Root Zone Evolution Review Committee (RZERC) Meeting Minutes
19 April 2022 | 19:00 - 20:00 UTC

Attendance
IETF Tim April
ccNSO Peter Koch
ICANN Board Kaveh Ranjbar
PTI Kim Davies
GNSO RySG Howard Eland
RSSAC Daniel Migault
SSAC Geoff Huston
Verisign (RZM) Duane Wessels

Staff Danielle Rutherford, Steve Sheng

Apologies Carlos Martinez (ASO)

Action Items from this Teleconference
- **ACTION ITEM:** Staff to publish approved 15 February 2022 minutes on RZERC’s website.
- **ACTION ITEM:** Duane Wessels will revise the ZONEMD Deployment Plan to address the RZERC’s feedback

Call to Order
Tim April called the teleconference to order at 19:02 UTC.

Roll Call
Danielle Rutherford conducted a roll call.

Agenda Review
There were no amendments to the agenda for this meeting.

Administration
**Draft Minutes from 15 February**
Tim April called for a vote on the draft minutes from the previous teleconference. There were no objections to the minutes and the minutes were approved.
- **ACTION ITEM:** Staff to publish approved 15 February 2022 minutes on RZERC’s website.
**Discussion Items**

**Action Request Register (ARR) Updates**
Danielle Rutherford shared an update on RZERC003. The ICANN Board considered RZERC003 on 24 February 2022 and directed the ICANN CEO to implement recommendations 1, 2, and 4. In the Rationale for the resolution, the ICANN Board noted it did not take action on recommendation 3 as it was not directed at ICANN. Recommendations 1, 2, and 4 have been moved to Phase 4: Implementation in the Action Request Register (ARR). Daniel Migault asked if the Board resolution had any implications for the RSSAC. Danielle Rutherford responded that there was no action for RSSAC at this time and that ICANN org Subject Matter Experts (SMEs) would reach out to RSSAC or the Root Server Operators as necessary for implementation of RZERC003.

**ZONEMD Deployment Plan**
Duane Wessels presented an updated draft of the plan for deploying ZONEMD in the root zone.

Duane Wessels clarified in the draft that the Verisign systems have been updated to support the ZONEMD record. Although that feature has been deployed, it's not yet enabled.

Duane Wessels shared new text related to how the root server operators (RSOs) are expected to behave in the event of an incorrect or missing ZONEMD record. The plan now states that “...ZONEMD verification will not be enabled for at least six months following the initial deployment. During that six-month period, the RSOs must not fail to update or load the root zone due to an incorrect or missing ZONEMD record. Deployment will not begin until confirmation from all RSOs has been received.”

Geoff Huston asked what an RSO is supposed to do after the initial six months of deployment if ZONEMD verification fails. Duane Wessels replied that some RSOs would continue to serve the old zone if there was a verification failure, but he does not expect that all RSOs would postpone.

Geoff Huston noted that if the RSOs do not behave consistently in the event of verification failure then RSOs could potentially be serving different versions of the root zone to end clients. Geoff Huston asked if the ZONEMD record is intended to serve both RSOs and end clients or is it intended to serve only potential end clients. Duane Wessels responded that it is already true today that RSOs can serve different versions of the root zone, due to network partitioning, bugs, or latency in updating the root zone. It’s generally understood and expected that the root zone is not updated within the order of minutes. Duane Wessels also responded that he believes ZONEMD is intended to serve both RSOs and end clients.

Geoff Huston stated that it should be communicated that RSOs may use ZONEMD as an additional verification check and that RSOs SHOULD design procedures to respond to verification failure in a timely manner. Peter Koch stated that the context of this discussion should be added to the ZONEMD deployment plan.
Daniel Migault asked if he should report to RSSAC that RSSAC should clearly position itself on whether ZONEMD verification will be an additional check and if verification fails a new procedure should be defined. Duane Wessels responded that it’s a bit early and that the discussion might result in additional recommendations from the RZERC. Geoff Huston stated that RZERC may not need to make additional recommendations, the important thing is that the ZONEMD deployment plan needs to have more information on what happens after the first 6 months of ZONEMD deployment.

Duane Wessels shared new text in the Recursive Resolvers Serving Root Data Locally section that clarifies some resolvers may not perform ZONEMD verification by default. There were no comments or questions about this text.

Duane Wessels shared new text in the Presentation Format section that includes a quote from RFC 3597 defining the generic format, state that in the initial implementation, the ZONEMD record shall appear in the unknown / generic format on the internic.net servers, and provides the generic format for the ZONEMD record. There were no comments or questions about this text.

Duane Wessels shared new text in the Prerequisites for the Deployment Schedule that states

All Root Server Operators must confirm to Verisign and ICANN that the presence of a ZONEMD record in the root zone will not result in service disruptions, and that ZONEMD verification will not be enabled until at least six months after the initial deployment.

Geoff Huston noted that this section of the deployment plan states a requirement for the RSOs and asked if that means a requirement for the RSOs can be included in the previously discussed section related to RSO behavior after the first 6 months of ZONEMD deployment. Steve Sheng asked to clarify who is asking the RSOs to enable verification - PTI & RZM or the RZERC. Daniel Migault stated that the concern is not that the RSOs complete a certain action, but that the RSOs all do the same thing in the case of ZONEMD verification failure. Geoff Huston stated that this is the responsibility of the RSSAC liaison to communicate, rather than a formal document item inside the PTI and RZM.

Duane Wessels shared new text on Announcement & Reporting Problems that provides people with the Verisign customer service email address for anyone that experiences problems about ZONEMD. Geoff Huston recommended adding a reference that people would contact the Root Zone Maintainer if they have a problem with ZONEMD and then provide the Verisign customer service email address. Duane Wessels agreed.

Peter Koch asked if the average resolver operator or the average hyper local operator is a target audience for this deployment plan. Peter Koch also asked if the ZONEMD deployment plan is information to the community and the targets are the RSOs or is it for everybody. Geoff Huston stated that Peter’s question opens up a larger topic area for consideration, which may be in scope for RZERC to consider, but the ZONEMD deployment plan does not need to address. Duane Wessels agreed with Geoff Huston.
• ACTION ITEM: Duane Wessels will revise the ZONEMD Deployment Plan to address the RZERC’s feedback

Adjournment
The RZERC concluded the teleconference without objections at 20:00 UTC.