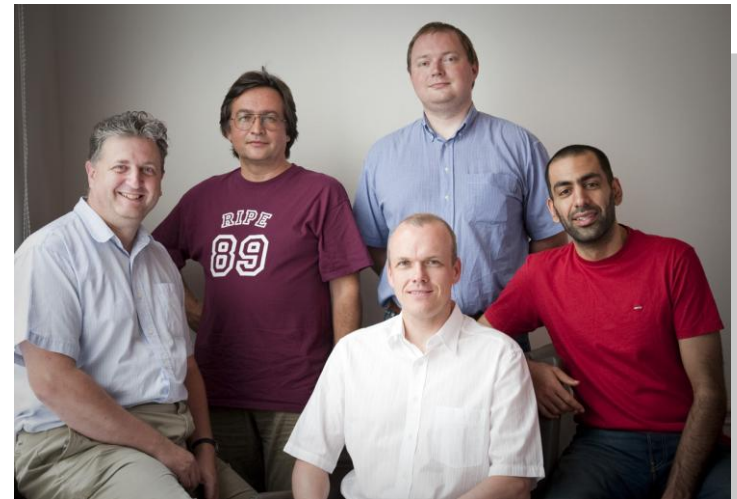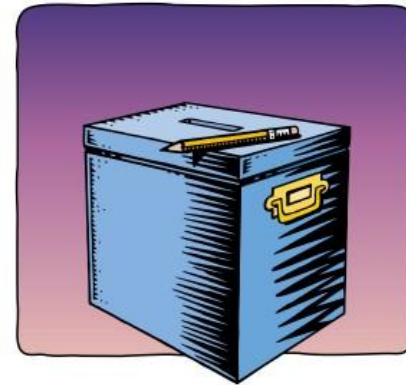# Update from the RIPE NCC

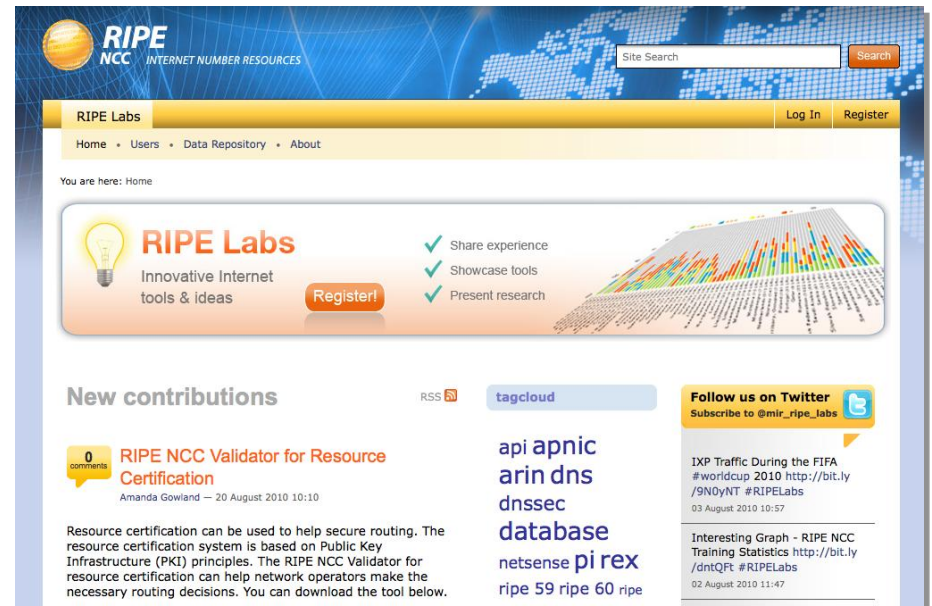Axel Pawlik

Managing Director

General Meetings, May & October

- Electronic Voting

- Executive Board elections
    - Remco van Mook incoming
    - Janos Zsako outgoing

- Meetings were webcast to members (585 remote participants in October)

- Small Article Changes

- Charging Scheme 2011
    - First IPv6 allocation is "free"

RIPE Labs 2.0

- Started in 2009
- Goal to improve community interaction
- Recently re-launched
- Picking up speed

- It's for you, too…

http://labs.ripe.net/

Measurements Pilot

- TTM is growing old
- Requirements have changed
- Has limited distribution
- So….

- … more measuring nodes needed
- Goal: Reach each AS, each major city
- Will announce pilot at RIPE 61
- Article series on labs.ripe.net

IPv6 Ripeness

- How to measure state of IPv6 deployment?
  - Allocation received
  - Prefix visible in RIS
  - Route object registered in DB
  - Reverse DNS set up
- Thinking about 5th property
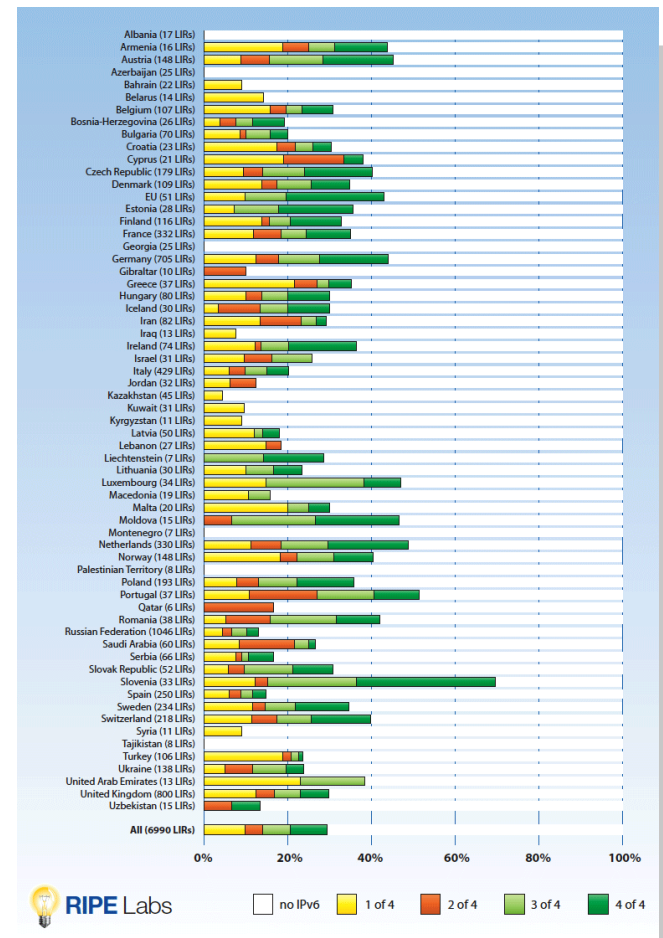
IPv6 Ripeness in RIPE region (7187 LIRs)
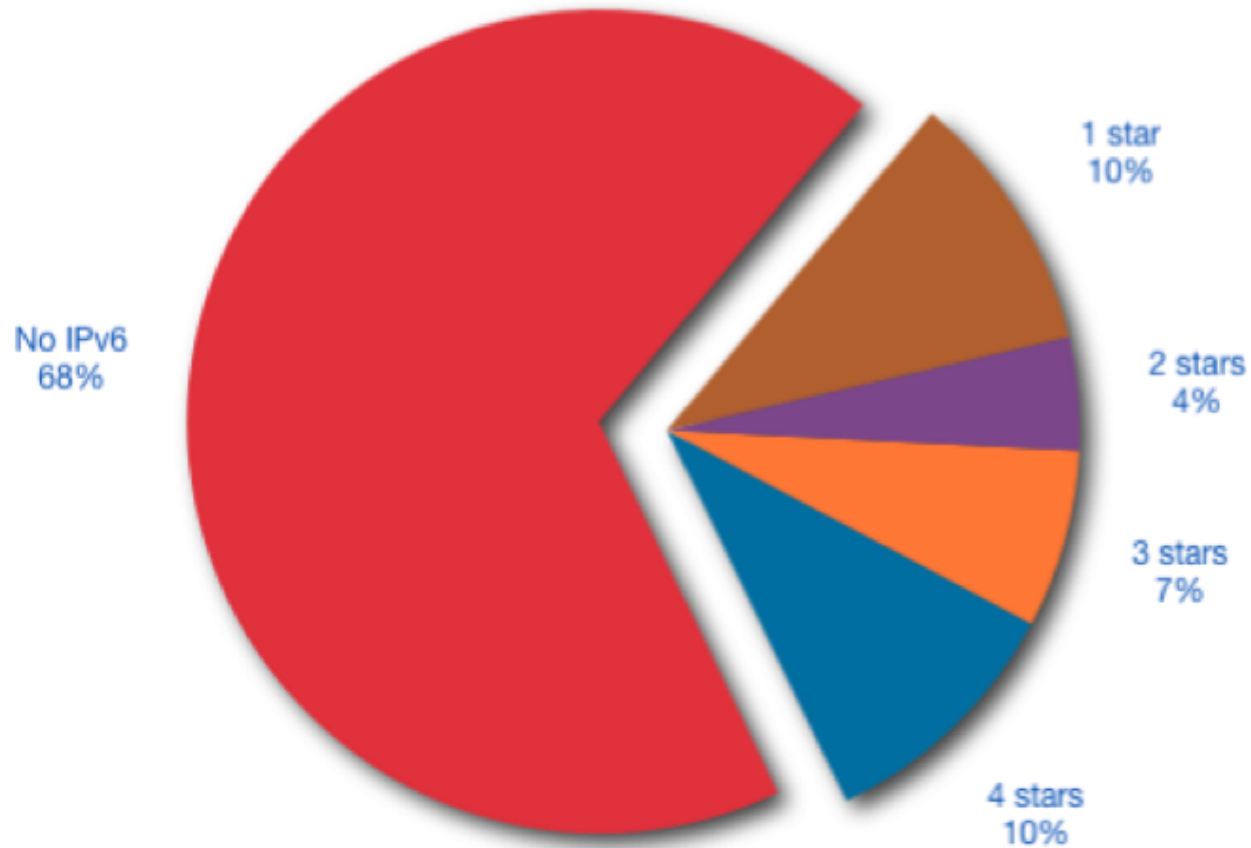
Unterstanding Community Needs

- Formal process Activity Plan
  - long cycle, not particularly agile

- Want to increase community interaction

- Need to understand requirements and interests

- RIPE Labs

- Training Services
  - Mini surveys

- Membership Survey planned

Staff Exchange with APNIC

- Formal RIR staff exchange long time idea

- Finally becoming reality

- Pilot project among APNIC / RIPE NCC

- Gary Kennedy (APNIC) came to RIPE NCC

- Gerard Leurs (RIPE NCC) back from APNIC

- Looking forward to extending exchange to other RIRs, while continuing low threshold "visits".

- APNIC / RIPE NCC is next!

External Relations and Communications

- Coordinating work for NRO
    - Phew!

- Usual "background work"
    - Activity Plan 2011
    - Meeting Support
    - Various websites
    - PR activities with Racepoint agency
    - Event support as needed, planned & ad-hoc …
    - …

Outreach Events 2010

- Roundtable, Amsterdam, 22 Feb

- ITU IPv6 WG, Geneva, 15-16 Mar

- Law Enforcement, London, 17 Mar

- MENOG / Regional Mtg, Ryadh, 10-14 Apr

- WTDC, Hyderabad, 24 May – 4 Jun

- Regional Roundtable ME, tbd

- ITU IPv6 Group, 1-2 Sep

- IGF, Vilnius, 14-17 Sep

- IPv6 Roadshow Middle East (MENOG)
  - Istanbul, Damascus, Tehran, Amman

- …

Outreach Channels

- IPv6ActNow.org

- CircleID regular articles

- Analyst & journalist briefings

- Support for 3rd party events

- Government IPv6 day participation
    - Norway, October
    - EC, December

Policies regarding IPv4 Depletion

- Allocations from the last /8 (2010-02)

  - Policy on how the last Internet resources will be distributed in the RIPE Region

  - Published third version for community comment and review

- Global Policy for IPv4 Allocation by the IANA post exhaustion (2010-05)

Policies regarding "Registration Quality"

- Registration Requirements for IPv6 End User Assignments (2010-06)

- Previous informal Training Survey ("reputation")
  - Abuse contact information (2010-08)
  - Frequent Update Request (2010-09)

- Adding reference to sponsoring LIR in **inetnum**, **inet6num** and **aut-num** objects (2010-10)

Policies regarding "Certification"

- Initial Certification Policy for Provider Aggregatable Address Space Holders (2008-08)

  - Business Practices (Closures etc)

- Registration Policy (being developed)
  - Registry Definition

Registration Services, more Quality

- 2007-01 implementation - Contractual requirements for End Users of independent resources
  - Processing incoming end user contracts through LIRs
  - After RIPE 61 find and contact end users, ourselves

- KPMG Audit on RS processes

- Internal escalation process for large resource requests

2007-01 End User Contracts

- To govern IPv4 PI space:
    - Phase 1 (Started 3 March 2009)
        - Set contract for all new independent resources
    - Phase 2 (May 2009 – November 2010)
        - End Users to sign contracts with LIR or RIPE NCC
    - Phase 3 (December 2010/January 2011)
        - RIPE NCC contacting 'orphaned' End Users

Registration Data Quality: "RDQ"

- Two questions for each prefix:

- Is this RIPE space?
  - Internal records cleaned up:
    - 1097 prefix inconsistencies fixed
    - (600 related to ERX/Legacy)

- How confident are we about legitimate holder?
  - Identify areas to improve Registry Data Quality
  - Prevent/ Resolve conflicts about address space usage
  - Support Policy Development Process with hard data
    - (Impact analysis)

Registration Quality

- **Reclamation**

  - Announced IP address space, "pending closure" LIRs

  - Since 2007, 847 non-paying LIRs contacted

  - 238 LIRs re-opened

  - 620 LIRs had Allocations returned to the RIPE NCC (6,123,520 IP addresses)

- **LIR Audit Activity**

  - From 1996 until 2008 - 343 Audits

  - 2009 - 301 Audits

  - 2010 - 415 Audits (to date)

Runout Predictions *(be prepared…)*

www.ipv4depletion.com:

IANA: February 2011

RIR: November 2011

IANA Runout
(www.ipv4depletion.com)

RIR Runout
(www.ipv4depletion.com)

| Jan 2011 | Feb 2011 | Mar 2011 | Apr 2011 | May 2011 | Jun 2011 | Jul 2011 | Aug 2011 | Sep 2011 | Oct 2011 | Nov 2011 | Dec 2011 | Jan 2012 |

IANA Runout
(www.potaroo.net)

RIR Runout
(www.potaroo.net)

www.potaroo.net:

IANA: March 2011

RIR: September 2011
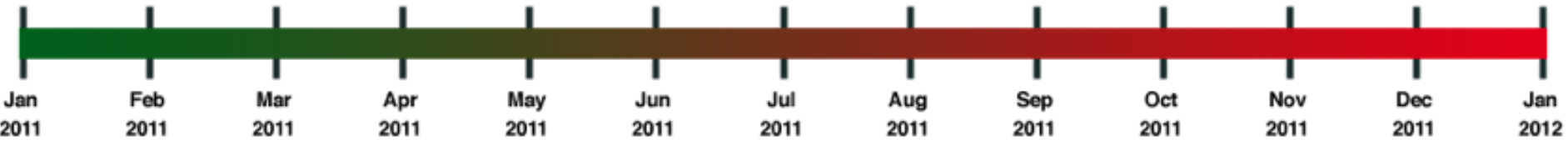
Resource Usage

- Unannounced ERX Space:
  - Large part of ERX space registered in RIPE Database
  - But not visible on global routing tables

- Contact the resource holders with question:
  - "Are you willing to make resources available for
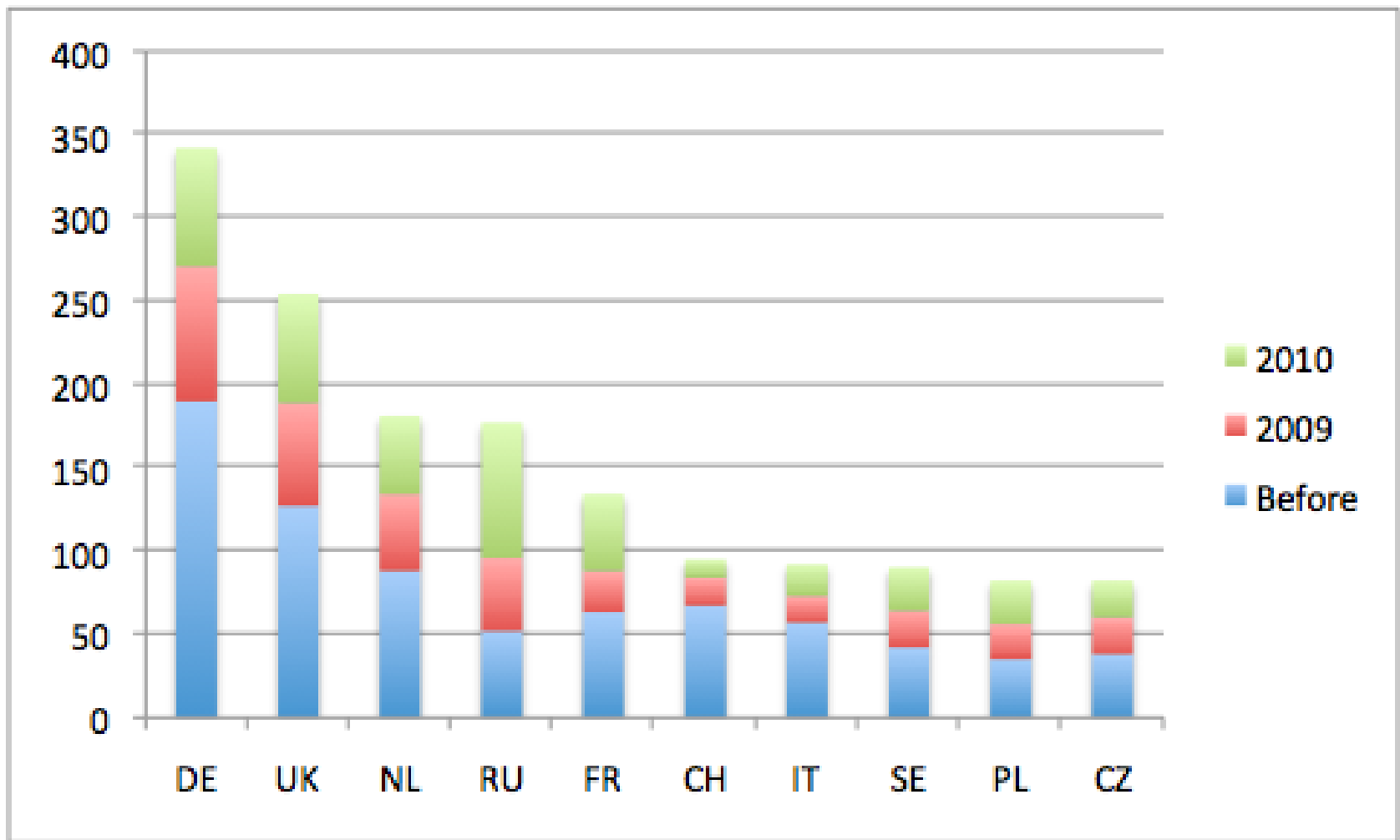 - reallocation?"

Resource Usage

- **Reservations:**
  - Agreement amongst RIRs:
    - As of January 2011 no more reservations
    - Outstanding reservations returned to address pool

- **Various Registry Space:**
  - Holes divided equally per RIR long time ago:
    - approx 390 /16 per RIR
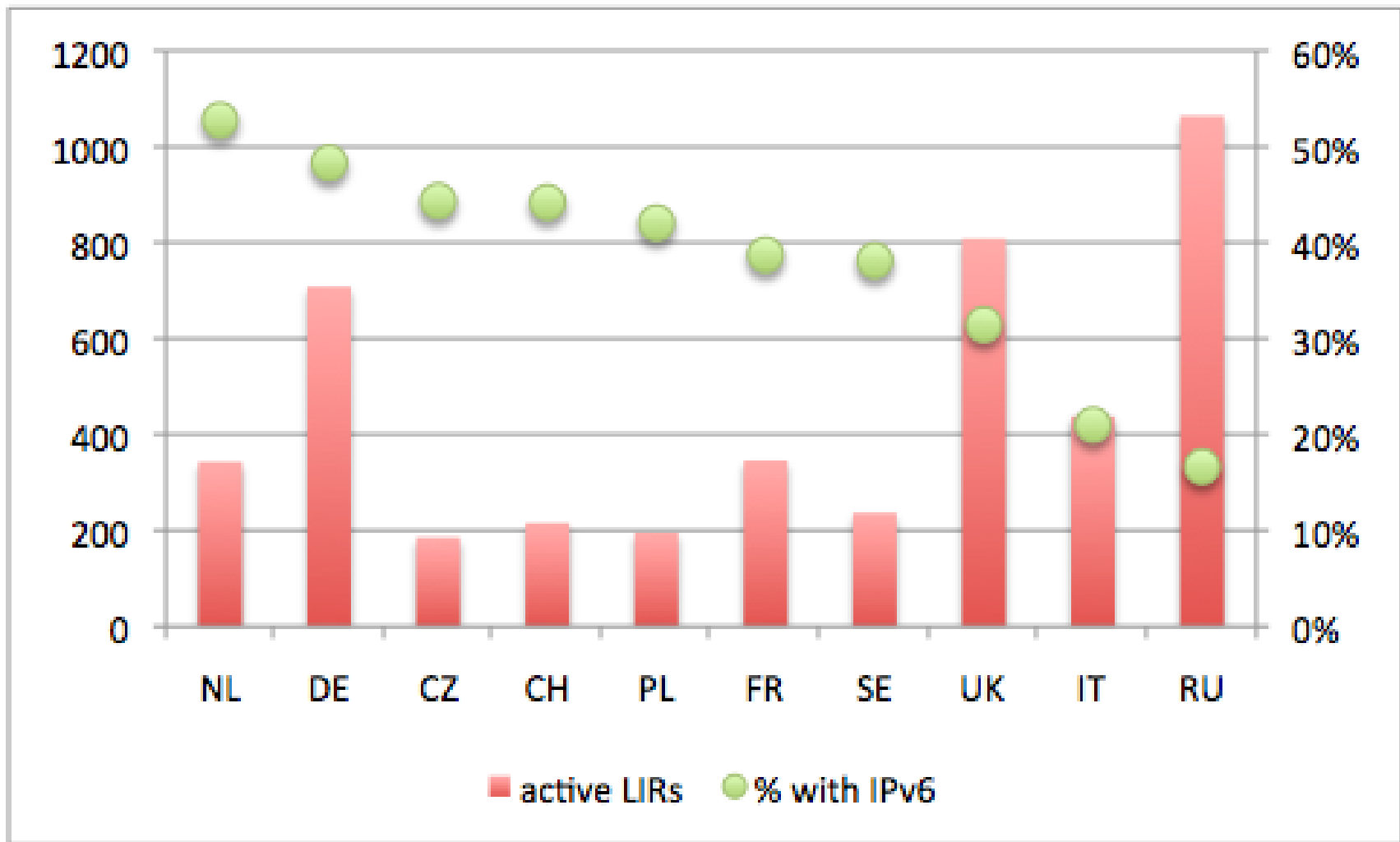   - RIRs will start to use in near future

IPv4 – Statistics
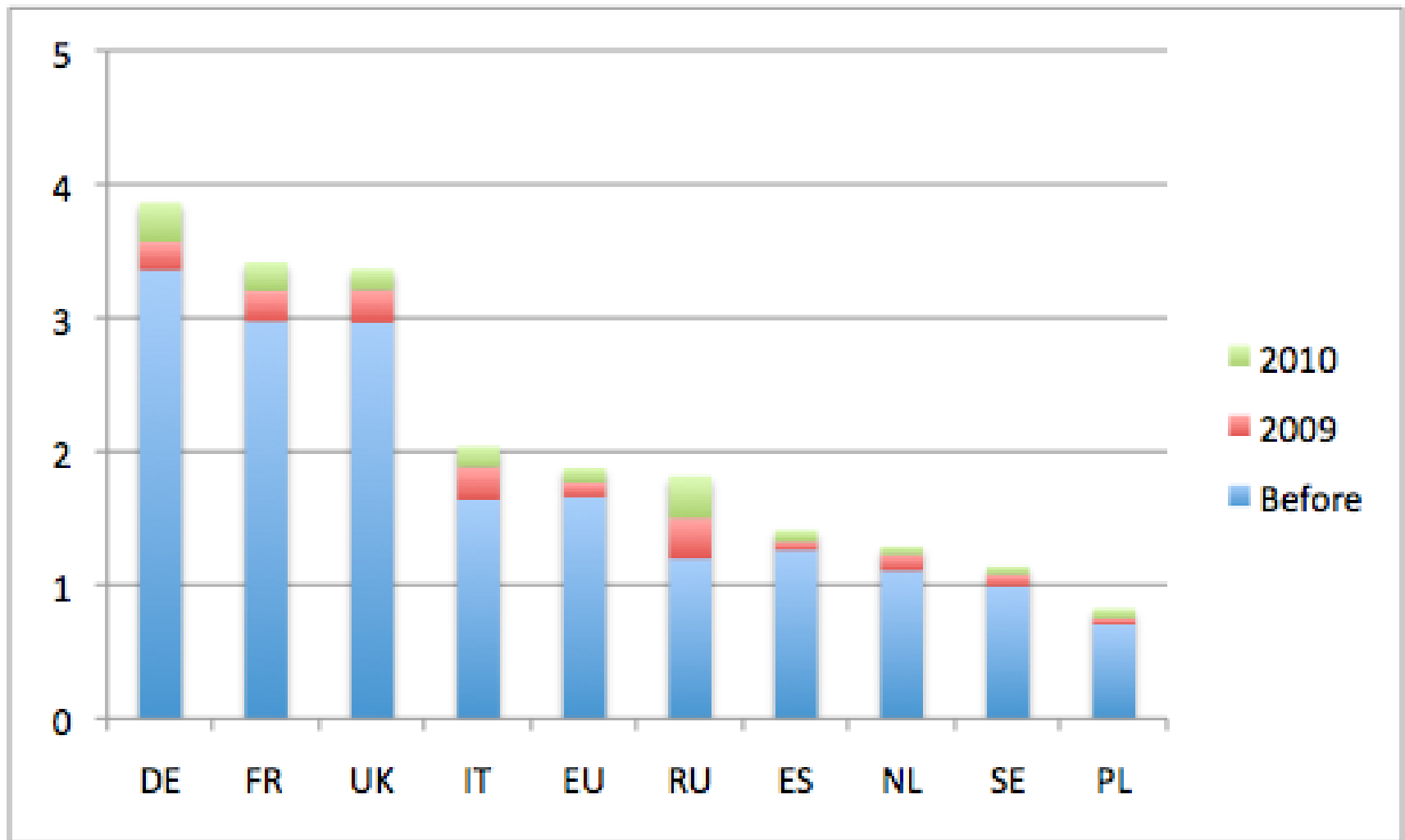
Counted in /8s

IPv6 – Statistics
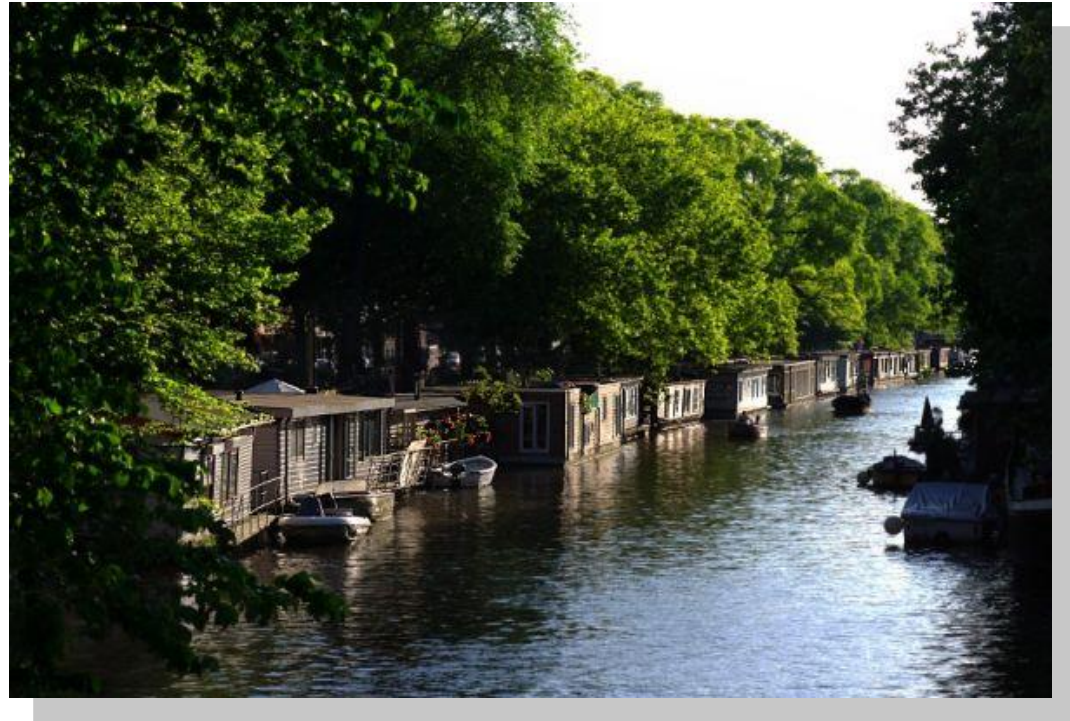

Number of allocations shown

IPv6 - Statistics

% of LIRs with an IPv6 allocation

RIPE 62

- 2 – 6 May 2011
- Amsterdam

Questions?