SSAC and the IANA Stewardship Transition

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ICANN

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Security and Stability Advisory Committee (SSAC)
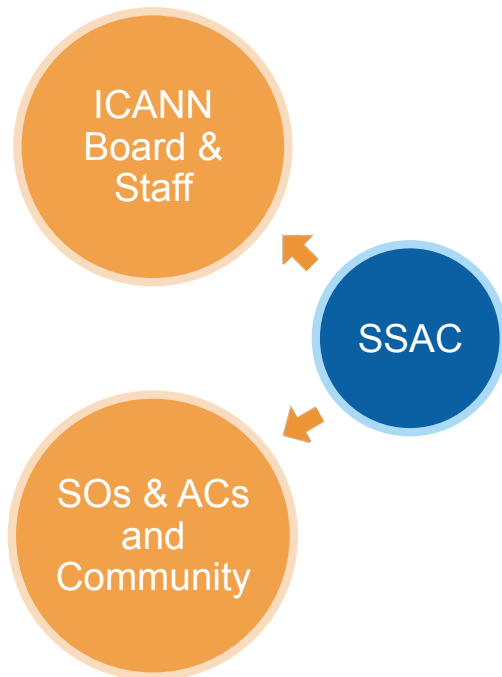
WHO WE ARE

👤 **35** Members

✓ Appointed by the ICANN Board

WHAT WE DO

Charter: Advise the ICANN community and Board on Matters relating to the security and integrity of the Internet's naming and address allocation systems.

WHO WE ADVISE

ICANN Board & Staff

SSAC

SOs & ACs and Community

HOW WE ADVISE

71 Publications since

Reports

Advisories

Comments

OUTREACH

Security and Stability Advisory Committee (SSAC)

PUBLICATIONS PROCESS

Form Work Party → Research & Writing → Review & Approve → Publish

CURRENT WORK PARTIES

New gTLDs

Registrant Protection

Document Management Solutions

Tracking Board Advice

DNSSEC Workshops

Membership Committee

RECENT PUBLICATIONS

[SAC071]: SSAC Comments on Cross Community Working Group Proposal on ICANN Accountability Enchancements (05 June 2015)

[SAC070]: SSAC Advisory on the Use of Static TLD / Public Suffix Lists (29 May 2015)

[SAC069]: SSAC Advisory on Maintaining the Security and Stability of the IANA Functions Through the Stewardship Transition (10 Dec 2014)

OUTREACH

🌐 https://ssac.icann.org

f https://www.facebook.com/pages/SSAC/432173130235645

▶ SSAC Intro: https://www.icann.org/news/multimedia/621

▶ SSAC067 & 68: https://www.icann.org/news/multimedia/729

IANA Functions
Stewardship Transition

Background

- On 14 March 2014, the U.S. Commerce Department's National Telecommunications and Information Administration (NTIA) announced its intention to transition out of its current role with respect to the Internet Assigned Numbers Authority (IANA) Functions.

- NTIA called on ICANN to "convene global stakeholders to develop a proposal to transition the current role played by NTIA in the coordination of the Internet's domain name system (DNS)."

Background Continued

- IANA is a traditional name used "to refer to the technical team making and publishing assignments of Internet protocol technical parameters."

- This technical team performs a set of tasks that involve the administration or coordination of many of the identifiers that allow the global Internet to operate.

Background Continued

- As described in the current IANA Functions contract between ICANN and NTIA, the IANA Functions are:

    - Domain Name System (DNS) Root Zone Management;

    - Internet Numbers Registry Management;

    - Protocol Parameter Registry Management, including management of the "Address and Routing Parameter Area" (.ARPA) TLD; and

    - Management of the "INTernational treaty organizations" (.INT) top-level domain.

SAC067: Overview and History of the IANA Functions

SAC067: Обзор и история функций IANA

https://www.icann.org/ru/system/files/files/sac-067-ru.pdf

SAC067

SAC067 was published on 15 August 2014, and

⊙ Establishes a baseline of understanding for those interested in how the upper-most level of the Internet's system of unique identifiers is managed

⊙ Describes the activities included in the IANA Functions contract

⊙ Describes the functions performed under the IETF MoU.

The report focuses on:

⊙ The IANA Functions contract

⊙ Describes all of the activities related to the IANA Functions as they are currently performed, including those that lie outside of the IANA Functions contract.

SAC068: SSAC Report on the IANA Functions Contract

SAC068: Отчет SSAC по договору о выполнении функций IANA

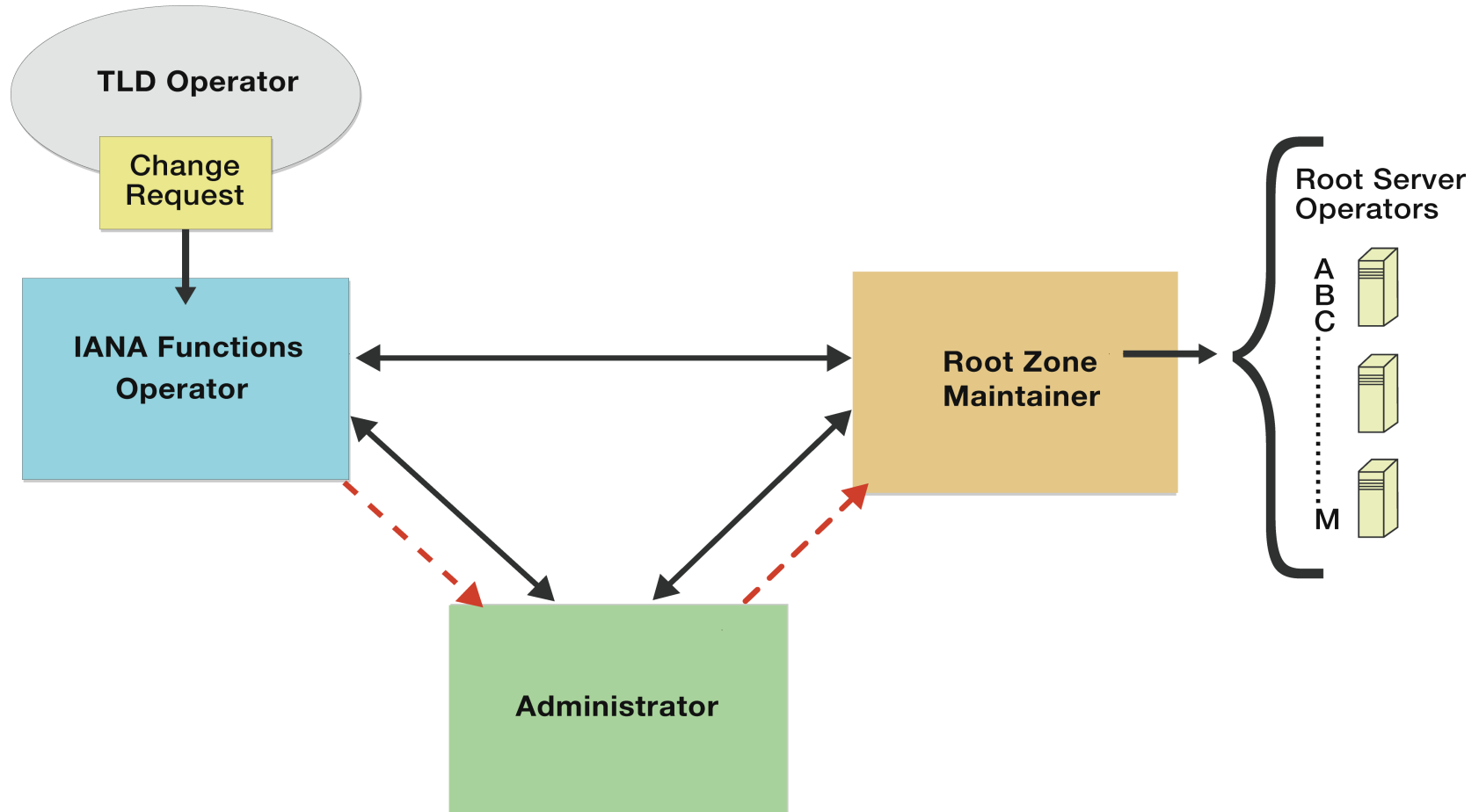https://www.icann.org/ru/system/files/files/sac-068-ru.pdf

SAC068

SAC068 was published on 10 October 2014, and in this report the SSAC:

- Provides an overview of the key elements of the IANA Functions contract; and

- Documents the role that NTIA currently plays with respect to the IANA Functions based on current public contractual information.

NTIA and IANA Functions

IANA Functions	Involved Parties	NTIA Role
DNS Root Zone Management	ICANN, NTIA and Verisign	IANA Functions Contract Administrator and Root Zone Management Process Administrator
Internet Numbers Registry Management	ICANN under authority of Regional Internet Registries and their communities	IANA Functions Contract Administrator
Protocol parameter registry management	ICANN under authority of The Internet Engineering Task Force (IETF) / Internet Architecture Board (IAB)	IANA Functions Contract Administrator
.ARPA and .INT management	ICANN under authority of IETF/IAB and other existing processes	IANA Functions Contract Administrator

NTIA and Root Zone Management

TLD Operator

Change Request

IANA Functions Operator

Root Zone Maintainer

Root Server Operators

A
B
C
⋮
M

Administrator

Chain of Authorization

Implementation Interactions

SAC069: Maintaining the Security and Stability of the IANA Functions Through the Stewardship Transition

SAC069: Консультативное заключение SSAC по вопросу сохранения безопасности и стабильности функций IANA в процессе передачи координирующей роли

https://www.icann.org/ru/system/files/files/sac-069-ru.pdf

SAC069

SAC069 was published on 10 December 2014

- Complements SAC067, "*Overview and History of the IANA Functions*," and SAC068, "*Report on the IANA Functions Contract*."

  - Describes the way in which NTIA currently contributes to the security, stability and resiliency of the IANA Function Activities.

  - Presents questions and issues that must be addressed by the Internet community in order to preserve the security, stability, and resiliency of the IANA Functions activities through (and beyond) the transition.

  - Makes recommendations to each of the questions and issues raised.

Recommendations – Root zone management

- Any proposal to replace NTIA's final authorization of root zone changes with an alternative be at least as reliable, resilient, and efficient as the current process.

- Effective arrangements should be made for the reliable and timely performance of all aspects of the root zone management process post-transition, including inter-organization coordination if the post-transition RZM process involves more than one root zone management partner.

- NTIA should clarify the processes and legal framework associated with the role of the Root Zone Maintainer after transition.

SAC069 Recommendations – Operational Communities

- Determine whether or not:
  - The requirements and deliverables defined in the IANA Functions Contract should be retained, and if additional external controls are necessary, how and by whom they should be administered.
  - Existing mechanisms outside of the IANA Functions Contract are sufficiently robust to hold the IANA Functions Operator accountable to the affected communities for the proper performance of the IANA Functions after the IANA Functions Contract expires; and if they are not, the communities should determine what additional accountability mechanisms will be needed.

SAC069 Recommendations – Operational Communities Cont.

- Determine whether or not:
  - Investigate and clarify the process for handling the possibility of governmental sanctions and restrictions (e.g., the protocol for obtaining OFAC licenses where US sanctions might interfere with the ability to execute proper instructions to IANA) following the stewardship transition.
  - Consider the extent to which the importance of transparency and freedom from improper influence in the performance of the IANA Functions might require additional mechanisms or other safeguards.
  - Review and (if necessary) enhance its policy development process to ensure that all of the instructions that it provides to the IANA Functions Operator are clear and implementable.

SAC071: SSAC Comments on Cross Community Working Group Proposal on ICANN Accountability Enchancements

SAC071

SSAC Charter: The SSAC advises "the ICANN community and Board on matters relating to the security and integrity of the Internet's naming and address allocation systems."

The SSAC:

- Has neither been given nor sought any standing for its advice other than that it be evaluated on its merits and adopted (or not) according to that evaluation by the affected parties;

- Believes that this purely advisory role is the one to which it is best suited; and

- Asks the CCWG-Accountability to take this into account in its review of the options described in Section 5.1.2.

SAC071

The SSAC:

- Has no comment at this time on whether or not a legal structure is required or desirable to compel ICANN and the Board to respond to the SSAC's advice.

- Is concerned about the way in which the proposed new SO/AC Membership Model might affect the way in which the SSAC operates, considering its narrow focus on security and stability matters and its reluctance to become involved in issues outside that remit.

- Expects that the community will adopt an organizational structure that recognizes the role and importance of high–quality expert advice on security and stability.

- Notes the relatively short time available for consideration of the draft proposal and reserves the right to make additional comments as further details are developed.

Thank you