

Second Security, Stability and Resiliency Review (SSR2)

Face-to-Face Meeting, ICANN59 Johannesburg



Plenary 17
Day 1: 25 June 2017

ICANN Expected Standards of Behavior

- Those who take part in ICANN's multistakeholder process, including Board, staff and all those involved in SO and AC councils, undertake to:



Act in accordance with ICANN's Bylaws. In particular, participants undertake to act within the mission of ICANN and in the spirit of the values contained in the Bylaws.



Adhere to ICANN's conflict of interest policies.



Treat all members of the ICANN community equally, irrespective of nationality, gender, racial or ethnic origin, religion or beliefs, disability, age or sexual orientation; members of the ICANN community should treat each other with civility both face-to-face and online.



Respect all members of the ICANN community equally and behave according to professional standards and demonstrate appropriate behavior. ICANN strives to create and maintain an environment in which people of many different backgrounds and cultures are treated with dignity, decency and respect. Specifically, participants in the ICANN process must not engage in any type of harassment. Generally, harassment is considered unwelcome hostile or intimidating behavior – in particular, speech or behavior that is sexually aggressive or intimidates based on attributes such as race, gender, ethnicity, religion, age, color, national origin, ancestry, disability or medical condition, sexual orientation or gender identity.



Protect the organization's assets and ensure their efficient and effective use.



Act fairly and in good faith with other participants in the ICANN process.



Conduct themselves in accordance with ICANN policies.



Support the maintenance of robust mechanisms for public input, accountability, and transparency so as to ensure that policy development and decision-making processes will reflect the public interest and be accountable to all stakeholders.



Listen to the views of all stakeholders when considering policy issues. ICANN is a unique multistakeholder environment. Those who take part in the ICANN process must acknowledge the importance of all stakeholders and seek to understand their points of view.



Work to build consensus with other stakeholders in order to find solutions to the issues that fall within the areas of ICANN's responsibility. The ICANN model is based on a bottom-up, consensus-driven approach to policy development. Those who take part in the ICANN process must take responsibility for ensuring the success of the model by trying to build consensus with other participants.



Promote ethical and responsible behavior. Ethics and integrity are essential, and ICANN expects all stakeholders to behave in a responsible and principled way.



Facilitate transparency and openness when participating in policy development and decision-making processes.



Act in a reasonable, objective and informed manner when participating in policy development and decision-making processes. This includes regularly attending all scheduled meetings and exercising independent judgment based solely on what is in the overall best interest of Internet users and the stability and security of the Internet's system of unique identifiers, irrespective of personal interests and the interests of the entity to which individuals might owe their appointment.

Welcome

Rollcall

Statement of Interest Updates

Opening Remarks

Agenda Review

Day 1 Agenda

AM

1

Welcome, Rollcall, Statement of Interest Updates, Opening Remarks, Agenda Review

09:00 – 09:15

2

Sub-Topics Scoping Discussion

09:15 – 10:00

3

SSR1
Implementation Briefing & Team Discussion

10:00 – 12:30

LUNCH 12:30 – 13:15

4

Sub-Topics Work Continued

13:15 – 15:30

5

Outreach

15:30 – 16:30

6

A.O.B, Review action items; Review tomorrow's agenda

16:30 – 17:00

PM

Sub-Topics Scoping Discussion

Refine and clarify topics if needed

Discuss scope and applicability to Terms of Reference

Refine and Clarify Topics

- ⦿ Topics list:

- <https://docs.google.com/document/d/1DWoT4VoMIT5Dvcy78EXI-O5tQFqa9CblwsDEV6go51s/edit?usp=sharing>

- ⦿ Discuss scope and applicability to Terms of Reference

1. Review implementation of the first Security Review Team's report (SSR1)
2. ICANN security processes
3. ICANN DNS security coordination processes
4. Future threats and challenges
5. IANA transition impact

Sub-Topic Volunteers

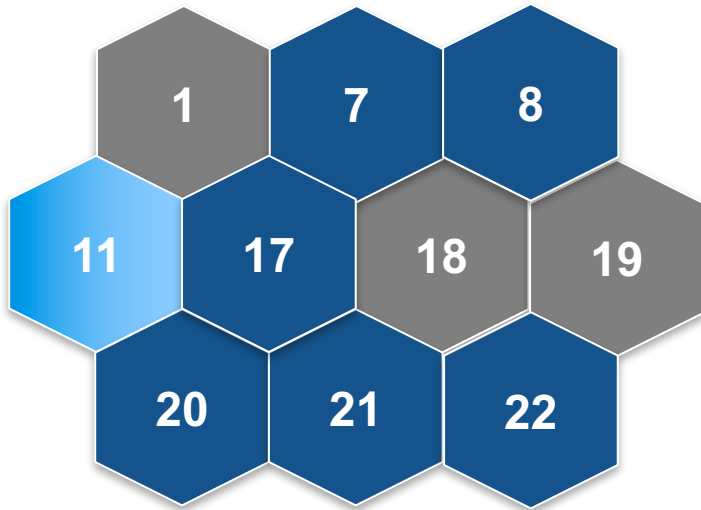
Topic	Volunteers
1. SSR1 Review	Denise, Alain, Eric, Ram Krishna
2. ICANN Security	James, Denise, Boban, Žarko, Eric, Noorul Ameen, Kerry-Ann,
3. DNS Security	Emily, Alain, Cathy, Žarko, Eric, Don, Matogoro, Ram Krishna, Geoff, Amin Hasbini
4. Future Threats	Eric, Emily, Kerry-Ann, Matogoro, Amin Hasbini, Noorul Ameen
5. IANA Transition	Cathy, James (R), Eric, Geoff
6. Other	Eric

SSR1 Review Implementation

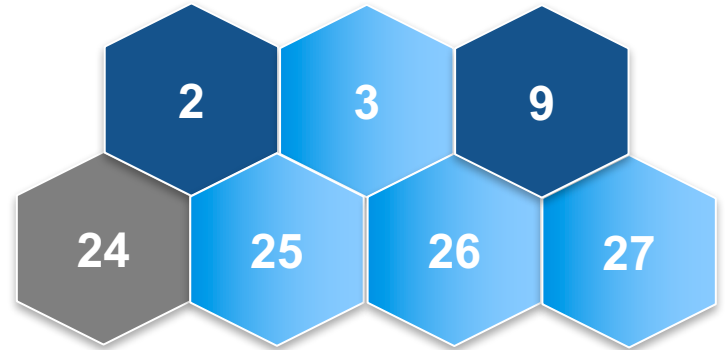
Briefing on SSR1 Recommendations

SSR1 Recommendations

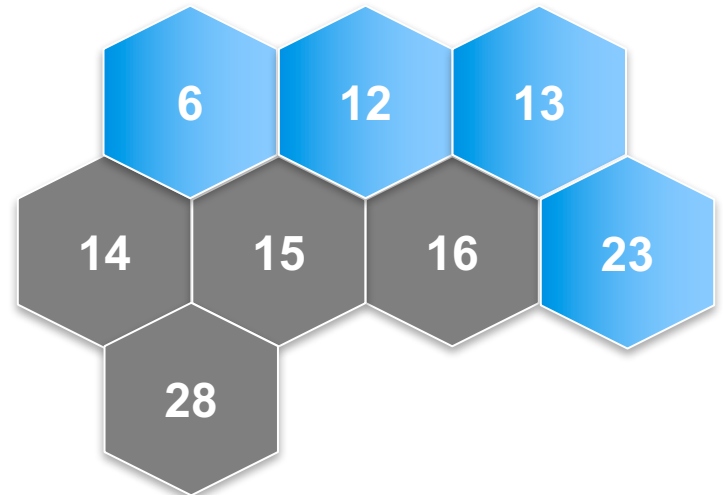
SSR Framework



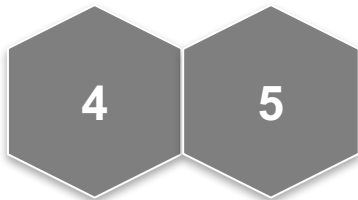
ICANN's SSR Role & Remit Within It's Limited Mission



SSR Community Outreach & Info Sharing – Security Threats & Mitigation



SSR Relationships to Support ICANN's Work



Compliance



Legend for briefing status:

- Briefing completed
- Briefing covered in this presentation
- Briefing not presented yet

Recommendations

ICANN should continue to refine its Strategic Plan objectives, particularly the goal of maintaining and driving DNS availability. The Strategic Plan and SSR Framework should reflect consistent priorities and objectives to ensure clear alignment. 8

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. This process should be informed by a pragmatic cost-benefit and risk analysis. 7

ICANN should increase the transparency of information about organization and budget related to implementing the SSR Framework and performing SSR-related functions. Information should be provided with enough clarity that the Community can track ICANN's execution of its SSR responsibilities, while not impeding ICANN's ability to operate effectively. 20

2 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.

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. 21

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. 9

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. 22

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. It also should establish metrics and milestones for implementation. 17

Strategic & Operating Plan FY 2016 - 2020

SSR1 Recommendation 2 – Status and

Deliverables

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.



Reflect ICANN's strategic SSR objectives, goals and key success factors (KSFs) in the [Strategic Plan for FY2016—2020](#)



Include SSR key performance indicators (KPI's), dependencies, five-year phasing and portfolios in the [Five-Year Operating Plan](#)



Include details on proposed SSR activities and expenditures in the Annual Operating Plan & Budget



Periodically review SSR Framework, including the SSR role and remit statement.

- The [statement](#) (and [SSR Framework](#)) informed ICANN's new [Strategic Plan for FY2016—2020](#), which reflects strategic SSR objectives, goals and key success factors (KSFs) for the next five years and was result of input and review by the ICANN community, Staff and Board. SSR elements are highlighted [here](#).
- This, in turn, informed the new [Five-Year Operating Plan](#), which also was developed with community input and includes SSR key performance indicators (KPIs), dependencies, five-year phasing, and portfolios. SSR elements are highlighted [here](#).
- Periodic review of the SSR Framework, including the SSR role and remit statement, are part of the SSR SOP, and also will be reviewed by the next SSR RT in 2015.

SSR1 Recommendation 7 – Status and

Deliverables

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. This process should be informed by a pragmatic cost-benefit and risk analysis



Incorporate SSR Framework and reflect SSR priorities, objectives and activities into standard operating procedures for development of ICANN plans and budgets



Report on SSR-related priorities, objectives and activities on regular basis as part of SOP, including in ICANN's regular [portfolio management reporting](#) and SSR [quarterly reports](#)



Improve and publish process for establishing updated SSR priorities and objectives



Publish [Annual SSR Framework Report](#)

- The Strategic and Operating Plans (see Recommendation 2) were informed by SSR Framework and reflect SSR priorities, objectives and activities. This is SOP for development of ICANN plans and budgets.
- SSR-related priorities, objectives and activities are reported on regularly as part of SOP, including in ICANN's regular [portfolio management reporting](#) and SSR [quarterly reports](#).

SSR1 Recommendation 8 – Status and

Deliverables

ICANN should continue to refine its Strategic Plan objectives, particularly the goal of maintaining and driving DNS availability. The Strategic Plan and SSR Framework should reflect consistent priorities and objectives to ensure clear alignment.

1

Incorporate SSR Framework and reflect SSR priorities, objectives and activities into standard operating procedures for development of ICANN plans and budgets

2

Report on SSR-related priorities, objectives and activities on regular basis as part of standard operating procedures, including in ICANN's regular [portfolio management reporting](#) and SSR [quarterly reports](#)

- The Strategic and Operating Plans (see Recommendation 2) were informed by SSR Framework and reflect SSR priorities, objectives and activities. This is SOP for development of ICANN plans and budgets, in which SSR alignment is reviewed as annual plans/budgets are developed.
- Progress on SSR-related priorities, objectives and activities are reported on regularly as part of SOP, including in ICANN's regular [portfolio management reporting](#) and SSR [quarterly reports](#)

SSR1 Recommendation 17 – Status and

Deliverables

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. It also should establish metrics and milestones for implementation.

1

See Recommendation 2 for information on how activities and initiatives relate to SSR priorities, objectives and goals and are integrated into ICANN's planning, budgeting and project reporting efforts.

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ICANN Planning Process

- ICANN's Planning Process cycle has a threefold approach encompassing a *Strategic Plan*, a *Five-Year Operating Plan*, and an *Annual Operating Plan & Budget*.
 - **Strategic Plan** – Developed with community input and updated every five years. Designed to shape ICANN priorities, inform its budget and drive activities.
 - **Five-Year Operating Plan** – Developed with community input and updated

Planning Process



ating

Security, Stability, & Resiliency in the ICANN Strategic Plan

- In October 2014, ICANN published a new Strategic Plan for fiscal years 2016-2020.
- As illustrated below, the ICANN Strategic Plan identifies a healthy, stable, and resilient Unique Identifier ecosystem as one of five strategic objectives for the organization.



1 Evolve and further **globalize** ICANN.



4 Promote ICANN's role and **multistakeholder** approach.



2 Support a healthy, stable, and resilient **unique identifier ecosystem**.



5 Develop and implement a **global public interest** framework bounded by ICANN's mission.



3 Advance **organizational, technological** and **operational excellence**.


Figure 4 – ICANN's Strategic Objectives (2016-2020)

FY2016 – 2020 Strategic Objective 2: Support a healthy, stable, and resilient unique identifier ecosystem:

2.1) Foster and coordinate a healthy, secure, stable, and resilient identifier ecosystem.

2.2) Proactively plan for changes in the use of unique identifiers and develop technology roadmaps to help guide ICANN activities.

2.3) Support the evolution of domain name marketplace to be robust, stable and trusted.

A background graphic consisting of a complex network of white nodes and connecting lines on a teal gradient. The nodes are of varying sizes and are distributed across the frame, creating a sense of interconnectedness and data flow.

Strategic Objective 2.1:
Foster and coordinate a healthy,
secure, stable, and resilient identifier
ecosystem

Strategic Objective 2.1 – ICANN Activities

To foster and coordinate a healthy, secure, stable, and resilient identifier ecosystem, ICANN organization will:

1. Deliver services to the ICANN Community according to service level targets
2. Monitor and manage service delivery against targets, identify opportunities for improvement and efficiency
3. Implement process improvements for increased operational efficiency and customer satisfaction
4. Implement system enhancements for increased operational efficiency and effectiveness

Strategic Objective 2.1 - Portfolios

2.1.1 – IANA Department Operations

Description: Operational responsibilities for maintaining registries for protocol parameters, IP numbers, Autonomous System Numbers, and root zone changes. Maintenance of relationship with Internet Engineering Task Force (IETF), Internet Architecture Board (IAB), five Regional Internet Registries (RIRs), and TLD operators

2.1.2 – IANA System Enhancements

Description: Software enhancements, tool development, and other discrete projects to improve delivery of the IANA services

2.1.3 – Advice Registry Management

Description: Development of processes and software used to track the acceptance, implementation, and resolution of advice provided to ICANN via Supporting Organizations, Advisory Committees, Review Teams, and others

2.1.4 – Global Domains Division (GDD) Operations

Description: Projects related to the service implementation and ongoing delivery of services to contracted parties by the GDD. This includes reviewing and improving the way services are delivered

2.1.5 – Global Customer Support

Description: Projects related to the development, implementation and ongoing operations of the ICANN Customer Service Center. This includes support, engagement and advocacy for the global registrant community

2.1.6 – Product Management

Description: Projects and ongoing activities in support of the new gTLD Program. This include technical development work for service platforms

2.1.7 – Implementation of IANA Functions Stewardship Transition and Enhancing ICANN Accountability

Description: Implementation of the community-developed proposals to transition the IANA Functions Stewardship and enhance ICANN's accountability

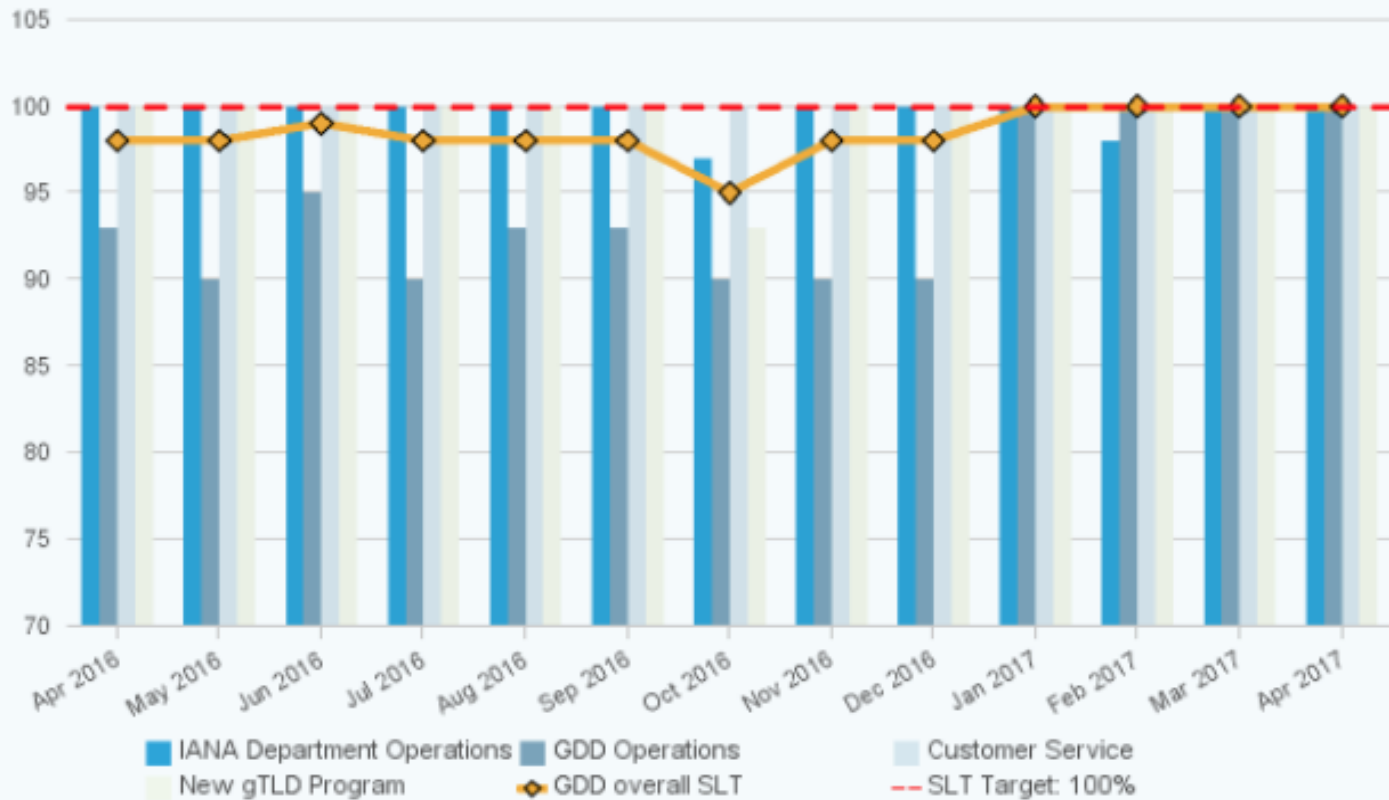
Strategic Objective 2.1 - KPI(s)

Key Performance Indicators (Metrics):

- % of Service Level Targets met across multiple departments including but not limited to IANA, GDD Operations, and Global Customer Support departments

GDD Overall SLT Performance

GDD Overall SLT Performance



The scores represent the aggregate of SLTs measured for the following areas: IANA operations, GDD operations, Customer Service and New gTLD Program.

Strategic Objective 2.1 - Key Success Factors

- Increased collaboration with the global community that improves the security, stability and resiliency of the unique identifier ecosystem (including updates of the root zone, Internet numbers registries, and protocol parameter registries, operation of the “L” root server, and other operational infrastructure supporting the identifier ecosystem).
- Ecosystem is able to withstand attacks or other events without loss of confidence in the operation of the unique identifier system.
- Unquestionable, globally recognized legitimacy as coordinator of unique identifiers.
- Reduction of government/industry/other stakeholders’ concerns regarding availability of IP addresses.
- Strengthened arrangements, including commitments, roles and responsibilities, with entities that directly use IANA services.
- Successful transition of the IANA functions stewardship to ICANN as announced by the NTIA.
- Globally accepted, reliable, secure, and trusted services to facilitate access to, and update of, identifier registration data.

Strategic Objective 2.2:

Proactively plan for changes in the use of unique identifiers and develop technology roadmaps to help guide ICANN activities

Strategic Objective 2.2 – ICANN Activities

In order to proactively plan for changes in the use of unique identifiers and develop technology roadmaps to help guide our activities, ICANN organization will:

1. Expand the department to enhance logistical support for research and SSR-related projects.
2. Gain approval of Technology Roadmaps from the community.
3. Continue to expand and enhance relationships with protocol/technology development organizations.
4. Deploy automated systems to collect data and compute ratio of registered domain names to active IP addresses.
5. Deploy automated systems to collect data and compute ratio of registered domain names to Internet users regionally and globally.
6. Publish analyses of data collected, implications of changes in data over time, and other topics relevant to the use of unique identifiers and evolution of identifier technologies
7. Document growth in ratios in developing regions.

Strategic Objective 2.2 - Portfolios

2.2.1 – WHOIS Core Function/Service and Improvements

Description: To promote trust and confidence in the Internet for all stakeholders, ICANN is committed to:

- Enforcing its current WHOIS policy
- Identifying improvements to the accuracy and reliability of the WHOIS system
- Implementing new GNSO consensus policies for WHOIS
- Addressing privacy and data protection concerns

2.2.2 – Identifier Evolution

Description: Track and support the evolution of the Internet's system of unique identifiers through venues such as the IETF, DNS-OARC, W3C, the RIRs, and other relevant bodies

2.2.3 – Technical Experts Group

Description: Support and enhance the Technical Expert Group, facilitating its activities related to exploration of technical issues and opportunities facing ICANN

2.2.4 – Security, Stability, and Resiliency of Internet Identifiers

Description: Work to observe, assess and improve the security, stability, and resiliency (SSR) of the Internet's Identifier systems in close collaboration with other ICANN departments and the community at large. This will be achieved through a range of activities including risk awareness and preparedness, measurement and analysis of identifier system behaviors or performance, and cooperative outreach that emphasizes coordination, capability building, and knowledge transfer


Strategic Objective 2.2 - KPI(s)

Key Performance Indicators (Metrics):

- Identifier Technologies Health Index will measure ICANN's contribution to health of identifiers in both the ICANN and broader Internet communities

Strategic Objective 2.2 - Key Success Factors

- The unique identifier system evolves to meet the world's needs.
- Effective coordination with the IETF and other forums that focus on protocol and technology changes.
- Improved technical acceptance of new TLDs, including Internationalized Domain Names (IDNs), within operating systems, applications, services, etc.
- Unique identifiers are used for the development of new technologies and enhancements to existing technologies.

The background of the slide is a teal color with a white network diagram overlaid. The diagram consists of numerous small circular nodes connected by thin white lines, forming a complex web that roughly outlines the continents of the world. The nodes are more densely packed in some areas, particularly in North America and Europe, and more sparse in others, like Africa and South America. The overall effect is a digital, interconnected map.

Strategic Objective 2.3:
Support the evolution of domain
name marketplace to be robust,
stable and trusted

Strategic Objective 2.3 – ICANN Activities

To support the development of a robust, stable and trusted domain marketplace, ICANN organization will:

1. Continue ongoing monitoring of the Domain Name Marketplace Health Index
2. Improve multistakeholder satisfaction by reducing survey gap by at least 10% year over year
3. Show stable healthy year over year growth in the domain name industry
4. Finish the current round of the New gTLD Program and have agreement on the start of next round

Strategic Objective 2.3 - Portfolios

2.3.1 – Registration Directory Services Analysis and Development

Description: To promote trust and confidence in the Internet for all stakeholders, ICANN will evaluate whether there is a better system for providing information about gTLD domain names, consistent with applicable data protection and privacy laws to replace WHOIS, including:

- Conducting a Policy Development Process, to examine whether a new policy framework will be needed to support the next generation of registration directory services
- Evaluating new Registration Directory Services technology
- Understanding the evolving data protection and privacy regulatory framework

2.3.2 – Placeholder

Description: Projects in this portfolio were moved to 2.1.5 based on feedback received on the draft plans. This placeholder has been retained to minimize reader confusion regarding portfolio numbering

2.3.3 – GDD Technical Services

Description: Projects to enhance systems, services and technical subject matter expertise related to a safe, secure, and reliable operation of the DNS

2.3.4 – Internationalized Domain Names

Description: Support the introduction and universal acceptance and adoption of Internationalized Domain Names (IDNs)

2.3.5 – New gTLD Program

Description: Projects and ongoing activities in support of the new gTLD Program. Activities include:

- Program Operations to support New gTLD Contracting, as well as prior to delegation operations including Pre-Delegation Testing, Registry Onboarding and Transition to Delegation. Module 5 of the AGB
- Operate and support Trademark Clearinghouse to enable New gTLD launch processes
- Project to Capture FY17 cost allocations from ICANN (Company 1) to New gTLD budget

Strategic Objective 2.3 – Portfolios (continued)

2.3.6 – Outreach and Relationship Management with Existing and new Registry, Registrar Community

Description: Create outreach and engagement strategies for registry and registrar operators to promote and cultivate a positive and constructive relationship among ICANN Staff, registries, registrars and other participants in the domain name industry value chain. Activities include having dedicated account managers, conducting workshops, webinars, and inter-sessional meetings, and attending ICANN meetings

2.3.7 – Domain Name Services

Description: Domain Name Services ongoing operations and Industry Engagement

2.3.8 – Next gTLD Round Planning

Description: Projects to design, plan and operationally prepare for the next application round of the new gTLD Program

2.3.9 – Universal Acceptance

Description: ICANN support to the Internet community to enable all protocol valid domains - including ccTLDs, gTLDs, and IDNs - to work in applications regardless of the age or script. This work is intended to support the goals of the user choice, user confidence, and competition

2.3.10 – Registry Services

Description: Projects related to managing the contracts, defining new services, and building a strong relationship with current and future registrar operators

2.3.11 – Registrar Services

Description: Projects related to managing the contracts, defining new services, and building a strong relationship with current and future registry operators

Strategic Objective 2.3 - KPI(s)

Key Performance Indicators (Metrics):

- Domain Name Marketplace Health Index

gTLD Marketplace Health Index

gTLD Marketplace Health Index



ICANN's publication of the gTLD Marketplace Health Index is in furtherance of ICANN's goal to support the evolution of the domain name marketplace to be robust, stable and trusted. This compilation of marketplace statistics and trends will assist ICANN and the broader community in evaluating the overall health of the gTLD marketplace in these three categories: robust competition, marketplace stability, and trust.

Representative gTLD marketplace gauges included in gTLD Marketplace Health Index (Beta)*

Robust Competition

- Physical locations of gTLD registries/registrar
- Rates of 2nd level additions, deletions, total registrations over time (multiple categories)
- Comparison of #s of individual gTLD registrars & registries with registrar/registry operator families

gTLD Marketplace Stability

- # of gTLD registrars entering marketplace (newly accredited)
- # of gTLD registrars exiting marketplace (voluntary/involuntary de-accreditations)

Trust

- # of UDRP and URS decisions issued against registrants
- # of gTLD registrars terminated due to Compliance issues
- Accuracy of WHOIS records, as detected by ICANN's WHOIS Accuracy Reporting System

*Published for public comment in July 2016 and updated with current data in December 2016. Report available at <https://www.icann.org/resources/pages/metrics-gdd-2015-01-30-en>

Strategic Objective 2.3 - Key Success Factors

- Credible and respected industry that is compliant with its responsibilities as demonstrated by open, transparent, and accountable systems, policies, and procedures implemented using best practices.
- High confidence in ICANN's coordination of the domain name system.

SSR-Related Budget & Expenditures

SSR1 Recommendation 20 – Status and Deliverables

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.

1

(Phase I) Integrate SSR Framework and reports on SSR activities and expenditures into [planning framework and process](#) to provide public information about SSR-related plans, budgets and activities

2

(Phase II) Identify mechanisms that provide more detailed public information on SSR-related budgets and expenditures across multiple ICANN departments

3

(Phase II) Explore after-event-reports (for relevant threats) that include budget and resource impacts related to managing the event

- (Phase I) A [planning framework and process](#) is in place to provide public information about SSR-related plans, budgets and activities (as outlined in Recommendation 2). This is integrated with ICANN's SSR Framework and reports on SSR activities and expenditures. Periodic SSR activity [reporting](#) augments this public information.
- (Phase II) Exploration was underway to identify mechanisms that provide more detailed public information on SSR-related budgets and expenditures across multiple ICANN departments. Staff also explored after-event-reports (for relevant threats) that include budget and resource impacts related to managing the event; A template for a public version of these reports has been published and can be found at: <https://community.icann.org/display/SSR/Rec+%2320> . This report will be published annually for every fiscal year, starting FY18.

SSR1 Recommendation 21 – Status and

Deliverables

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.

1

(Phase I) Integrate SSR Framework and reports on SSR activities and expenditures into [planning framework and process](#) to provide public information about SSR-related plans, budgets and activities

2

(Phase II) Identify mechanisms that provide more detailed public information on SSR-related budgets and expenditures across multiple ICANN departments

3

(Phase II) Explore after-event-reports (for relevant threats) that include budget and resource impacts related to managing the event

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SSR1 Recommendation 22 – Status and

Deliverables

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.

1

(Phase I) Integrate SSR Framework and reports on SSR activities and expenditures into [planning framework and process](#) to provide public information about SSR-related plans, budgets and activities

2

(Phase II) Identify mechanisms that provide more detailed public information on SSR-related budgets and expenditures across multiple ICANN departments

3

(Phase II) Explore after-event-reports (for relevant threats) that include budget and resource impacts related to managing the event

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SSR-Related Budget & Expenditure – Strategic Objective (2.1)

Strategic Objective (2.1): Foster and Coordinate a Healthy, Secure, Stable, and Resilient Identifier Ecosystem

Portfolios	FTE	Pers	T&M	Prof Svcs	Admin	Capital	Total
2.1.1 IANA Department Operations	18.1	3.0	0.2	0.7	0.4	0.1	4.4
2.1.2 IANA System Enhancements	1.2	0.3	0.0	0.0	0.0	0.0	0.3
2.1.3 Advice Registry Management	1.3	0.3	0.0	0.0	0.0	0.0	0.3
2.1.4 Global Domains Division (GDD) Operations	15.1	2.8	0.8	2.3	0.0	0.0	5.9
2.1.5 Global Customer Support	15.0	1.5	0.1	0.0	0.2	0.0	1.9
2.1.6 Product Management	2.0	0.4	0.0	0.0	0.0	0.0	0.5
2.1.7 Implementation of IANA Functions Stewardship Transition & Enhancing ICANN Accountability	1.0	0.3	0.0	0.9	0.1	0.1	1.4
Total	53.5	\$8.5	\$1.2	\$3.9	\$0.7	\$0.2	\$14.5

SSR-Related Budget & Expenditure – Strategic Objective (2.2)

Strategic Objective (2.2): Proactively Plan for Changes in the Use of Unique Identifiers and Develop Technology Roadmaps to Help Guide ICANN Activities

Portfolios	FTE	Pers	T&M	Prof Svcs	Admin	Capital	Total
2.2.1 WHOIS Core Function/Service & Improvements	0.6	0.3	0.0	0.0	0.0	0.0	0.3
2.2.2 Identifier Evolution	2.0	0.6	0.0	0.2	0.1	0.0	1.0
2.2.3 Technical Experts Group	0.3	0.1	0.0	0.0	0.0	0.0	0.1
2.2.4 Security, Stability, and Resiliency of Internet Identifiers	10.6	2.8	0.3	0.4	0.1	0.1	3.8
Total	13.5	\$3.8	\$0.3	\$0.6	\$0.3	\$0.2	\$5.1

SSR-Related Budget & Expenditure – Strategic Objective (2.3)

Strategic Objective (2.3): Support the Evolution of Domain Name Marketplace to be Robust, Stable and Trusted

Portfolios	FTE	Pers	T&M	Prof Svcs	Admin	Capital	Total
2.3.1 Registration Directory Services Analysis and Development	1.0	0.2	0.0	0.0	0.0	0.0	0.2
2.3.2 Placeholder: Projects in this portfolio were moved to 2.1.5 based on feedback received on the draft plans. This placeholder has been retained to minimize reader confusion regarding portfolio numbering.	-	0.0	0.0	0.0	0.0	0.0	0.0
2.3.3 GDD Technical Services	3.4	0.6	0.0	0.2	0.0	0.0	0.8
2.3.4 Internationalized Domain Names	1.0	0.2	0.2	0.8	0.0	0.0	1.2
2.3.5 New gTLD Program	4.4	3.5	0.8	6.2	1.1	0.0	11.7
2.3.6 Outreach and Relationship Management with Existing and new Registry, Registrar Community	-	0.0	0.0	0.1	0.0	0.0	0.1
2.3.7 Domain Name Services	5.7	1.3	0.1	0.2	0.0	0.0	1.7
2.3.8 Next gTLD Round Planning	8.3	1.6	0.0	0.8	0.0	0.0	2.5
2.3.9 Universal Acceptance	-	0.0	0.0	1.3	0.0	0.0	1.3
2.3.10 Registry Services	9.0	1.4	0.2	0.2	0.0	0.0	1.9
2.3.11 Registrar Services	6.0	1.1	0.1	0.1	0.1	0.0	1.4
Total	38.8	\$9.9	\$1.5	\$9.9	\$1.3	\$0.0	\$22.7
	105.7	\$22.2	\$3.1	\$14.4	\$2.3	\$0.4	\$42.2

SSR-Related Budget & Expenditure on-going Reporting

Summarized view of total SSR-related costs:

SSR Functions	FYxx Budget	FYxx Actual	FYxy Budget
Direct Costs / Dedicated resources			
Direct Costs / Shared resources			
Support Services Allocations			
Total			

SSR-related cost breakdown by department:

Function	Department	Description
Direct SSR Departments	Department Name	<u>Travel & Meeting Cost:</u> <u>Personnel Cost:</u> <u>Capital Cost:</u> <u>Total Cost:</u>
	Department Name	<u>Travel & Meeting Cost:</u> <u>Personnel Cost:</u> <u>Capital Cost:</u> <u>Total Cost:</u>
Direct Shared Resources	Department Name	<u>Travel & Meeting Cost:</u> <u>Personnel Cost:</u> <u>Capital Cost:</u> <u>Total Cost:</u>
	Department Name	<u>Travel & Meeting Cost:</u> <u>Personnel Costs:</u> <u>Capital Cost:</u> <u>Total Cost:</u>
Support Services Allocations	Multiple	<u>Travel & Meeting Cost:</u> <u>Personnel Costs:</u> <u>Capital Cost:</u> <u>Total Cost:</u>

Certification

SSR1 Recommendation 9 – Status and

Deliverables

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.

1

Implement DNSSEC in the root

2

Incorporate SSR-related certification into EFQM program

- ICANN's implementation of DNSSEC in the root has [achieved SysTrust certification](#).
- ICANN launched its [EFQM web page](#) where the focus is on continuous improvement. The EFQM Excellence Model provides mechanisms for the holistic assessment of an organization. These assessments help improve the way ICANN works, so that it can deliver better results.

Certifications & Audits

- As part of ICANN organization's commitment to ensuring the security and stability of the Internet's unique identifier systems, we conduct two third-party audits each year on different aspects of the IANA functions we provide. These audits evaluate our Service Organization Controls (SOCs) against the "Trust Services Principles and Criteria":
 - SOC 3 Certification of Root Zone KSK System
 - SOC 2 for Registry Assignment and Maintenance Systems

Trust Services Principles and Criteria

- The Trust Services Principles and Criteria is an international set of principles and criteria developed and managed by the American Institute of Certified Public Accountants (AICPA).
- The SOC 2 and SOC 3 examination is a rigorous process developed by the AICPA to provide independent assurance that an organization's systems are reliable.
- ICANN organization's SOC certification and reports focus on the following Trust Services principles:
 - Availability — the system was available for operation and use, as committed or agreed
 - Processing Integrity — the system processing was complete, accurate, timely, and authorized
 - Security — the system was protected against unauthorized access
 - Each principle is supported by well-defined and detailed criteria that encompass a company's infrastructure, software, data, people, and procedures.

SOC 3 Certification of Root Zone KSK System

- As the DNSSEC Root Zone Key Signing Key (RZ KSK) manager, ICANN organization engages a third party to ensure appropriate internal controls are in place to meet the availability, processing integrity and security objectives for the RZ KSK System.
- For this system, SOC 3 framework (formerly known as SysTrust) is used, with the audit conducted by the international accounting firm, PricewaterhouseCoopers, LLP (PwC).
- PwC has been performing the SysTrust/SOC 3 audit since 15 June 2010.
- PwC has evaluated the IT operational practices and controls around the RZ KSK System and awarded ICANN organization with SOC 3 certification with an unqualified opinion. This certification is renewed annually.

SOC 2 for Registry Assignment and Maintenance Systems

- ICANN organization engages a third party to ensure we have appropriate internal controls in place to meet the availability, processing integrity, and security objectives for the key systems used to support the IANA function's transaction processing.
- These systems are referred to as our Registry Assignment and Maintenance Systems (RAMS), and includes the Root Zone Management System, and the system used to manage IETF protocol parameter registries and number allocation requests.
- The RAMS are audited using the SOC2 framework, with the audit conducted by PwC.
- The SOC 2 audit report is provided to the relevant oversight bodies to fulfill a requirement of the contract between PTI and ICANN; the Memorandum of Understanding between ICANN and the IETF; and the SLA contract between ICANN and the five Regional Internet Registries.
- PwC has prepared SOC 2 reports covering periods commencing June 2013, with audits conducted on an annual basis.

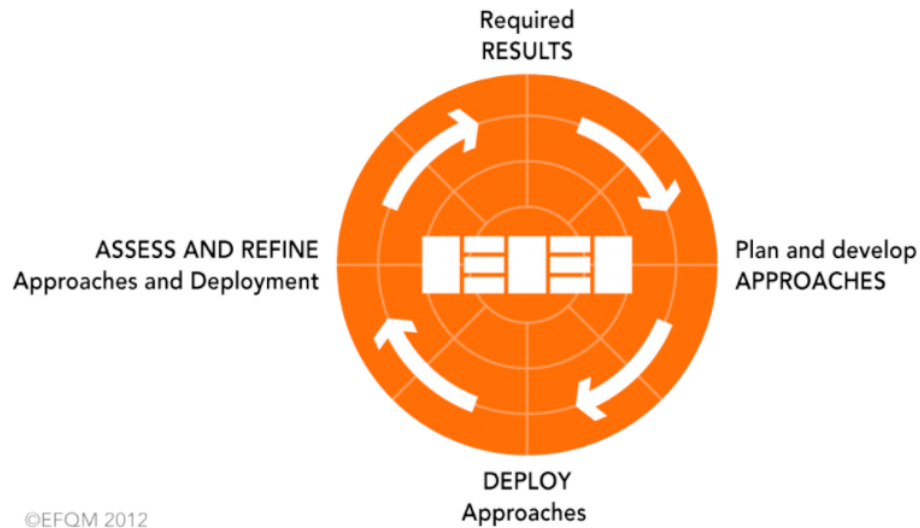
Excel@ICANN

*applying the excellence model,
EFQM*

Organizational Excellence

- IANA functional team begun annual internal assessment based on the EFQM Excellence Model since 2009
- Received [EFQM Committed to Excellence](#) recognition for IANA function following an external assessment conducted by a panel of three independent assessors in August 2013
- Conducted organization-wide annual internal assessment since FY15 based on the EFQM Excellence Model
- Currently, conducting FY17 (3rd annual) internal assessment

Excellence Models



- The EFQM Excellence Model is a framework that has been used to drive sustainable organizational development for over 20 years. It can be applied to any organization, regardless of size or sector. It is based on observation and learnings from leading organizations on what has made them successful and what they need to do to remain competitive in future.
- For continuous improvements in various functional areas, ICANN also uses other applicable excellence models and frameworks that have specific focus in each of these areas.

Additional information

Additional Information

[Security Stability and Resiliency Review \(SSR1\)](#)

[SSR1 Implementation Quarterly Reports](#)

[SSR2-RT information](#)

[SSR Framework](#)

[ICANN Planning Process](#)

[ICANN Operating Plan 2016 – 2020](#)

[ICANN Strategic Plan](#)

Sub-Topics Continued

Identify information gathering and research needs
Discuss work plan

Outreach

Determine guidelines

Address ICANN internal (SO/AC etc.) and external outreach

Address Team member and Team outreach

Determine Guidelines

- ⦿ Questions/comments from team members:
 - Need to define/clarify outreach (eg. should we consider SSAC general outreach or a group we need to interact with to get the work done?)
 - Need clarity on roles/relationships/boundaries between all of the entities involved in outreach and engagement on the SSR issues inside ICANN and how they engage the ICANN communities so we can assess actions, effectiveness and impacts. Maybe we need to ask for outreach plan and activities on specifics.

Address ICANN Internal and External Outreach

- ◎ Draft outreach list:
<https://community.icann.org/pages/viewpage.action?pageId=64076120&preview=/64076120/64078800/SSR2%20Draft%20Outreach%20List%2028March17.docx>
- ◎ Questions/comments from team members:
 - We should add some of the prominent LEA actors, including Interpol, Europol and the FBI to this list
 - We should think ahead to Abu Dhabi meeting in October.

Address Team Member and Team Outreach

- ⦿ Questions/comments from Team members:
 - Are we individuals or representatives?
 - Is it the responsibility of members from each of SO/ACs to do some reporting back to SO/AC groups on big topic items?
 - If we start reporting to our constituencies we need to agree how we report back.

Wrap-Up

A.O.B

Review action items

Review tomorrow's agenda

Day 2 Agenda

AM

1

Welcome, Rollcall

09:00 – 09:15

2

Sub-Topic Group Work

09:15 – 12:30

LUNCH 12:30 – 13:15

3

Address Scope of Work,
work plan, timeline, as
needed

13:15 – 15:00

4

Next Steps &
Support Needs

15:00 – 16:00

5

A.O.B, Recap of action
items, next steps, Review
ICANN meeting agenda
for relevant sessions

16:00 – 17:00

PM