

#### **RIPE NCC Update**

Axel Pawlik Managing Director RIPE NCC

ENOG 12 Yerevan 4 October 2016

#### About the RIPE NCC



- Secretariat for the RIPE community
- Maintains the RIPE Database
- One of five Regional Internet Registries (RIRs)
  - Serving Europe, the Middle East and parts of Central Asia
  - 76 countries
- Allocate and assign IPv4, IPv6 and AS Numbers
- Outreach, tools, measurements, training and more!

#### About the RIPE NCC



- Independent, not-for-profit, bottom-up membership organisation
- Anyone can become a member
- Incorporated into the Netherlands, governed by Dutch law
- Funded by members, fully autonomous
- Open, transparent, neutral and impartial
- Offices in Amsterdam and Dubai
  - Approximately 140 staff members; two in Moscow

### **RIPE NCC Activity in 2016**



- Maintaining a strong registry
- RIPE NCC Survey 2016
  - Collecting and acting on feedback
- Outreach and external relations throughout our service region
  - Regional meetings, member lunches, trainings, etc.
  - Improving our processes for greater efficiency
- Providing enhanced statistics and analysis
- RPKI Validator

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#### **ENOG Website Redesign**



- Better navigation and content organisation
- Clear and modern design
- Mobile-friendly and responsive
- Added improved features in the back-end for presentation submission and rating
- We welcome your feedback!

## enog.org

#### What's Left in 2016



- RIPE 73 in Madrid
- RIPE NCC General Meeting (GM) October 2016
- RIPE Atlas Hackathon in Madrid
- NRO NC Election
- Member Lunches
  - Zagreb, Kiev, Amman
- Moving to our new office in Amsterdam







- 24-28 October 2016 at the Meliá Castilla Hotel in Madrid
- Draft Meeting Plan is now online
- Participate in person or remotely
- ripe73.ripe.net

#### **RIPE NCC General Meeting October 2016**

- 26-28 October 2016 at the Meliá Castilla Hotel in Madrid, alongside RIPE 73
- Registration is open
- Topics to be discussed:
  - RIPE NCC Activity Plan and Budget 2017
  - Redistribution of RIPE NCC Surplus 2016
  - Amendments to RIPE NCC Conflict Arbitration Procedure
  - Charges for Legacy Internet Resource Holders
  - General Charging Scheme Model

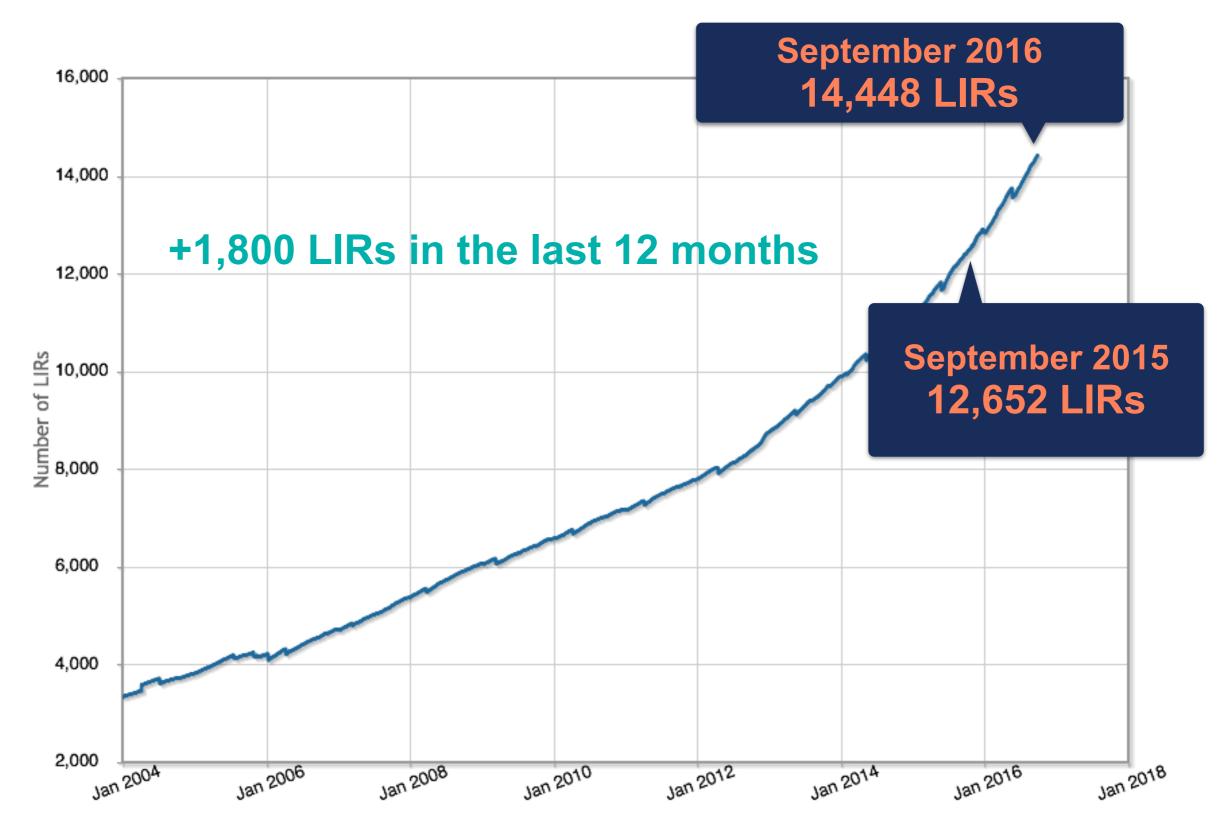
#### **NRO NC Election 2016**



- Voting for one representative from the RIPE NCC service region
- The election takes place at RIPE 73, using electronic voting for the first time:
  - All registered RIPE Meeting attendees will receive an email that contains a link to private voting login
  - Voting opens at 16:00 UTC+1 on Tuesday, 25 October
  - Voting closes at 10:30 UTC+1 on Friday, 28 October
  - The RIPE Chair announces the result during the Friday morning plenary on 28 October

#### **Total Number of LIRs**





### **Understanding our Membership**



- A changing RIPE NCC membership reflects a change in the overall Internet environment
  - Close to half of our current membership base are no longer classic ISPs/telcos
- We need to better understand these categories and the associated growth trends
- Does our current service portfolio cater to the needs of an evolving membership?
  - We are looking at this in more detail

#### **RIPE NCC Survey 2016**



- We run these surveys to find out:
  - How we can better help our members and the community
  - What direction we should be taking in the coming years
- Survey was conducted by a neutral third party
- We had our biggest response ever: thank you!
  - Over 4,400 people responded
  - 15 of our 23 Armenian members took part
- We are now analysing the feedback and deciding how to act on it

### **Activity Plan and Budget 2017**



- Changes include:
  - Increases in External Relations activity
  - Contributions towards "Good of the Internet"
  - Information security budget increasing
  - Expenses per member will drop by -6% in the budget 2017 vs budget 2016
  - Staff numbers will increase to cope with increased workload from membership growth, to 148 FTE (+7 FTE from B2016)

#### **RIPE NCC Regional Presence**



- More focus on RIPE NCC Regional Meetings and community events, member lunches, etc.
- Supporting NOGs throughout our service region
- Ongoing support for ENOG events and community
- Engaging with governments in the region, particularly on issues concerning regulation, industry trends and Internet development

#### **RIPE NCC Regional Presence**



## Your RIPE NCC representatives in the ENOG region:



Maxim Burtikov mburtikov@ripe.net

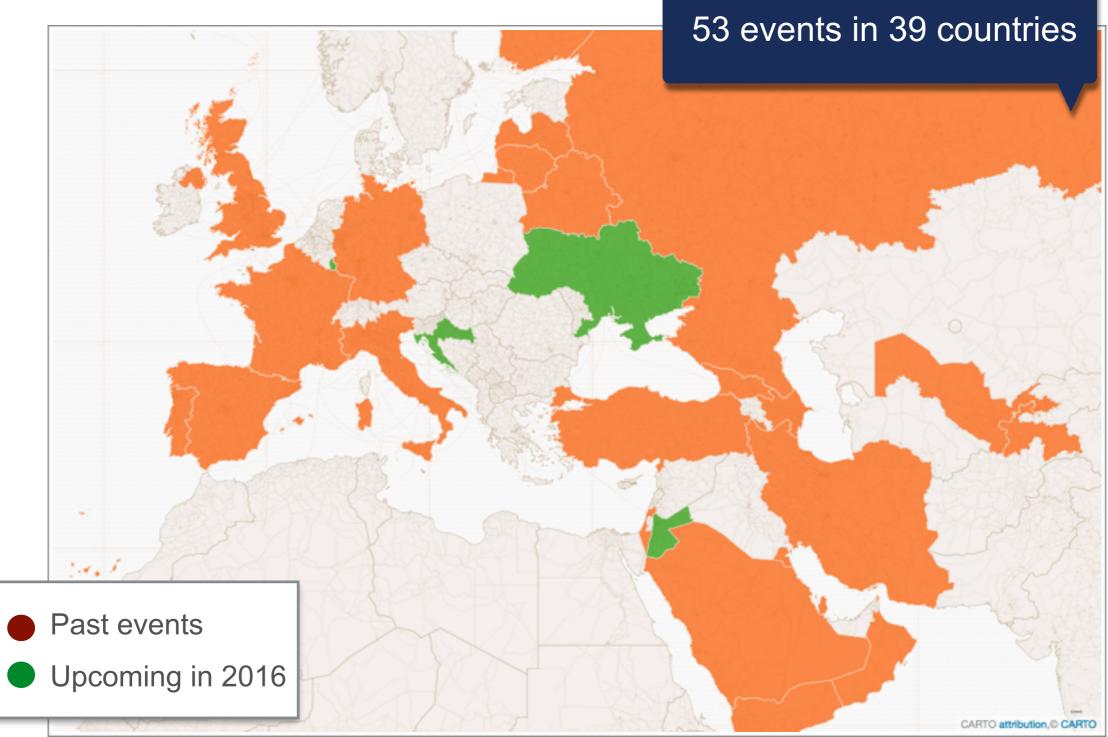
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Alex Semenyaka asemenyaka@ripe.net

 Maxim and Alex actively engage the local community and feed back to the RIPE NCC

#### **Meeting Our Members**





Member lunches/meetings from 1 January 2015 until present www.ripe.net/member-lunches

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### **RIPE Policy Development Process (PDP)**

- Armenian participation could be better
- Participate: addresspolicy-wg@ripe.net
- Policies on resource transfers, the last /8 and resource authentication currently in progress

#### Participation in 2016



This map is updated regularly (last update: 1 September 2016).

### **IPv6: Deployment and Training**



- IPv6 use in Armenia is low
- The RIPE NCC can help with training
- Some Armenians completed the Train the Trainer programme last year
  - What happened after that?
  - Local language trainers are available to help with IPv6
- We now have Russian-speaking trainers
- Courses are also available online in the RIPE NCC Academy: academy.ripe.net

#### **RIPE Atlas**



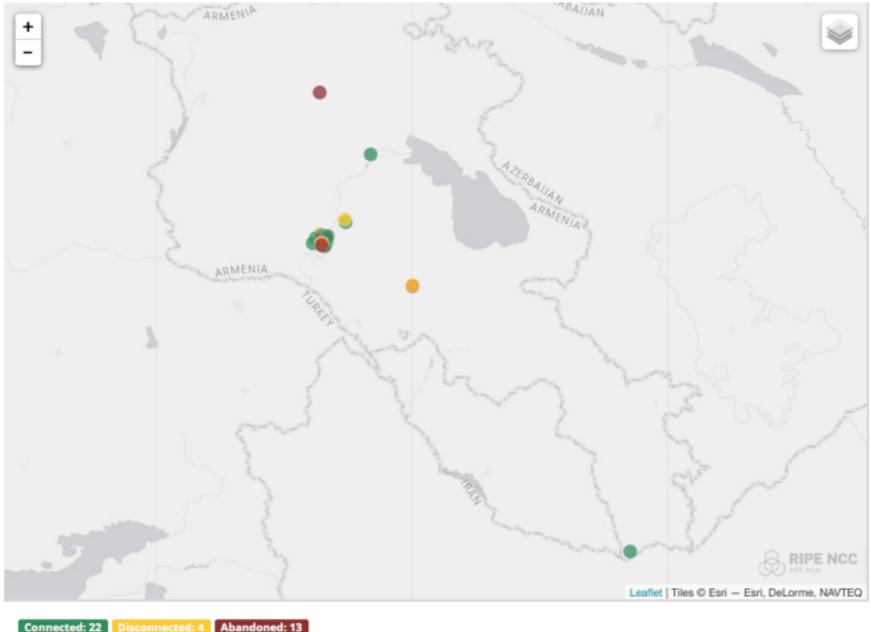
- 9,210 connected probes running 12,000+ measurements
  - We've nearly reached our goal of 10,000 probes
  - 212 RIPE Atlas anchors
- Read about RIPE Atlas use cases:
  - https://labs.ripe.net/atlas/user-experiences



#### **RIPE Atlas Probes Cluster**



 Most RIPE Atlas probes in Armenia are clustered in Yerevan:



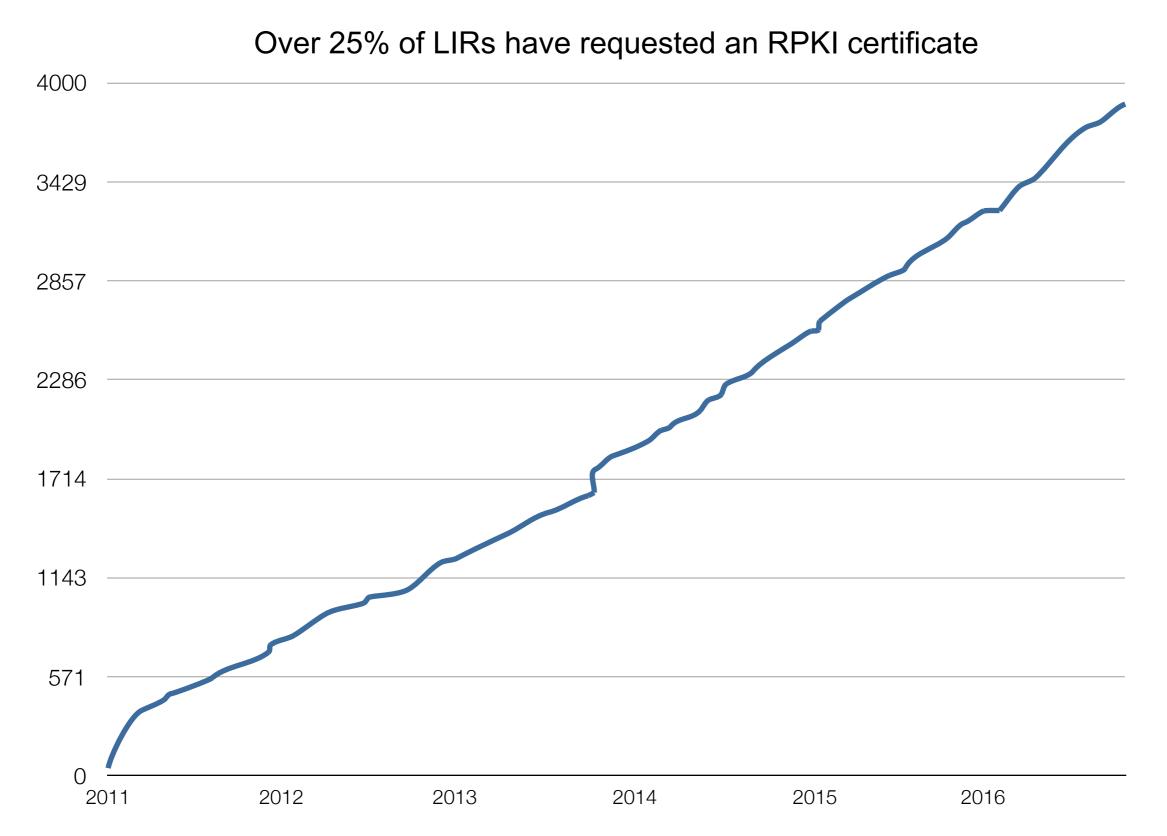
#### **Resource Certification (RPKI)**



- 3,500+ members have requested a certificate
- Members have created Route Origin Authorisations (ROAs) covering:
  - 2,886 unique ASNs
  - 14,446 IPv4 prefixes
  - 2,222 IPv6 prefixes
- All address space can now be covered
  - Including PI and legacy space

#### **RPKI in our Service Region**





#### **RPKI Validator**



- Operators can validate the RPKI data sets for use in BGP and router configuration
- Current version requires greater scalability
- Proposed solution: Enhance RPKI Validator
  - Modern, stable routing workflow toolset
  - Secure, modular design
  - Integrate IRR functionality
- The RIPE NCC will follow the community's direction in this development

#### **RIPE NCC Academy**





- Our online learning platform
- Trainees can complete courses and be certified for their knowledge
- Complements existing courses and webinars already on offer
- https://academy.ripe.net

### LIR Training Course Online



- Launched this week
- Developed for new members
- Also a useful refresher for older members
- Learn about:
  - Managing Internet number resources
  - Using RIPE NCC services
  - The RIPE Policy Development Process
  - How the RIR system works

# **RIPE Academic Cooperation Initiative** (**RACI**)

- Connects RIPE with academic community
- Operators: learn about academic Internet research
- Academics: make connections and learn from the industry
- RACI attendees receive tickets, travel and accommodation for RIPE/regional events
- All applicants can publish work on RIPE Labs

#### **IANA Stewardship Transition**



- On 1 October 2016 the transition was completed
- The five RIRs have a Service Level Agreement (SLA) in place with IANA
- The NRO Executive Council will conduct periodic reviews of IANA's services
- Otherwise, operations are not affected
- A positive demonstration of our open, transparent and bottom-up approach - thank you!



## Questions



axel@ripe.net