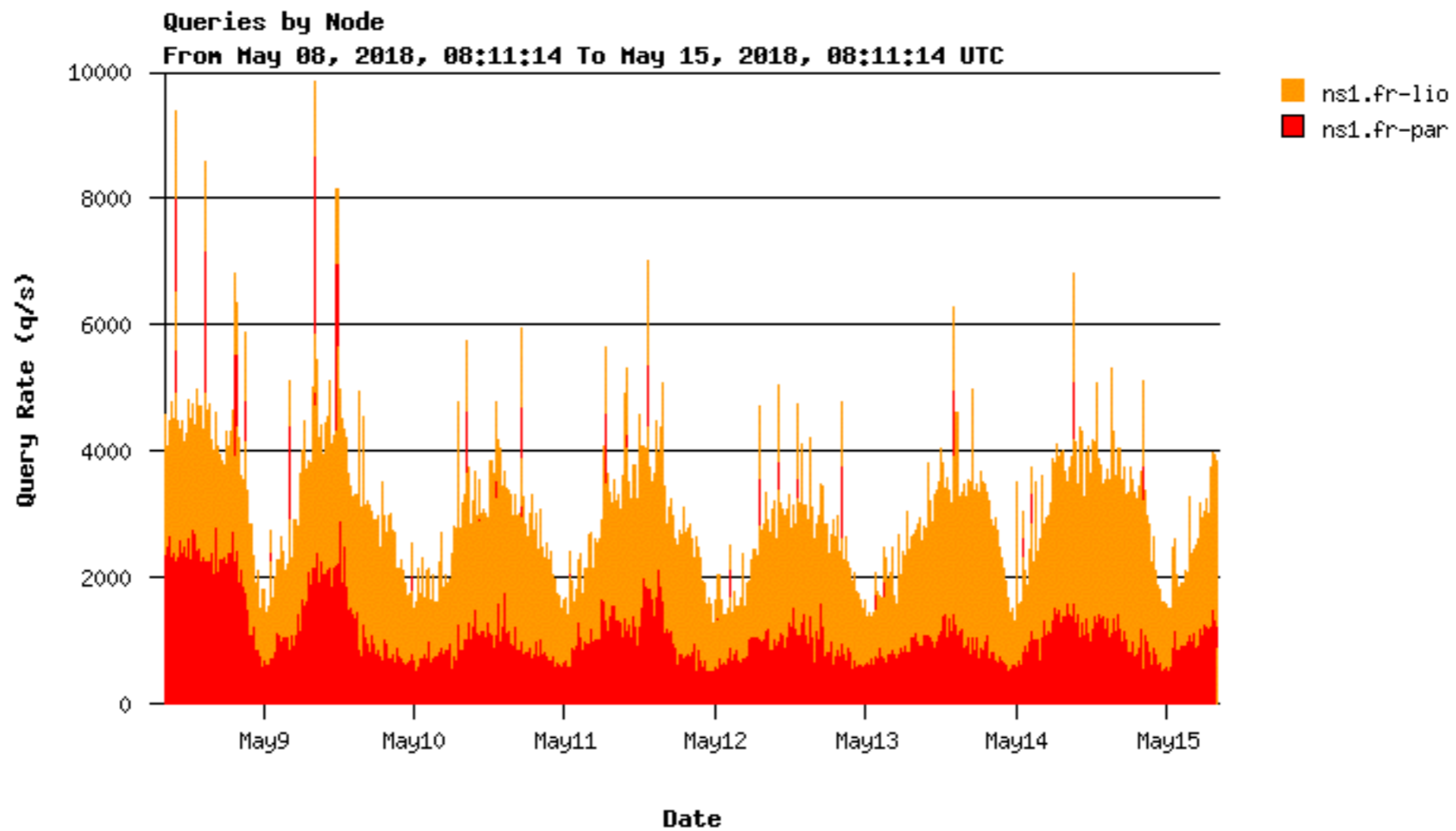# RIPE NCC DNS Update

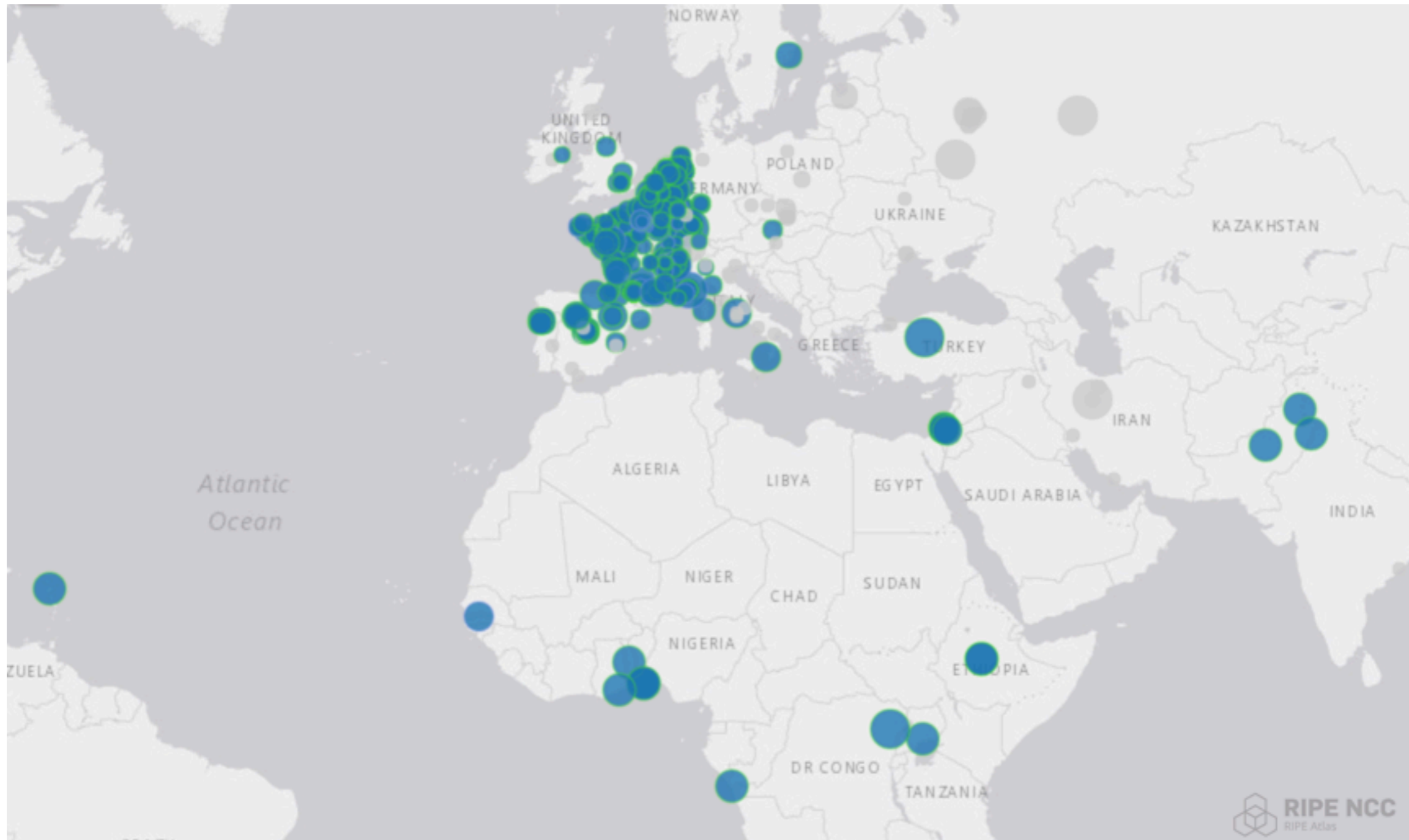Anand Buddhdev | May 2018 | RIPE 76

K-root

- Anycast footprint keeps growing
  - 61 instances (four new since RIPE 76)
  - Manama, Lyon, Dushanbe and Panama City

- Dushanbe - funded by RIPE NCC Community Projects Fund

- Panama City - sponsored by LACNIC

K-root en France

French K-root Nodes' Footprint

K-root Capacity improvements

- We are continuing to upgrade core sites to 10G

- RIPE NCC board has approved the proposal for a new 100G site

  - Planning and deployment will happen after RIPE 76

  - This will help us with the planning and budget for similar sites in 2019

Contributing Data for Research

- DITL 2018

  - PCAP files from K-root and AS112 node uploaded to DNS OARC

  - Researchers can access this data after signing an agreement with DNS OARC

- Root zone KSK roll-over

  - Hourly uploads of trust anchor signalling data to ICANN (RFC 8145)

Zone Transfers over IPv6

- RIPE NCC provides secondary DNS service to, and receives secondary DNS service from various organisations

- We use IPv6 exclusively for transfers to and from the following:

  - APNIC, ARIN, LACNIC, ICANN and ISC's secondary name service (SNS)

- For AFRINIC, we still have IPv4 fallback, but it's temporary. We hope to switch to IPv6 exclusively once they do some upgrades

DNSSEC Signer Replacement

- Community feedback about non-HSM based solutions has been favourable

- We are still evaluating various solutions
  - Knot DNS
  - PowerDNS
  - Secure64's x86 signer (based on Knot DNS)

- We aim to complete our replacement by the end of this year

Zonemaster GUI

- Zonemaster does pre-delegation checks before domain objects can be created or updated in the RIPE Database

- The GUI at https://zonemaster.ripe.net lets users run pre- and post-delegations tests

- We will move this functionality into RIPEstat within the next two months

Questions

anandb@ripe.net