**ICANN Reviews – Terms of Reference (ToR)**

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| **Review Name:** | **Second Review of the Security, Stability and Resiliency of the Domain Name System (SSR2)**  |
| **Section I: Review Identification** |
| **Board Initiation**  | [Resolution 2017.02.03.11](https://www.icann.org/resources/board-material/resolutions-2017-02-03-en#1.g) |
| **ToR Due Date** | Due date for ToR, as per Board Resolution: 30 March, 2017Submission date: 11 May 2017 (SSR2 informed the Board in March 2017 of its progress on the ToR) |
| **Announcement of Review Team:**  | [14 February, 2017](https://www.icann.org/news/announcement-2-2017-02-14-en) |
| **Name(s) of RT Leadership:** |  |
| **Name(s) of Board Appointed Member(s):** | Kaveh Ranjbar |
| **Review Workspace URL:** | [https://community.icann.org/display/SSR/SSR2+Review](https://community.icann.org/display/SSR/SSR2%2BReview)  |
| **Review Mailing List:** | <https://mm.icann.org/pipermail/ssr2-review/>  |
| **Important Background Links:**  | * ICANN Bylaws Article IV Section 4.6 Specific Reviews: <https://www.icann.org/resources/pages/governance/bylaws-en/#article4.6>
* Review team announced (February 2017): <https://www.icann.org/news/announcement-2-2017-02-14-en>
* Review restart (June 2018): <https://www.icann.org/news/announcement-2-2018-06-07-en>
* Review team composition: <https://community.icann.org/x/7prRAw>
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| **Section II: Mission, Purpose, and Deliverables** |
| **Mission & Scope:** |
| **Background**At its meeting on 03 February 2017, the ICANN Board initiated the SSR2 Review to perform a “*review of ICANN's execution of its commitment to enhance the operational stability, reliability, resiliency, security, and global interoperability of the systems and processes, both internal and external, that directly affect or are affected by the Internet's system of unique identifiers that ICANN coordinates”.***Mission and Scope**Per the [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en#article4.6), Article IV Section 4.6(c): *“(i) The Board shall cause a periodic review of ICANN's execution of its commitment to enhance the operational stability, reliability, resiliency, security, and global interoperability of the systems and processes, both internal and external, that directly affect and/or are affected by the Internet's system of unique identifiers that ICANN coordinates ("SSR Review").**(ii) The issues that the review team for the SSR Review ("SSR Review Team") may assess are the following:**(A) security, operational stability and resiliency matters, both physical and network, relating to the coordination of the Internet's system of unique identifiers;**(B) conformance with appropriate security contingency planning framework for the Internet's system of unique identifiers; and**(C) maintaining clear and globally interoperable security processes for those portions of the Internet's system of unique identifiers that ICANN coordinates.**(iii) The SSR Review Team shall also assess the extent to which ICANN has successfully implemented its security efforts, the effectiveness of the security efforts to deal with actual and potential challenges and threats to the security and stability of the DNS, and the extent to which the security efforts are sufficiently robust to meet future challenges and threats to the security, stability and resiliency of the DNS, consistent with ICANN's Mission.**(iv) The SSR Review Team shall also assess the extent to which prior SSR Review recommendations have been implemented and the extent to which implementation of such recommendations has resulted in the intended effect.**(v) The SSR Review shall be conducted no less frequently than every five years, measured from the date the previous SSR Review Team was convened.”***Objectives** |
| **Deliverables & Timeframes:** |
| The review team shall to the best of its abilities respect the timelines and deliverables as outlined in this document. The review team shall develop a work plan that outlines the necessary steps and expected timing in order to achieve the milestones of this review, as agreed on below. The review team shall follow its published work plan to address review objectives within the available time and specified resources. The work plan is a roadmap towards reaching milestones and is subject to adjustments as the review team progresses through work. Progress towards time-bound milestones defined in the work plan shall be tracked and published on a Fact Sheet. **Timeline (subject to change):** *

**Deliverables:**The review team shall produce at least one **draft report** and a **final report**. The draft report should include the following:* Overview of the review team’s working methods, tools used and analysis conducted
* Facts and findings related to the investigation of the objectives identified in the scope
* Resolution to all questions raised in the scope or those that arose subsequently during the course of the review (as appropriate)
* Summary of public consultations and engagement conducted
* Self-assessment of what processes (pertinent to the scope) work well and where improvements can be made; the self-assessment ought to be based on and refer to facts, findings, and data provision wherever possible.
* Preliminary recommendations that address significant and relevant issues detected
* Preliminary feasibility assessment
* A preliminary impact analysis to measure the effectiveness of the recommendations proposed by the current review team, including source(s) of baseline data for that purpose:
	+ Identification of issue
	+ Definition of desired outcome, including identification of metrics used to measure whether recommendation goals are achieved, where possible
	+ Identification of potential problems in attaining the data or developing the metrics
	+ A suggested timeframe in which the measures should be performed
	+ Define current baselines of the issue and define initial benchmarks that define success or failure
	+ Surveys or studies
* All recommendations should indicate a preliminary, non-binding level of consensus they have received, as defined in these ToR. This is to inform the community during the public comment period to indicate the level of review team support for each recommendation, without binding the review team on their support level in the final report.

At least one draft report will be submitted for public comment, following standard ICANN procedures. The review team may update the draft report based on the comments and/or other relevant information received, and submit its final report to the ICANN Board. The final report shall contain the same sections as the draft report and, in addition, a section detailing the public comments received on the draft report and an explanation of why and how they were incorporated into the final report or why and how they were rejected by the review team. Each recommendation shall include the level of consensus received from the review team members, as defined in these ToR. As mandated by ICANN's Bylaws, the final report of the review team shall be published for public comment in advance of the Board's consideration. |
| **Considerations with Regard to Review Team Recommendations:** |
| Review teams are expected to develop, and follow a clear process when documenting constructive recommendations as the result of the review. This includes fact-based analysis, clear articulation of noted problem areas, supporting documentation, and resulting recommendations that follow the S.M.A.R.T framework: **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**ime-Bound. Additionally, the review team is asked to share its proposed recommendations with ICANN organization to obtain feedback regarding feasibility (e.g., time required for implementation, cost of implementation, and potential alternatives to achieve the intended outcomes.) As stated in the Bylaws, the review team shall attempt to prioritize each of its recommendations and provide a rationale for such prioritization. To the extent practical, proposed recommendations should be provided in priority order to ensure focus on highest-impact areas and priority should be accompanied by.To help review teams assess whether proposed recommendations are consistent with this guidance, testing each recommendation against the following questions may be helpful:* What is the intent of the recommendation?
* What observed fact-based issue is the recommendation intending to solve? What is the “problem statement”?
* What are the findings that support the recommendation?
* Is each recommendation accompanied by supporting rationale?
* How is the recommendation aligned with ICANN’s strategic plan, the Bylaws and ICANNs mission?
* Does the recommendation require new policies to be adopted? If yes, describe issues to be addressed by new policies.
* What outcome is the review team seeking? How will the effectiveness of implemented improvements be measured? What is the target for a successful implementation?
* How significant would the impact be if not addressed (i.e., Very significant, moderately significant) and what areas would be impacted (e.g., security, transparency, legitimacy, efficiency, diversity, etc.)
* Does the review team envision the implementation to be Short-term (i.e., completed within 6 months of acceptance by the Board), Mid-term (i.e., within 12 months), or Longer-term (i.e., more than 12 months)?
* Is related work already underway? If so, what is it and who is carrying it out?
* Who are the (responsible) parties that need to be involved in the implementation work for this recommendation (i.e., Community, ICANN organization, Board, or combination thereof)
* Are recommendations given in order of priority to ensure focus on highest impact areas?

Finally, review teams are encouraged to engage in dialog with the dedicated ICANN Board Caucus Group; for example, when the review team reaches a milestone and could benefit from feedback on agreed scope or any recommendations under development to address that scope. |
| **Section III: Formation, Leadership, Other Organizations** |
| **Membership:** |
| As per the ICANN Bylaws, the review team has been selected by the Chairs of ICANN’s Supporting Organizations and Advisory Committees (SO/ACs). Members and their gender, SO/AC affiliation, and region are:

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| --- | --- | --- | --- | --- |
| Jabhera Matogoro | M | ALAC | AF |  |
| Alain Aina | M | ccNSO | AF |  |
| Mohamad Amin Hasbini | M | GAC | AP |  |
| Noorul Amin | M | GAC | AP |  |
| Geoff Huston | M | SSAC | AP | Resigned 16 August 2018 |
| Ramkrishna Pariyar | M | ALAC | AP |  |
| James Gannon | M | GNSO | EUR | Resigned 8 December 2017 |
| Boban Krsic | M | ccNSO | EUR |  |
| Emily Taylor | F | GNSO | EUR | Resigned 16 July 2017 |
| Žarko Kecić | M | ccNSO | EUR |  |
| Kerry-Ann Barrett | F | GAC | LAC |  |
| Cathy Handley | F | RSSAC | NA | Resigned 3 October 2017 |
| Denise Michel | F | GNSO | NA |  |
| Don Blumenthal | M | SSAC | NA | Resigned 14 April 2018 |
| Eric Osterweil | M | RSSAC | NA |  |
| Norm Ritchie | M | GNSO | NA | Appointed 24 August 2017 |
| Rao Naveed bin Rais | M | GNSO | AP | Appointed 28 February 2018 |
| Scott McCormick | M | GNSO | NA | Appointed 14 April 2018 |
| Laurin Weissinger | M | ALAC | EUR | Appointed 14 April 2018 |
| KC Claffy | F | SSAC | NA | Appointed 14 April 2018 |
| Russ Housley | M | SSAC | NA  | Appointed 14 April 2018 |
| Kaveh Ranjbar | M | ICANN Board | EUR |  |

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| **Roles and Responsibilities of Review Team Members:** |
| Responsibilities for all review team members include:* Attend all meetings.
* Provide apologies for planned absences at least 24 hours in advance for all remote meetings; provide apologies for planned absence for face-to-face meetings as early as possible to minimize unnecessary expenses.
* Actively engage on email list(s) and other collaborative tools, including providing feedback when requested to do so through that medium.
* Actively engage with relevant stakeholder groups within the ICANN community, and within each team member’s respective community.
* Provide fact-based inputs and comments based on core expertise and experience.
* Undertake desk research as required and in accordance with scope of work, including assessment of implementation of recommendations from prior reviews.
* Be prepared to listen to others and make compromises in order to achieve consensus recommendations.
* Participate in sub-groups and assist with drafting of findings, recommendations and other portions of the report as required.
* Comply with ICANN’s expected standards of behavior.
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| **Roles and Responsibilities of Review Team Leadership:** |
| Responsibilities of the review team’s leadership include:* Remain neutral when serving as Chair or Co-Chair.
* Identify when speaking as an advocate.
* Maintain standards and focus on the aims of the review team as established in this terms of reference.
* Drive toward delivery of key milestones according to the work plan.
* Ensure effective communication between members and with broader community, Board and ICANN organization.
* Set the agenda and run the meetings.
* Ensure that all meeting attendees get accurate, timely and clear information and that each review team member has an opportunity to express his/her point of view.
* Determine and identify the level of consensus within the review team.
* Provide clarity on review team decisions.
* Ensure decisions are acted upon.
* Build and develop team-work with Co-Chairs and the ICANN organization team supporting work of the review.
* Manage the review team’s budget and work with the ICANN organization team supporting work of the review to provide reporting to maintain accountability and transparency.
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| **Replacement and Removal of Members:** |
| If a review team member is no longer able or willing to serve, the SO/AC making the original endorsement may fill the vacancy with a new member. The SO/AC may nominate a new candidate according to their own processes and their nomination is not limited to those candidates who originally applied requesting their endorsement.Depending on the remaining time of a review, or any other factors, the relevant SO/AC may choose not to nominate a replacement candidate.If a review team member is sufficiently inactive or disruptive as to cause at least 70% of review team members (excluding the member in question) to request their removal, the member will be asked to resign. If the member refuses to resign, the SO/AC that endorsed the member will be requested to withdraw their endorsement and replace the member. Should the SO/AC not take action, the member can be removed by a 70% majority vote of the remaining review team members. Balloting will be carried out in such a way as to not reveal how individual members voted. |
| **Support from ICANN Organization:** |
| Members of ICANN organization assigned to the review team will support its work, including project management, meeting support, document drafting if/when requested, document editing and distribution, data and information gathering if/when requested, and other substantive contributions when deemed appropriate. The commitments in this document presume appropriate staff support from ICANN organization.  |
| **Dependencies on Other Organizations:**  |
| The review team will ensure the work it undertakes does not duplicate or conflict with purview and scope of the following efforts. The review team will be briefed/updated on these activities, as appropriate, to avoid unnecessary or unintended overlap:  ICANN org will alert the SSR2 review team of any changes to the list and update it.The review team will engage in dialog with the dedicated ICANN Board Caucus Group; for example, when the review team reaches a milestone and could benefit from feedback on agreed scope or any recommendations under development to address that scope. |
| **Section IV: Decision-Making and Methodologies** |
| **Decision-Making Methodologies:**  |
| According to the Bylaws: *“(iii) Review team decision-making practices shall be specified in the Operating Standards, with the expectation that review teams shall try to operate on a consensus basis. In the event a consensus cannot be found among the members of a review team, a majority vote of the members may be taken.”*With regards to drafting recommendations, the Bylaws state, *“Each report of the review team shall describe the degree of consensus or agreement reached by the review team on each recommendation contained in such report. Any member of a review team not in favor of a recommendation of its review team (whether as a result of voting against a matter or objecting to the consensus position) may record a minority dissent to such recommendation, which shall be included in the report of the review team.”[[1]](#footnote-1)*The review team leadership will be responsible for designating each decision as having one of the following designations:* **Full consensus** - no review team members speak against the recommendation in its last readings.
* **Consensus** - a small minority disagrees, but most agree.
* **Strong support but significant opposition** - most of the group supports a recommendation but a significant number of members do not.
* **Divergence** - no strong support for any particular position, rather many different points of view. Sometimes this is due to irreconcilable differences of opinion and sometimes it is due to the fact that no one has a particularly strong or convincing viewpoint, but the members of the group agree that it is worth listing the issue in the report nonetheless.
* **Minority view** - a proposal where a small number of people support the recommendation. This can happen in response to a **consensus**, **strong support but significant opposition**, and **no consensus;** or, it can happen in cases where there is neither support nor opposition to a suggestion made by a small number of individuals.

In cases of **consensus**, **strong support but significant opposition**, and **no consensus**, an effort should be made to document that variance in viewpoint and to present adequately any **minority views** that may have been made. Documentation of **minority view** recommendations normally depends on text offered by the proponent(s). In all cases of **divergence,** the review team leadership should encourage the submission of minority viewpoint(s).The recommended method for discovering the consensus level designation on recommendations should work as follows:1. After the review team has discussed an issue long enough for all issues to have been raised, understood and discussed, the review team leadership makes an evaluation of the designation and publish it for the group to review.
2. After the review team has discussed the review team leadership’s estimation of designation, the leadership should reevaluate and publish an updated evaluation.
3. Steps (i) and (ii) should continue until the leadership makes an evaluation that is accepted by the review team.
4. The Co-Chairs may decide that the use of a poll is reasonable – in line with the Bylaws article IV, Section 4.6(a)(C)(iii). Some of the reasons for this might be:
	* A decision needs to be made within a time frame that does not allow for the natural process of iteration and settling on a designation to occur.
	* It becomes obvious after several iterations that it is impossible to arrive at a designation. This will happen most often when trying to discriminate between **consensus** and **strong support but significant opposition** or between **strong support but significant opposition** and **divergence.**

Based upon the review team’s needs, the leadership may direct that review team participants do not have to have their name explicitly associated with any full consensus or consensus view/position. However, in all other cases and in those cases where a group member represents the minority viewpoint, their name must be explicitly linked to that position.Consensus calls should always involve the entire review team and, for this reason, should take place on the designated mailing list to ensure that all review team members have the opportunity to fully participate in the consensus process. It is the role of the leadership to designate which level of consensus is reached and announce this designation to the review team. Member(s) of the review team should be able to challenge the designation of the leadership as part of the review team’s discussion. However, if several participants in a erview team disagree with the designation given to a position by the leadership or any other consensus call, they may follow these sequentially:1. Send email to the leadership, copying the review team explaining why the decision is believed to be in error.
2. If the leadership still disagrees with the opposing member, a straw poll shall be conducted to determine the result.
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| **Accountability and Transparency:** |
| Teleconferences and face-to-face meetings will be recorded and streamed, to the extent practicable, and subject to Confidential Framework provisions. However, the record shall reflect this decision, as well as the underlying considerations that motivated such action. The review team and supporting members of ICANN organization will endeavor to post (a) action items within 24 hours of any telephonic or face-to-face meeting; and (b) streaming video and/or audio recordings as promptly as possible after any such meeting, subject to the limitations and requirements described above. The review team will maintain a [wiki page](https://community.icann.org/x/AE6AAw), on which it will post: (a) action items, decisions reached, correspondence, meeting agendas, background materials provided by ICANN, members of the review team, or any third party; (ii) audio recordings and/or streaming video; (b) the affirmations and/or disclosures of review team members under the review team’s conflict of interest policy; (c) input, whether from the general public, from ICANN stakeholders, from ICANN organization, the ICANN Board, Supporting Organizations and Advisory Committees, etc. Absent overriding privacy or confidentiality concerns, all such materials should be made publicly available on the review team website within 48 business hours of receipt. Email communications among members of the review teamshall be [publicly archived](https://mm.icann.org/pipermail/ssr2-review/) automatically via the review email list, ssr2-review@icann.org. Email communication between team members regarding review team work should be exchanged on this list. In exceptional circumstances, such as when required due to Non-Disclosure Agreement or Confidential Disclosure Agreement provisions, non-public email exchanges may take place between review team members and ICANN organization.  |
| **Reporting:**  |
| Review team members are expected to perform their reporting obligations, and provide details in terms of content and timelines. Reporting should start when a review team is launched and should continue until its conclusion. The review teamshould include in this section (a) the information to be reported, (b) the report format to be used, and (c) report intervals, to assure accountability and transparency of the RT vis-a-vis the community. In addition, reference to the quarterly Fact Sheets, assembled by ICANN organization, should be made.Review team members are, as a general matter, encouraged to report back to the nominating entity that with respect to the work of the review team, using publicly available information. As and when requested by the ICANN Board, the review team will provide regular updates to the Organizational Effectiveness Committee, whose charter stipulates that it ‘oversees the conduct of reviews’. ICANN organization may assist with this effort.ICANN organization will also provide a quarterly fact sheet detailing relevant metrics on the review, including attendance records of review team members, progression of work, and budget updates. A template for such a fact sheet will be provided by the ICANN organization support staff to each review team.  |
| **Subgroups:**  |
| The review team can create as many subgroups as it deems necessary to complete its tasks through its standard decision process, as follows:* + Subgroups will be composed of review team members and will have a clear scope, timeline, deliverables and leadership.
	+ Subgroups when formed will appoint a rapporteur who will report the progress of the sugroup back to the plenary on a defined timeline.
	+ Subgroups will operate per review team rules and all subgroup requests will require review team approval.
	+ Subgroups can arrange face-to-face meetings in conjunction with review team face-to-face meetings.
	+ All documents, reports and recommendations prepared by a subgroup will require review team approval before being considered a product of the review team.
	+ The review team may terminate any subgroup at any time.
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| **Travel Support:** |
| Members of the review team who request funding from ICANN to attend face-to-face meetings will receive it according to ICANN’s standard travel policies and subject to the review team’s budget. When a review team face-to-face meeting is held in conjunction with an ICANN meeting, and when outreach sessions have been scheduled, review team members, who are not funded otherwise, may receive funding for the duration of the ICANN meeting. |
| **Outreach:**  |
| The review team will conduct outreach to the ICANN community and beyond to support its mandate and in keeping with the global reach of ICANN’s mission. As such the review team will ensure the public has access to, and can provide input on, the team’s work. Interested community members will have an opportunity to interact with the review team. The review team will present its work and hear input from communities (subject to budget requirements).The review team is encouraged to develop and adhere to an outreach plan, including details of how it will ensure SO/ACs, the OEC and the wider community is kept informed of the review team’s progress. ICANN organization will provide a template for the outreach plan to the review team.   |
| **Observers:**  |
| Observers may stay updated on the review team's work in several ways:**Mailing-Lists**Observers may subscribe to the observers mailing-list by sending a request to mssi-secretariat@icann.org. Calendar invites to SSR2 review team meetings are sent to the observers mailing-list.**Attend a meeting virtually**All meetings, whether in person or online, will have a dedicated Adobe Connect room for observers to participate: <https://participate.icann.org/ssrreview-observers>. **Attend a meeting in person**When review team members gather for public face-to-face meetings, Observers may attend to share their input and questions with the review team, as appropriate. The calendar of scheduled calls and meetings is published on the wiki: <https://community.icann.org/x/AE6AAw> **Email input to the review team**Observers may send an email to the review team to share input on their work. Remarks and/or questions can be sent to the following address: input-to-ssr2rt@icann.org.The list of SSR2 observers is available [here](https://community.icann.org/x/7QByB). |
| **Independent Experts:** |
| As per the Bylaws (Article IV, Section 4.6(a)(iv), the review team may engage independent experts “to render advice as requested by the review team. ICANN shall pay the reasonable fees and expenses of such experts for each review contemplated by [Section 4.6 of the Bylaws] to the extent such fees and costs are consistent with the budget assigned for such review.”For the purpose of this review, independent experts are third parties that may be contractually engaged to support the review team’s work. Should the need for independent experts arise, the review team will consider the scope of work required, expected deliverables, necessary skills and expertise, and the budget implications associated with the project. To initiate a request for an independent expert, the review team will create and formally approve a statement of work which includes:* A clear, specific project title and concise description of the work to be performed
* A description of required skills, skill level, and any particular qualifications
* Concrete timelines for deliverables, including milestones and measureable outcomes
* Any additional information or reference material as needed to detail requirements

The review team leadership will communicate the review team’s request to ICANN org for processing in accordance with ICANN’s standard operating procedures. Selection of experts to support the work of the review team will follow ICANN’s procurement processes. The statement of work will inform the procurement path to be followed (Request For Proposals [RfP] or no RfP). In either case, ICANN organization will search for an expert that meets the specified criteria, evaluate each candidate relative to the criteria, negotiate contract terms, and manage the contracting process. Should the review team wish to appoint designated team members to participate in the selection process of the third party, the designated team members will be expected to sign the Non-Disclosure Agreement.**Considering advice from independent experts**The review team shall give appropriate consideration to any work submitted by an independent expert.While the review team is at liberty to adopt or reject any input or advice provided by an independent expert, it must include a dedicated section in its draft and final reports that details how the independent examiner’s work was taken into consideration by the review team.In case the independent examiner provides concrete advice, and the review team rejects that advice, a rationale shall be provided.Any work that the independent expert submits to the review team shall be included in full as an annex to the review team’s draft and final reports. |
| **Closure & Review Team Self-Assessment:** |
| The review team will be dissolved upon the delivery of its final report to the Board, unless assigned additional tasks or follow-up by the ICANN Board are being requested.Following its dissolution, review team members shall participate in a self-assessment, facilitated by supporting members of ICANN organization, to provide input, best practices, and suggestions for improvements for future review teams.**Implementation Phase:**The review team shall identify one or two review team members to remain available for clarification as may be needed during the planning phase of implementation of review team recommendations. |

1. Article IV, Section 4.6(a)(vii)(A). [↑](#footnote-ref-1)