

ICANN BOARD PAPER NO. 2021.03.25.1a

TITLE: **RSSAC Advisory on Technical Analysis of the Naming Scheme Used For Individual Root Servers**

PROPOSED ACTION: **For Board Consideration and Approval**

EXECUTIVE SUMMARY:

On 3 August 2017, Root Server System Advisory Committee (RSSAC) published [RSSAC028: Technical Analysis of the Naming Scheme Used For Individual Root Servers](#). The Advisory documents the technical history of the names assigned to individual root servers since the creation of the root server system. It contains an analysis of possible changes to the current naming scheme, such as considering whether the names assigned to individual root servers should be moved into the root zone from the ROOT-SERVERS.NET zone. It also considers the impact on the priming response of including Domain Name System Security Extensions (DNSSEC) signatures over root server address records. The Advisory's intent is to provide a risk analysis, and then make recommendations to root server operators, root zone management partners, and ICANN org on whether changes should be made, and what those changes should be.

BOARD TECHNICAL COMMITTEE (BTC) RECOMMENDATION:

The BTC recommends that the Board accept the RSSAC's recommendations.

PROPOSED RESOLUTION:

Whereas, on 3 August 2017, RSSAC published [RSSAC028: Advisory on Technical Analysis of the Naming Scheme Used For Individual Root Servers](#).

Whereas, the work called for in RSSAC028 falls under ICANN's remit in ensuring the stable and secure operation of the Internet's system of unique identifiers as part of ICANN's mission.

Whereas, ICANN org has evaluated the feasibility of the RSSAC's advice in RSSAC028 and developed implementation recommendations for each advice item.

Whereas, the Board has considered ICANN org implementation recommendations relating to RSSAC028's Recommendations.

Resolved (2021.03.25.xx), the Board accepts Recommendation 1, calling for the current naming scheme used in the root server system to remain unchanged until more studies have been conducted.

Resolved (2021.03.25.xx), the Board accepts Recommendation 2, relating to conducting a study to understand the current behavior of DNS resolvers and how each naming scheme discussed in this document would affect these behaviors, and directs the ICANN President and CEO, or designee(s), to commence such a study.

Resolved (2021.03.25-xx), the Board accepts Recommendation 3, relating to conducting a study to understand the feasibility and impact of node re-delegation attacks, and directs the ICANN President and CEO, or designee(s), to commence such a study.

PROPOSED RATIONALE:

Why is the Board addressing the issue?

The Board is taking this action at the recommendation of the RSSAC.

The RSSAC's remit 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. This includes communicating on matters relating to the operation of the root servers and their multiple instances with the technical and ICANN community; gathering and articulating requirements to offer those engaged in technical revisions of

the protocols and best common practices related to the operation of DNS servers; engaging in ongoing threat assessment and risk analysis of the root server system; and recommending any necessary audit activity to assess the current status of root servers and the root zone.

What is the proposal being considered?

The RSSAC Caucus Root Server Naming Work Party investigated possible changes to the current root server naming scheme. This naming scheme has worked well for root servers and the Internet community at large for over two decades. However, given today's Internet environment, the RSSAC has studied the naming scheme used for individual root servers and considered the consequences of making changes.

The Work Party concluded that there may be a benefit to adopting one of the other schemes described in RSSAC028 after more in-depth research, but it was also recommended that no immediate changes to root server names be made at the time of the Advisory's publication (Recommendation 1).

The document recommends that DNS researchers should investigate four topics: the acceptable response size for priming queries; how resolvers respond when given answers with a shortened set of glue records; how resolvers that validate priming responses behave when faced with broken responses; and whether search lists affect priming behavior (Recommendation 2).

In addition, RSSAC recommended that a study should be conducted to understand the feasibility and impact of node re-delegation attacks as it was recognised that more in-depth research is required to understand node re-delegation attacks, the costs and benefits of signing the A and AAAA records for the root servers, and the effects of increasing the priming query response size (Recommendation 3).

Recommendation 4 calls for RSSAC to study priming responses sent under specific circumstances. There is no action for the ICANN Board associated with this recommendation.

Recommendation 5 is labeled as “speculative” and contains suggested actions that only apply if node redelegation attacks pose a serious risk that needs to be mitigated. On 28 September 2020 RSSAC confirmed that there is no action for the ICANN Board related to this recommendation at this time.

Which stakeholders or others were consulted?

Under RSSAC’s remit mentioned above, the RSSAC formed a [Caucus Work Party](#) that was responsible for publishing material leading up to and including [RSSAC028](#).

What concerns or issues were raised by the community?

None at this time.

What significant materials did the Board review?

The [Caucus Work Party](#) published their [Statement of Work and Scope for History and Technical Analysis of the Naming Scheme used for Individual Root Servers](#) on 9 July 2015. This document provided direction in the form of five key points. The first point was, “document the technical history of the names assigned to individual root servers since the creation of the root server system”, which lead to RSSAC’s issuing [RSSAC023](#): History of the Root Server System. The remaining four scope points provided the foundation for this Advisory, [RSSAC028](#).

What factors did the Board find to be significant?

This research facilitates continued evolution of the root server system.

Are there positive or negative community impacts?

ICANN org could perform the investigation required by RSSAC028 to aid the community in deciding whether or not to recommend changing the root server naming scheme.

Are there fiscal impacts or ramifications on ICANN (strategic plan, operating plan, budget); the community; and/or the public?

The resources required for the studies in both Recommendation 2 and 3 (it is more efficient to run the studies together) will require staff and budget not currently allocated.

ICANN org estimates completing the Recommendation 2 study will require approximately six months of a researcher's time at a cost of approximately USD \$150,000 along with some minimal project management and administrative support. This study has not been budgeted for FY21.

ICANN org estimates completing this study contemplated in Recommendation 3 would require approximately two months of a researcher's time at a cost of approximately USD \$50,000 along with some minimal project management and administrative support. This study has not been budgeted for FY21.

Are there any security, stability or resiliency issues relating to the DNS?

The research recommended by RSSAC028 is directly related to ensure the future stability of the root server system.

Is this decision in the public interest and within ICANN's mission?

This falls directly under ICANN's Mission Statement, from Bylaws Section 1.1.

MISSION:

"(a) The mission of the ICANN is to ensure the stable and secure operation of the Internet's unique identifiers

(ii) Facilitates the coordination of the operation and evolution of the DNS root name server system. “

In addition, the implementation of this advice aligns with item “1.2 Strengthen DNS root server operations governance in coordination with the DNS root server operators” from the ICANN Strategic Plan for Fiscal Years 2021-2025.

Is this either a defined policy process within ICANN’s Supporting Organizations or ICANN’s Organizational Administrative Function decision requiring public comment or not requiring public comment?

The action recommended by RSSAC028 does not require a public comment as it is only research. However, once the research is published there will be future decisions requiring community input.

Signature Block:

Submitted by:

Position:

Date Noted:

Email:

ICANN BOARD PAPER NO. 2021.03.25.1b

TITLE: **RSSAC Advisory on Metrics for the DNS Root Servers and the Root Server System**

PROPOSED ACTION: **For Board Consideration and Approval**

EXECUTIVE SUMMARY:

RSSAC047, Root Server System Advisory Committee (RSSAC) Advisory on Metrics for the DNS Root Servers and the Root Server System, presents a set of metrics for the Domain Name System (DNS) root servers as well as for the root server system (RSS) as a whole. The document calls for taking external measurements of each Root Server Operator (RSO), collecting those measurements, and then collating them into monthly reports. The reports will present a pass or fail status for each metric against a set of thresholds listed in the Advisory. The Office of the CTO developed a prototype implementation of this measurement system before RSSAC047 was published to help the RSSAC Caucus determine appropriate thresholds for the metrics presented in the Advisory.

THE BOARD TECHNICAL COMMITTEE'S (BTC) RECOMMENDATION:

The BTC recommends that the Board acknowledge ICANN org's implementation of a prototype for the measurement system as meeting the requirements described in Recommendation 1. ICANN org further recommends implementing the measurement system described in Recommendation 2, which is intended to be a refined version of the prototype system described in Recommendation 1, based on experience with that prototype.

Recommendation 3 calls for future work. ICANN org recommends that work be delayed until after RSSAC, or whatever bodies are created as a result of the restructuring recommendations in RSSAC038, have had sufficient time to analyze the output of the measurement systems called for by Recommendation 1 and Recommendation 2.

PROPOSED RESOLUTION:

Whereas, RSSAC047, RSSAC Advisory on Metrics for the DNS Root Servers and the Root Server System, published on 12 March 2020, recommends a set of metrics for the Domain Name System (DNS) root servers as well as for the root server system (RSS) and recommends the development of systems to collect those metrics,

Whereas, ICANN org has developed a prototype measurement system to provide data to the RSSAC Caucus to allow an informed recommendation on the metric thresholds, and RSSAC and the RSSAC Caucus agreed upon four types of metrics to most accurately measure the performance of the root server operators (RSOs),

Whereas, the recommendations in RSSAC047 fall under ICANN org's remit to ensure the stable and secure operation of the Internet's unique identifier systems; and implementing the recommendations would further preserve and enhance the operational stability, reliability, security, and global interoperability of the Internet and ensure that new gTLDs are introduced in a secure and stable manner.

Resolved (2021.03.25.xx), the Board accepts Recommendation 1, which calls for implementing a prototype measurement system for RSOs, and thanks ICANN org for already developing such a system to assist with defining the metrics outlined in RSSAC047.

Resolved (2021.03.25.xx), the Board accepts Recommendation 2 to implement a more permanent measurement system after establishing and using the prototype measurement system from Recommendation 1, and directs the ICANN President and CEO, or designee(s), to implement such a system.

Resolved (2021.03.25.xx), the Board directs the President and CEO, or his designee(s), to implement and operate the measurement system described in Recommendation 2.

PROPOSED RATIONALE:

Why is the Board addressing the issue?

The Board is taking this action in response to the advice of the RSSAC.

What is the proposal being considered?

RSSAC047 defines measurements, metrics, and thresholds that root server operators (RSOs) meet to provide a minimum level of performance. The thresholds are based on technical metrics designed to assess the performance, availability, and quality of service that each root server identifier (RSI) provides. The thresholds and the metrics on which they are based are included as the RSSAC's input to a yet-to-be defined evaluation process for current and future RSOs. The metrics defined in RSSAC047 provide a way to show when RSOs are, or are not, meeting minimum performance levels. They also provide a way to show that the RSS as a whole is, or is not, meeting performance levels.

RSSAC047 has three (3) Recommendations:

RSSAC047's Recommendation 1 calls for initial implementation of the measurement and analysis systems described in the Advisory. This work has already been completed.

The metrics are based on a strategy of taking external measurements of each root server identifier, collecting those measurements, and then collating them into monthly reports. The reports are given as pass/fail for each metric against a set of thresholds listed in the document.

RSSAC047's Recommendation 2 describes a later long-term service. The operational details of the long-term service can be determined after there is sufficient experience with the initial prototype implementation described in Recommendation 1. Based on this operational experience with the prototype system, ICANN org can determine how and when the official implementation will be put in place. It is possible that ICANN org will determine that the prototype system meets all the requirements described in RSSAC047 and is suitable for long-term use.

RSSAC047's Recommendation 3 calls for additional work in the future, so there is no action for the Board at this time. The future work would be initiated by RSSAC (or a successor

organization as a result of implementing the recommendations in RSSAC038), and would be performed in collaboration with ICANN org and the Internet community.

Which stakeholders or others were consulted?

RSSAC047 was created and edited by the RSSAC Caucus, which consists of dozens of experts from the wider community. RSSAC submitted this Advisory in its capacity of advising the ICANN community and Board on matters relating to the operation, administration, security, and integrity of the Internet's root server system.

There was strong agreement in the Caucus that the four types of metrics identified in the document are the correct set for external measurements of the RSOs.

ICANN org has already worked with RSSAC on a prototype measurement system of RSO performance to provide data for consideration to aid in the development of the metrics outlined in RSSAC047.

What concerns or issues were raised by the community?

No concerns.

What significant materials did the Board review? What factors did the Board find to be significant?

The impetus for this work comes from RSSAC037: A Proposed Governance Model for the DNS Root Server System. While not dependent on the implementation of RSSAC037, this work can inform the implementation work on RSSAC037 in the following ways:

- A future manifestation of the Performance Monitoring and Measurement Function (PMMF) could use the technical metrics and thresholds defined in this report as a starting point to define

its rules to assess the performance, availability, and quality of service that each RSO provides, thus bringing technical accountability to the RSOs.

- RSSAC037 states that Service Level Expectations (SLEs) should exist between the stakeholders that provide funding and RSOs that receive funding. Metrics and thresholds for the RSOs defined in this report can be used as a starting point for further discussions on the technical and performance requirements in the SLE.

Secondly, while this report focuses on only minimal performance expectations, the RSSAC recognizes that, with the evolution of the governance model, RSOs may enter into future service contracts which could include Service Level Agreements (SLAs). The RSSAC expects that the metrics defined here will be useful in an SLA context. Based on discussions during the preparation of this report, the RSSAC further expects that any SLA thresholds would be stricter (if possible) than the ones provided here.

Thirdly, the metrics and thresholds defined in this report can also be used by RSOs and others to identify situations where the RSS as a whole is degrading in performance, and actions need to be taken collectively.

What factors did the Board find to be significant?

ICANN org has already worked with RSSAC on a prototype measurement system of RSO performance to provide data for consideration to aid in the development of the metrics outlined in RSSAC047.

Are there positive or negative community impacts?

The metrics defined here allow the community to determine if there are RSOs not meeting minimum performance levels. The community can then work with RSSAC, or through other community mechanisms, to address the issue.

Are there fiscal impacts or ramifications on ICANN (strategic plan, operating plan, budget); the community; and/or the public?

Implementation of Recommendation 1 and, eventually Recommendation 2, requires ICANN org time and a small amount of ongoing operational expenditure. These costs are incorporated into OCTO's budget as part of OCTO's normal activities.

Are there any security, stability or resiliency issues relating to the DNS?

The metrics defined here provide a way to show that the RSS as a whole is, or is not, meeting performance levels. Implementing this advice is within ICANN's remit because it involves setting up systems that the community can use to make assessments of the RSS.

Is this decision in the public interest and within ICANN's mission?

Yes. RSSAC047 defines measurements, metrics, and thresholds that root server operators (RSOs) meet to provide a minimum level of performance. This falls directly under ICANN's Mission Statement, from Bylaws Section 1.1. MISSION:

- "(a) The mission of the ICANN is to ensure the stable and secure operation of the Internet's unique identifiers*
- (ii) Facilitates the coordination of the operation and evolution of the DNS root name server system. "*

In addition, the implementation of this advice aligns with item "1.2 Strengthen DNS root server operations governance in coordination with the DNS root server operators" from the ICANN Strategic Plan for Fiscal Years 2021-2025.

Signature Block:

Submitted by:

Position:

Date Noted:

Email:

ICANN BOARD PAPER NO. 2021.03.25.1c

TITLE: **Appointment of Independent Audit Firm for FY21**

PROPOSED ACTION: **For Board Consideration and Approval**

EXECUTIVE SUMMARY:

Section 22.2 of the ICANN Bylaws (<http://www.icann.org/general/bylaws.htm>) requires that after the end of the fiscal year, the books of ICANN must be audited by certified public accountants, which shall be appointed by the Board.

As the Audit Committee has recommended that the Board approve BDO USA, LLP and BDO members firms as the independent audit firm(s) for the fiscal year ending 30 June 2021 for any annual ICANN independent audit requirements, the Board is now being asked to approve the Audit Committee's recommendation.

AUDIT COMMITTEE RECOMMENDATION:

The Audit Committee has recommended that the Board authorize the President and CEO, or his designee(s), to take all steps necessary to engage BDO USA, LLP and BDO member firms as ICANN's annual independent audit firm(s) for the fiscal year ending 30 June 2021 for any annual independent audit requirements in any jurisdiction.

PROPOSED RESOLUTION:

Section 22.2 of the ICANN Bylaws (<http://www.icann.org/general/bylaws.htm>) requires that after the end of the fiscal year, the books of ICANN must be audited by certified public accountants, which shall be appointed by the Board.

Whereas, the Board Audit Committee has discussed the engagement of the independent auditor for the fiscal year ending 30 June 2021 and has recommended that the Board authorize the President and CEO, or his designee(s), to take all steps necessary to engage BDO USA, LLP and BDO member firms.

Resolved (2021.03.25.XX), the Board authorizes the President and CEO, or his designee(s), to take all steps necessary to engage BDO USA, LLP and BDO member firms as the audit firm(s) for the financial statements for the fiscal year ending 30 June 2021.

RATIONALE FOR RESOLUTION:

The audit firm BDO USA, LLP and BDO member firms have been ICANN's independent audit firms since the audit of fiscal year 2014. In 2019, there was a partner rotation and a new audit partner was assigned to the ICANN engagement. Based on the report from the organization and the Audit Committee's evaluation of the work performed, the committee has recommended that the Board authorize the President and CEO, or his designee(s), to take all steps necessary to engage BDO USA, LLP and BDO member firms as ICANN's independent audit firm(s) for fiscal year 2021 for any annual independent audit requirements in any jurisdiction.

This furthers ICANN's accountability to its Bylaws and processes, and the results of the independent auditors' work will be publicly available. Taking this decision is both consistent with ICANN's Mission and in the public interest as the engagement of an independent auditor is in fulfilment of ICANN's obligations to undertake an audit of ICANN's financial statements and helps serve ICANN's stakeholders in a more accountable manner.

This decision will have a fiscal impact on ICANN, which is accounted for in the ICANN Operating Plan and Budget. This decision should not have any direct impact on the security, stability and resiliency of the domain name system.

This is an Organizational Administrative Function not requiring public comment.

Submitted by: Xavier Calvez
Position: SVP Planning & CFO
Date Noted: XX March 2021
Email: Xavier.calvez@icann.org

ICANN BOARD PAPER NO. 2021.03.25.2a

TITLE: **Acceptance of the Second Organizational Review
of the Security and Stability Advisory Committee
(SSAC2) Final Implementation Report**

PROPOSED ACTION: **For Board Consideration and Approval**

EXECUTIVE SUMMARY:

The Board is being asked to accept the [Final Implementation Report](#) of the second Organizational Review of the Security and Stability Advisory Committee (SSAC2). The Board's acceptance of the Final Implementation Report concludes the second Organizational Review of the SSAC.

In line with the Board [resolution](#) issued on 12 March 2020, the SSAC2 Review Work Party (SSAC2 RWP) completed implementation work and provided semi-annual updates to the Organizational Effectiveness Committee (OEC) of the Board (see [Progress Report](#) submitted on 25 June 2020). The SSAC2 RWP, by submitting the SSAC-approved Final Implementation Report to the OEC on 21 December 2020, reports that it has concluded the implementation.

The Final Implementation Report indicates that all twenty-four recommendations from the [Detailed Implementation Plan](#) that had been [accepted by the Board](#), have now been either completed, or integrated into ongoing SSAC processes, as documented in the SSAC Operational Procedures. Particularly, the implementation work for twelve recommendations resulted in the amendment of the [SSAC Operational Procedures issued on 12 February 2020](#), while the implementation of one recommendation resulted in a Bylaws amendment. This detailed implementation report suggests that the impact of the implementation of these recommendations will continue on as part of the ongoing processes, supporting the continuous improvement orientation of the SSAC as they operationalize and continue to follow the modified procedures on a go forward basis.

Moreover, limited components of implementation work for three recommendations are dependent on factors beyond the control of the SSAC. These limited components are:

the publication of photographs of SSAC members on the SSAC public website, which will be completed once the new SSAC website is created in March 2021 (recommendation 18), and engagement activities which will require adaptation due to COVID-19 cancellations of ICANN meetings (recommendations 24, 25). Note that six recommendations and /or the underlying issues provided by the independent examiner were not supported by the SSAC and consequently, these recommendations were not included in the Detailed Implementation Plan nor the Final Implementation Report.

In line with its oversight responsibilities for organizational reviews, the OEC has monitored the progress of the review implementation and considered all relevant documents, including the Final Implementation Report as approved by the SSAC.

ORGANIZATIONAL EFFECTIVENESS COMMITTEE (OEC)

RECOMMENDATION:

In its capacity of overseeing the organizational review process, the OEC recommends that the Board accept the Final Implementation Report issued by the SSAC Review Work Party (SSAC2 RWP) and approved by the SSAC on 3 December 2020, thereby concluding the second SSAC Review. The OEC further recommends that the SSAC should provide the OEC with progress updates on the three areas of implementation efforts that remain outstanding until such time that the implementation efforts conclude.

PROPOSED RESOLUTION:

Whereas, on 12 March 2020 the Board accepted the SSAC2 Review Detailed Implementation Plan and directed the SSAC2 Review Work Party to provide the Board with regular reporting on the implementation efforts.

Whereas, the Security and Stability Advisory Committee Review Work Party (SSAC2 RWP), with SSAC approval and oversight, provided the Board via the OEC with semi-annual updates on the progress of implementation efforts until such time that the implementation efforts concluded.

Whereas, the SSAC2 RWP, submitted a [Final Implementation Report](#) on 3 December 2020, detailing the completion of implementation of the recommendations arising out of the second SSAC Review and documenting that three recommendations¹ have limited components that are not yet fully implemented. The OEC acknowledged that the remaining steps of the SSAC2's implementation work have dependencies beyond the control of the SSAC.

Whereas, the OEC recommends that the Board accept the SSAC2 Review [Final Implementation Report](#) issued by the SSAC2 RWP and approved by the SSAC on 3 December 2020, thereby completing the second SSAC Review; and requests that the SSAC provide a written or oral update to the OEC by 30 June 2021 on the three recommendations with limited components for which implementation is not yet fully completed and, if not completed by then, every six months thereafter until all implementation is completed.

Resolved (2021.03.25.xx), the Board accepts the [Final Implementation Report](#) of the second SSAC Review issued by the SSAC RWP approved by the SSAC, which marks the completion of this organizational review in accordance with Bylaws [Article 4 Section 4.4](#). The Board encourages the SSAC to continue monitoring the impact of the implementation of the recommendations from the second Review of the SSAC as part of its continuous improvement process.

Resolved (2021.03.25.xx), the Board acknowledges the SSAC RWP's implementation work aimed at improving the SSAC's effectiveness, transparency, and accountability, in line with the proposed timeline as set out in the adopted SSAC2 Review Detailed Implementation Plan.

Resolved (2021.03.25.xx), the Board requests the SSAC to provide the OEC with a written or oral progress update on the remaining components of the three recommendations for which the implementation is not fully completed. In the event that implementation is not completed by 30 June 2021, the SSAC shall continue to provide such updates to the OEC on a six-monthly basis until such time that the implementation efforts conclude.

¹ Recommendations 18, 24 and 25

PROPOSED RATIONALE:

Why is the Board addressing the issue?

ICANN organizes independent reviews of its supporting organizations and advisory committees as prescribed in [Article 4 Section 4.4](#) of the ICANN Bylaws, to ensure ICANN's multistakeholder model remains transparent and accountable, and to improve its performance.

This action completes the second review of the SSAC and is based on the [Final Implementation Report](#), as approved by the SSAC.

Following the assessment of all pertinent documents by the Organizational Effectiveness Committee (OEC), the Board is now in a position to consider and accept the Final Implementation Report.

Background: The independent examiner began its work in March 2018 and issued its [Final Report](#) in December 2018, including 30 recommendations. The SSAC published its [Feasibility Assessment and Initial Implementation Plan](#) in May 2019, with the Board [accepting both and directing the implementation planning to start](#) in June 2019. The Board [accepted](#) the [Detailed Implementation Plan](#) in March 2020. Note that six recommendations and /or the underlying issues provided by the independent examiner were not supported by the SSAC and consequently, these recommendations were not included in the Detailed Implementation Plan nor the Final Implementation Report (recommendations 7, 13, 17, 21, 22, and 23).

What is the proposal being considered?

The SSAC RWP submitted its Final Implementation Report to the OEC on 3 December 2020. The Final Implementation Report indicates that all 24 recommendations accepted by the Board have now been either completed, or integrated into ongoing SSAC processes, as documented in the SSAC Operational Procedures.

Particularly, the implementation work for twelve recommendations resulted in the amendment several sections of the [SSAC Operational Procedures issued on 12](#)

February 2020: Sections 2.1.2 (*Withdrawals and Dissents*)², 2.3 (*New Member Selection*)³, 2.5 (Annual Review Process)⁴, 2.6.1 (Affirmation of Confidentiality and Non-disclosure)⁵, 2.8.1 (*SSAC Roles – Chair*)⁶, 2.8.3 (*SSAC Roles – SSAC Outward liaisons*)⁷, 3.1 (*SSAC Publication Procedures - Proposing, Selecting, and Planning a Work Product*)⁸, 3.2.4 (*SSAC Publication Procedures – Study and Primary Work – Preliminary Review*)⁹, 3.4 (*Publication, Promulgation, and Publicizing*)¹⁰, 3.5 (*Tracking, Review, and Follow-Up*)¹¹, Appendix B and F¹².

These twelve recommendations cover various aspects of SSAC operations:

- documenting reviews and feedback from Board Liaison (recommendation 3),
- capturing of information in the Board Action Request Register (ARR) (recommendation 4),
- reviewing the implementation state of past and future advice provided to the ICANN Board (recommendation 5),
- formalizing an annual process to set research priorities and identify SSR threats (recommendations 8),
- updating skills in the SSAC's membership and recruitment processes (recommendation 9),
- communicating on its decisions (recommendation 10),
- explicitly discussing who affected parties may be in SAC-series document (recommendation 16),
- identifying skills gap in the current membership (recommendation 24),
- developing a formalized process to estimate its current and desired diversity (recommendation 25),
- ensuring ensure that the effectiveness of an external liaison and the individual in the role are reviewed on a regular basis (recommendation 26),

² Recommendation 29

³ Recommendations 24, 25, 29

⁴ Recommendation 29

⁵ Recommendation 29

⁶ Recommendation 27

⁷ Recommendation 26

⁸ Recommendations 8, 9, 10

⁹ Recommendation 16

¹⁰ Recommendation 3

¹¹ Recommendations 4, 5

¹² Recommendation 29

- and limiting SSAC's leadership to two, three-year terms, and imposing no term limits on non-leadership members (recommendation 27).

In addition, the implementation of recommendation 28 resulted in a Bylaws amendment for there to be term limits on the SSAC Chair.

This suggests that the impact of the implementation of these recommendations will continue on as part of the ongoing processes, supporting the continuous improvement orientation of the SSAC as they operationalize and continue to follow the modified procedures on a go forward basis.

SSAC RWP reported that eight recommendations (1, 2, 11, 14, 15, 19, 20, 30) did not require implementation work because the recommended steps are already part of the SSAC processes and operations.

Moreover, limited components of implementation work for recommendations 18, 24 and 25, are dependent on factors beyond the control of the SSAC. The recommendations pertain to consolidating information online and increasing transparency (recommendation 18), identifying skills gap in the current membership (recommendation 24), developing a formalized process to estimate its current and desired diversity (recommendation 25) and while significant work was implemented, components of these recommendations could not be considered fully implemented due to the non-publication of photographs of SSAC members on the SSAC public website (recommendation 18), and the lack of face-to face opportunities due to the COVID-19 cancellations of ICANN meetings (recommendations 24, 25). However, SSAC is planning to address the last component of recommendation 18 once the new SSAC website is published, and will also approach ICANN regional staff to assist with outreach pertaining to implementation of recommendation 24 and 25.

Which stakeholders or others were consulted?

The Board, through the OEC, consulted with the SSAC2 RWP, who was responsible for the implementation, and monitored the progress of the review as well as the progress of the implementation of review recommendations.

What concerns, or issues were raised by the community?

The implementation work conducted by the SSAC followed its standard best practices to ensure transparency and accountability. No concerns were voiced by the community.

What significant materials did the Board review?

The Board reviewed relevant [Bylaws sections](#), [Organizational Review Process documentation](#), [SSAC2 Review Implementation Plan](#), its [first six-monthly implementation progress report](#) and the [final implementation report](#).

What factors did the Board find to be significant?

The Board found several factors to be significant, contributing to the effective completion of the implementation work:

- SSAC's commitment to its continuous improvement.
- Convening a dedicated group that oversees the implementation of Board-accepted recommendations.
- Adherence to the implementation plan that included a timeline for the implementation, definition of desired outcomes, as well as ways to measure current state and progress toward the desired outcome.
- Timely and thorough reporting on the progress of implementation.

Are there positive or negative community impacts?

This Board action is expected to have a positive impact on the community by acknowledging and highlighting an effective completion of implementation of SSAC2 Review Recommendations. The completed implementation of the SSAC2 organizational review demonstrates SSAC's commitment to continuous improvement.

Are there fiscal impacts or ramifications on ICANN (strategic plan, operating plan, budget); the community; and/or the public?

This Board action is anticipated to have no additional fiscal impact. The Board notes that most recommendations require the help of the ICANN org SSAC support staff to execute, which would be done as part of support staff's standard duties. The ramifications of this resolution on the ICANN organization, the community and the public are anticipated to be positive, as this Board action signifies an important milestone for organizational reviews.

Are there any security, stability or resiliency issues relating to the DNS?

This Board action is not expected to have a direct effect on security, stability or resiliency issues relating to the DNS.

How is this action within ICANN's mission and what is the public interest served in this action?

The Board's action is consistent with ICANN's commitment pursuant to section 4.1 of the Bylaws to ensure ICANN's multistakeholder model remains transparent and accountable, and to improve the performance of its supporting organizations and advisory committees. This action will serve the public interest by fulfilling ICANN's commitment to maintaining and improving its accountability and transparency.

Is public comment required prior to Board action?

No public comment is required.

Signature Block:

Submitted by: Theresa Swinehart

Position: Senior Vice President, Global Domains Services (GDS)

Date Noted: 9 February 2021

Email: theresa.swinehart@icann.org

ICANN BOARD INFO PAPER NO. 2021.03.25.2b

TITLE: Accepting Name Collision Analysis Project

(NCAP) Study 1 and proceeding with Study 2

PROPOSED ACTION: For Board Consideration and Approval

EXECUTIVE SUMMARY:

NCAP Study 1, the first of three studies proposed by the Security and Stability Advisory Committee (“SSAC”) as part of the Name Collision Analysis Project (“NCAP”), is complete and available for the Board’s review at

<https://www.icann.org/en/system/files/files/ncap-study-1-report-19jun20-en.pdf>. The goals of Study 1 were to document prior work on name collisions, assess datasets related to name collision, and recommend whether or not the proposed Studies 2 and 3 should be performed.

The results of Study 1 found that, amongst other things, Studies 2 and 3 should not be performed as originally designed. In response to the recommendations of Study 1, the NCAP Discussion Group (“NCAP DG”) redesigned Study 2.

This resolution acknowledges receipt of Study 1 and directs the NCAP DG and ICANN org to proceed with Study 2 as redesigned with an emphasis on identifying criteria for identifying collision strings and determining if collision strings are safe to be delegated.

COMMITTEE RECOMMENDATION:

The Board Technical Committee (“BTC”) recommends that the NCAP DG be directed to proceed with Study 2 as redesigned and that ICANN org be directed to assist as called for in the redesigned study plan.

PROPOSED RESOLUTION:

Whereas, in 2017 the Board passed resolutions [2017.11.02.29 - 2017.11.02.31](#) asking a series of questions about name collisions.

Whereas, the ICANN Security and Stability Advisory Committee (SSAC) responded with a proposal for three studies intended to address the Board’s questions.

Whereas, SSAC and the Office of the Chief Technology Officer (OCTO) within ICANN org worked together to produce a mutually agreed revised proposal for NCAP Study 1.

Whereas, in April 2019 the Board directed ICANN org to proceed with NCAP Study 1 and authorized the associated expenditures for that purpose.

Whereas, ICANN org engaged Scarfone Cybersecurity, an independent contractor, to research and write NCAP Study 1.

Whereas, on 30 June 2020, ICANN org sent the final version of NCAP Study 1 to the Board Technical Committee (BTC) after two public comment periods on the [draft](#) and [final](#) versions of the report.

Whereas, NCAP Study 1 recommended that NCAP Studies 2 and 3 not proceed as currently designed.

Whereas, the NCAP Discussion Group (DG) revised the design of NCAP Study 2 to take into account the issues raised by NCAP Study 1.

Whereas, on 5 February 2021, the NCAP DG leadership presented the revised design of NCAP Study 2 to the BTC for approval.

Resolved (2021.03.25.xx), the Board reiterates its thanks to the SSAC for its work in responding to the November 2017 resolution and developing an initial proposal for the NCAP and subsequent revisions to that proposal.

Resolved (2021.03.25.xx), the Board thanks the NCAP DG for its contributions to NCAP Study 1.

Resolved (2021.03.25.xx), the Board affirms the continued relevance of the nine questions related to name collisions presented in Board resolutions [2017.11.02.29 - 2017.11.02.31](#), especially questions (7) and (8) concerning criteria for identifying collision strings and determining if collision strings are safe to be delegated.

Resolved (2021.03.25.xx), the Board directs the NCAP DG to proceed with Study 2 as redesigned, and directs the President and CEO, or his designee(s), to participate in Study 2 in the manner indicated in the redesigned proposal.

RATIONALE:

Name collision refers to the situation where a name that is defined and used in one namespace may also appear in another. A “namespace” in this context refers to all possible names that can be resolved, e.g., the public DNS namespace as administered by ICANN through the IANA functions or a “private” namespace that is limited to an enterprise network. Users and applications intending to use a name in one namespace may attempt to use it in a different one (typically accidentally due to misconfigurations), and unexpected behavior may result where the intended use of the name is not the same in both namespaces. An example of name collision outside the DNS would be calling out a common person’s name in a closed environment like a company lunch room versus calling out that name in a crowded public space: in the first case, the intended person is likely to respond whereas in the latter case, multiple people may respond.

On 2 November 2017, the ICANN Board passed resolutions [2017.11.02.29 -](#) [2017.11.02.31](#) requesting SSAC to conduct studies to present data, analysis, and points of view, and provide advice to the Board regarding the risks posed to users and end systems if .CORP, .HOME, .MAIL strings were to be delegated in the root, as well as possible courses of action that might mitigate the identified risks. The Board also asked nine questions related to the definition of name collision, user experience and possible harm, causes of collisions, potential risks, and possible mitigations, among other topics related to name collisions.

Following the Board resolution, the SSAC began project planning in December 2017 for the work necessary to address the Board’s requests. In January 2018, the SSAC NCAP Work Party ("NCAP WP") was formed and prepared a plan calling for three studies. Also created was the NCAP Administration ("NCAP Admin"), a smaller group comprising the NCAP WP leadership and SSAC leadership, which guides the NCAP effort both within SSAC and in the larger ICANN community.

In June 2018, the ICANN organization's CEO, after input from the Board, assigned OCTO to be responsible for completing the NCAP studies since SSAC did not have the administrative infrastructure or the resources to undertake and manage such a large project.

In September 2018, SSAC published "[SSAC Proposal for the Name Collision Analysis Project](#)", which proposed three consecutive studies to address the Board's request.

OCTO proposed minor changes to the proposal and, after discussion between SSAC and OCTO, [an updated version of the proposal](#) was published in February 2019.

In April 2019, the NCAP DG was formed to allow interested members of the larger ICANN community to also participate in the NCAP effort. The NCAP DG consists of both the SSAC NCAP WP and any interested community members.

Due to resource constraints, OCTO chose to outsource the completion of Study 1 to a contractor. An [RFP](#) for the work was published on 9 July 2019 and in September 2019, Scarfone Cybersecurity was selected in accordance with ICANN org's standard procurement processes. Study 1 was the result of a collaborative effort between Scarfone Security, NCAP DG and ICANN org. Every draft of the study during each Public Comment proceedings was met with various comments and points of discussion before the publication of the final report. The [final Study 1 report](#) was published on 19 June 2020.

The major findings of Study 1 can be summarized as follows:

1. Name collisions have been a known problem for decades but published work only began to appear starting in 2012. The only known work on name collisions in the past few years has been done within the ICANN community by the NCAP DG and the New gTLD Subsequent Procedures PDP Working Group ("SubPro WG").
2. Few instances of name collisions were reported to ICANN or publicly since controlled interruption was instituted. Only one of the reports to ICANN necessitated action by a registry, and none of the public reports surveyed mentioned major harm to individuals or organizations.
3. There are several root causes of name collisions but these have typically been found researching a specific leaked TLD, not by examining datasets.
4. No gaps or other issues were identified in accessing datasets that would be needed for Studies 2 and 3.

Study 1 goes on to state:

Given these findings, the recommendation is that Studies 2 and 3 should not be performed as currently designed. Regarding Study 2, analyzing datasets is unlikely to identify significant root causes for name collisions that have not already been identified. New causes for name collisions are far more likely to be found by investigating TLD candidates for potential delegation on a case by case basis. Regarding Study 3, controlled interruption has already proven an effective mitigation strategy, and there does not appear to be a need to identify, analyze, and test alternatives for the vast majority of TLD candidates.

(Executive Summary, p. v)

In response to the findings of Study 1, the NCAP DG redesigned Study 2 and made several major changes: (1) the removal of two original study goals, (2) the expansion and added detail of other study goals, and (3) having the NCAP DG undertake most of the work which was slated for paid contractors in the original version of the Study 2 proposal. These modifications dramatically reduce the scope, level of effort, total costs, and resources required to execute Study 2.

NCAP DG will undertake a significant portion of the work in the redesigned Study 2, while ICANN will provide project management support and engage a technical writer and a technical investigator to assist with preparation of the Study. The estimated costs to ICANN org for the redesigned Study 2 fall below the threshold required for Board approval and are therefore not described further in this Board paper.

The BTC affirms that the questions related to name collisions posed by in Board resolutions [2017.11.02.29 - 2017.11.02.31](#) are still relevant. The BTC emphasizes the particular importance of questions (7) and (8) regarding the criteria for identifying collision strings and determining if collision strings are safe to be delegated.

Signature Block:

Submitted by:	David Conrad
Position:	CTO
Date Noted:	4 March 2021
Email:	david.conrad@icann.org

ICANN BOARD PAPER NO. 2021.03.25.2a

TITLE: **Operational Design Phase for System for Standardized Access/Disclosure to Non-Public Registration Data (SSAD)**

PROPOSED ACTION: **For Board Consideration and Approval**

EXECUTIVE SUMMARY:

On 19 July 2018, the GNSO Council [initiated](#) and [chartered](#) an Expedited Policy Development Process (“EPDP”) on the Temporary Specification for gTLD Registration Data. The GNSO council [transmitted](#) the Recommendations Report regarding the supermajority adoption of the Final Recommendations from the Expedited Policy Development Process on the Temporary Specification for gTLD Registration Data (EPDP) Phase 2 to the Board on 29 October 2020. The Bylaws require that any PDP Recommendations approved by a GNSO Supermajority Vote shall be adopted by the Board unless, by a vote of more than two-thirds (2/3) of the Board, the Board determines that such policy is not in the best interests of the ICANN community or ICANN. ICANN org is recommending the Board initiate an Operational Design Phase Assessment of the policy recommendations to help its deliberations about whether the policy recommendations are in the best interests of the ICANN community or ICANN.

The [Final Report - Temporary Specification for gTLD Registration Data Phase 2 Expedited Policy Development Process](#) (“Final Report”) consists of 22 recommendations, where recommendations #1-18 specifically describe a System for Standardized Access/Disclosure (“SSAD”) to handle requests for non-public registration data in a timely and predictable manner, while recommendations #19-22 address the topics concerning the issues noted in the [Annex to the Temporary Specification for gTLD Registration Data](#) ("Important Issues for Further Community Action") and outstanding issues deferred from EPDP Phase 1, e.g., redaction of city

field, data retention, et al.¹ The SSAD-related recommendations (#1-18) concern complex issues, and it is anticipated that the Board may benefit from further due diligence to evaluate the operational requirements and impact to inform its deliberation.

In anticipation of these and other complex policy recommendations, ICANN org recently developed the Operational Design Phase (ODP) concept process with community input. The ODP is intended to become part of the [Consensus Policy Implementation Framework](#). The ODP consists of an operationally focused assessment of GNSO Council-approved policy recommendations by ICANN org. The ODP is initiated and scoped by the Board, and includes an expected timeline for delivery of the relevant information.

The ODP will produce an Operational Design Assessment (ODA) that will be delivered to the Board for its consideration alongside the GNSO Council-approved recommendations. The ODA is expected to provide the Board with relevant information to facilitate the Board's determination of whether the recommendations are in the best interests of the ICANN community or ICANN. This includes analysis of the operational impact of SSAD-related recommendations in terms of risk, anticipated costs, resource requirements, potential timelines, and other matters related to implementation of the recommendations.

ICANN ORG RECOMMENDATION:

The ICANN org recommends that the Board take action to initiate an Operational Design Phase of the SSAD-related recommendations #1-18 of the EPDP Phase 2 Final Report to facilitate the Board's review and consideration of the recommendations. The GDPR Board Caucus Group has been consulted regarding the org's recommendation and is in support of it.

PROPOSED RESOLUTION:

¹ Public comment proceedings on Recommendations #19-22 of the Final Report that addresses outstanding items deferred from EPDP Phase 1 closed on 22 January 2021 and will soon be considered for Board action

Whereas, on 24 September 2020 the GNSO Council [voted to approve](#) all of the recommendations in its [Final Report](#) on the Expedited Policy Development Process on the Temporary Specification for gTLD Registration Data (EPDP) Phase 2.

Whereas, the Board has begun its deliberations to consider whether the recommendations in the EPDP Phase 2 Final Report are in the best interests of ICANN community or ICANN;

Whereas, the Board wishes to utilize the newly developed Operational Design Phase process to assess the recommendations and to gather more information as part of its deliberations.

Whereas, the Board notes that on 5 May 2020 a [Discussion Paper: ICANN org Cost Estimate for EPDP Phase 2 Team's Proposed System for Standardized Access/Disclosure](#) was provided to the Expedited Policy Development Process on the Temporary Specification for gTLD Registration Data (EPDP) Phase 2 Working Group by the ICANN org that included an estimate of the costs associated with the start-up and ongoing operations related to the team's proposed system requirements during the Policy Development Process;

Resolved (2021.03.25 xx), the Board directs the President and CEO, or his designee(s), to proceed with the Operational Design Phase for [GNSO Council-approved recommendations \(#1-18\)](#) from the EPDP Phase 2 report on the System for Standardized Access and Disclosure.

Resolved (2021.03.25 xx), the Board directs the President and CEO, or his designee(s), to conduct the Operational Design Phase by addressing the questions outlined in the [System for Standard Access/Disclosure to Non-Public Registration Data Operational Design Phase Scoping Document](#) and that the final Operational Design Assessment be delivered to the Board 6 months from the date of the Board's request, provided that there are no unforeseen legal or other matters that could affect the timeline. In the event that unforeseen circumstances arise, the Board directs the President and CEO, or his designee(s), to notify and discuss such with the Board and provide an updated timeline for the appropriate next steps with respect to the Operational Design Assessment.

[Commented \[1\]: Link to Scoping Doc](#)

Resolved (2021.03.25 xx), the Board directs the President and CEO, or his designee(s), to consider the 5 May 2020 ICANN org Cost Estimate Discussion Paper during the Operational Design Phase for [GNSO Council-approved recommendations](#) (#1-18) from the EPDP Phase 2 report on the System for Standardized Access and Disclosure.

PROPOSED RATIONALE:

Why is the Board addressing the issue?

Due to the resource investment and complexity that would likely be required to implement the SSAD-related policy recommendations in a timely and predictable manner, initiating an ODP is essential to inform the Board's deliberations, including whether the recommendations are in the best interests of the ICANN community or ICANN. The ODP work will assess the potential risks, anticipated costs, resource requirements, timelines, and other matters related to implementation of the SSAD-related recommendations. It will also transparently provide the Board with relevant information regarding the recommendations in support of the Board's obligation to act on the GNSO recommendations in accordance with the Bylaws. Additionally, the GNSO Council in its [22 January 2021](#) letter recommended the Board review the original "cost estimate discussion paper" published by ICANN org on 20 May 2020, and subsequently [requested a consultation](#) with the ICANN Board to discuss "whether a further cost-benefit analysis should be conducted before the ICANN Board considers all SSAD-related recommendations for adoption." The initiation of the Operational Design Phase will aid in the Board's consultation with the GNSO Council.

What is the proposal being considered?

The Board is taking action at this time to initiate the ODP and directs ICANN org to prepare an assessment of the operational requirements and impact of the SSAD-related recommendations as per the scope specified by the Board for the purpose of informing the Board's deliberation of the recommendations.

Which stakeholders or others were consulted?

The EPDP Phase 2 Team published its [Initial Report](#) on priority 1 recommendations on 7 February 2020 and the [Addendum to the Initial Report](#), covering Priority 2 recommendations, on 26 March 2020. Both the [Initial Report](#) and Addendum to the Initial Report were subject to Public Comment Proceedings. The [Final Report](#) was delivered to the GNSO Council on 31 July 2020. Minority Statements from stakeholder groups were accepted through 24 August 2020, and all statements received by the deadline were incorporated into the Final Report.

In its 29 October 2020 [letter](#) transmitting the EPDP Phase 2 team's recommendations to the Board, the GNSO Council requested a consultation with the ICANN Board regarding recommendations #1-18, which outlines the policy for the SSAD. In its [1 December 2020 letter](#), the Board "acknowledged the GNSO Council's request for a consultation on the SSAD-related recommendations" and noted its plan to "initiate an Operational Design Phase to assess the operational impact of the GNSO Council-approved consensus recommendations." On 8 February 2021, the Board initiated the [public comment forum](#) on the SSAD-related recommendations. The public comment forum is expected to close on 30 March 2021.

Additionally, the ODP is a new process that was developed with community input. The first iteration of the ODP concept was published on [1 October 2020](#). The community and ICANN org discussed the contents of the concept paper during [ICANN69](#). The second version of the ODP was published on [17 December 2020](#). The ICANN org conducted a community webinar on [13 January 2021](#) to facilitate a discussion on the updates provided in the subsequent draft of ODP and to receive additional community feedback.

What concerns or issues were raised by the community?

The community provided extensive feedback regarding the SSAD, including its financial implications. The following concerns were among those shared in public comments and minority statements on the EPDP Phase 2 Final Report, as well as in correspondence received by ICANN org, and in other settings:

- The SSAD does not fulfill the needs of the community by providing access to specific accurate non-public data in a timely predictable manner.

- The SSAD bears significant operational costs and lacks flexibility to ensure it is suitable.
- The SSAD falls short of addressing the security, stability, reliability of the DNS system.
- The SSAD includes insufficient mechanisms for evolution.
- The SSAD may disrupt a stable, predictable and workable access mechanism for the non-public WHOIS information.

The community also provided feedback during the development of the ODP raising the following concerns:

- The ODP could provide an opportunity for stakeholder groups to reopen or revisit policy questions that were already settled during the policy development process.
- The ODP would alter the roles and responsibilities of ICANN org and the Implementation Review Team that is formed after the Board has adopted the GNSO council recommendations.
- The ODP would modify the role of the GNSO Council as the manager of the Policy Development Process.

What significant materials did the Board review?

The Board reviewed the following materials

- The [5 May 2020 cost analysis discussion paper](#), produced by ICANN org for the EPDP Phase 2 team, which provides an estimate of the costs associated with the start-up and ongoing operations related to the proposed system requirements.
- The 24 September 2020 GNSO Council [resolution](#) of the EPDP Phase 2 Final report recommendations.
- The [EPDP Phase 2 Final report](#), received from the GNSO Council, which includes recommendations #1-18 which addresses the System for Standardized Access and Disclosure (SSAD).
- The GNSO Council 29 October 2020 [correspondence](#) requesting a Board and GNSO Council consultation prior to the Board's deliberations on the policy recommendations.
- The GNSO Council's 22 January 2021 [letter](#) recommended the Board review and update the original cost estimate discussion paper along with suggested topics for operational impact assessment.

What factors did the Board find to be significant?

The Board considered factors outlined in the cost estimate analysis and the complexity of the SSAD-related recommendations as they propose a new system for ICANN. The Board understands from the community that there are concerns regarding the financial implications and the cost versus benefit of the SSAD. The Board also understands from potential users of the SSAD in the community that there are concerns that such system be effective for its stated purpose and be widely used. The information collection effort will include consideration of the effectiveness of the SSAD and measures to ensure its broad adoption and use. If the recommendations are approved by the Board, the SSAD is a new system that ICANN org will build and potentially operate. The implementation and operation of the SSAD will require significant investments and resources. Furthermore, data protection laws such as the General Data Protection Regulation (GDPR) have significantly impacted ICANN org and WHOIS registration data. It is possible that other laws and legal uncertainties may arise during the ODP period that could also significantly impact ICANN org and WHOIS registration data. Thus, ICANN org needs to ensure that the SSAD is designed in a manner that complies with all laws and supports the DNS globally.

Are there positive or negative community impacts?

ICANN org will incorporate feedback mechanisms such as webinars to communicate with the community on the progress of the ODP thus enhancing the transparency of the Board consideration of the GNSO council-approved policy recommendations. The ODA will also provide further clarity on the policy recommendations, thus will likely reduce the time ICANN org and the Implementation Review Team spend on designing processes during the implementation phase.

Are there fiscal impacts or ramifications on ICANN (strategic plan, operating plan, budget); the community; and/or the public?

This resolution will involve dedicating significant organizational resources to completing the ODP during the time period outlined in the scoping document. The community will be asked to provide feedback throughout this time period.

Are there any security, stability or resiliency issues relating to the DNS?

The ODP will consider the impact the SSAD may have on the security, stability or resiliency of the DNS.

Is this decision in the public interest and within ICANN's mission?

In its evaluation, the Board will explore what, if any, are the public interest considerations within the EPDP Phase 2 recommendations. The mechanism for ascertaining the relevant public interest on a given recommendation will be the global public interest procedural [framework](#) that the Board is piloting in FY21. The framework will be used as an evaluative tool only for recommendations with public interest considerations.

Is this either a defined policy process within ICANN's Supporting Organizations or ICANN's Organizational Administrative Function decision requiring public comment or not requiring public comment?

This is an Organizational Administrative Function that does not require public comment, but it should be noted that the Final Report of policy recommendations and the ODP framework were the subject of public comment as discussed above. Additionally, the ODP itself is an open and transparent process and it is foreseen that the public will be able to provide comments and feedback throughout the design phase.

Signature Block:

Submitted by:

Position:

Date Noted:

Email:

System for Standard Access/Disclosure to Non-Public Registration Data Operational Design Phase Scoping Document

1. Introduction

The ICANN Board is considering the [Expedited Policy Development Process \(EPDP\) Phase 2 Final Report](#) recommendations that were transmitted by the GNSO Council on 29 October 2020. In order to facilitate the Board's careful review and consideration of the recommendations, the Board is requesting that the ICANN org conduct an Operational Design Assessment of the System for Standard Access/Disclosure to Non-Public Registration Data, recommendations #1-18, of the Final Report. The Board requests that the Operational Design Assessment be completed 6 months from the date of the Board's request, provided that there are no unforeseen legal or other matters that could affect the timeline. This document provides the Parameters (Section 2), and Scope (Section 3), within which the ODA should be conducted.

2. Parameters

The ICANN org is expected to conduct its Operational Design Assessment based on the following parameters:

- 2.1. Operational Design Assessment (ODA) is performed from the perspective of finding a way to implement the GNSO's final recommendations and makes no judgment on whether the Board should approve the recommendations.
- 2.2. ODA will be organized by work area and include operational design analysis based on the policy recommendations as well as any additional anticipated aspects required to implement.
- 2.3. In cases where ICANN org needs to make assumptions to allow for the completion of the analysis, the assumptions will be explicitly stated in the ODA to provide transparency to the Board and community; and to assist in understanding the overall assessment.

- 2.4. Implementation may be dependent on other community or ICANN org efforts outside of the specific recommendation-related implementation work; such efforts will be clearly identified, documented, and explained, including how the ODA does or does not address the identified dependencies.
- 2.5. Initiating and conducting an ODP is not a minor undertaking and will require ICANN org resources to execute and deliver the information within the specified timeframe.
- 2.6. Some questions may only be addressed after the ODP is completed and, should the policy recommendations be adopted, once implementation of the SSAD has begun.

3. Scope

The ICANN org is expected to conduct its Operational Design Assessment of the GSNO Council-approved SSAD-related recommendations #1-18 within the scoping questions specified below, but may extend beyond the scope as it deems necessary.

3.1. Operational Readiness

- 3.1.1. Identity Verification
 - 3.1.1.1. What approach(es) for identity verification can be used across different jurisdictions for the purposes required by the policy recommendations?
 - 3.1.1.2. What criteria will be used to select the Identity Provider(s)?
 - 3.1.1.3. Is more than one Identity Provider necessary for the operation of the SSAD?
- 3.1.2. Country/Territory/Governmental Accreditation
 - 3.1.2.1. How will the governments be verified to make an Accreditation Authority (AA) designation?
 - 3.1.2.2. How will the country/territory or government-designated AA be designated? Who should be allowed to make such designations?
 - 3.1.2.3. How will country/territory or government-designated AA de-accreditation work?
 - 3.1.2.4. How will governments integrate with ICANN org's systems?
- 3.1.3. Legal Questions
 - 3.1.3.1. Data Protection Impact Assessment
 - 3.1.3.1.1. Should a Data Protection Impact Assessment be performed concerning any processing recommended to occur via the SSAD?
 - 3.1.3.2. Data subject rights

- 3.1.3.2.1. How can data subject rights under applicable laws be accounted for at the Central Gateway level?
- 3.1.3.3. Legal bases for processing
 - 3.1.3.3.1. How can the various legal bases for personal data processing (where applicable) be accounted for in the SSAD design?
 - 3.1.3.3.2. How will the variable applicable legal bases for disclosure impact (if at all) the concept of SSAD providing reasonable access?
- 3.1.3.4. International data transfers
 - 3.1.3.4.1. What is the impact of data transfers from the EU and European Economic Area (EEA) to non-EU/EEA countries particularly following the Schrems II decision of the Court of Justice of the European Union?
 - 3.1.3.4.2. To what extent can the Central Gateway implement safeguards that may be legally required to transfer personal data across borders?
- 3.1.3.5. Economic and Trade Sanction Matters
 - 3.1.3.5.1. What impact could economic and trade sanctions have on operating the SSAD?
- 3.1.4. Timeline
 - 3.1.4.1. What is an estimated timeline to deliver the SSAD including specific timing for the items listed below?
 - 3.1.4.1.1. RFI/RFP for vendors
 - 3.1.4.1.2. Development of systems (Central Gateway, Accreditation Authority)
 - 3.1.4.1.3. Legal instrument creation
 - 3.1.4.1.4. Establishment of country/territory AA
- 3.1.5. Operation of the SSAD
 - 3.1.5.1. What is the proposed operational process flow for the SSAD?
 - 3.1.5.2. What is the expected volume the SSAD operational process flow will be able to manage?
 - 3.1.5.3. Can the SSAD handle requests for non-public registration data in a timely and predictable manner?
 - 3.1.5.4. Can the SSAD design scale to meet reasonably anticipated, future operational changes, for example as anticipated in Recommendation 18?
 - 3.1.5.5. How many potential users may be expected to use the system?
 - 3.1.5.6. Can the SSAD design be flexible enough to incorporate future changes in law(s) or ICANN Policy(ies)?

3.2. Systems & Tools

- 3.2.1. What systems, tools, and infrastructure are needed for the technical operation of the SSAD and its component parts?
- 3.2.2. Should ICANN org conduct a pilot program prior to launching the SSAD system?
- 3.2.3. How will the system integrate the various requirements such as identity verification, accreditation authorities, and disclosure of data?
- 3.2.4. Should the Accreditation Authorities manage and verify signed assertions for each requestor?

3.3. Vendors & 3rd Parties

- 3.3.1. Who will perform the Central Gateway Manager role?
- 3.3.2. Who will perform the Accreditation Authority role?
- 3.3.3. Should Identity Providers be used by the AA?

3.4. Resources & Staffing

- 3.4.1. What is the expected level of effort for ICANN org for each area of work outlined below?
 - 3.4.1.1. Development and launch of SSAD
 - 3.4.1.1.1. Systems development
 - 3.4.1.1.2. Vendor procurement
 - 3.4.1.1.3. Legal agreement creation
 - 3.4.1.1.4. Establish and manage the IRT; alignment with GNSO/IRT throughout the implementation phase
 - 3.4.1.2. Ongoing Operation of SSAD
 - 3.4.1.2.1. On-going operation of SSAD (system maintenance, vendor management, appeal mechanisms, compliance capacity, general customer support, etc.)
 - 3.4.1.2.2. Regular public reporting
 - 3.4.1.2.3. Engagement with GNSO Standing Committee

3.5. Finance

- 3.5.1. What is the cost estimate to design, build and operate a SSAD, or the estimate to contract for services as related to the SSAD?
- 3.5.2. How will the fee structure for the SSAD be constructed?

3.6. Risks

- 3.6.1. Would implementation of the SSAD recommendations create business, legal, reputational, or political risks for ICANN or ICANN org?
- 3.6.2. Would implementation of the SSAD recommendations create any potential conflicts with the ICANN Bylaws?
- 3.6.3. Is there any risk that existing policy or anticipated policy changes, or ICANN contractual requirements or amendments could conflict with implementation of the SSAD recommendations?
- 3.6.4. What is the risk to ICANN and ICANN org if future changes in law(s) impact the implementation of the SSAD?
- 3.6.5. Are there any recommendations where the intent is unspecified or unclear that will potentially lead to implementation challenges?
- 3.6.6. Is there a security, stability, and resiliency concern with the implementation of the recommendations?

3.7. Dependencies

- 3.7.1. What dependencies, if any, does implementation of the SSAD have with other ICANN org operations?
- 3.7.2. What are the dependencies, if any, on existing law(s) to implementation of the SSAD?
 - 3.7.2.1. Specifically, what is the impact of the NIS2, should it be adopted?
- 3.7.3. How will the timing of RDAP implementation impact the development and launch of SSAD?
- 3.7.4. What changes, if any, would be needed to the gTLD RDAP profile to implement the SSAD policy recommendations?

3.8. Global Public Interest Framework

- 3.8.1. What impact, if any, do the EPDP Phase 2 recommendations have on the Global Public Interest as evaluated using the [procedural framework](#) that was published in June 2020 and is currently being piloted?

3.9. Contractual Compliance

- 3.9.1. What will the ICANN org Contractual Compliance process design look like for SSAD-related complaints?

- 3.9.2. How will ICANN Compliance evaluate complaints from requestors regarding a CP's failure to respond, incomplete or delayed response, or rejection of disclosure when substantive review remains within the CP's discretion?