



**RIPE NCC**  
RIPE NETWORK COORDINATION CENTRE

# Obtaining, Managing and Protecting IP Addresses

Andrew de la Haye | March 2016 | MENOG 16



# Getting IPv4 and IPv6 Allocations

# IPv4 Address Requests

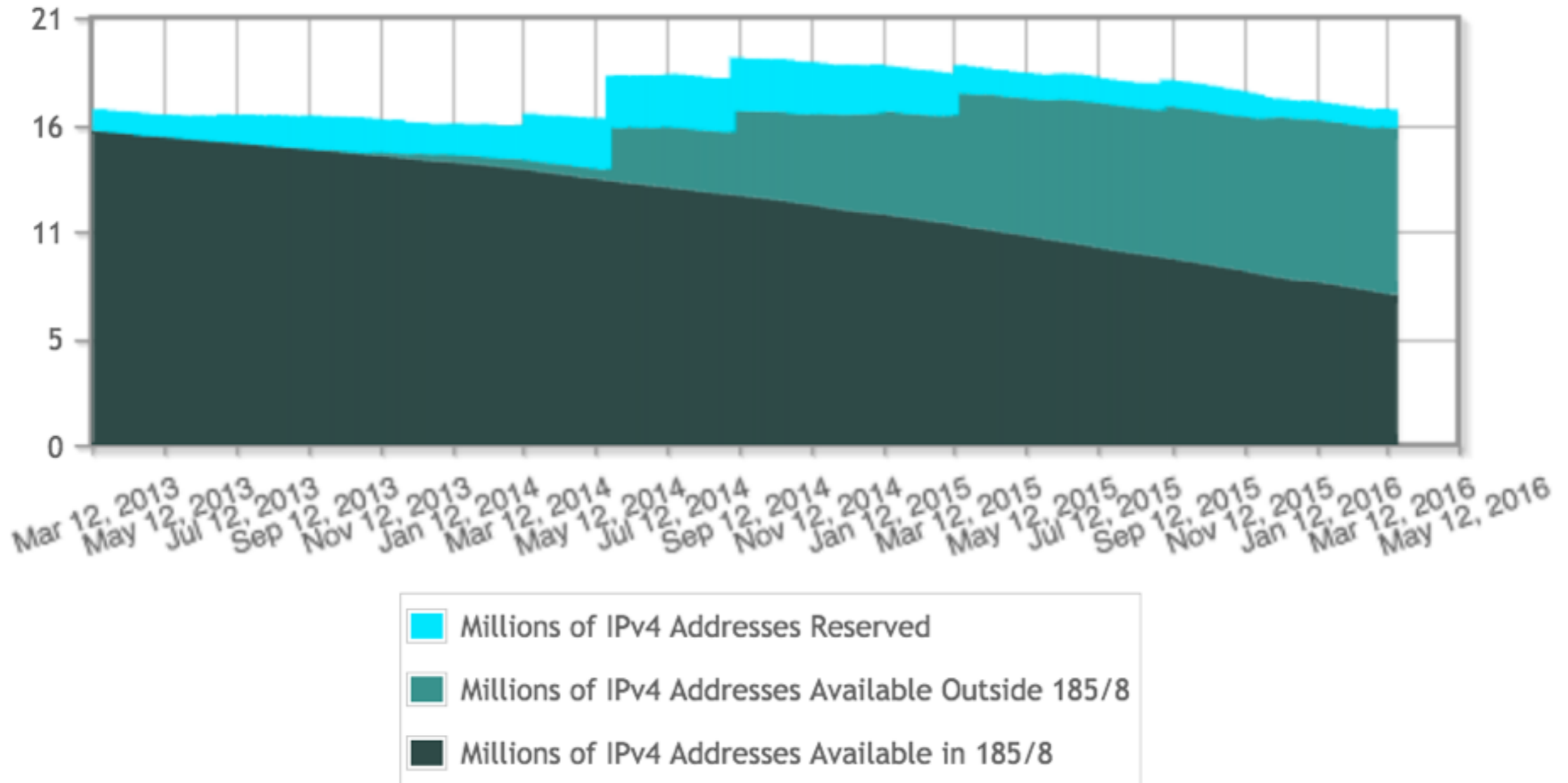


- Under current policy, each LIR can receive one final allocation from our remaining pool (last /8)
  - Allocation size: 1,024 addresses (/22)
  - For both new and existing members

# RIPE NCC Available IPv4 Pool

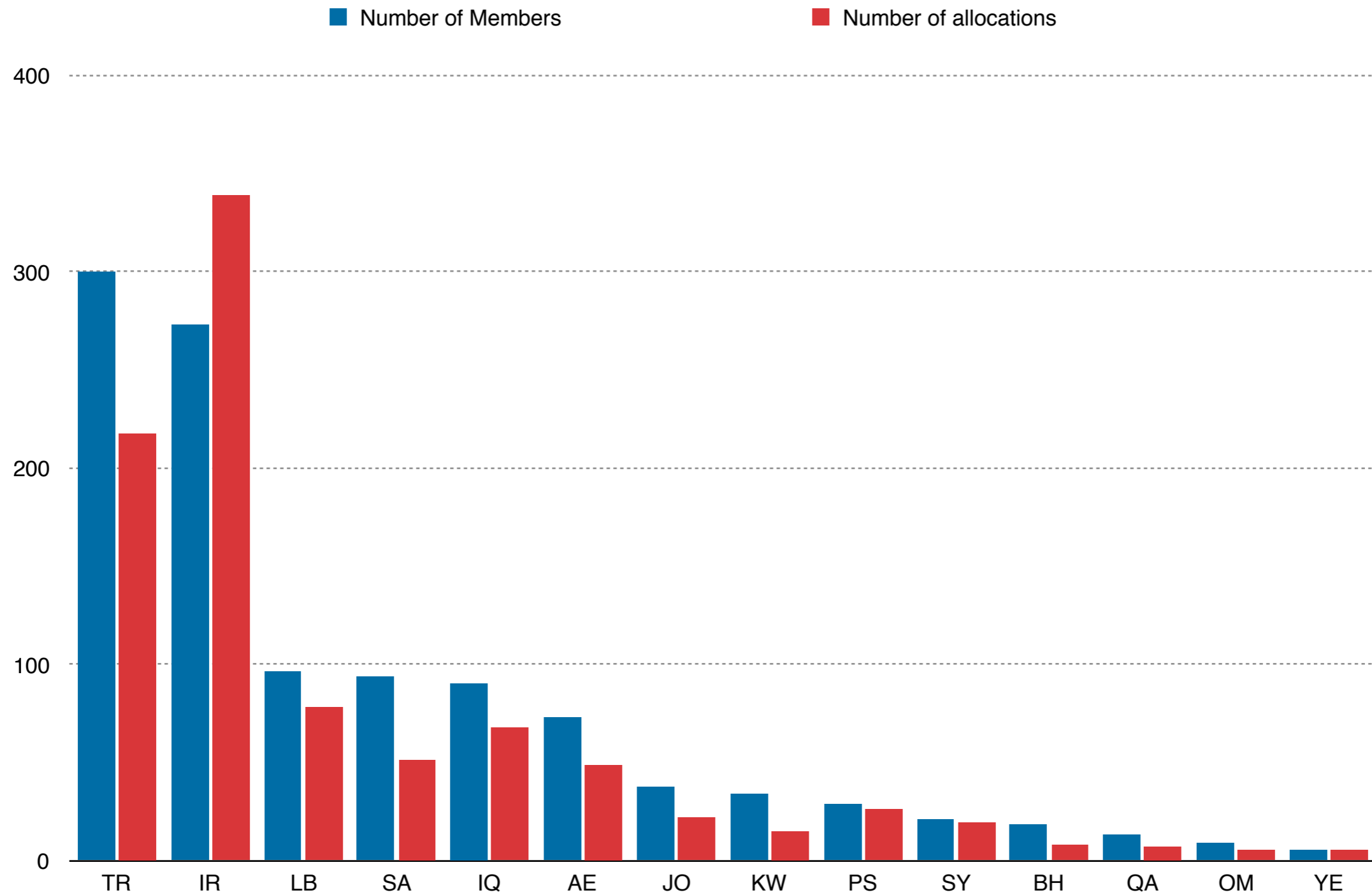


RIPE NCC IPv4 Pool — Last 36 Months



[www.ripe.net/IPv4-graph](http://www.ripe.net/IPv4-graph)

# IPv4 Final /22 Allocations in the Region

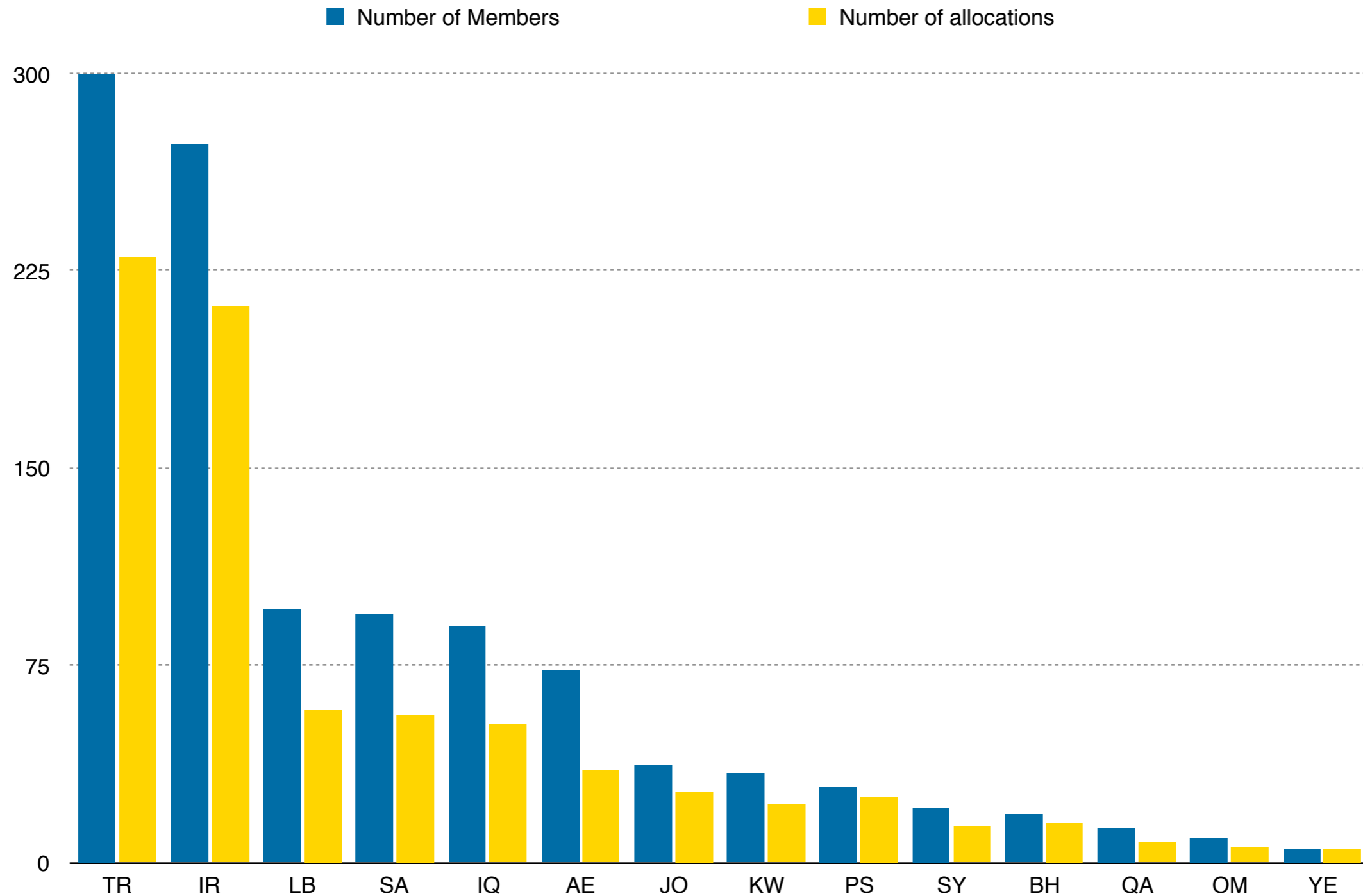


# Getting IPv6 Addresses



- You can receive an IPv6 allocation if:
  - You are a member of the RIPE NCC
  - You can show a plan for making assignments within two years
- The minimum allocation size is a /32
  - Can be extended up to a /29 without additional justification
  - More addresses can be allocated when justified
- Non-members can request an IPv6 Provider Independent (PI) assignment

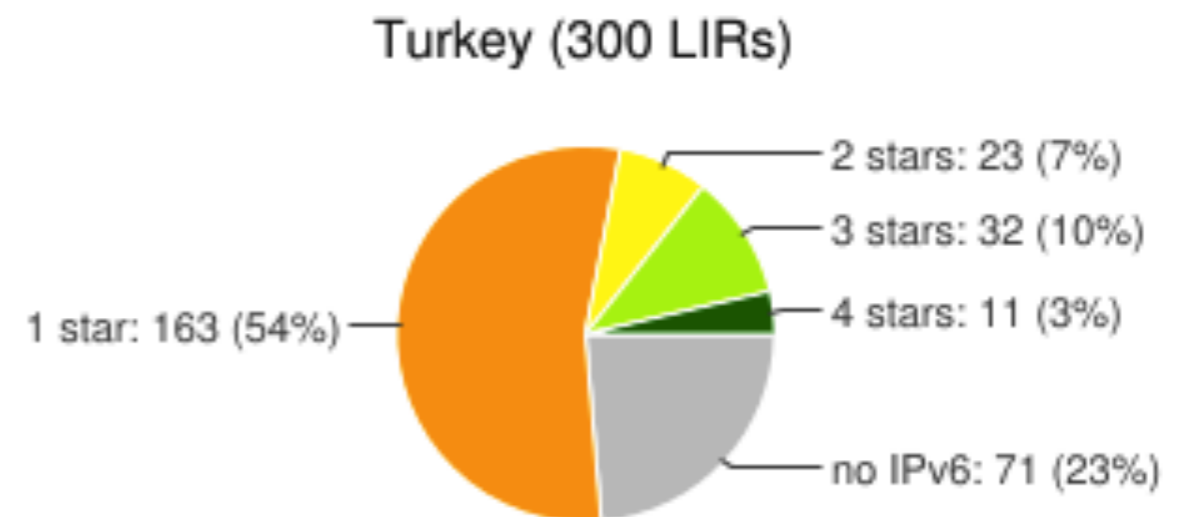
# IPv6 Allocations in the Region



# IPv6 RIPEness

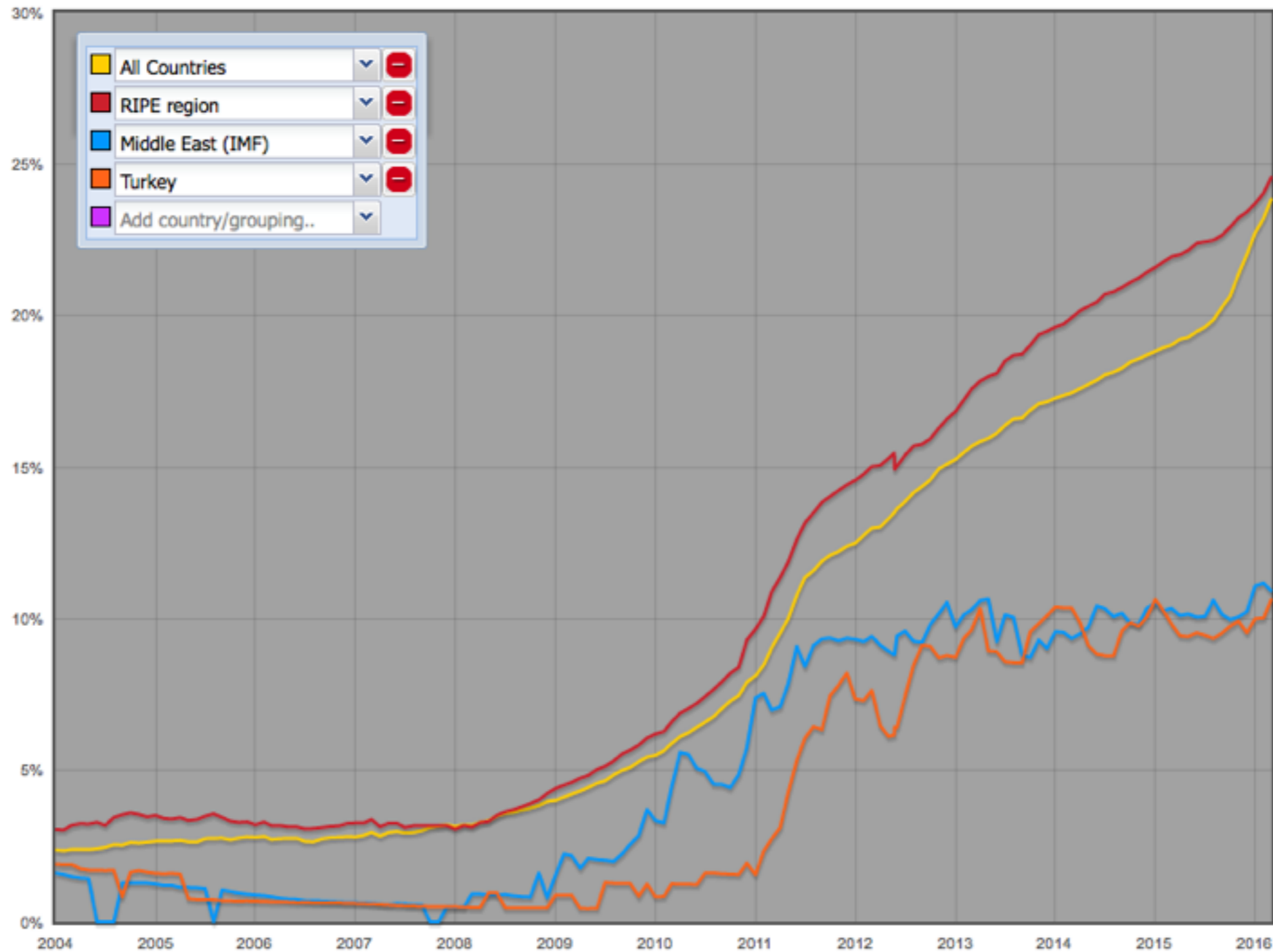


- A rating system which awards stars to RIPE NCC members based on indicators of IPv6 preparedness. Stars are awarded for:
  - Having an IPv6 address space allocation or assignment from the RIPE NCC
  - Visibility in the Routing Information Service (RIS)
  - Having a route6 object in the RIPE Database
  - Having a reverse DNS delegation set up
  - We measure IPv6 being in use above a certain threshold



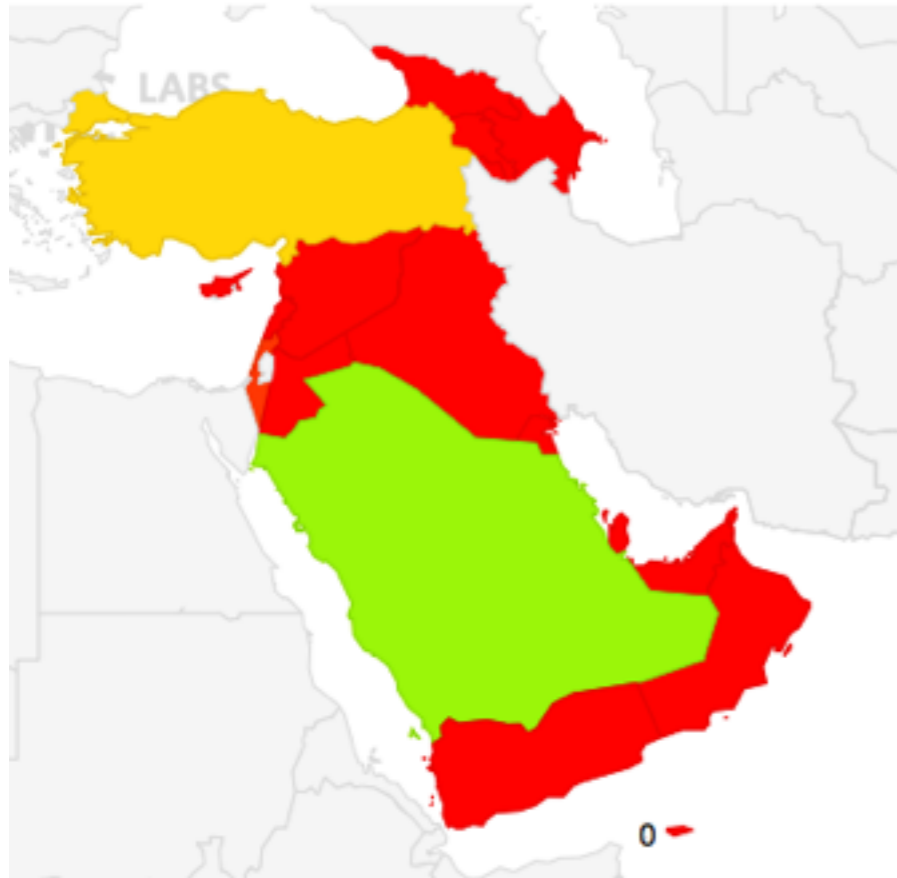


# IPv6 Announcements



<http://v6asns.ripe.net/v/6?s= ALL;s= RIR RIPE NCC;s= IMF middleeast;s=TR>

# End Users on IPv6



Use of IPv6 for Saudi Arabia (SA)



<http://stats.labs.apnic.net/ipv6/XV>



# Resource Transfers

# If you need more IPv4 addresses



- IPv4 allocations can be transferred
  - Between LIRs
  - 24-month holding period after transfer
- IPv4 Provider Independent (PI) assignments
  - Between LIRs and End Users
- Based on RIPE community policy
- Completed transfers published on our website:
  - <https://www.ripe.net/manage-ips-and-asns/resource-transfers-and-mergers/transfers/ipv4/ipv4-transfer-statistics>



# IPv4 Transfer Statistics

List of Allocated PA Transfers

List of Assigned PI Transfers

According to section 5.5 of "IPv4 Address Allocation and Assignment Policies for the RIPE NCC Service Region", the RIPE NCC publishes a list of all IPv4 allocations transferred under this policy. This information does not include transfers that were due to a change in company structure such as a merger or acquisition.

Show  entries

Search:

| Original Block   | Transferred Blocks             | From  | To  | Date       |
|------------------|--------------------------------|---|---|------------|
| 86.105.236.0/22  | 86.105.236.0/22                | IPv4 Management SRL   | XSTREAM SRL   | 08/03/2016 |
| 86.107.170.0/23  | 86.107.170.0/23                | IPv4 Management SRL   | Fast Serv Inc.  | 08/03/2016 |
| 89.147.64.0/19   | 89.147.64.0/20                 | RubiCom Ltd.  | DIGI Tavkozlesi es Szolgáltato Kft.                       | 08/03/2016 |
| 89.147.96.0/20   | 89.147.96.0/23, 89.147.98.0/24 | RubiCom Ltd.  | DIGI Tavkozlesi es Szolgáltato Kft.                       | 08/03/2016 |
| 89.45.212.0/22   | 89.45.212.0/22                 | IPv4 Management SRL   | XSTREAM SRL   | 08/03/2016 |
| 185.14.172.0/22  | 185.14.172.0/22                | BIDDOOR<br>TELEKOMUNIKASYON<br>HABERLESME<br>TEKNOLOJILERI VE ILETISIM<br>HIZMETLERI A.S. | GOONET TELEKOMUNIKASYON<br>HIZMETLERI A.S.                | 04/03/2016 |
| 195.192.0.0/17   | 195.192.0.0/17                 | Styrelsen for it og laering   | SALZBURG AG fur Energie, Verkehr und<br>Telekommunikation | 04/03/2016 |
| 195.192.248.0/23 | 195.192.248.0/23               | Styrelsen for it og laering   | Gigabit ApS   | 04/03/2016 |

# IPv4 Transfers: Where to Look

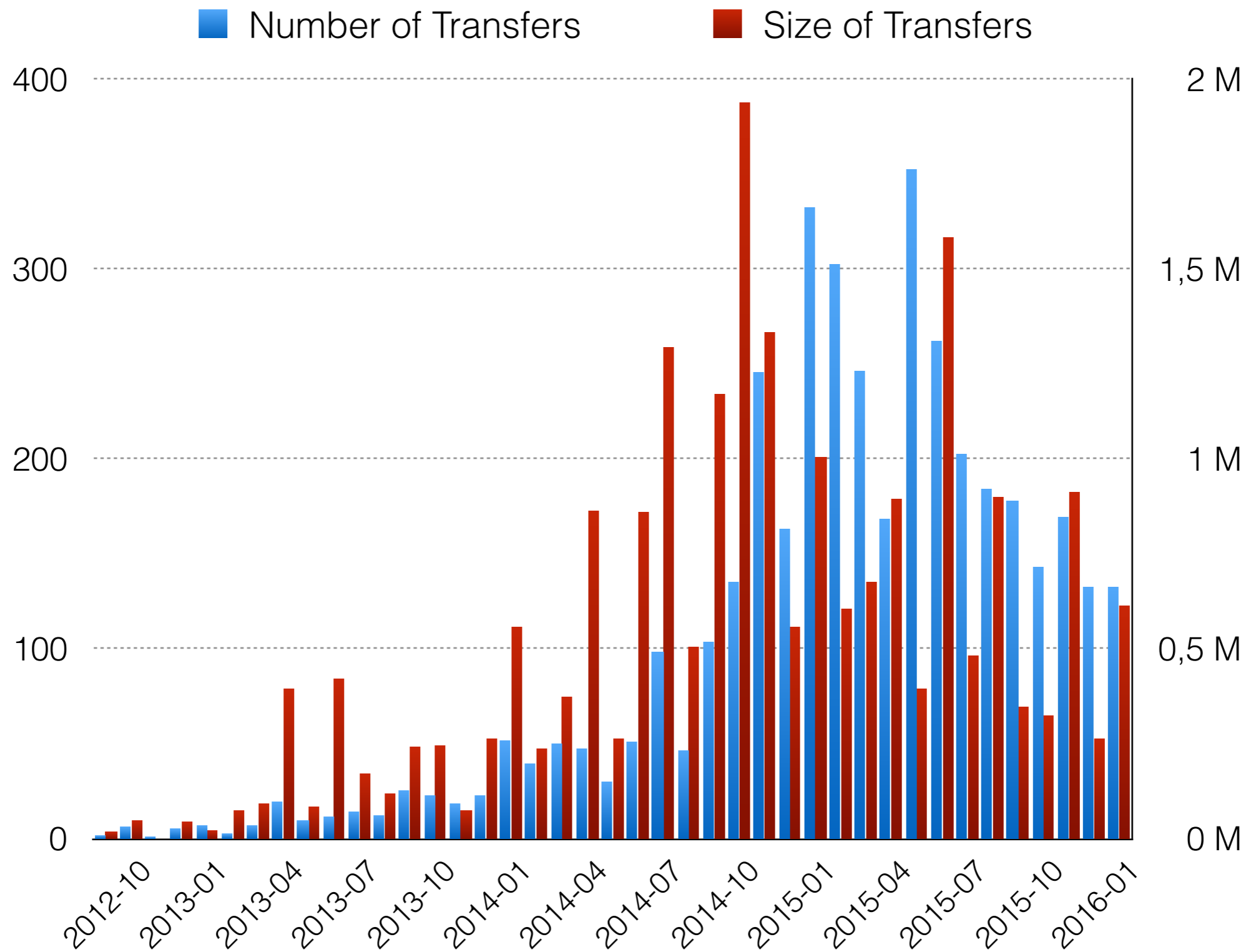


- RIPE NCC IPv4 Transfer Listing Service
  - Facilitates demand and supply, **increasing transparency**
  - Accessible via the LIR Portal
- List of “recognised” brokers on our website
  - Brokers who have signed an agreement to follow RIPE Policies and RIPE NCC procedures
  - The RIPE NCC is not part of the financial transaction

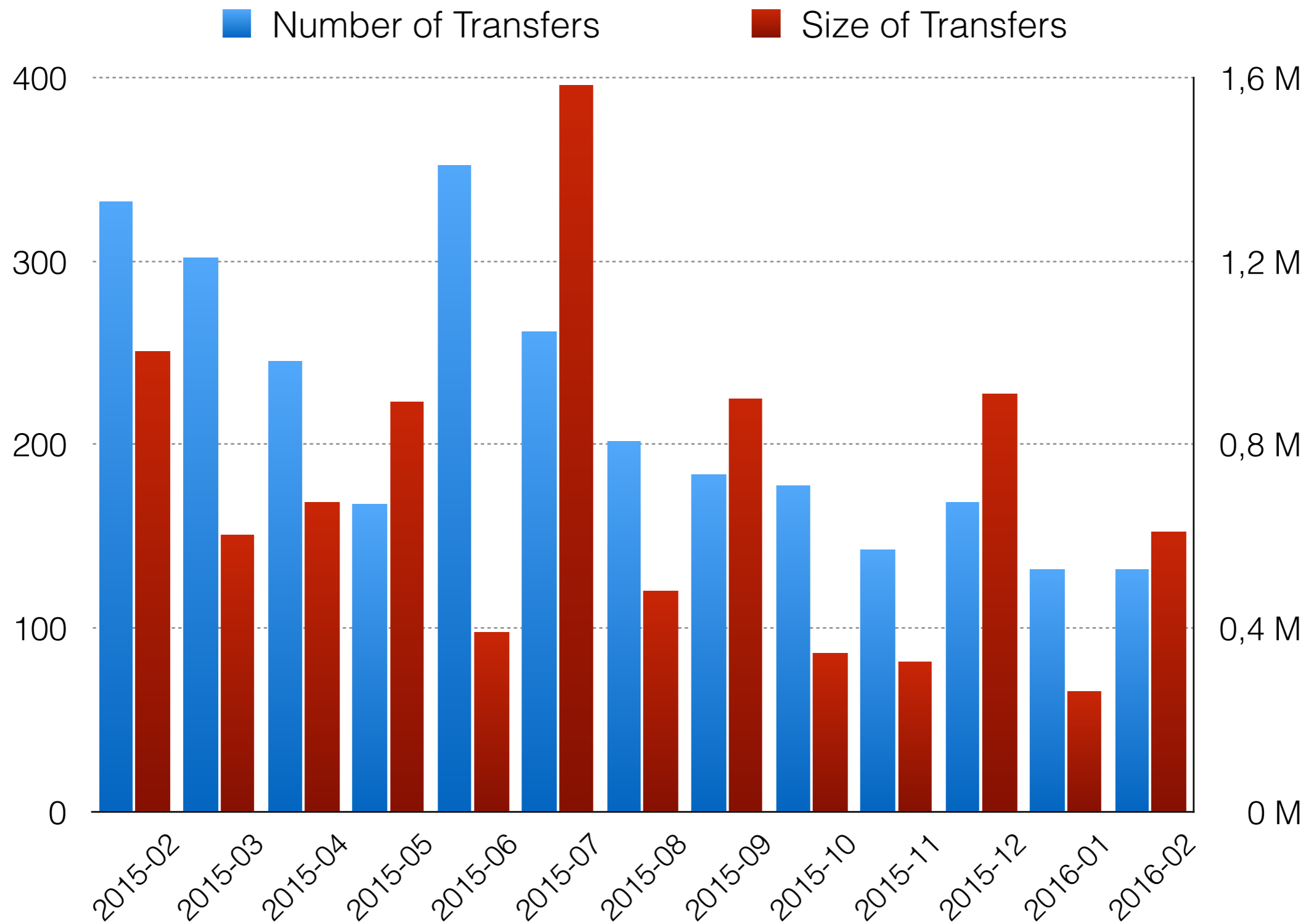
<https://www.ripe.net/manage-ips-and-asns/resource-transfers-and-mergers/transfers/brokers>

- Correct registry information is key for ensuring reliability of transfers

# Completed IPv4 Transfers

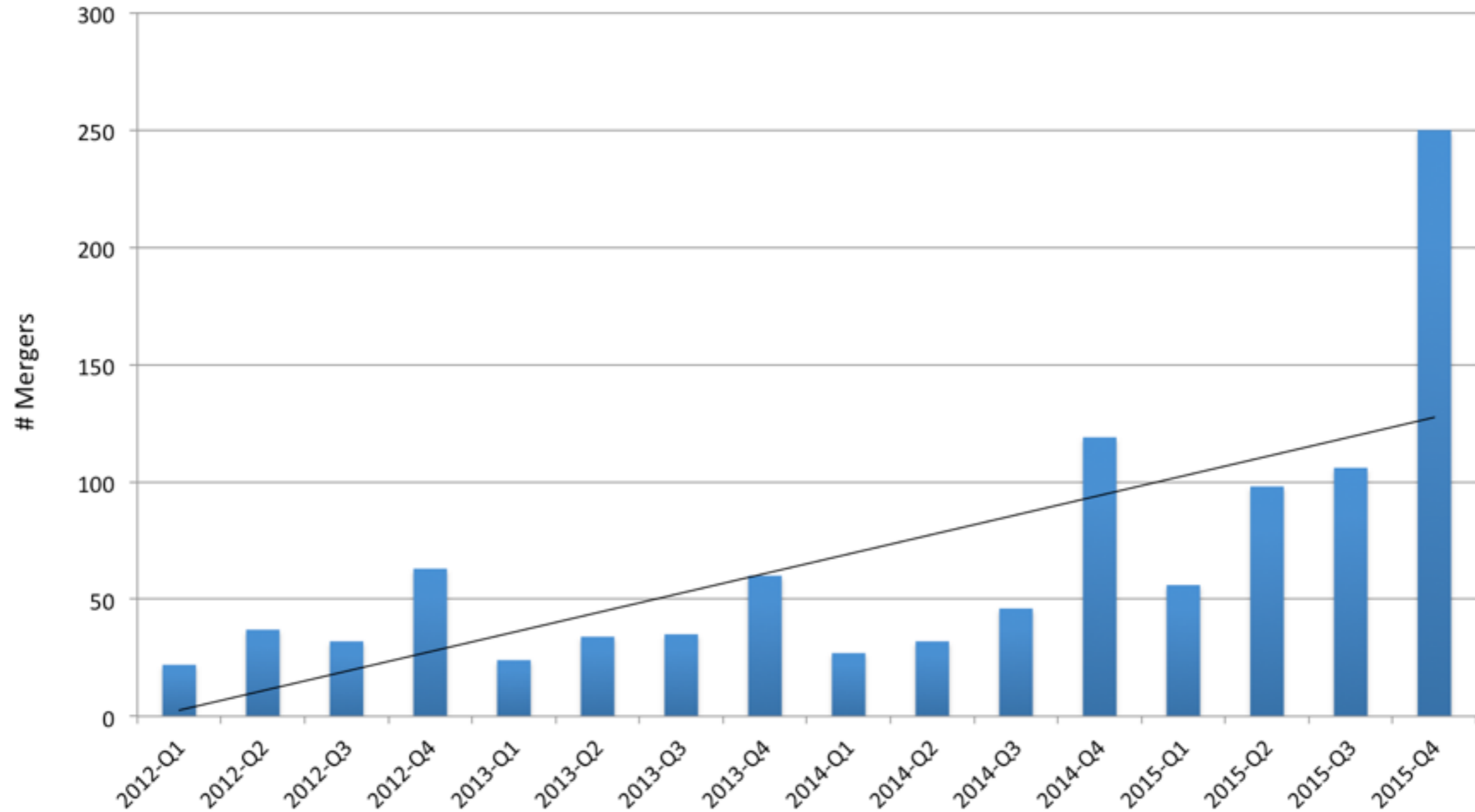


# Completed IPv4 Transfers

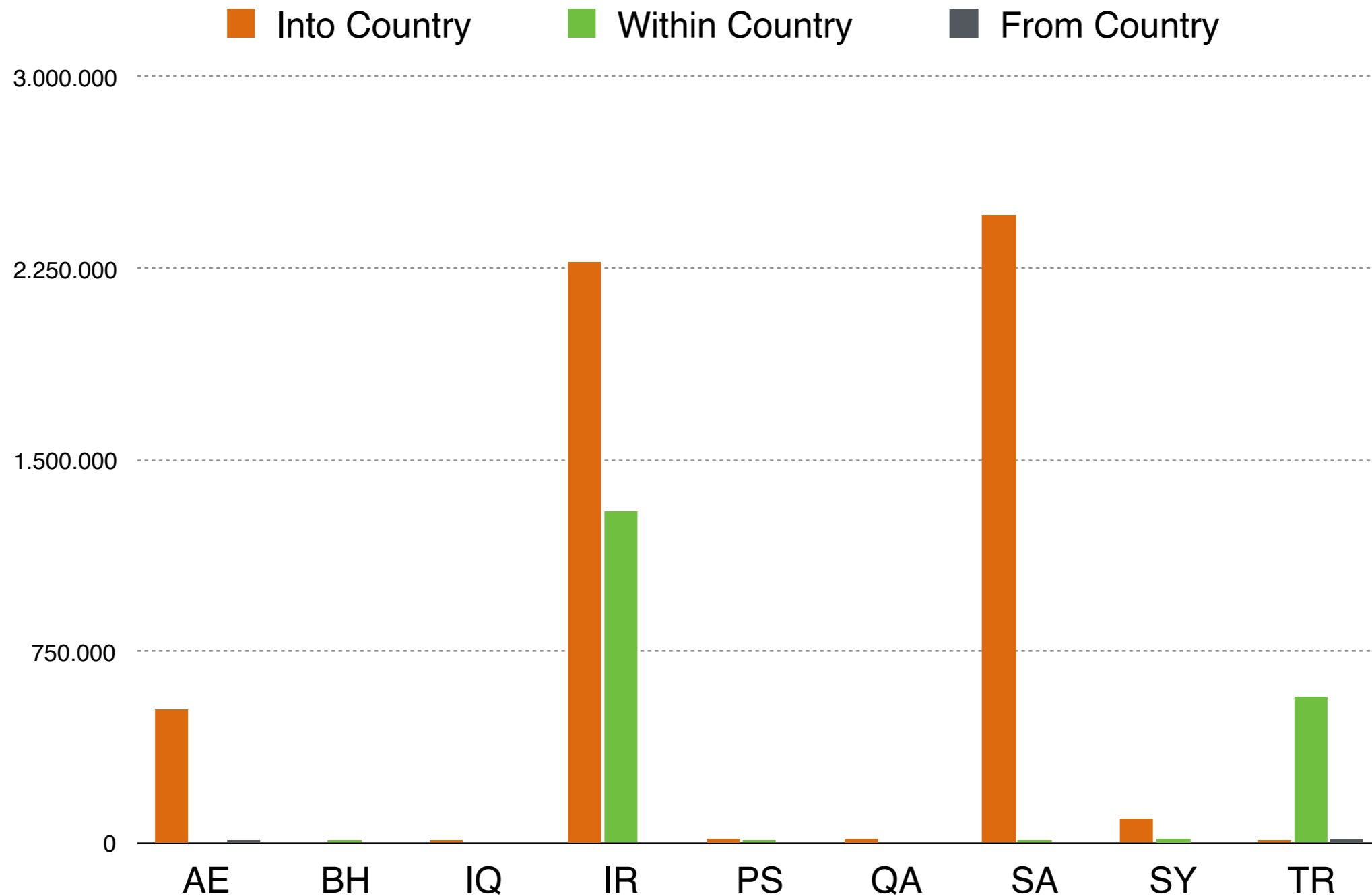




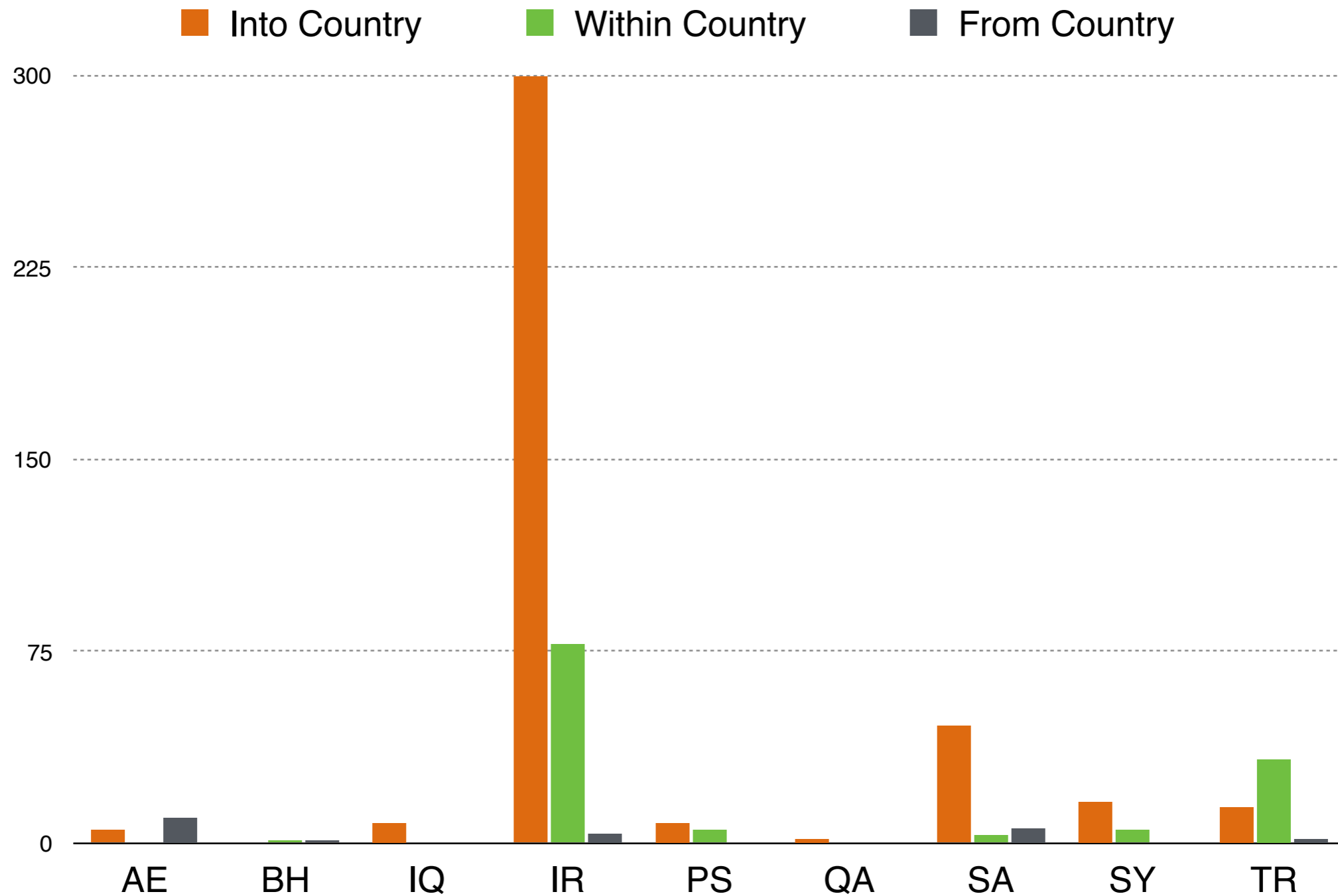
# Completed Mergers



# IPv4 Addresses Transferred in the Region



# Number of IPv4 Transfers in the Region

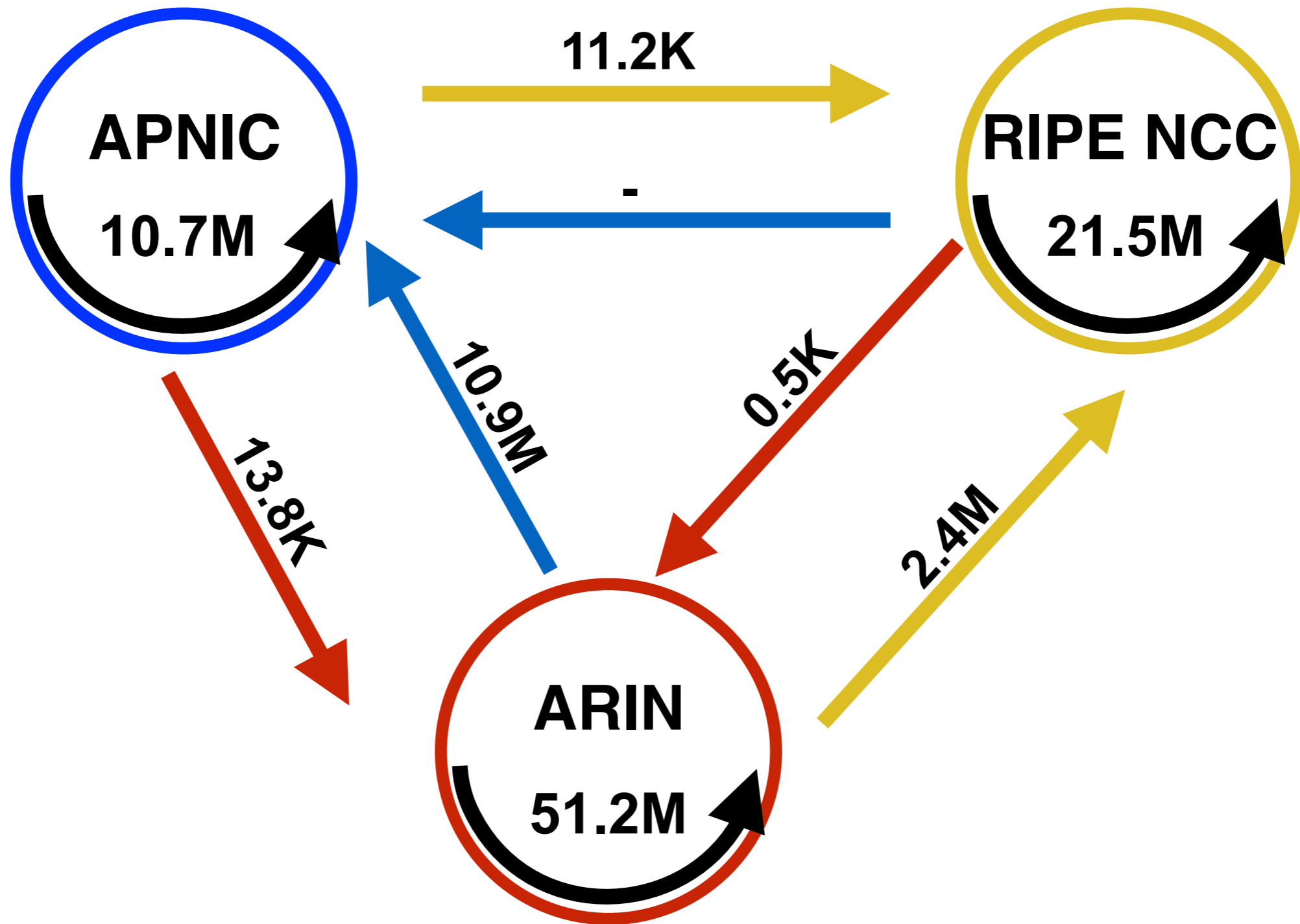


# Inter-RIR transfers



- IPv4 address transfers possible between organisations in:
  - RIPE NCC
  - ARIN
  - APNIC

# Inter-RIR Transfers



# The RIPE NCC's Role in Transfers



- The ultimate goal is an accurate and up-to-date RIPE Registry
  - Registry data relied upon by Network Operators, LEAs and Regulators
- We support members through the transfer process
  - Ensuring due diligence through thorough checks
  - Protecting your resources, which are valuable to you

# Increase in Disputes Over IP Addresses



- Disputed transfers
  - Outdated contact information
  - “LIR contact was no longer working at the company”
- Hijacked, disputed LIR accounts
  - LIR contacts removing other contacts from the LIR Portal
  - LIR accounts opened on behalf of unaware organisations
- Hijackers often target resources with outdated contact details!

# Protect Your Resources



- Ensure you verify your details in the LIR portal
  - Company address and contact details
  - RIPE NCC Access accounts
  - List of people authorised to make changes
- When receiving a transfer ensure the person you are dealing with is authorised!
- Check your information at regular intervals
  - In case of doubts or questions contact us: [lir-help@ripe.net](mailto:lir-help@ripe.net)



# Helping You Protect Your Resources



- We've improved our audit activities with feedback from members and the RIPE community
- Goals are:
  - Help members to maintain accurate data
  - Support members in protecting their resources
  - ...while minimising intrusion and workload for the member

# ARC: Some Numbers



*“One of the RIPE NCC’s key responsibilities is to maintain the accuracy and quality of the RIPE Registry”*

## 2,152 ARCs completed so far

93% of ARCs resulted in LIR data update!

130 ARCs completed in the MENOG region

In order to request an ARC contact us at [lir-help@ripe.net](mailto:lir-help@ripe.net)

| Action Taken                 | LIRs Helped |
|------------------------------|-------------|
| LIR Portal Admin Privileges  | 487         |
| LIR Contact Details          | 1032        |
| Billing Issues               | 148         |
| LIR Resource Registration    | 1115        |
| PI Resource Registration     | 163         |
| Maintainer Password Recovery | 166         |
| Routing Consistency          | 459         |
| rDNS Consistency             | 556         |



# Questions



[andrew@ripe.net](mailto:andrew@ripe.net)