



MANRS Steering Committee Meeting #5

13 April 2022

Kevin Meynell, Version 1.0

Attendees

<u>Name</u>	<u>Organisation</u>	<u>Sector</u>
Melchior Aelmans	Juniper Networks	Vendor
Kevin Chege	Internet Society	-
Andy Clyde	Internet Society	-
Andrew Gallo - Vice-Chair	GWU	Network Operator
Joe Hall	Internet Society	-
Flavio Luciani	NAMEX	IXP
Kevin Meynell - Secretary	Internet Society	-
Warrick Mitchell - Chair	AARNet	Network Operator
Andrei Robachevsky	Internet Society	-
Israel Rosas	Internet Society	-
Arturo Sevrin	Google	CDN/Cloud Provider
Aftab Siddiqui	Internet Society	-
Jeff Tantsura	Microsoft	CDN/Cloud Provider
Tony Tauber	Comcast	Network Operator
Ashlyn Elizabeth Wittwer	Internet Society	-

Apologies were received from:

Nick Hillard	INEX	IXP
Arnold Nipper	DE-CIX	IXP

1. Approval of Minutes

The minutes from the last meeting on 16 March 2022 were approved.

2. Actions from last meeting

- 3.2 Andrew Gallo, Flavio Luciani, Warrick Mitchell, Arturo Sevrin and Tony Tauber to review MANRS Fellowship applications.

Done

- 3.3 Aftab Siddiqui to prepare a report highlighting the problems with RIR Reserved resources.
Done
- 3.4 Andrew Gallo to raise issues of RIR Reserved resources with ARIN.
Done
- 3.5 Aftab Siddiqui to write blog about the single digit ASN hijack issue.
Done
- 3.6 Working Group Liaisons to start discussion of activities and deliverables on Slack.
Ongoing
- 4.1 Kevin Meynell to investigate data consent for secondary contacts.
Ongoing
- 4.2 Kevin Meynell to send out meeting details.
Done

3. MANRS Governance Legal Advice

Kevin said that the Internet Society is committed to supporting the MANRS project until at least the end of 2023 (and possibly beyond), but the ISOC leadership has asked for a pathway towards a self-governing entity. To this end, ISOC's legal team had investigated four potential options from a US legal perspective:

501(c)6 – Trade Association

This is a membership-based organisation, that would be a separate entity to ISOC

Pros: Can engage in lobbying, self-regulation and certification activities.

Cons: Can't receive charitable contributions – i.e. ISOC couldn't provide ongoing funding beyond startup grant and specific activities that have a public benefit. It also couldn't be a subsidiary entity of ISOC and would have to hire its own staff.

501(c)3 – Charitable Organisation

Can be structured as a membership-based organisation, either separate or controlled by ISOC.

Pros: ISOC or ISOC Foundation could continue to make grants (as can any 501(c)3 organisation), its revenue would be tax-exempt whilst membership dues and grants are normally tax exempt, and it could share ISOC staff if controlled by ISOC.

Cons: It is uncertain whether MANRS would qualify for 501(c)3 status as its members would receive commercial benefit. It must also meet the public support test whereby at least 33% of its revenue must come from donors contributing no more than 2% of revenue each.

SMLLC – Single Member Limited Liability Company

Would be treated as a separate entity from ISOC, but with ISOC being the sole shareholder.

Pros: ISOC or ISOC Foundation could continue to support MANRS as now. It's revenue would be tax exempt whilst membership dues and grants are normally tax exempt. It can also enter into contracts, own property and hire employees in its own name, but could also share ISOC staff.

Cons: The MANRS participants would not legally own the company, and some uncertainties over whether MANRS would be considered for public rather than commercial benefit.

For-Profit Corporation

A corporate subsidiary of ISOC or ISOC Foundation

Pros: Free to operate for commercial purposes, with ISOC able to make capital contributions subject to UPMIFA Act (i.e. only whilst corporation is profitable). Membership dues are normally tax deductible. It can also enter into contracts, own property and hire employees in its own name, but could also share ISOC staff.

Cons: ISOC Foundation could not make grants unless it owns the corporation. It would be subject to corporation tax on net income, and grants would not be tax deductible as charitable contributions.

Kevin said he had received the legal advice only the previous day and would need to discuss with ISOC's legal team what would be the most appropriate option moving forward. He would aim to present some recommendations at the next Steering Committee meeting.

Action 5.1 – Kevin Meynell to outline recommendations for future legal structure.

4. MANRS Ambassadors & Fellows 2022

Israel thanked the Steering Committee members that had assisted in the selection of the Ambassador and Fellows. He reported that 10 Fellows had now been selected: 5 for Training, 3 for Research, and 2 for Policy.

The Ambassadors will provide an Action Plan on how they'll guide their groups by the end of April. This includes the trainings to be delivered based on the needs of local and regional communities; which research topics and tools will be worked on; and which Internet governance and government agencies to engage with in order to promote MANRS as a community-driven initiative based on voluntary adoption.

Team Cymru and the APNIC Foundation have already confirmed their support in 2022, but ISOC was still actively seeking sponsors for the programme.

5. MANRS Capacity Building

Kevin Chege provided an update on the MANRS Capacity Building activities.

MANRS is currently offering online course via ISOC's Learning Management System (Docebo). This consists of visual and audio materials on the core MANRS concepts in English and supported by expert moderators. There had been 675 enrollments for this course during 2021.

MANRS also provides a practical lab offering a topology of five Cisco routers with one that is configurable. There had been approximately 100 enrollments for this course during 2021.

The plans for 2022 included improving the ISOC LMS course by adding new content on RPKI, and to improve the MANRS Lab by including more router operating systems. They would be working with the MANRS Ambassadors and Fellows to facilitate more online labs, and to increase outreach to potential trainees.

6. MANRS Community Meeting #8

Kevin reminded the Steering Committee that the next MANRS Community Meeting would be held the following day (14 April 2022) in two repeated sessions at 8.00-09.00 and 15.00-16.00 UTC.

The programme included an update on MANRS plans for 2022, followed by a session on What's New in Routing. Ben Du (CAIDA) would present on IRR hygiene in the RPKI era; Tijay Chung (Virginia Tech) on novel techniques to detect ROV; and Andrew Gallo (GWU) on max length prefixes.

This would be rounded-off with a bit of fun: a Kahoot quiz on routing security put together by Max Stucchi.

7. Bogons & RADB

Bogon update

Aftab provided an update on how APNIC is marking bogons.

APNIC has a 30 day period for paying invoices, after which LIR accounts are suspended. After 60 days the account is closed if payment has still not been received after further reminders, number resources are moved to reserved status, and ROAs are automatically deleted with 24 hours. He had calculated that around 97-98% of IPv4 bogons and a slightly lower percentage of IPv6 bogons actually have reserved status.

Aftab proposed that bogons should be categorised as 'Available' and 'Reserved' and both would continue to be displayed in the MANRS Observatory, but that MANRS conformance would only be calculated on the basis of 'Available' bogons in future.

He also proposed to ask all RIRs to provide a statement on their policies for marking number resources as bogon, and the timeframe for deleting the respective route objects and ROAs.

RADB update

Aftab said he'd been examining the RADB database for a while and it was clear this was no longer an authoritative source of information. It contained over 1.5 million route objects dating from 1995, of which 60% were proxy route objects that had not been created by the holder of the number resources.

At the RPKI Deployathon held during AusNOG 2022, a number of recommendations were formulated. This included asking MANRS applicants to create route objects in the relevant RIR database rather than a third-party IRR, although legacy resource holders would need to be exempted from this requirement as they do not have access to an RIR database.

In addition, we should reach out to RADB and ALTDB and ask whether it's possible they can clean up stale data, and to not create proxy objects for resources that are already in an RIR database.

Aftab asked the Steering Committee to comment on these proposals and whether they can be included in the MANRS Actions. It should be pointed out that some work was needed on the MANRS Observatory to render the different categories of bogons, but this was expected to be implemented in May or early June.

Tony asked whether Aftab could circulate the bogon data and RADB analysis.

Action 5.2 – Aftab Siddiqui to send the data on reserved versus available bogons, as well as the RADB analysis to the Steering Committee.

8. Next meetings

The next meeting will be held on Wednesday, 11 May 2022 at 15.00-16.00 UTC. [Note – this was subsequently cancelled]

The following meeting will be held on Wednesday, 9 June 2022 at 15.00-16.00 UTC.

The next Community Meeting (#9) is planned for Friday, 8 July 2022 during RPKI Week 2022

Action 5.3 – Kevin Meynell to send out meeting details.

Open Actions

- 4.1 Kevin Meynell to investigate data consent for secondary contacts.
- 5.1 Kevin Meynell to outline recommendations for future legal structure.
- 5.2 Aftab Siddiqui to send to the Steering Committee the data on reserved versus available bogons, as well as the RADB analysis.

5.3 Kevin Meynell to send out meeting details.