Update:
IP addresses
AS numbers
and related things...

PLNOG

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RIPE NCC

RIPE

IPv4

IPv6

Provider Independent Addresses

AS32

Routing Information Service

RIPE NCC

Located in Amsterdam

Not for profit membership organisation

6064 active members (1 jan 2008)
695 new members in 2008

Started by the RIPE community in 1992

One of five RIRs

The 5 RIRs
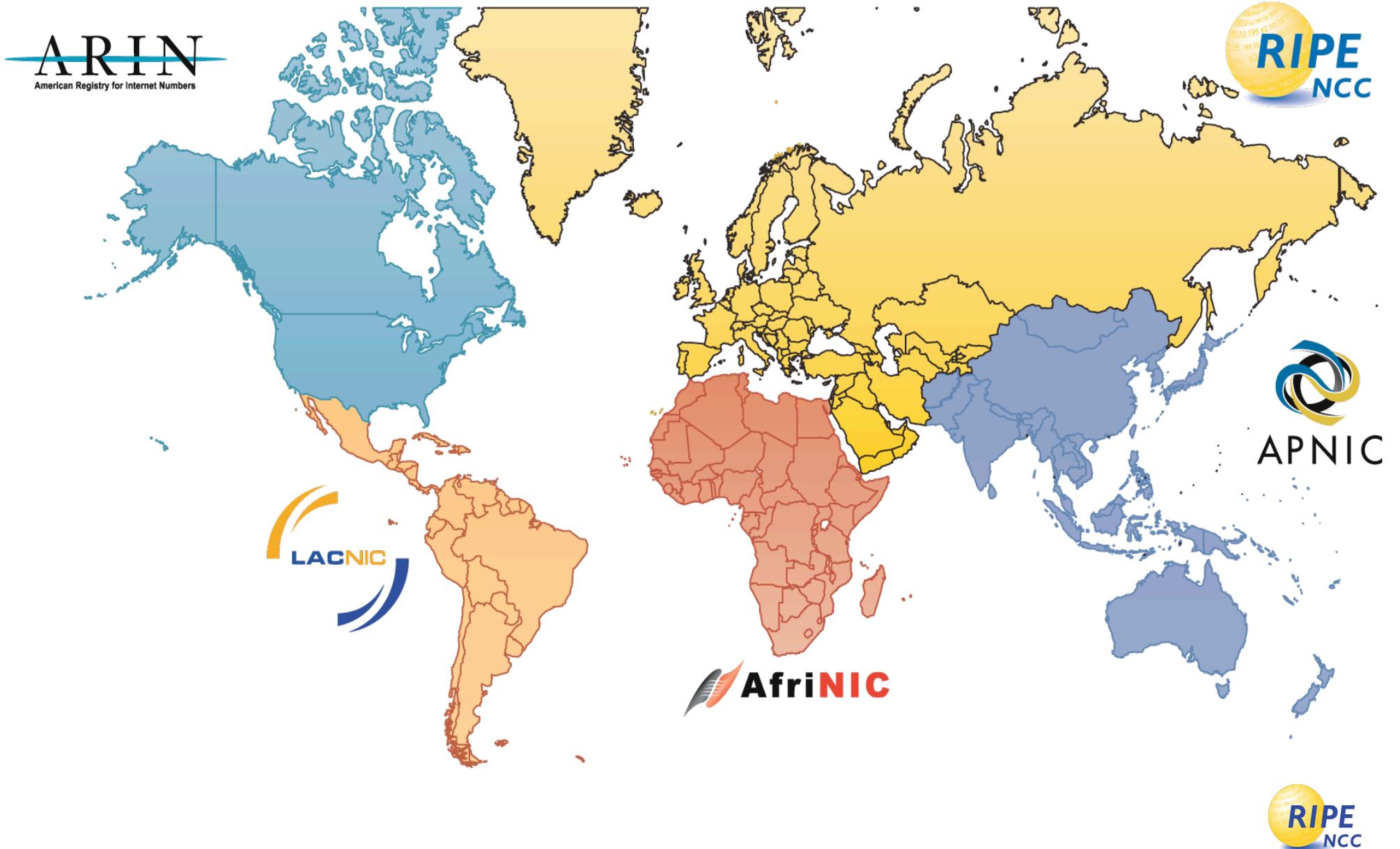
IP Address Distribution

Allocation	PA Assignment	PI Assignment
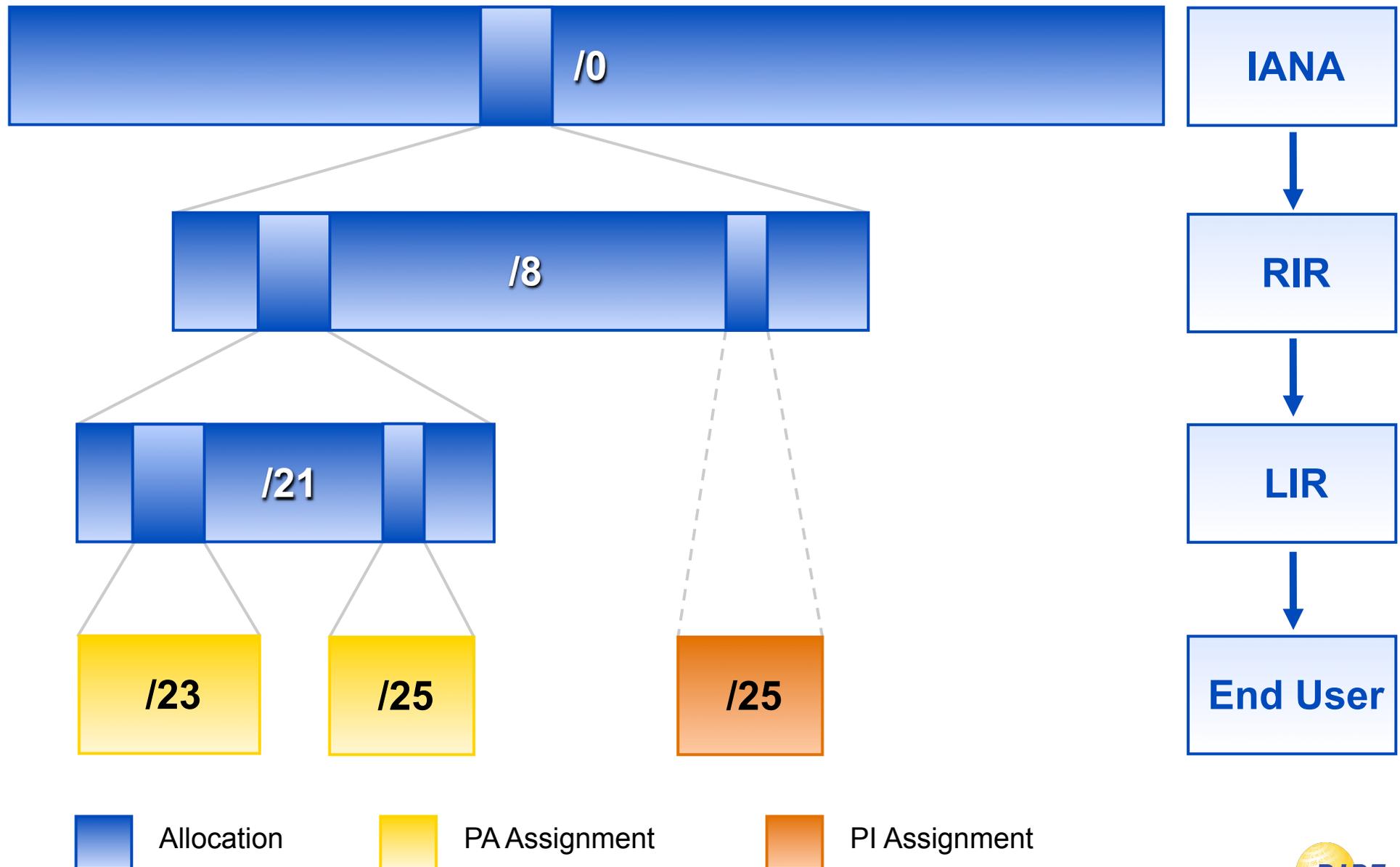
Registration

Aggregation

Conservation

IPv4 Address Pool - 2005

25%
available

Central
Registry

APNIC

LACNIC

ARIN

AfriNIC

RIPE NCC

RIPE NCC
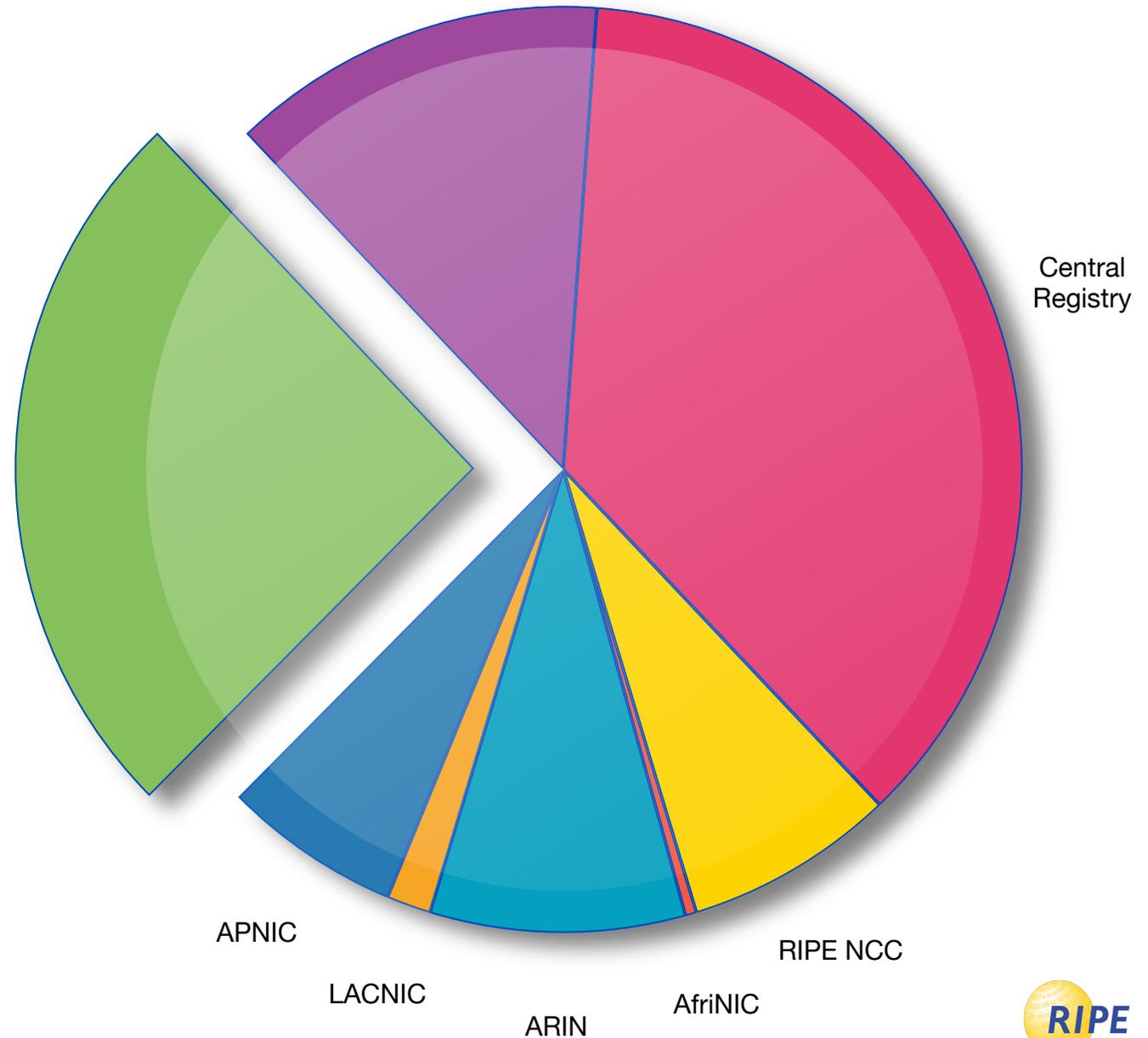
IPv4 Address Pool - Now

13%
available

- Central Registry
- RIPE NCC
- AfriNIC
- ARIN
- LACNIC
- APNIC
- Other
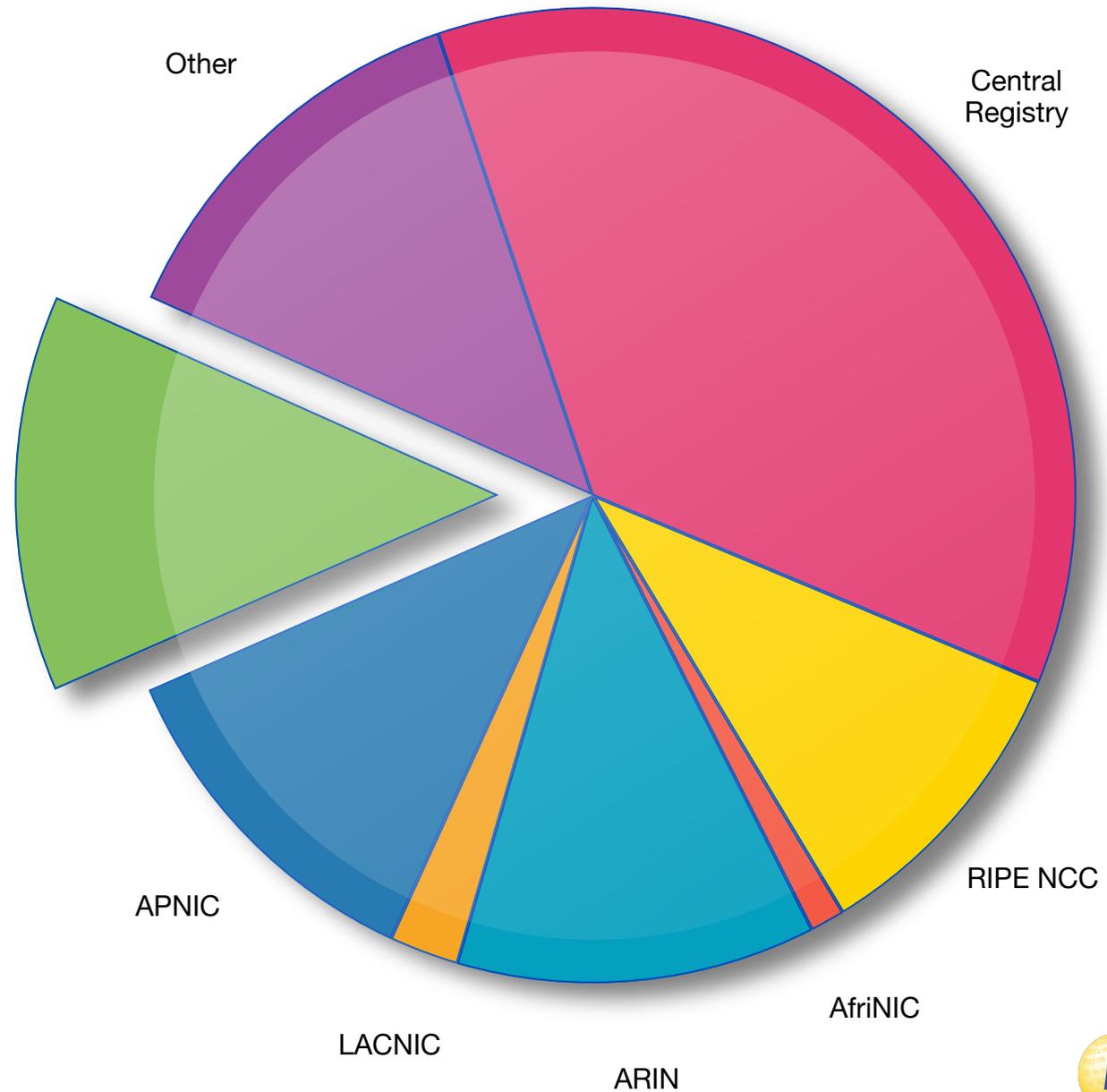
IPv4 Address Pool - The Future
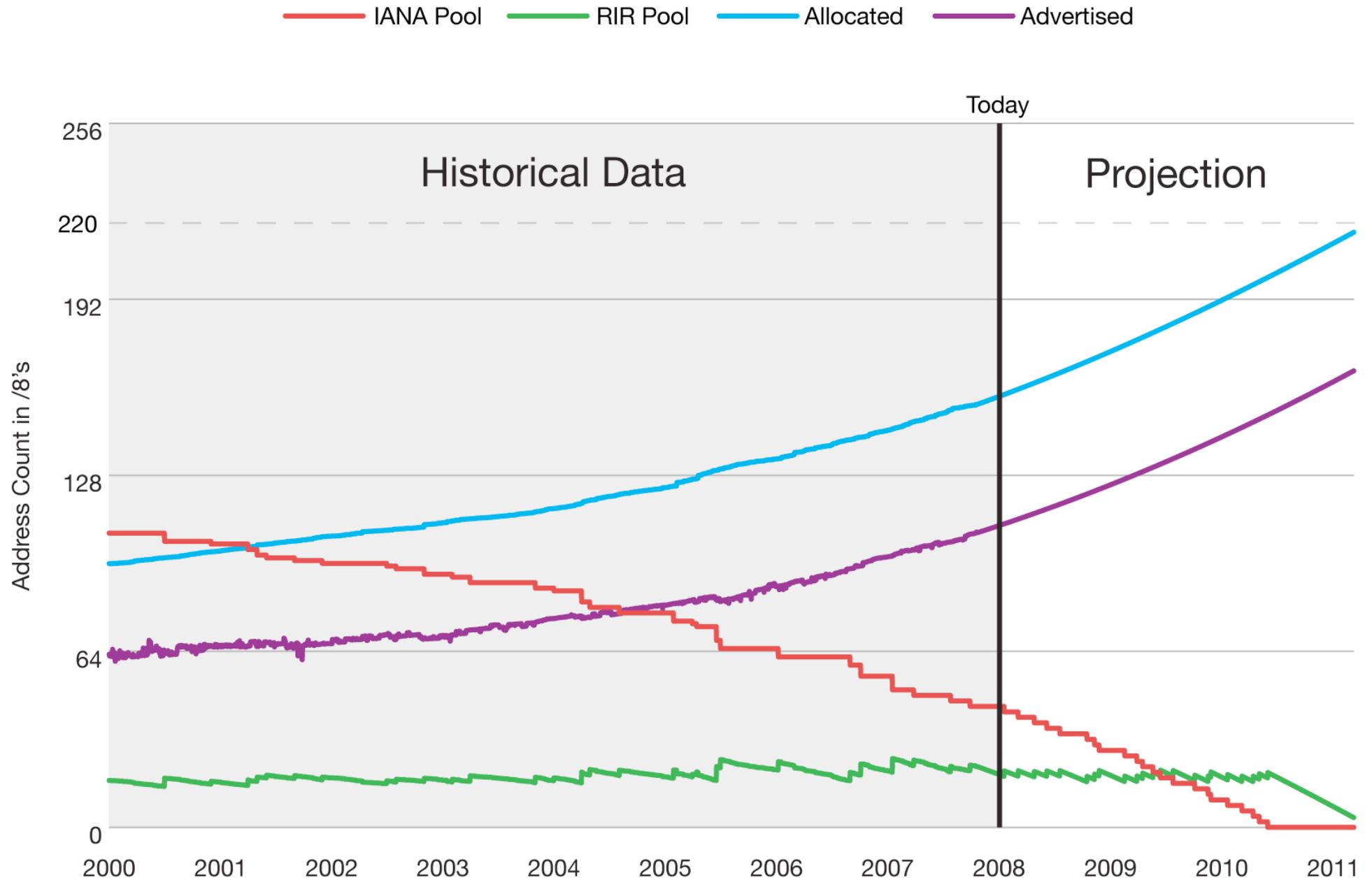
Stages of Grief

Denial

Anger

Bargaining

Depression

Acceptance

IPv6 Allocations and Announcements

Chart showing IPv6 Allocations (blue) and Announcements (red) from 2004 to 2008. Y-axis ranges from 0 to 1000. Allocations rise from about 280 in 2004 to 1000 by 2008. Announcements rise from about 150 in 2004 to about 490 by 2008.

Legend:
- — Allocations
- — Announcements

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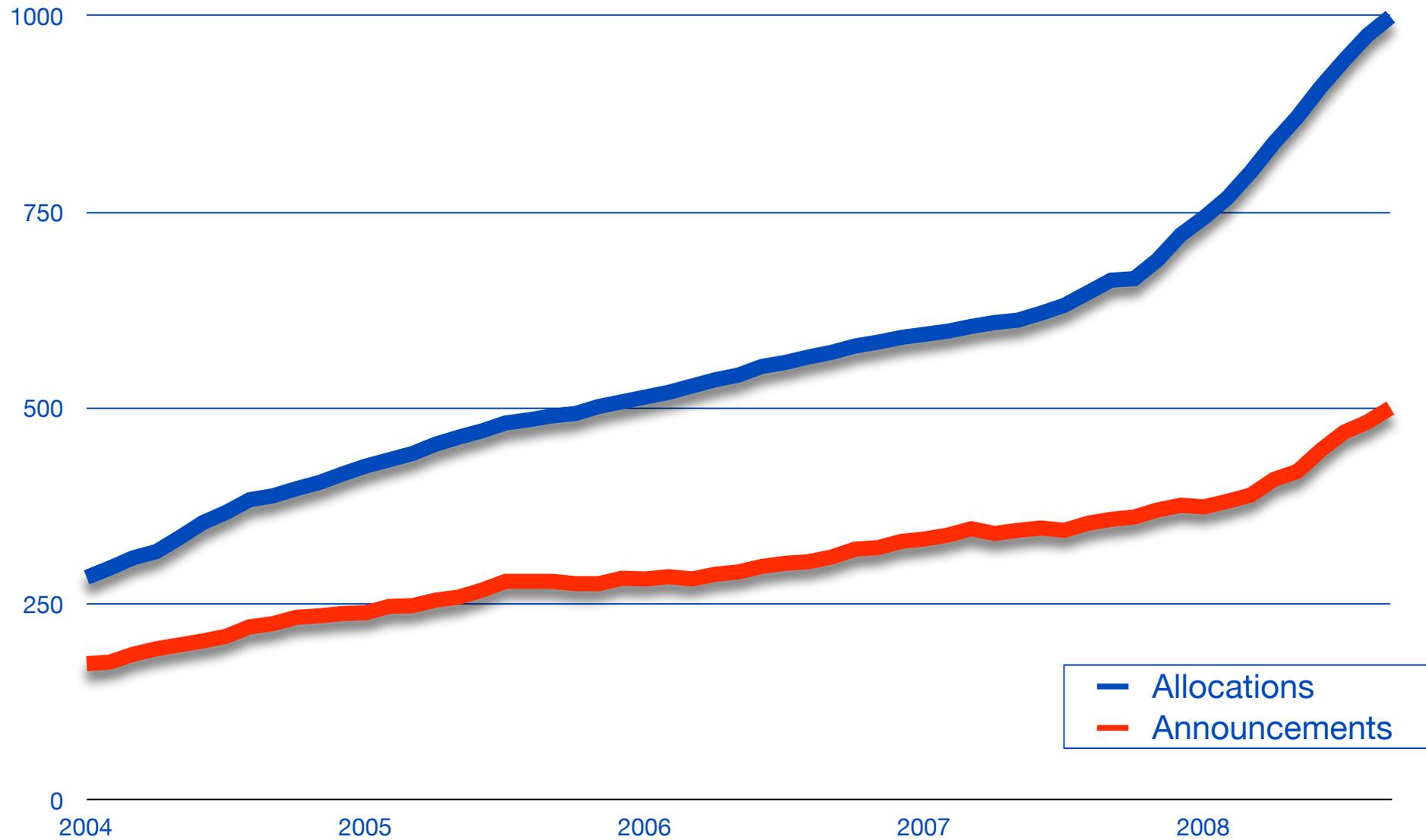
Getting an IPv6 allocation

To qualify, an organisation must:
- Be an LIR
- Advertise the allocation as a single prefix
- Have a plan for making assignments within two years

Minimum allocation size /32

IPv6 Transition
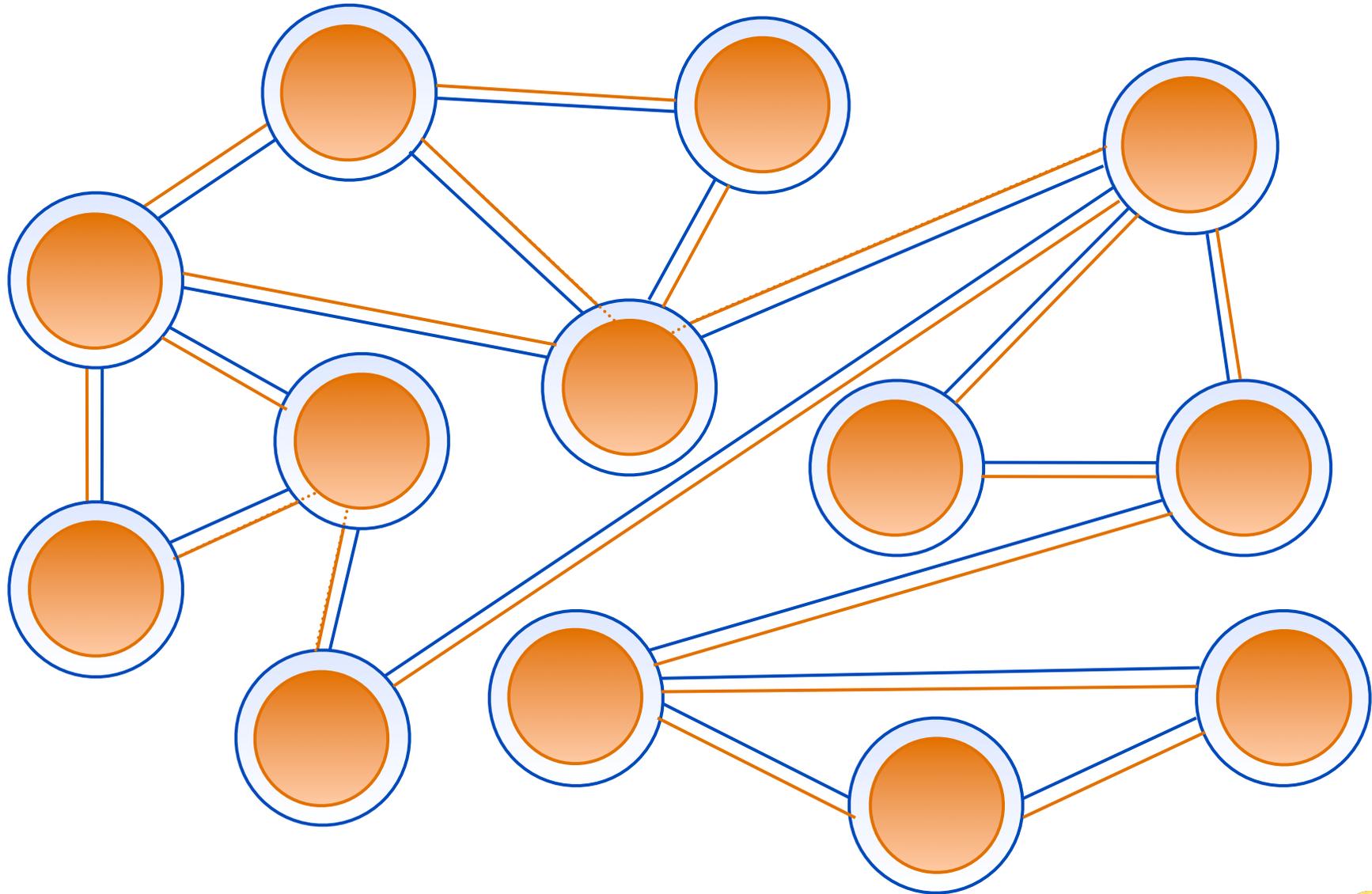
Procedural changes...

How Policy Is Made
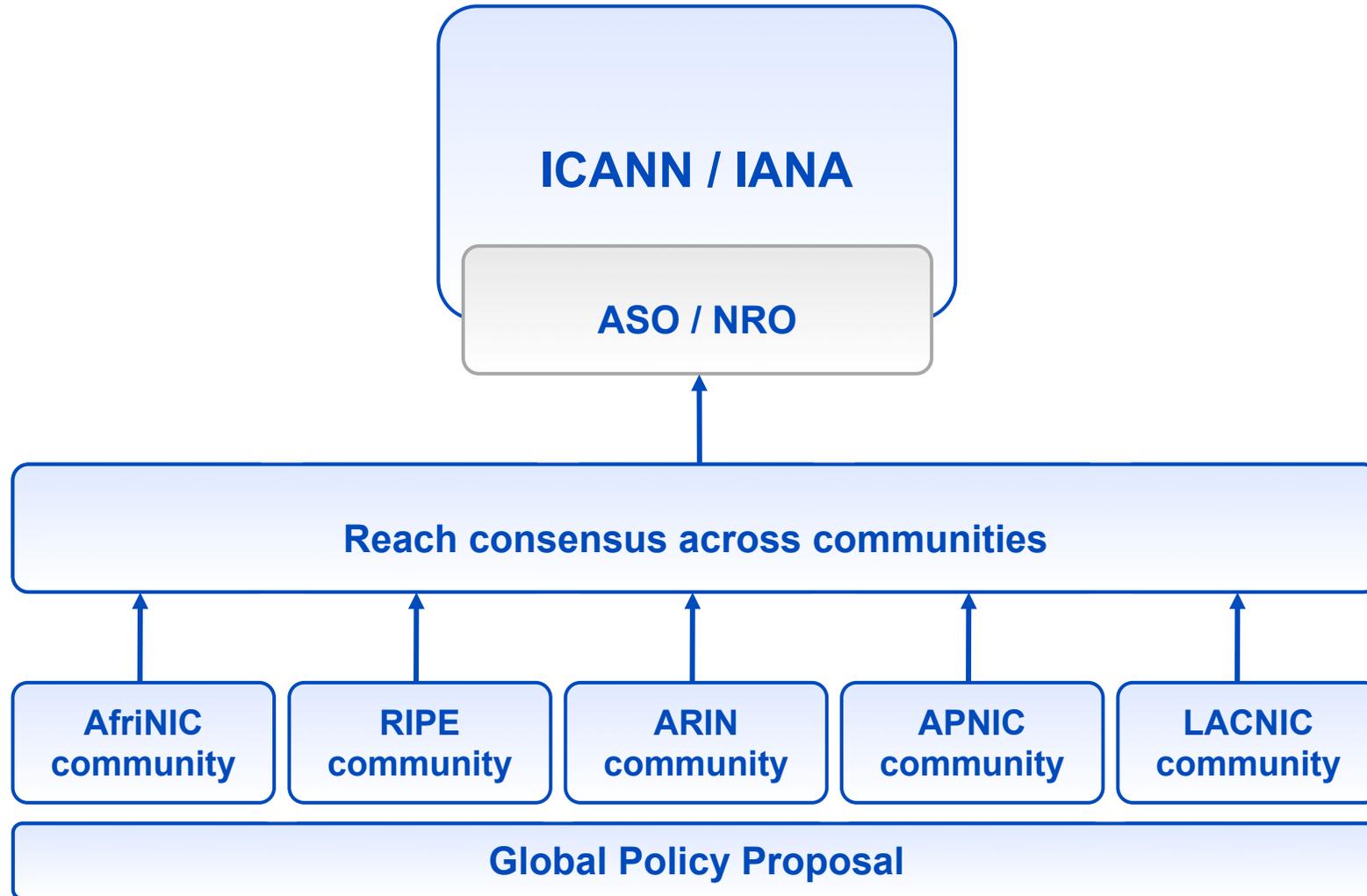
Direct End User assignments changes

Starting with RIPE NCC Charging Scheme 2009

Changes already applied to new members

Charges for PI address space and AS numbers

RIPE Policy Proposal 2007-01

What do the changes mean?

No impact on fee for vast majority of LIRs

Minimal impact for LIRs with many Direct End User assignments

Contract with end user needs to be renewed

Implementation of procedures is being worked on

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PI address space user choices

- Renew contract with their original LIR

- Find a new sponsoring LIR

- Get a direct end user contract with RIPE NCC

- Become LIR

- Return the address space

New and improved ASNs

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Autonomous System Numbers

Assignment requirements

- Address space

- Multihoming

- One AS Number per network

Requesting AS Numbers

- Create **organisation** and **mntner** objects

- Submit the AS Number request form

- Submit company registration documents

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32-bit AS Numbers

Global policy on 32-bit ASN deployment schedule:

1 Jan 2008:   16-bit default, 32-bit on request

1 Jan 2009:   32-bit default, 16-bit on request

1 Jan 2010:   Only 32-bit AS Numbers

32-bit AS Numbers and You

Can you handle a new AS number like "AS 200432"?

If not, please don't wait anymore!

Prepare for 32-bit AS numbers in your organisation:

- Check whether your hardware is compatible; if not, ask your hardware vendor for support

- Check whether your upstream provider is running compatible hardware; if not, encourage them to upgrade!

Routing Information Service

What is RIS?

A really really large database of BGP routing information

Free to use for any purpose, by anyone

Collected from BGP peers around the world
- 580 peers on 14 collectors
- ~90 peers send full tables (including your prefixes)
- Every update, every route received from peers is stored

15 Remote Route Collectors (RRCs)

RIS tools
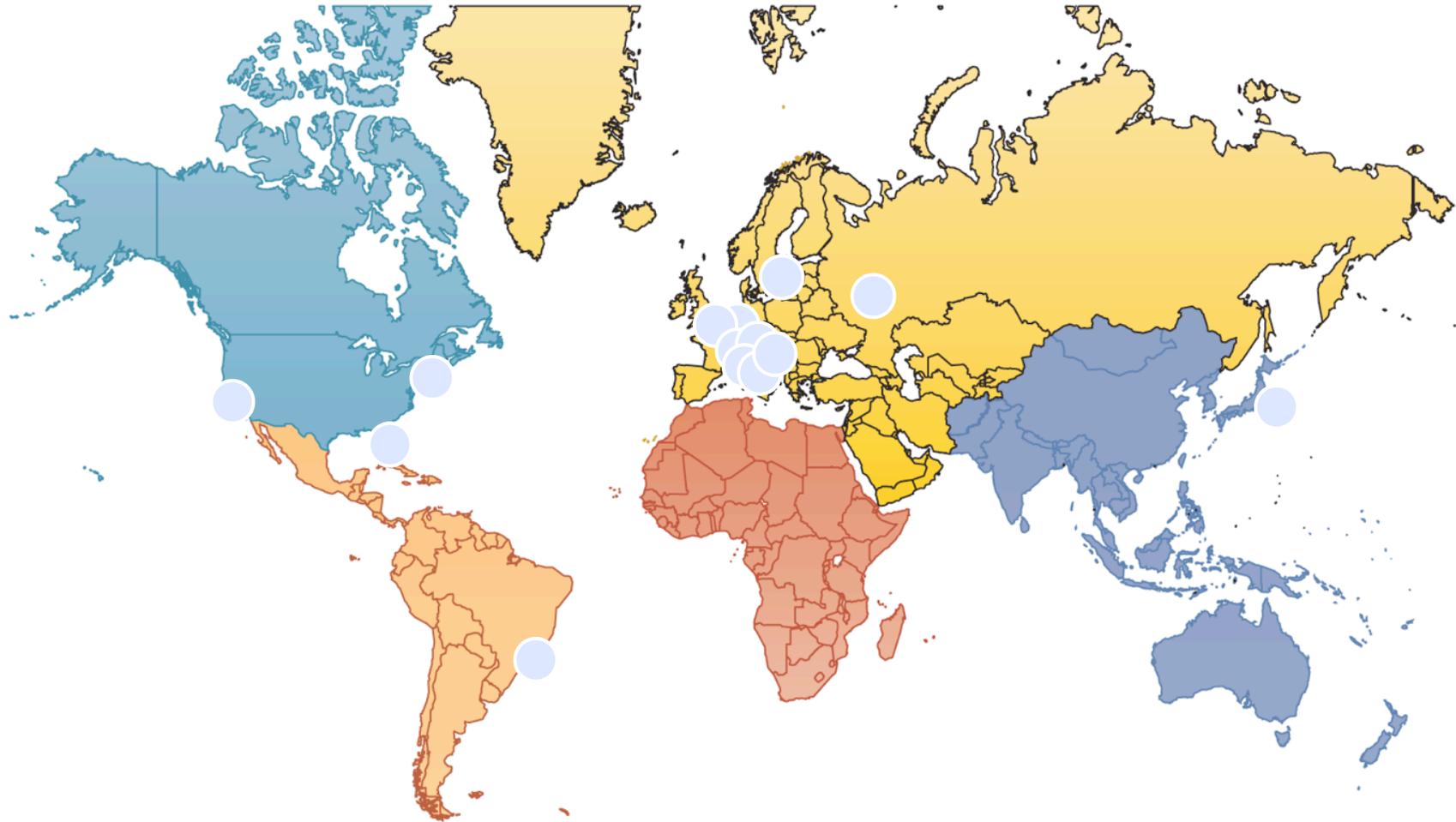
http://www.ripe.net/ris/

Allows searching in last 3 months of data

Search allows you to search for RIS data for a specific
    prefix or Autonomous System

Raw data available in standard format

Mostly used for research purposes

Kept forever - collection started in 1999

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More information:

www.ripe.net

arno@ripe.net

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