

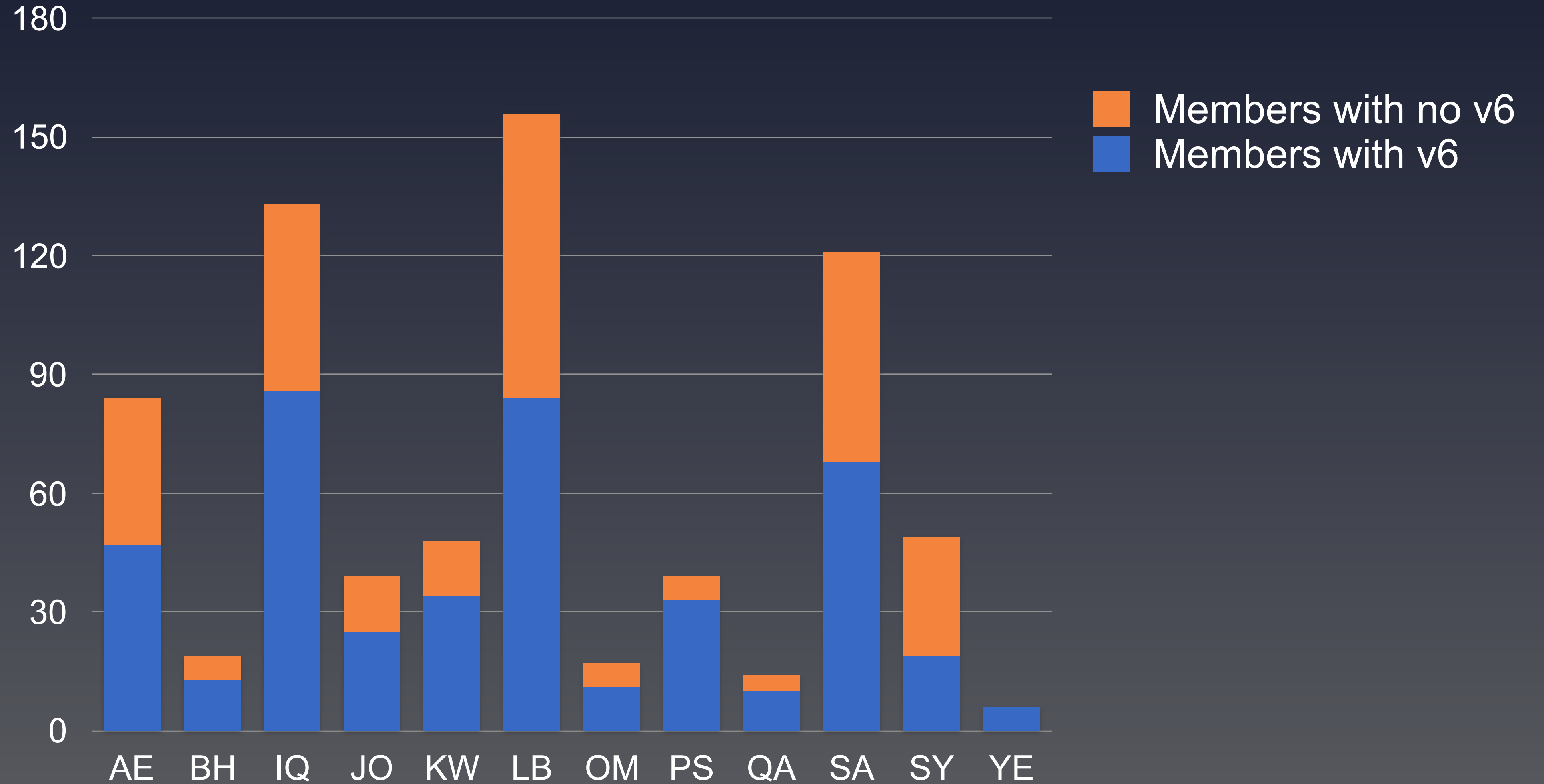


RIPE NCC
RIPE NETWORK COORDINATION CENTRE

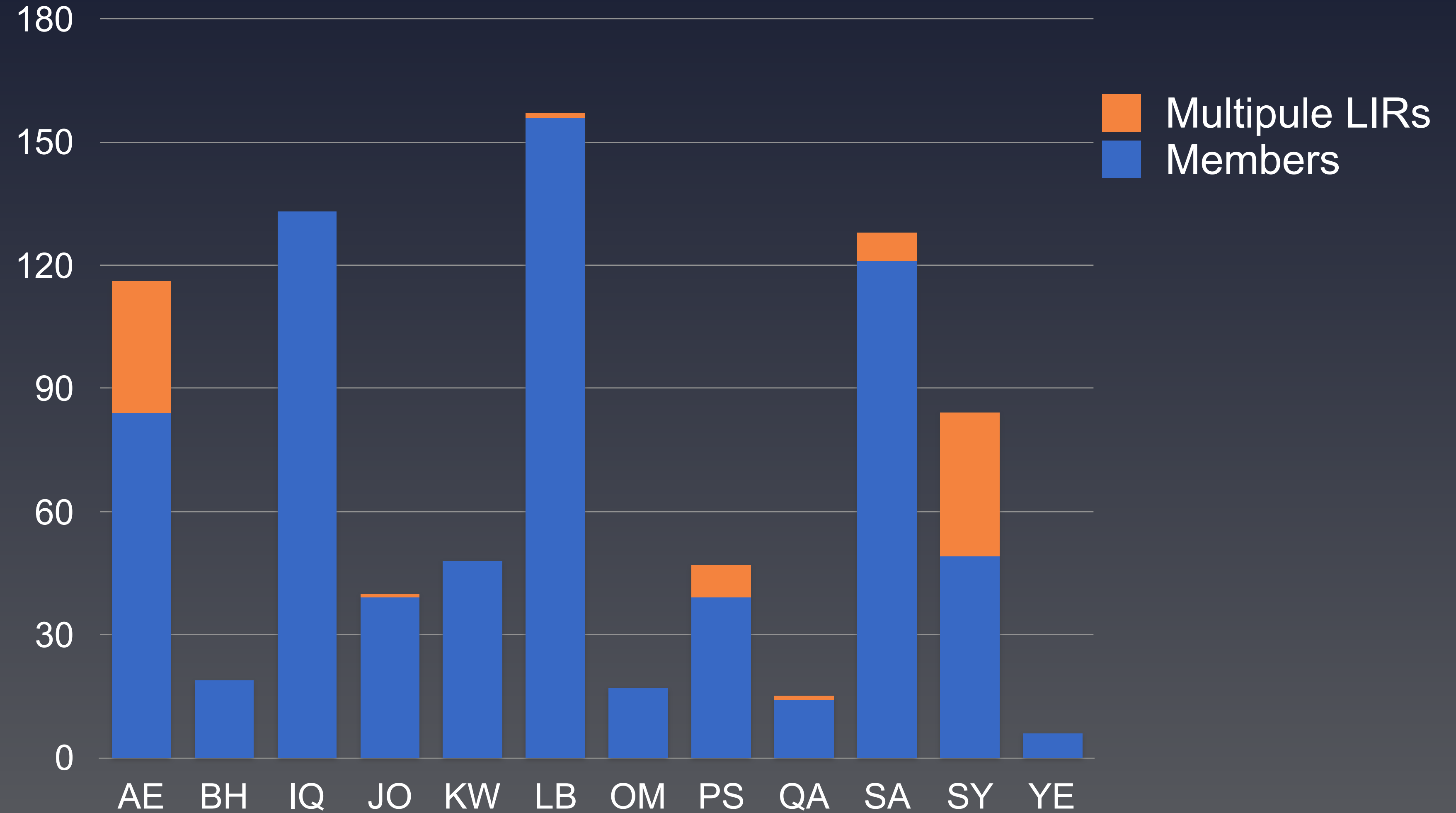
Internet Development in the Middle East: Statistics, Analysis and Trends in 2019

Hisham Ibrahim | ME Round Table | December 2019

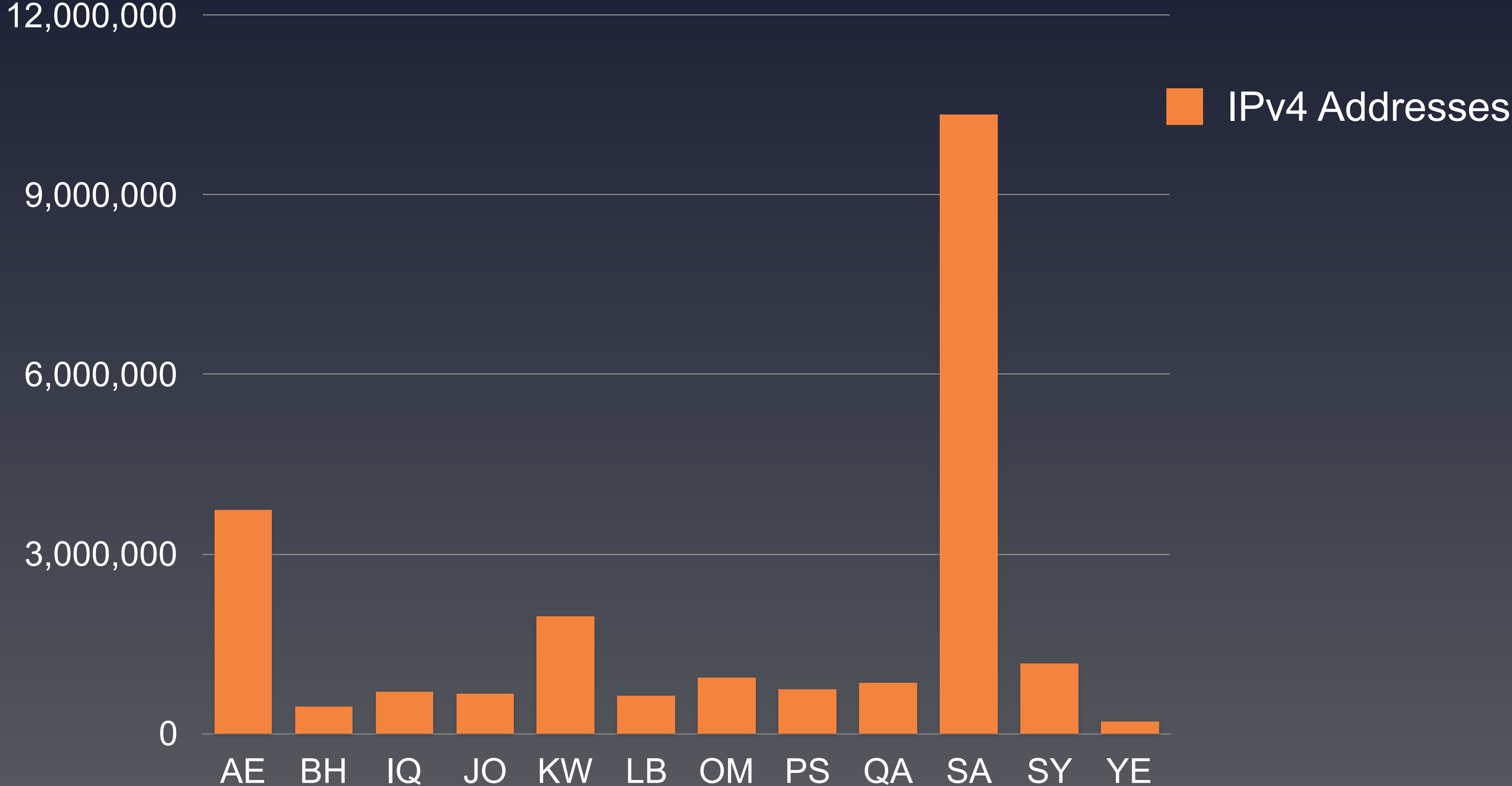
Membership



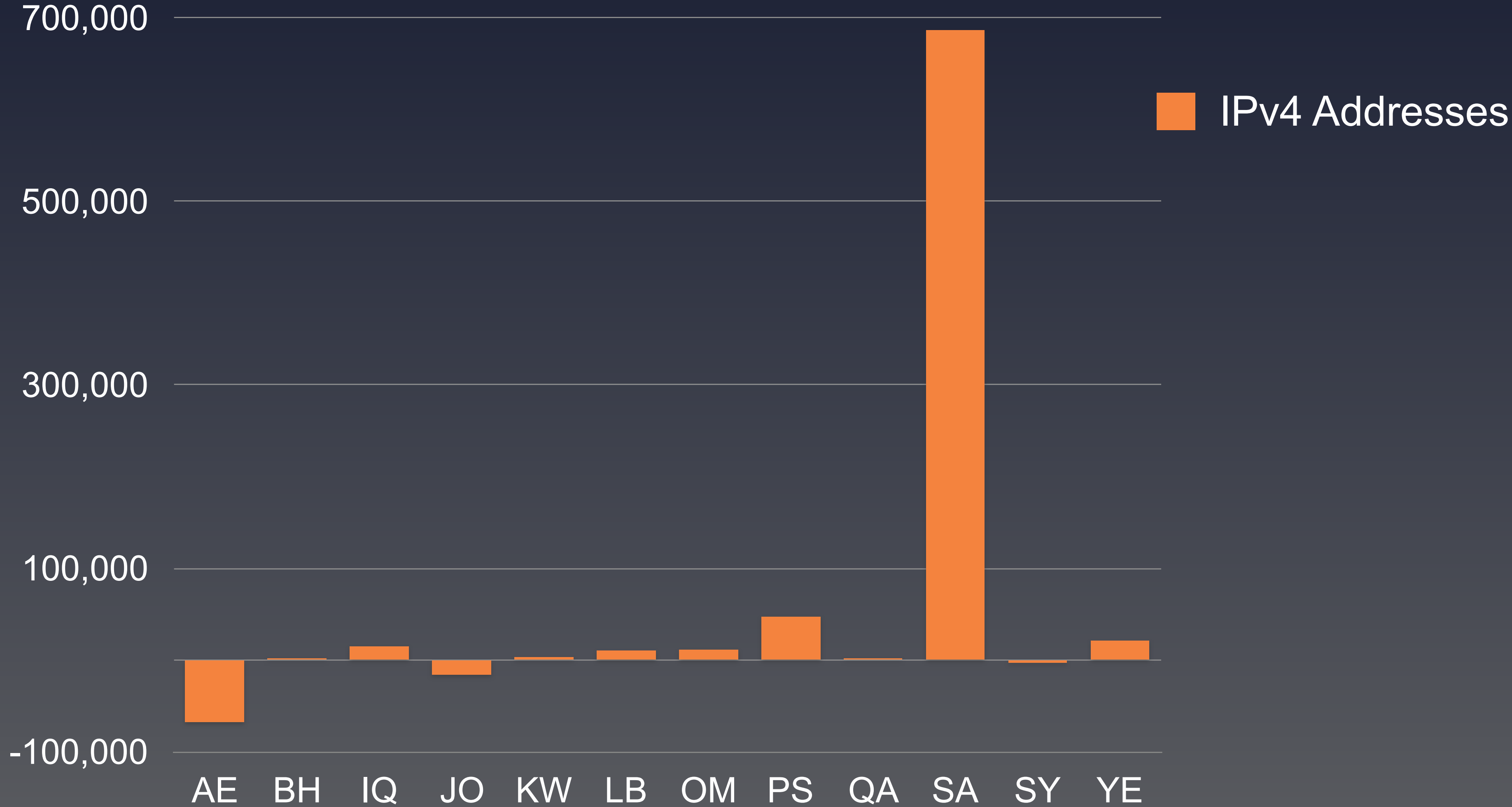
Members vs. LIRs



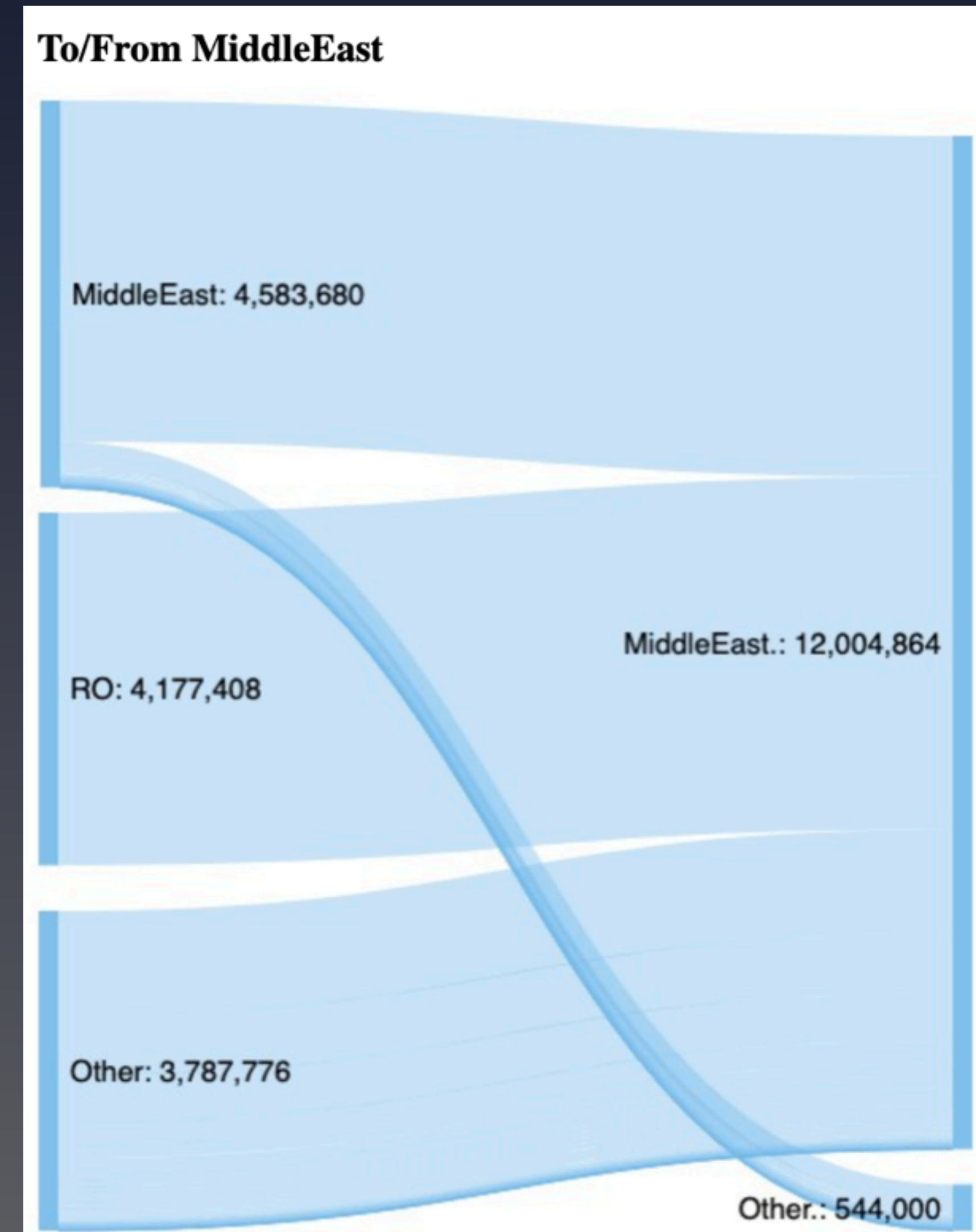
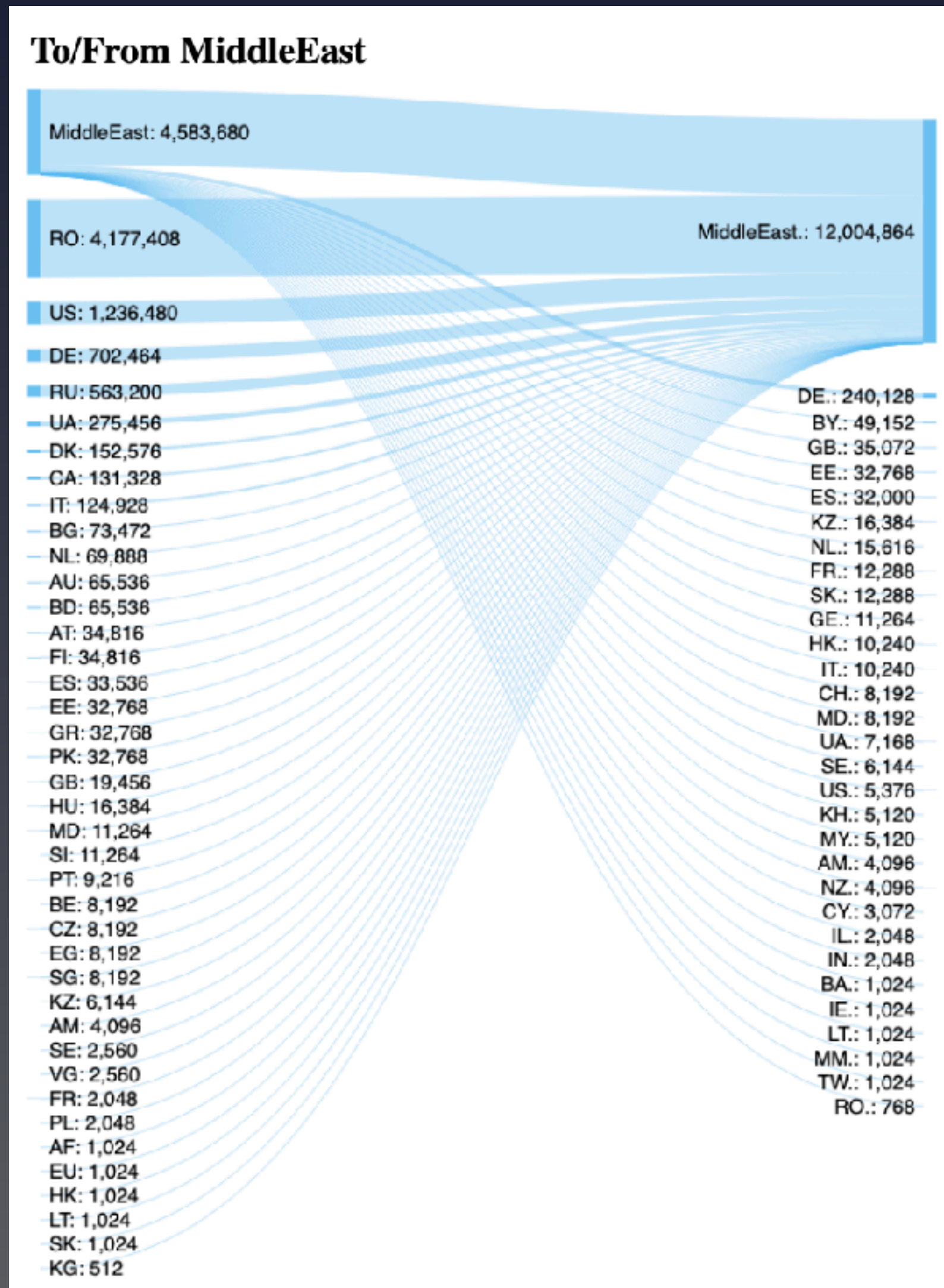
IPv4 Addresses



IPv4 Address Changes 2019



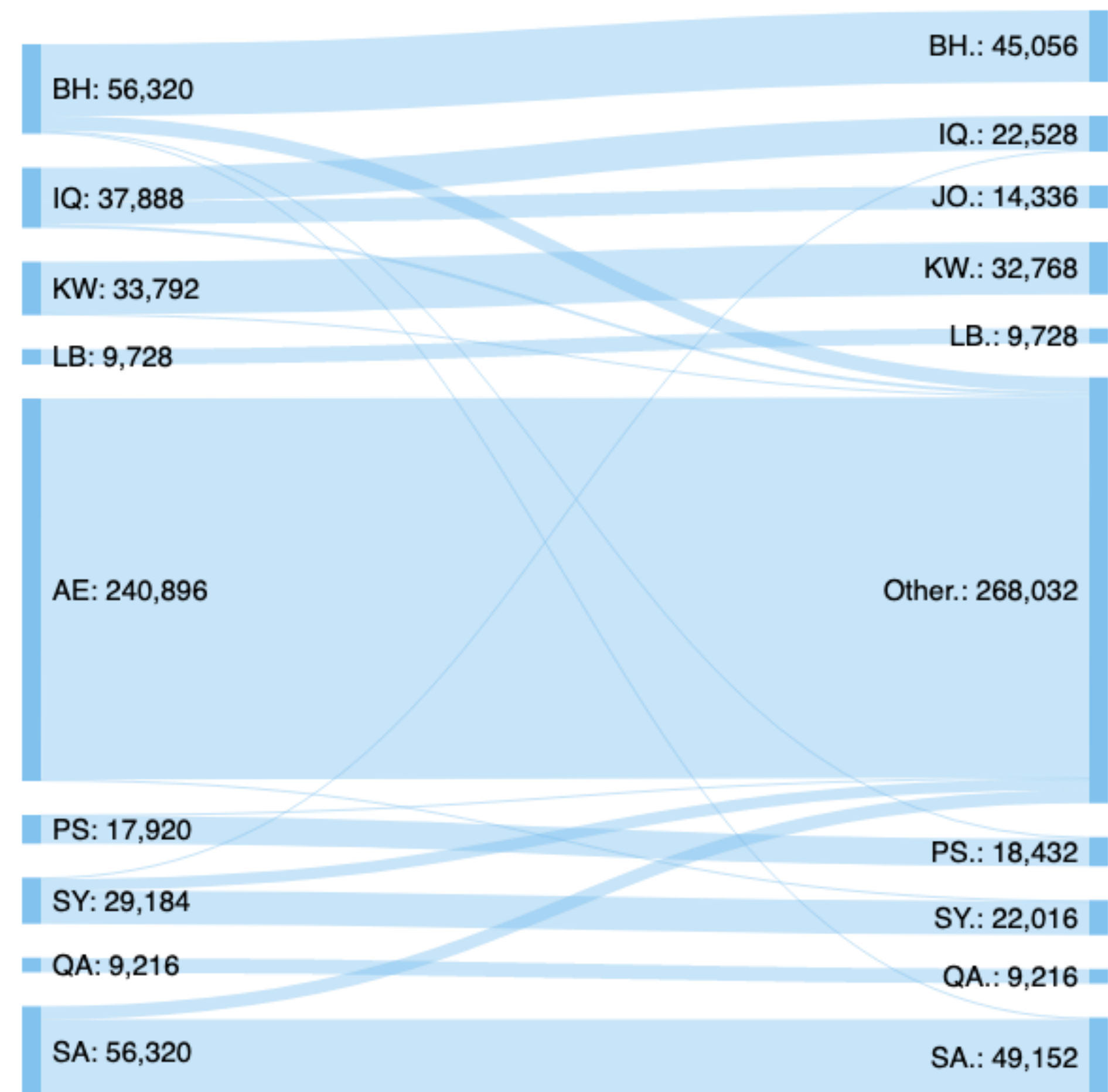
Transfer Balance - Middle East



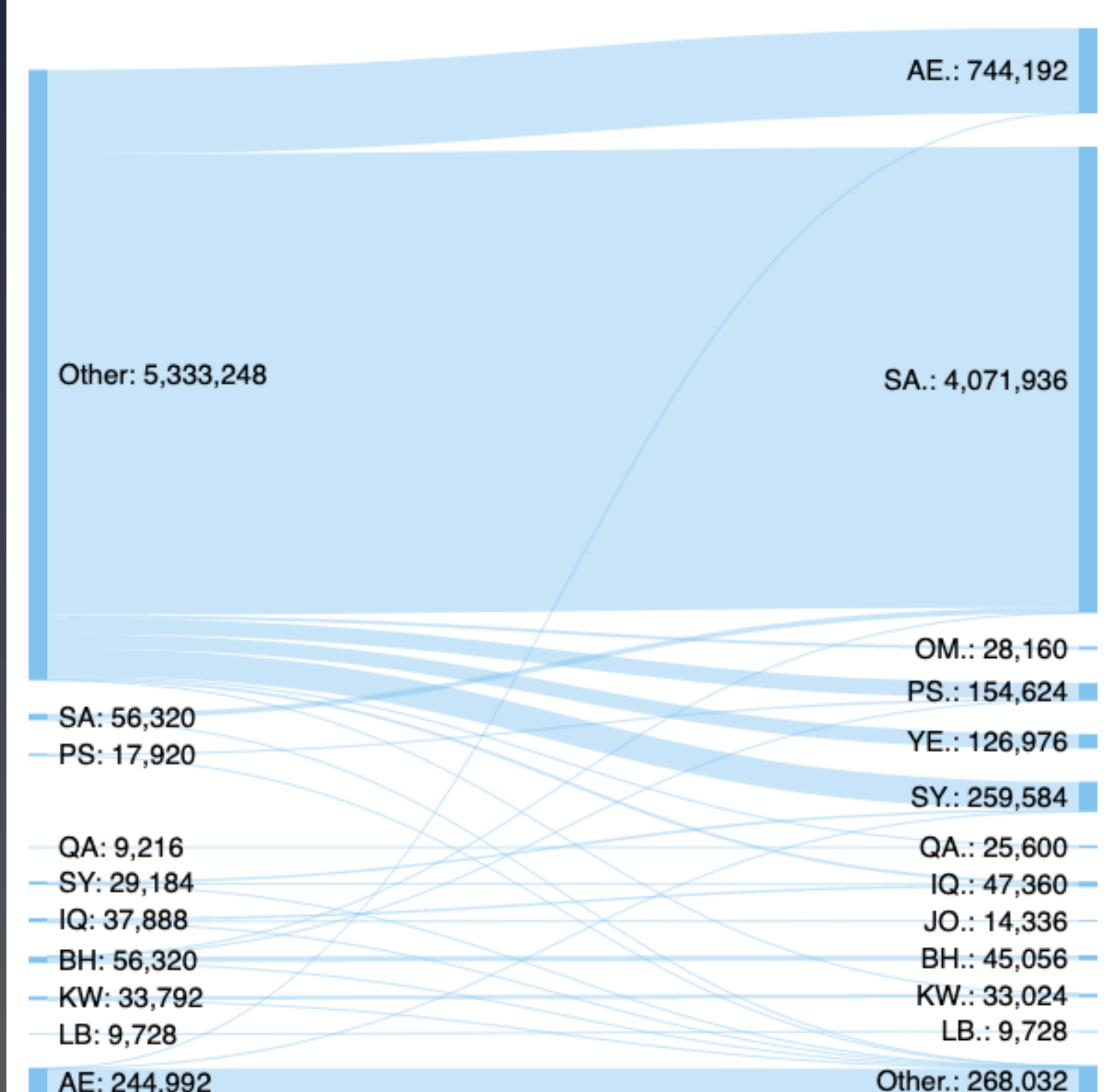
Transfer Balance - Arab Countries



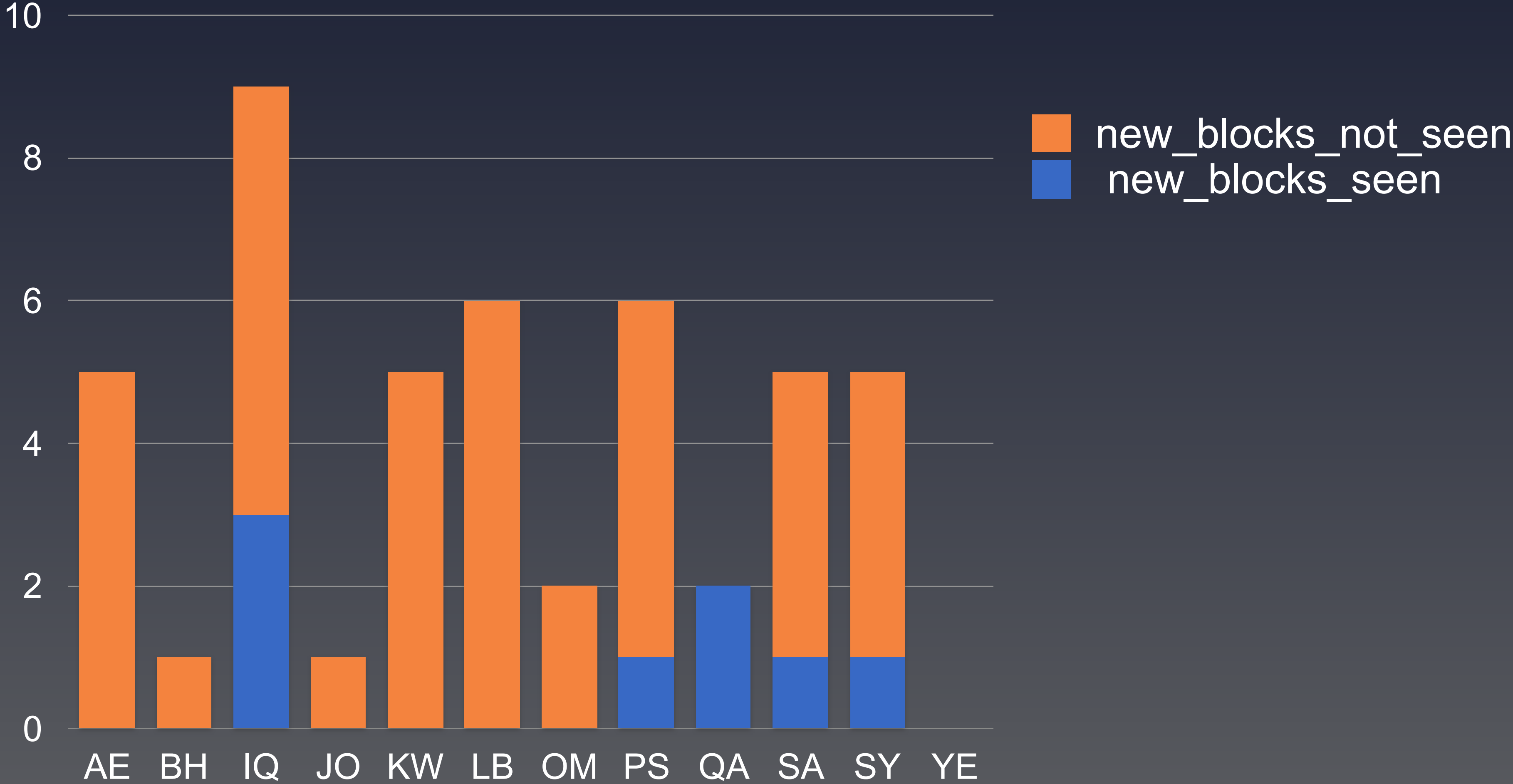
From Arab Countries to Arab Countries



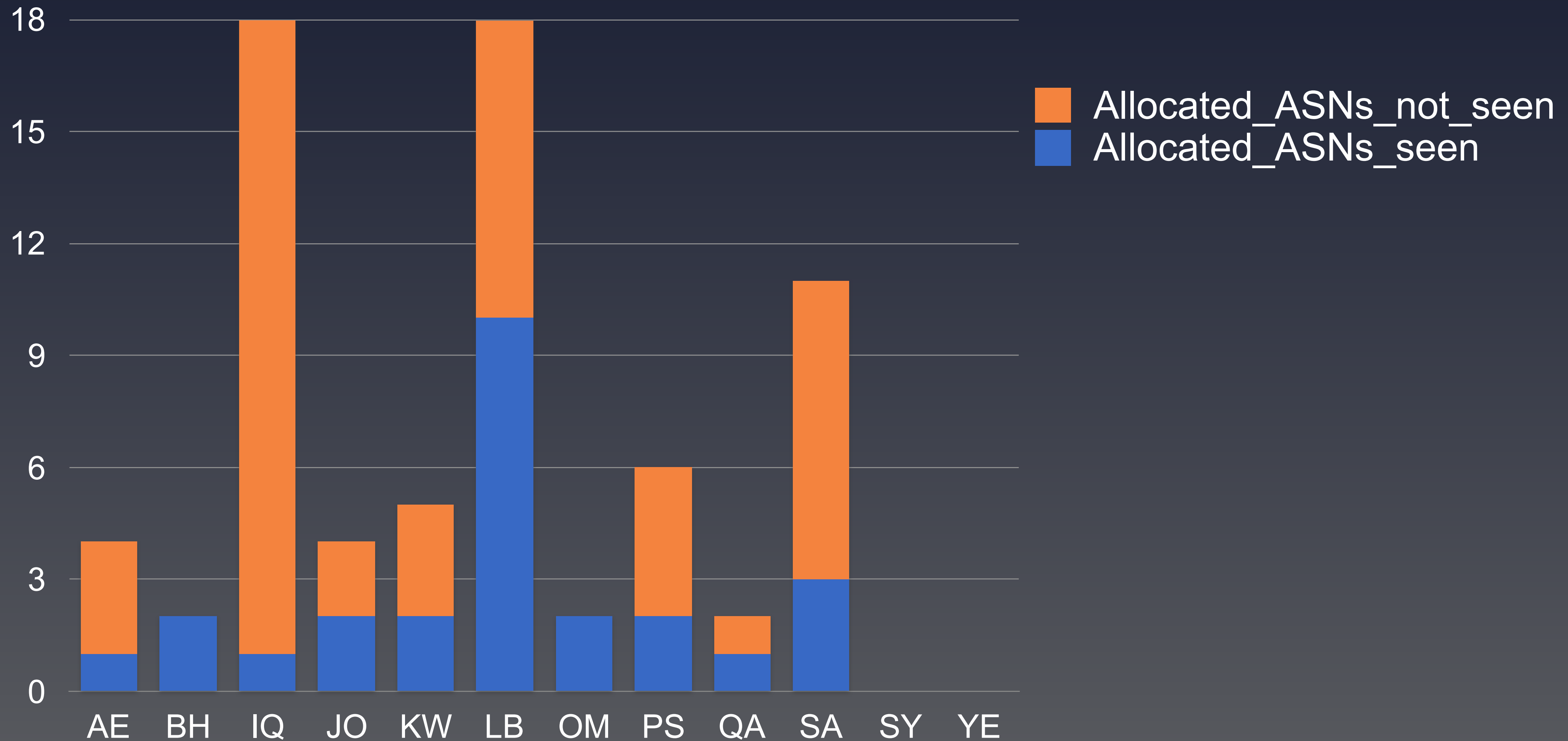
From or To The Arab Countries



New IPv6 Allocations / Assignments 2019



New Autonomous System Number 2019





RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE NCC Due Diligence and Cooperation Highlights

Hisham Ibrahim | ME Round Table | December 2019

Due Diligence



- The RIPE NCC has a mandate from the RIPE community to keep an up-to-date and correct Internet number resource registry. In order to comply with this mandate, the RIPE NCC performs due diligence on organisations the RIPE NCC registers Internet number resources for.
- Due diligence refers to the controls the RIPE NCC performs before and after the Internet number resources are registered.

<https://www.ripe.net/publications/docs/ripe-729>

Due Diligence - Verification



- Verification is an issue in most **ME** countries.
 - Countries such as **LB** and **SA** have good online chamber of commerce registries.
 - Countries such as **IQ** and **SY** however do not.
 - Countries such as **AE** have free trading zones that make it difficult to determine the legal status.
 - Current Status is not always available.

Due Diligence - M&As

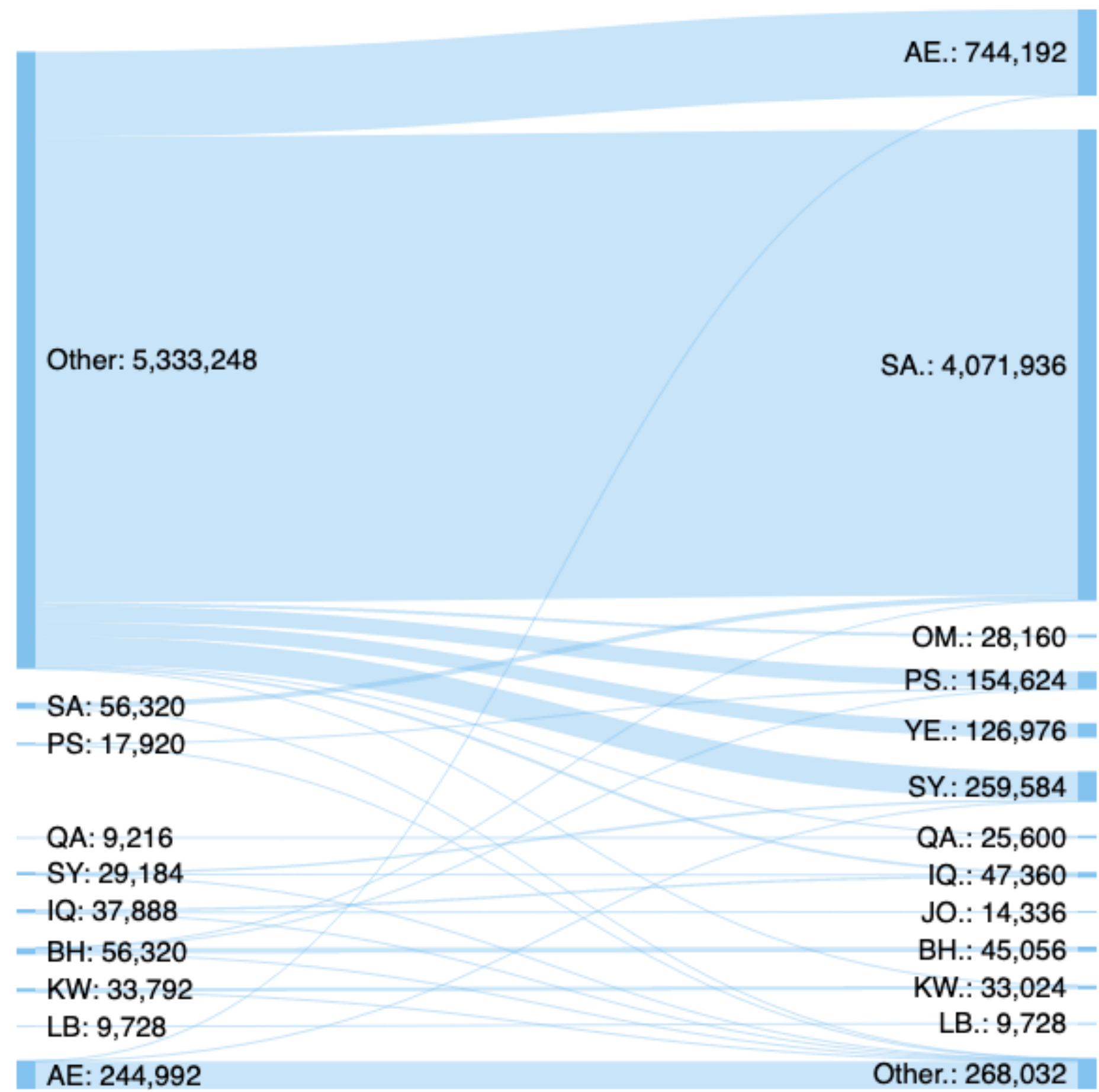


- Since **2015** the RIPE NCC handled over **5,500** Merger and Accusation (M&A) cases throughout the service region.
- These M&As resulted in the transfer of over **47 Million** IPv4 addresses.
- More than **95%** of the M&As the RIPE NCC handles are M&As within the same country.
- **DE, IT, RU & UK** are the top ranking countries for M&As (Resources Transferred) and **RO** is the top ranking country for M&As (Number of M&As).
- **BH, IQ, OM & PS** have all had M&As within the same country.
- **AE** has had both an internal and an external M&A.

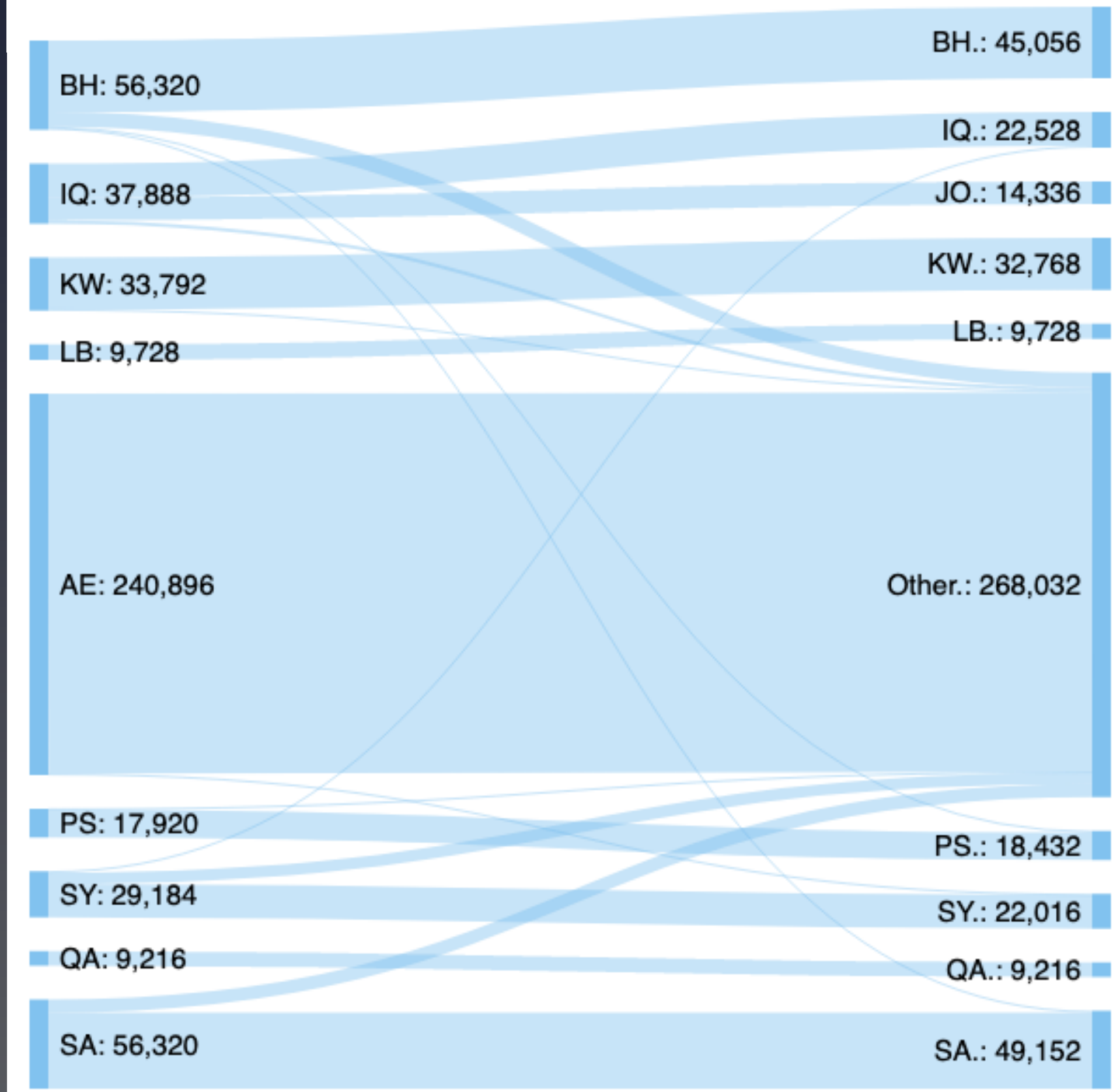
Due Diligence - Transfers



From or To The Arab Countries



From Arab Countries to Arab Countries



Due Diligence - Reachability



- We have had instances when the contacts in an account were neither responsive nor reachable, which is a scenario that can have a negative impact on an account (such as account freezing, closure and deregistration).
- This also increases the possibility of unauthorised changes taking place if invalid contacts still have access to an account.

Reverse DNS



- Reverse DNS is the process by which IP addresses are resolved back to domain names using the DNS.
- Reverse DNS is required for the successful delivery of email. It is also very useful when debugging network issues.
- RIPE NCC operates an Authoritative DNS cluster (distinct from K-root) for serving these reverse DNS zones.

Reverse DNS



- Currently there are no Reverse DNS clusters hosted in the Middle East.
- There is no cost for this, but a partner ISP should be willing and able to provide a moderately specced Dell server. RIPE NCC will operate this server remotely.
- This DNS cluster also serves the reverse DNS zones of the other RIRs, as well as a number of country-code top-level domains (ccTLDs).

Certified Professionals Programme



- RIPE Database certification launch in January 2020
- IPv6 Fundamentals and IPv6 Security certifications coming in 2020
- Three levels of Certification: Analyst, Associate and Expert
- Partnerships with LEA's (bulk vouchers system to certify officers)
- Proctored online examinations
- First group test environment will be held alongside MENOG20

MENOG 20



- MENOG 20 and Peering Forum will take place in Manama, Bahrain, from 15-19 March 2020
- Workshops (3 days) – 15-17 March 2020
 - IPv6 Basic (1D)
 - IPv6 Security (1D)
 - RIPE Database (1D)
 - MANRS (2D)
 - Email Address Internationalisation (1D)
- Plenary (2 days) – 18-19 March 2020





Thoughts

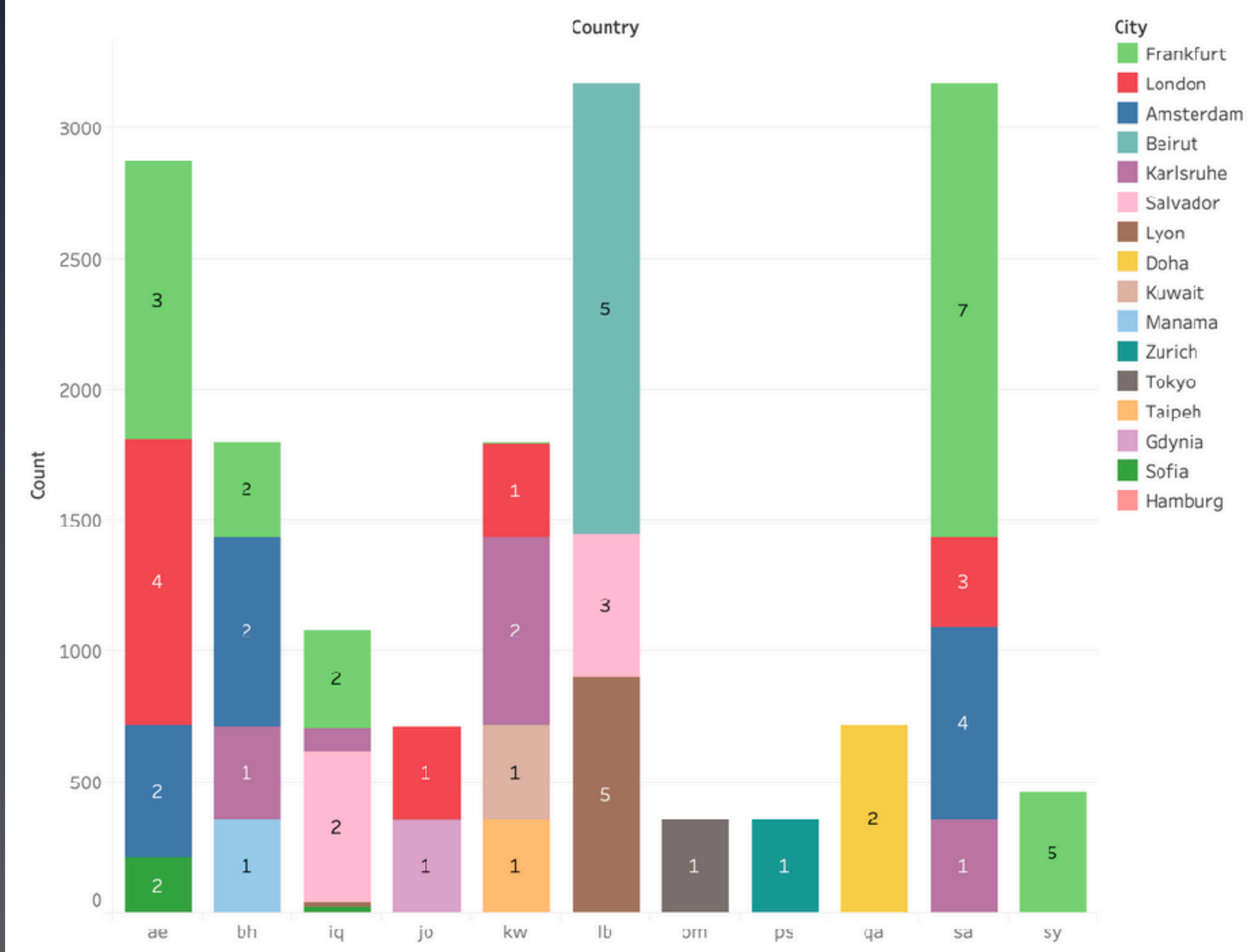


hmi@ripe.net

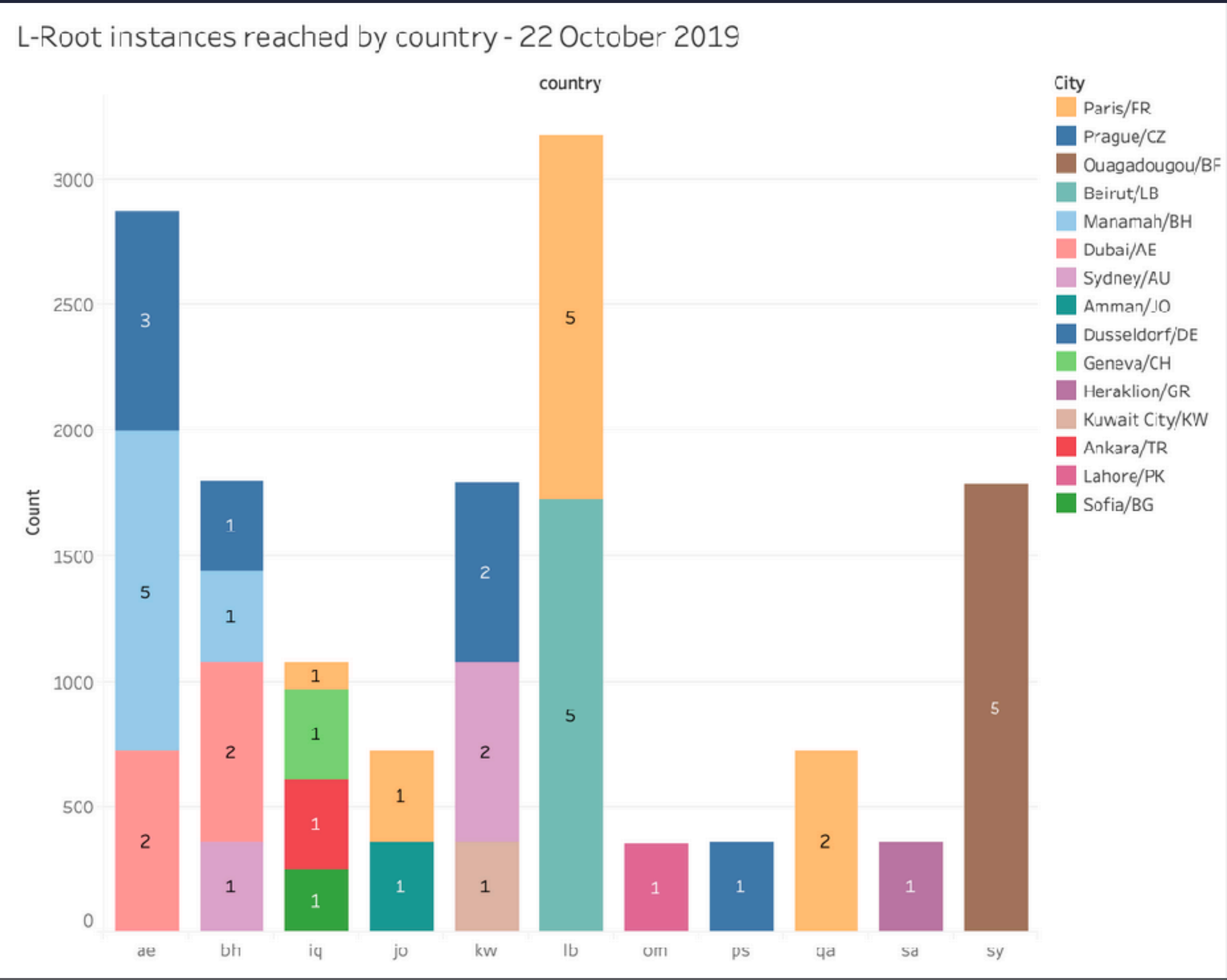
K Root



K-root locations reached by country - 22 October 2019



L Root



1.1.1.1



Cloudflare locations reached by country - 20 October 2019

