ICANN SSR2 Review Team

Work summaries – sub-teams

August 10, 2018

⊙ **Related Bylaw**

  ◆ 4.6 (c)(iv)

⊙ **Team Members**

  ◆ Denise, Alain, Ram Krishna - **Rapporteur**: Alain

Skillset

  ◆ ICANN, SSR1, Audit, Project management

Description of activity

  ◆ The sub team will be responsible for reviewing the implementation of the SSR1 RTs work and drafting a document outlining the effectiveness of said implementation

  ◆ Complete the assessment of the implementation of SSR1 recommendations, the impact of the implementation, how the post implementation is being managed and what implications for the SSR2 review.

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⊙ **Work Items**

     ○   Assemble data

     ○   Preliminary review of the implementation of the recommendations

     ○   Elaboration ToR for the consultant (for Implementation's gap analysis)

     ○   Selection of consultant

     ○   Follow up with consultant to ensure work performed as required

     ○   Review consultant report

     ○   Engage the global review team for consultant report approval

     ○   SSR1 recommendations implementation implications on the SSR2 review

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Achievements

Activity	Date	Status
SSR1 briefings by full review team https://community.icann.org/display/SSR/SSR1+Review+Implementation+Home?preview=/54691765/64084717/SSR1%20Recs%201-28%2031March2017.pdf	March 2017	✅
• Sub-groups formation SSR1 Implementation review: Do or hire an independent expert for the Gap analysis on the SSR1 recommendations implementation?	May 2017	✅
SSR1 Review - Meeting #1 Thursday, 20 July 2017 21:00 UTC SSR1 Review - Meeting #2 Thursday, 3 August 2017 21:00 UTC - CANCELLED		
RFP for Gap Analysis of Implementation of SSR1 Review Recommendations published https://www.icann.org/news/announcement-2-2017-09-28-en	September 2017	✅
Only 2 proposals received (16/04/2017) and extension was agreed to November (07/11/2017)	October 2017	✅
Things got paused: Some criticisms from community about hiring an independent expert for the Gap analysis		

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- Topics/areas for ICANN SSR assessment established
- 2-day review/interview session with ICANN staff (ICANN LA) Oct 9-10, 2017
- Topics covered:
  1. Stability and Security related to DNS
     - Business Continuity Management
     - IT operating procedures
     - Resource Recovery Plans
     - Incident Response
     - Root server operations
  2. Operational Processes of GDD
     - Impact on SSR stemming from new gTLDs
       - EBERO
       - Data Escrow
       - CZDS
       - SLA Monitoring System
       - SADAG/DAAR
  3. Root Server Management and Operations

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DNS SSR

- As per the wiki page for this sub group (https://community.icann.org/display/SSR/Subgroup+%233+-+DNS+SSR) the subgroup's mandate was reviewing ICANNs role in the broader security of the DNS and unique identifiers system, including its role in mitigating threats to the DNS and other unique identities it coordinates.

- The first activity of this group was to assemble a set of questions to ask the IANA Manager, Kim Davies, about aspects of the management of Labels entered into the root zone, the NS and DS records and their management, and some questions relating to the DNSSEC signing of the Root Zone. (https://community.icann.org/display/SSR/Subgroup+%233+-+DNS+SSR?preview=/66071179/69276998/2017-08-14-Questions-KD.docx)

- The interview occurred with only Geoff Huston and Eric Osterweil on the call (!)   Notes from the interview were made, but not posted to the Wiki

- Potential issues revealed from the interview were:
    - IANA does NOT not regularly monitor NS and DS records in the root zone for data quality and health of the delegation. Previous sensitivities in this area were cited as the reason for this stance.
    - IANA does not actively monitor the root zone servers for accurate consistency with the master root zone.
    - IANA has no formal operational procedure in the (admittedly unlikely) event of loss of access to the KSK of the root zone.

At this stage the subgroup work stopped due to lack of participation from subgroup members.

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Topics for Consideration

How do we assess "Future challenges to security and stability a DNS?"

2. Explore forecasting research on the Internet unique identifiers

3. What has been, or could be, the impact of the evolution and the number and types of devices in the DNS?

4. How effective are ICANN's security efforts to known threats and preparation for future threats?

5. What emerging technologies and trends should we consider? [new items to discuss] :

- ICANN OCTO Middleware research

- ICANN Emerging Technologies (ask ICANN)

- Internet Governance issues

- Privacy regulation i.e. GDPR

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<u>Discussion Points (based on face to face meetings and conference calls)</u>

- The approach would be to determine how the team review the information and future forecasting and what the technology will offer in the future and how this will impact future operations of the DNS.

- In looking at the ICANN security operations we would need to consider as new technologies emerge would need to examine what the threats might be.

- Performance-specific IT challenges e.g. IOT and provision of hardware and software from the provider side. It is different from attacks but relates to the security of services, Vendor selection and management of solution and vendors.

- Issues related to SLAs

- Other aspects of the DNS management structure

- Internet Governance

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- Extensive interviews took place with key IANA and ICANN staff on the topic
- The sub-group reviewed both the technical and process related topics that may have been impacted
- Arrived at a conclusion that minimal impact on the operation of the IANA functions has taken place as a result of the IANA transition
- Consider the sub-group has completed review with no major recommendations required
- Any small topics can be raised by James Gannon via the CSC

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