



IANA Update @ AFRINIC 17 Khartoum, Nov 2012

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Overview

- 2012 Customer Survey Results
- Updating IANA Special IPv4 & IPv6 Registries
- New Global Policy Implementation
- Key Signing Ceremonies
- AS Number Management

2012 Customer Survey

We invited Protocol Parameters, Number Resources & Root Management users to participate in a satisfaction survey in April & May 2012

The results were positive and a full report [is available](#)



Special IPv4 & IPv6 Registries

Consolidation & update of pre-existing RFCs defining special registries & documenting special prefixes

- draft-bonica-special-purpose-03 proposes restructuring special registries to use a common format for all special purpose registrations

New IPv4 Global Policy Ratified

Global Policy for Post Exhaustion IPv4 Allocation Mechanisms by the IANA | (ratified 6 May 2012)

The IANA shall establish a Recovered IPv4 Pool to be utilized post RIR IPv4 exhaustion. The Recovered IPv4 Pool will initially contain any fragments that may be left over in the IANA. It will also hold any space returned to the IANA by any other means.

The Recovered IPv4 Pool will be administered by the IANA. It will contain:

- a. Any fragments left over in the IANA inventory after the last /8s of IPv4 space are delegated to the RIRs
 - The IANA inventory excludes "Special use IPv4 addresses" as defined in BCP 153 and any addresses allocated by the IANA for experimental use.
- b. Any IPv4 space returned to the IANA by any means.

The Recovered IPv4 Pool will stay inactive until the first RIR has less than a total of a /9 in its inventory of IPv4 address space.

When one of the RIRs declares it has less than a total of a /9 in its inventory, the Recovered IPv4 pool will be declared active, and IP addresses from the Recovered IPv4 Pool will be allocated as follows:

- a. Allocations from the IANA may begin once the pool is declared active.
- b. In each "IPv4 allocation period", each RIR will receive a single "IPv4 allocation unit" from the IANA.
- c. An "IPv4 allocation period" is defined as a 6-month period following 1 March or 1 September in each year.
- d. The IANA will calculate the size of the "IPv4 allocation unit" at the following times:
 - When the Recovered IPv4 Pool is first activated
 - At the beginning of each IPv4 allocation period

To calculate the "IPv4 allocation unit" at these times, the IANA will use the following formula:

IPv4 allocation unit = 1/5 of Recovered IPv4 pool, rounded down to the next CIDR (power-of-2) boundary.

No RIR may get more than this calculation used to determine the IPv4 allocation unit even when they can justify a need for it.

The minimum "IPv4 allocation unit" size will be a /24. If the calculation used to determine the IPv4 allocation unit results in a block smaller than a /24, the IANA will not distribute any addresses in that IPv4 allocation period.

IPv4 Post Exhaustion Global Policy Ratified (1 of 3)

The pool contains

- 13 * /24
- 7 * /23
- 47 * /22
- 18 * /21
- 12 * /20
- 3 * /19
- 5 * /18,
- 3 * /17
- 17 * /16
- 2 * /15
- 1 * /14
- 1 * /13
- 1 * /12
- 1 * /11
- 1 * /10
- 1 * /9

- Running a public comment period on implementation choices following discussions with IESG & NRO
 - Registry format
 - Address selection mechanism

IPv4 Post Exhaustion Global Policy Ratified (2 of 3)

Pool size is approximately a 1¼ /8s at the moment

- Registry options include:
 - Single, high granularity registry
 - Multiple registries
 - Multiple views in 1 registry
- Selection mechanism options:
 - OSS
 - Manual with public review

IPv4 Post Exhaustion Global Policy Ratified (3 of 3)

- 21 day public comment period followed by a 21 day reply period
- Scheduled to begin first week of October 2012
- icann.org/public-comment

Recent key signing ceremony - November 2012



ASN Policy Criteria

3. Additional Allocations

An RIR is eligible to receive (an) additional ASN block(s) from the IANA if one of the following conditions is met:

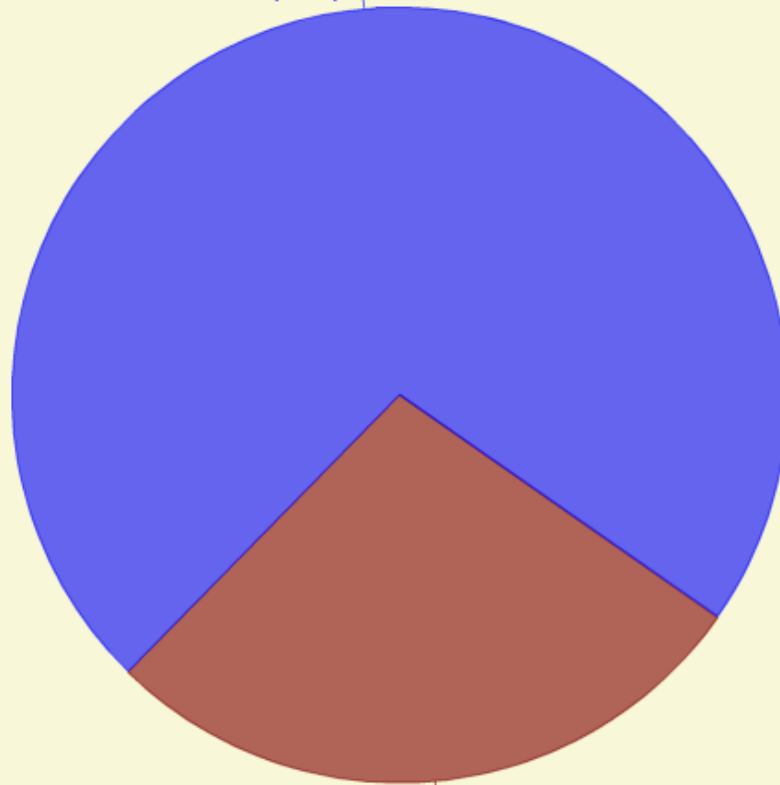
1. The RIR has assigned/allocated 80% of the previously received ASN block, or
2. The number of free ASNs currently held by the RIR is less than two months need. This projection is based on the monthly average number of ASNs assigned/allocated by the RIR over the previous six months.

An RIR will be allocated as many ASN blocks as are needed to support their registration needs for the next 12 months, based on their average assignment/allocation rate over the previous six months, unless the RIR specifically requests fewer blocks than it qualifies for.

Usage by RIR: Reflects Criteria 1

Usage of most recent ripenc ASN allocation(s) on 20120321 (as of 20/09/2012) - (c) ICANN Research

Unallocated (2223)

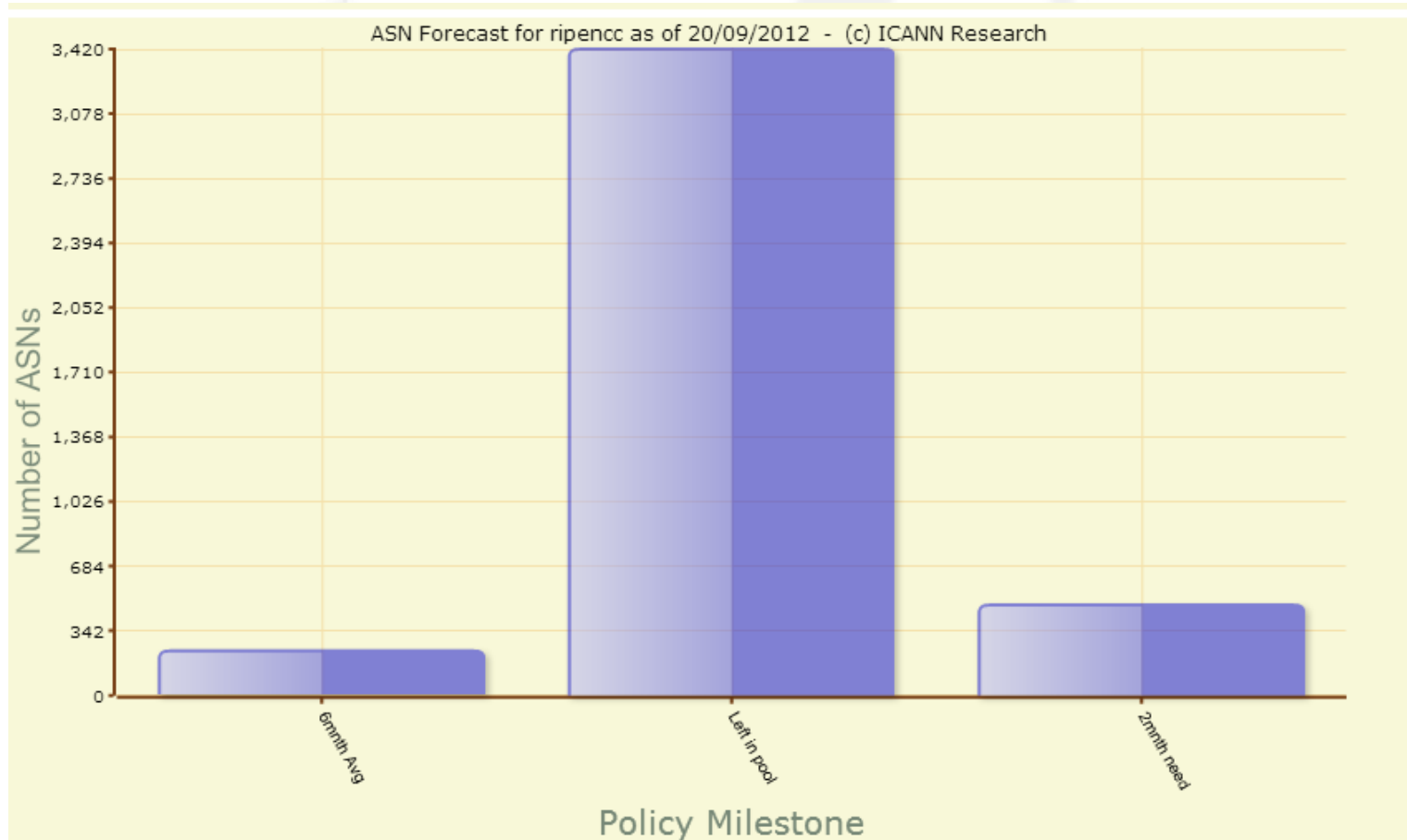


Allocated (849)

<http://stats.research.icann.org>



Run rate per RIR: Criteria 2



Service Measurements for Numbers Management

We documented our KPIs for number management in 2011 and used them as input when reviewing the ASN request process in 2012

Area	KPI	Target
Accuracy	Registry updated before notifying requester	100%
Timeliness & Process Quality	Iterations with requester	2
Transparency	Public announcements in a timely fashion	100%



Thank You

One World

One Internet

Questions