

Second Security, Stability, and Resiliency Review (SSR2)



4th Plenary Meeting | 28 March 2017

Agenda

1. Updated SOIs, note apologies/absences
2. Review Action Items list (see staff email)
3. Confirm conference call rotation and date & location of next few meetings (see staff email)
4. Developing SSR2 Scope & Workplan, next steps
5. Identify SSR issues members think are important for Team to explore (follow-up on Copenhagen brainstorming – please review results on wiki)
6. Developing initial outreach list (see Denise's email)
7. Co-Chairs work and processes
8. AOB

Action Items from 22 March SSR2 RT Plenary #3

Mtg	Date	Actions	Assigned to	Due Date	Status
3	22 Mar	Schedule 60-minute plenary call #4, 14:00 UTC Tuesday 28 March.	ICANN Org	22 Mar	Complete
3	22 Mar	Co-Chairs to coordinate and formulate a proposal as to how to separate duties and present it to the RT.	SSR2 Co-Chairs	tbd	
3	22 Mar	Prepare a plan for a rotation schedule for RT calls to the Co-Chairs for the next meeting.	ICANN Org	24 Mar	Completed
3	22 Mar	Open SSR1 Rec 11 - Effectiveness of mechanisms to mitigate abuse <ul style="list-style-type: none"> Implementation Description: ICANN should finalize and implement measures of success for new gTLDs and IDN fast track that expressly relate to its SSR-related program objectives, including measurements for the effectiveness of mechanisms to mitigate domain name abuse. 	ICANN Org	April tbd	
3	22 Mar	The following three Open SSR1 Recommendations are interrelated and are being implemented together. <p>Rec 20 SSR Budget</p> <ul style="list-style-type: none"> Implementation Description: ICANN should increase the transparency of information about organization and budget related to implementing the SSR Framework and performing SSR-related functions. <p>Rec 21 SSR Budget</p> <ul style="list-style-type: none"> Implementation Description: ICANN should establish a more structured internal process for showing how organization and budget decisions relate to the SSR Framework, including the underlying cost-benefit analysis <p>Rec 22 - SSR Resources for new gTLDs</p> <ul style="list-style-type: none"> Implementation Description: ICANN should publish, monitor and update documentation on the organization and budget resources needed to manage SSR issues in conjunction with introduction of new gTLDs. 	ICANN Org	April tbd	
3	22 Mar	Update the ICANN Board that the deadline of the end of the month will not be met but note that the RT is working to prepare its Terms of Reference and Work Plan per the Boards request.	Kaveh Ranjbar	28 Mar	
3	22 Mar	Prepare straw-man versions of the Terms of Reference and Work plan for the RT to consider	ICANN Org	31 Mar	
3	22 Mar	Generate a list of official observers and their relevant skill sets for RT consideration	ICANN Org	28 Mar	Completed

SSR2 RT Call Schedule

The best time slots for the call rotation are 0600 UTC, 1400 UTC and 2100 UTC.

The best day to hold the call appears to be Tuesday.

This means that the rotation if agreed could look as follows:

28 March	1400 UTC
4 April	2100 UTC
11 April	0600 UTC
18 April	1400 UTC
25 April	2100 UTC

Face-to-Face SSR2 RT meetings

2017

May 13-15 Madrid in conjunction with the DNS Symposium (Confirmed)

June Johannesburg at ICANN59 – Planned
(date(s) to be confirmed between June 26-29)

October Abu Dhabi at ICANN60 – Planned
(date(s) to be confirmed between October 28-November 3)

2018

March San Juan, Puerto Rico at ICANN61– Planned
(date(s) to be confirmed between March 10-15)

June tbd (LAC region) at ICANN62 – Planned
(date(s) to be confirmed between June 18-21)

October Barcelona, Spain at ICANN63 – Planned
(date(s) to be confirmed between October 20-26)

Developing SSR2 Scope & Workplan

Next Steps

Identifying SSR Issues members think are important for Team to explore (Follow-up on Copenhagen brainstorming)

See Slides 13 to 24

Developing Initial Outreach List

There are some key briefings, meetings, and outreach to key groups:

ICANN Groups

- Security Stability Advisory Committee (SSAC)
- Governmental Advisory Committee (GAC)
- GAC's Public Safety Working Group (PSWG)
- Root Server System Advisory Committee (RSSAC)
- At-Large Advisory Committee (ALAC)
- GNSO constituencies (see list on website)
- Country Code Names Supporting Organization (ccNSO)
- Address Supporting Organization (ASO)
- Board
- Board Technical Experts Group (TEG)

SSR1 Review Team

IETF

IAB

W3C

Developing Initial Outreach List con't

Regional Internet Registries (RIRs)

- African Network Information Center (AFRINIC)
- Asia-Pacific Network Information Centre (APNIC)
- American Registry for Internet Numbers (ARIN)
- Latin American and Caribbean Network Information Centre (LACNIC)
- Réseaux IP Européens Network Coordination Centre (RIPE NCC)

Regional country code top-level domain organizations

- African TLD Organization (AFTLD)
- Council of European National TLD Registries (CENTR)
- Asia Pacific TLD Organization (APTLD)
- Latin American and Caribbean TLD Organization (LACTLD)

Anti-Phishing Working Group (APWG)

Messaging, Malware and Mobile Anti-Abuse Working Group (M3AAWG)

Additional information

SSR2 ICANN Board Resolution

03 Feb 2017

Appointment of Board Designees for New Specific Reviews: Second Security, Stability, and Resiliency of the Domain Name System

Resolved (2017.02.03.11), the Board hereby appoints Kaveh Ranjbar to serve as a member of the Second SSR Review Team, and **requests that this team develop and deliver to the Board their approved Terms of Reference and Work Plan by the 30th of March**, to ensure that the team's scope and timeline is consistent with the requirements of the ICANN Bylaws.

<https://www.icann.org/resources/board-material/resolutions-2017-02-03-en#1.g>

Draft Outline of Terms of Reference based on CCT example

1. SSR2 Review Mandate from Bylaws Section 4.6)
2. Background
3. Framework
 - a. Scope
 - b. Data and Metrics
 - c. ICANN Evaluation Reports
 - d. Definitions
4. Process
 - a. Communications and transparency
 - b. ICANN Staff Input
 - c. Community Consultations
5. Work of Review Team
 - a. Decision-making
 - b. Meetings
 - c. Reporting
 - d. Participation
 - e. Tools /Means of Communications
 - f. Indicators/Metrics
6. Deliverables
 - a. Interim Recommendations
 - b. Findings
 - c. Final Recommendations
 - d. Recommendations to next Review Panel(s)
7. Conflicts of Interest
8. Timeline

15 March Brainstorming Capture

AREA OF ASSESSMENT:

li: Shall Review 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.

Questions we need to address in this area <i>(as captured in the 15 March morning session)</i>	Exploration Space Proposed Elements	Consensus Elements
<p>Measures and evaluations of security efforts</p> <ul style="list-style-type: none"> • What is the scope of ICANN's threat modeling? • Is DNSSEC an ICANN security effort? • How effective it is ICANN risk management? • Study the DNS abuse lifecycle • If I how ICANNs security efforts related to the DNS? • How ICANN measures the effectiveness as security efforts? • What are ICANN's security efforts? (x2) • What are the benchmarks and good practices for successful security efforts? <p>• Evaluate the DNS abuse threat mitigation measures/Deficiencies processing speed</p> <p>• Recommend upgrade and revision of security and stability procedures and action plans. Review ICANN security procedures.</p> <p>Organizational</p> <ul style="list-style-type: none"> • What are the indicators for "successful" implementations and intended effects? • Are SSAC recommendations automatically considered as ICANN efforts towards SSR? • What are the changes to ICANN SSR with the IANA transition? • How to interact with outside organizations? • What are the key performance indicators • How can we measure "the extent" of ICANN's success in implementing security efforts? • What is the significance of "both internal and external, that directly affect and/or affected by..."? <p>Future challenges</p> <ul style="list-style-type: none"> • Explore forecasting research on the Internet capacity/performance(DD OS). • Should SSR2 consider the future? • How do we assess "Future challenges to security and stability a DNS?" • What are the actual and potential challenges and threats? 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •

15 March Brainstorming Capture

AREA OF ASSESSMENT:

iii: Shall review 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.

Questions we need to address in this area <i>(as captured in the 15 March morning session)</i>	Exploration Space Proposed Elements	Consensus Elements
<p>Approach to Assessing</p> <ul style="list-style-type: none"> • How can we assess the efforts of prior recommendations? SSR1 implementation, what were the impacts for results of each successfully implemented recommendation? • How do we get an understanding of what SSR1 recommendations have been implemented? • Which implementation measures from what were critical are deemed insufficient? • Are there measures in place to assess SSRI one work? • Which extent of SSR1 recommendations implemented? • Review and grade importance and way it is implemented • What are the indicators the SS are too would want to use to measure "success" of security efforts? • How are we distinguishing operational stability and security from measures that stem from compliance issues? • How can we work on global policies? <p>Post Transition Factors</p> <ul style="list-style-type: none"> • Which recommendations are still critical for SSR since the transition? <p>Uncategorized</p> <ul style="list-style-type: none"> • Collect input from the community on how ICANN should improve on SSR 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •

15 March Brainstorming Capture

AREA OF ASSESSMENT: iA; May assess the Security, operational stability and resiliency matters, both physical and network, relating to the coordination of the Internet's system of unique identifiers		
Questions we need to address in this area <i>(as captured in the 15 March morning session)</i>	Exploration Space/ Proposed Elements	Consensus Elements
<p>Definitions</p> <ul style="list-style-type: none"> • What does security, stability, resiliency mean? (x4) • What do we mean by unique identifiers? (x2) • What is meant by “both physical and network”? • What does “interoperable security processes” mean <p>Scope</p> <ul style="list-style-type: none"> • What has been, or could be, the impact of the evolution and the number and types of devices in the DNS? • What are the parameters to secure the DNS? • Which portion of the Internet systems of unique identifiers does ICANN not coordinate? • Where is the best source to determine most pertinent aspects? (e.g. networking scope is wide and covers many actors in the community) • What is the main responsibility of SSR2 review team? <p>Procedures</p> <ul style="list-style-type: none"> • UI procedures? • Interoperable security processes – how is this currently addressed in DN, protocols, addresses? • What is the current state of ICANN and disaster and operational recovery planning? • Identity and access management? • Operational impact on security and stability? • What is ICANN's internal level of risk and how it minute and how is it managed? (vulnerability reporting bug bounty, future?) • Conduct performance indicators and benchmarks of SSR. <p>Uncategorized</p> <ul style="list-style-type: none"> • Explore DNS analysis opportunities (malware) • Is the assessment limited to those organizations ICANN has policy inputs to? • Physical security? Should we consider KSK signing physical security? ICANN headquarters? • How can we ensure the security reliable unique data fires? How do out organizations policies affect assessment? 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •

15 March Brainstorming Capture

AREA OF ASSESSMENT:		
iB: May assess conformance with appropriate security contingency planning framework for the Internet's system of unique identifiers		
Questions we need to address in this area <i>(as captured in the 15 March morning session)</i>	Exploration Space Proposed Elements	Consensus Elements
<p>How do we assess</p> <ul style="list-style-type: none"> • Definition of scope of "Internets system of unique identifiers?" • When it says conformance, to what extent? • Overall process the implication of security, stability, and resiliency of DNS as per bylaws? • What are the key point who address secure reliable and stable DNS? • How can we address the "operational issue?" <p>IANA transition</p> <ul style="list-style-type: none"> • What is the impact of moving the IANA services to PTI? How will this be monitored? • What contingency planning has taken place as a result of the CWG/CCWG <p>Contingency planning</p> <ul style="list-style-type: none"> • what measures are taken to ensure relevance and applicability of the contingency plan? • Contingency planning framework, what does that mean four, DN, protocols, addresses? • What is the appropriate security contingency planning framework? • Who is responsible for the current contingency plan? • What is meant by "the appropriate security contingency planning framework"? <p>Uncategorized</p> <ul style="list-style-type: none"> • What is ICANN doing in the area of interoperable security STDs to monitor? (ITHI) • How the end-user feel secure, reliable, instable • Does this review look only internally and ICANN process? • Who is responsible for the maintenance and upkeep of the [unreadable] 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •

15 March Brainstorming Capture

AREA OF ASSESSMENT:

iC: May assess maintaining clear and globally interoperable security processes for those portions of the Internet's system of unique identifiers that ICANN coordinates.

Questions we need to address in this area (as captured in the 15 March morning session)	Exploration Space	Proposed Elements	Consensus Elements
<p>Definitions</p> <ul style="list-style-type: none"> • What is meant by "globally interoperable security processes?" • What aspects of the unique identifier space is relevant to the definition of quote security processes"? • This is IETF, No? <p>Abuse (GTLD and ccTLD)</p> <ul style="list-style-type: none"> • GTLD abuse mitigation • Global abuse policies recommendations • How does ICANN compliance impact SSR? <p>GTLD compliance analysis</p> <ul style="list-style-type: none"> • What are the SSR issues with new GTLD's? • ccTOD abuse mitigation <p>Assess effectiveness</p> <ul style="list-style-type: none"> • How effective is ICANN's coordination effort with IETF and others? • How effective or ICANN's security efforts to known threats and preparation for future threats? <p>Emerging trends</p> <ul style="list-style-type: none"> • What emerging technologies are trends should we consider? <p>Uncategorized</p> <ul style="list-style-type: none"> • Root server stability, security • How DNS works with secure reliable and stable (look up text] 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •

15 March Brainstorming Capture

TOPIC: Approach to the work.			
Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • Biweekly for an hour for the start • Conference call online meetings every two weeks • How often – fortnightly by call and ongoing on list • Need to work online every week • Monthly virtual, quarterly in person • Meet every 3 months, conference calls every 2 weeks • Virtual meetings first choice, F2F for decisional (more than 1 day) • Reporting of output, online participation, F2F attendance • Regular online meetings, F2F every 2 to 3 months • Meeting, need a wide discussion once deliverables identified • Approach – subgroups around streams once identified • Subgroups that will address separate areas • Subgroups definitely • 3-6 groups with group lead • We need to define our scope first • Premature to decide on subgroups 	<ul style="list-style-type: none"> • Guidelines for use of outside experts. 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.

15 March Brainstorming Capture

TOPIC: COMMUNICATION AND TRANSPARENCY

Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • Monthly report to Community via SMAC chairs • Default open, we may need closed sessions (CDA, NDA) • Mailing list (Slack please!) • Use existing ICANN communication structure • Workplan milestones and important decisions • Unless a specific confidentiality specified, open and available to community • Communicate often and through multiple channels but don't lose focus on her primary task, the report • Communicate our work at least once in a quarter, All documents should be kept in wiki • We have to go community level on regional basis • It would be conferencing public consultation • Like other technical ACs • Public comment on scope and workplan, Draft report • Rapporteurs, consider regular blog pieces on progress? • Communicate at ICANN meetings and online • Wiki page for work is okay concern is with the email archive • Wiki with updates and pointers elsewhere. 	<ul style="list-style-type: none"> • Teleconference calls using Adobe Connect room. • Streaming face to face meetings. • Establish a public website to house all activities and information developed. • Use of an email list for communication and public archiving. 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.

15 March Brainstorming Capture

TOPIC: Reporting and metrics to reflect progress.

Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • Milestones and PMP (x2) • Quarterly commitment, no quality measures needed (Public comments are enough) • Current reporting structure of other review teams • Do we need to report to SO of each team member separately? • We can meet the online session once a week • We need to define our scope first • Public session at each Public meeting (x2) • Accountable to work plan timelines and community input and reporting • Measure progress versus workplan • Questionnaire regarding KPI's for review team? • Community feedback will be more effective • Can measure on community feedback • Virtual meeting at least two hours a week, Form subgroup on key assets are domain face-to-face 	<ul style="list-style-type: none"> • Use of dashboards and reporting mechanisms to inform the Community of progress. • Guidelines for communication back to RT members' constituency groups. • Determination of metrics to track for communication to the community. 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.

15 March Brainstorming Capture

TOPIC: Team structure			
Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • Subgroups (x10) • Co-chairs (x5) • Co-chairs and rapporteurs (x4) • Chair, vice Chair, and working group leaders • Single Chair and group leaders • SSR Co Charis, then a Chair and rapporteurs for subgroups • Sub groups on policy and research/technology • Subgroups when needed on specific topic (x2) 	<ul style="list-style-type: none"> • Guidance regarding RT members seeking assistance from parties outside the RT or ICANN Staff. • Guidelines for Observers. 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.

15 March Brainstorming Capture

TOPIC: Role of Staff			
Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • Full admin support • The Adobe connect support • Staff supporting, not leading (review team owns the work product) • Specific staff also needed (Kim, Elise, Rick, Punky) • Current level of support should be maintained • Meeting an organizational support • Help with gathering materials • Not to steer the substantive discussions • Organizational support, just like what has happened so far • Staff should capture all requests, Questions, and action items, and post and distribute responses as appropriate • Provide support documentation, Guide team on organizational structure, facilitate the team • ICANN SSR team should provide reports, explanations, and data. 	<ul style="list-style-type: none"> • Provide draft review team guidelines and procedures developed with Board oversight, to assist any deliberations to cover additional topics beyond those identified in the planning phase. 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.

15 March Brainstorming Capture

TOPIC: Role of Outside Experts			
Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • To validate assumptions • Experts if needed Yes, if we discover gaps in info we need • Specific request can be drafted for experts on demand basis • Also consider literature review on current and future trends • Should engage pay consultants with specific focus • Consultants for specific questions, not standing engagement • We need to scope defined before engaging consultants • If needed we should expand team or get external help (Experts or studies) • Engage outside experts as the need arises especially skills not on SSR2 • Need to conduct the program at regional level • Should be clear and should not be ambiguity • Should be transparent 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.

15 March Brainstorming Capture

TOPIC: Decision-making format.			
Ideas and thoughts from the RT <i>(15 March morning session)</i>	Other elements to consider <i>(based on past review efforts or Staff input)</i>	Observations and comments from the Plenary <i>To be populated during plenary discussion</i>	Consolidated Elements of Alignment <i>To be populated in discussion or post-discussion for future review and approval by RT</i>
<ul style="list-style-type: none"> • Consensus driven decision with argumentation • Keep going until you have consensus • Majority consensus two thirds consensus across 15 people not possible • Consensus whenever possible, Dissenting statements only if absolutely necessary • Dissenting opinions must be addressed and recorded in minutes and proceedings • Need to clearly determine the role and responsibility • Majority vote with tie- breaking mechanism • Full consensus • Consensus with notation of dissenting view • Note dissenting opinions • Consensus– A decision that can be live with • Consensus no strong objections after attending to all issues • Co-chairs by subgroup 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • To be populated in discussion or post-discussion for future review and approval by RT.