









Implementation Report on the Security, Stability and Resiliency of the DNS








Review Team Recommendations







The following tables show the current status of implementation for the 28 SSR Review Team recommendations adopted by the ICANN Board, as aligned with ICANN's four management delivery areas for Fiscal Year 2014.

Key:
 Complete ✓ or 
 In Progress ○ or 
 In Planning ◇ or 


Report Recommendations Implementation As of 18 March 2014

	Topic	Summary of Implementation activities	Milestones & Due Dates
SSR Review Team Recommendations			
1 	Affirmation of Purpose – ICANN's Remit, Mission	ICANN should publish a single, clear and consistent statement of its SSR remit and limited technical mission.	<ul style="list-style-type: none"> ✓ Public comment was taken on a draft statement between May-Sept 2012. ✓ The draft statement was revised on 4 Oct 2012. ✓ An updated version was published in the FY 14 SSR Framework, and this statement has been incorporated into other ICANN documentation.
2 	Affirmation of Purpose – ICANN's Remit, Mission	ICANN's definition and implementation of its SSR remit and limited technical mission should be reviewed in order to maintain consensus and elicit feedback from the Community.	<ul style="list-style-type: none"> ✓ The updated role and remit statement will be reviewed with the next SSR RT in 2015. As this recommendation has a recurring component, it will never be complete. ICANN continues to refine the scope of its SSR activities. The new structure of the Identifier System Security, Stability and Resiliency Team (ISSSR, previously the ICANN Security team) demonstrates that ICANN is continuing to review its SSR remit and scope.
3 	Internationalization – Terminology and Relationships	Once ICANN issues a consensus-based statement of its SSR remit and limited technical mission, ICANN should utilize consistent terminology and descriptions of this statement in all materials.	<ul style="list-style-type: none"> ○ The Security team has worked across the organization to use consistent terminology and descriptions related to ICANN's SSR role and remit in ICANN's materials. Because of the on-going nature of using consistent terminology and descriptions, this work will never be fully complete.
4 	Internationalization – Terminology and Relationships	ICANN should document and clearly define the nature of the SSR relationships it has within the ICANN Community in order to provide a single focal point for understanding the interdependencies between organizations.	<ul style="list-style-type: none"> ○ The Strategy Panel on ICANN's Role in the Internet Governance Ecosystem also recommended mapping ICANN's security and technical relationships. The new Security, Stability and Resiliency of the DNS Review Team (SSR) is developing documentation related to ICANN's SSR relationships.
5 	Internationalization – Terminology and Relationships	ICANN should use the definition of its SSR relationships to maintain effective working arrangements and to demonstrate how these relationships are utilized to achieve each SSR goal.	<ul style="list-style-type: none"> ○ The ISSSR team is working with ICANN's Global Stakeholder Engagement team to maintain and enhance effective working arrangements and relationships. The ISSSR team has established relationships with law enforcement & the operational security community worldwide, and has provided past training in the Czech Republic, France, Netherlands, UK, US, among others. Reporting on ICANN's progress toward SSR-related key performance indicators and key success factors will complete this recommendation.

6 	Multistakeholder Model Evolution	#6 - ICANN should publish a document clearly outlining the roles and responsibilities for both the SSAC and RSSAC in order to clearly delineate the activities of the two groups.	For tracking this has been divided into 6A [SSAC] and 6B [RSSAC]: √ 6A - Roles and Responsibilities of SSAC are defined in SSAC's Operating Procedures. SSAC's Operational Procedures are located at on ICANN's website . √6B – Roles and Responsibilities for RSSAC are in development, following the end of public comment on proposed amendments to the ICANN Bylaws on the purpose of RSSAC .
7 	Operations Excellence - Objectives	ICANN should build on its current SSR Framework by establishing a clear set of objectives and prioritizing its initiatives and activities in accordance with these objectives.	○ Staff used the management delivery structure to align ICANN's objectives and initiatives with the annual SSR Framework, and support the development of the FY 14 budget, operating plan and next ICANN Strategic Plan. With the creation of the new ISSSR department, priorities are being realigned with the creation of the FY 15 budget, operating plan and the 2016-2020 Strategic Plan.
8 	Operations Excellence - Objectives	ICANN should continue to refine its Strategic Plan objectives, particularly the goal of maintaining and driving DNS availability. Clear alignment of Framework & Strategic Plan.	○ In line with the 2016-2020 Strategic Plan, ICANN's Strategic Plan objectives have been refined related to SSR. The 2016-2020 Strategic Plan will describe this in more detail [see the Strategic Planning webportal for information].
9 	Operations Excellence – Standards and Compliance	ICANN should assess certification options with commonly accepted international standards (e.g. ITIL, ISO and SAS-70) for its operational responsibilities. ICANN should publish a clear roadmap towards certification.	√ ICANN's implementation of DNSSEC in the root has achieved SysTrust certification . √ ICANN recently hired a Chief Information and Innovation Officer . ○ A roadmap on certification options falls under the remit of the CIIO. This will be explored further in the remainder of FY 14 and into FY 15.
10 	Operation Excellence – Standards and Compliance	ICANN should continue its efforts to step up contract compliance enforcement and provide adequate resources for this function. ICANN also should develop and implement a more structured process for monitoring compliance issues and investigations.	√ This recommendation is being led by ICANN's Compliance team and through implementation of the recommendations from the WHOIS Review Team. Staff believes this recommendation is largely complete, while efforts to step up Compliance enforcement continue.
11 	Operation Excellence – new generic TLDs and IDNs	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.	○ Staff is exploring the full implications of this Recommendation. Security team expects this will involve community-staff collaboration for full implementation. ○ As this relates to the Competition, Consumer Trust and Consumer Choice Review and measurements for both new gTLDs and IDN ccTLDs delegated via the IDN ccTLD Fast Track, there will be engagement with stakeholders from across the community. The focus of this recommendation is mechanisms related to mitigating domain name abuse. Staff is supporting efforts in Advisory Committees and community on abuse metrics.
12 	Multistakeholder Model Evolution	ICANN should work with the Community to identify SSR-related best practices and support the implementation of such practices through contracts, agreements and MOUs and other mechanisms.	○ ICANN staff previously wrote to the SO-AC Chairs for input. Some Supporting Organizations (ccNSO) currently publish SSR-related information for their members. ○ The Security team has worked with the APWG Internet Policy Committee to publish recommendations for web application protection, has engaged in development of resources for security awareness (through SANS Securethehuman.org

			activities and with NCA Stop.Think.Connect). o The revised new gTLD registry agreement contains additional language on best practices.
13 	Multistakeholder Model Evolution	ICANN should encourage all Supporting Organizations to develop and publish SSR-related best practices for their members.	o This recommendation will involve community-staff collaboration through the ASO, ccNSO and GNSO on appropriate best practices related to the unique identifiers in their respective roles. o The Internet Society's Deploy360 Best Current Operational Practices (BCOP) effort provides a good example for the collection and publication of SSR-related best practices . Some of the regional engagement strategies are also looking at SSR activities (see Latin American & Caribbean Regional Engagement Strategy).
14 	Internationalization – Outreach and Engagement.	ICANN should ensure that its SSR-related outreach activities continuously evolve to remain relevant, timely and appropriate.	o Outreach activities have been expanded and will be reviewed annually. The Security team provides both a service function to ICANN's Global Stakeholder Engagement team as subject matter experts, and a community function in outreach and engagement in SSR matters. This is an on-going obligation.
15 	Operations Excellence – Risk Management and Threat Mitigation	ICANN should act as a facilitator in the responsible disclosure and dissemination of DNS security threats and mitigation techniques.	√ ICANN published a Coordinated Vulnerability Disclosure document . This recommendation has been completed but staff notes that because facilitation of responsible disclosure is an on-going obligation the work in this area is ongoing. √ Staff collaborates with operators and trusted security community entities on DNS security threats and mitigation techniques. This is related to Recommendation 28.
16 	Internationalization – Outreach and Engagement.	ICANN should continue its outreach efforts to expand Community participation and input into the SSR Framework development process. ICANN also should establish a process for obtaining more systematic input from other ecosystem participants.	o Outreach activities and processes have been expanded and will be reviewed annually. The Security team's ongoing work with security communities such as APWG, MAAWG has resulted in participation by members of those communities in SSAC. Through engagement with ICLN and CCI, the Security team emphasizes the value of multistakeholder approaches to cybersecurity issues. The recommendation is considered complete in FY 14 but there is an on-going aspect to ensure outreach efforts continue. o This is related to Recommendations 4, 5 and 14. o The Security team supports a variety of capability building initiatives at the request of stakeholders, such as DNSSEC training, ccTLD attack and contingency response training, law enforcement training, outreach at Network Operator Group meetings such as CaribNOG, MENO, among others.
17 	Operations Excellence – Transparency	ICANN should establish a more structured internal process for showing how activities and initiatives relate to specific strategic goals, objectives and priorities in the SSR Framework.	o ICANN staff has used the internal process for the creation and publication of key success factors and key performance indicators to show how ICANN's SSR activities and initiatives relate to goals, objectives and priorities. Further information on this will be described in the 2016-2020 Strategic Plan and the FY 15 SSR Framework, which is to be published in April 2014.
18 	Affirmation of Purpose – ICANN's Remit, Mission	ICANN should conduct an annual operational review of its progress in implementing the SSR Framework and include this assessment as a component of the following year's SSR Framework.	√ Implemented as part of the FY 13 & FY 14 SSR Frameworks and will be repeated annually. The previous status of SSR RT implementation was published in Appendix C of the ATRT2 Report

19	Operations Excellence – Risk Management and Threat Mitigation	ICANN should establish a process that allows the Community to track the implementation of the SSR Framework. Information should be provided with enough clarity that the Community can track ICANN's execution of its SSR responsibilities.	o The publication of the annual SSR Framework includes a status update on the previous fiscal year Framework. MyICANN also contains project reporting, and will be updated to better reflect SSR portfolios and work.
20	Operations Excellence – Transparency	ICANN should increase the transparency of information about organization and budget related to implementing the SSR Framework and performing SSR-related functions.	o The publication of ICANN Financial data through MyICANN and its At Task project management system provide more transparency for the community on ICANN's SSR-related work. As more information is made available in FY14 and into FY 15 this recommendation will be completed.
21	Operations Excellence – Structure	The publication of key success factors and key performance indicators to ICANN's SSR portfolios will complete the implementation of this recommendation.	o The publication of key success factors and key performance indicators to ICANN's SSR portfolios will complete the implementation of this recommendation.
22	Operation Excellence – new generic TLDs and IDNs	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.	o This is related to Recommendation 21 (budget and organization decisions) as well as to the development of monitoring with the introduction of new gTLDs. Information on ICANN budgeting and resourcing has increased through Quarterly Financial reporting and through the publication of data through MyICANN.
23	Multistakeholder Model Innovation	ICANN must provide appropriate resources for SSR-related Working Groups and Advisory Committees, consistent with the demands placed upon them. ICANN also must ensure decisions reached by Working Groups and Advisory Committees are reached in an objective manner that is free from external or internal pressure.	o Staff is conducting an inventory [23A] of activity in the existing SSR-related working groups and Advisory Committees (SSAC and RSSAC). o This will be followed by a description or documentation of the budget process for SO/AC input [23B]. o 23C will describe a standard operating process step to show that SO/AC/Working Group decisions are reached in an objective manner.
24	Affirmation of Purpose – ICANN's Remit, Mission	ICANN must clearly define the charter, roles and responsibilities of the Chief Security Office Team.	√ Previously Implemented with updated Security team page on 4 October 2012 and publication of the FY 13 SSR Framework. The FY 15 SSR Framework will be published in April 2014 describing the new ISSR team, roles and responsibilities.
25	Operations Excellence – Risk Management and Threat Mitigation	ICANN should put into place mechanisms for identifying both near and longer-term risks and strategic factors in its Risk Management Framework.	o This is tied to the delivery of a Risk Management Framework under Recommendation 26. ICANN published a DNS Risk Management Framework and has begun a DNS Risk Assessment. Further information about the DNS Risk Assessment will be presented at the ICANN meeting in Singapore. ICANN has also published a Report on Mitigating Risk of Name Collisions.
26	Operations Excellence – Risk Management and Threat Mitigation	ICANN should prioritize the timely completion of a Risk Management Framework.	o ICANN has retained Westlake Governance to assist with its DNS Risk Management Framework project. Westlake completed the DNS Risk Management Framework (presented at the ICANN Buenos Aires meeting) and has initiated the Risk Assessment phase. More information will be available on this work at the ICANN Singapore meeting.
27	Operations Excellence – Risk Management and Threat Mitigation	ICANN's Risk Management Framework should be comprehensive within the scope of its SSR remit and limited missions	o The Risk Management Framework will be aligned with ICANN's activities in support of its technical mission and the community. This will be comprehensive in that scope, and will be accomplished with the delivery of the Framework under Recommendation 26.

28 	Operations Excellence – Risk Management and Threat Mitigation	ICANN should continue to actively engage in threat detection and mitigation, and participate in efforts to distribute threat and incident information.	√ This recommendation supports a continuation of ICANN efforts, including root zone monitoring, threat detection and mitigation related to ICANN’s DNS Operations and to DNS threats and incidents in general. While execution of these activities fulfills this recommendation, staff notes that the work in this area is ongoing.
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