Report of Public Comments

Title:	Review of Trusted Community Representation in Root Zone DNSSEC Key Signing Ceremonies
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Prepared By:	Kim Davies

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Staff Contact:	Kim Davies	**Email:**	kim.davies@icann.org

Section I: General Overview and Next Steps

ICANN has considered the feedback received on Trusted Community Representation, and intends to (a) increase the number of TCRs that can perform at specific ceremonies; (b) provide mechanisms to select new TCRs, as well as introduce term-limits for existing TCRs; (c) provide travel support to those TCRs that request it; and (d) define a minimum level of participation for TCRs.

Section II: Contributors

At the time this report was prepared, a total of seventeen (17) community submissions had been posted to the Forum. The contributors, both individuals and organizations/groups, are listed below in chronological order by posting date with initials noted. To the extent that quotations are used in the foregoing narrative (Section III), such citations will reference the contributor's initials.

Organizations and Groups:

Name	Submitted by	Initials
ICANN At-Large Advisory Committee	Xinyue Liang	ALAC

Individuals:

Name	Affiliation (if provided)	Initials
Alain Aina		
Nicolas Antoniello		
Dmitry Burkov		
Rudi Daniel		
Anne-Marie Eklund-Löwinder	.SE (The Internet Infrastructure Foundation)	
Olafur Gudmundsson		
Olaf M. Kolkman		
Martin J. Levy	Hurricane Electric	

Ed Lewis		
Andy Linton		
Bill Manning		
Carlos M. Martinez		
McTim		
S. Moonesamy		
Michele Neylon	Blacknight Solutions	
Jim Reid		

Section III: Summary of Comments

> *General Disclaimer: This section is intended to broadly and comprehensively summarize the comments submitted to this Forum, but not to address every specific position stated by each contributor. Staff recommends that readers interested in specific aspects of any of the summarized comments, or the full context of others, refer directly to the specific contributions at the link referenced above (View Comments Submitted).*

Is the current TCR model effectively performing its function of ensuring trust in the KSK management process?

> Yes (11 respondents); There needs to be more transparency on TCR selection and removal process (2 respondents); Continual evolution of the process to optimize security outcomes should continue (1 respondent); Sub-optimally, due to lack of TCRs' ability to attend ceremonies (1 respondent); Broader community could be surveyed on satisfaction with the current model (1 respondent).

Is the current size of the TCR pool appropriate to ensure sufficient participation in the ceremonies, while not overburdening the availability of specific volunteers?

> Yes (5 respondents); Consider increasing the pool of TCRs (2 respondents); Yes, but barely (1 respondent); More TCRs need to participate to show tamper-evident bags have not been compromised regularly (1 respondent); Unsure (2 respondents)

Should there be a minimum level of participation required of a TCR in order to be considered to be successfully discharging their duties?

> TCRs should attend a minimum of one ceremony per year (6 respondents); Yes; Beyond attendance, TCRs should actively engage by writing reports which are made public (1 respondent); Yes, ideally 5 of 7 should attend each ceremony to detect inter-ceremony compromise (1 respondent); Ideally each TCR should attend 60% of ceremonies (1 respondent); Missing three ceremonies in a row should be grounds for removal (1 respondent); TCRs could be trained on security issues (1 respondent)

There is no standard provision to refresh the list of TCRs except when they are replaced due to inability to effectively perform their function. Should there be a process to renew the pool of TCRs, such as using term limits or another rotation mechanism?

Yes, there should be term limits/renewal process (9 respondents); Term limits should be staggered (4 respondents); The process of TCR selection and renewal should be transparent (2 respondents); Conflicts of interest need to be disclosed to avoid capture (1 respondent); Perhaps a round-robin mechanism (1 respondent); There should be formal provisions for removal of TCRs (3 respondents); Process should provide for biasing selection based on needed expertise (1 respondent); Consider phasing out TCRs in favour of staff, with on-site and remote participation by community witnesses. (1 respondent)

The current model does not compensate TCRs for their services in order to ensure their independence from ICANN. Should the model of TCRs paying the costs of their participation be retained?

No (3 respondents); Yes (1 respondent); No, but only with respect to travel-related costs (5 respondents); May be difficult to find volunteers if travel funding is not catered for (3 respondents)

Would some form of compensation to offset the expenses incurred by the TCRs detract from their independence in performing the role?

No (10 respondents)

If you support compensating TCRs for their expenses, are there requirements or limitations on whom the funding organization should be?

Should be externally funded or have funding managed by a party at arms length/independent from ICANN (3 respondents); Should be ICANN (2 respondents); Should not come from ICANN, or DNS industry entities (3 respondents); Should be a specially constituted group to manage the budget (1 respondent); Funding sources should be diverse (1 respondent); Should have controls to ensure sponsors to not persuade ceremony outcomes (1 respondent); No (2 respondents); If independent, funding organisation must be accountable if ceremonies are interrupted by lack of funding (1 respondent).

Other general feedback on the consultation topic

ALAC provided a general statement of observations including how key ceremonies are conducted.

Backup COs should be more involved in ceremonies.

Section IV: Analysis of Comments

General Disclaimer: This section is intended to provide an analysis and evaluation of the comments received along with explanations regarding the basis for any recommendations provided within the analysis.

The respondents endorsed the overall model of using Trusted Community Representatives (TCRs) as a key part of the oversight for Root KSK Operations. While the suggestions received all involved evolving certain aspects of how TCRs participate, there was general agreement that the current model is working well.

Based on a commonly expressed view that participation by TCRs should not be open-ended, and instead governed by a mechanism by which TCRs are rotated in a responsible way, ICANN intends to implement a revised operational procedure. The revised TCR procedure will involve: (a) term limits for TCRs; and (b) a rotation mechanism that ensures the population of TCRs does not change too rapidly to allow knowledge transfer to occur. The operational procedure will also have a mechanism by which a TCR may be removed if they have not attended nor made themselves available to attend at least one Key Signing Ceremony in the previous year. Finally, the revised operational procedure will clarify the selection criteria for TCRs, and provide a selection mechanism to be used whenever there are vacancies in the TCR pool. These procedural updates will be performed in accordance with ICANN's DNSSEC Practice Statement (DPS).

ICANN has planned improvements to the Key Management Facilities' security systems in the 2014-2015 budget year, which include the addition of a "key safe", which will allow the secure and fully auditable storage of the physical metal keys that are used to manage access to each TCR's individual lock box within a KMF's credential safe. The addition of this key safe will allow TCR procedures to be revised such that there is no longer a hard maximum of 7 TCRs per facility, and therefore provide greater flexibility in coordinating TCR attendance to each ceremony. This will allow ICANN to grant TCRs with capabilities to perform their role at any facility, rather than their role being affixed to a single location. It will also allow the ability to eliminate the Backup TCR pool by promoting those on that list to active TCRs. The size of the TCR pool could also be further increased if necessary. ICANN has found through experience that while we have had a minimum of attendance at all ceremonies to date, this has involved a significant amount of behind-to-scenes coordination, and to increase confidence of sufficient participation in the future an increase of the available TCRs for any given ceremony is a priority.

The bulk of the comments relating to reimbursement for attendance endorsed an approach of altering the current model. Under the current model, TCRs volunteered on the basis they could be funded solely by means they are able to coordinate themselves (such as by their employers, or organisations they are representing). Comments largely suggested moving to a model where TCRs may also call upon some other funding mechanism that is automatic. Opinions were divided on which is the appropriate organization to fund and manage this additional resource. On one side, some respondents believed it needed to be ICANN, and on the other some believed it needed to not be ICANN, nor members of the ICANN community ecosystem.

A common thread across the comments appears to be whatever the funding mechanism, it needs to be transparent and avoid any indication of favouritism or capture that would compromise trust in the TCR participation process. ICANN believes the most workable model is a travel support fund that is dedicated to Key Signing Ceremonies, and available to participating TCRs who request it. This fund

would be solely funded through ICANN's general budget, and ICANN has proposed funding for this approach in its 2014-2015 fiscal year, which is currently under community review. Under this approach, ICANN will provide cost reimbursement for travel, accommodation and incidental costs in accordance with ICANN's established travel policies for community participation. ICANN will not reimburse for TCR's time, wages or other expenses. The reimbursement policy will be implemented by ICANN's meeting and travel support department, separately from the staff that manage execution of the Key Management Ceremonies. The fund is intended to support up to four TCRs for each ceremony. In the event there are more TCR volunteers seeking funding than available funding, preference will be given to TCRs who have least recently attended a ceremony, and then to TCRs who were first to volunteer to participate at a given ceremony.