RIPE Policy Development
& IPv4 / IPv6

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Overview

- RIPE PDP (Policy Development Process)

- IPv4 depletion
  - Statistics
  - Policy

- IPv6 uptake
  - Policy
    - Increase incentives for IPv6
    - Get ready for sustained IPv4 usage
  - Statistics

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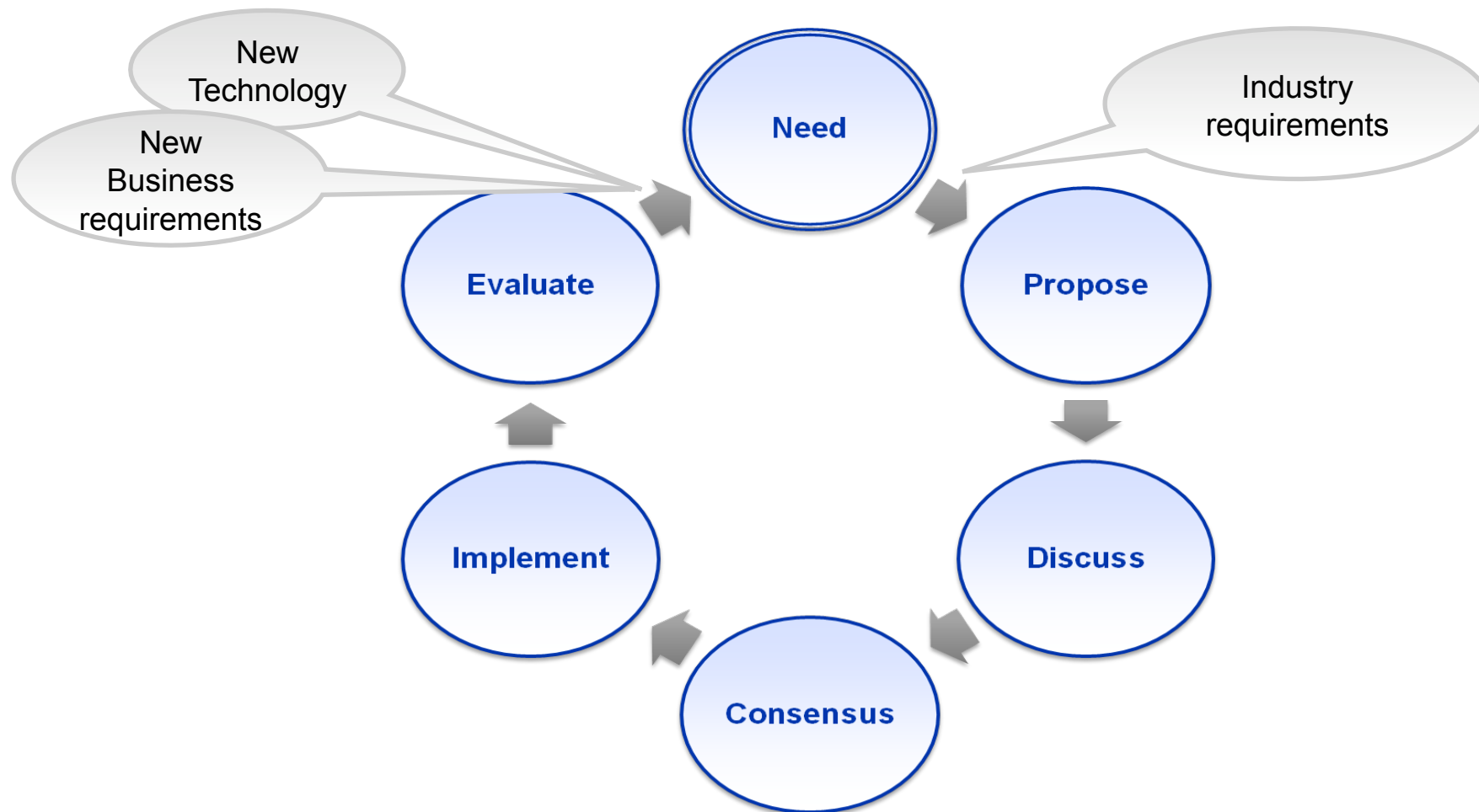 - Statistics

RIPE Policy Development Process Principles

- Open
  - Anyone can participate
  - Policy meetings
  - Mailing lists

- Transparent
  - Mailing lists archived
  - Meetings scribed

- Developed Bottom-up
  - By the Internet Community

- Documented
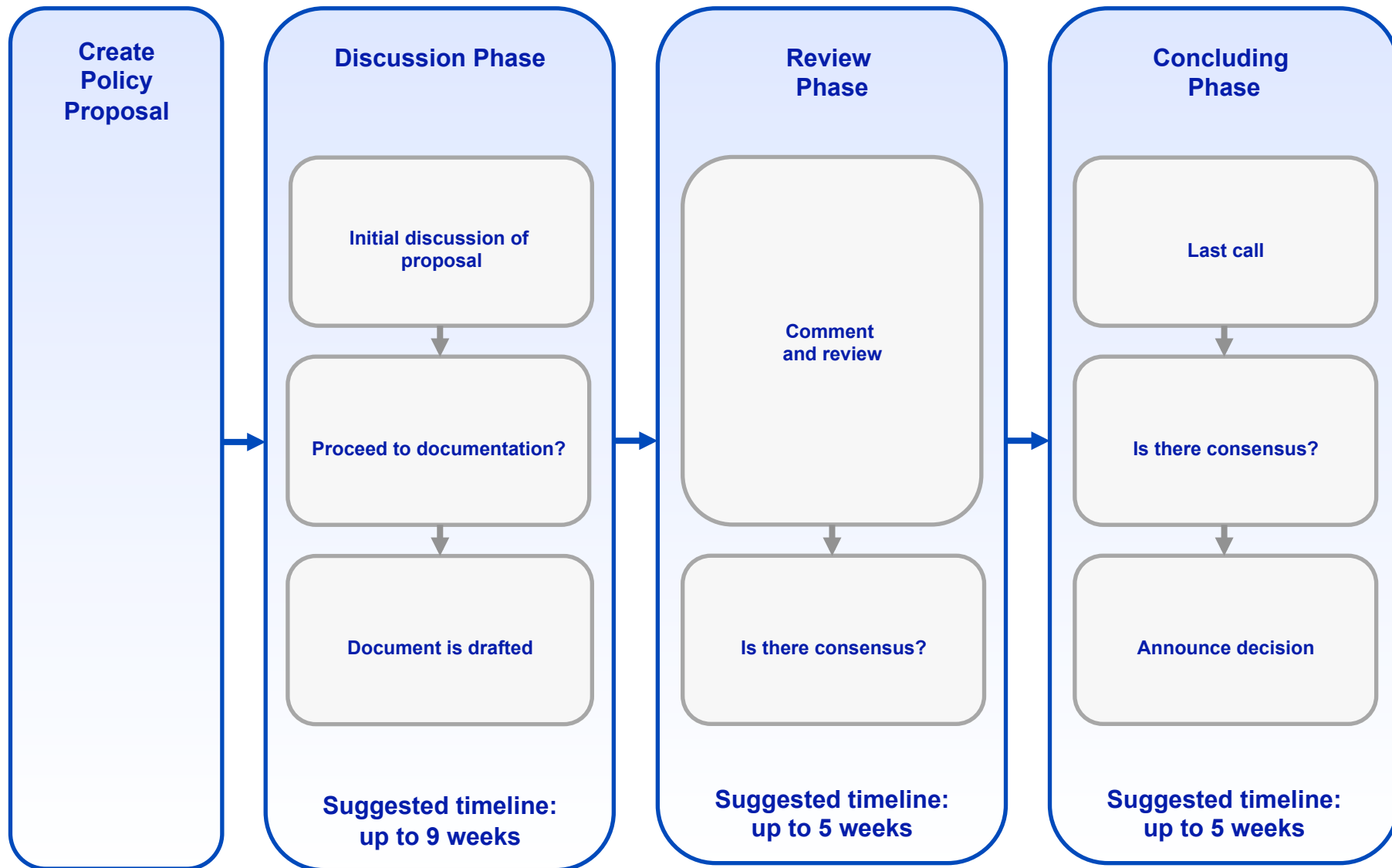 - Formal Policy Documents
  - Implementation Procedures

Policy Development Process:
Community's (bottom-up) Answer to demand for change

New
Technology

Industry
requirements

New
Business
requirements

Need

Evaluate

Propose

Implement

Discuss

Consensus

Policy Development Process

Create Policy Proposal

Discussion Phase

Initial discussion of proposal

↓

Proceed to documentation?

↓

Document is drafted

Suggested timeline: up to 9 weeks

Review Phase

Comment and review

↓

Is there consensus?

Suggested timeline: up to 5 weeks

Concluding Phase

Last call

↓

Is there consensus?

↓

Announce decision

Suggested timeline: up to 5 weeks

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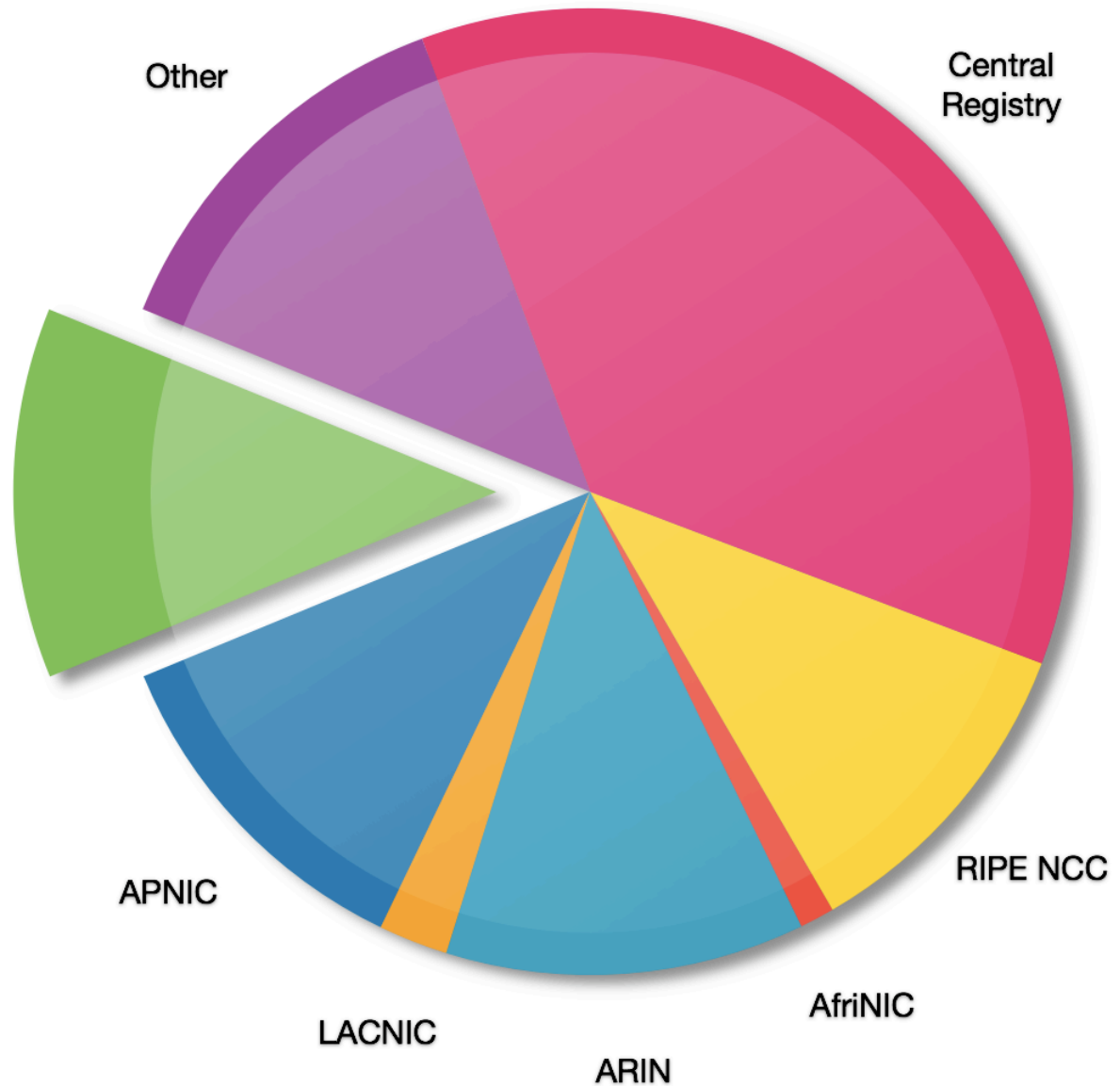- IPv4 depletion
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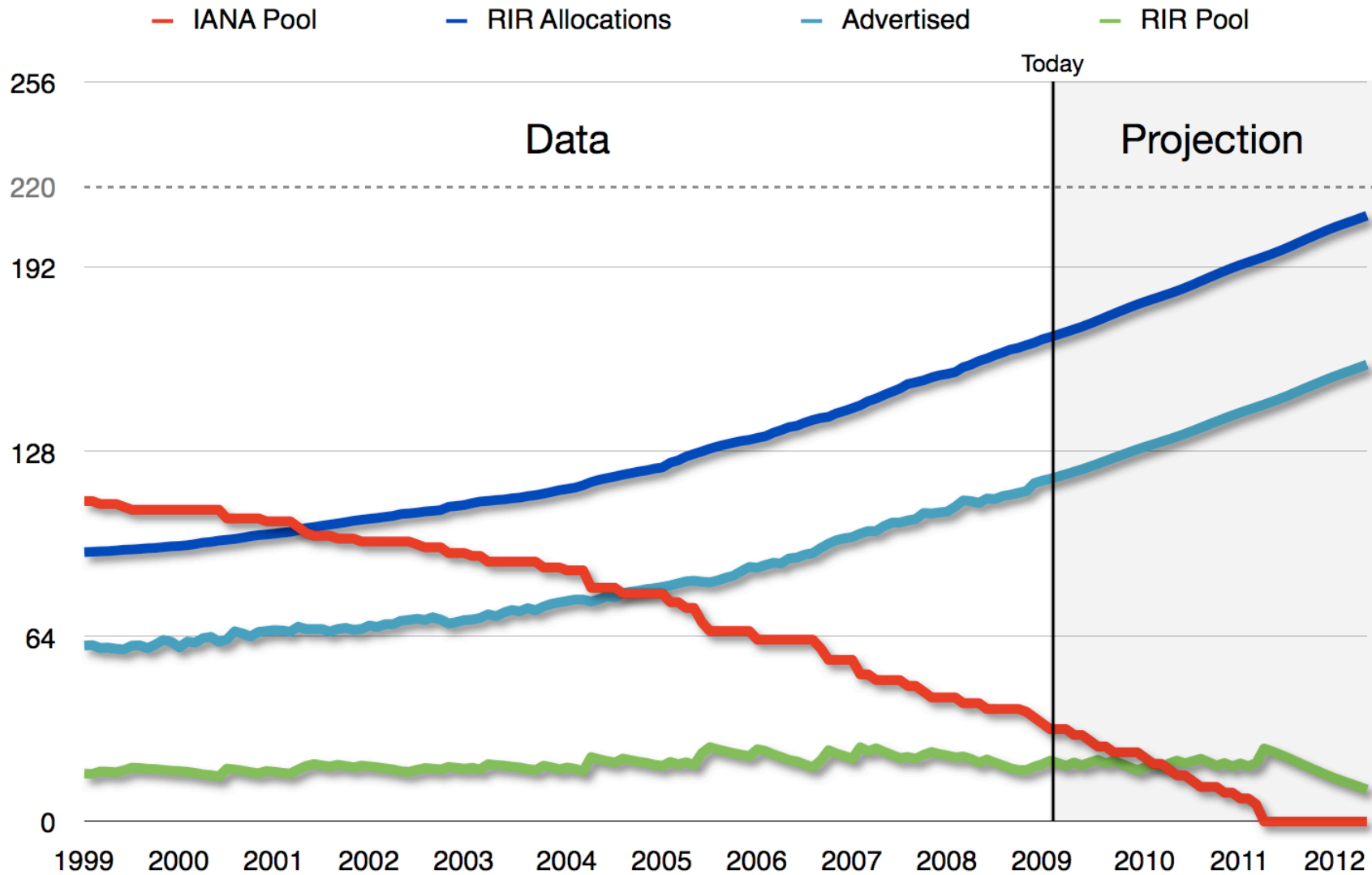   - Get ready for sustained IPv4 usage
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IPv4 Address Pool - Now

12%
available

IPv4 Address Pool - Projection

— IANA Pool   — RIR Allocations   — Advertised   — RIR Pool

Source: Geoff Houston

IPv4 remaining free pool Policies (1/2)

- Global Policy for the Allocation of the Remaining IPv4 Address Space (2008-03)

  - Accepted by all regions and documented

  - Distribute the last 5 /8s evenly among RIRs (N=1)

- Use of last /8 (2008-06)

  - New LIRs and Existing LIRs

    - Must qualify for an allocation

    - Will receive only one block in min size regardless of their real needs

  - A /16 will be reserved for unforeseen circumstances

  - Addition of IPv6 deployment requirement suggested

IPv4 remaining free pool Policies (2/2)

- Ensuring efficient use of historical IPv4 resources (2008-07)
  - Currently legacy allocations are exempt from 80% usage policy
  - Proposal requires documentation of usage of legacy space

- Enabling Methods for Reallocation of IPv4 Resources (2007-08)
  - IPv4 depletion
  - Applies only to IPv4 PA allocations

Prudence – Other Regions

Dedicated IPv4 blocks to facilitate IPv6 Deployment

- ARIN accepted
  - Reserve a /10
  - Assignments for key dual stack DNS servers, and NAT-PT or NAT464 translators
- APNIC accepted
  - Use of final /8
  - Ensuring efficient use of historical IPv4 resources
- LACNIC accepted
  - Reserve a /12
  - /22s for "new" ISPs and critical infrastructure

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Main IPv6 Proposals

- Proposal 2006-02
  - IPv6 Allocation criteria altered
    - No more requirement for assignments to *others*
    - No more requirement for 200 customers
  - New End Site definition
    - LIRs internal assignments count as End Site
  - LIRs: Plan to make sub-allocations to others or assignments to End Sites
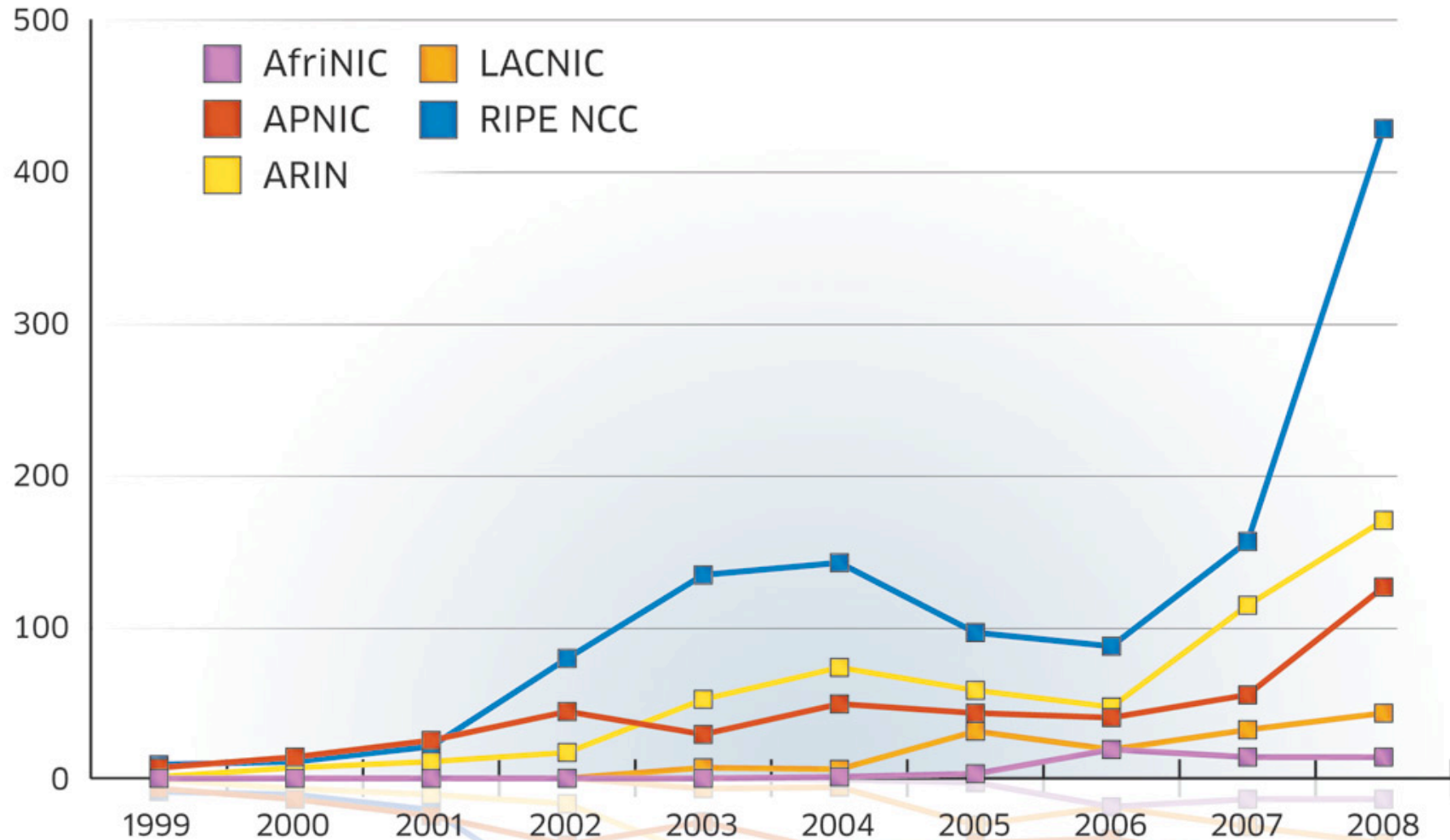
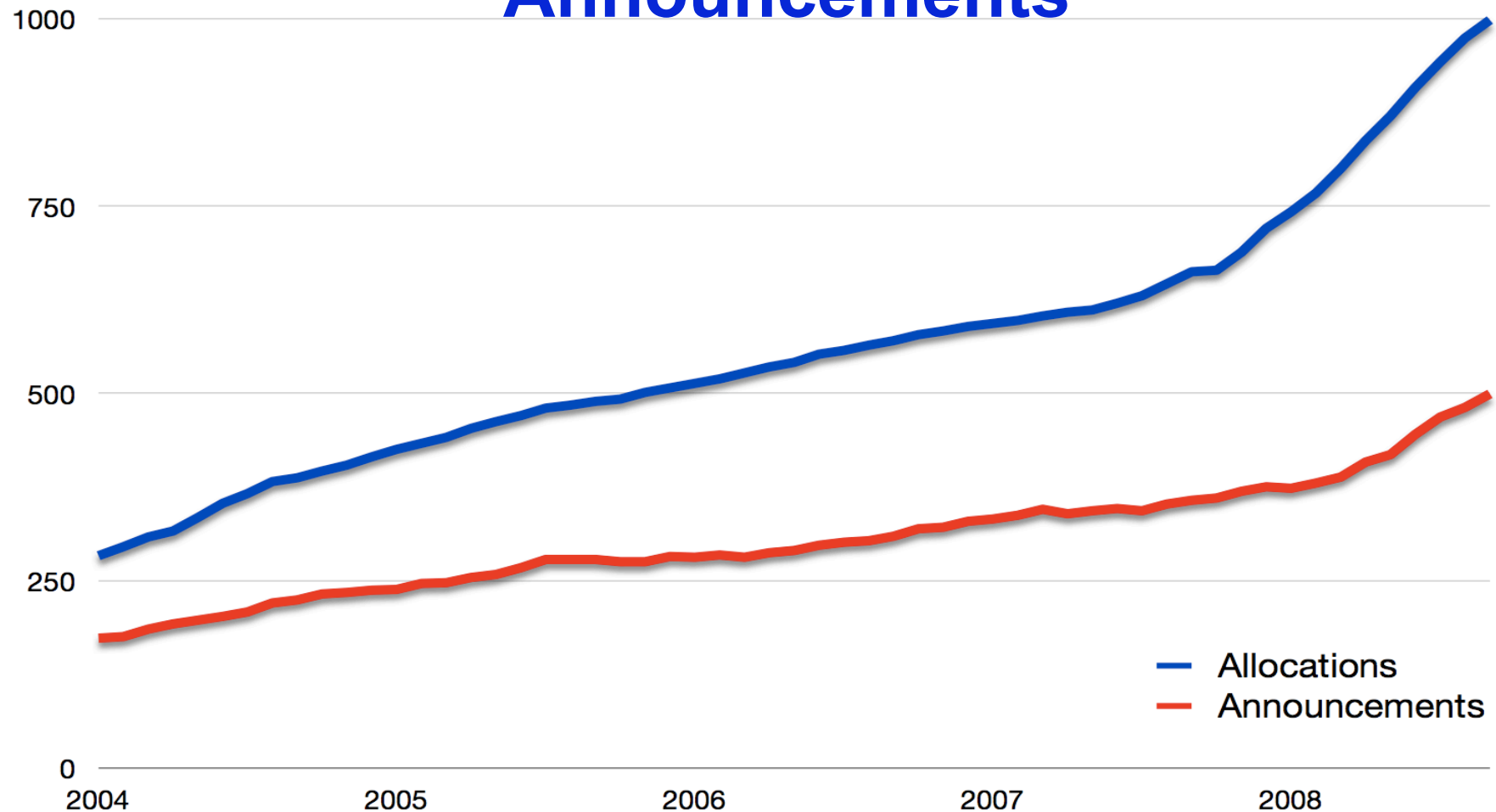- Proposal 2006-01: IPv6 for End Users

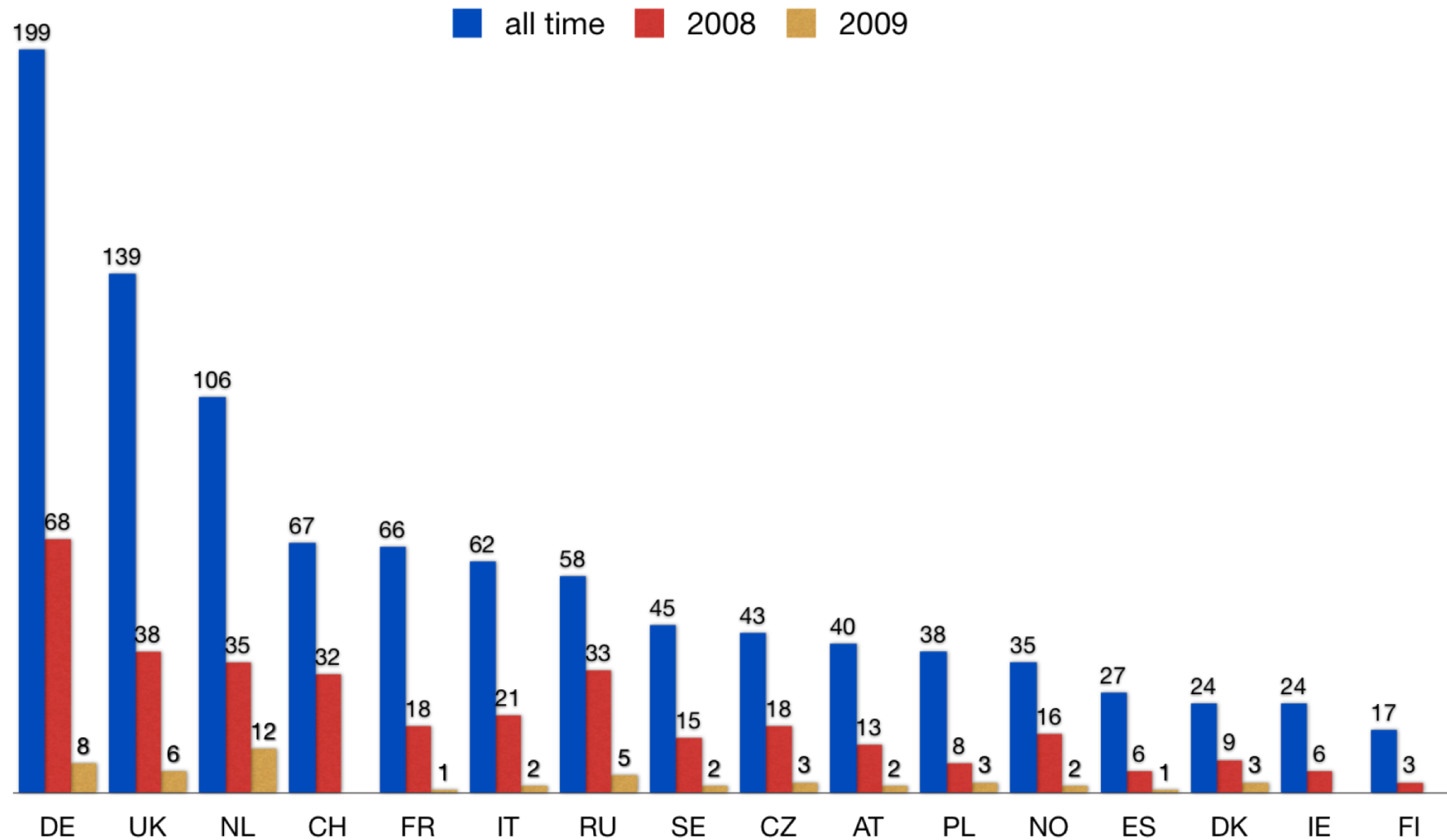# IPv6 Allocations - Last 24 months
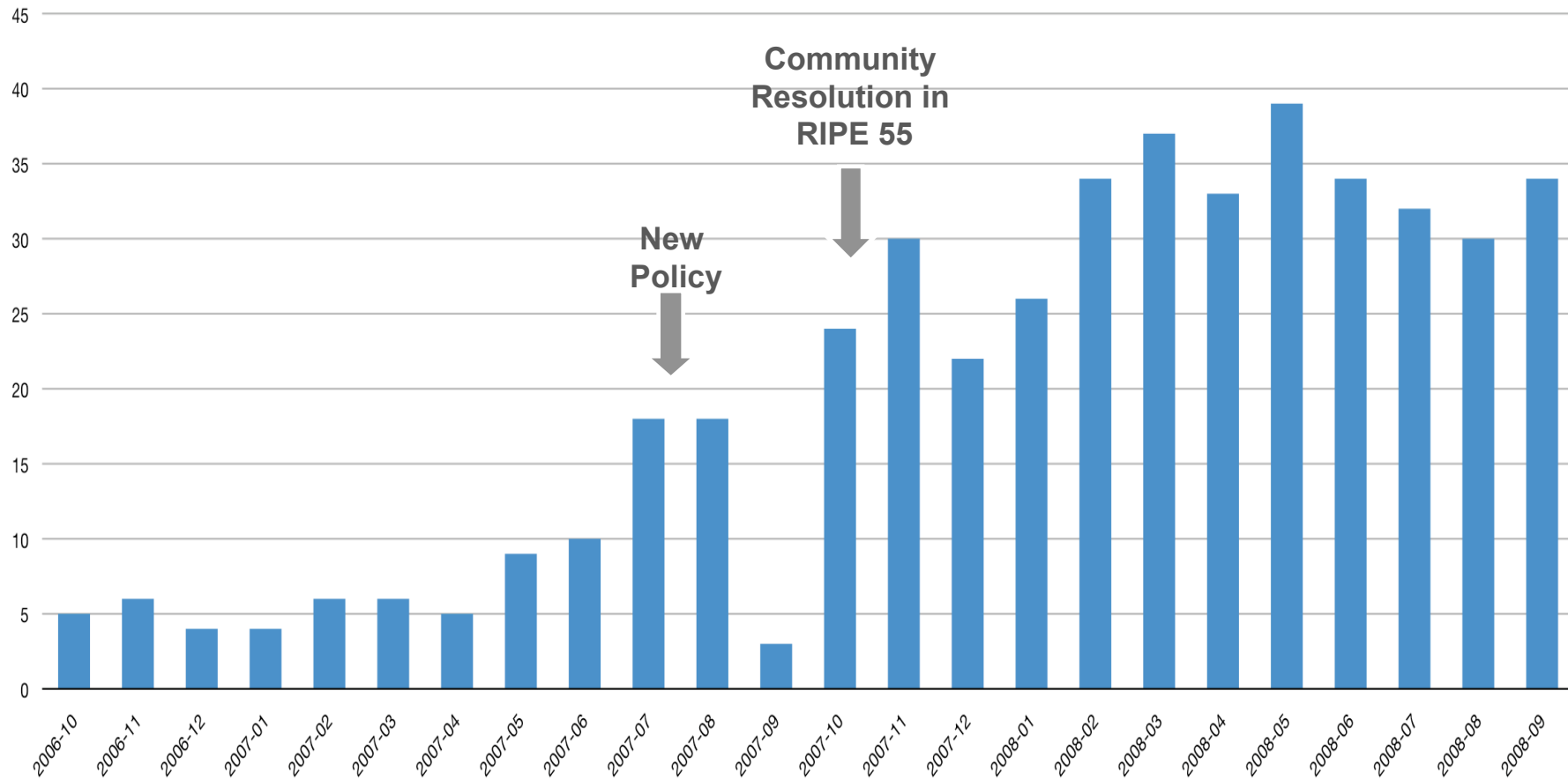
IPv6 Allocation world wide
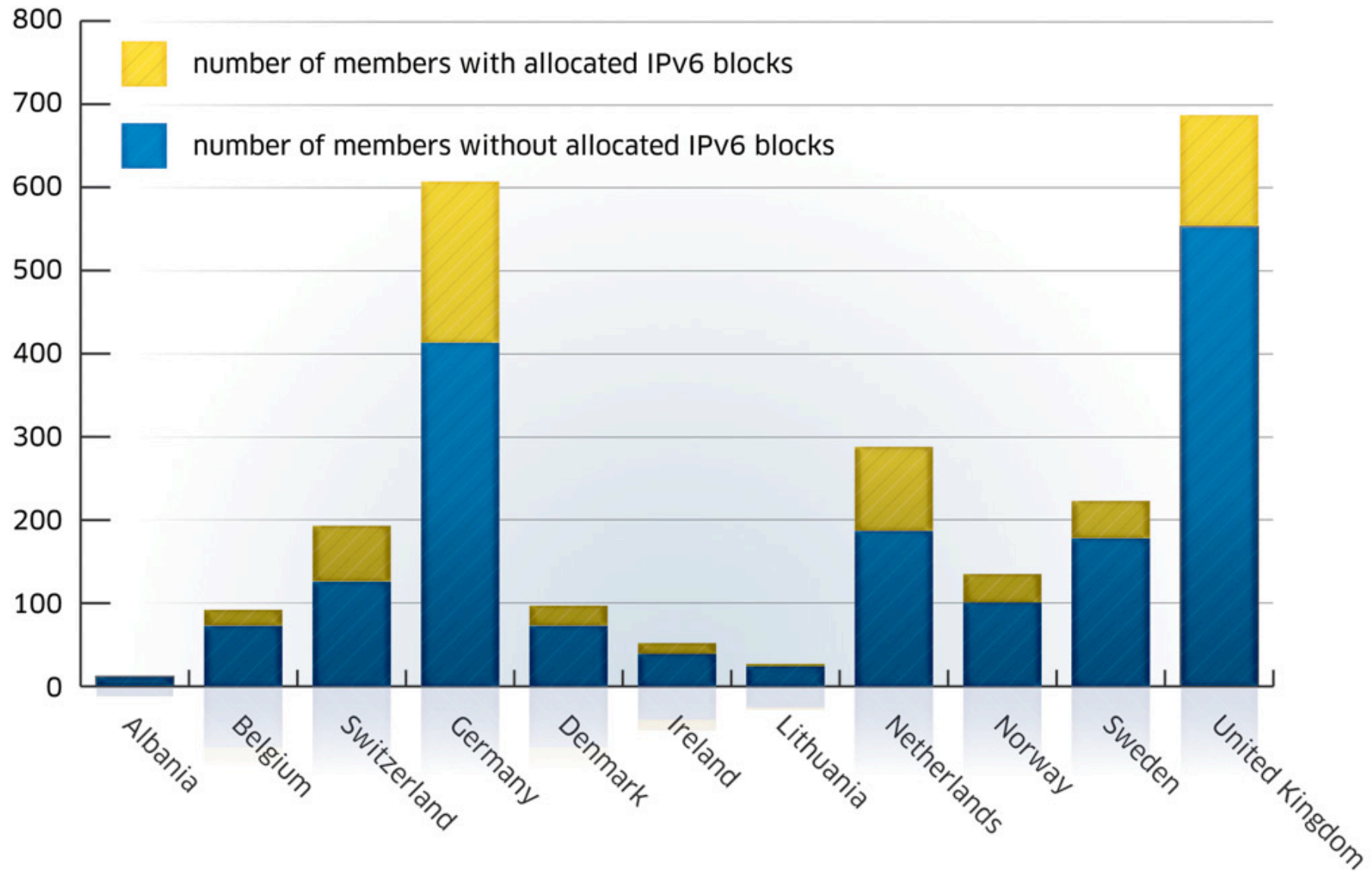
IPv6 Allocations and Announcements

IPv6 Allocations per Country

IPv6 penetration in your region

Conclusion

- Prepare for future with IPv4 and IPv6
  - Minimise the impact
  - Increased contact to space holders
  - Increased efficiency in usage
  - Enabling usage of allocated but unused space
  - Focus on prudence and responsible stewardship

- Increase IPv6 deployment
  - Easier access to resources
  - Raise awareness

References

- RIPE PDP
  - http://www.ripe.net/ripe/docs/pdp.html

- Document Store
  - http://www.ripe.net/ripe/docs/

- Current Proposals
  - http://www.ripe.net/ripe/policies/proposals/

- Archived Proposals
  - http://www.ripe.net/ripe/policies/proposals/archive/

- Address Policy WG Mailing list
  - http://www.ripe.net/ripe/maillists/archives/address-policy-wg/

- Policy Announce Mailing List
  - http://www.ripe.net/ripe/maillists/archives/policy-announce/

Questions?