

**Independent Review of the ICANN Security and Stability Advisory
Committee:
Assessment Report**

Report Prepared for the Internet Corporation for Assigned Names and
Numbers (ICANN)

By Dr. Shlomo Hershkop, Christopher Llop, Dr. Greg Rafert,
Professor Steve Weber^{1,2}

June 20, 2018

¹ Dr. Shlomo Hershkop is the Director of Engineering at Allure Security Technology, Inc., and previously served for 15 years in roles as Adjunct Professors at the University of Pennsylvania and at Columbia University in the City of New York. Professor Steven Weber is the faculty director and a cofounder of UC Berkeley's Center for Long Term Cybersecurity (CLTC), an organization focused on developing and shaping cybersecurity research and practice based on a long-term vision of the Internet and its future. Greg Rafert (Vice President) and Christopher Llop (Associate) are employees of Analysis Group, Inc., an international economic, financial, and strategy consultancy.

² The authors would like to thank the SSAC RWP for its thoughtful participation in the review process, the SSAC for opening meetings to us, and ICANN's MSSI for extensive help in interview and meeting coordination. We also thank all who have taken the time to be interviewed, surveyed, or provide commentary on this Assessment Report, and thank Austin Bell (Senior Analyst) at Analysis Group, Inc. for his assistance in data analysis and research.

Executive Summary

Since 2002, the Security and Stability Advisory Committee (SSAC) has advised the ICANN community and the ICANN Board of Directors (ICANN Board) on issues concerning the security and integrity of the Internet's naming and address allocation systems. The ICANN Bylaws require that the SSAC be independently reviewed at least once every five years.³ In accordance with this requirement, our review includes an assessment of: (1) the implementation state of SSAC's prior review, (2) whether SSAC has a continuing purpose within the ICANN structure, (3) how effectively SSAC fulfills its purpose and whether any change in structure or operations is needed to improve effectiveness, and (4) the extent to which SSAC as a whole is accountable to the wider ICANN community, its organizations, committees, constituencies, and stakeholder groups.

This report is the first stage of our independent review of the SSAC: an assessment of the SSAC's performance. A final report, which will be published later this year, will also include our recommendations to increase the SSAC's effectiveness.

The findings of our review are based on auditing of SSAC's in-person meetings at ICANN61 and those conducted remotely after ICANN61, a large number of individual interviews conducted among members of the ICANN community both in person and remotely, an online survey provided to members of the ICANN community, and a comprehensive review of materials published by the SSAC. Our interview and survey processes were designed to capture a wide variety of perspectives on the role of the SSAC, its strengths and weaknesses, and its relationship with the ICANN community.

Our principal findings are summarized briefly here and in more detail in Section I.D of this report.

- The SSAC is widely acknowledged to be very important to the overall mission of ICANN, the role of the SSAC as described in the ICANN Bylaws is closely aligned with ICANN's mission, and the SSAC is successful in providing high quality advice on a broad variety of relevant security, stability, and resiliency (SSR) issues. The SSAC is accountable directly to the ICANN Board, and through it to the wider ICANN community.
- Individuals suggested that the largest impediment to the SSAC's success is the fact that the organization is volunteer-based and has a large amount of work to do.
- The SSAC's process of generating advice is collegial and is generally effective. However, there is some concern among members of the SSAC that advice provided to the ICANN Board is not acted on in a timely manner. Similarly, there is some concern among members of the ICANN Board that the advice of the SSAC is not provided sufficiently quickly to the Board.
- Some interviewees indicated that there could be value in developing processes by which the SSAC could more formally review the security ecosystem as part of its topic selection process.

³ ICANN Bylaws, *ICANN*, Article 4, Section 4, available at <https://www.icann.org/resources/pages/governance/bylaws-en#VII-1>, accessed on May 1, 2018.

- There is a need for individuals with an understanding of SSR-related issues to take part in policy development, and members of the ICANN community discussed whether or not the SSAC or its members (as individuals) should play that role.
- The SSAC's size of roughly 40 members appears to be appropriate given tradeoffs in the size of the SSAC, though some thought that additional members with additional perspectives would be valuable.
- Many interviewees would like to see improvements in the SSAC's recruiting process, but they are cautious about the burden such processes might place on the SSAC's volunteers.
- The SSAC is perceived to lack geographical and gender diversity and is comprised mostly of male individuals from the U.S. and Europe, though it has diversity in technical expertise.
- The membership review process used by the SSAC today is clearer and more transparent than it had been in the past, and when flaws have been identified, the process has undergone (and continues to undergo) improvements.
- The SSAC's term length of three years for members is generally considered to be appropriate, but there exists much more variation in individuals' views as to the appropriate term limit, if any, for SSAC leadership.
- The SSAC is generally seen to be less transparent than other parts of ICANN. While most interviewees understand this to be necessary given the sensitive nature of security risks, many would like to see a more transparent SSAC.
- The SSAC has taken clear steps to implement the recommendations that were accepted after its prior review, and makes clear efforts to continually improve outside of the formal review process.

This assessment report has been published to solicit feedback from the ICANN community. Between June and July of 2018, there will be a public consultation period that will include a webinar and a public participation mailing list. The webinar is set to take place on July 12, 2018 at 20:00 UTC, with additional information available at <https://community.icann.org/display/ACCSSAC/Assessment+Report+Webinar>. To participate in the webinar and/or the mailing list, please contact mssi-secretariat@icann.org.

We will incorporate feedback into a final report, which will contain both our assessment of the SSAC and our recommendations for improving the operation of the SSAC. A draft final report will be published for public comments on September 12, 2018. The public comment period will last 40 days and close on October 22, 2018. After incorporating comments from the ICANN community, the final report will be published on November 21, 2018.