

RSSAC Statement on IANA's Proposal for Future Root Zone KSK Rollovers

29 January 2020

1 Background

On 1 November 2019, the ICANN Organization published a public comment proceeding on the Internet Assigned Numbering Authority's (IANA's) Proposal for Future Root Zone KSK Rollovers.¹ This statement represents the RSSAC's full input to that public comment proceeding.

Foremost of importance for the RSSAC is that future KSK rollovers be done in a consistent, predictable and deliberate manner. Thus, the RSSAC welcomes this opportunity to comment on subsequent KSK rollovers, and would like to thank IANA for preparing this plan and submitting it for public comment.

2 Scope of RSSAC's Advice

Per the ICANN Bylaws, the role of the RSSAC "is to advise the ICANN community and Board on matters relating to the operation, administration, security, and integrity of the Internet's Root Server System".

The RSSAC limits its comments to its remit (i.e., the impacts of the proposed KSK rollover timeline to the RSS). With that in mind, the RSSAC offers the following potential impacts to adopting the Proposal for Future Root Zone KSK Rollovers.

3 Concerns and Considerations

3.1 Measurement

The plan lacks discussion on measuring the stability implications of future KSK rollovers. It is not clear how decisions regarding whether to go forward with a phase transition, or not go forward with a phase transition, will be made absent of any measurement data. To be more consistent, predictable and deliberate in future KSK rollovers, IANA should promote the development of a root telemetry mechanism.

3.2 Algorithm and Key Length Changes

The RSSAC understands that a change of DNSSEC algorithm for the root zone is complicated and not yet well studied. The RSSAC supports the plan to remain on the existing algorithm and key length. However, the RSSAC would like to see a stronger commitment from IANA to begin studying and documenting a comprehensive approach to an algorithm rollover, or to a key length change, and have that plan subject to public review.

¹ See <https://www.icann.org/public-comments/proposal-future-rz-ksk-rollovers-2019-11-01-en>

4 Conclusion

Although RSSAC identifies two concerns and considerations in this statement, we do not see a technical reason for these items to cause any delay in proceeding with future KSK rollovers as currently planned by IANA.

Foremost of importance for the RSSAC is that future KSK rollovers be done in a consistent, predictable and deliberate manner. Late changes to planned procedures or vague and undetermined processes are detrimental to the continued and stable functioning of the RSS during KSK rollovers. The RSSAC welcomes continued documentation and discussion surrounding subsequent KSK rollovers to help ensure smooth operations and smooth transitions to new KSKs, and looks forward to continued dialogue on subsequent KSK rollover planning.