

**Root Server System Advisory Committee  
(RSSAC) Organizational Review  
Draft Final Report**

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# Timeline

- ◆ Review began in September 2017
- ◆ Draft Assessment Report (findings) published on 27 February 2018 for public consultation
  - ◆ <https://community.icann.org/display/ACCRSSAC/Assessment+Report>
- ◆ Principal findings presented at ICANN61 on 14 March 2018
- ◆ Draft Final Report (findings and recommendations) published on 1 May 2018 for public comment (closed 10 June 2018)
  - ◆ <https://www.icann.org/public-comments/rssac2-review-final-2018-05-01-en>
- ◆ Public comment webinar 9 May 2018
- ◆ **Presentation of Draft Final Report at ICANN62**
- ◆ Final Report published 2 July 2018

# Purpose of the Review

- The purpose of the review is to determine:
  - (i) whether the RSSAC has a continuing purpose in the ICANN structure;
  - (ii) if so, whether any change in structure or operations is desirable to improve its effectiveness; and
  - (iii) whether the RSSAC is accountable to its constituencies, stakeholder groups, organizations, and other stakeholders.
- The review also assesses the effectiveness of the improvements resulting from the previous review, which was conducted in 2008.

# Scope of the Review

- The scope of the review was defined by the RSSAC Review Working Party and the ICANN Board's Organizational Effectiveness Committee

<https://community.icann.org/display/ACCRSSAC/Scope+of+the+review>

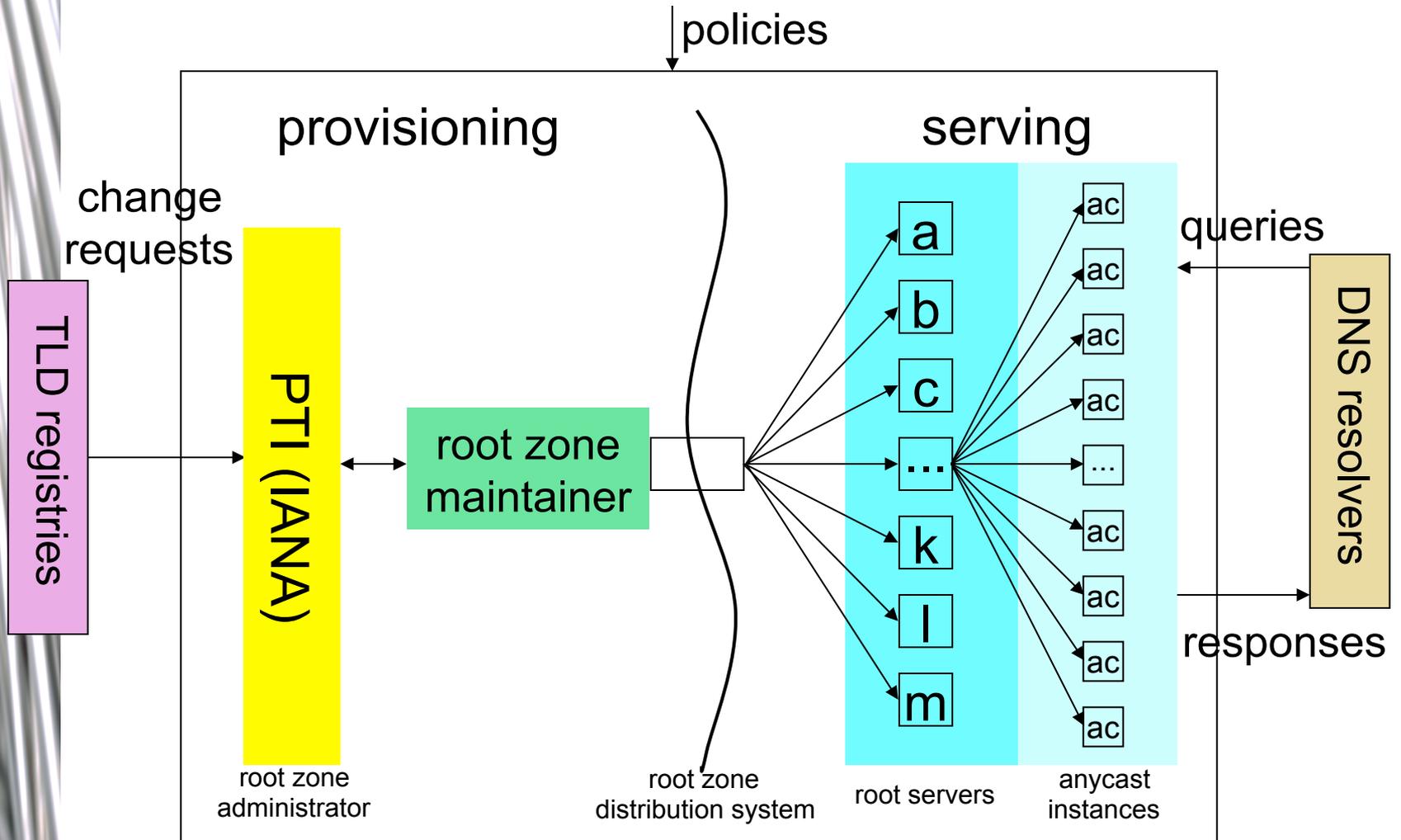
“Examination of RSSAC’s chartered purpose, to advise the ICANN community and Board on matters relating to the operation, administration, security, and integrity of the Internet's Root Server System, and how well it is fulfilled, will help assess the RSSAC’s continuing purpose within the ICANN structure.”

“The assessment of RSSAC structure and operations may include an assessment of RSSAC’s makeup, its current level of participation in, but not limited to, ICANN’s specific review team and cross-community efforts, the RSSAC’s representation and effectiveness within ICANN, the effectiveness of its communications (both internal and external towards ICANN and other SO/ACs), and the alignment of its charter with ICANN’s mission.”

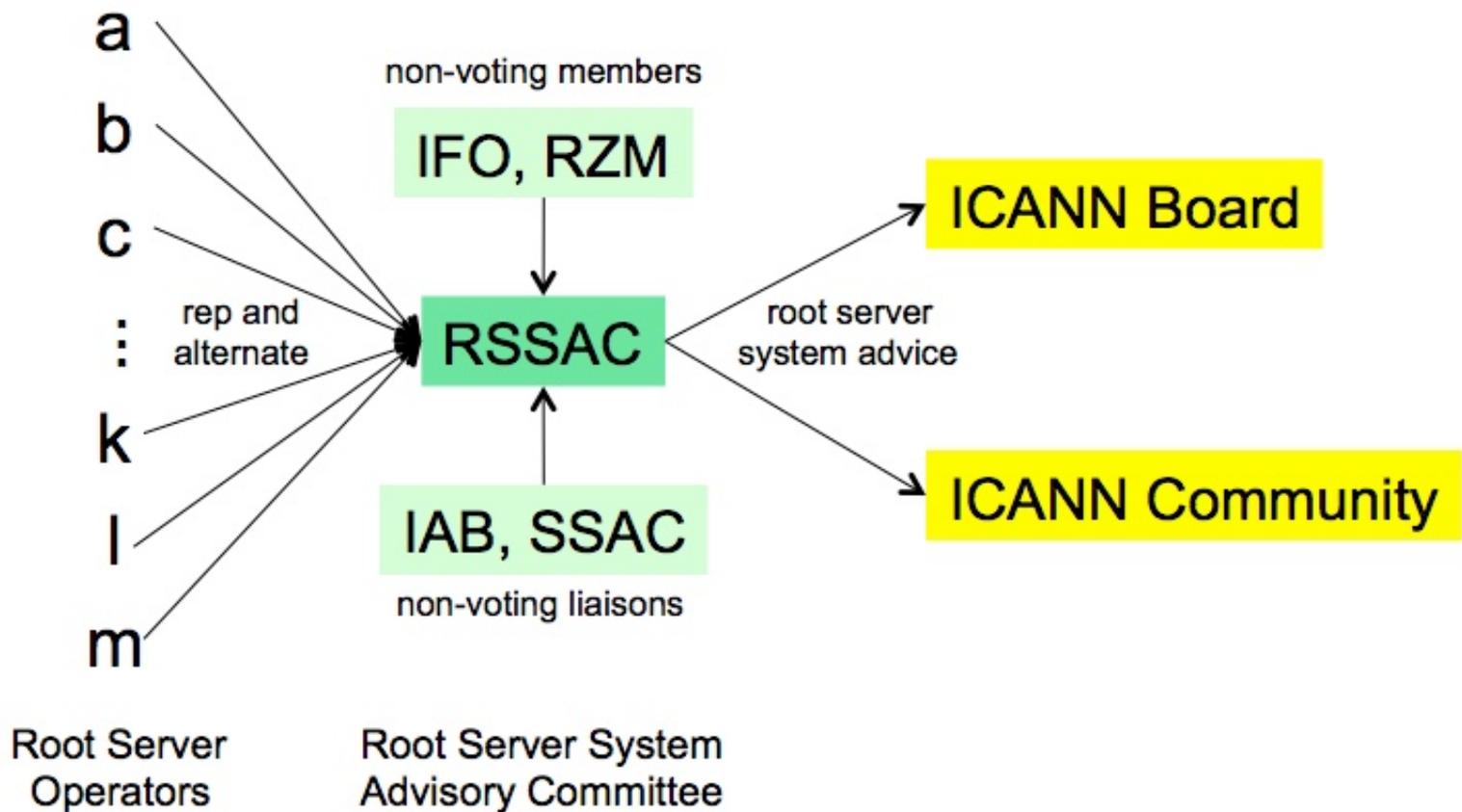
“Determine if the RSSAC is sufficiently accountable regarding the operation, administration, security, and integrity of the Internet's Root Server System, according to its chartered mandate.”

- Although the Root Server System (RSS), the Root Server System Advisory Committee (RSSAC), and the Root Server Operators (RSOs) are closely related, the RSSAC review looks at the RSS and RSOs only within this defined scope.

# The Root Server System



# The Root Server System Advisory Committee (RSSAC)



# Principal Findings

- Raw data concerning the context, role and purpose, structure, operation, and outcomes of the RSSAC collected from all sources subjected to a formal qualitative analysis
- Published on 27 February 2018 in the *Assessment Report for Public Consultation*

<https://community.icann.org/display/ACCRSSAC/Assessment+Report>

# Principal Findings (1)

The ongoing RSSAC reformation that began in 2013—revised RSSAC charter, new operating procedures, and creation of the RSSAC Caucus—has substantially improved the structure and operation of the RSSAC.

Implementing changes recommended by the prior review has significantly improved the effectiveness of the RSSAC. The addition of staff support and travel funding has increased RSSAC and Caucus work quality and meeting participation.

## Principal Findings (2)

The RSSAC has become more open, transparent, and accessible since the last review, but this has not been widely recognized by outside observers.

The RSSAC's focus on technical root server issues and deliberate non-participation in other ICANN activities have concentrated its impact on a small technical audience of DNS experts. It is still widely perceived to be closed and secretive, and less transparent than other ICANN Advisory Committees and Supporting Organizations.

## Principal Findings (3)

As the only visible interface between ICANN and the root server operators (RSOs), the RSSAC is expected to deal with every root service issue that arises within ICANN, whether or not the issue is properly within its scope.

The RSSAC's scope is limited to providing information and advice about the root server system, but because it is the only visible point of contact between ICANN and the RSOs many in the ICANN community imagine that its role is (or should be) much broader.

## Principal Findings (4)

The RSSAC's ability to serve as a shared space for RSO–ICANN communication and cooperation is complicated by a persistent legacy of distrust of ICANN by some of its members.

The RSSAC is paradoxically both a statutory part of ICANN and a group with some members who persistently distrust ICANN, pushing back forcefully on its real or perceived infringement on their exclusive responsibility for all matters concerning root system operations.

## Principal Findings (5)

The current RSSAC membership model excludes non-RSO participants and their different skills and perspectives.

The RSSAC membership model excludes both serving-side root service participants (e.g., non-RSO anycast instance providers and public DNS resolvers) and provisioning-side interested parties (e.g., TLD registries and the ccNSO). It also denies the RSSAC the benefit of skills and perspectives beyond those that can be provided by the root server operators.

## Principal Findings (6)

The RSSAC's continuing purpose in the ICANN structure may include serving as the focal point for issues of mutual concern to ICANN and the RSOs, such as future operational and funding scenarios for serving the root.

The RSSAC is developing advice and recommendations concerning the future evolution of the root server system and how it might be supported, but this work is being conducted entirely by RSO representatives who will be directly affected by it. Many people outside of the RSSAC either don't know that it's working on root service evolution and other strategic policy issues or believe that its focus is misdirected.

## Principal Findings (7)

Because RSSAC members do not agree on who its stakeholders should be, it is not clear for what and to whom it should be accountable.

Although its charter does not explicitly identify its stakeholders, its statement of RSSAC's role implies that they are the ICANN Board and community. Its members, however, do not agree on what this means in practice.

## Principal Findings (8)

The relative roles and responsibilities of the RSSAC, the RSSAC Caucus, the Root Zone Evolution Review Committee (RZERC), and the Security and Stability Advisory Committee (SSAC) are unclear to both outsiders and insiders.

In many cases even members of one of these groups could not distinguish its responsibilities from those of the others.

# Public Comments

- Public comment period opened on 1 May 2018 and closed on 10 June 2018.
- 7 comments were received from individuals and ICANN constituent organizations.  
<https://mm.icann.org/pipermail/comments-rssac2-review-final-01may18>
- All comments will be considered during preparation of the Final Report.

# Recommendations

- Recommendations for changes to the structure or operation of the RSSAC follow from the Findings augmented by public consultation.
- Published in the *Draft Final Report* on 1 May 2018.  
<https://www.icann.org/public-comments/rssac2-review-final-2018-05-01-en>
- Principal Recommendations (1, 2, 3, ...) and suggestions for implementation (1a, 1b, 1c, ...).

# Recommendation 1

Modify the RSSAC membership criteria to allow the RSSAC to recruit a variety of skills, perspectives, and interests that include but are not limited to those available from the root server operator organizations.

(a) Extend RSSAC membership by invitation to any qualified person.

This is the SSAC model—recruit the expertise you need, with confirmation/ratification by the Board. The RSOs might retain their prerogative to appoint representatives to the RSSAC, but the RSSAC could recruit members from other sources as well.

(b) Let individual RSOs decide whether or not to participate.

Some RSOs are interested in the RSSAC, some are not; some RSOs have the resources to commit to RSSAC activities, others do not. Admit any RSO that wishes to participate, but do not require every RSO to do so.

## Recommendation 2

Resolve the apparent mismatch between the charter and operational procedures of the RSSAC and the requirements and expectations of the ICANN Board and Community for interaction with the root server system.

The apparent mismatch between what ICANN needs from an interface to the root server system and what the RSSAC is currently chartered to provide suggests that either the RSSAC scope should be expanded or the attention and expectations of the Board and Community should be explicitly redirected away from the RSSAC to some other group.

(a) Document the rationale for the architecture of the root server system.

The RSSAC could improve the quality of discussions about the ICANN/RSS relationship by clearly documenting the rationale for the current RSS architecture, particularly with respect to RSO diversity and independence.

## Recommendation 3

Formalize the responsibilities of the RSSAC to the ICANN Board and Community in a work plan that is periodically reviewed and published, and hold the RSSAC accountable for work plan deliverables.

Constructing and periodically revisiting a formal work plan would align the understanding and expectations of both the Board and the RSSAC, and enable the Board to hold the RSSAC accountable for specific deliverables rather than general undefined advice.

It would also help to dispel the erroneous impression that the RSSAC is an “association” of the RSOs, in which the distinction between RSSAC accountability and RSO accountability is too often lost.

# Recommendation 3abc

(a) Engage in ongoing threat assessment and risk analysis of the Root Server System and recommend any necessary audit activity to assess the current status of root servers and the root zone.

This is a direct quotation from the RSSAC charter.

(b) Coordinate the gathering and publishing of meaningful data about the root server system.

Pursue and extend the RSSAC's previous recommendation in RSSAC002 that individual RSOs collect and publish data in a standard format for a standard set of metrics.

(c) Assess and report on the status of compliance with the recommendations of RSSAC001.

## Recommendation 4

Develop and implement a leadership training and succession plan.

The membership criteria for the RSSAC do not actively select for leadership skills, but as the evolution of the RSSAC since its reformation in 2014 demonstrates, leadership matters.

## Recommendation 5

Engage more actively with the rest of ICANN and its Community.

More visible engagement with other ICANN Advisory Committees, Supporting Organizations, review teams, and task forces would contribute to fulfillment of the RSSAC mandate to “[c]ommunicate on matters relating to the operation of the Root Servers and their multiple instances with the Internet technical community and the ICANN community.”

It would also help to dispel the community perception that the RSSAC is a closed and secretive group.

## Recommendation 6

Clarify the role and responsibility of the RSSAC with respect to other groups with adjacent or overlapping remits, including the SSAC, the RZERC, and the RSSAC Caucus.

Only the RSSAC and RSSAC Caucus charters and operating procedures are within the scope of the RSSAC, but clarity in these documents with respect to roles and responsibilities would be easier to achieve in collaboration with the SSAC and the RZERC.

# Recommendation 6abc

(a) Develop a more effective and transparent process for defining RSSAC Caucus projects, engaging its members and managing its membership, managing its work, and promoting its output.

(b) In cooperation with the SSAC, develop and publish a statement that clearly distinguishes the roles and responsibilities of the RSSAC and the SSAC, describes how they are complementary with respect to their shared interests in security and stability, and establishes a framework for collaboration on issues of mutual concern.

(c) In cooperation with the RZERC and the SSAC, develop and publish a statement that clearly distinguishes the roles and responsibilities of the RSSAC, the RZERC, and the SSAC with respect to the evolution of the DNS root system (within the scope of ICANN's mission).

# Next Steps

- ◆ Revision of Draft Final Report incorporating public comments
- ◆ Final Report published on 2 July 2018

# Questions?

