

IPv6:: the global picture and the position of UK

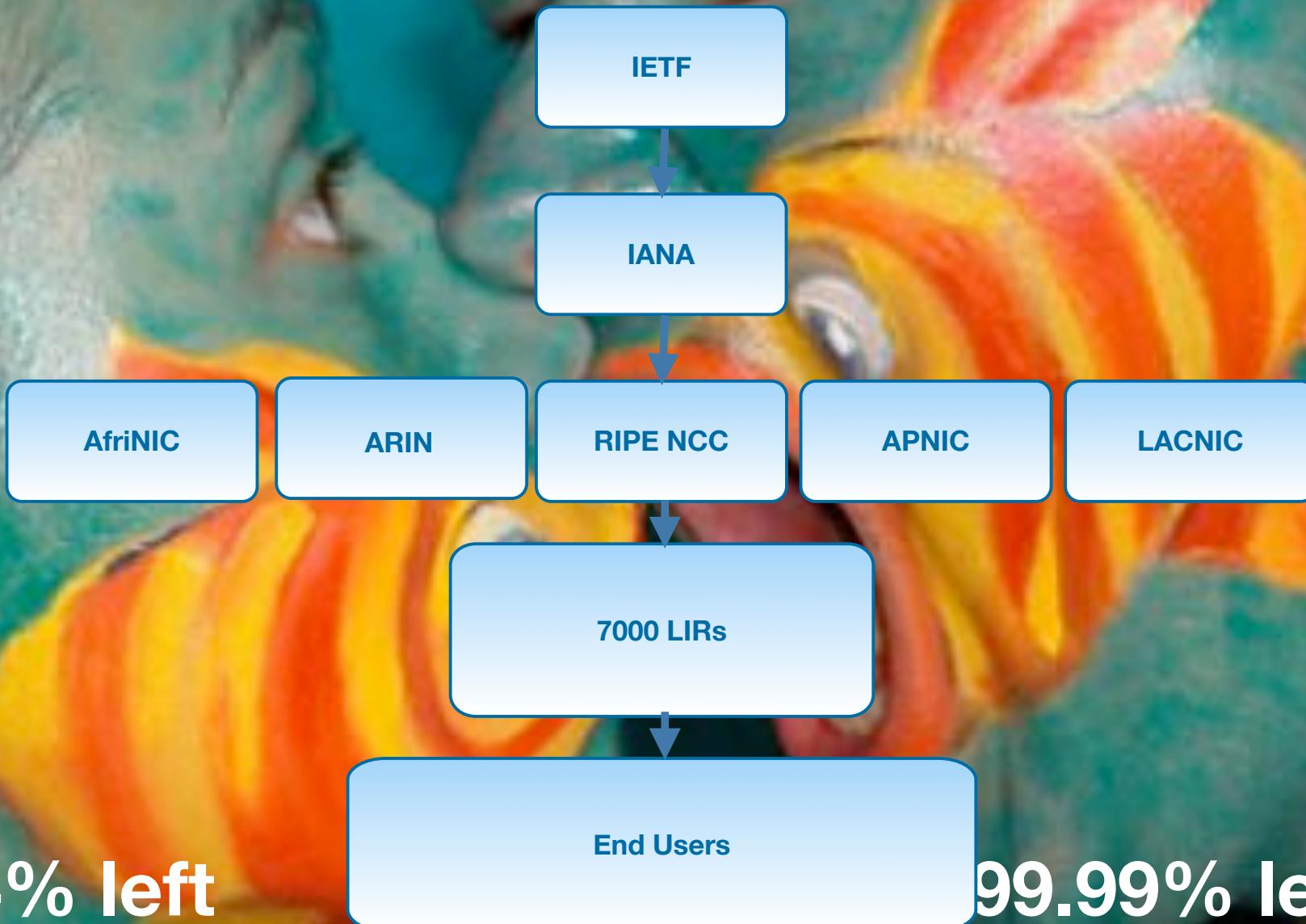


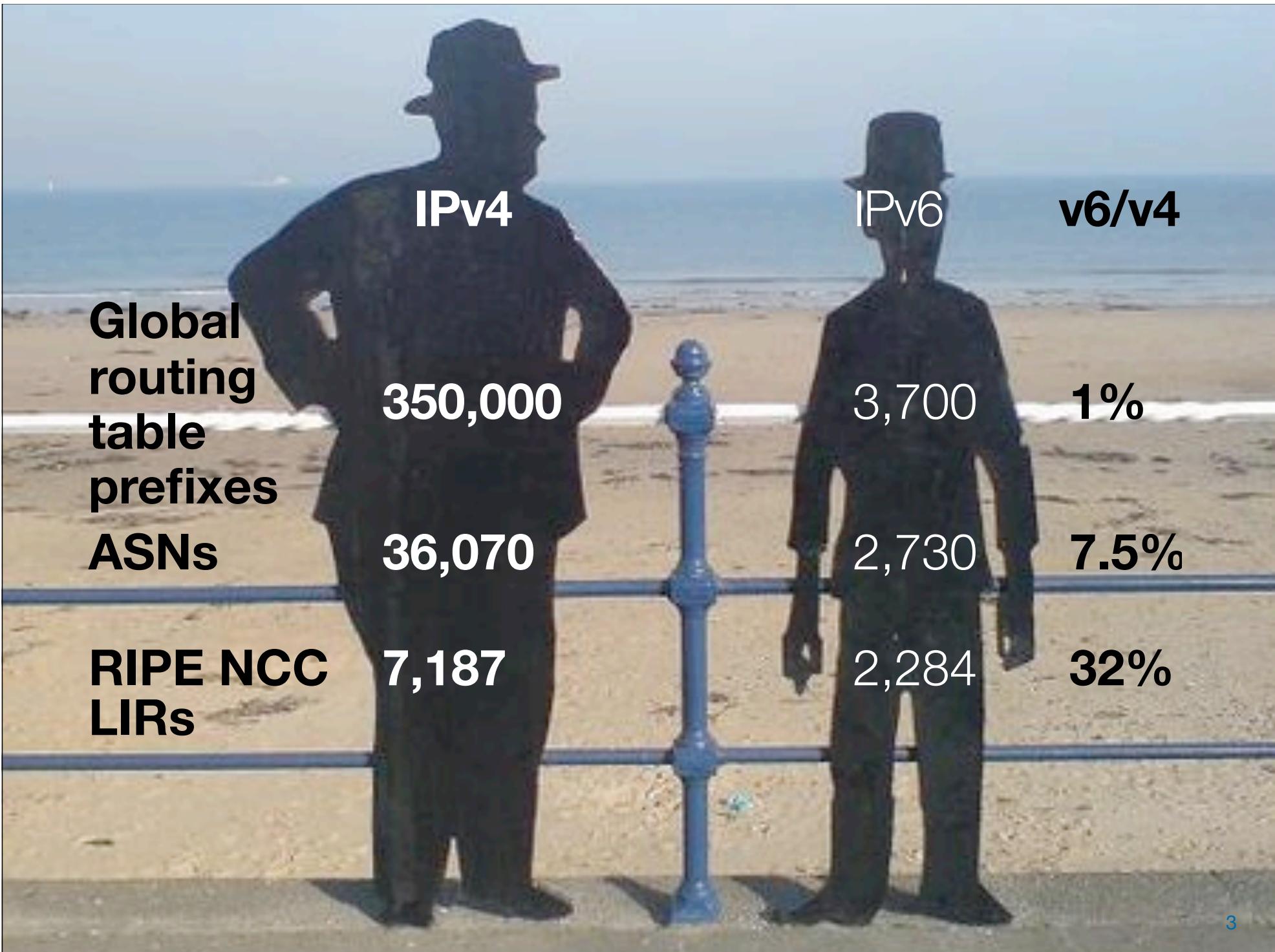
Vesna Manojlovic, RIPE NCC

@ 6UK Launch event, 11-11-2010, London



Where are all the numbers coming from?





IPv4 is running out

- Right now, you can get IPv4 space you need, for up to:
 - ... 9 months (July 2010)
 - ... 6 months (January 2011)
 - ... 3 months (July 2011)
- From the last /8, RIPE NCC will give LIRs only one last /22 block
(2000 addresses)
only if they already have IPv6!



6UK?

- 30% of ISPs have IPv6 addresses
- Only 7% have 4 “stars” IPv6 “Ripeness”
- 9% of ASNs use IPv6
- 1% DNS IPv6 enabled



IPv6 Ripeness - rating of ISPs (LIRs)

- ★ Address space
- ★ Routing security
(route6 object in
RIPE Database)
- ★ Reverse DNS
- ★ Routed on Internet
(visible in RIS)

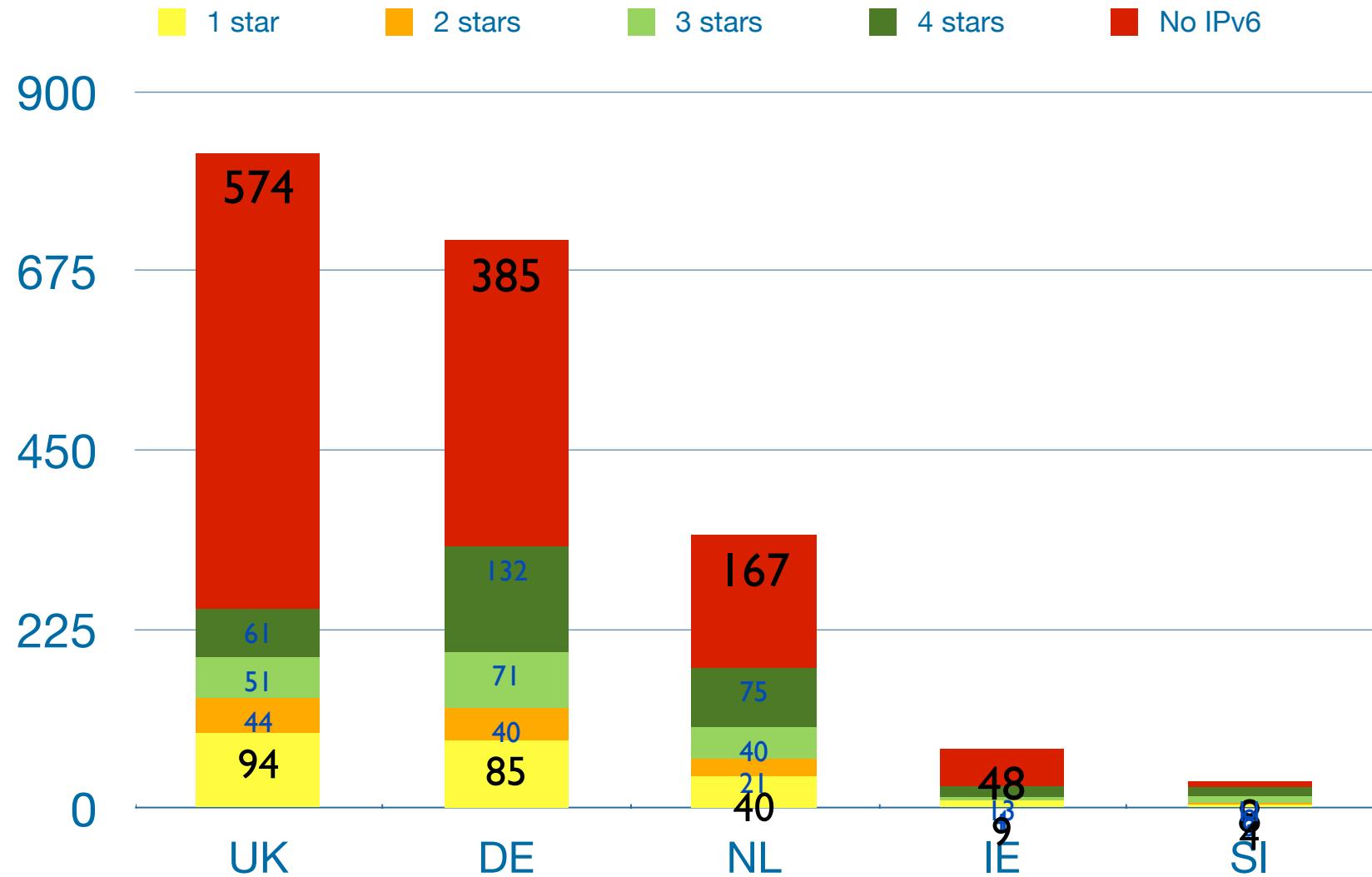
<http://ipv6ripeness.ripe.net>

And now for
something
completely
different...

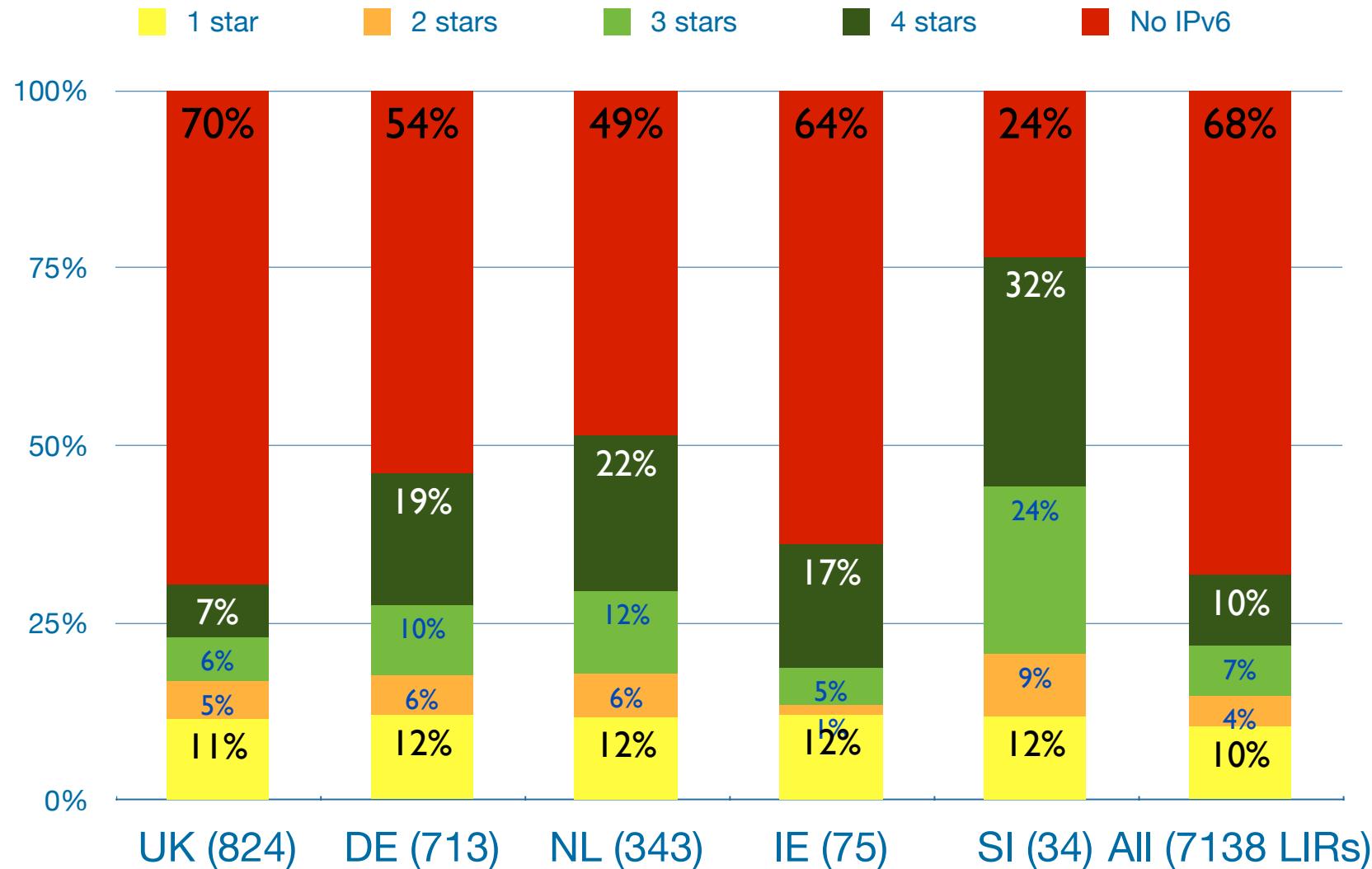
Statistics, statistics and more statistics...



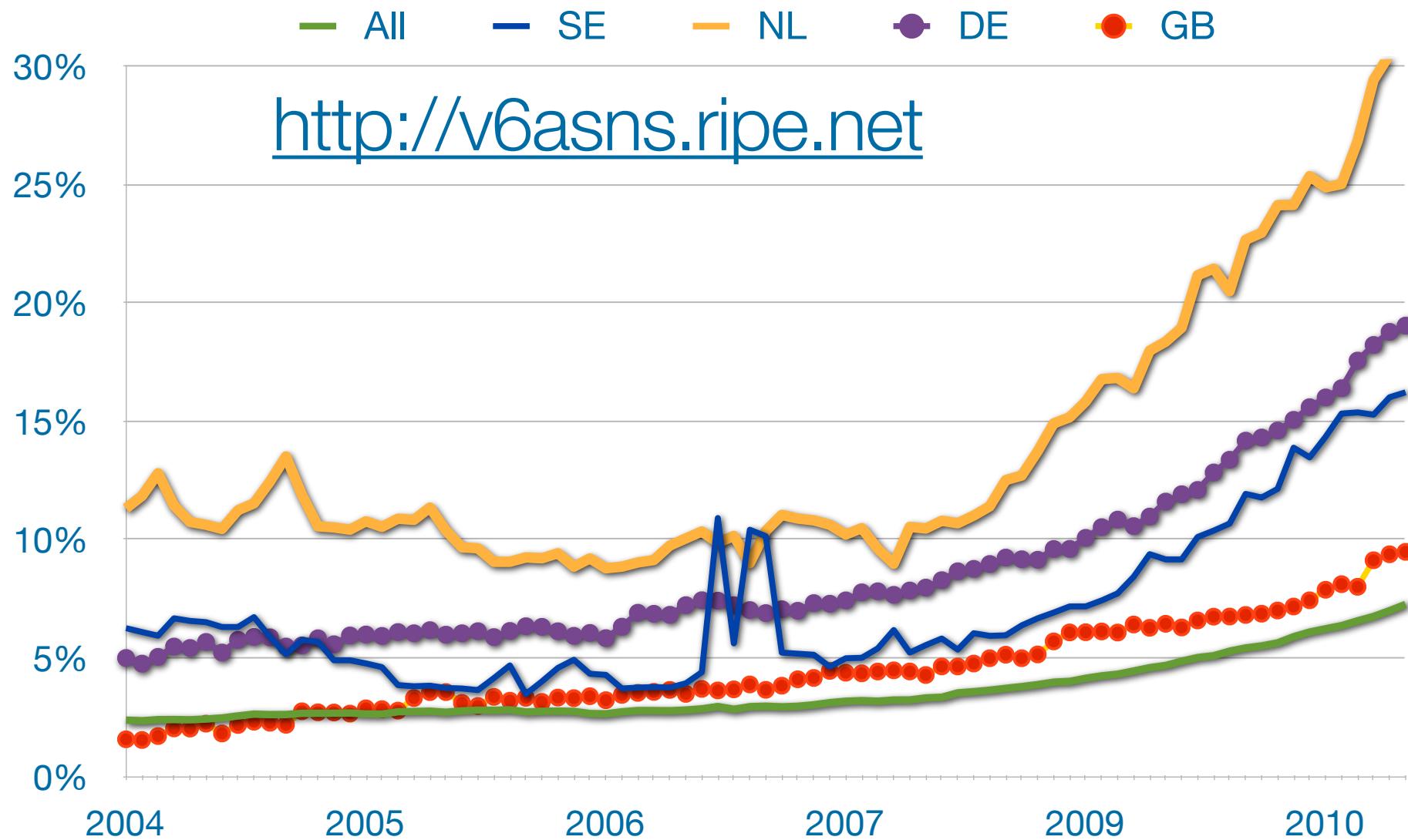
Comparative IPv6 Ripeness - absolute



Comparative IPv6 Ripeness - relative

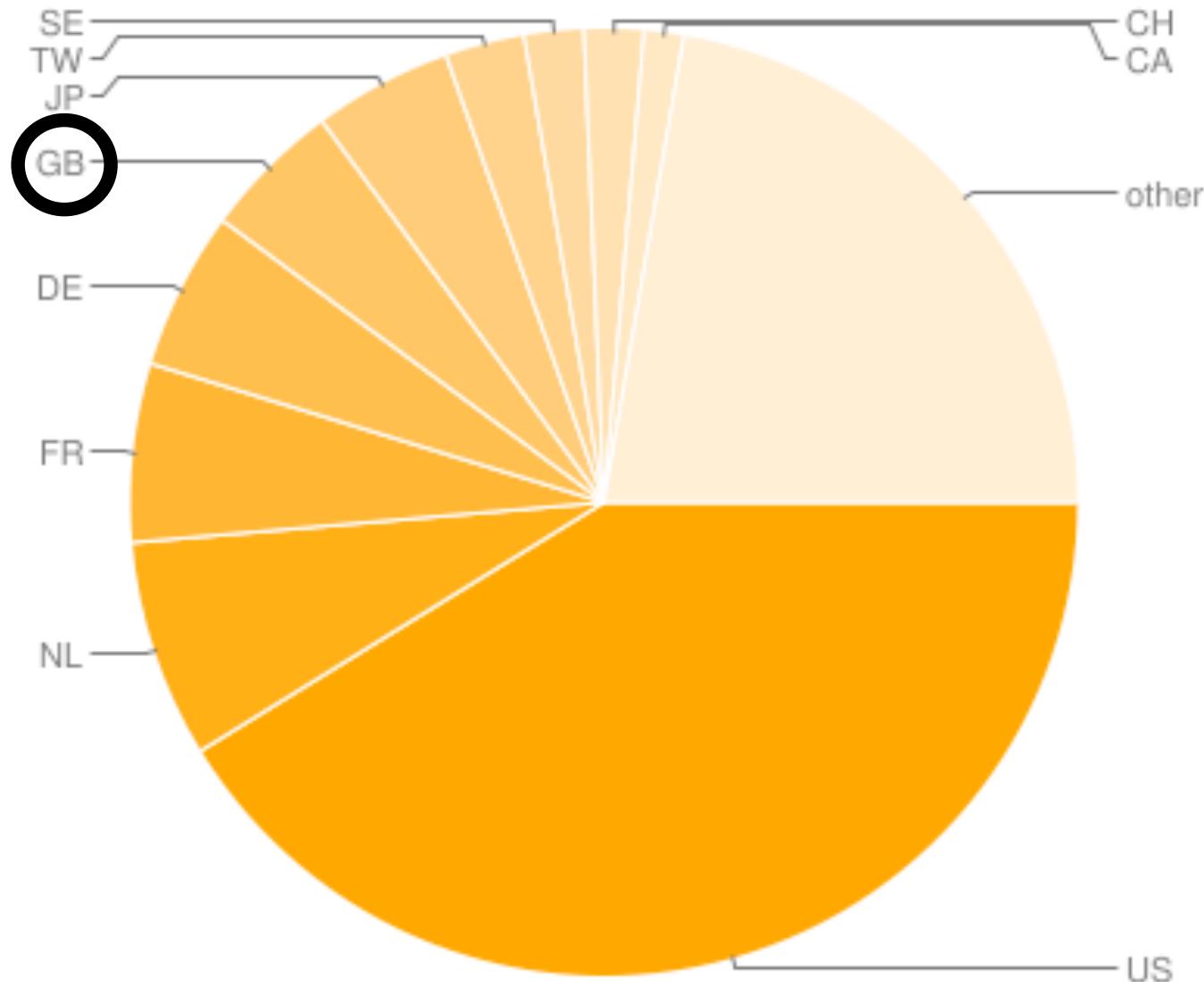


Networks announcing IPv6, over time



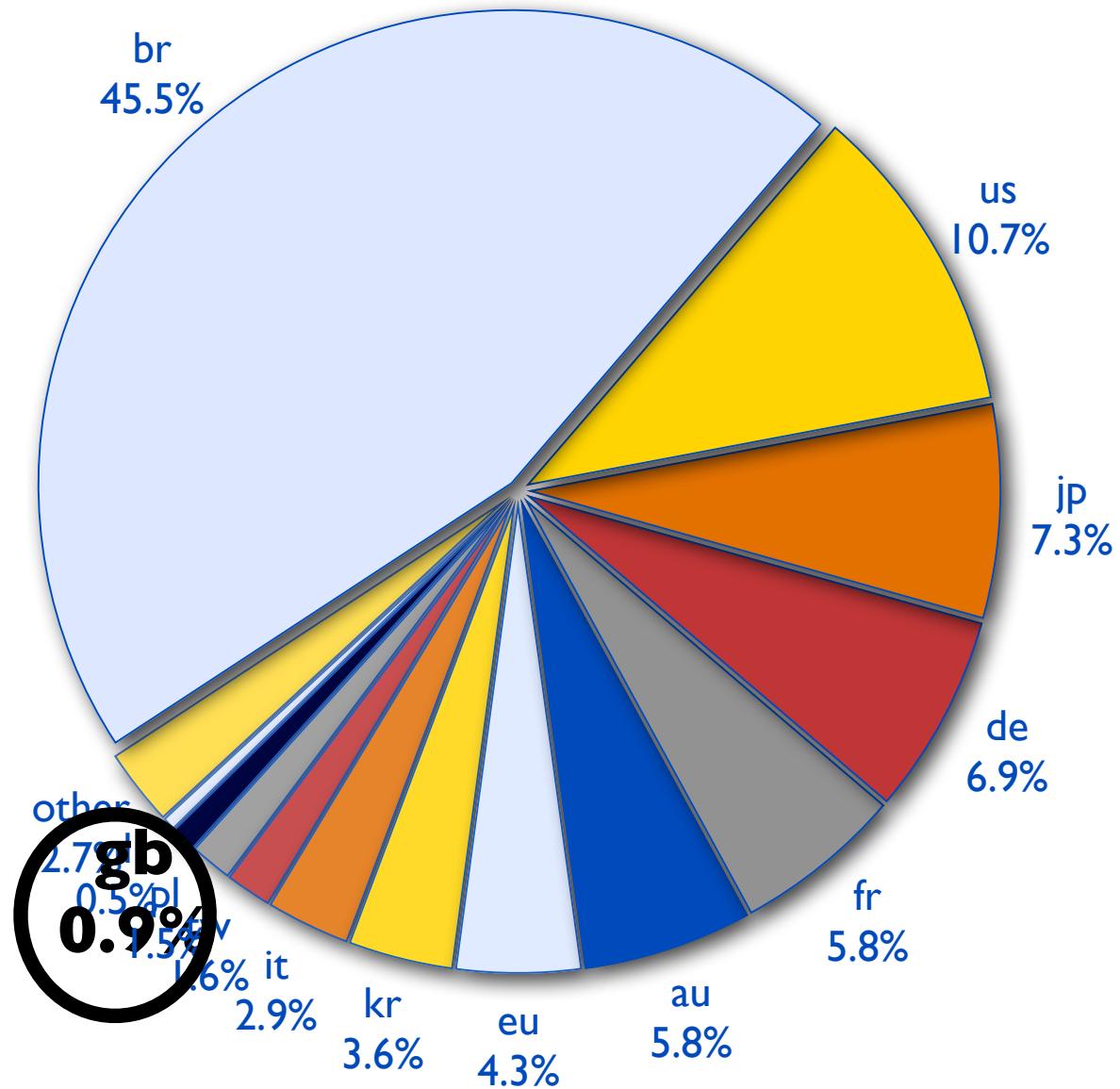
IPv6 DNS (June 2010)

<http://asert.arbornetworks.com/2010/06/ipv6-dns-statistics/>



Top 12 countries: allocated IPv6 space

<http://bgp.potaroo.net/iso3166/v6cc.html>



RIPE
NCC

Ask for IPv6!

- It is easy to get IPv6 from RIPE NCC
- For LIRs it is for FREE for (Direct) End Users 50 Euro per year





CAUTION CAUTION CAUTION

Protocol Translation



Make it Dual Stack



RIPE
NCC

16

5 years from now...



... “private” IPv4 addresses
will be the only ones
available for new
customers

PRIVATE
PROPERTY
NO



which leads to more...

Network Address Translation...

... breaks End to End communication principle.

E2E enables innovation on the Internet



- UK Centre for the Protection of National Infrastructure working on a security assessment of the IPv6 protocol suite
- <http://www.lacnic.net/documentos/presentaciones/lacnicxiv/ipv6-security-assessment.pdf>

“Training is needed for engineers, technicians, security personnel, etc., before the IPv6 network is running”

<http://www.lacnic.net/documentos/presentaciones/lacnicxiv/ipv6-security-assessment.pdf>



What now?

