

RIPE NCC Status Update

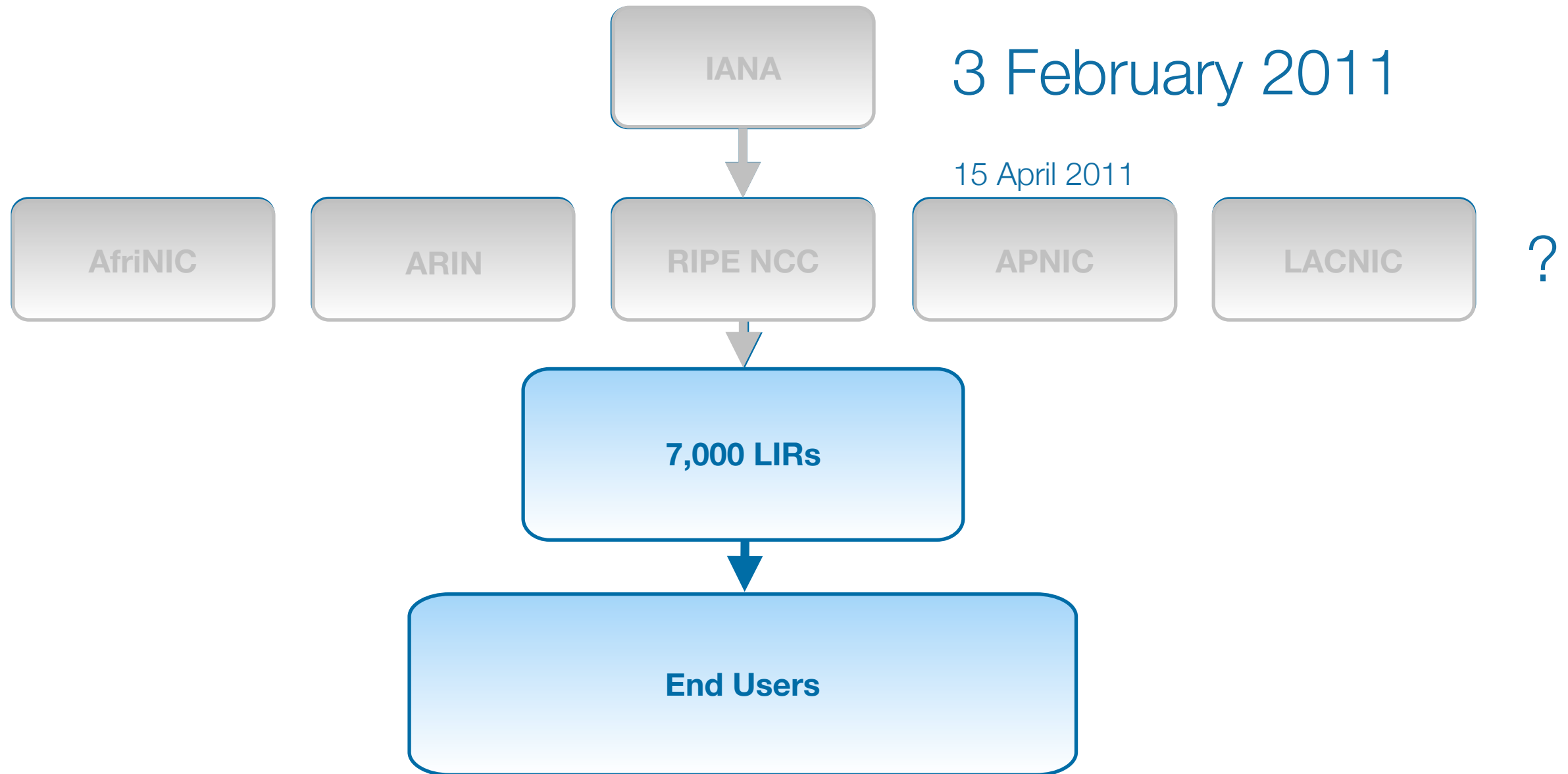
IPv4 and more

Marco Hogewoning, Trainer



IPv4 Run Out

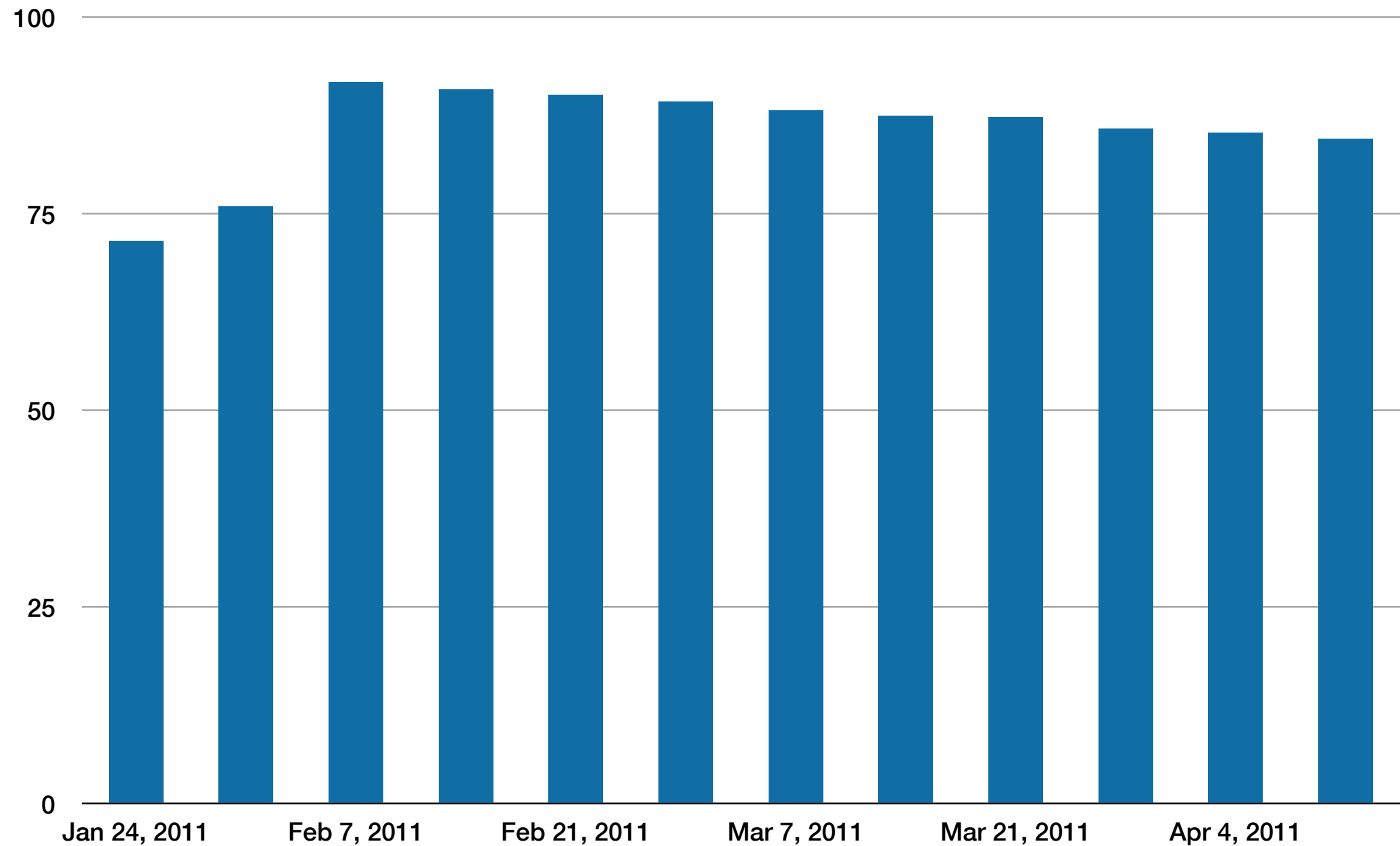
IPv4 Distribution



Business As Usual

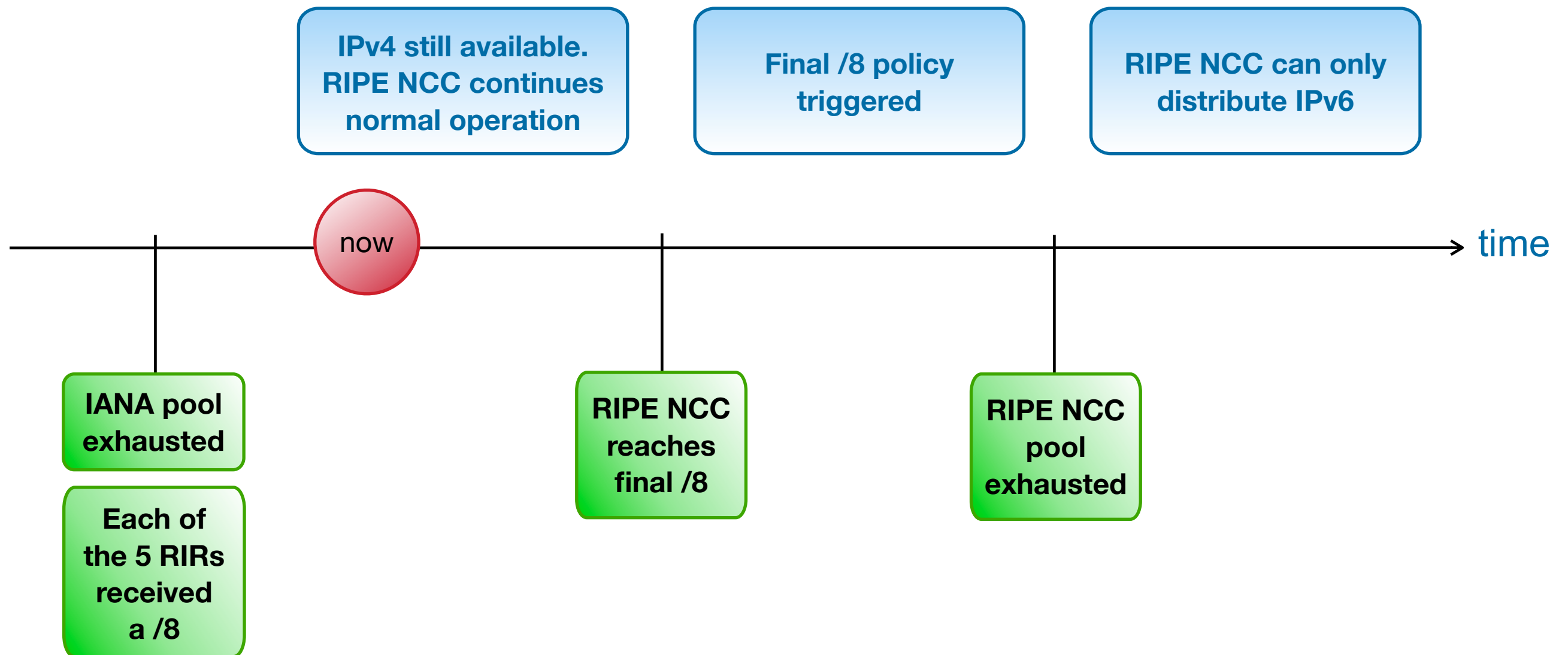
- The situation in APNIC does not affect the RIPE NCC's reserves of IPv4 addresses and we will keep distributing these resources to our members on the basis of need until we reach the final /8.

IPv4 Reserves at RIPE NCC



Amount of IPv4 addresses (million),
includes the final /8

IPv4 Exhaustion Phases



“Run Out Fairly”

- Gradually reduced allocation and assignment periods
- Needs for “Entire Period” of up to...
 - 12 months (January 2010)
 - 9 months (July 2010)
 - **6 months (January 2011)**
 - 3 months (July 2011)
- 50% has to be used up by half-way period

Final /8 Policy

- Each LIR can get **one** /22 allocation
- You must meet the criteria for an (additional) allocation
- Only when you already have IPv6 addresses
- A /16 is reserved for unforeseen circumstances
- **No Provider Independent (PI) assignments**

Transfer of IPv4 Allocations

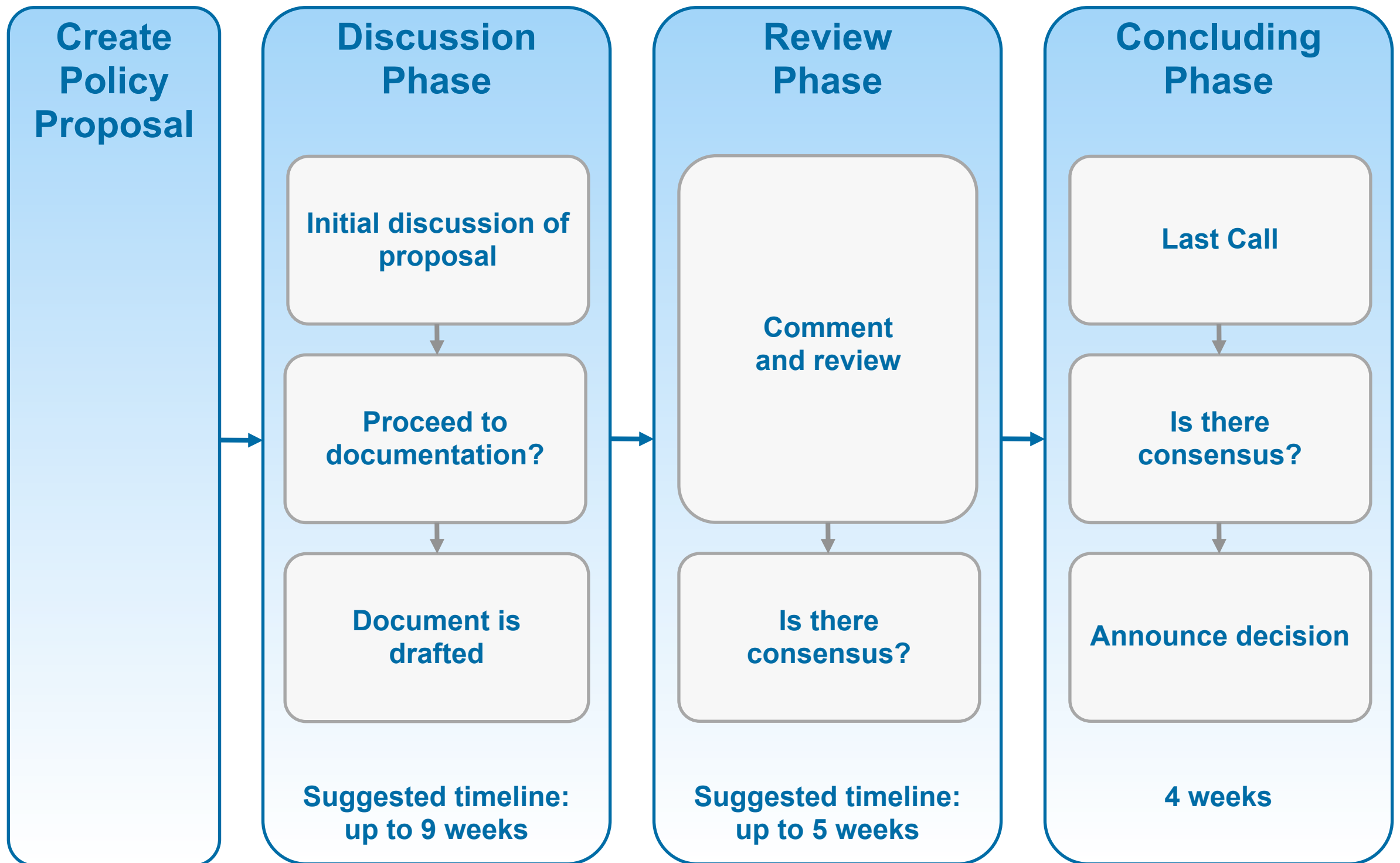
- LIRs can transfer IPv4 address blocks:
 - To another LIR
 - Only when the block is not in use
 - Meets minimum allocation size (/21)
- Requests are evaluated by the RIPE NCC
- Registered in the RIPE Database

No Changes Yet

- Policy will only be triggered when the RIPE NCC's final /8 is reached
- Be aware of the shorter assignment period!
- **And start deploying IPv6 now!**

Policy Development

Policy Development Process



2008-08 Initial Certification Policy

- This proposal lays out the guidelines on how LIRs can receive certificates over their Internet number resources and how these certificates should be maintained
- Review phase: open to further community discussion, ends on April 26

2010-01 Temporary Assignments

- Proposes to allow the RIPE NCC to reserve pools of IP addresses and Autonomous System (AS) numbers, which can be used by the RIPE NCC to make temporary direct assignments to End Users

- Concluding phase: last call ends 11 May

2010-08 Abuse Contact Information

- Proposal to make an IRT reference mandatory for **inetnum**, **inet6num** and **aut-num** objects
- Discussion phase: awaiting documentation from proposer

2011-01 IANA Post Exhaustion Allocations

- This proposal describes the process that IANA will follow to allocate IPv4 address space to Regional Internet Registries (RIRs) after the central pool of addresses is exhausted
- Global policy proposal, open for discussion until April 18

2011-02 Multihome Requirement IPv6 PI

- Proposal to remove the multihoming requirement for IPv6 Provider Independent (PI) assignments.
- Discussion phase: ends 13 May

More Information

- <http://www.ripe.net/ripe/policies/current-proposals>
- Check the RIPE Working Group mailing lists.
- Or subscribe to policy-announce@ripe.net:
 - <http://www.ripe.net/ripe/mail/ripe-lists/policy-announce>

IPv6

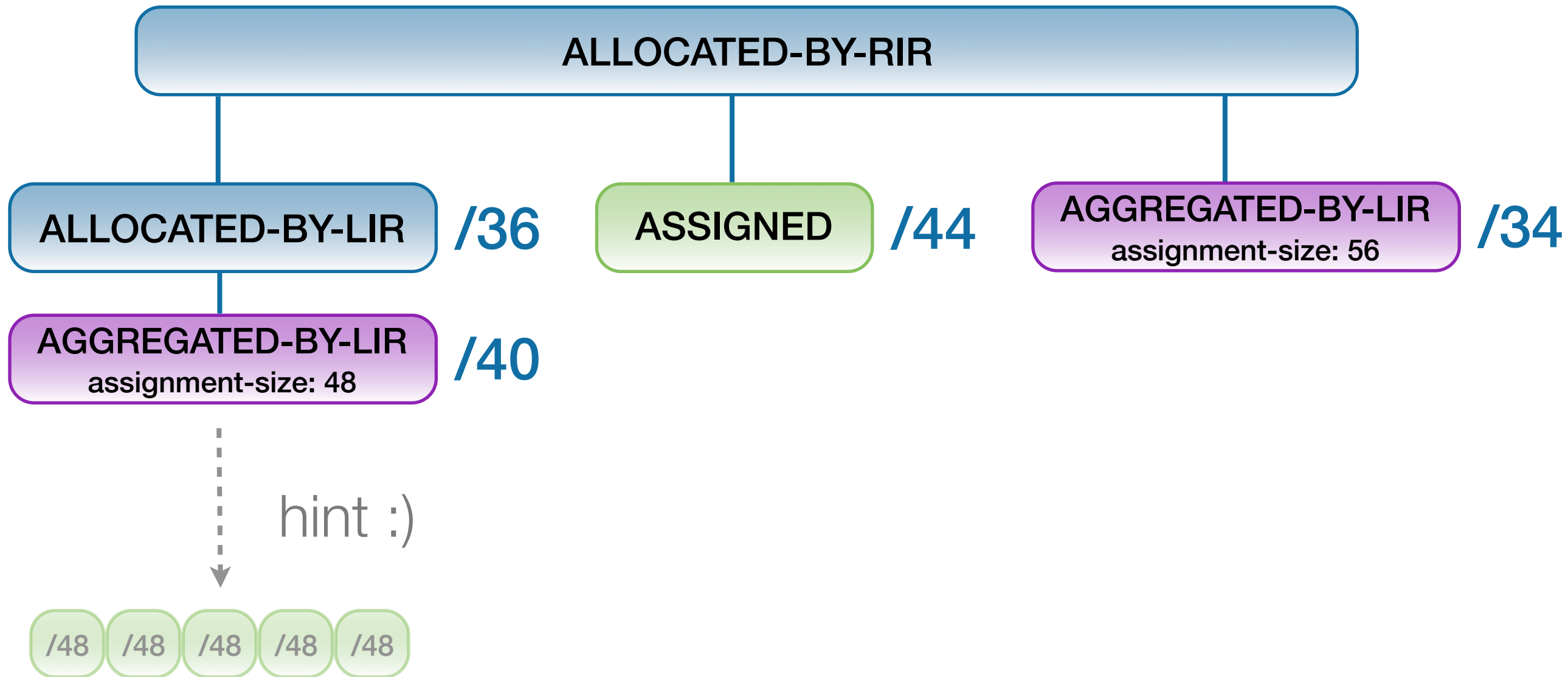
Registration of IPv6 Assignments

- All assignments must now be registered in the RIPE Database
- This includes existing assignments
- Method introduced to minimise the number of objects you have to create and maintain

Grouping of Assignments

- New status value: AGGREGATED-BY-LIR
- New attribute called “assignment-size”
- Create one object covering multiple assignments that share description and contacts
- Indicating the size of individual assignments

Using AGGREGATED-BY-LIR



AGGREGATED-BY-LIR

inet6num: 2001:db8:1000::/36
netname: Bluelight
descr: We want more Bluelight B.V.
descr: Colocation services
country: NL
admin-c: BN649-RIPE
tech-c: BN649-RIPE

status: AGGREGATED-BY-LIR

assignment-size: 48

mnt-by: BLUELIGHT-MNT
notify: noc@example.net
changed: noc@example.net 20110218
source: RIPE



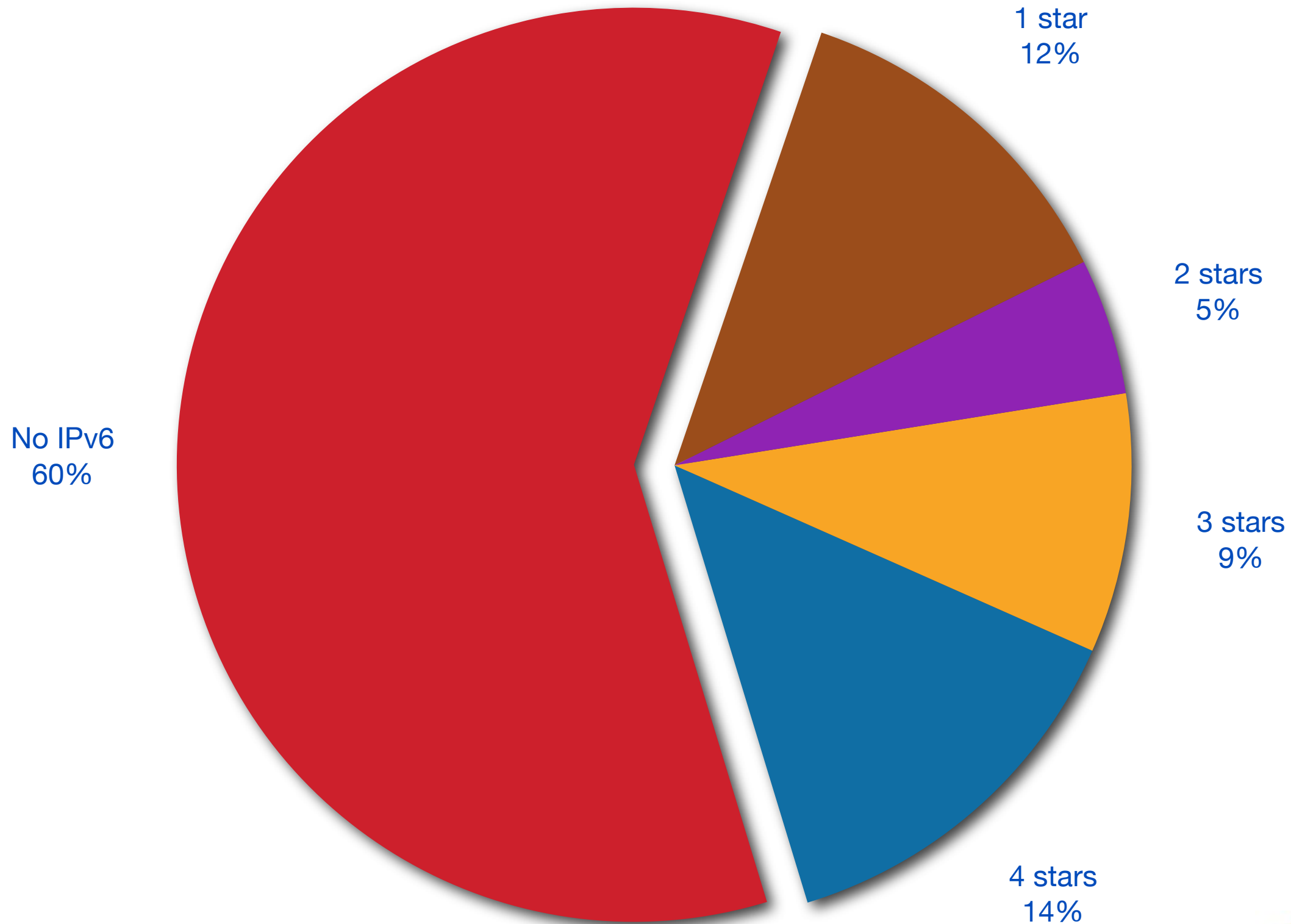
IPv6 Statistics

IPv6 Statistics

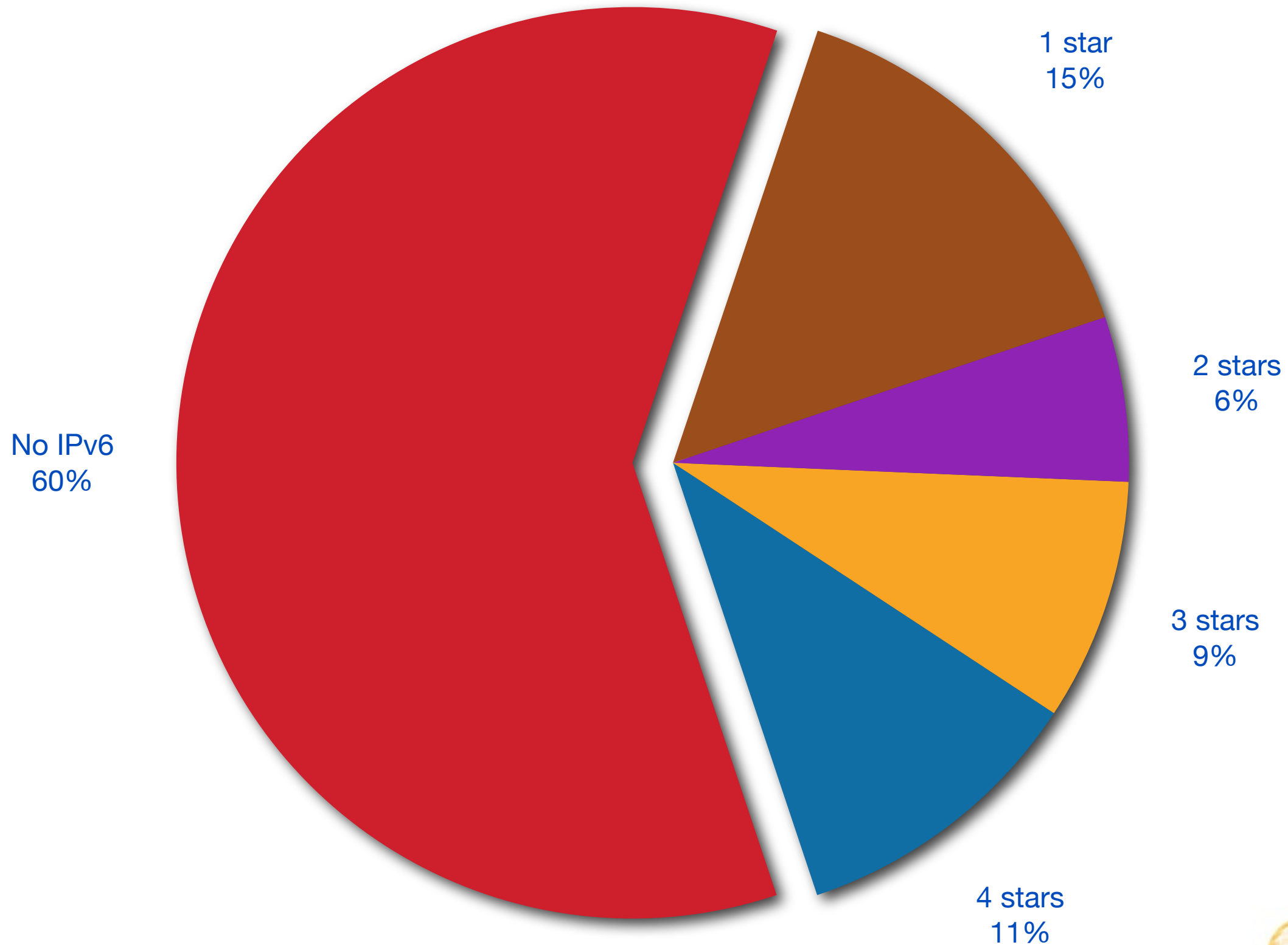
- RIPEness rating system. Stars awarded for:
 - Requesting an allocation
 - Creating a route object
 - Announcing your space
 - Setting up reverse DNS

- Free t-shirt if you make it to 4 stars :)

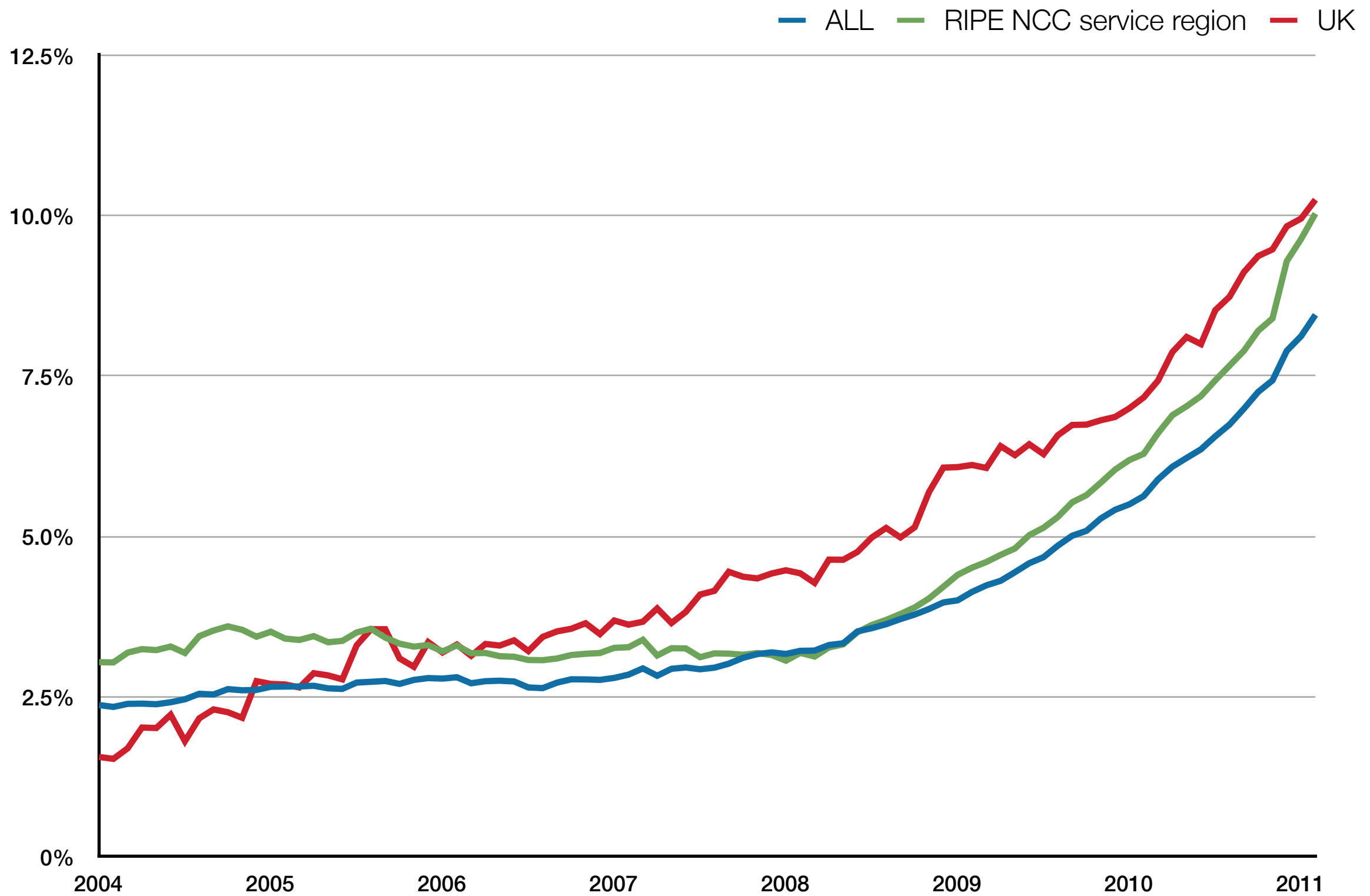
IPv6 RIPEness: total (7,369 LIRs)



IPv6 RIPEness: UK (838 LIRs)



IPv6 Enabled ASNs



Outreach

Training Courses

- LIR, IPv6 and Routing Registry courses
- Locations throughout the RIPE NCC service region
- “Standalone” but also in conjunction with other events, like NOG meetings
- 23 courses now scheduled until end of Q2 2011
- See <https://lirportal.ripe.net/training/courses>

Meetings

- RIPE 62 in Amsterdam, 2 - 6 May 2011
- Regional Meetings 2011:
 - al-Khobar, Saudi Arabia (14 May)
 - Moscow, Russia (6 - 8 June)
 - Dubrovnik, Croatia (7 - 9 September)
 - Muscat, Oman (27 - 28 September)
- RIPE 63 in Vienna, Austria (31 October - 4 November 2011)

More information

- <http://ripe.net/v4exhaustion>
- <http://www.ipv6actnow.org>
- <http://ripeness.ripe.net>
- <http://v6asns.ripe.net>
- <http://labs.ripe.net>

Questions?

