TITLE:                     **Appointment of David Piscitello to the Security and Stability Advisory Committee**

**PROPOSED ACTION:        For Board Consideration and Approval**

**EXECUTIVE SUMMARY:**

The Chair of the Security and Stability Advisory Committee (SSAC) respectfully requests the appointment of David Piscitello as new Committee members.

**COMMITTEE RECOMMENDATION:**

The Committee desires the appointment of David Piscitello to the SSAC.

**PROPOSED RESOLUTION**:

Whereas, the Security and Stability Advisory Committee (SSAC) reviews its membership and makes adjustments from time-to-time.

Whereas, the SSAC Membership Committee, on behalf of the SSAC, requests that the Board appoint David Piscitello to the SSAC for a term beginning immediately upon approval of the Board and ending on 31 December 2020.

Resolved (2018.09.16.xx), the Board appoints David Piscitello to the SSAC for a term beginning immediately upon approval of the Board and ending on 31 December 2020.

**PROPOSED RATIONALE**:

The SSAC is a diverse group of individuals whose expertise in specific subject matters enables the SSAC to fulfil its charter and execute its mission.  Since its inception, the SSAC has invited individuals with deep knowledge and experience in technical and security areas that are critical to the security and stability of the Internet's naming and address allocation systems.

The SSAC's continued operation as a competent body is dependent on the accumulation of talented subject matter experts who have consented to volunteer their time and energies to the execution of the SSAC mission.

Throughout his 40 year career, David has accumulated extensive experience in networking, security, Internet protocols and services. He has been a staff member of ICANN since 2005, most recently in the role of Vice President Security and ICT Coordination, and as such has been a member of SSAC for many years. As Fellow to the SSAC, he conducted research and wrote technical reports and advisories on behalf of the Committee, working in conjunction with then Chairman, Dr. Stephen Crocker. He has contributed positively to many SSAC discussions.

This resolution is an organizational administrative function for which no public comment is required. The appointment of SSAC members is in the public interest and in furtherance of ICANN's mission as it contributes to the commitment of the ICANN to strengthen the security, stability, and resiliency of the DNS.

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| Submitted by: | Ram Mohan |
| Position: | Liaison to the ICANN Board from the Security & Stability Advisory Committee |
| Date Noted: | 3 August 2018 |
| Email: | mohan@afilias.info |

# ICANN BOARD PAPER NO. 2018.09.16.1c

**TITLE:**                  **Convening the First IANA Naming Function Review**

**PROPOSED ACTION:**       **For Board Consideration and Approval**

## EXECUTIVE SUMMARY:

The Board is being asked to convene the first periodic IANA Naming Function Review ("IFR"), as it is required under §18.2 of the ICANN Bylaws that the first periodic IFR be convened no later than 1 October 2018. The IFR is a new accountability mechanism created as part of the IANA stewardship transition to ensure that PTI meets the needs and expectations of its naming customers by adhering to the contractual requirements set forth in the IANA Naming Function Contract and the IANA Naming Function Statement of Work. ICANN org has already begun planning work with the community in order to prepare for the IFR to initiate in a timely fashion.

## ICANN ORG RECOMMENDATION:

ICANN org recommends that the Board convenes the first IANA Naming Function Review and directs ICANN org to provide administrative and operational support necessary for the IANA Naming Function Review Team to carry out its responsibilities, including providing and facilitating remote participation for all meetings.

## PROPOSED RESOLUTION:

Whereas, the ICANN Bylaws require "The Board, or an appropriate committee thereof, shall cause periodic and/or special reviews (each such review, an "IFR") of PTI's performance of the IANA naming function against the contractual requirements set forth in the IANA Naming Function Contract and the IANA Naming Function SOW to be carried out by an IANA Function Review Team ("IFRT") established in accordance with Article 18 of the ICANN Bylaws."

Whereas, §18.2.a of the ICANN Bylaws requires that the first Periodic IFR shall be convened no later than 1 October 2018.

Whereas, §18.7 of the ICANN Bylaws specifies the composition of the IANA Naming Function Review Team and requires that the members and liaisons of the Review Team be appointed in accordance with the rules and procedures of the appointing organizations.

Whereas, some of the appointing organizations have already appointed members and liaisons to the IFR Review Team.

Whereas, §18.8.c of the ICANN Bylaws requires that the appointing organizations for the IFRT members and liaisons work together to achieve a Review Team that is balanced for diversity (including functional, geographic and cultural) and skill, and seek to broaden the number of individuals participating across the various reviews; provided, that the Review Team includes members from each ICANN Geographic Region, and the ccNSO and Registries Stakeholder Group shall not appoint multiple members who are citizens of countries from the same ICANN Geographic Region.

Whereas, §18.8.e of the ICANN Bylaws requires the ICANN Board to appoint an ICANN staff member to serve as a point of contact to facilitate formal lines of communication between the Review Team and ICANN.

Whereas, §18.3 of the ICANN Bylaws specifies the scope and responsibilities of the Review Team.

Whereas, §18.3.j of the ICANN Bylaws requires the Review Team to "identify process or other areas for improvement in the performance of the IANA naming function under the IANA Naming Function Contract and IANA Naming Function SOW and the performance of the CSC and the EC as it relates to oversight of PTI."

Whereas, §18.11 of the ICANN Bylaws requires ICANN org to provide administrative and operational support necessary for the Review Team to carry out its responsibilities, including providing and facilitating remote participation in for all meetings.

Resolved (2018.09.16.xx), the Board hereby convenes the first IANA Naming Function Review and directs ICANN President and CEO or his designee(s) to provide administrative and operational support necessary for the Review Team to carry out its responsibilities, including providing and facilitating remote participation for all meetings.

Resolved (2018.09.16.xx), the Board asks that the remaining appointing organizations complete their processes to appoint members and liaisons. Further, the appointing organizations should coordinate to ensure that the composed Review Team meets diversity requirements in §18.8.c of the ICANN Bylaws.

Resolved (2018.09.16.xx), the IFR shall be conducted in accordance with the scope specified in §18.3 of the ICANN Bylaws.

Resolved (2018.09.16.xx), in fulfilment of the Board's obligation to appoint an ICANN org staff member to serve as a point of contact to facilitate formal lines of communication between the Review Team and ICANN org, the Board directs the ICANN President and CEO to designate the appropriate staff member to serve in that role.

**PROPOSED RATIONALE:**

The Board is convening the first periodic IANA Naming Function Review ("IFR") to satisfy the requirement under §18.2 of the ICANN Bylaws that the first periodic IFR be convened no later than 1 October 2018. The IFR is a new accountability mechanism created as part of the IANA stewardship transition to ensure that PTI meets the needs and expectations of its naming customers by adhering to the contractual requirements set forth in the [IANA Naming Function Contract and the IANA Naming Function Statement of Work](#).

Steps have already been taken by appointing organizations to appoint members and liaisons to the Review Team. The Board asks that the remaining appointing organizations complete their processes to appoint members and liaisons so that the composed Review Team can begin its work. To ensure that the final composition of the Review Team meets the requirements of the ICANN Bylaws, the Board asks that the

appointing organizations coordinate to finalize the composition of the Review Team in accordance with §18.8.c of the ICANN Bylaws. ICANN org has been directed to provide a staff member point of contact to support communication between the Review Team and ICANN org.

The Board understands that the scope of the IFR is well-defined at §18.3 in the ICANN Bylaws. There is the possibility of overlap with the ongoing CSC Effectiveness Review, required at §17.3 of the Bylaws, which states: "The effectiveness of the CSC shall be reviewed two years after the first meeting of the CSC…The method of review will be determined by the ccNSO and GNSO." The CSC Effectiveness Review must commence by 6 October 2018, which is two years from when the Customer Standing Committee held its first meeting. The potential overlap is with the IFR Review Team scope item to "Identify process or other areas for improvement in the performance…of the CSC…as it relates to oversight of PTI. " To ensure effective and efficient use of community resources, the Board encourages the IFR Review Team to consider as input into its work any future findings, recommendations, or methodology and criteria that the GNSO and ccNSO adopt as it relates to the review of the effectiveness of the Customer Standing Committee.

The Board-approved FY19 ICANN annual operating plan and budget contains resources budgeted to support the IFR.

This action is within ICANN's mission as it supports ICANN carrying out the part of its mission relating to coordination of the allocation and assignment of names in the root zone, and directly supports the public interest. The ICANN Board is taking this action in accordance with the requirements of the ICANN Bylaws. As such, no public comment period is needed to inform the Board's action.

**Signature Block:**

Submitted by: Akram Atallah

Position: President, Global Domains Division

Date Noted: [date]

Email: akram.atallah@icann.org

**TITLE:**                                    **Renewal of .coop TLD Registry Agreement**

**PROPOSED ACTION:**               **For Board Consideration and Approval**

**EXECUTIVE SUMMARY:**

The Board is being asked to approve the proposed Renewal Registry Agreement with DotCooperation LLC (the Registry Operator), for .coop.  The current TLD Registry Agreement is set to expire on 22 November 2018. This proposed renewal registry agreement is based on the current .coop agreement with modifications agreed upon by the ICANN org and DotCooperation LLC as well as certain provisions from the base New gTLD Registry Agreement as modified for a legacy TLD (such as the .museum Registry Agreement, dated 2 March 2018). Like other registry agreements, the .coop TLD Registry Agreement gives the registry operator the right to renew the agreement at its expiration, provided that the registry operator is in good standing at the time of renewal and subject to negotiating renewal terms acceptable to ICANN org.

Historically, legacy TLDs have been categorized as either "Generic" TLDs or "Sponsored" TLDs, and the concept of a "Community" TLD was introduced via Specification 12 in the New gTLD Registry Agreement. A "Sponsored" TLD is a specialized TLD that has a charter which defines the purpose for which the sponsored TLD has been created and will be operated. A "Community" TLD is operated for the benefit of a clearly delineated community. In order to account for the specific nature of the .coop TLD, a "Sponsored" TLD, relevant provisions in the existing Registry Agreement have been carried over to the proposed renewal agreement in Specification 12. The .coop Registry Agreement defines the "Sponsored" community the TLD intends to serve and delegates authority to the sponsorship community to develop policy for the TLD in several areas such as establishing naming conventions to be used in the Sponsored TLD, functional and performance specifications, pricing, and matters concerning the operation of the registry. The proposed .coop renewal agreement includes the set of standard public interest commitments applicable to all new gTLDs while maintaining the "Sponsored" TLD designation.

From 11 June 2018 through 27 July 2018, ICANN org posted the proposed renewal of the .coop TLD Registry Agreement for [public comment](). ICANN org received two (2) comments via the public comment forum, following which  the comments were [summarized, analyzed and posted to the public comment page](). The first issue raised involved the inclusion of new gTLD Rights Protection Mechanisms (RPMs) and safeguards such as Public Interest Commitments in legacy gTLDs registry agreement renewals. One commenter expressed support for the inclusion in the proposed renewal agreement of certain rights protection mechanisms, such as Uniform Rapid Suspension and Trademark Post-Delegation Dispute Resolution Procedure, and the inclusion of the Public Interest Commitments (i.e., safeguards) contained in the base gTLD Registry Agreement. Conversely, one commenter expressed concern over the inclusion of base gTLD rights protection mechanisms in legacy agreements. They suggested that these provisions should not be added as a result of contract negotiations but should be addressed through the GNSO policy development process ("PDP").

The other issue raised was regarding the negotiation process for the proposed renewal of the .coop TLD Registry Agreement and legacy gTLD registry agreement negotiations in general. One commenter was encouraged that .coop is transitioning to the technical and operational specifications from the base gTLD Registry Agreement but was disappointed that .com and .net have not modernized their terms as well. Another commenter reiterated objections to the negotiation process, stating that GDD staff "unilaterally establishes a new status quo for registry agreements" and substitutes "its (GDD) judgement instead of GNSO policy development" by exceeding its "powers and overrides safeguards intended to preserve transparency and inclusion with the multistakeholder community."

**ICANN ORGANIZATION RECOMMENDATION:**

ICANN org recommends that the Board approve the proposed Renewal Registry Agreement with DotCooperation LLC for the continued operation of the .coop TLD.

**PROPOSED RESOLUTION**:

Whereas, the registry operator for .coop, DotCooperation LLC, has an existing agreement with ICANN org and it is set to expire on 22 November 2018.

Whereas, ICANN org entered into negotiations with the registry operator to develop a proposed renewal agreement and commenced a public comment period from 11 June 2018 through 27 July 2018 on the proposed Renewal Registry Agreement for the .coop TLD, receiving comments from two organizations. A summary and analysis of the comments were provided to the Board.

Whereas, the Board has reviewed the comments and determined that no revisions to the proposed .coop Renewal Registry Agreement are necessary after taking the comments into account.

Whereas, the .coop Renewal Registry Agreement includes new provisions consistent with the comparable terms of the New gTLD Registry Agreement.

Resolved (2018.09.16.xx), the proposed .coop Renewal Registry Agreement is approved and the President and CEO, or his designee(s), is authorized to take such actions as appropriate to finalize and execute the Agreement.

## PROPOSED RATIONALE:

### Why is the Board addressing the issue now?

ICANN org and DotCooperation LLC entered into a [Registry Agreement](#) on 01 July 2007 for operation of the .coop top-level domain. The current .coop TLD Registry Agreement expires on 22 November 2018 and the registry operator has the right to a presumptive renewal with the existing agreement. The proposed Renewal Registry Agreement was posted for public comment between 11 June 2018 and 27 July 2018. At this time, the Board is approving the proposed .coop Renewal Registry Agreement for the continued operation of the .coop TLD by DotCooperation LLC.

### What is the proposal being considered?

The proposed .coop TLD Renewal Registry Agreement, approved by the Board, is based on the current .coop TLD Registry Agreement with modifications agreed upon by ICANN org and

DotCooperation LLC and includes certain provisions from the base New gTLD Registry Agreement.

**Which stakeholders or others were consulted?**

ICANN org conducted a public comment period on the proposed .coop Renewal Registry Agreement from 11 June 2018 and 27 July 2018. Additionally, ICANN org engaged in negotiations with the Registry Operator to agree to the terms to be included in the proposed .coop Renewal Registry Agreement that was posted for public comment.

**What concerns or issues were raised by the community?**

The public comment forum on the proposed .coop Renewal Registry Agreement closed on 27 July 2018, with ICANN org receiving two (2) comments. The comments can be summarized in the two categories listed below.

1. The inclusion of new gTLD Rights Protection Mechanisms (RPMs) and safeguards such as Public Interest Commitments in legacy gTLDs registry agreement renewals: One commenter expressed support for the inclusion in the proposed renewal agreement of certain rights protection mechanisms, such as Uniform Rapid Suspension and Trademark Post-Delegation Dispute Resolution Procedure, and the inclusion of the Public Interest Commitments (i.e., safeguards) contained in the base gTLD Registry Agreement. Conversely, one commenter expressed concern over the inclusion of base gTLD rights protection mechanisms in legacy agreements. They suggested that these provisions should not be added as a result of contract negotiations but should be addressed through the GNSO policy development process ("PDP").

2. The negotiation process for the proposed renewal of the .coop TLD  Registry Agreement and legacy gTLD registry agreement negotiations in general: One commenter was encouraged that .coop is transitioning to the technical and operational specifications from the base gTLD Registry Agreement, but was disappointed that .COM and .NET have not modernized their terms as well. Another commenter reiterated objections to the negotiation process, stating that GDD staff "unilaterally establishes a new status quo for registry agreements" and substitutes "its (GDD) judgement instead of GNSO policy

development" by exceeding its "powers and overrides safeguards intended to preserve transparency and inclusion with the multistakeholder community."

**What significant materials did the Board review?**

As part of its deliberations, the Board reviewed various materials, including, but not limited to, the following materials and documents:

- Proposed .coop TLD Renewal Registry Agreement
- Redline showing changes compared to the current .coop TLD Registry Agreement
- Current .coop TLD Registry Agreement
- New gTLD Agreement – 31 July 2017
- Public Comment Summary and Analysis

**What factors has the Board found to be significant?**

The Board carefully considered the public comments received for the .coop Renewal Registry Agreement, along with the summary and analysis of those comments. The Board also considered the terms agreed upon by the Registry Operator as part of the bilateral negotiations with ICANN org.

While the Board acknowledges the concerns expressed by some community members regarding the inclusion of the URS in the proposed Renewal Registry Agreement, the Board notes that the inclusion of the URS in the Renewal Registry Agreement is based on the negotiations between ICANN org and the Registry Operator, where Registry Operator expressed its interest in renewing its agreement based on the new gTLD Registry Agreement.

The Board notes that the URS was recommended by the Implementation Recommendation Team (IRT) as a mandatory rights protection mechanism (RPM) for all new gTLDs. The GNSO was asked to provide its view on whether certain proposed rights protection mechanisms (which included the URS) were consistent with the GNSO's proposed policy on the introduction of New gTLDs and were the appropriate and effective option for achieving the GNSO's stated principles and objectives. The Special Trademark Issues Review Team (STI) considered this matter and concluded that "Use of the URS should be a required RPM for all New gTLDs." That is, the GNSO stated that the URS was not inconsistent with any of its existing policy recommendations.

Although the URS was developed and refined through the process described here, including public review and discussion in the GNSO, it has not been adopted as a consensus policy and ICANN org has no ability to make it mandatory for any TLDs other than new gTLD applicants who applied during the 2012 New gTLD round.

Accordingly, the Board's approval of the Renewal Registry Agreement is not a move to make the URS mandatory for any legacy TLDs, and it would be inappropriate to do so. In the case of .coop, inclusion of the URS was developed as part of the proposal in negotiations between the Registry Operator and ICANN org.

**Are there positive or negative community impacts?**

The Board's approval of the .coop Renewal Registry Agreement offers positive technical and operational benefits. For example, the .coop Renewal Registry Agreement includes the same Approved Services as included in the base gTLD Registry Agreement plus DNS Service - TLD Zone Contents, and Active Domain Directory. In addition, DotCooperation LLC will be required to follow the same public interest commitments for .coop as in the base gTLD Registry Agreement. Taking this action is in the public interest as it contributes to the commitment of ICANN org to strengthen the security, stability, and resiliency of the DNS.

**Are there fiscal impacts or ramifications on ICANN org (e.g. strategic plan, operating plan, budget), the community, and/or the public?**
There is no significant fiscal impact expected from the .coop Renewal Registry Agreement.

**Are there any security, stability or resiliency issues relating to the DNS?**
The .coop Renewal Registry Agreement is not expected to create any security, stability, or resiliency issues related to the DNS. The .coop Renewal Registry Agreement includes terms intended to allow for swifter action in the event of certain threats to the security or stability of the DNS, as well as other technical benefits expected to provide consistency across all registries leading to a more predictable environment for end-users.

**Signature Block:**
Submitted by: Akram Atallah

Position:  President, Global Domains Division
Date Noted:  3 September 2018
Email:  akram.atallah@icann.org

## ICANN BOARD PAPER NO. 2018.09.16.2a

**TITLE:**               **GAC Advice: Panama Communiqué (June 2018)**

**PROPOSED ACTION:**               **For Board Consideration and Approval**

**EXECUTIVE SUMMARY:**

The Governmental Advisory Committee (GAC) delivered advice to the ICANN Board in its Panama Communiqué issued 28 June 2018. The advice concerns: General Data Protection Regulation (GDPR) and WHOIS, protection of names and acronyms of Intergovernmental Organizations (IGOs) in gTLDs, and two-character country codes at the second level. The GAC also provided a follow-up to previous advice on the deferred items regarding GDPR and WHOIS from the GAC San Juan Communiqué.

The Panama Communiqué was the subject of such an exchange between the Board and the GAC on 31 July 2018. The purpose of the exchange was to ensure common understanding of the GAC advice provided in the communiqué. Meeting notes from the call are available here: https://gac.icann.org/sessions/gac-and-icann-board-conference-call-regarding-icann62-communique.

The Board is being asked to approve an iteration of the GAC-Board Scorecard to address the GAC's advice in the Panama Communiqué. The draft Scorecard is attached to this briefing paper. The Scorecard includes: the text of the GAC advice; the Board's understanding of the GAC advice following the 31 July 2018 dialogue with the GAC; the GNSO Council's review of the advice in the Panama Communiqué as presented in a 27 July 2018 letter to the Board; and the Board's proposed response to the GAC advice.

**ICANN ORG RECOMMENDATION:**

The ICANN org recommends that the Board adopt the attached scorecard to address the GAC's advice in the June 2018 Panama Communiqué.

**PROPOSED RESOLUTION**:

Whereas, the Governmental Advisory Committee (GAC) met during the ICANN62 meeting in Panama City, Panama and issued advice to the ICANN Board in a communiqué on 28 June 2018 ("Panama Communiqué").

Whereas, the Panama Communiqué was the subject of an exchange between the Board and the GAC on 31 July 2018.

Whereas, in a 27 July 2018 letter, the GNSO Council provided its feedback to the Board concerning advice in the Panama Communiqué relevant to generic top-level domains to inform the Board and the community of gTLD policy activities that may relate to advice provided by the GAC.

Whereas, the Board developed an iteration of the scorecard to respond to the GAC's advice in the Panama Communiqué, taking into account the dialogue between the Board and the GAC, and the information provided by the GNSO Council.

Resolved (2018.09.16.xx), the Board adopts the scorecard titled "GAC Advice – Panama Communiqué: Actions and Updates (16 September 2018)" **[INSERT LINK TO FINAL GAC ADVICE SCORECARD ADOPTED BY BOARD]** in response to items of GAC advice in the Panama Communiqué.

**PROPOSED RATIONALE:**

Article 12, Section 12.2(a)(ix) of the ICANN Bylaws permits the GAC to "put issues to the Board directly, either by way of comment or prior advice, or by way of specifically recommending action or new policy development or revision to existing policies." In its Panama Communiqué (28 June 2018), the GAC issued advice to the Board on: General Data Protection Regulation (GDPR) and WHOIS, protection of names and acronyms of Intergovernmental Organizations (IGOs) in gTLDs, and two-character country codes at the second level. The GAC also provided a follow-up to previous advice on the deferred items regarding GDPR and WHOIS from the GAC San Juan Communiqué. The ICANN Bylaws require the Board to take into account the GAC's advice on public policy matters in the formulation and adoption of the polices. If the Board decides to take an action that is not consistent with the GAC advice, it must inform the GAC and state the reasons why

it decided not to follow the advice. Any GAC advice approved by a full consensus of the GAC (as defined in the Bylaws) may only be rejected by a vote of no less than 60% of the Board, and the GAC and the Board will then try, in good faith and in a timely and efficient manner, to find a mutually acceptable solution.

The Board is taking action today to accept all the items related to GDPR and WHOIS, and protections of IGOs and will defer consideration of the two (2) advice items items related to two-character country codes at the second level, pending further discussion with the GAC. The Board will consider if further action is needed following these discussions. The Board's actions are described in the scorecard dated <mark>16 September 2018</mark> **<mark>[INSERT LINK TO FINAL GAC ADVICE SCORECARD ADOPTED BY THE BOARD]</mark>**.

In adopting its response to the GAC advice in the Panama Communiqué, the Board reviewed various materials, including, but not limited to, the following materials and documents:

- Panama Communiqué (15 March 2018): https://www.icann.org/en/system/files/correspondence/gac-to-icann-28jun18-en.pdf

- The GNSO Council's review of the advice in the Panama Communiqué as presented in the 27 July 2018 letter to the Board: https://www.icann.org/en/system/files/correspondence/forrest-et-al-to-chalaby-27jul18-en.pdf

The adoption of the GAC advice as provided in the scorecard will have a positive impact on the community because it will assist with resolving the advice from the GAC concerning gTLDs and other matters. There are no foreseen fiscal impacts associated with the adoption of this resolution. Approval of the resolution will not impact security, stability or resiliency issues relating to the DNS. This is an Organizational Administrative function that does not require public comment.

**Signature Block:**

Submitted by:  Christine Willett; David Olive

Position: Vice President, gTLD Operations;
          Senior Vice President, Policy Development Support

Date Noted: XX September 2018

Email: christine.willett@icann.org;  david.olive@icann.org

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| **TITLE:** | **Root Server Strategy** |
| **PROPOSED ACTION:** | **For Board Consideration and Approval** |

**EXECUTIVE SUMMARY:**

The Board is requested to approve a resolution that directs staff to work with the community to finalize a multi-prong strategy to reduce effects of attacks against the root server system. The methods currently used in the ICANN-managed root server, deploying "L-Single" and "L-Cluster" anycast instances around the globe, are at risk of being unable to maintain pace with the growth in attack capacity. As such, a broader strategy should be engaged, one which in addition to expanding existing protective mechanisms; explores leveraging commercial cloud infrastructure and further decentralizing root service; encourages further deployment of DNSSEC; facilitates the standardization and implementation of privacy improvements for the DNS; promotes increased engagement with both the root server operator community as well as resolver operators; and enhances root system monitoring. In keeping with ICANN's mission of ensuring the security and stability of the Internet's system of unique identifiers, of which the root service of the DNS is a core component, this new strategy is necessary in order to address the increased risks resulting from attacks against the confidentiality, integrity, and availability of the root server system.

**STAFF RECOMMENDATION:**

ICANN org staff recommends that the Board instruct ICANN org to work with the Community to finalize a strategy to reduce effects of attacks on the root system and, once finalized, direct the CEO to begin implementation of that strategy by developing a project plan with associated timelines and potential expenditures for subsequent Board review and approval.

**PROPOSED RESOLUTION**:

Whereas, ICANN's present approach of deploying a large number of individual servers ("L-Singles") and a small number of larger, multi-server installations ("L-Clusters") has, to date, been an adequate defense against attacks on the Root Server System seen;

Whereas, the Root Server System as currently deployed is seen by many within the technical community as at risk of being unable to keep pace with the growth in attack capacity and thus, is increasingly vulnerable to attack traffic whether launched by malicious entities or as a result of misconfiguration, misuse, or bugs;

Whereas, a successful attack against the Root Server System would pose a serious risk to the security and stability of the DNS and pose a potentially existential risk to ICANN org, as the facilitator of the coordination of operation and evolution of the DNS root server system;

Whereas, a comprehensive strategy intended to reduce the effects of the attacks against the Root Server System should take into consideration multiple approaches that leverage and enhance existing root server operator practices, integrate new technological advances and methodologies, as well as increase observation and monitoring of the system as a whole;

Whereas, the ICANN community looks to ICANN to make the Root Server System more robust and more consistently available;

Resolved (2018.09.16.xx), that the Board instructs the ICANN org to work with the Community to finalize a strategy to reduce effects of attacks on the root system and, once finalized, directs the CEO to begin implementation of that strategy by developing a project plan with associated timelines and potential expenditures for subsequent Board review and approval.

**RATIONALE**:

Additional detail about the rationale for the additional strategies described in this resolution are provided in the accompanying paper, entitled "Root Server Strategy Supporting Information".

Architecturally, the root of the DNS namespace serves as a single point through which the lookup of any name within that namespace must pass at least once. This poses a risk of a "single point of failure" for the entire DNS. To date, this risk has been mitigated by "hardening" the infrastructure that provides name service for that root. This hardening has traditionally been implemented by expanding capacity, either by increasing bandwidth to name servers or via the use of "anycast" routing, deploying more name servers that answer questions for the root around the world.

However, as a result of continued evolution of Internet technologies and facilities, in particular, the deployment of "Internet of Things" devices and increased capacity of networks all over the world, coupled with the unfortunate lack of sufficient security in those devices and networks, attackers have increasing power to cripple Internet infrastructure. Specifically, the growth in attack capacity risks outstripping the ability of the root server operator community to expand defensive capacity. While it remains necessary to continue to expand defensive capacity in the near-term, the long-term outlook for the traditional approach appears bleak.

In addition, due to the lack of significant deployment of DNSSEC validation, responses from the Root Server System remains at risk from integrity attacks. Similarly, as a result of DNS messages assumed to be sent unencrypted, the users of the Root Server System (i.e., resolvers) are subject to confidentiality attacks. While these attacks are not necessarily new, the ever-increasing reliance on the DNS and hence, the Root Server System, suggests a new strategy to reduce the effect of these attacks against the Root Server System is required.

To meet this requirement ICANN org has devised a comprehensive strategy that in addition to expanding existing traditional protective mechanisms looks to potentially leverage commercial cloud infrastructure and further decentralize root service, encourage deployment of DNSSEC validation, facilitate the development of privacy enhancements for the DNS, promote increased engagement with both the root server operator community as well as resolver operators, and enhance root system monitoring.

This strategy, documented in an accompanying paper, should be finalized with the cooperation of the community, and in particular the RSSAC. Once finalized the implementation of the strategy should begin by developing a detailed project plan that includes timelines, milestones, and anticipated expenditures. Upon completion of the project plan, it should be provided to the Board for review and approval.

The resolution to finalize the root strategy and develop the necessary detail project plan is anticipated to require personnel resources that are within the current FY19 budget, so no additional budgetary impact is anticipated.

This decision is in the public interest and within ICANN's mission, as it supports ICANN org's work to ensure the stable and secure operation of the Internet's unique identifier systems.

# ICANN BOARD PAPER NO. 2018.09.16.2c

**TITLE:**            **Approval to Proceed with KSK Rollover**

**PROPOSED ACTION:**            **For Board Consideration and Approval**

**EXECUTIVE SUMMARY:**

In Resolution 2018.05.13.09, the Board asked for input from RSSAC, RZERC, and SSAC on the plan to proceed with the Key Signing Key (KSK) rollover. Input from RSSAC, RZERC, and SSAC was received, and the Board is now requested to approve with proceeding with the KSK rollover on 11 October 2018.

**STAFF RECOMMENDATION:**

ICANN org recommends that the Board approve proceeding with the KSK rollover on 11 October 2018 as described in the "Updated Plan for Continuing the Root KSK Rollover" (published at <https://www.icann.org/resources/pages/ksk-rollover-operational-plans>).

**PROPOSED RESOLUTION**:

Whereas, ICANN org committed to roll the KSK "after 5 years of operation" as documented in the "DNSSEC Practice Statement for the Root Zone KSK Operator";

Whereas, ICANN org solicited a design team to prepare a full set of plans in order to implement the KSK roll;

Whereas, as part of the implementation of that plan, ICANN org collected certain data that raised questions relating to the impact of the KSK rollover on end users;

Whereas, ICANN org suspended the rollover on 27 September 2017 in order to understand the data being collected;

Whereas, ICANN org, in consultation with members of the DNS technical community, gained further understanding of the data that had been collected;

Whereas, ICANN org extrapolated the likely impact of the KSK roll;

Whereas, ICANN org has updated the full plan documents and created "Updated Plan for Continuing the Root KSK Rollover";

Whereas, the Board has received input from RSSAC, RZERC, and SSAC on the plan documents and that input indicates that those bodies found no reason to not continue with the updated plan for the KSK rollover and that portions of the community, in particular, those in the DNS technical community, have expressed concerns about the impact of further postponing the KSK rollover, specifically that not moving forward with the KSK rollover would not be in keeping with the consensus of community expectations, not supported by data obtained to date, could result in confusion about or loss of community attention to ICANN org's DNSSEC messaging, could encourage a belief that the KSK will never be rolled resulting in a risk of the current KSK getting embedded in hard-to-change system, and/or reduce confidence in DNSSEC as a trustworthy system;

Whereas, the anticipated number of end users negatively impacted by the KSK rollover is significantly less than the community-specified threshold of 0.5% of end users, and the identification and remediation of that negative impact should be straightforward for those affected;

Whereas, ICANN believes that the benefits to the community of proceeding with the rollover in a timely fashion outweigh the difficult to quantify risks;

Resolved (2018.09.16.xx), that the Board instructs ICANN org to proceed with the KSK rollover as described in the "Updated Plan for Continuing the Root KSK Rollover".

**RATIONALE**:

This section summarizes the reasons for proceeding with the KSK rollover in a timely fashion. The attached reference materials give further detail about both the benefits of proceeding and the risks to ICANN, the DNS, and DNSSEC of postponing the KSK rollover.

The plan to roll the DNS root KSK was paused on 27 September 2017 due to unexpected data, specifically data received as a result of early implementations of RFC 8145, that raised questions related to how ready validating resolvers were for the roll that was scheduled to be implemented on 11 October 2017. ICANN org, along with others, analyzed that data and determined that there were indications that a relatively small percentage of resolvers were likely to be negatively impacted by the KSK rollover, however it was also established that the data was unsuitable for determining the number of end users that would be impacted.

Based on that research, ICANN org asked the technical community to recommend a plan of action. While there was a minority dissent, the majority of input from that community was that ICANN org should proceed with the KSK rollover procedure in an orderly fashion.

With that input, ICANN org created a summary plan, titled "Plan for Continuing the Root KSK Rollover", to roll the root KSK on 11 October 2018. ICANN org published the summary plan for community review on 1 February 2018 (see <https://www.icann.org/public-comments/ksk-rollover-restart-2018-02-01-en>). The time allowed for comments was extended beyond the normal 45 days to allow presentations about the plan at ICANN 61 in San Juan and IETF 101 in London and to request more community input at those fora.

The consensus of the community response received by 2 April 2018 was in favor of the published plan, with some suggestions of additional outreach that ICANN org has already done. Based on that community response, ICANN org created the "Updated Plan for Continuing the Root KSK Rollover", revising the original KSK roll plan documents to show which steps had already been taken and which steps still needed to

be taken using the revised dates. These plan documents are available at <https://www.icann.org/resources/pages/ksk-rollover-operational-plans>.

The community input on the proposed plan came from a variety of Advisory Committees, Stakeholder Groups, organizations, and individuals. The Board requested explicit input from RSSAC, RZERC, and SSAC on the proposed plan. The following are responses to the Board's request:

- RSSAC: RSSAC039, "RSSAC Statement Regarding ICANN's Updated KSK Rollover Plan", 7 August 2018

- RZERC: RZERC001, "Feedback on the Updated Plan for Continuing the Root Key Signing Key (KSK) Rollover", 10 August 2018

- SSAC: SAC102, "SSAC Comment on the Updated Plan for Continuing the Root KSK Rollover", 17 August 2018

ICANN org considered all the findings in these three responses from Advisory Committees, particularly any findings that were hesitant about proceeding with the rollover. On balance, ICANN org interprets those findings as to indicate the risks of disruption to a very small number of Internet users who may never be prepared for a rollover as being less than the benefits of rolling the KSK now and regularly in the future. The attached reference material also lists the major objections to proceeding known to ICANN org along with responses to those objections.

The KSK rollover is not anticipated to have any fiscal impact on ICANN org that has not already been accounted for in the budgeted resources necessary for ongoing support of the root KSK rollover.

This decision is in the public interest and within ICANN's mission, as it supports ICANN org's work to ensure the stable and secure operation of the Internet's unique identifier systems.

This is an Organizational Administrative Function that does not require public comment beyond what has already been requested.

**Signature Block:**

Submitted by:  Paul Hoffman

Position:  Principal Technologist,
Office of the CTO

Date Noted:

Email:  paul hoffman@icann.org

TITLE:                          **Appointment of 2019 Nominating Committee Chair and Chair-Elect**

PROPOSED ACTION:       **For Board Consideration and Approval**

## EXECUTIVE SUMMARY:

The Board is being asked to consider the Board Governance Committee's (BGC) recommendation with respect to the 2019 Nominating Committee (NomCom) Chair and Chair-Elect.

Following the call for expressions of interest (EOI), the BGC reviewed and discussed the received EOIs and reviewed the peer review of the 2018 NomCom leadership as input into the selection of 2019 the NomCom leadership positions. After the results of the peer review were considered, and interviews of candidates were completed, the BGC agreed on recommendations to the Board for the 2019 NomCom Chair and Chair-Elect.

## BOARD GOVERNANCE COMMITTEE RECOMMENDATION:

The BGC recommends that the Board appoint [INSERT NAME HERE] as the 2019 NomCom Chair and [INSERT NAME HERE] as the 2019 NomCom Chair-Elect.

## PROPOSED RESOLUTION:

Whereas, the BGC reviewed the Expressions of Interest from candidates for the 2019 Nominating Committee ("NomCom") Chair and Chair-Elect, considered the results of a peer review of the 2018 NomCom leadership, and conducted interviews of candidates.

Whereas, the BGC has recommended that [INSERT NAME HERE] be appointed as the 2019 NomCom Chair and [INSERT NAME HERE] be appointed as the 2019 NomCom Chair-Elect.

Resolved (2018.09.16.xx), the Board hereby appoints [INSERT NAME HERE] as the 2019 Nominating Committee Chair and [INSERT NAME HERE] as the 2019 Nominating Committee Chair-Elect.

**PROPOSED RATIONALE:**

ICANN's Bylaws require the Board to appoint the Nominating Committee (NomCom) Chair and NomCom Chair-Elect. *See* ICANN Bylaws, Article 8, Section 8.1. The Board has delegated the responsibility for recommending the NomCom Chair and Chair-Elect for Board approval to the Board Governance Committee (BGC). (*See* BGC Charter at http://www.icann.org/en/committees/board-governance/charter.htm.) The BGC posted a call for expressions of interest (EOI) on 13 June 2018 seeking EOIs by 2 July 2018 (see (https://www.icann.org/news/announcement-2-2018-06-13-en). The BGC received and reviewed several EOIs, reviewed peer review results of the 2018 NomCom leadership and conducted interviews with candidates before making its recommendations. The Board has considered and agrees with the BGC's recommendation for the 2019 NomCom Chair and 2019 NomCom Chair-Elect. The Board also would like to thank all who expressed interest in becoming part of the 2019 NomCom leadership.

Appointing a NomCom Chair and Chair-Elect identified through a public EOI process, including interviews of the candidates, is in the public interest as it positively affects the transparency and accountability of ICANN. It is also fully consistent with ICANN's mission.

Adopting the BGC's recommendation has no financial impact on ICANN that was not otherwise anticipated, and will not negatively impact the security, stability and resiliency of the domain name system.

This is an organizational administrative function not requiring public comment.

Submitted by:      Amy A. Stathos, Deputy General Counsel
Date Noted:        24 August 2018
Email:             amy.stathos@icann.org

# AGENDA – 16 SEPTEMBER 2018 REGULAR BOARD MEETING – 60 minutes

| Time, etc. | Agenda Item | Shepherd |
|---|---|---|
| **Assembly, Roll Call & Consent Agenda Vote** | **1.  Consent Agenda** | |
| 10 min | 1.a. Approval of Board Meeting Minutes from 18 July and 21 August 2018 | John Jeffrey |
| | 1.b. Appointment to the Security and Stability Advisory Committee | Ram Mohan |
| | 1.c. Convening the First 'IANA Naming Function Review', as required under §18.2 of the ICANN Bylaws | Göran Marby |
| | 1.d. Renewal of .coop TLD Registry Agreement | Göran Marby |
| | 1.e. Appointment of 2019 Nominating Committee Chair and Chair-Elect | Becky Burr |
| **Discussion & Decision** | **2.  Main Agenda** | |
| | 2.a. GAC Advice: Panama Communiqué (June 2018) | Maarten Botterman |

## AGENDA – 16 SEPTEMBER 2018 REGULAR BOARD MEETING – 60 minutes

| Time, etc. | Agenda Item | Shepherd |
|---|---|---|
| 50 min | 2.b. ICANN Strategy to Reduce Effects of Attacks on the Root System | Göran Marby |
| | 2.c. Discussion re KSK Rollover | Göran Marby |
| | 2.d. Further Consideration of the .AMAZON Applications | Chris Disspain |
| | 2.e. AOB | |

**Directors and Liaisons,**

**Attached below please find Notice of date and time for a Regular Meeting of the ICANN Board.**

**16 September 2018 – Regular Meeting of the ICANN Board of Directors - at 08:00 UTC (10:00 CEST Genval).  This Board meeting is estimated to last approximately 60 minutes.**

**https://www.timeanddate.com/worldclock/fixedtime.html?msg=Regular+Meeting+of+the+ICANN+Board&iso=20180916T10&p1=48&ah=1**

**Some other time zones:**

**16 September 2018 – 01:00am PDT Los Angeles**

**16 September 2018 – 04:00am EDT Washington, D.C.**

**16 September 2018 – 09:00am BST London**

**16 September 2018 – 05:00pm JST Tokyo**

**REGULAR MEETING OF THE ICANN BOARD**

Consent Agenda

- Approval of Board Meeting Minutes
- Appointment to the Security and Stability Advisory Committee
- Convening the First 'IANA Naming Function Review', as required under §18.2 of the ICANN Bylaws
- Renewal of .coop TLD Registry Agreement

Main Agenda

- GAC Advice: Panama Communiqué (June 2018)
- Root Server Strategy
- Discussion re KSK Rollover
- Appointment of 2019 Nominating Committee Chair and Chair-Elect
- AOB

**MATERIALS – You can access the Board Meeting materials, when available, in Google Drive here:**

**If you have trouble with access, please let us know and we will work with**

**you to assure that you get access to the documents.**

**If call information is required, it will be distributed separately.**

**If you have any questions, or we can be of assistance to you, please let us know.**

**John Jeffrey**
**General Counsel & Secretary, ICANN**
**John.Jeffrey@icann.org <John.Jeffrey@icann.org>**
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