2019 IANA Numbering Services Review Committee Report

Date: 10 March 2020

1. Introduction

1.1. Background

In 2016, the Internet Number Community proposal to the IANA Stewardship Coordination Group ("ICG") on the IANA Stewardship Transition called for a review committee to be established. The review committee was to comprise of community representatives from each region to advise the RIRs on the IANA Functions Operator's performance and adherence to identified service levels.

The IANA Numbering Services Review Committee ("RC") was therefore established in October 2016 with representatives from all five RIR regions, upon completion of the IANA Stewardship Transition process.

About the IANA Numbering Services Review Committee

As described in its charter, the role of the RC is as follows:

The IANA Numbering Services Review Committee's function is to advise and assist the Number Resource Organization Executive Committee ("NRO EC") in its periodic review of the service level of the IANA Numbering Services provided to the Internet Number Community.

In carrying out this function, the Review Committee will report to the NRO EC any concerns regarding the performance of the IANA Numbering Services Operator, including any observed failure or near failure by the IANA Numbering Services Operator to meet its obligations under the Service Level Agreement. The Review Committee must submit such a report to the NRO EC at least once every calendar year, by the date specified by the NRO EC from time to time.

2.1. Website and proceedings

The IANA Numbering Services Review Committee website, proceedings and meeting archives can be found at:

https://www.nro.net/iana-numbering-services-review-committee/

2.2. Charter

The charter of the IANA Numbering Services Review Committee can be found at: IANA Numbering Services Review Committee Charter: https://www.nro.net/review-committee-charter-final

2.3. Composition

The RC is composed of qualified representatives from each RIR region (see below). There is to be equal representation from each region, and selections should be conducted in an open, transparent, and bottom-up manner appropriate for each RIR region.

2.4. Current members of the RC

The members of the RC at the time of the publishing of this report are:

AFRINIC:

- Noah Maina community representative
- Mike Silber community representative
- Madhvi Gokool RIR staff representative

APNIC:

- Bertrand Cherrier community representative (VICE CHAIR)
- Syam Zulfadly community representative
- Guangliang Pan RIR staff representative

ARIN:

- Louie Lee community representative
- Martin Hannigan community representative
- John Sweeting RIR staff representative

LACNIC:

- Nathalia Sautchuk Patrício community representative
- Juan Alejo Peirano community representative

Ernesto Majó – RIR staff representative

RIPE:

- Filiz Yilmaz community representative
- Nurani Nimpuno community representative (CHAIR)
- Nikolas Pediaditis RIR staff representative

3. Methodology

3.1. Time period

This review report covers the period 1 January 2019 through 31 December 2019.

The IANA Numbering Services Review Committee Operating procedures specify that the committee will provide advice on IANA Numbering Services performance of the previous year.

3.2. Community input

The RC openly sought Internet number community input on the IANA numbering services performance through a 30 day comment period following the posting of the RIR review matrix through email to iana-performance@nro.net.

Notice of the 30 day comment period was publicly posted on the <u>NRO web site</u>, and announced on the five respective RIR announcement mailing lists: announce@afrinic.net, apnic-announce@lists.apnic.net, arin-announce@arin.net, anuncios@lacnic.net, ripe-list@ripe.net. (See Appendix 2 for links to each announcement message.)

Additionally, RC members have made a point to engage with their respective regional numbers communities to both communicate relevant developments relating to the Committee to their respective communities, and to collect feedback relevant to the IANA Numbering Services Operations from their respective communities.

3.3. Data sets

3.3.1. RIR IANA Numbering services review Matrix

RIR review Matrix:

https://www.nro.net/wp-content/uploads/2019-RIR-IANA-summary-report.pdf

Monthly IANA reports:

https://www.iana.org/performance/numbers

RIR summarising statement of annual performance from RIR Matrix:

The Regional Internet Registry (RIR) staff have reviewed the IANA performance reports for 2019 and confirm that the Service Level Agreements (SLA) were met 100% of the time in all cases. It is noted that the IPv4 unicast request in March was an automatic allocation made to the RIRs in accordance with the Global Policy for Post Exhaustion IPv4 Allocation Mechanisms by the IANA. This allocation was executed as expected with no issues to note. The three IPv6 unicast requests and the one AS number request submitted during the months of March, May, June, and November fully met the expectations of the RIRs and were executed within the agreed to terms of our SLA with no issues to note. The RIRs recognize the flawless execution of IANA services in 2019.

3.3.2. Community input on RIR IANA Numbering services review Matrix

The RC notes that one comment was received in the public comment period supporting the conclusion that the SLAs for the IANA numbering services have been met 100%.

The full comment is included in Appendix 2.

4. Conclusion

The RC evaluated the Data sets in Section 3 and observed that:

- One IPv4 automatic allocation was initiated to all RIRs during March in accordance with the Global Policy for Post Exhaustion IPv4 Allocation Mechanisms by the IANA.
- Three IPv6 allocations were requested one during March by RIPE NCC, one during May by RIPE NCC, and one during November by ARIN.
- One ASN allocation was requested during June by APNIC.

All requests were fulfilled accurately and on time.

There has been no indication of failure or near failure by the IANA Numbering Services Operator to meet its obligations under the Service Level Agreement. There were no concerning or interesting patterns detected with respect to the performance of the IANA Number Services Operations.

There has been no indication from the Internet number community of any concerns regarding the performance of the IANA Numbering Services, nor the inability of the IANA Number Services Operations to meet the needs and expectations of its customers, namely the Internet number community.

The RC is confident that there was sufficient community outreach and community involvement in order to support and enhance the multistakeholder model in a transparent, open, and bottom up process in this review of the performance of the IANA Numbering Services provided to the Internet number community.

The RC concludes that the performance of the IANA Number Services Operations are within the SLA and meet the needs of the Internet number community. Furthermore, we conclude that there are no topics of concern or interest that need further scrutiny at this time.

5. References

- IANA Numbering Services Review Committee website: https://www.nro.net/iana-numbering-services-review-committee/
- IANA number resource services performance reports: https://www.iana.org/performance/numbers
- RIR IANA Numbering Services Review Matrix: https://www.nro.net/wp-content/uploads/2019-RIR-IANA-summary-report.pdf
- The Service Level Agreement (SLA) for the IANA Numbering Services: https://www.nro.net/wp-content/uploads/SLA-Executed-ICANN-RIRS.pdf
- The IANA Stewardship Transition Proposal: https://www.ianacg.org/icg-files/documents/IANA-transition-proposal-final.pdf
- Community input on RIR IANA Numbering services review Matrix: https://www.nro.net/accountability/operational/iana-numbering-services-review-co-mmittee/iana-rc-reports/iana-rc-report-2019/

6. Appendices

Appendix 1. RIR IANA Numbering Services Review Matrix

Date	Request Type	Request Processing Details	
2019-03-01	IPv4 Unicast	Responded on time (0.0 days) Implemented on time (0.8 days) Accurately implemented	More information
2019-03-11	IPv6 Unicast special allocation	Responded on time (0.0 days) Implemented on time (0.5 days) Accurately implemented	
2019-05-13	IPv6 Unicast	Responded on time (0.3 days) Implemented on time (0.2 days) Clarification asked on time (2.1 days) Accurately implemented	More information
2019-06-11	AS Number	Responded on time (0.6 days) Implemented on time (1.1 days) Accurately implemented	
2019-11-01	IPv6 Unicast	Responded on time (0.0 days) Implemented on time (3.1 days) Accurately implemented	More information

2019 Review Committee Assessment

IANA Service Level Agreement (SLA) Performance

Less than 2 business day responses	SLA met 100%
Right sized blocks allocated	SLA met 100%
Numbers given don't overlap	SLA met 100%
Numbers given match delegation	SLA met 100%

March 2019

Summary		
Date	Request Type	Request Processing Details
2019-03-01	IPv4 Unicast	2019-03-01 00:00:00
		Request received from Scheduled Allocation
		0.0 business days
		2019-03-01 00:00:00
		Request acknowledged
		Acknowledged on time (within 2 business days)
		0.8 business days
		2019-03-01 19:06:10
		Implemented using resource(s)
		Implemented on time (within 4 business days)
		Implemented accurately
2019-03-11	IPv6 Unicast	2019-03-11 10:21 UTC
		Request received from RIPE NCC
		0.0 business days
		Timestamp not available due to incompatibility of systems Request acknowledged
		Acknowledged on time (within 2 business days)
		0.5 business days
		2019-03-12 23:11 UTC
		Implemented using resource(s)
		Implemented on time (within 4 business days)
		Implemented accurately
		Complement of historic allocation in order to make it consistent with the regular size of IANA allocations

May - June 2019

Summary	Summary	
Date	Request Type	Request Processing Details
2019-05-13	IPv6 Unicast	2019-05-13 15:10:57 Request received from RIPE NCC 0.3 business days 2019-05-13 21:21:19 Request acknowledged Acknowledged on time (within 2 business days) 2.1 business days 2019-05-15 22:43:22 Clarification asked Asked on time (within 4 business days) 14.6 business days 2019-06-05 12:47:16 Clarification received 0.2 business days 2019-06-05 17:43:53 Implemented using resource(s) Implemented on time (within 4 business days) Implemented accurately
2019-06-11	AS Number	2019-06-11 01:42:36 Request received from APNIC 0.6 business days 2019-06-11 15:12:36 Request acknowledged Acknowledged on time (within 2 business days) 1.1 business days 2019-06-12 18:03:29 Implemented using resource(s) Implemented on time (within 4 business days) Implemented accurately

November 2019

Summary		
Date	Request Type	Request Processing Details
2019-11-01	IPv6 Unicast	2019-11-01 16:08:20 Request received from ARIN 0.0 business days 2019-11-01 16:14:30 Request acknowledged Acknowledged on time (within 2 business days) 3.1 business days 2019-11-06 18:16:55 Implemented using resource(s) Implemented on time (within 4 business days) Implemented accurately

Appendix 2. Community input

Notice of the 30 day comment period was publicly posted on the NRO web site, and announced on the appropriate RIR announcement mailing lists:

NRO announcement:

https://www.nro.net/call-for-public-comments-on-the-2019-iana-performance-matrix-summary-report/

AFRINIC announcement:

https://lists.afrinic.net/pipermail/community-discuss/2020-February/003466.html

APNIC announcement:

https://mailman.apnic.net/mailing-lists/apnic-announce/archive/2020/02/msg0000 0.html

ARIN announcement:

https://lists.arin.net/pipermail/arin-announce/2020-February/002390.html

LACNIC announcement:

https://mail.lacnic.net/pipermail/anuncios/2020-February/001279.html

RIPE announcement:

https://www.ripe.net/ripe/mail/archives/ripe-list/2020-February/001740.html

All collected community comments in a raw, unedited format can be found online:

https://www.nro.net/wp-content/uploads/2019-IANA-RC-Public-Comment.pdf

These comment(s) are also included below: (Personal identifiable information has been redacted.)

Comment 1:

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From: Lars-Johan Liman < redacted>
Date: Wed, Feb 5, 2020 at 09:00 UTC
Subject: Re: Call for Public Comments on the 2019 IANA Performance Matrix
Summary Report
To: <iana-performance@nro.net>

Nurani, (others),

I took a look at the report with a certain premonition of what it would look like. And it did. Meeting the SLAs to 100 % all over.
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This matches very well the levels we see in the similar monthly reports to the ICANN Customer Standing Committee (CSC) - a committee with a corresponding auditing function for IANA's performance on the domain name side. More often than not they meet the SLAs to 100 % and when they don't, it's a few nagging decimals below, and the explanation is nearly alway a specific SLA which is surprisingly ill-design (we're slowly fixing that) and where action times outside the control of the IANA are taken into account, which is unfair.

The IANA is probably the most well-run service on the entire Internet, and I suggest that you let the people that operate the IANA services know that they're doing a stellar job, and that what they do is very much appreciated by the community. That is certainly how I feel, and the message I try to convey from our (the CSC's) side.

Best regards,

/Lars-Johan Liman

CSC Chair, Netnod LIR

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