



# Current RIPE Policy Developments and RIPE Policy Implementation

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# Contracts for Independent Resource Holders

- Independent Resources
  - PI address space (IPv4 and IPv6, IXP IPv6, Anycast)
  - AS Numbers
- Annual fees for Independent Resources
- Implementation – phased approach:
  - Phase 1: new assignments (March 2009)
  - Phase 2: existing assignments (ongoing)
  - Phase 3: RIPE NCC will directly contact End Users

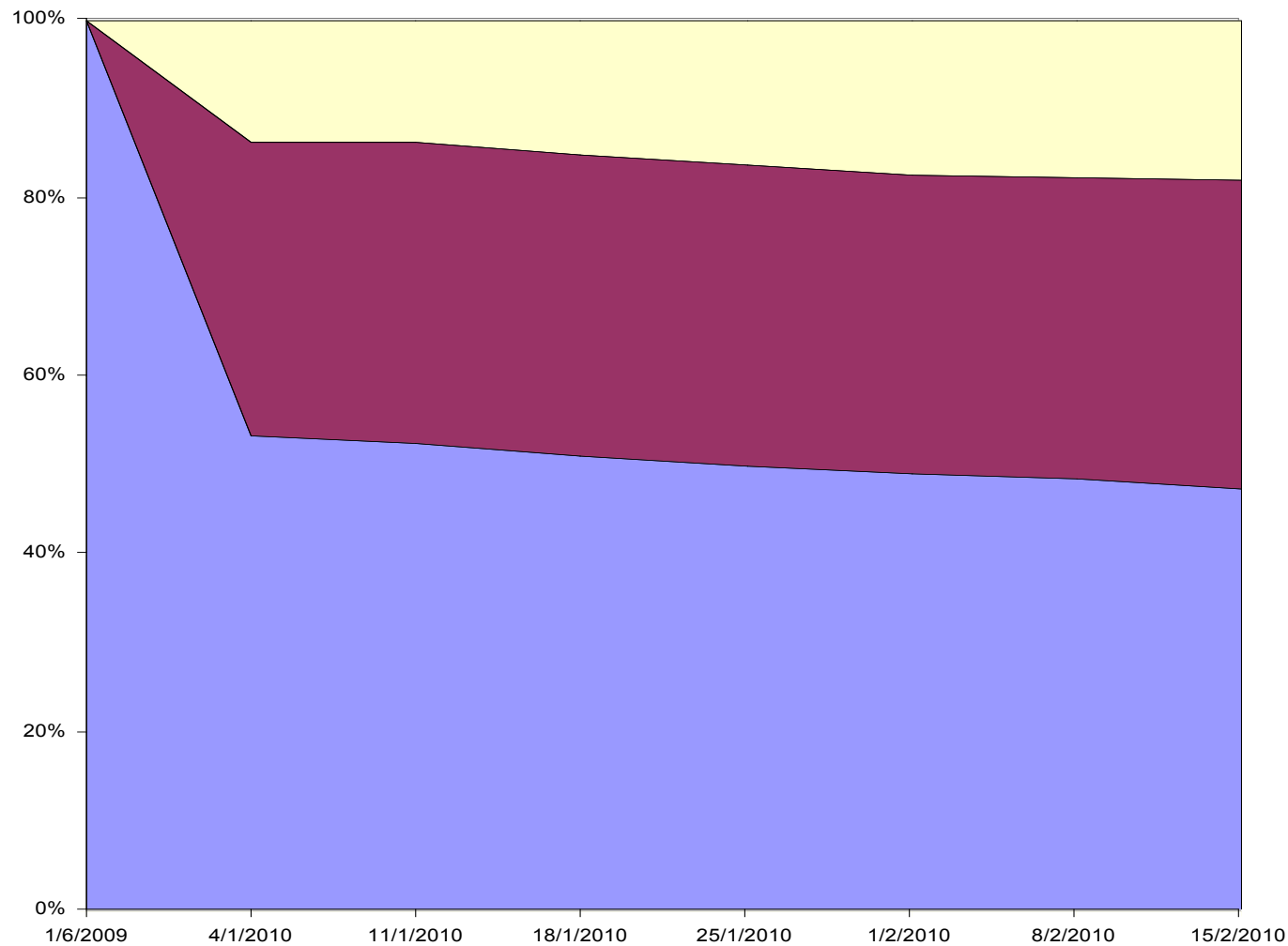


# Existing Independent Assignments

- End User choices (since Q2 2009):
  - Sign contract with their original LIR
  - Find a new sponsoring LIR
  - Become an Direct Assignment User
  - Become an LIR
  - Return the resource (address space or ASN)

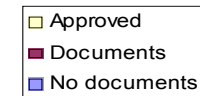


# End Users and their Agreements



Total End Users:

11,464





# Run Out Fairly Implementation

- Gradually reduced allocation/assignment periods, for a need of up to:
  - 9 months (July 2010)
  - 6 months (January 2011)
  - 3 months (July 2011)
- Since January 2010: assignments for up to one year



# Policy Development in RIPE



# How Can You Participate?

- Join mailing list discussions about policy proposals
- Read the Working Group mail archives
  - RIPE website → RIPE → Mailing Lists
- Come to the RIPE Meetings
  - Two free tickets for new LIRs
  - Remote participation possible



# Policy Proposals Currently Under Discussion

- End of IPv4
  - Use of Final /8
  - IPv4 Allocation and Assignments to Facilitate IPv6 Deployment
  
- Resource Certification
  - Using the Resource Public Key Infrastructure (RPKI) to Construct Validated IRR Data

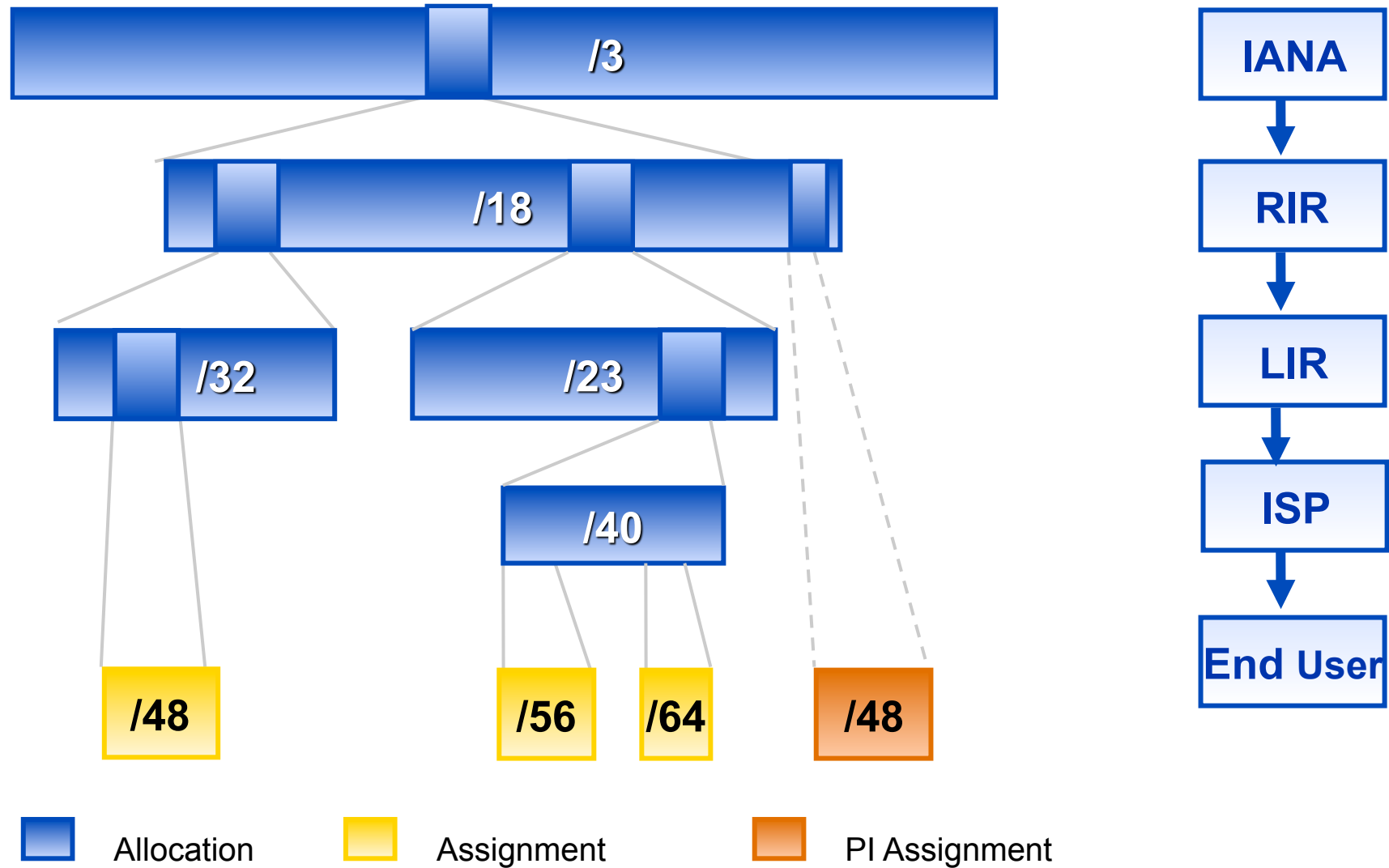




# Getting IPv6 from the RIPE NCC



# IPv6 Address Space Distribution





# To Obtain an IPv6 Allocation

- Your organisation must be an LIR
- Have a plan for making assignments within two years
- Minimum allocation size: /32
- For further allocations:
  - Previous allocations should be used by HD ratio of 0.86
  - The unit of measurement is /56



# If You're Not An LIR?

- Get a sub-allocation from an LIR
- Get a Provider Aggregatable (PA) assignment from an LIR:
  - /48 or /56 for End User sites
  - /64 for one subnet
  - /128 for hosts
- Apply for a Provider Independent (PI) IPv6 assignment from the RIPE NCC



# IPv6 in the Routing Registry

- RPSLNg compliant:
  - RIPE Database
  - IRRToolset: RtConfig
- Create “route6” objects for your IPv6 allocations
  - Example lookup: `whois -r -m -T route6 2001::/18`
- Describe routing policy in mp-import: / mp-export:



# IPv6 in the Reverse DNS

```
inet6num: 2001:0888::/32  
status: ALLOCATED-BY-RIR  
mnt-by: RIPE-NCC-HM-MNT  
mnt-domains: LIR-MNT
```

```
domain: 8.8.8.0.1.0.0.2.ip6.arpa  
mnt-by: LIR-MNT  
nserver: ns.example.com  
nserver: ns.ripe.net
```



# Questions?

