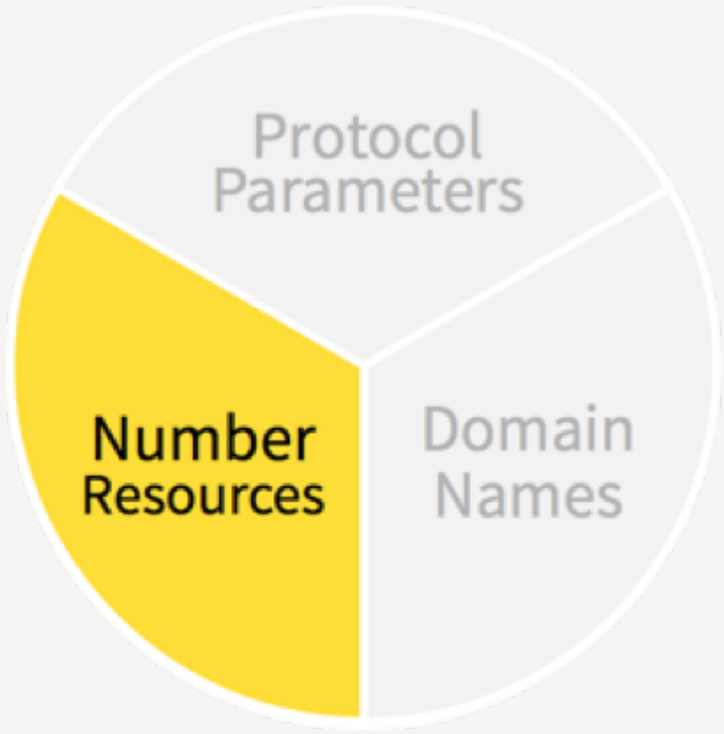
IANA Numbers Function Update

Kim Davies
IANA Services

ARIN 43: Barbados
9 April 2019



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Our team

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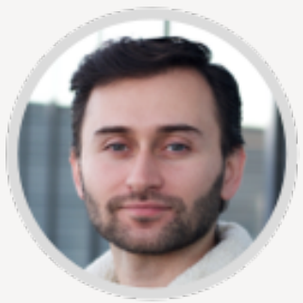

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REQUEST SPECIALIST

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REQUEST SPECIALIST

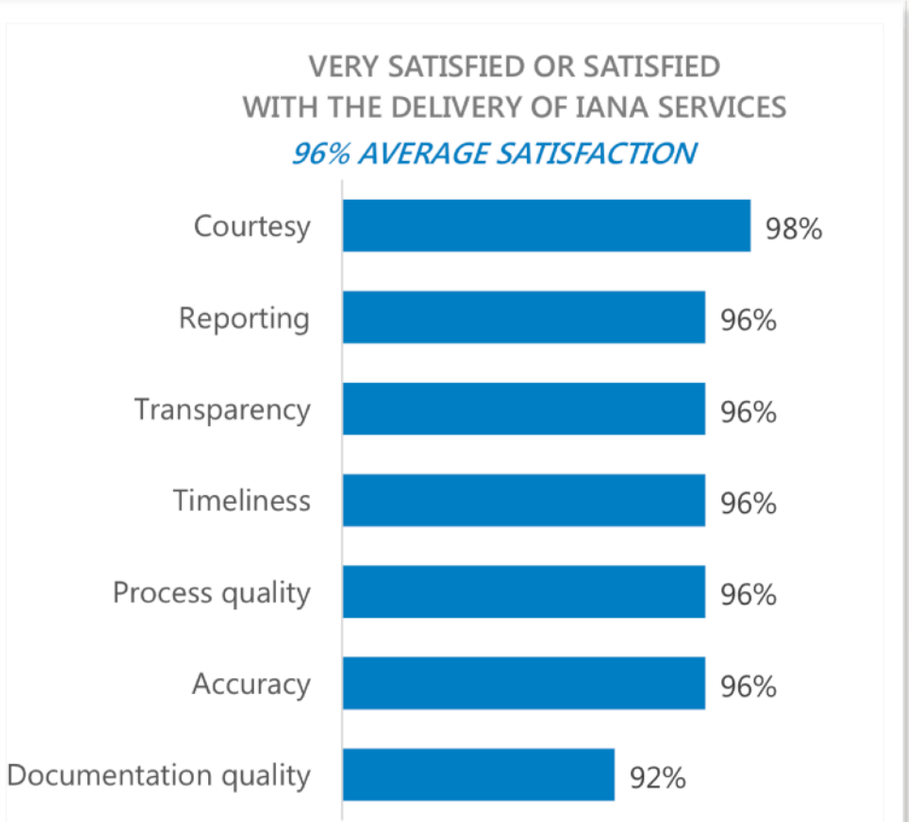
Customer Satisfaction Survey

- Annual survey sent to the RIR CEOs and Registration Services Managers
- Participation rate was 25%, which is about 10% lower than previous years' average.
- 100% satisfaction rate which is consistent to previous years.
- All 5 respondents reported they did not have any customer service related issue in the past year.
- Accuracy and Timeliness were reported the two most important performance aspects for the Numbers function.
- **New for 2019:** Satisfaction survey after request completion

https://iana.org/performance

Overall IANA Satisfaction

- 96% of respondents reported being satisfied of very satisfied.
- Responses reflect our highest satisfaction since surveys have been conducted.

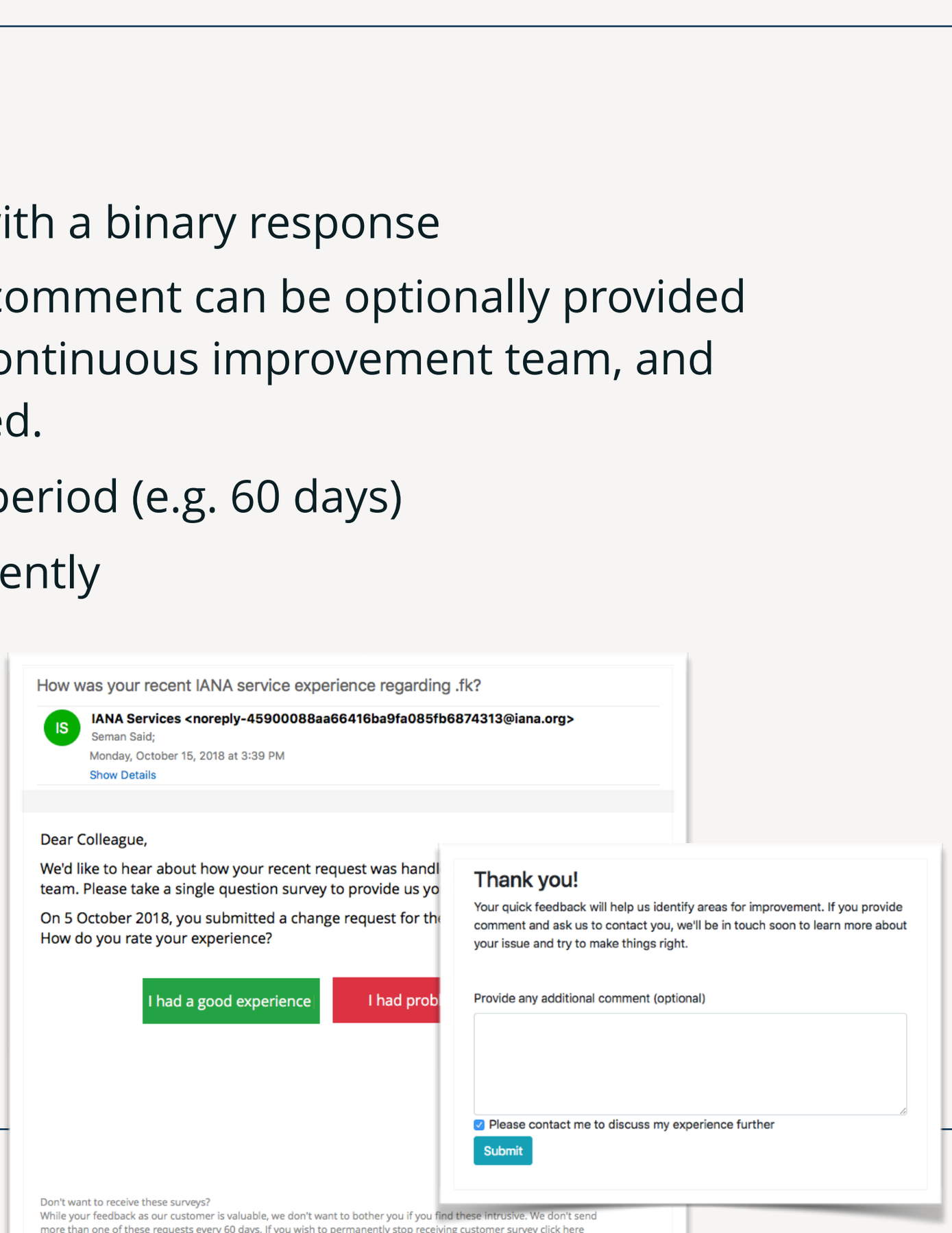


RATED VERY SATISFIED OR SATISFIED WITH THE DELIVERY OF THE IANA SERVICES

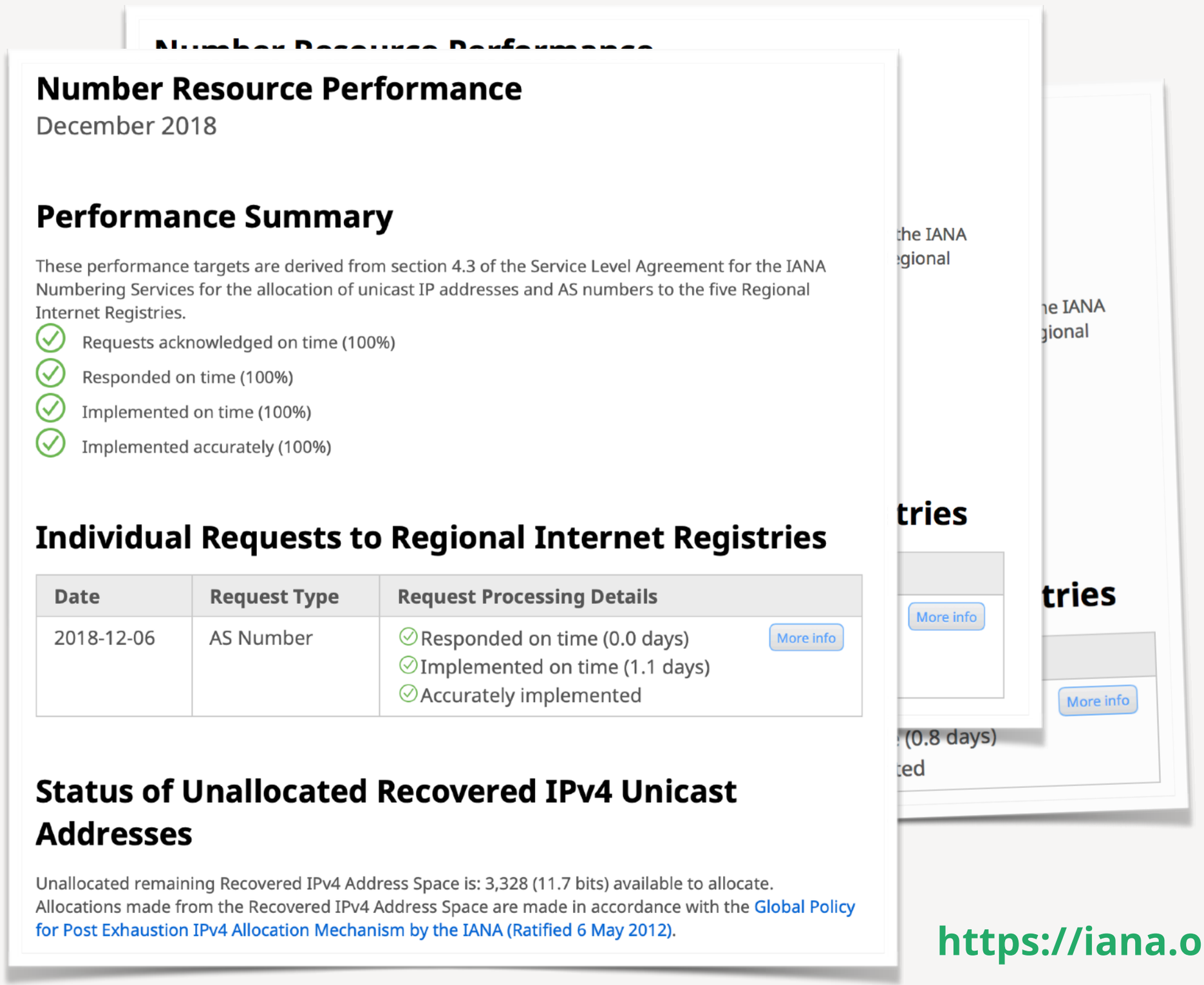
	2018	2017	2016	2015	2014	2013
Customer participation	n=178	n=276	n=420	n=427	n=489	n=112
Accuracy	96%	94%	93%	90%	89%	93%
Timeliness	96%	89%	86%	82%	80%	87%
Process quality	96%	89%	87%	83%	84%	86%
Transparency	96%	83%	79%	82%	81%	76%
Documentation quality	92%	87%	85%	82%	83%	74%
Courtesy	98%	88%	84%	84%	87%	94%
Reporting	96%	80%	76%	76%	79%	77%

“How did we do?"

- Launched in October 2018
- A simple one question survey with a binary response
- To either response, a followup comment can be optionally provided which will be reviewed by our continuous improvement team, and triaged for follow-up if requested.
- Surveys are limited to one in a period (e.g. 60 days)
- Customers can opt-out permanently



SLA Performance



Number Resource Performance

December 2018

Performance Summary

These performance targets are derived from section 4.3 of the Service Level Agreement for the IANA Numbering Services for the allocation of unicast IP addresses and AS numbers to the five Regional Internet Registries.

- Requests acknowledged on time (100%)
- Responded on time (100%)
- Implemented on time (100%)
- Implemented accurately (100%)

Individual Requests to Regional Internet Registries

Date	Request Type	Request Processing Details
2018-12-06	AS Number	Responded on time (0.0 days) Implemented on time (1.1 days) Accurately implemented

More info

Status of Unallocated Recovered IPv4 Unicast Addresses

Unallocated remaining Recovered IPv4 Address Space is: 3,328 (11.7 bits) available to allocate. Allocations made from the Recovered IPv4 Address Space are made in accordance with the Global Policy for Post Exhaustion IPv4 Allocation Mechanism by the IANA (Ratified 6 May 2012).

https://iana.org/performance

Audit Programs

Registry Assignment and Maintenances Systems (including number resources). 2018 report issued with no exceptions. 2019 program kicked off, integrates COSO framework this year.

Root Zone KSK.
2018 report issued with no exceptions. This report provides confidence that the trust anchors for the domain name system are properly managed.

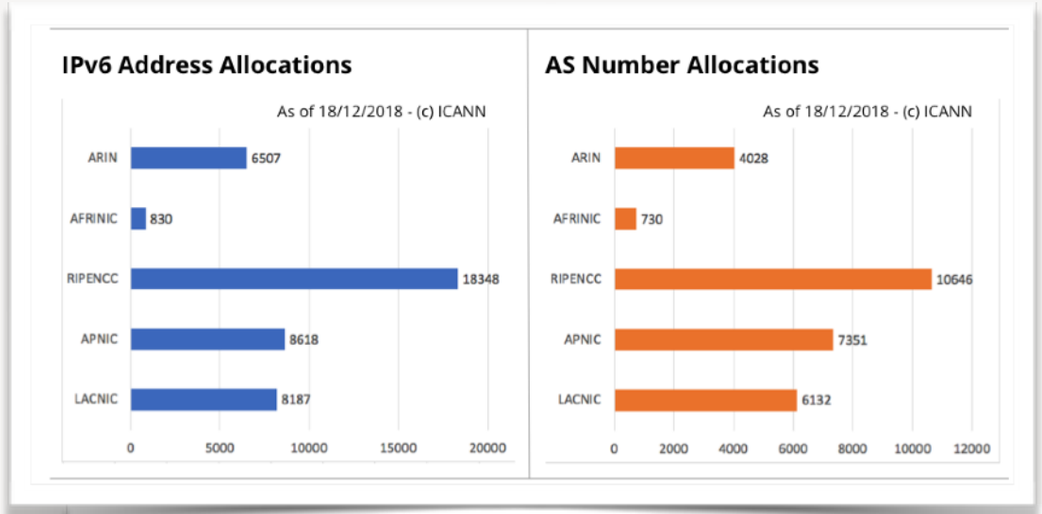
RSM

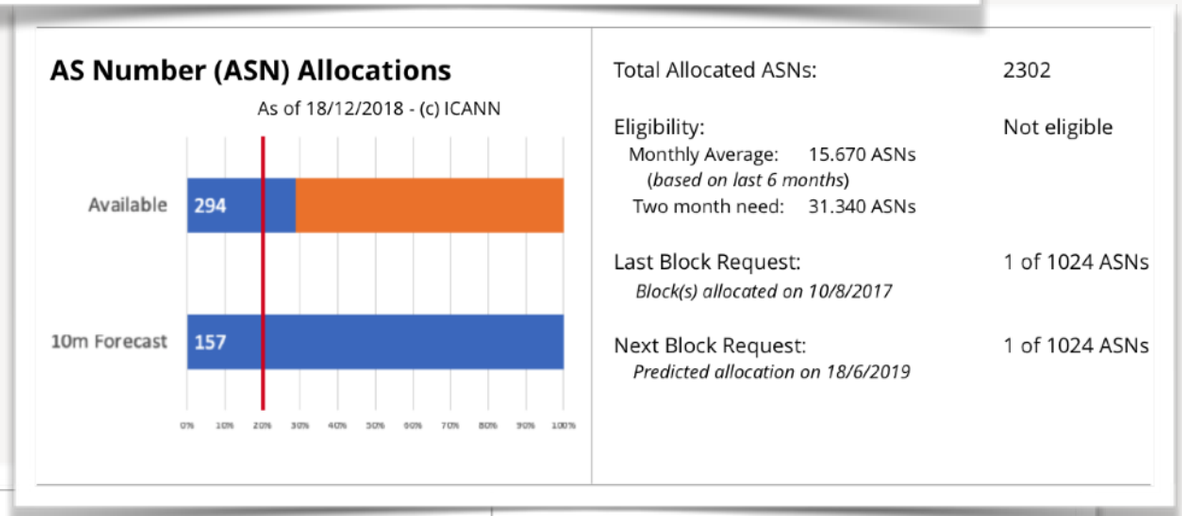
Our 2018 audit program was conducted by RSM.

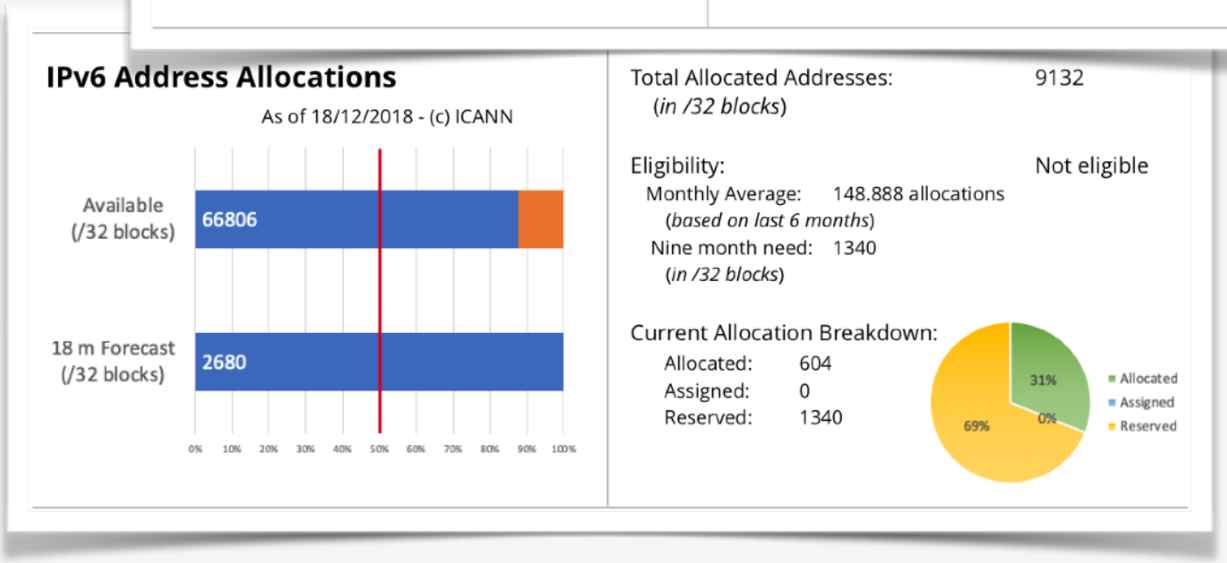
https://iana.org/audits

New Dashboard for RIR allocations

- Under development
- Replaces ICANN Research website that was used in the past
- Targeted presentation of qualifying criteria for RIR allocation
  - INR Allocations by RIR
  - Drill-down into average monthly allocations, INR availability, supply forecast
- Modern website, no Flash, clear navigation





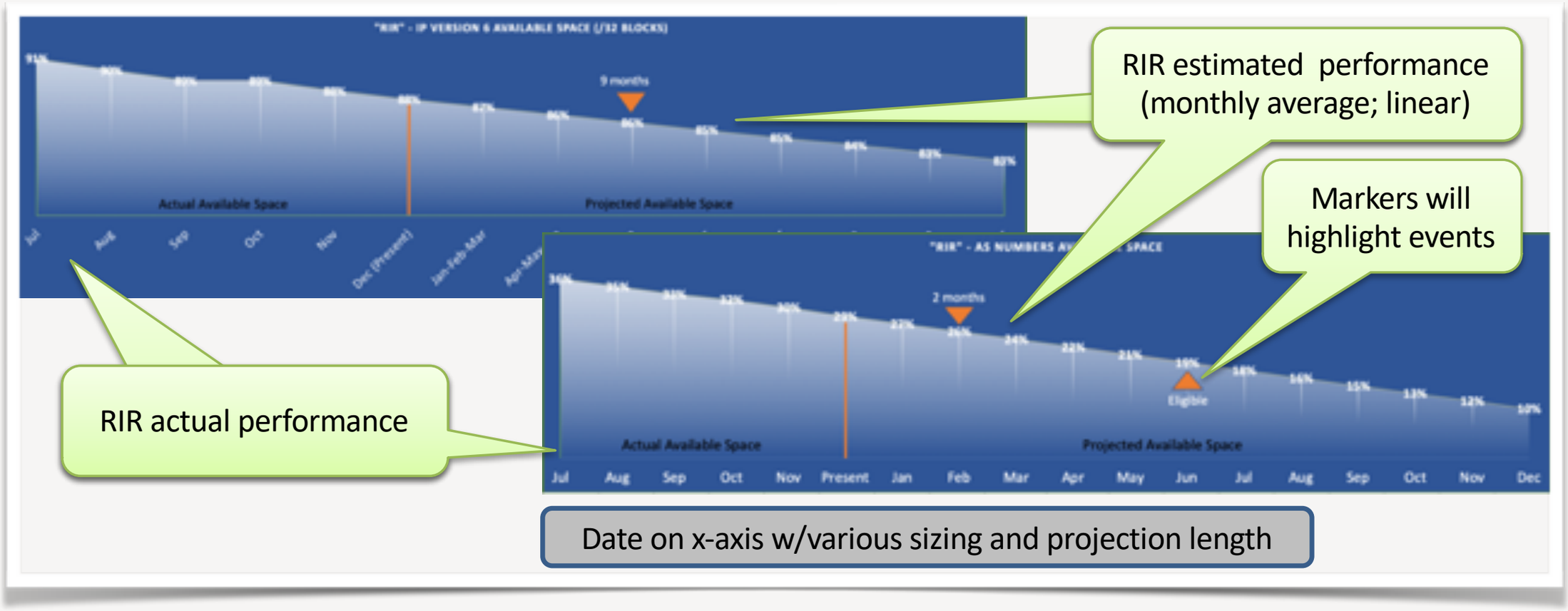


New Dashboard for RIR allocations

- IPv6
  - Redesigned
    - **State of the RIR Pool**
    - **Number/growth of IPv6 addresses allocated in region**
  - Decommissioned
    - IPv6 allocations for the RIR; IPv6 allocation activity; Number of IPv6 allocations to countries in the region
- AS numbers
  - Redesigned
    - **ASN allocation activity**
    - **Two month ASN allocation forecast**
    - **Consumption of the last AS block allocation from IANA**
  - Decommissioned
    - Number of ASN allocations to countries in region; ASN pool according to the RIR; ASNs per country code

New Dashboard for RIR allocations

- Exploring ways for RIRs to visually see their actual performance over a span of time, and expected future performance based on statistic measurements (more complex stats possible; monthly average is depicted



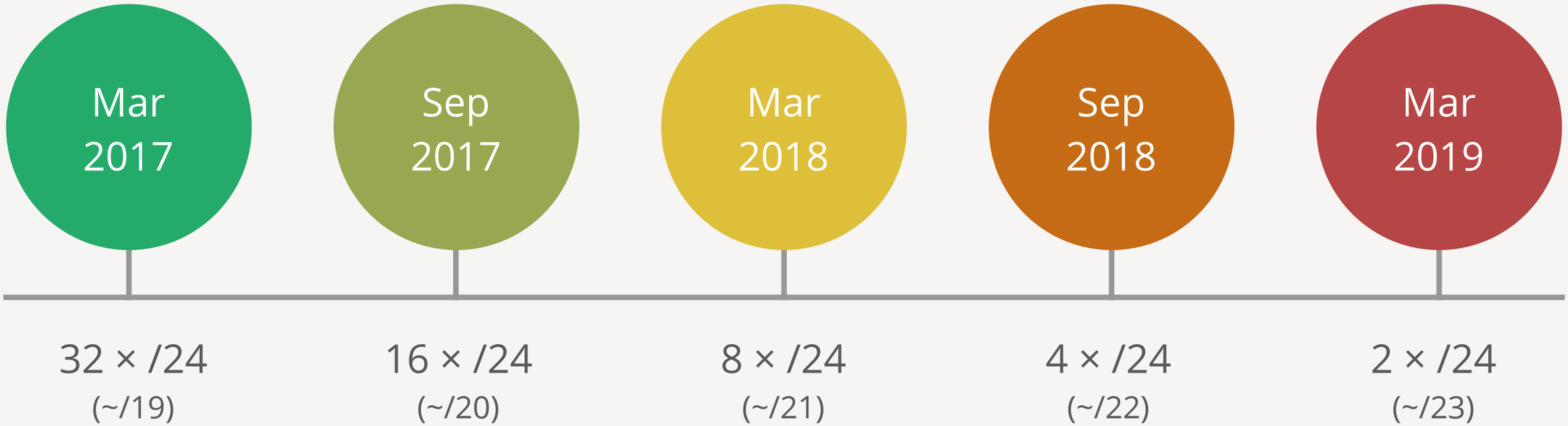
IPv6 Allocation

- Allocation made to RIPE NCC.
- Allocated a /22 at their request to utilize a gap in the pre-2006 allocations.
- Interpretation was validated with NRO EC (global policy provides for a minimum allocation block of /12)

Prefix	Designation	Date	WHOIS	RDAP	Statu
2001:0200::/23	APNIC	1999-07-01	whois.apnic.net	https://rdap.apnic.net/	ALLO
2001:0400::/23	ARIN	1999-07-01	whois.arin.net	https://rdap.arin.net/registry http://rdap.arin.net/registry	ALLO
2001:0600::/23	RIPE NCC	1999-07-01	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:0800::/23	RIPE NCC	2002-05-02	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:0a00::/23	RIPE NCC	2002-11-02	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:0e00::/23	APNIC	2003-01-01	whois.apnic.net	https://rdap.apnic.net/	ALLO
2001:1200::/23	LACNIC	2002-11-01	whois.lacnic.net	https://rdap.lacnic.net/rdap/	ALLO
2001:1400::/23	RIPE NCC	2003-02-01	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:1600::/23	RIPE NCC	2003-07-01	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:1800::/23	ARIN	2003-04-01	whois.arin.net	https://rdap.arin.net/registry http://rdap.arin.net/registry	ALLO
2001:1a00::/23	RIPE NCC	2004-01-01	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:1c00::/22	RIPE NCC	2004-05-04	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:2000::/20	RIPE NCC	2004-05-04	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:3000::/21	RIPE NCC	2004-05-04	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:3800::/22	RIPE NCC	2004-05-04	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:3c00::/22	RIPE NCC	2019-03-12	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:4000::/23	RIPE NCC	2004-06-11	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:4200::/23	AFRINIC	2004-06-01	whois.afrinic.net	https://rdap.afrinic.net/rdap/ http://rdap.afrinic.net/rdap/	ALLO
2001:4400::/23	APNIC	2004-06-11	whois.apnic.net	https://rdap.apnic.net/	ALLO
2001:4600::/23	RIPE NCC	2004-08-17	whois.ripe.net	https://rdap.db.ripe.net/	ALLO
2001:4800::/23	ARIN	2004-08-24	whois.arin.net	https://rdap.arin.net/registry http://rdap.arin.net/registry	ALLO
2001:4a00::/23	RIPE NCC	2004-10-15	whois.ripe.net	https://rdap.db.ripe.net/	ALLOC
2001:4c00::/23	RIPE NCC	2004-12-17	whois.ripe.net	https://rdap.db.ripe.net/	ALLOC
2001:5000::/20	RIPE NCC	2004-09-10	whois.ripe.net	https://rdap.db.ripe.net/	ALLOC
2001:8000::/19	APNIC	2004-11-30	whois.apnic.net	https://rdap.apnic.net/	ALLOC
2001:a000::/20	APNIC	2004-11-30	whois.apnic.net	https://rdap.apnic.net/	ALLOC
2001:b000::/20	APNIC	2006-03-08	whois.apnic.net	https://rdap.apnic.net/	ALLOC
2003:0000::/18	RIPE NCC	2005-01-12	whois.ripe.net	https://rdap.db.ripe.net/	ALLOC
2610:0000::/23	ARIN	2005-11-17	whois.arin.net	https://rdap.arin.net/registry http://rdap.arin.net/registry	ALLOC
2620:0000::/23	ARIN	2006-09-12	whois.arin.net		

IPv4 Allocation

IPv4 Recovered Pool Allocation



- The last allocation from the recovered pool took place in **March 2019**. With only 3 × /24 left, cannot further exercise policy unless more IPv4 is returned to IANA.
- Allocations made from the Recovered IPv4 Address Space are made in accordance with the Global Policy for Post Exhaustion IPv4 Allocation Mechanism by the IANA (Ratified 6 May 2012).

Thank you!

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