# Second Security, Stability, and Resiliency of the Domain Name System Review Team (SSR2)

ICANN60 October 2017



#### What Does ICANN Do?

 The overarching principle of ICANN's activities is the security, stability, and resiliency of the Internet's system of unique identifiers.

So how are we doing?

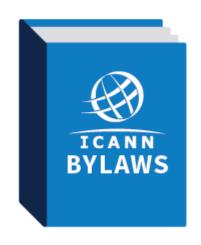
- Every 5 years the SSR Review examines ICANN activities and looks at effectiveness in addressing our concerns over security and stability
  - SSR is one of the four community reviews mandated by ICANN Bylaws



#### **Mandate**

#### The SSR2 Review Team is assessing the:

- Extent to which ICANN has successfully implemented its security, stability and resiliency efforts in relation to how it manages the unique identifiers in which it coordinates.
- Effectiveness of security, stability and resiliency efforts to deal with challenges/threats to the security and stability of the DNS.
- Extent to which security, stability, and resiliency efforts are fully robust to meet future challenges/threats to the security, stability and resiliency of the DNS.
- Extent to which SSR1 Recommendation have been implemented



The Review
Team's mandate
can be found in
ICANN's Bylaws,
Section 4.6(c)



# Security, Stability, and Resiliency are Big Topics

- There is a large scope of work here, given that security, stability and resiliency applies to almost everything we do
- We've had to review a large set of material to establish current context
- We've had to call upon a diverse set of skills and experience from our team

- We want to be thorough and thoughtful
- We want our report to be helpful
- So this review is not a quick exercise



# **Composition of Review Team**

| Name*                     | SO/AC Affiliation | Region |
|---------------------------|-------------------|--------|
| Alain Aina                | ccNSO             | AF     |
| Noorul Ameen              | GAC               | AP     |
| Kerry-Ann Barrett         | GAC               | LAC    |
| Don Blumenthal            | SSAC              | NA     |
| James Gannon              | GNSO              | EUR    |
| Mohamad Amin Hasbini      | GAC               | AP     |
| Geoff Huston              | SSAC              | AP     |
| Žarko Kecić               | ccNSO             | EUR    |
| Boban Krsic               | ccNSO             | EUR    |
| Jabhera Matogoro          | ALAC              | AF     |
| Denise Michel (Co-Chair)  | GNSO              | NA     |
| Eric Osterweil (Co-Chair) | RSSAC             | NA     |
| Ram Krishna Pariyar       | ALAC              | AP     |
| Kaveh Ranjbar             | Board appointee   | EUR    |
| Norm Ritchie              | GNSO              | NA     |

<sup>\*</sup>Former Team Members: Emily Taylor, GNSO, EU; Cathy Handley, RSSAC, NA



## **Five Key Areas of Review**



ICANN's implementation of 28 SSR1 recommendations from 2012



ICANN's key security, stability, and resiliency activities



Activities that impact the SSR of the Domain Name System (that ICANN contributes to/facilitates).



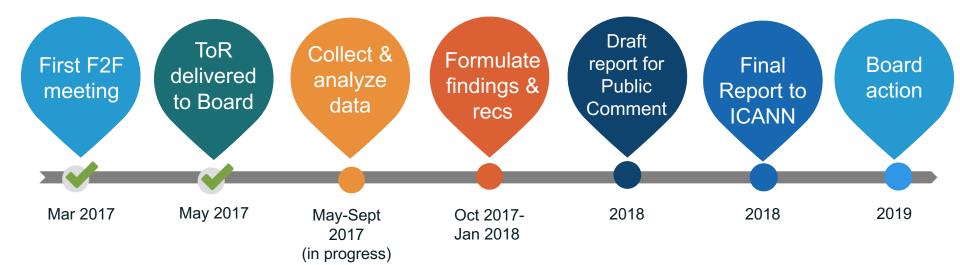
Challenges to the secure and resilient operation of the unique identifiers system



The impact of the IANA stewardship transition on SSR



#### **SSR2: Review Timeline**





# **Key Milestones**

| Activity  | Date           | Status    |
|---|----------------|-----------|
| Launched info gathering, SSR1 briefings, outreach, and Review Team agreed to leadership by three Co-Chairs:  • Denise Michel, GNSO; Eric Osterweil, RSSAC; Emily Taylor, GNSO (resigned July 2017)                                | March 2017     |           |
| Briefings, due diligence, info gathering, community updates ongoing; sub-groups formed and draft work topics identified in 5 key areas:  SSR1 Implementation ICANN SSR DNS SSR Future Challenges Impact of IANA transition on SSR | May 2017       |           |
| RFP for Gap Analysis of Implementation of SSR1 Review Recommendations published   | September 2017 |           |
| More public consultation, outreach meetings with ICANN groups   | ICANN60        | Scheduled |
| Drafting session for first draft of report  | January 2018   | Scheduled |



#### This Week at ICANN60

• We're meeting with SOs, ACs, Constituencies and everyone else Including you!

 And we'll take an extra day this week before heading home to digest what we are learning from you this week

 We're keen to continue the conversation as we progress through our work, so we'll try to keep in touch with you



#### **Your Turn**

#### We've told you that:

 The SSR Review is a periodic activity that examines our activities and looks at our effectiveness in addressing our concerns over security and stability

#### Now we're listening to you:

So if you had just one topic relating to security, stability and resiliency of this identifier space that you think the review team should look at, what would it be?



#### **Additional Material**

You may find these slide useful to refer to later, so we've stuck them here at the back



# **Opportunities to Participate**

- Input to the review: <a href="http://mm.icann.org/pipermail/input-to-ssr2rt/">http://mm.icann.org/pipermail/input-to-ssr2rt/</a>
   (send input to public email: input-to-ssr2rt@icann.org)
- Be an observer at the SSR2 Face-to-Face meeting day 2 at ICANN60
   http://sched.co/CbF7
  - Friday 3<sup>rd</sup> November: 09:00 17:30 (Capital Suite 1)
- Become an observer to our regular meetings send an email to <u>mssi-secretariat@icann.org</u>
- SSR2 wiki contains all of Team's work, emails, meeting records, regular newsletters:
  - https://community.icann.org/display/SSR/SSR2+Review



# **Key Progress**

- SSR2's progress includes:
  - Terms of reference agreed in May by consensus
  - Significantly greater due diligence activity than SSR1
  - Development of key topics and issue areas for Team's initial focus
  - Working within sub-teams to increase throughput and efficiency
  - Working with outside help to complete gap analysis of SSR1 implementation
  - Face-to-face sessions have been effective in making substantive progress
    - For instance, the recent sub-team F2F (summary here: <a href="https://community.icann.org/pages/viewpage.action?pageId=69277737">https://community.icann.org/pages/viewpage.action?pageId=69277737</a>)
    - Madrid ICANN DNS Symposium
    - ICANN meetings, including ICANN60



# **Fact Finding - Briefings and Documents**

- Extensive review of background materials; 70+ reports, documentation including:
  - Mitigating unique identifier abuse
  - Registry and registration security and abuse
  - Operation of DNS root name system
  - Risk assessment and management
  - Incident response
  - o PTI materials
  - SSR1 implementation
- Over 20+ detailed briefings/discussions on SSR topics including:
  - Domain Abuse Reporting Tool
  - ITHI reporting
  - PTI-ICANN relationship
  - SSR1 implementation
  - ICANN's Security Framework and emerging threats
  - ICANN's Risk Management Framework
  - ICANN's Business Continuity strategies, objectives, plans and procedures
  - ICANN's operational planning and controls, and prioritized activity recovery strategy
  - ICANN's Incident Response Structure
  - ICANN's root server operations
  - ICANN's Global Domains Division activities that relate to SSR objectives



### **Next Steps for SSR2**

- Engagement at ICANN60
  - SSR2 Review Team Community Engagement Session
  - At-Large Advisory Committee (ALAC)
  - Address Supporting Organization (ASO)
  - Commercial Stakeholder Group (CSG)
  - Generic Names Supporting Organization (GNSO)
  - ICANN Board
  - Not-for-Profit Operational Concerns (NPOC)
  - Non-Commercial Users Constituency (NCUC)
  - Registries Stakeholder Group (RySG)
  - Root Server System Advisory Committee (RSSAC)
  - Security and Stability Advisory Committee (SSAC)
- Face-to-Face follow up meeting directly after ICANN60
- Community outreach will continue to be a cornerstone of our work
- Potential further Face-to-Face meetings of sub-teams
- Regular Review Team conference calls as SSR2 transitions to drafting and recommendations

