

RIPE NCC ENUM Update

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DNS Department Services

- Reverse DNS for RIPE NCC zones
- Secondary for other RIRs
- K-root
- F-reverse (in-addr.arpa & ip6.arpa)
- Secondary DNS for ccTLDs
- ENUM Tier-0 (e164.arpa)
- AS112 node at AMS-IX (RFC1918 space sink)

Anycast Cluster (AS197000)

- Two anycast instances operational
 - London (LINX) & Amsterdam (AMS-IX)
- Production for critical zones
 - in-addr.arpa (Reverse IPv4 parent zone)
 - ip6.arpa (Reverse IPv6 parent zone)
 - IPv4 and IPv6 reverse parent zones
 - Primary for RIPE NCC
 - Secondary for other RIRs
 - RIPE NCC forward zones (ripe.net, etc.)

DNSSEC Outages: The Ugly

- Encountered a bug during KSK rollover
- Signature over DNSKEY set missing
 - Affected e164.arpa on 15 February 2011
- Vendor could not reproduce the problem and concluded that high load on system caused it

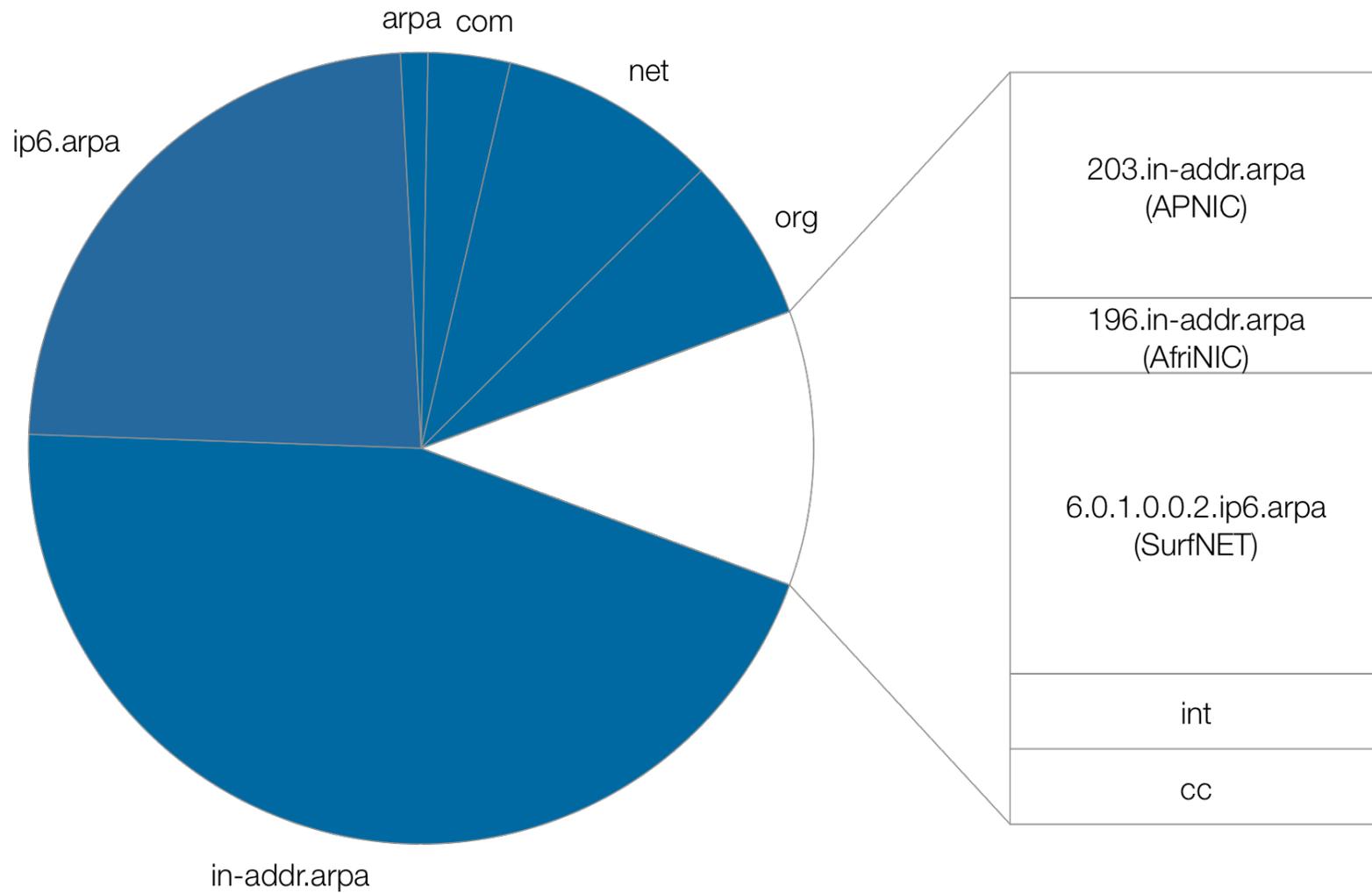
DNSSEC Outages: The Bad

- Second outage on 14 April 2011
 - Affected ripe.net and 0.a.2.ip6.arpa
- Same exact problem – no high system load

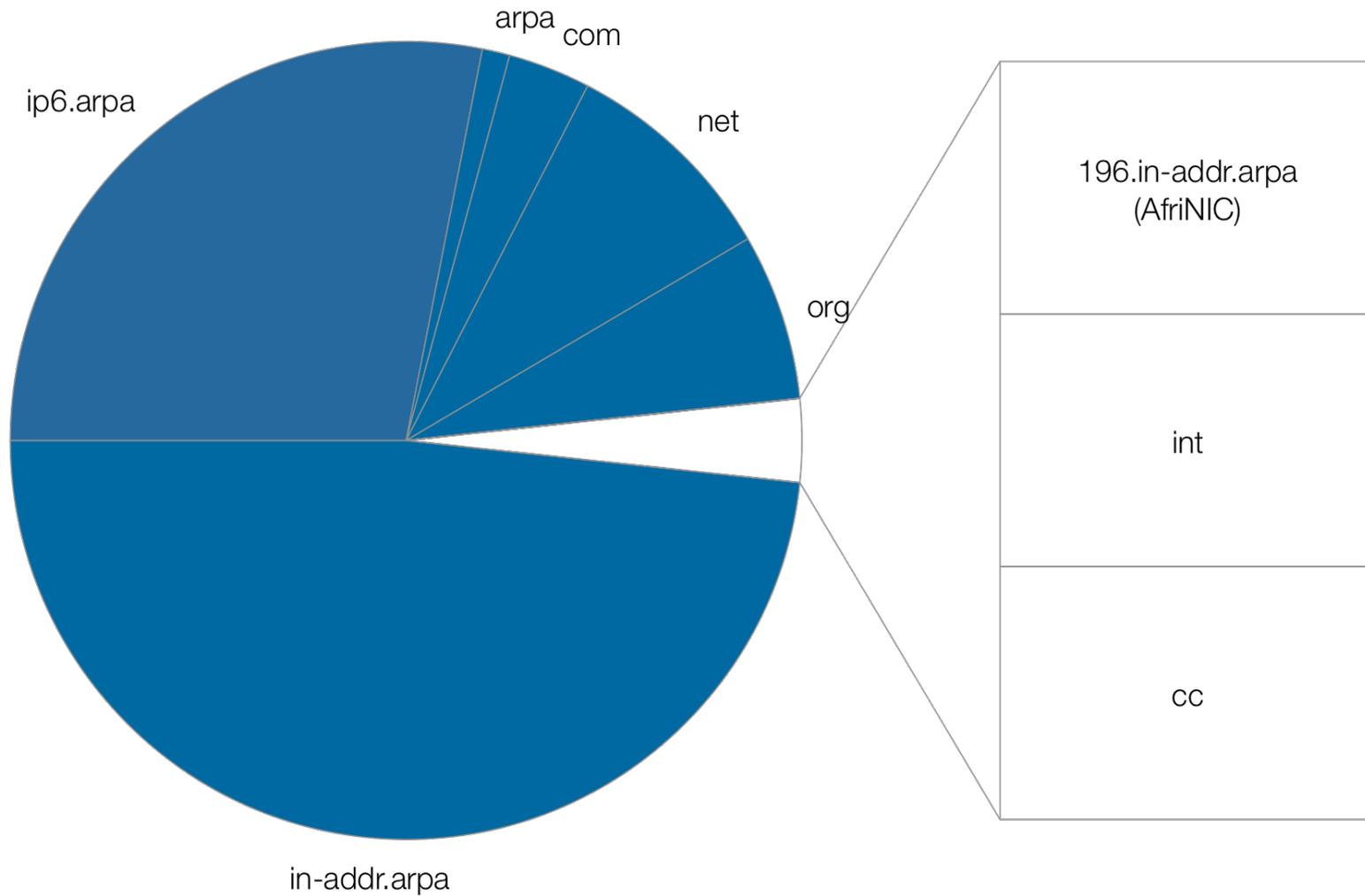
DNSSEC Outages: The Good

- Gathered enough data to reproduce the bug
 - Awaiting release with bug fix before our next rollover
- Called for broad work on a safeguard
 - Spurred interest from others (SIDN, AFNIC, DENIC, ...)
 - Initial work on a DNSSEC verification proxy started
 - Coordination on the DNSSEXY mailinglist
 - <http://nlnetlabs.nl/mailman/listinfo/dnssexy>

DNSSEC: Signed Parents



DNSSEC: Signed Parents (By Fall 2011)



Delegation Updates

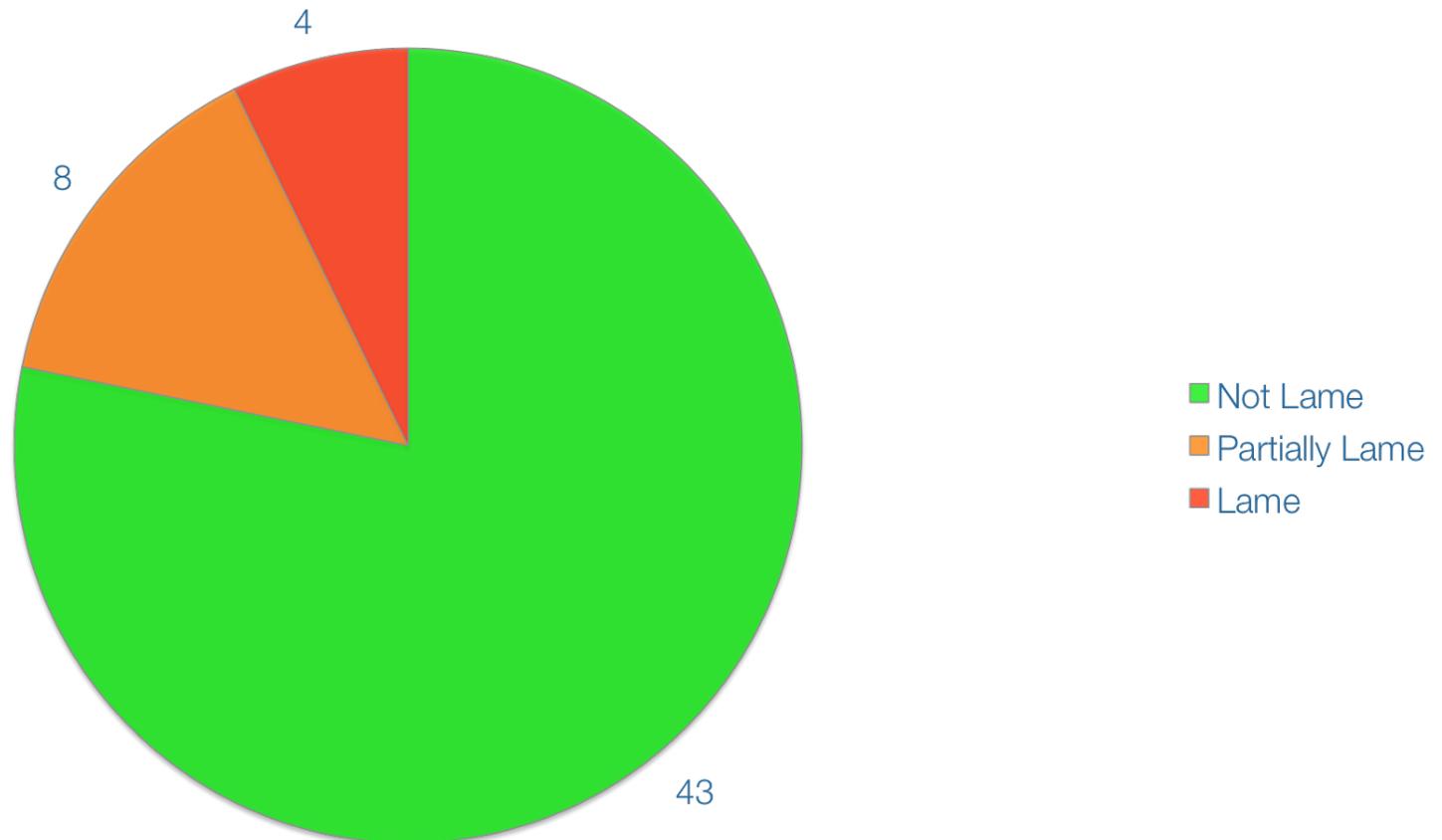
- One new delegation since RIPE 61
 - Portugal (+351) in April 2011

Signed Zones

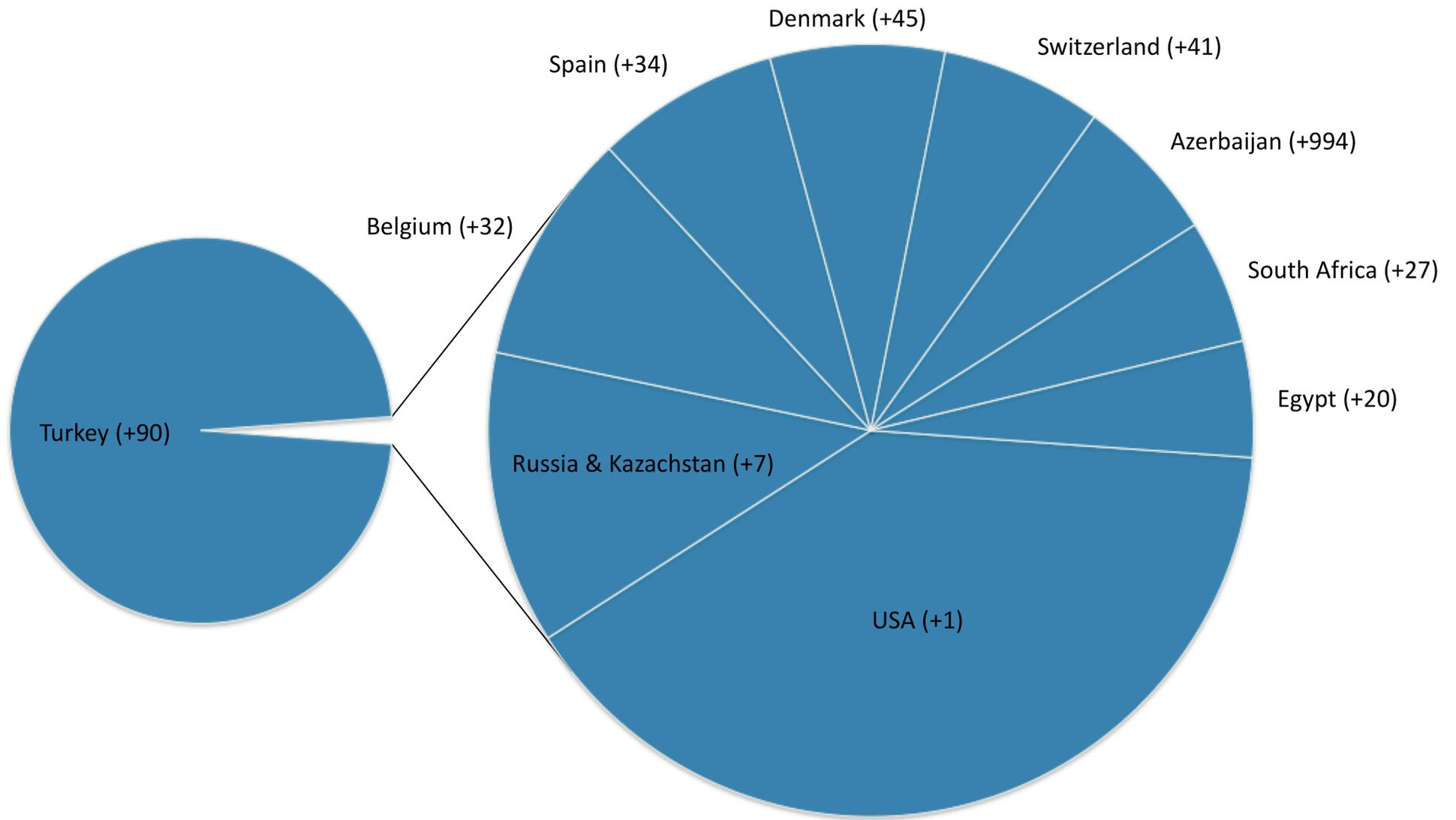
- Poland (+48)
- Czech Republic (+420)
- Netherlands (+31)
- Lithuania (+370)
- Armenia (+374)
- Portugal (+351) – No DS record in e164.arpa yet

Lameness in the ENUM Zone

- Data from March 2011



Top 10: Undelegated Country Codes



Questions?

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