

**Subject: Appeal against consensus determination on last call of "RPKI ROAS FOR UNALLOCATED AND UNASSIGNED AFRINIC ADDRESS SPACE"**

**a. Brief description of the topic under appeal**

July 21 declaration of consensus by PDWG co-chairs on the "RPKI ROAs for Unallocated and Unassigned AFRINIC Address Space" proposed policy.

**b. Date of the appeal.**

23 July, 2021

**c. Name and email address of complainant.**

Lamiaa Chnayti <lamiaachnayti@gmail.com>

**d. Names of three (3) persons, other than the complainant, who support the appeal and who participated in the discussions**

1. Erick Lagon <erickj.lagon@gmail.com>
2. Brian Sowers <lunatunamapunapuna@gmail.com>
3. Gaby Giner <gabyginernetwork@gmail.com>

**e. Date of the decision made by the co-chairs**

21 July, 2021

**f. Reference to an announcement of decision which is being appealed**

<https://lists.afrinic.net/pipermail/rpd/2021/013580.html>

**g. Evidence of a failed attempt to resolve the disagreement through discussion:**

There is a strong chain of email from multiple participants showing opposition to this policy. Many of the issues raised were declared "addressed" by the co-chairs while in fact, they remain open. There is a deliberate effort to dismiss several objections by claiming that the objections are based on ignorance of the process or incorrect assumptions. This simply is not the case. The objections are based in an awareness that RIRs are fallible and that routers automatically process RPKI data, making the consequences of an erroneous and/or malicious RPKI ASO ROA far greater than the consequences of errors in WHOIS.

Below are a set of citations organized by author, which are exemplars of these objections and other opposition to the policy.

**1. Original announcement by PDWG Co-chairs**

<https://lists.afrinic.net/pipermail/rpd/2021/013580.html>

**2. Meriem Dayedaye**

- i. (Monday, Jun 7 16:42:06 UTC 2021 )

<https://lists.afrinic.net/pipermail/rpd/2021/013237.html>

ii. (MonJun716:42:06UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013237.html>

iii. (TueJun814:58:40UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013281.html>

### **3. Owen DeLong**

iv. (Thu Jul 22 05:25:08 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013583.html>

v. (Thu Jul 22 05:25:08 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013583.html>

vi. (Thu Jul 22 05:44:42 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013587.html>

vii. (Thu Jul 22 05:41:24 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013586.html>

viii. (Thu Jul 22 05:28:17 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013584.html>

ix. (Tue Jun 29 09:48:22 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013389.html>

x. (Sat Jun 26 08:29:44 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013362.html>

### **4. Wijdane Goubi**

xi. (Mon Jul 5 15:33:07 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013460.html>

### **5. Aziz Halim**

xii. (SunJun617:24:32UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013218.html>

xiii. (Mon Jun 7 16:47:07 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013238.html>

### **6. Elvis Ibeanusi**

xiv. (MonJun711:04:54UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013234.html>

## **7. Fredrik Korsback**

xv. (MonJun1420:24:38UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013314.html>

Note: In concurrence with Mark Tinka

(<https://lists.afrinic.net/pipermail/rpd/2021/013321.html>)

## **8. Job Snijders**

xvi. (MonJun1411:12:24UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013312.html>

xvii. (Tue Jun 15 18:45:58 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013327.html>

xviii. (Tue Jun 15 18:59:05 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013328.html>

Note: Response to Noah (<https://lists.afrinic.net/pipermail/rpd/2021/013326.html>)

## **9. Mark Tinka**

xix. (Fri Jun 11 16:49:26 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013301.html>

xx. (TueJun1514:44:41UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013321.html>

## **10. Anthony Ubah**

xxi. (Sun Jun 6 15:46:54 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013216.html>

xi. (Sun Jul 4 00:44:40 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013440.html>

## **11. Daniel Yakmut**

xii. (MonJun722:14:46UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013243.html>

(Response to Jordi Palet <https://lists.afrinic.net/pipermail/rpd/2021/013240.html>)

xiii. (Mon Jun 7 22:45:41 UTC 2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013245.html>

(Response to Fernando Frediani <https://lists.afrinic.net/pipermail/rpd/2021/013244.html>)

## 12. PWDG Co-Chairs' (Vincent Ngundi & Darwin Da Costa) Responses:

xiv. (TueJun813:58:08UTC2021)

<https://lists.afrinic.net/pipermail/rpd/2021/013273.html>

xv. (Thu Jun 17 15:17:42 UTC 2021) – Last Call

<https://lists.afrinic.net/pipermail/rpd/2021/013339.html>

### **h. Detailed appeal submission**

1. Despite declaration of co-chairs, no consensus actually exists within the community. According to the CPM, if consensus is not reached, the concerned policy cannot be ratified. Despite the failure to address numerous concerns and multiple attempts to hand-wave (often while engaging in ad hominem suggestions that the commenters are ignorant or misinformed) these objections away, nothing has been done to substantively address them by updating the actual policy proposal.
2. Co-chairs have erred in accepting these hand-wavy dismissals of concerns raised by the community and accepting that authors know best. The above trail of email, many from very respected and experienced members of the community clearly shows this to be the case.
3. While sophistry and technicalities can be used to argue that this policy does not “inject RIR data into routing”, this reflects either a blatant attempt to circumvent the community’s objections or worse, ignorance of the actual implications of this policy proposal. In reality, RPKI is the only data currently published by any RIRs which is routinely used through entirely automated processes to control route acceptance. As such, errors or worse, malicious content in RPKI data can have direct and immediate operational impact in a way simply not possible with any other RIR published data. This policy represents a clear and present danger to the stability of the internet in its current form and does not contain sufficient safeguards for implementation of a tool with such far reaching potential consequences.
4. The policy fails to provide adequate safety in terms of a specific hold-down between the revocation of a resource and issuance of an AS0 ROA. Certainly there should be at least sufficient delay to allow the resource holder facing revocation to avail themselves of any appeals or other measures allowed prior to taking such a destructive action. This should be a minimum of 90 days, probably longer to allow the resource holder to exhaust any appeals to staff and board and still have time to seek injunctive relief, if necessary.
5. The proposed policy creates additional potentials for disruptive interruptions of the orderly routing of packets on the internet.
6. Erroneous (or worse, malicious) creation of AS0 ROAs can be very disruptive to active services with little or no recourse. This can be especially bad if the disruption starts near the end of AFRINIC’s business day or outside of AFRINIC’s normal operating hours, as the disruption is likely to persist until someone at AFRINIC can be reached to even begin resolution. There is no assurance in policy that such changes will take place at times which would make immediate restoration of service feasible. There is no assurance in the policy that AFRINIC will be available 24/7/365 for restoration of service in case of such an event.

7. There are numerous operational realities that are important, yet not properly considered in this proposal. There is a great deal of hand-waving from the authors claiming that staff will implement with adequate resolution. However, the reality is that past precedent shows that staff has a limited understanding of the details of running internet operations and even less understanding of routing in general. Since there are many very technical subtleties that must be considered to implement this policy in a way which is not detrimental to normal operations of the internet, such concerns cannot be dismissed with a mere hand wave or trusted to staff implementation without regard to these concerns.
8. This policy proposal would introduce new failure modes for routing that do not currently exist and have no reason to exist. A relevant example from another RIR some months ago:

“On Wednesday, 16 December 2020 from 18:00-19:00 (UTC+1), some legacy resources lost their contractual status in our internal systems. The result of this was that the RPKI ROAs for these resources were revoked.”

It is, of course, suboptimal to lose your ROAs for a period of time. During that period of time, you are not enjoying the protection of BGP Origin Validation. However, it is an entirely different matter if instead of losing your ROAs (route validation = unknown), a ROA is published which makes your prefixes invalid (route validation = invalid). Most ISPs that do origin validation will accept validation=valid or validation=unknown. Most will reject a route where validation=invalid, which will effectively black-hole all affected prefixes. As such, absent a very clear benefit and somewhat extreme safeguards against erroneous (or worse, malicious) publication of ASO ROAs for valid or disputed prefixes, it is most inadvisable to adopt or implement such a policy.

9. This proposal does not move RPKI deployment or acceptance forward. Indeed, it may well create a backlash against RPKI as it exposes (and even creates) new risks associated with RPKI deployment. Converting RPKI from a mostly benign minimally beneficial technology gaining wide acceptance on the internet into a loaded gun in provably irresponsible hands is contrary to the best interests of the community and the wider internet all.
10. Once an RIR begins automatically generating ASO ROAs based on its database of unallocated/unassigned space, any database incidents where the registration status of a resource accidentally (and temporarily) lapses can convert a minor misstep into a major outage.
11. The internet is built on a series of fail-open fail-safe mechanisms. This policy goes to the very heart of that system (routing) and converts it to a fail-closed fail-hard system with the potential for very wide-reaching and very damaging consequences.
12. Co-chairs erred in accepting authors claims that objections were addressed. In reality, authors engaged in a combination of sophistry and handwaving to attempt to discredit the objections and dismiss the objectors as unqualified. Authors are incorrect on both counts. While there were some objections that were specious or ill-informed, there were many that still hold true and have not been addressed. Many of the objectors have long experience in internet operations and are at least

as qualified as the proposal authors and the co-chairs. Their objections should not be dismissed so easily or so lightly.

**List of additional materials the complainant will rely on, if any**

All necessary evidence and supporting documentation are presented above.

We humbly ask you to find that the above objections and concerns raised during both the discussion, and the last call, as well as those coming after the erroneous declaration of consensus:

1. Are valid
2. Have not been fully addressed
3. Require changes in the policy proposal to be addressed

Assuming that you agree with us on the above three points, we believe there is no valid choice other than to vacate the consensus declaration and return the proposal to the list for further discussion and refinement.

Respectfully submitted,

Lamiaa Chnayti <lamiaachnayti@gmail.com>