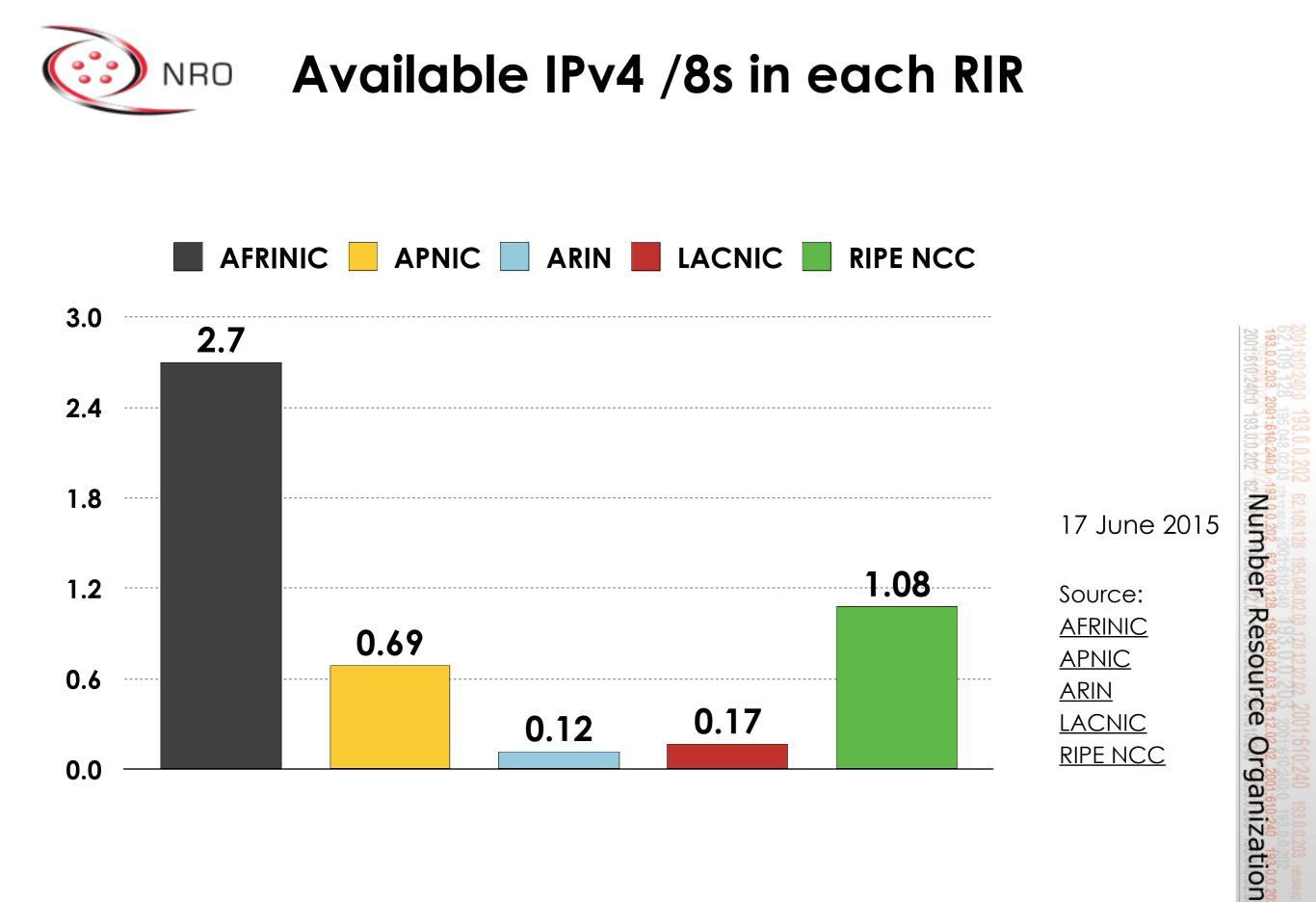


NRO / RIR Operational Update

June 2015

Axel Pawlik NRO Chair

June 2015



June 2015



RIR IPv4 Depletion Policies

APNIC

- Reached last /8 April 2011.
- Up to /22 from 103/8 and up to /22 from recovered pool.

RIPE NCC

- Reached last /8 (185/8)September 2012.
- One /22 per LIR.

ARIN

- Last /10 reserved: /28 /24 for new entrants.
- Justified by immediate IPv6 requirements.

Number Resource Organization



RIR IPv4 Depletion Policies

LACNIC

- Reached last /10 in June 2014.
- /11 reserved for gradual exhaustion:
 - /24 to a /22 once every 6 months.
- Final /11 (and recovered space)
 - One initial assignment from /22 to a /24 for new members.

AFRINIC

- Last /8: Maximum allocation size /13.
- Final /11: Allocation size min /24 max /22.



Resource Transfers

	IPv4	IPv6	ASNs
AFRINIC			
APNIC			
ARIN			
LACNIC	Current proposal		
RIPE NCC			

- All current policies (and proposals) refer to intra- and inter-RIR transfers.
- IPv4 transfers now occurring between RIR members in ARIN and APNIC.
- RIPE NCC currently implementing policy to allow transfers with other regions (with compatible transfer policies).

Number Resource Organization



IANA - RIR IPv4 Allocation

- Based on Global Policy for Post Exhaustion IPv4 Allocation.
- Third allocation made on March 1 2015.
- Each RIR received 524,288 IPv4 addresses (a equivalent of /13).

45.8.0.0	45.15.255.255	RIPE NCC
45.68.0.0	45.71.255.255	LACNIC
45.4.0.0	45.7.255.255	LACNIC
45.72.0.0	45.79.255.255	ARIN
45.248.0.0	45.255.255.255	APNIC
45.240.0.0	45.247.255.255	AFRINIC



NRO IANA - RIR ASN Allocation

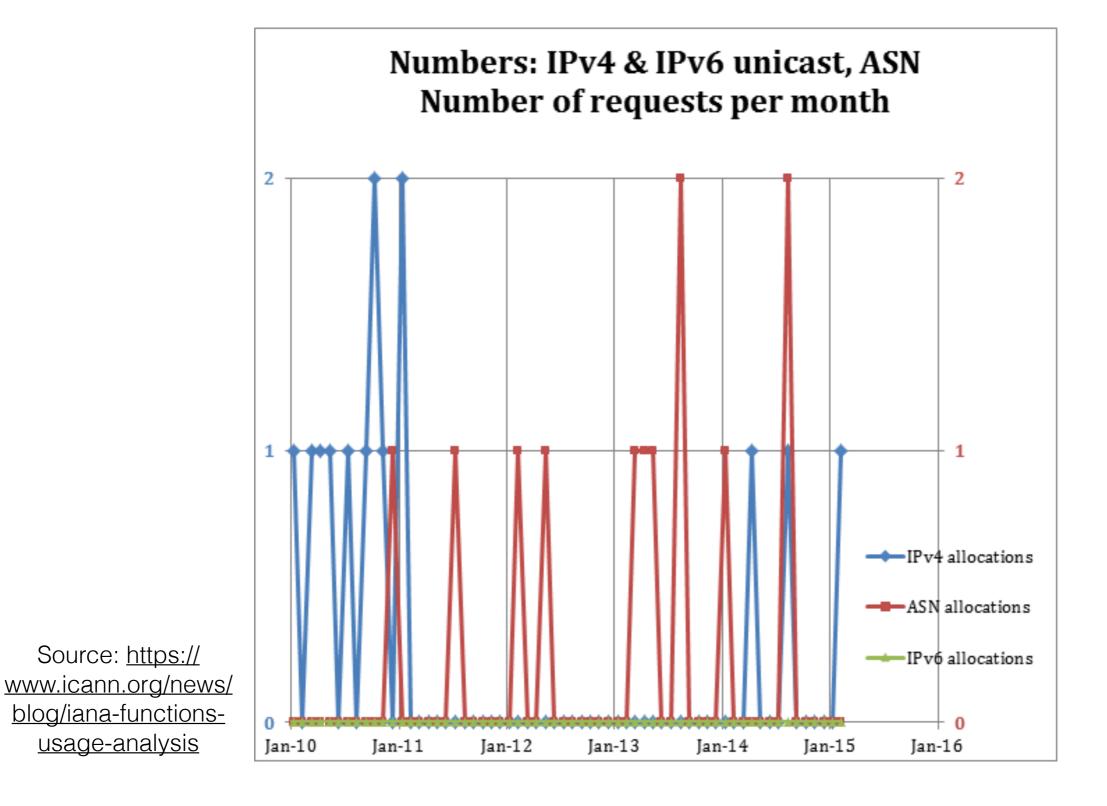
- Based on Global Policy for Allocation of ASN Blocks to Regional Internet Registries
 - Allocations in blocks 1024.
 - Last 12 months.

2 ASN Blocks	September 2014	APNIC
2 ASN Blocks	September 2014	LACNIC
1 ASN Block	April 2015	ARIN
2 ASN Blocks	June 2015	RIPE NCC

June 2015

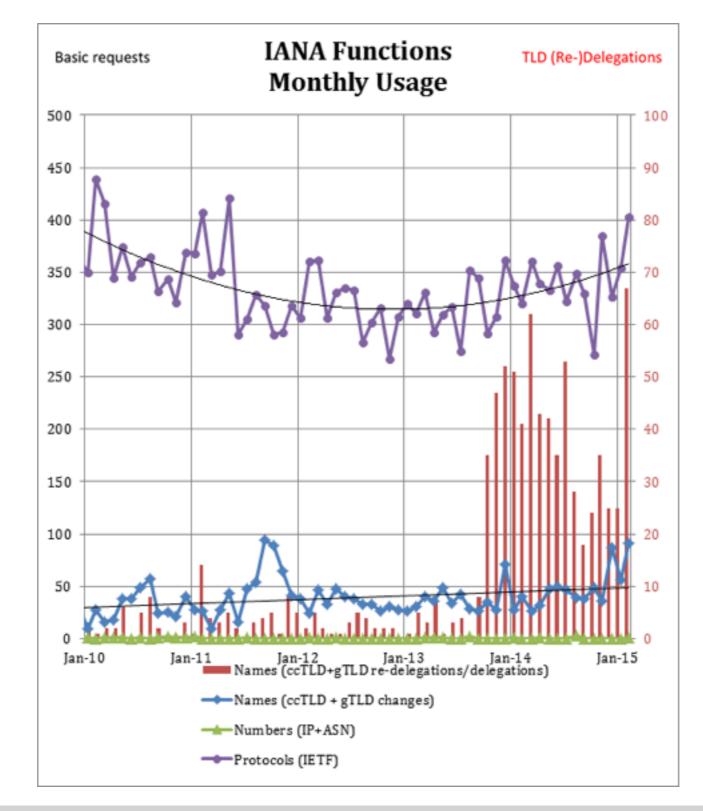


Internet Numbers Requests



June 2015

Internet Numbers vs Names and Protocols Requests



Source: <u>https://</u> <u>www.icann.org/news/</u> <u>blog/iana-functions-</u> <u>usage-analysis</u> Number Resource Organization

NRO / RIR Operational Update ICANN 53

June 2015



NRO Global Stats

- NRO Extended Allocation and Assignment Reports.
 - Updated Daily
 - Information at granular level of the global distribution of IPv4, IPv6 and ASN
- Internet Number Resources Status Report
 - Updated Quarterly
 - Global Information on IPv4 available, IPv6 Allocations and ASN assignment.

http://www.nro.net/statistics



RDAP

- Based on RFC 7484 Finding the Authoritative Registration Data (RDAP), the IANA department completed the creation of registries specified in the RFC
- RIRs and IANA are working to design a process to add and maintain the RDAP entries in the relevant entries
 - IANA IPv4 Address Space Registry
 - IPv6 Global Unicast Address Assignments
 - Autonomous System (AS) Numbers



Thank you

Questions?

June 2015