank you.

DANIELLE RUTHERFORD: Liman, is that an old hand or do you have a new comment?

LARS-JOHAN LIMAN: Sorry, that's an old one. I only have my phone here [inaudible] remote [inaudible]. I'll remove it.

DANIELLE RUTHERFORD: All right. Wes Hardaker has his hand up. Wes, go ahead.

EN

WES HARDAKER: Thanks. So Paul's comments, as he mentioned .arpa and possibly needing that for hyperlocal deployments, ISI's LocalRoot project actually does allow you to deploy .arpa. And our hope is to eventually use ZONEMD for wherever it is deployed.

ISI will actually be hosting a DNS research conference in late November where I'll actually talk about what happens if you don't have .arpa deployed in a hyperlocal kind of instance as well. So I actually did an experiment where I did that. You can contact me offline if you're interested in coming to the virtual conference, because it will be online. You do have to register and things like that, but the deadline is Friday for actually registering for that. Thanks.

PETER KOCH: Friday as in tomorrow, Friday?

WES HARDAKER: Yeah, but the registration is quite easy. You just need a paragraph.

PETER KOCH: Cool, thank you.

WES HARDAKER: Yeah, we were sent to DNS Op and DNS Deployment and various other things a month ago, so it shouldn't be a surprise.

ICANN|72
VIRTUAL ANNUAL GENERAL

DANIELLE RUTHERFORD: Monica has a question in the chat. Question, "Does RZERC also considered the retiring of single-root servers? What about the retiring of the characters?"

And I think, Tim, that's to you to field.

TIM APRIL: Yeah. I guess a point of clarification for myself would be that the retiring single-root servers meaning a root instance that only has one server hosting that site? My understanding of the RZERC charter—and others may chime in on this if I get this wrong—is that that would be out of scope of the RZERC charter because we're responsible for reviewing the architectural changes to the contents of the root zone in the system that serves it, not necessarily dictating how the Root Server System operators are protecting their own infrastructure to serve the zone. That would probably fall to the RSSAC or the RSO. I guess the GWG if it becomes a thing.

And Kim beat me to the punch for that one of the GWG link right there. Maybe I'm confused about the second question of what you're actually trying to get out there, if you can expand on that.

DANIELLE RUTHERFORD: Monica, would you like to expand on the second question and unmute or perhaps expand in the chat. Oh, okay. Monica stated in the chat, "I understood that some people might get rid of the characters for naming the 13 instances."

EN

TIM APRIL: Sorry, I'm not too familiar with that process or what's going on there. Potentially, Peter has raised his hand. Or Peter or Paul raised their hand to respond directly to that.

PETER KOCH: Yeah. I think both questions I really good questions in this session because they reflect that we're having so many committees with not really overlapping but closely-related functions. And it might be indeed a bit confusing who does what and how and maybe what is needed at another time as explaining the landscape a bit. What does RSSAC deal with and what does RZERC deal with? And where might other parties chime in? Because Paul mentioned .arpa. And actually, the IAB is an important [entity] there.

To the best of my knowledge, the discussion of the naming of the root servers is dealt with in the Root Server System Advisory Committee. And there are colleagues on the call who might want to chime in, but I leave that, of course, to the wisdom of our chair. Thank you.

DANIELLE RUTHERFORD: In the queue we have Liman with his hand raised and then Paul Hoffman.

ICANN|72
VIRTUAL ANNUAL GENERAL

LARS-JOHAN LIMAN: Thank you. Lars Liman from Netnod here, and also operator of the one of the root servers, a member of RSSAC, and also a member of the Governance Working Group.

So Monica, yes, this is an interesting question. But [inaudible] you that this is out of scope for RZERC. This does not pertain to the content of the root zone, meaning the top-level domains and so on. It pertains to the operation of the Root Server System. And as such, it today sits within the lap of the Root Server System Advisory Committee.

That said, there is, today, no process for making changes to the system, but the Root Server Governance Working Group is underway and, as you know, has come some way to designing a new model for dealing with the Root Server System. And that includes the possibility of adding and removing Root Server Operators and changing the number of root server identities.

Not that that means that there are going to be changes, but at least the result of the Governance Working Group will hopefully entail processes for making such changes if anyone thinks it's a good idea to do that and if there is universal support for doing that. Thank you.

TIM APRIL: Thank you to Peter and Lars for chiming in there. Any other questions or comments?

DANIELLE RUTHERFORD: All right. A final call for any other questions or comments for the RZERC before we close this meeting. Not seeing other questions. Tim, is it okay to go ahead and close the meeting for everybody?

TIM APRIL: Yep. Thank you everyone for attending. Talk to you at the next RZERC public meeting.

LARS-JOHAN LIMAN: Thank you all. Cheers,

DANIELLE RUTHERFORD: All right. The session is now over. Please stop the recording.

[END OF TRANSCRIPTION]