Operational Update

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Andrew de la Haye | 26 October 2016 | RIPE 73

Operational Teams Ticket Volume

Legend: RIPE Atlas · RIPE DB Support · ARC · Membership Support · Resource Request and Transfers · Members · FTEs
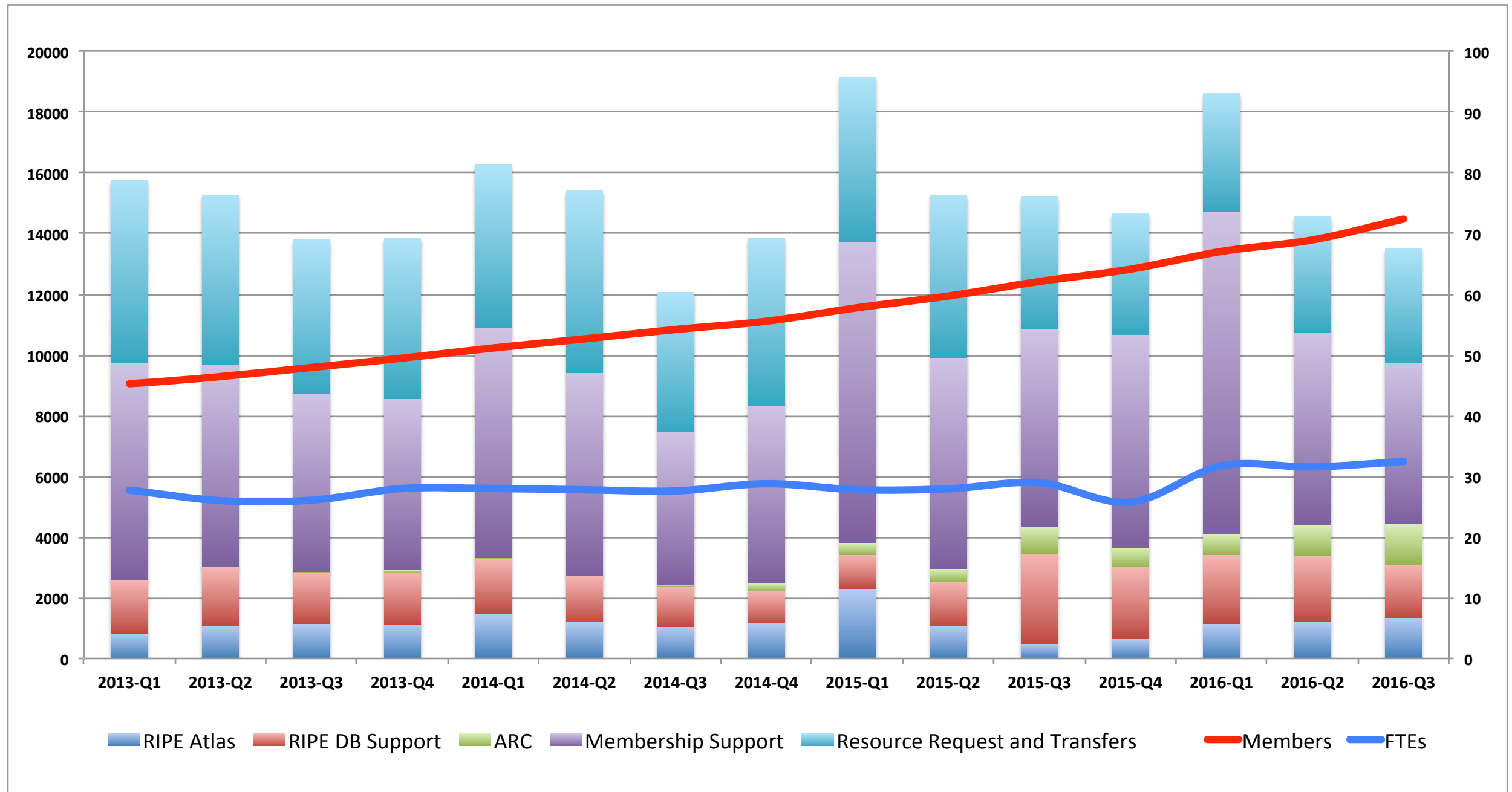
Allocations From the Last /8
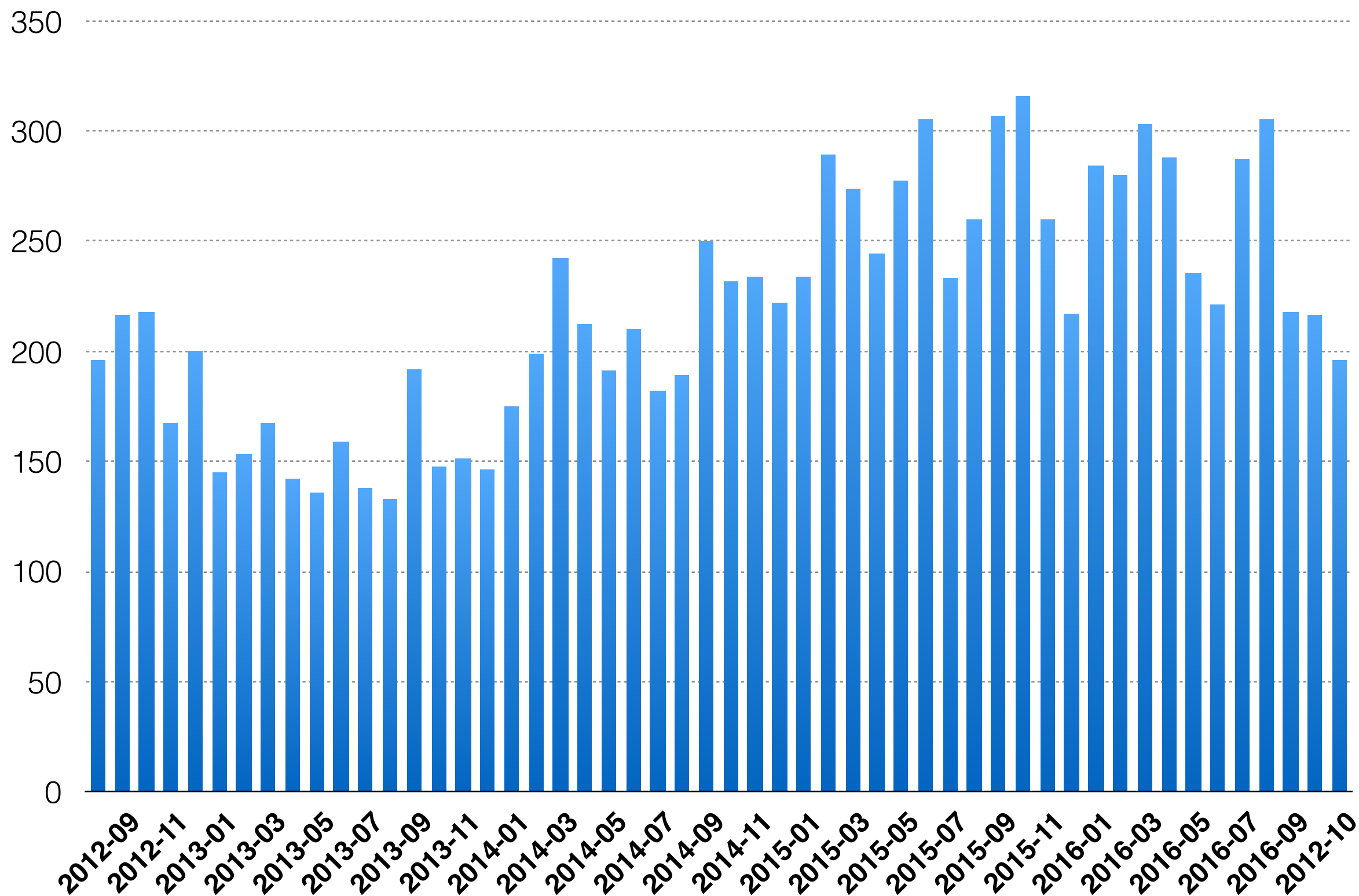
ASN Assignments
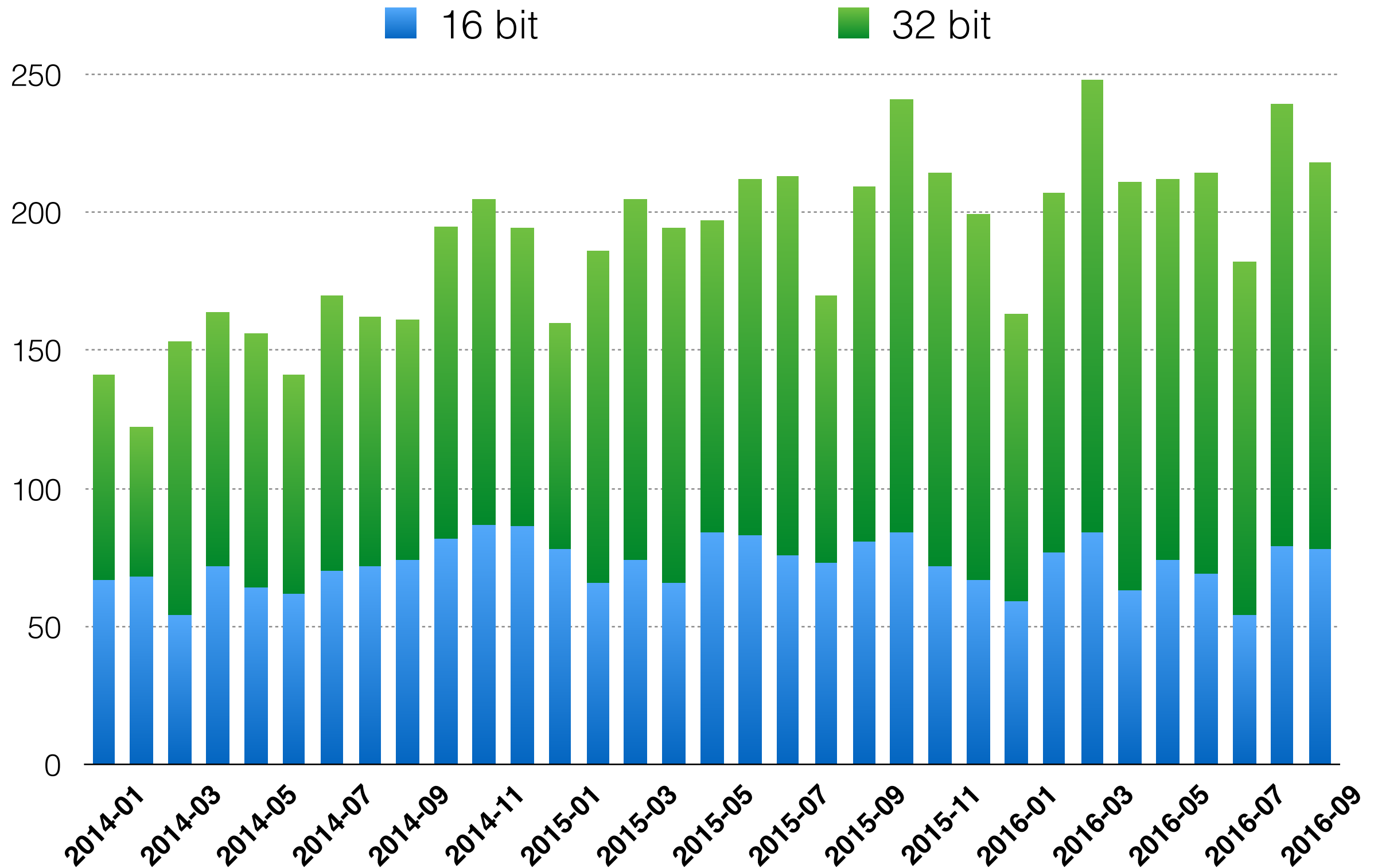
IPv6 Allocation Trend
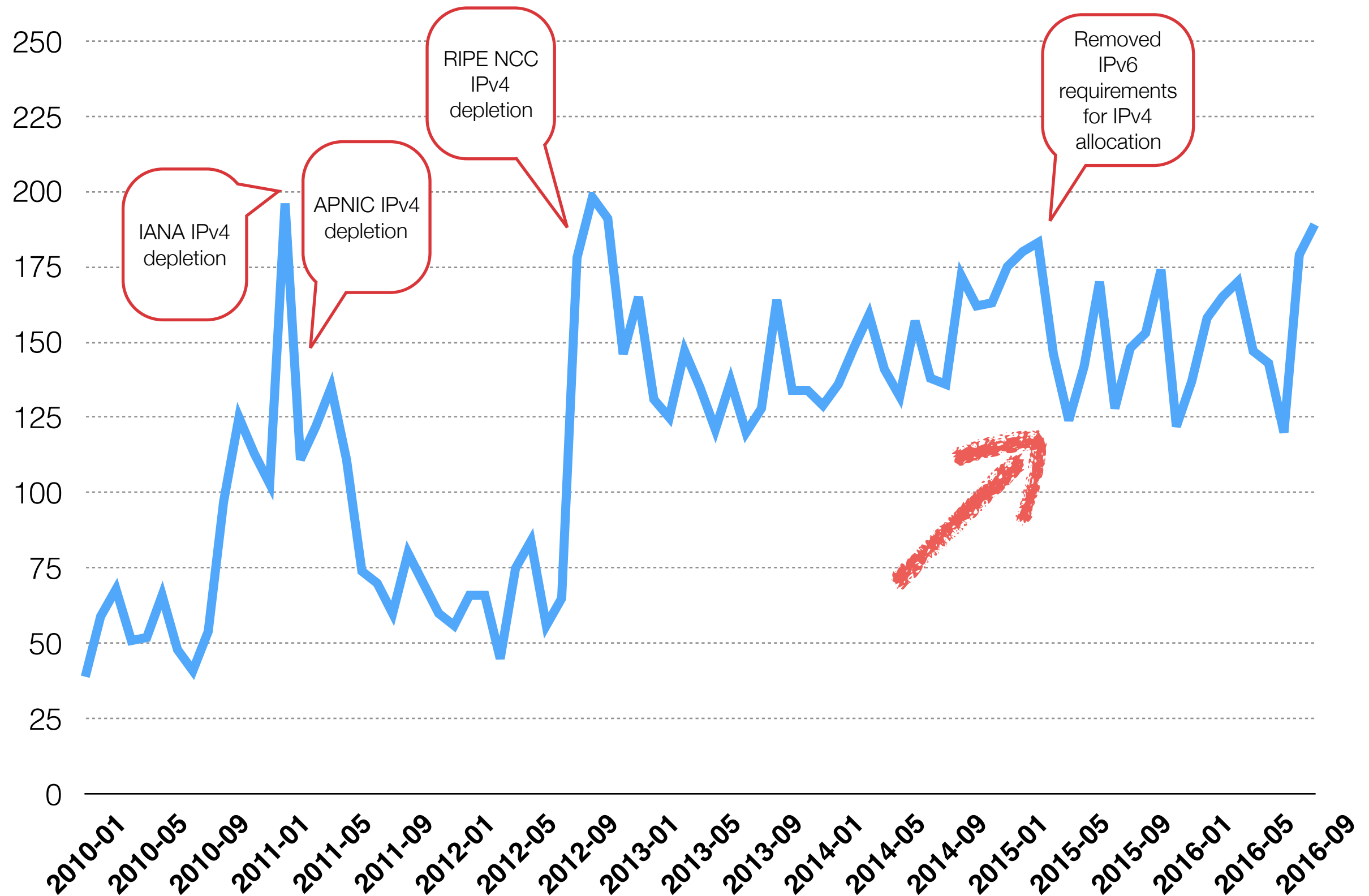
Legacy IPv4 Resource Registration

Pie chart:
- LIR Infrastructure 37%
- Sponsoring LIR 10%
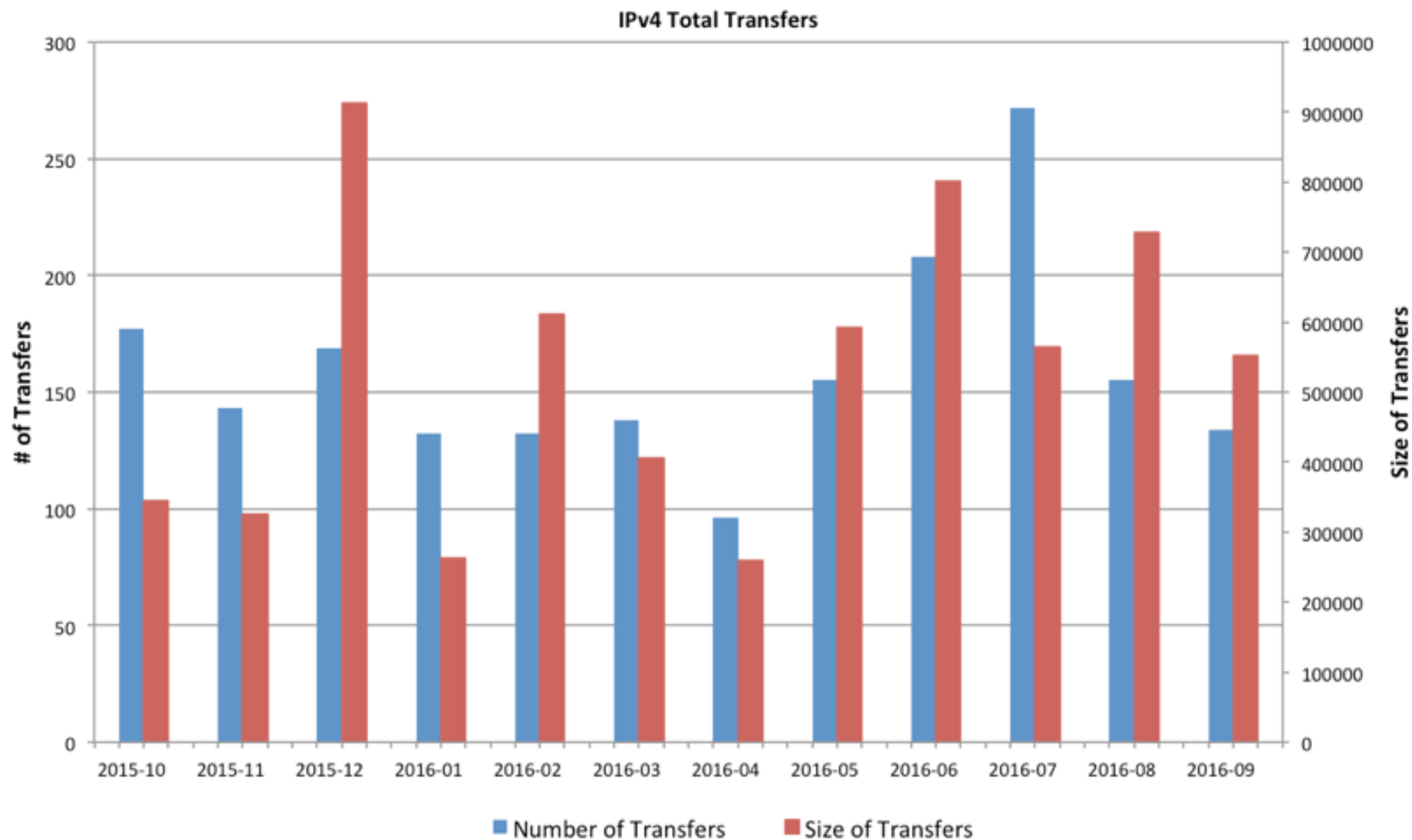- No Contract 53%
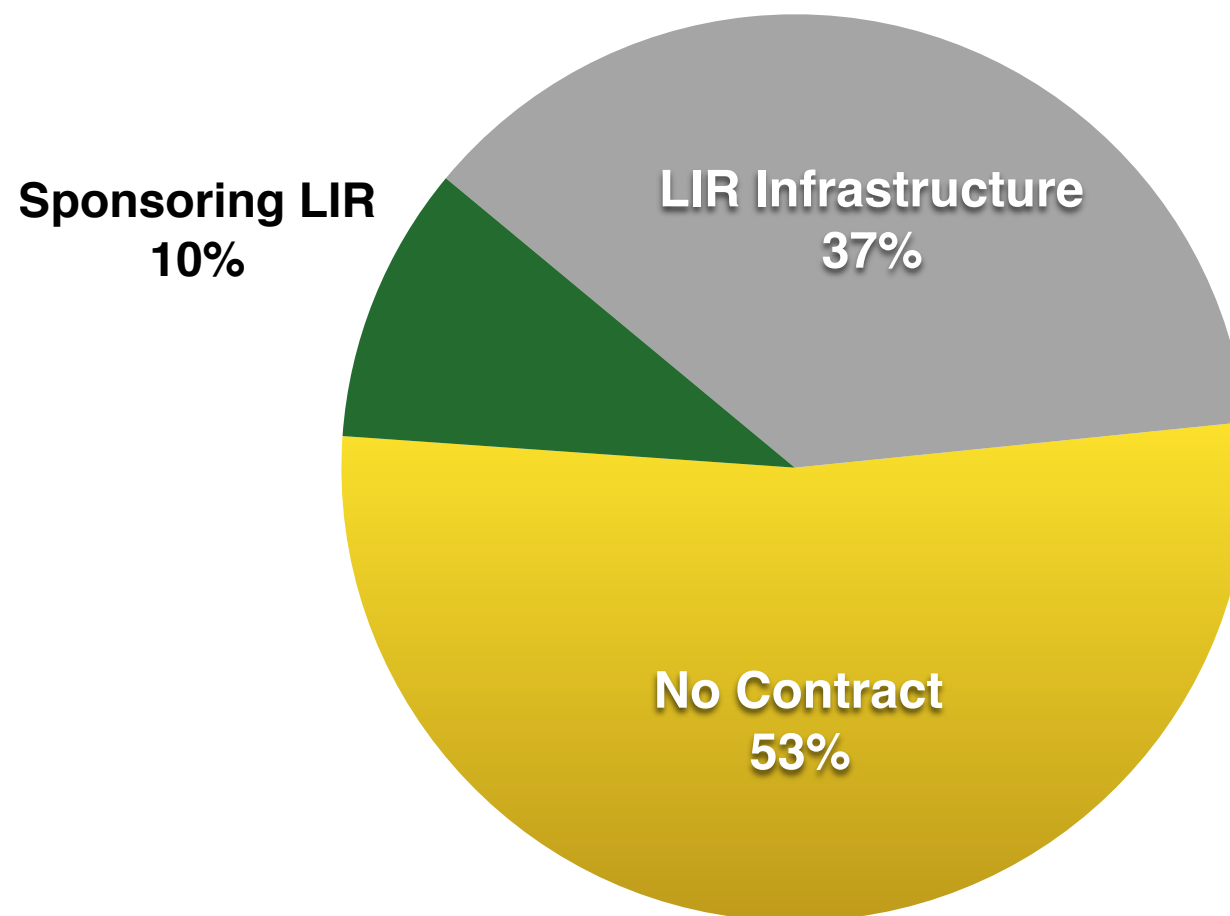
- 47% of all legacy IPv4 addresses registered in the region are under contractual relationship

- Important contribution to RIPE Database data quality by Legacy Internet resource holders

IPv4 Transfers - Within the Region

- Average of ~180 transfers per month

Resource Transfer Process

- **New Internet number resource transfer wizard**

  - Process transfers of LIR's infrastructure and End User direct assignment resources

  - Helps to maintain an accurate Registry

  - Simpler process for LIRs

- **Upcoming Mergers and Acquisitions functionality**

What would you like to update?

- ○ My LIR name or resources.
- ○ End User name or resources.

Please be aware that the offering member needs to pay the full annual service fee for all the LIRs they hold before they can transfer any of the resources they hold. This applies to transfers, mergers and acquisitions.

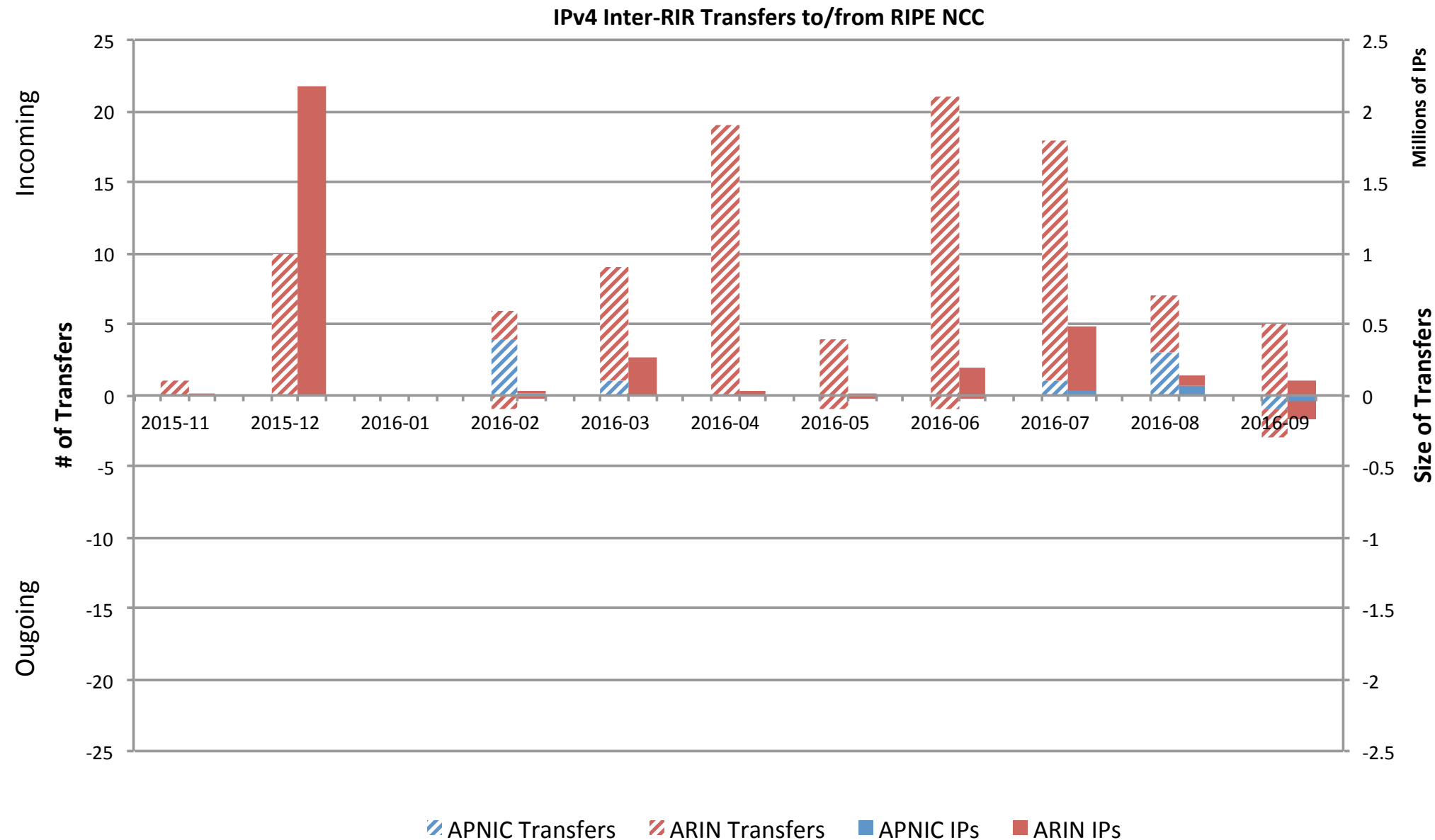Further Billing information can be found here: https://www.ripe.net/participate/member-support/info/faqs/faq-billing>

Is there another legal entity involved?

- ○ This change affects only one legal entity: "Internet Provider BV".
- ○ This change involves another legal entity, e.g. merger, acquisition or transfer.

Please select the most relevant option:

- ○ I wish to transfer Internet number resources to another legal entity. There has not been a merger or acquisition.
- ○ Another legal entity has taken over the operation of 'Internet Provider BV', e.g. merger, acquisition. This change in business structure must be supported by official documents issued by the relevant national authorities.
- ○ None of these options are relevant to me. Please open a ticket.

IPv4 Transfers - Inter-RIR

IPv4 Inter-RIR Transfers to/from RIPE NCC

Legend: APNIC Transfers, ARIN Transfers, APNIC IPs, ARIN IPs

- ~3.5M IP addresses transferred to the RIPE NCC service region

- ~170K IP addresses transferred out of the RIPE NCC service region

Strong Need for Accurate Registry

- Internet number resource Registry increased in value

- Increasing external focus on data quality

  - LIRs protecting their resources

  - Operators and LEAs for daily operations

  - Brokers for reviewing legitimacy of transactions

  - NRENS for legacy resources verified by the RIPE NCC

  - PSWG interest in IP WHOIS accuracy

Membership Survey Key Points

- Registration and accuracy of data is highly valued

  - Current effort is not enough

- Support for regular data quality reviews

  - Increasing contact moments in LIR Portal and via email

- Tools for updating registry data should be simpler to use and be centrally located

  - rDNS, route and inetnum object creation in one place

  - Allow for additional customer information to be stored

Initiatives Aimed at Security and Data Quality

Continuous Review of Registry Data

- Matching RIPE Registry data against 3rd party database

  - Company name, legal address, national ID

  - Developing proactive monitoring resulting in targeted contacts

- Improve member information

  - Industry type, company size, single location or branch

Assisted Registry Check (ARC)

"One of the RIPE NCC's key responsibilities is to maintain the accuracy and quality of the RIPE Registry"

3,900 ARCs completed so far

- 95% of ARCs resulted in LIR data update!

- >750 LIRs participated in ARC survey

  * Relevance of ARC 4.4 (0-5 scale)

  * Helpfulness of phone call 4.4 (0-5 scale)

  * Time invested vs. results 4.5 (0-5 scale)

  * Quality of support 4.8 (0-5 scale)

Action Taken	LIRs Helped
LIR Portal Admin Privileges	936
LIR Contact Details	1989
LIR Resource Registration	2101
Billing Issues	343
PI Resource Registration	259
Maintainer Password Recovery	362
Routing Consistency	910
rDNS Consistency	1008

Investigations

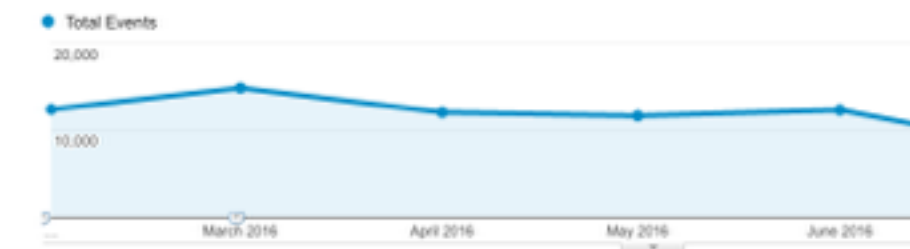| Year	2015	2016
Concluded	95	60
New	25	75

- 🔵 De-registered PI
- 🟢 Due-diligence reminder
- 🟡 Final warnings
- 🟠 LIR Closures
- 🔴 Rejected new LIR applications
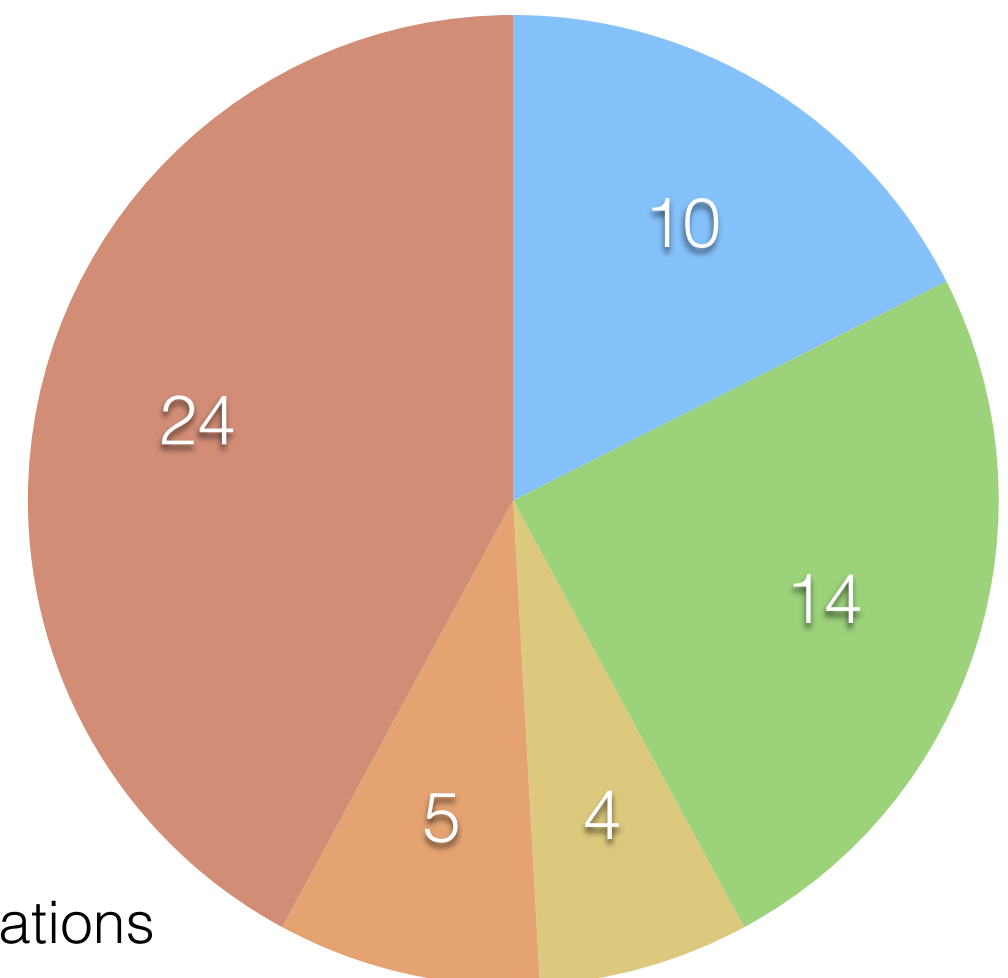
Understanding Our Members Needs

- What are their needs and issues?

- Member survey

  - Who are they?

  - Where are they from?

  - Which RIPE NCC services do they use?

- Real time event tracking
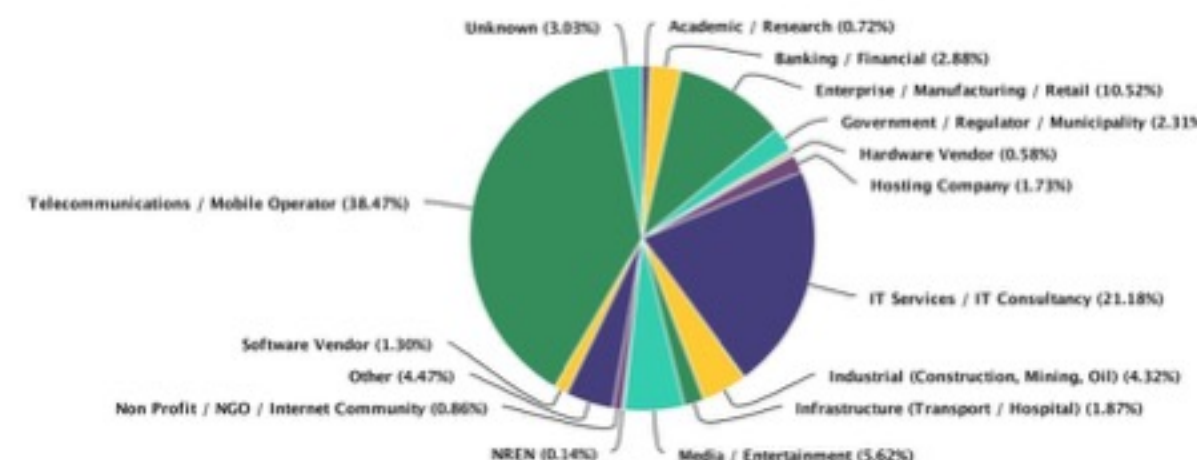
- Demographics

- Real time contact

LIR Contact Migration

● Members currently have people representing them as:

1. LIR Contact

    - A person identified by their email address who can contact the RIPE NCC on the LIR's behalf
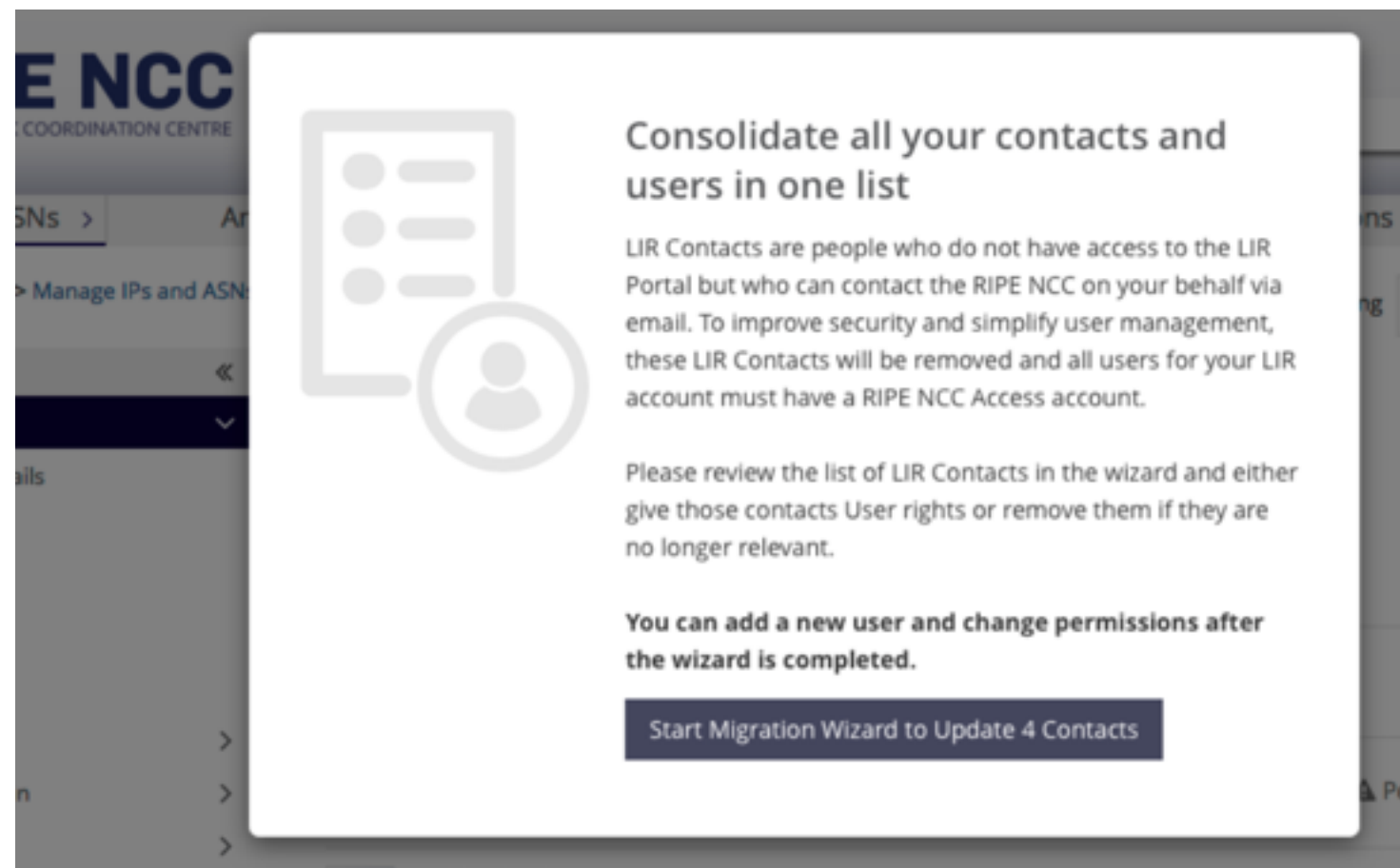
2. LIR Portal User

    - A person with a RIPE NCC Access account who can log into the LIR Portal and perform certain actions

● Two separate lists, double user maintenance

    - Cumbersome and confusing process

LIR Contact Migration

- Contacts are being merged into a single list
  - All listed persons will have access to the LIR Portal and be identified as LIR Contacts

Upcoming Operational Improvements

- Contact LIRs for which RIPE Registry data and 3rd party database becomes inconsistent

- LIR Portal data review reminders

- Provide support to LIRs that do not know how to update their data

  - Two months resource registration in RIPE Database review and LIR education on how-to

- One-stop-shop for rDNS, IRR and Inetnum objects

Upcoming Operational Improvements

- Domain object creation

  - Current creating **domain** objects is error-prone and cumbersome

- Launching new **domain** object wizard

  - Allows entering a prefix, which will be automatically reversed into multiple **domain** objects

  - Will do real time checking of the name servers

  - Will provide specific feedback on mistakes for each **domain** object

Training Services

- Membership survey

  - More courses in more locations

  - More online resources

  - RIPE NCC Academy: new course!

  - More emphasis on IPv6

  - More emphasis on BGP and Security

IPv6, BGP and Security Training

- IPv6 Program Management

- IPv6 training courses (66 in 2016)

- Two-day BGP Operations and Routing Security course (launched in January 2016)

- DNSSEC training course

- Hands-on, with labs and exercises

Numbers 2016

- 112 Training Courses in 37 countries

  - 2200+ participants

- 42 Webinars

  - 630+ participants

- RIPE NCC Academy

  - RIPE Database Course: 1,517 enrolled (367 completed)

  - Intro to IPv6: 1,211 enrolled (223 completed)

  - NEW COURSE: LIR course: 183 enrolled after first week

Longer Term Outlook (2017)

- Bringing people together

  - Create opportunities for people to share knowledge and experiences in their local communities

  - Webinars with content experts

  - Online events

- IPv6 Security Training course/webinar

- RIPE NCC Academy

  - Online Advanced IPv6 course

  - Online BGP/Security course

Questions

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