



**RIPE NCC**  
RIPE NETWORK COORDINATION CENTRE

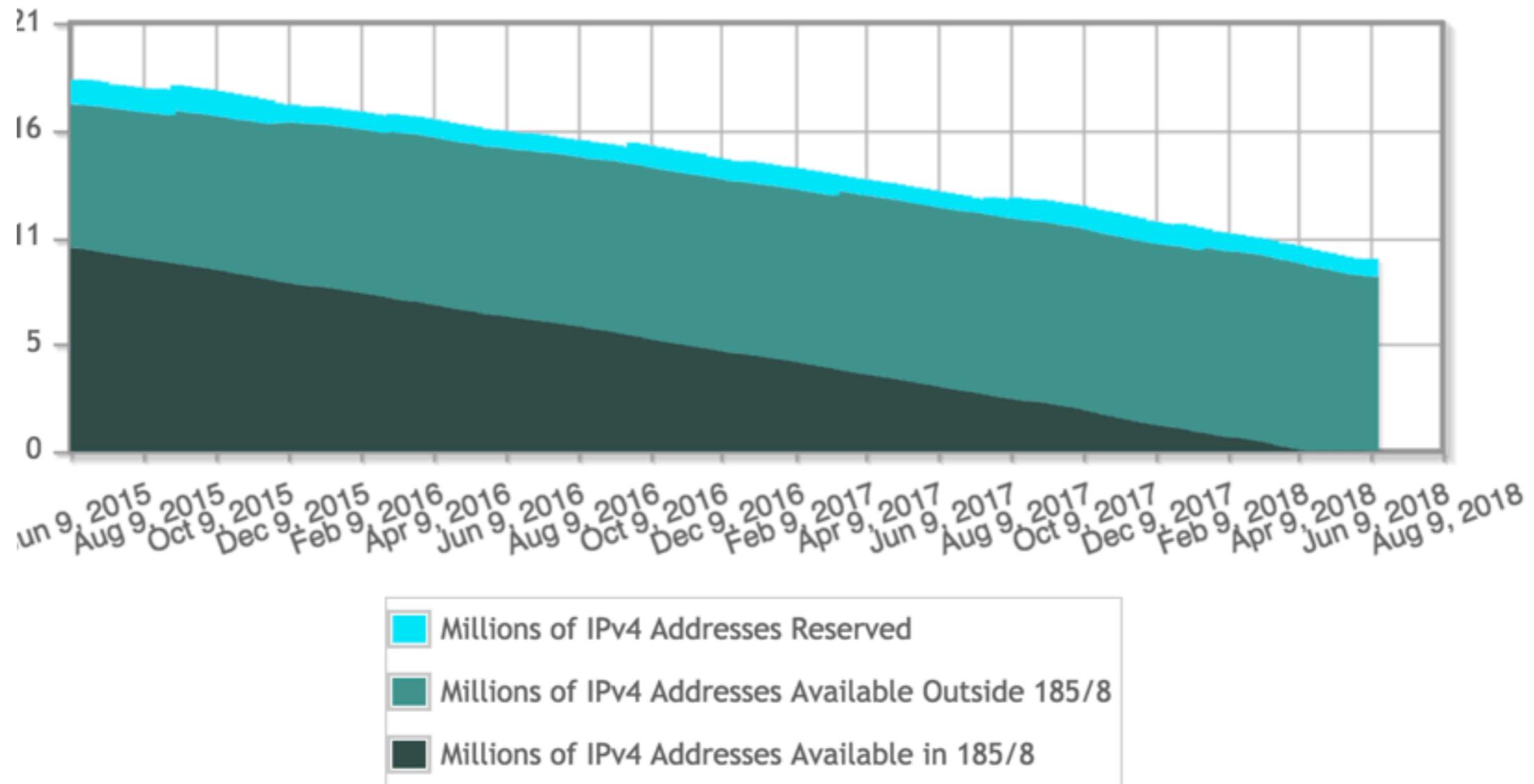
# IPv4 Transfers in the Region

Name | Date | Event

# RIPE NCC Available IPv4 Pool



RIPE NCC IPv4 Pool – Last 36 Months



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

# IPv4 Address Distribution



- Less than 0.5 /8s in our pool - Projected to last 1,5 more years
- 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
- IPv4 addresses cannot be transferred for 24 months from the date they were received by the resource holder



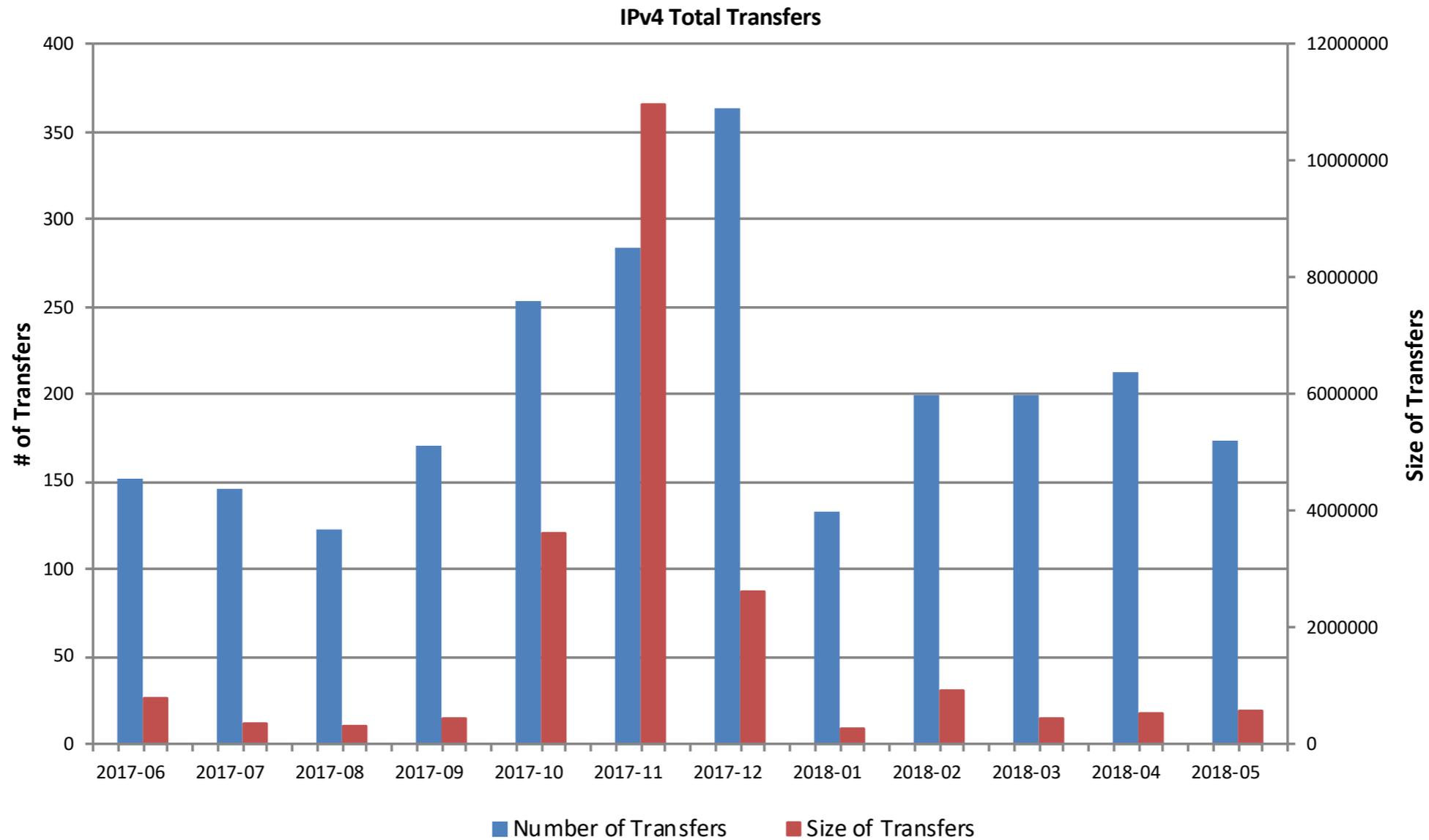
# Transferring IPs

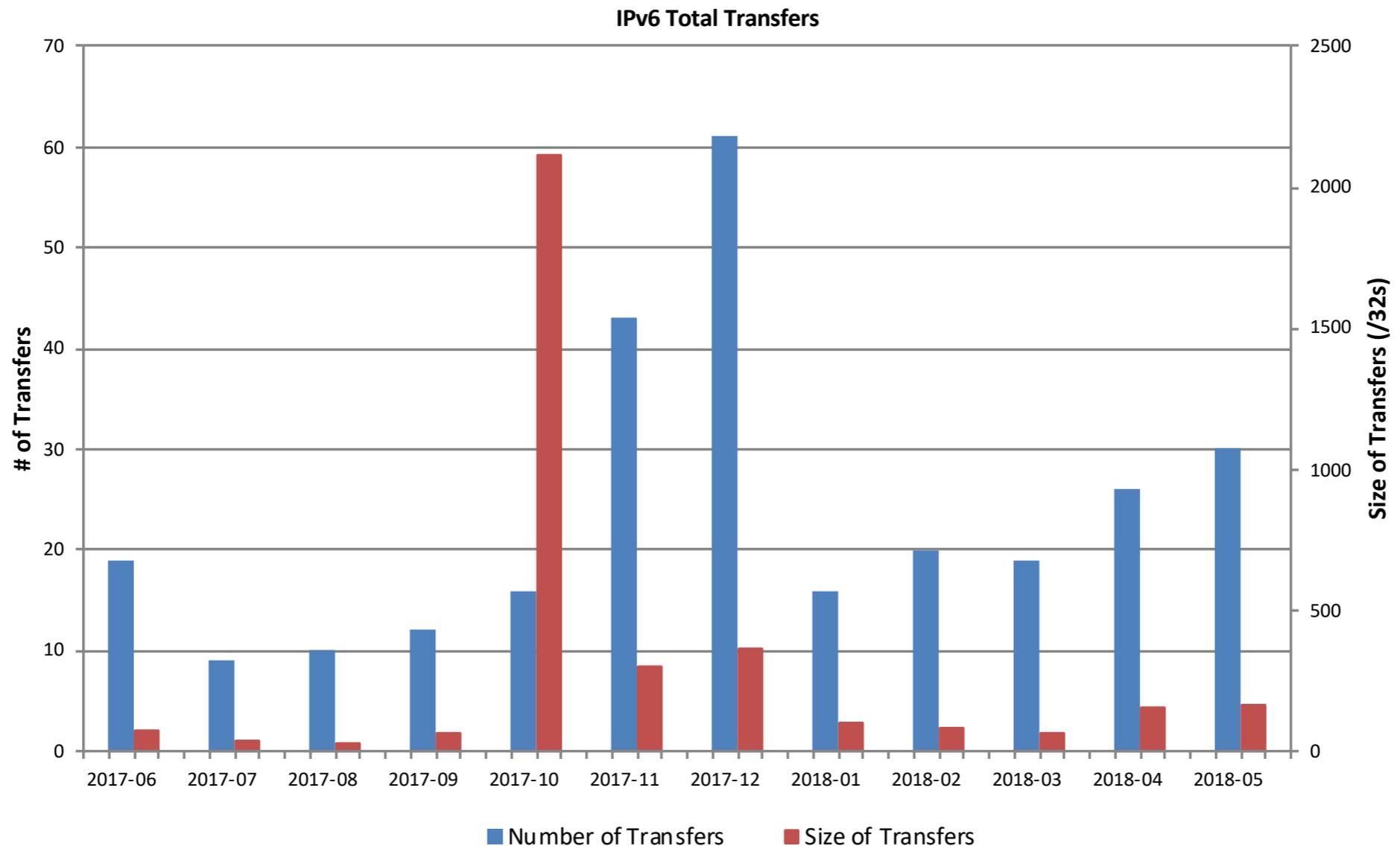
# Country Statistics

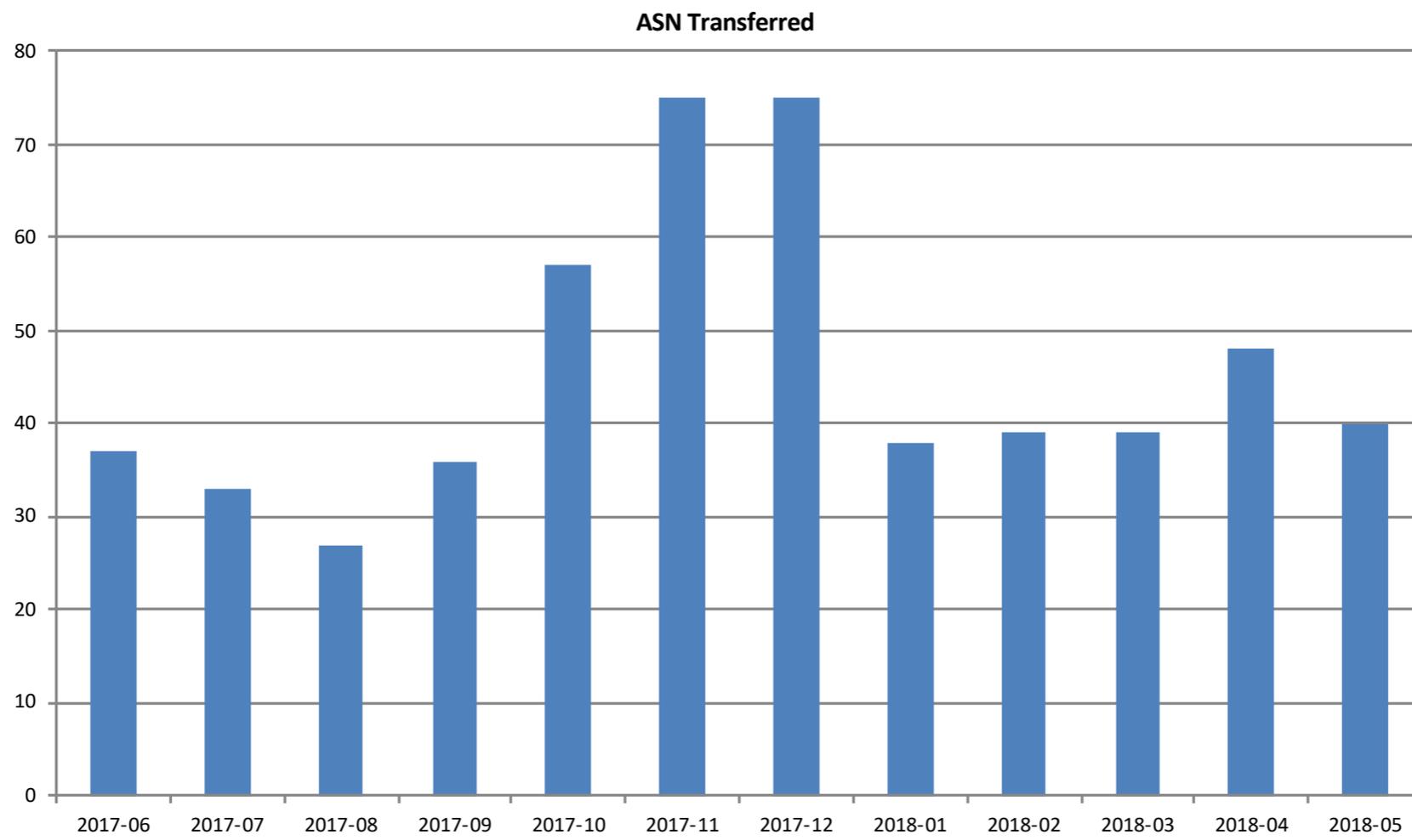


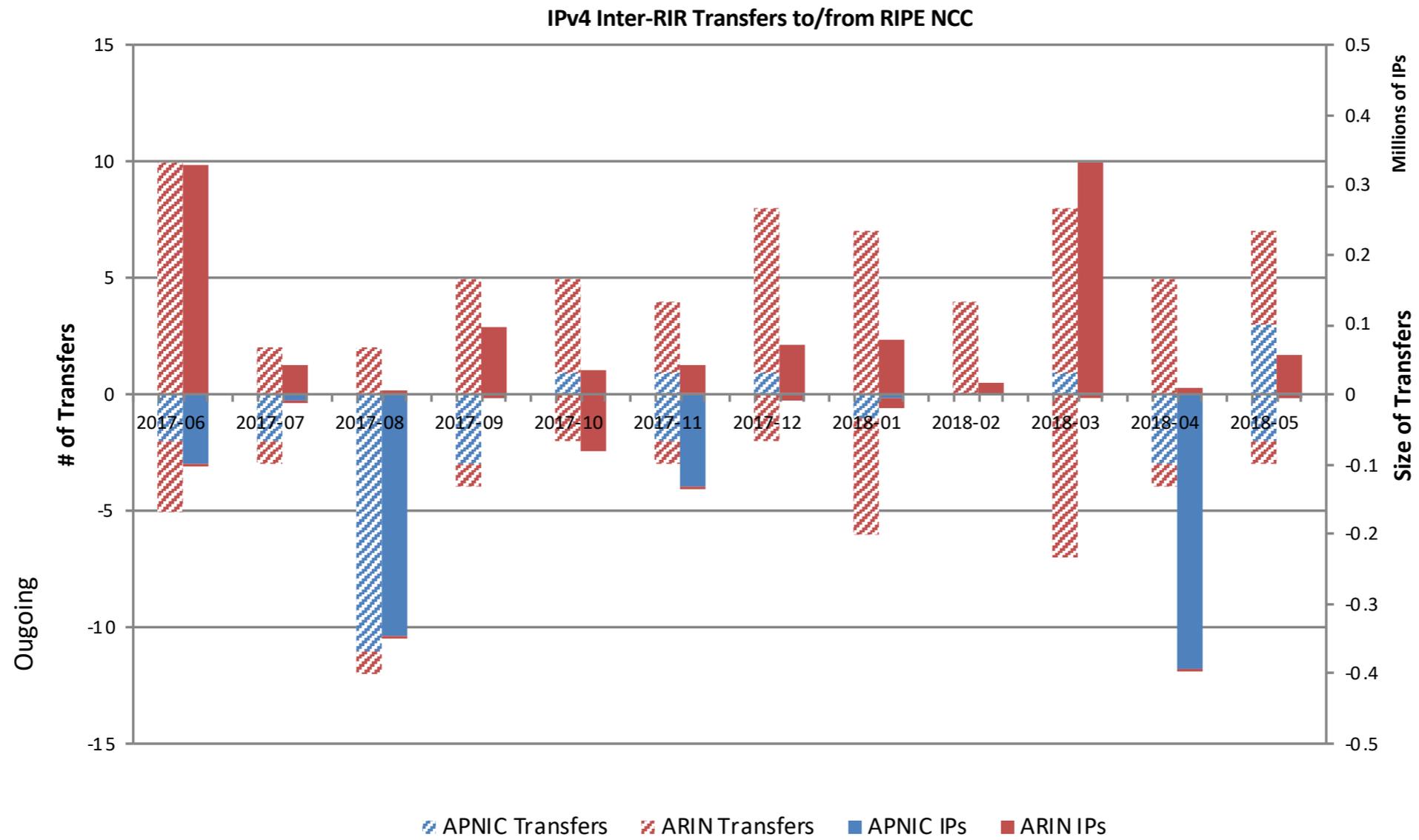
Country Code	IPs Into	Transfers Into	IPs Inside	Transfers Inside	IPs From	Transfers From
FI	8192	6	371456	37	82176	15
DK	229120	27	204544	43	632832	119
IS	12288	2	3328	4	6144	3
NO	294656	25	241664	25	5120	4
SE	250112	107	754432	75	20480	14
Legend:						
IPs Into = IPs transferred into the country from another country						
Transfers Into = Nr of transfers into the country from another country						
IPs Inside = Nr of IPs transferred within the country						
Transfers Inside = Nr of transfers within the country						
IPs From = IPs transferred from the country to another country						
Transfers From = Nr of transfers from the country to another country						

# Completed IPv4 Transfers









# IPv4 Hijacks



- IPv4 addresses are becoming more valuable due to scarcity
- Criminals use very sophisticated methods to obtain control over (seemingly) unused address blocks
  - Faking registration and identity papers
  - Faking entire websites and domains
- Hijackers often target resources with outdated contact details!

# 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
- We see an increase in efforts to hijack legacy space



# Questions



# Actions Taken by the RIPE NCC



Year	2015	2016
Concluded	95	64
New	25	80

- De-registered PI
- Due-diligence reminder\*
- Final warnings\*\*
- LIR closures (SSA & Membership termination)
- Rejected new LIR applications

\*Due diligence reminder for more minor infringements

\*\*Final warnings for major Policy and contractual violations

