



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE NCC Update

Axel Pawlik
Managing Director
RIPE NCC

ENOG 15 | Moscow, Russia | 4-5 June 2018

What is the RIPE NCC?



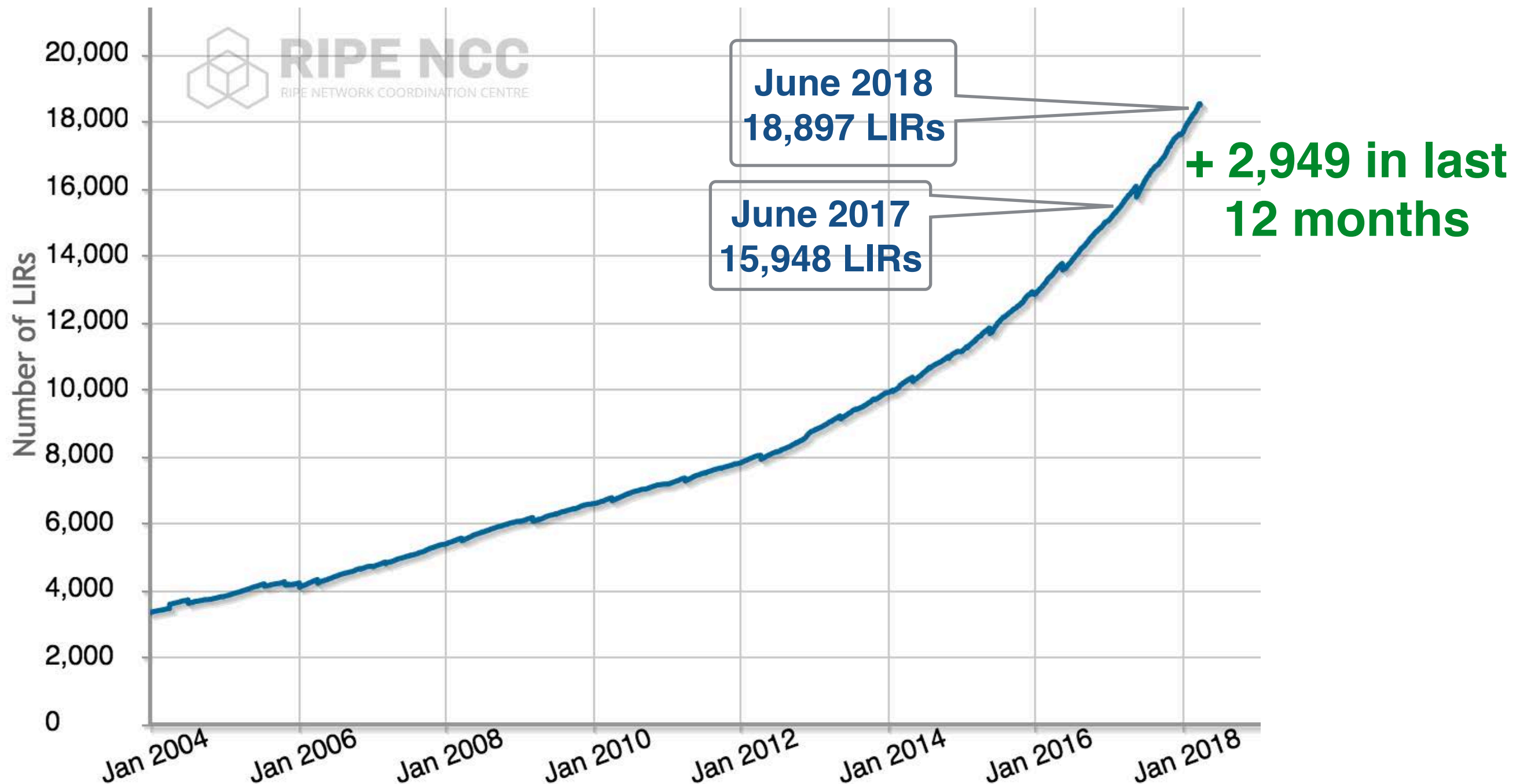
- Secretariat for the RIPE community
- Distribute IP addresses and AS Numbers
- Maintain the RIPE Database
- RIPEstat, RIPE Atlas and other tools and services
- Funded by members, fully autonomous
- Open, transparent, neutral and impartial

Our Focus for 2018



- Rethinking our service delivery and ensuring the accuracy of the RIPE Database
- Outreach to stay connected with our members and other stakeholders
- Strengthen the global RIR system and ensure it remains accountable, transparent and resilient
- Understand our members to better meet their needs and add value to their operations

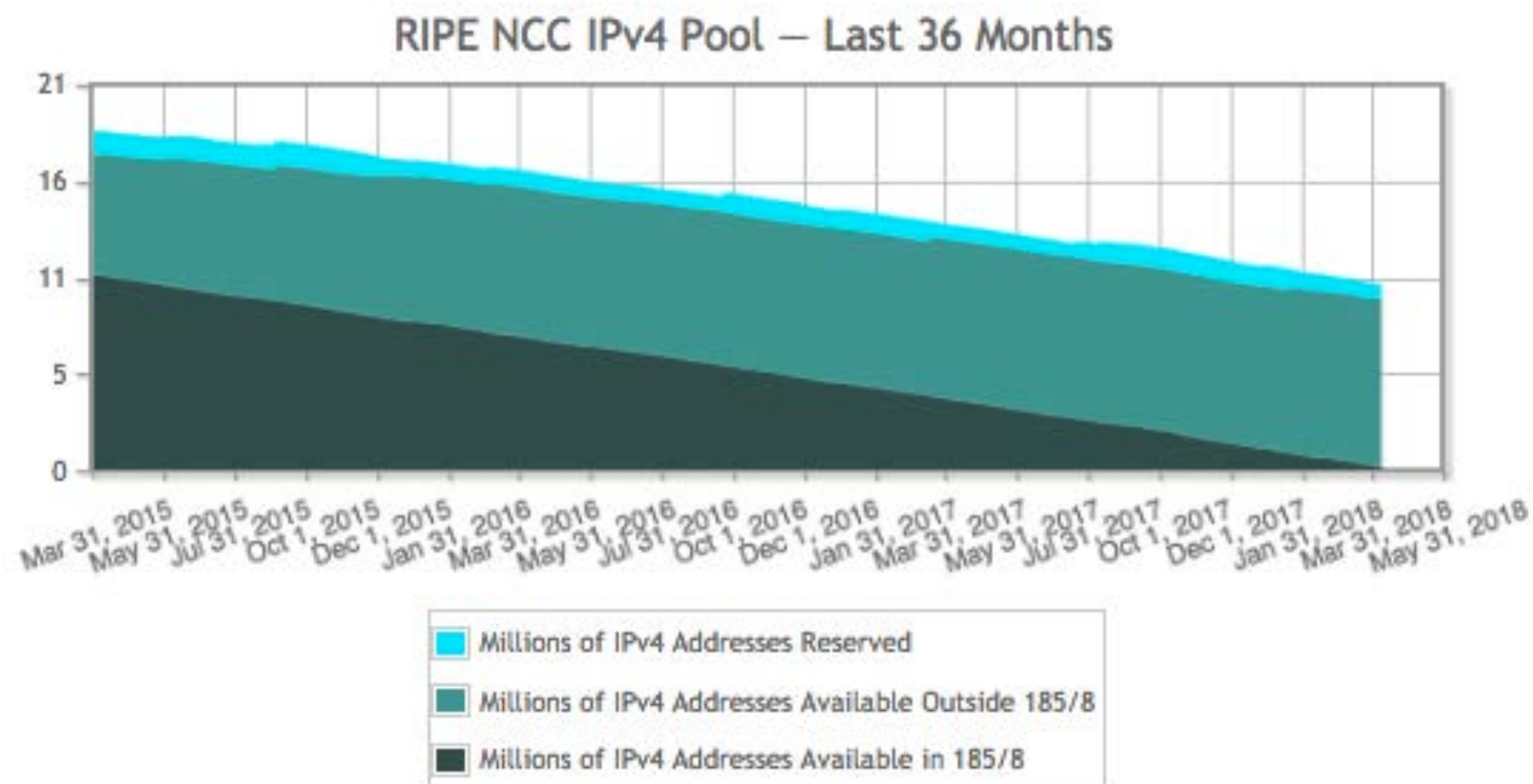
Membership Growth...



...Impacting our IPv4 Pool



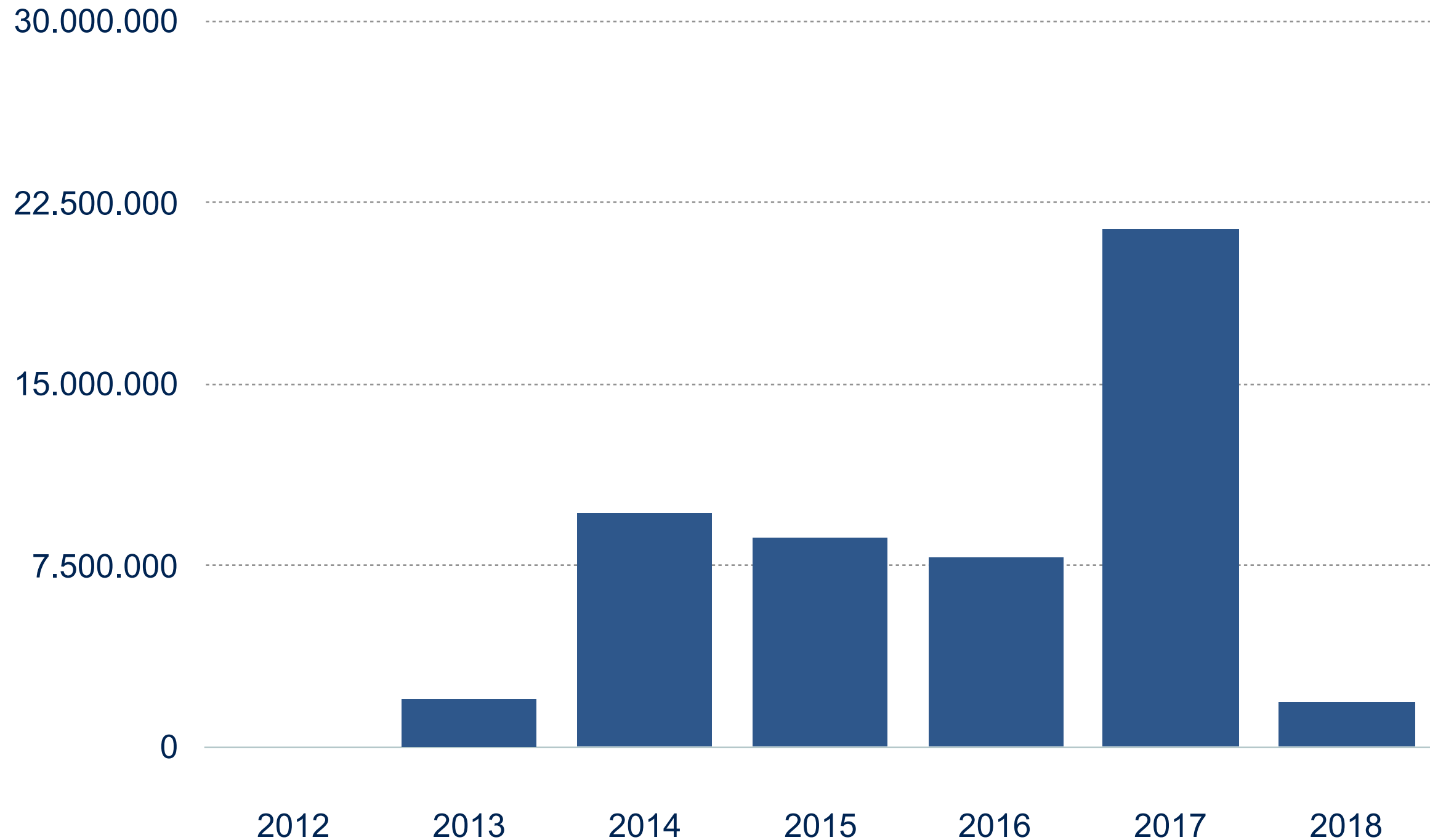
- Membership growth driven by need to obtain IPv4 /22 allocations (1,024 addresses)
- Last /22 from 185/8 recently allocated - we expect remaining IPv4 to last two more years at current rate



21 Million Addresses Transferred in 2017



IPv4 Transfers Within the RIPE NCC Service Region

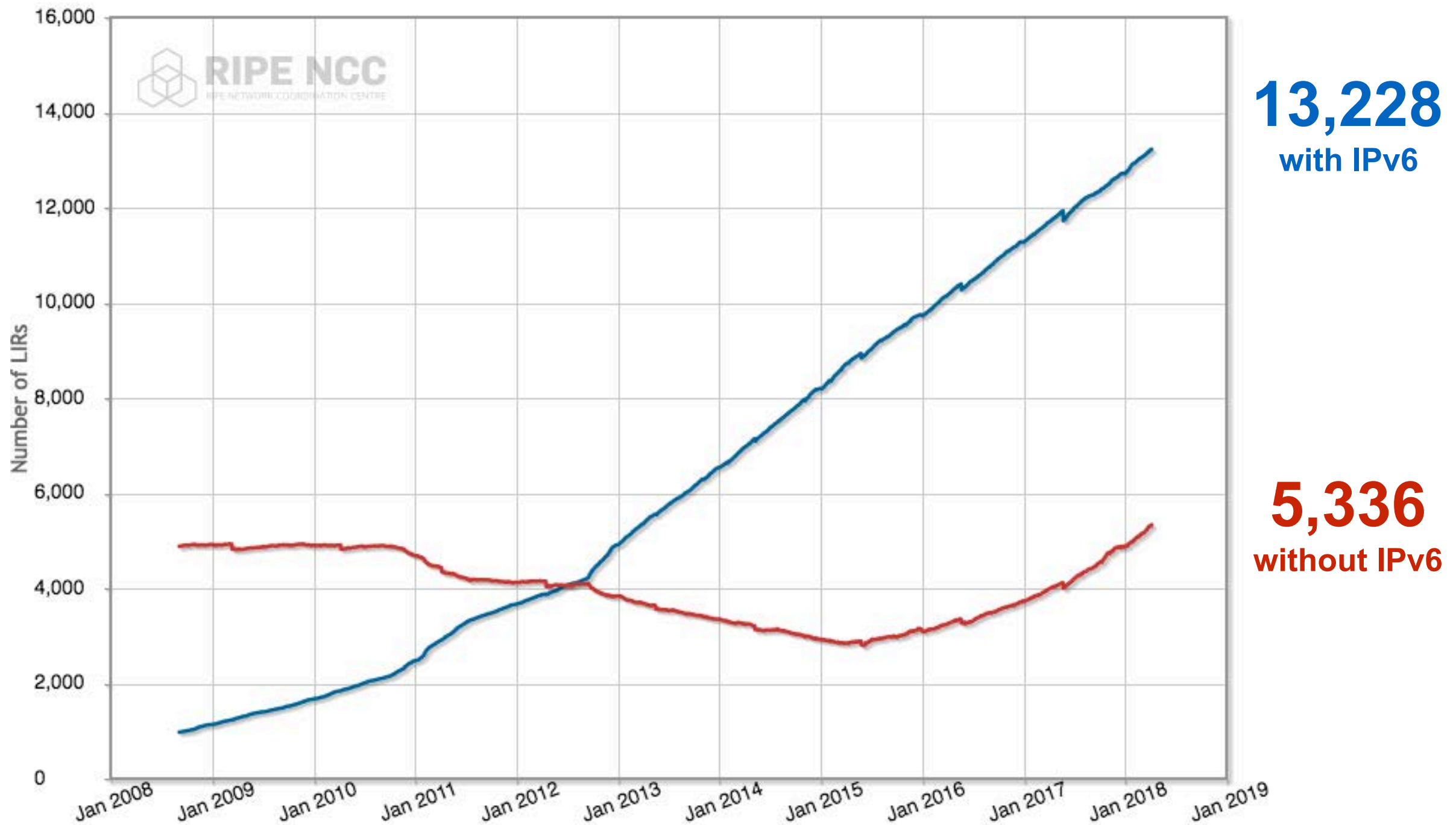


...But was This Really the Market?



- 78% of 21 million addresses were “administrative transfers” between related entities
 - Subsidiaries of the same group / business restructuring
- The remaining 4.6 million addresses transferred between unrelated LIRs “on the market” — continuing the downward trend of recent years
- But a higher *number* of transfers overall — so more transfers of smaller blocks
 - Analysis on RIPE Labs: <https://www.ripe.net/s/0EmN>

More LIRs Without IPv6...



...But Maybe That's Okay



- Drop began after IPv6 requirement was removed for IPv4 /22 allocations
- Doesn't necessarily point to disinterest among new operators:
 - Enterprises and other organisations are joining to get a last bit of IPv4 — these organisations can rely on their service provider for IPv6
- Entities with multiple LIRs generally won't need IPv6 allocations for each LIR
 - More membership trends on RIPE Labs:
<https://www.ripe.net/s/SUzM>

RIPE NCC General Meeting (GM)



- It's vital that we get your input on member issues
- At the GM in May:
 - Two new executive board members elected
 - Voted on the Charging Scheme for next year
 - Adopted the financial report
 - Confirmed new arbiters (including one from Iran)
 - Discharged the Executive Board
- Next GM at RIPE 77, Amsterdam: register and participate (in person or remotely)

RIPE NCC Activity Russia 2018



- Member Accounts
 - 1,580 member accounts open as of June 2018
 - 1,145 with IPv6
- Allocations
 - 5,040 IPv4 allocations (+157 in 2018)
 - 1,259 IPv6 allocations (+48 in 2018)
- RIPE Atlas
 - Over 470 RIPE Atlas probes connected
 - 5 RIPE Atlas anchors

GDPR



- The EU General Data Protection Regulation (GDPR) became applicable in May this year
- Internal project launched in March 2017 to review RIPE NCC services and procedures
- Will continue to review RIPE NCC services to ensure compliance with GDPR
- Some amendments to be made to RIPE Database
- More details on RIPE Labs:
<https://www.ripe.net/s/jf7v>

Internet of Things (IoT)



- Pace of development introduces significant security, privacy and safety concerns
- RIPE community has formed a new working group to discuss challenges and opportunities around IoT
- IoT Working Group is a focal point for the community to develop positions on IoT matters

<https://www.ripe.net/participate/ripe/wg/iot>

Capacity Building



- Supporting local communities
 - Regional Meetings in Tehran, Moscow, Timisoara
 - Member Lunches across our service region
 - IPv6 Roadshow program, Train the Trainer, other training courses
 - Country-focused meetings (Kazakhstan in 2018)
 - LEA meetings and Roundtable Meetings for Governments
 - Greater engagement in the Caucasus with a new staff member based in the region

Over 25 NOGs in Our Service Region



New NOGs:

**ALNOF
NONOG
PTNOG
GRNOG
RONOG
iNOG
IRNOG**

Supporting NOGs



- We can help local/national NOGs
- Providing speakers for their events (RIPE NCC staff or others)
- Help with sponsorship (venue, catering, social events)
- Offering expertise (from supporting RIPE for almost 30 years)

Our Goals



- Connect NOG participants with the RIPE community (and vice versa)
 - Full plenary session on NOGs held at RIPE 76, along with a meeting for NOG organisers to share experiences
- Support local and regional relationships
- Engage more effectively across our service region
- NOGs have a crucial role to play in the Internet's development - we support that!

Policy Proposals Under Discussion



- **2018-01, “Organisation-LIR Clarification in IPv6 Policy”**
 - Allows organisations to request IPv6 “per LIR” rather than “per organisation”
- **2018-02, “Assignment Clarification in IPv6 Policy”**
 - Clarifies the definition of “assign” in the IPv6 policy
- **2018-03, “Fixing Outdated Information in the IPv4 Policy”**
 - Updates key sections in the IPv4 policy

Webinars



- We offer the webinars on the following topics:
 - Internet Routing Registry (New)
 - RIPE Atlas
 - RIPE Database
 - IPv6
 - Internet Governance
 - KSK-Rollover

RIPE NCC::Educa



- One day “online event” with a series of webinars focusing on a specific topic
- Webinars conducted by RIPE NCC staff and RIPE community members
- Provides support to members who can’t make it to training courses
- Next RIPE NCC::Educa focussing on IPv6 takes place this week to mark 6th anniversary of World IPv6 Launch Day

RIPE NCC Academy



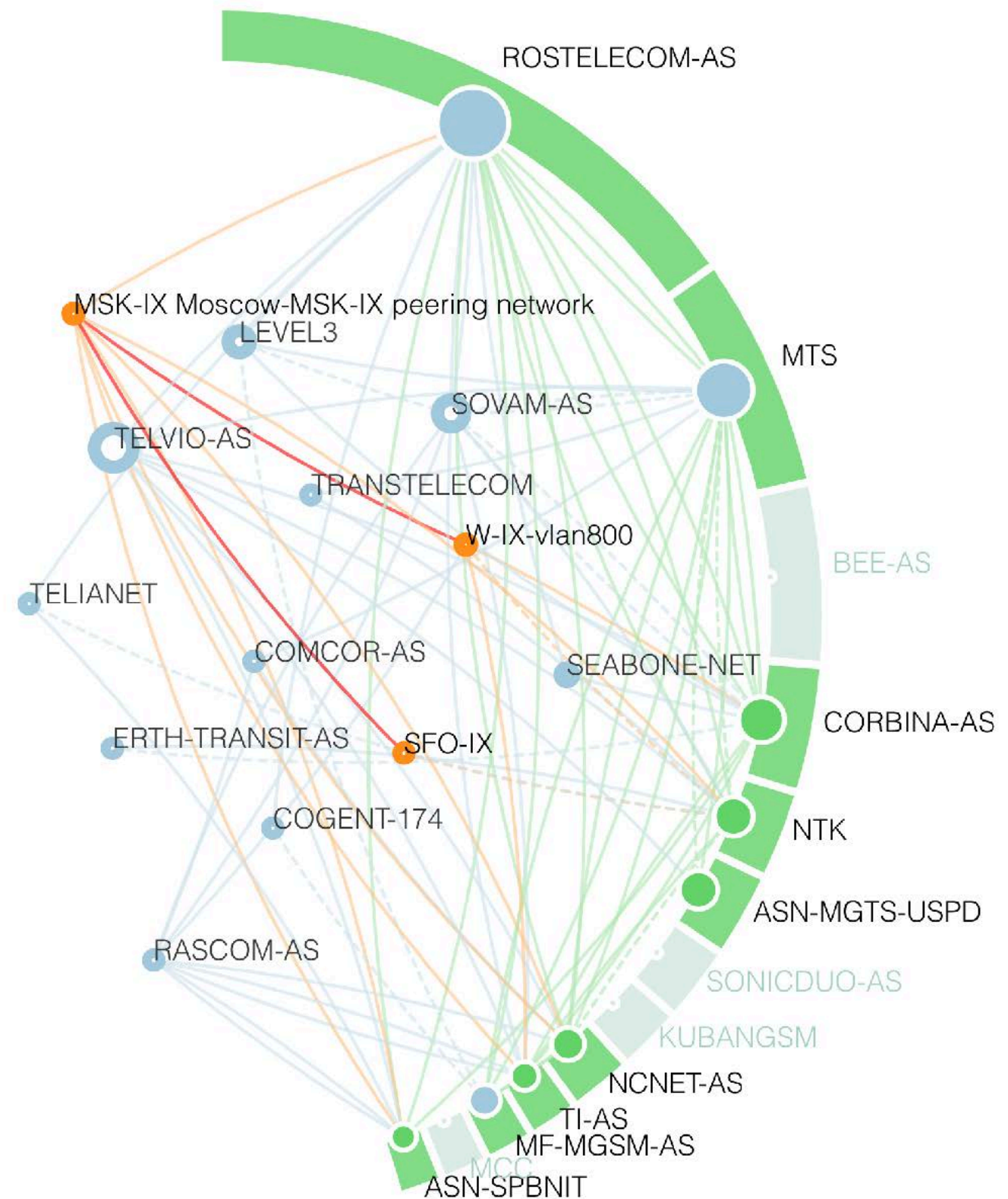
- A virtual learning environment
- Follow online courses and get qualified:
 - Local Internet Registry
 - RIPE Database Expert
 - Introduction to IPv6
- Available to members and non-members
- Developing options to get certified through the academy

academy.ripe.net

New Visualisation for IXP Country Jedi



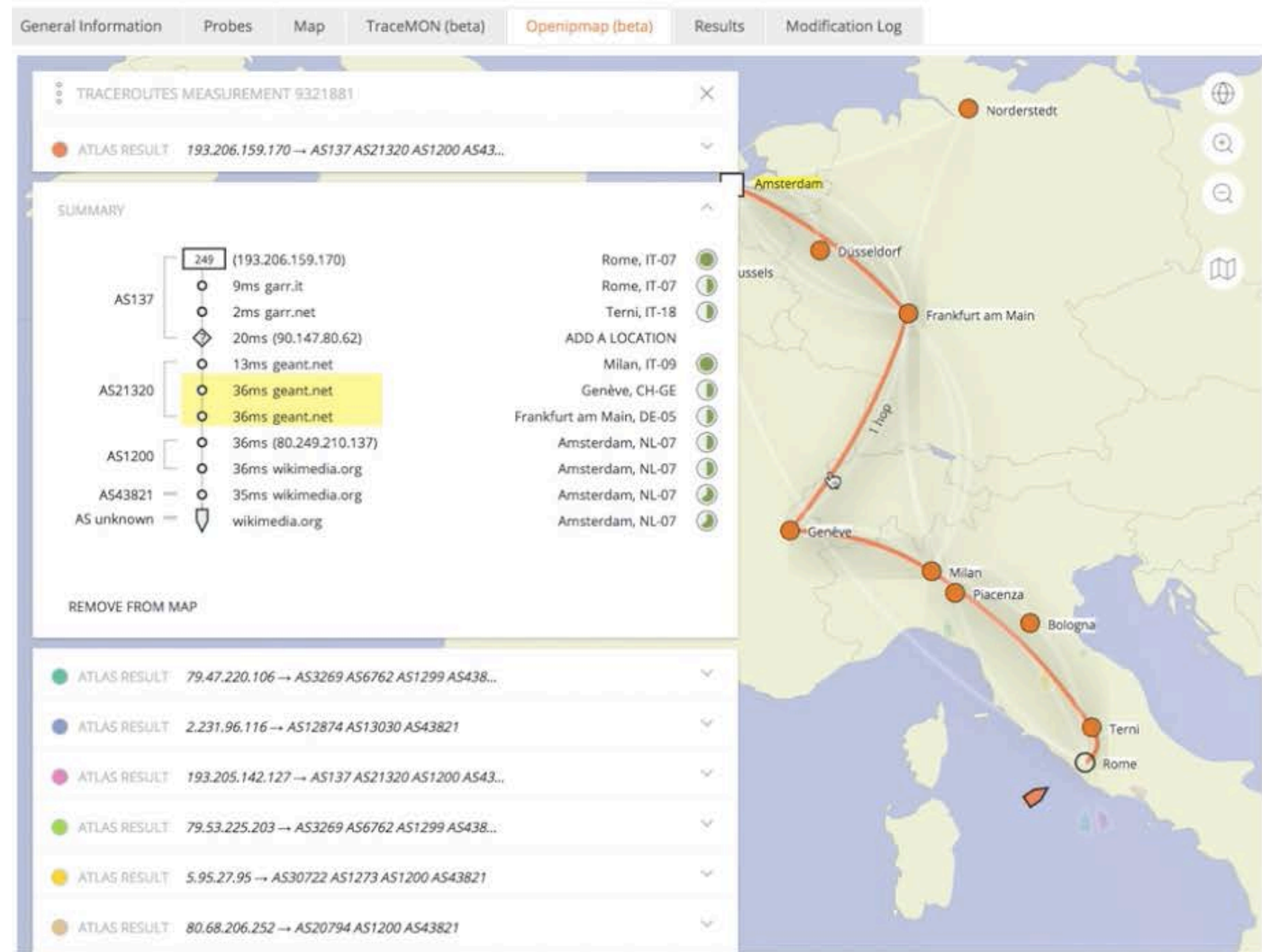
- Sketch of user-to-user connections within a country
- Snapshot of different ways networks interconnect their users
- <http://sg-pub.ripe.net/ixp-country-jedi/ru/>



RIPE IPmap



- A collaborative approach to geolocation for core internet infrastructure
- ipmap.ripe.net



Fellowships and Funding



- RIPE Academic Cooperation Initiative (RACI)
- RIPE and ENOG Fellowships
 - Four ENOG fellows with us here at ENOG 15:
Bondarenko Sergey (Russia) **Denis Mikhlevich** (Russia)
Anna Karapetyan (Armenia) **Mansur Mirzoev** (Tajikistan)
 - Helping people attend and present at RIPE and RIPE NCC Regional Meetings
 - Attendees receive tickets, travel and accommodation
 - More information online:
<https://www.ripe.net/participate/ripe/ripe-fellowship>

Next RIPE Meeting





Questions

axel@ripe.net

