



ARTICLE 19 response to the ICANN Recommendations for Early Warning for Root Zone Scaling

Introduction

ARTICLE 19 welcomes the efforts of the Internet Corporation for Assigned Names and Numbers (ICANN) to engage in a multi-stakeholder process by holding this Public Consultation¹ on the Recommendations for Early Warning for Root Zone Scaling².

This consultation is an important opportunity, as the rules that ICANN will apply in determining the rate of scaling of the root zone will impact the human rights of internet users.

We thus appreciate the opportunity to provide ICANN with our position on the Recommendations for Early Warning for Root Zone Scaling and we look forward to the discussions that will follow. This statement is made on our own behalf. We also endorse comments by the Non Commercial Stakeholder Group (NCSG) and those of the At-Large Advisory Committee (ALAC).

About ARTICLE 19

ARTICLE 19 is an international human rights organisation that works to protect and promote free expression, which includes the right to speak, freedom of the press and the right to access information. With regional programmes in Africa, Asia, Europe, Latin America and the Middle East and North Africa, we champion freedom of expression at the national, regional and international levels. The work of ARTICLE 19's Digital Programme focuses on the nexus of human rights, Internet infrastructure, and Internet governance.

At ICANN, we engage through the ICANN Empowered Community as members of the Generic Names Supporting Organization (GNSO) under the Non-Commercial Users Constituency (NCUC) and as members of the At-Large Advisory Committee (ALAC) directly as part of the European Regional At-Large Organization (EURALO). We work within the ICANN community with the

1 ICANN Recommendations for Early Warning for Root Zone Scaling <<https://www.icann.org/public-comments/recommendations-early-warning-root-scaling-2020-10-05-en>> accessed November 17, 2020

2 Recommendations for Early Warning for Root Zone Scaling <<https://www.icann.org/en/system/files/files/octo-015-01oct20-en.pdf>> accessed November 17, 2020



main purpose of raising awareness and coalition building within the community about how the Domain Name System (DNS) affects human rights. This aim would ensure that Section 27.2 of ICANN Bylaws (on Human Rights) and other Bylaws with an impact on Human Rights are implemented in full and put the user at the centre of policy development processes.

Summary

In November 2020, ARTICLE 19 reviewed the ICANN Recommendations for Early Warning for Root Zone Scaling.

Our analysis shows that the draft contains some positive provisions, particularly as it envisions the involvement of every stakeholder in the early warning process for root zone scaling.

However, the recommendations do not fully address the human rights implications of the recommendations, as they propose data collection for monitoring but do not provide clear guidance on the scope and limitations.

In the analysis, we recognise that the Internet is a global resource that should be managed in the public interest and appreciate the unequivocally important role that the ICANN community and ICANN Organization have to play. In order for ICANN to be effective in its operations, it needs to take into consideration the recent Workstream 2 Recommendations, especially those on human rights.

ARTICLE 19 urges the ICANN's Office of the Chief Technical Officer (OCTO) to consider the recommendations below, which would help align the Recommendations for Early Warning for Root Zone Scaling more closely with international law and best practice.

Measurements Methodology

We welcome the proposed mixed methodology, which uses both objective and subjective metrics, as applicable to DNS ecosystem stakeholders, to determine the rate of scaling of the root zone. However, we are concerned by the proposal to measure whether "the IANA team would not be able to keep up with the day-to-day changes to the root zone (such as Name Server (NS) and Delegation Signer (DS) resource record changes)." This proposal would be flawed, because such inability to keep up with changes could result from lack of sufficient resources on the part of the IANA team.

As more people globally become connected to the internet, ICANN and IANA have historically responded to this growth by continuously scaling up the DNS and the root zone. If the IANA team is unable to keep up with day-to-



day changes to the root zone, it may be an indication of a need to increase resources to the team, rather than a rate of growth that risks the stability of the internet. The proposed measurement does not provide for such consideration. We recommend that the approach taken by ICANN and IANA at present continues.

Data Protection Considerations

We welcome the high-level recognition that, "...internal measurements, such as name server memory and router bandwidth consumption, could be perceived as highly invasive and might expose sensitive information..."

However, under section 4, these recommendations would require each stakeholder (Root Server Operators, IANA Naming Team, Recursive Resolvers, Anti-Abuse Communities and Law Enforcement Agencies and ICANN Community) to periodically collect "...actual measurement, monitoring, and data sharing capability of root zone performance, in cooperation with RSSAC and other root zone management participants..." in line with the Security and Stability Advisory Committee (SSAC) Recommendation under SAC046, *Report of the Security and Stability Advisory Committee on Root Scaling*.

We believe that policy decisions related to early warnings for root zone scaling will be greatly informed by the data collected. However, the recommendations should be redrafted to ensure that this data is collected, used, stored and destroyed in accordance with the right to privacy and in line with international standards for data protection such as the General Data Protection Regulation (EU GDPR) and the California Consumer Privacy Act (CCPA), which both apply to ICANN operations.

For example, the recommendations note that data from recursive resolvers are among the data points that will inform any early warnings for root zone scaling. However, this data includes personally identifiable information and data that can be linkable to indirectly identify and produce inferences about Internet users. The failure to specify limitations on the collection and storage of this data poses a risk to not only individuals' privacy, but also their security, as this data can be used by attackers to launch DNS amplification attacks or DNS cache poisoning attacks.

We thus recommend that data protection principles including retention limitation and data minimization are fully applied to all data collected, stored and used for policy actions related to root zone scaling, and are clearly specified.



Conclusion

ARTICLE 19 is grateful for the opportunity to engage with ICANN in this process in light of the five objectives under ICANN's Strategic Plan for Fiscal Years 2021-2025.

We look forward to continued collaboration to strengthen human rights considerations in the Domain Name System and particularly in ICANN's policies and procedures. We welcome further engagement opportunities and avail ourselves in case of any questions or concerns.

If you would like to discuss this analysis further, please contact Ephraim Percy Kenyanito, Senior Digital Program Officer, at ephraim@article19.org. Additionally, if you have a matter you would like to bring to the attention of the ARTICLE 19 Digital Programme, you can contact us by e-mail at digital@article19.org.