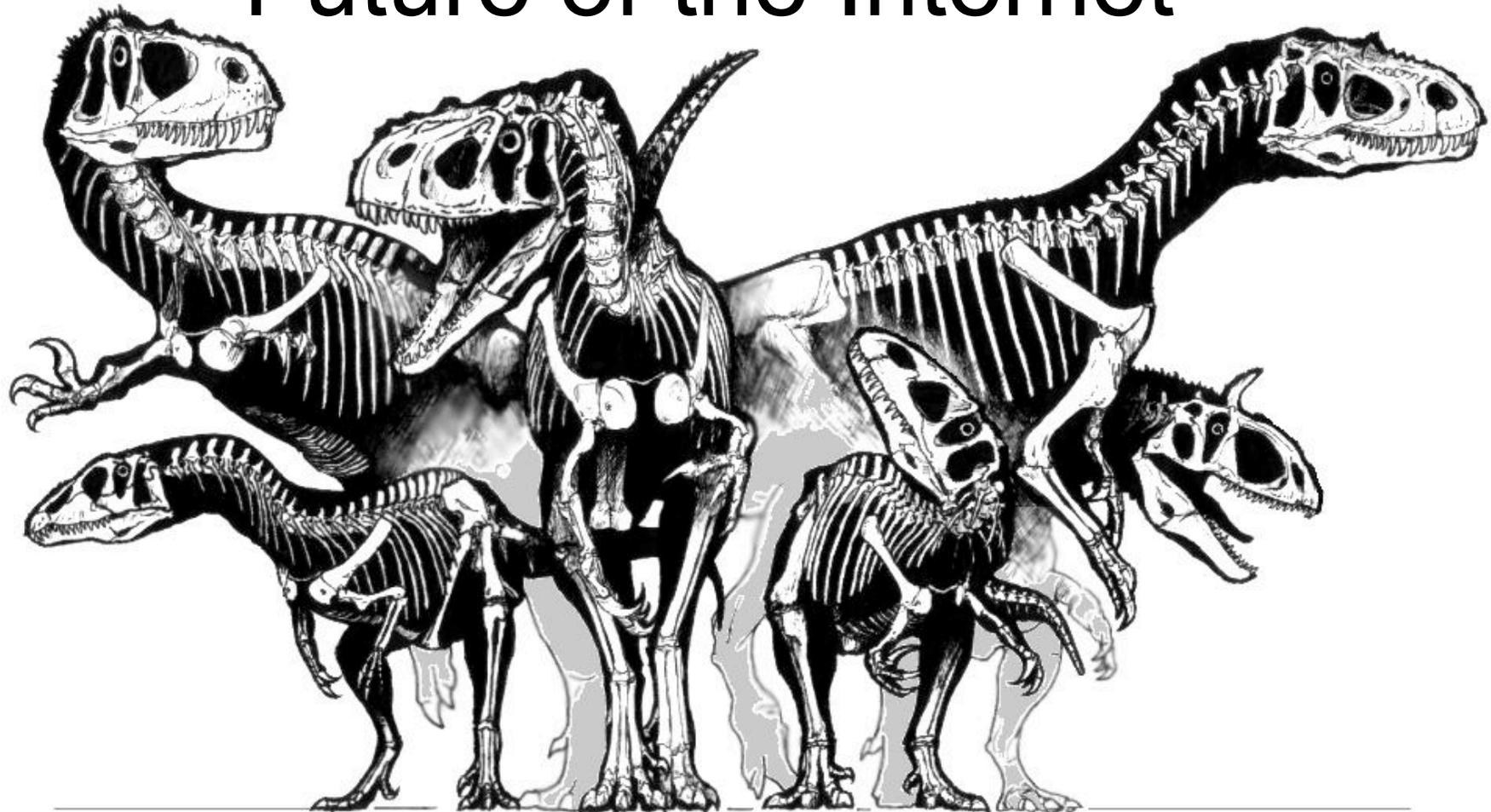
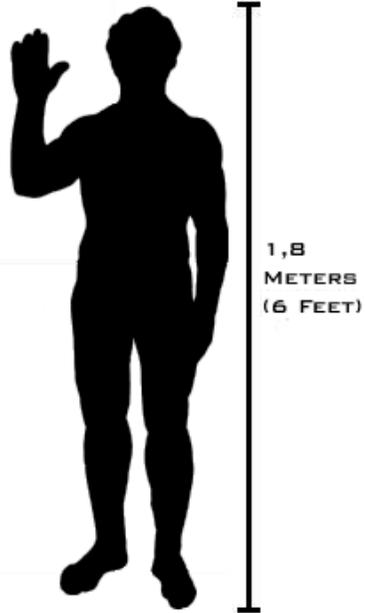


Addressing the Future of the Internet



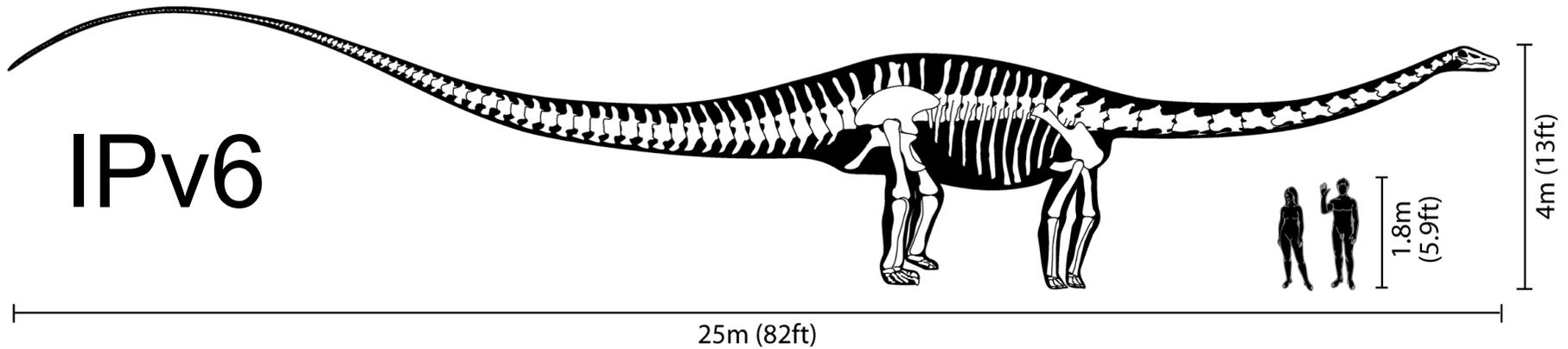
Vesna Manojlovic, RIPE NCC
SIGINT, Cologne, May 2009

IPv4

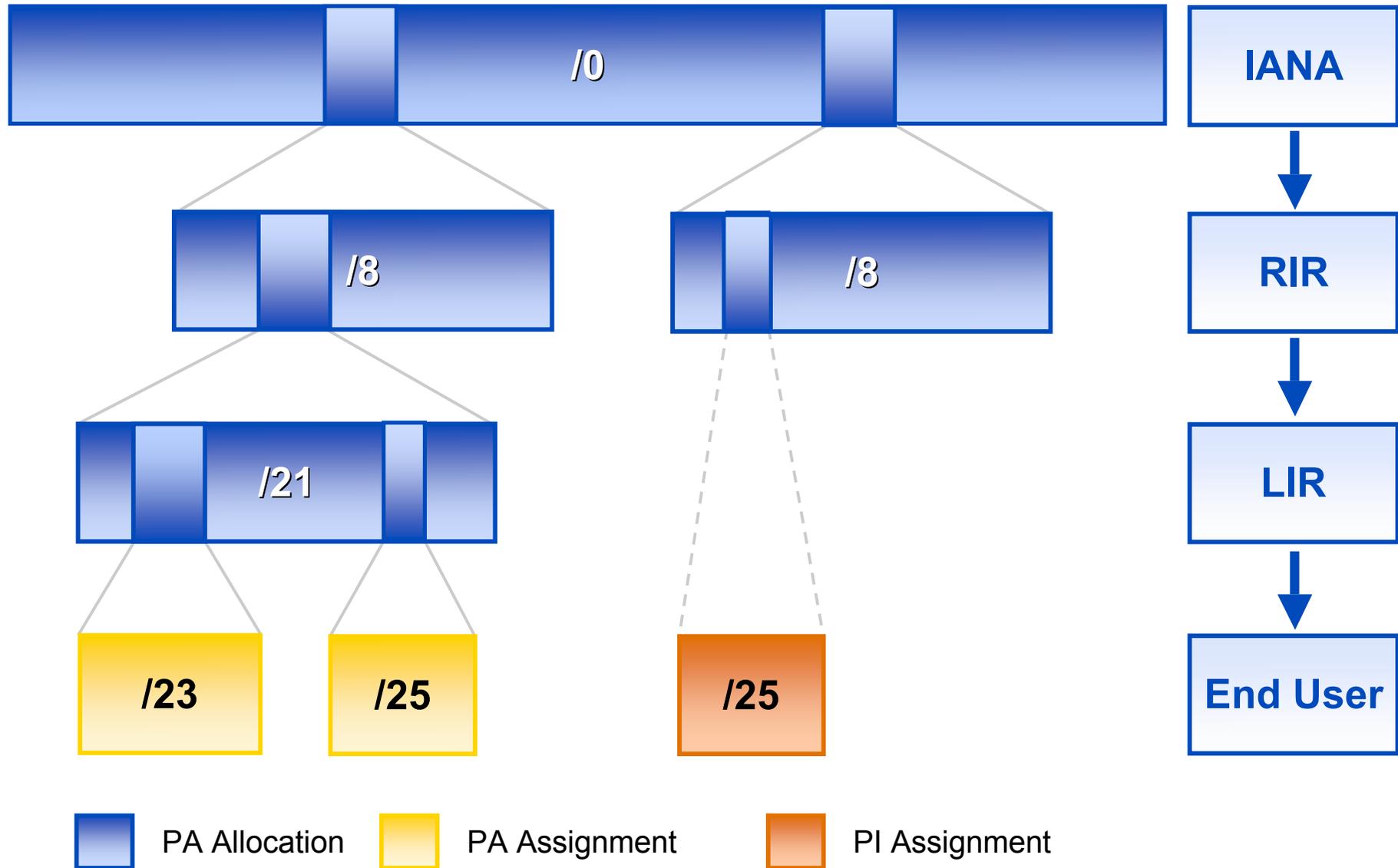


Size Does Matter

IPv6

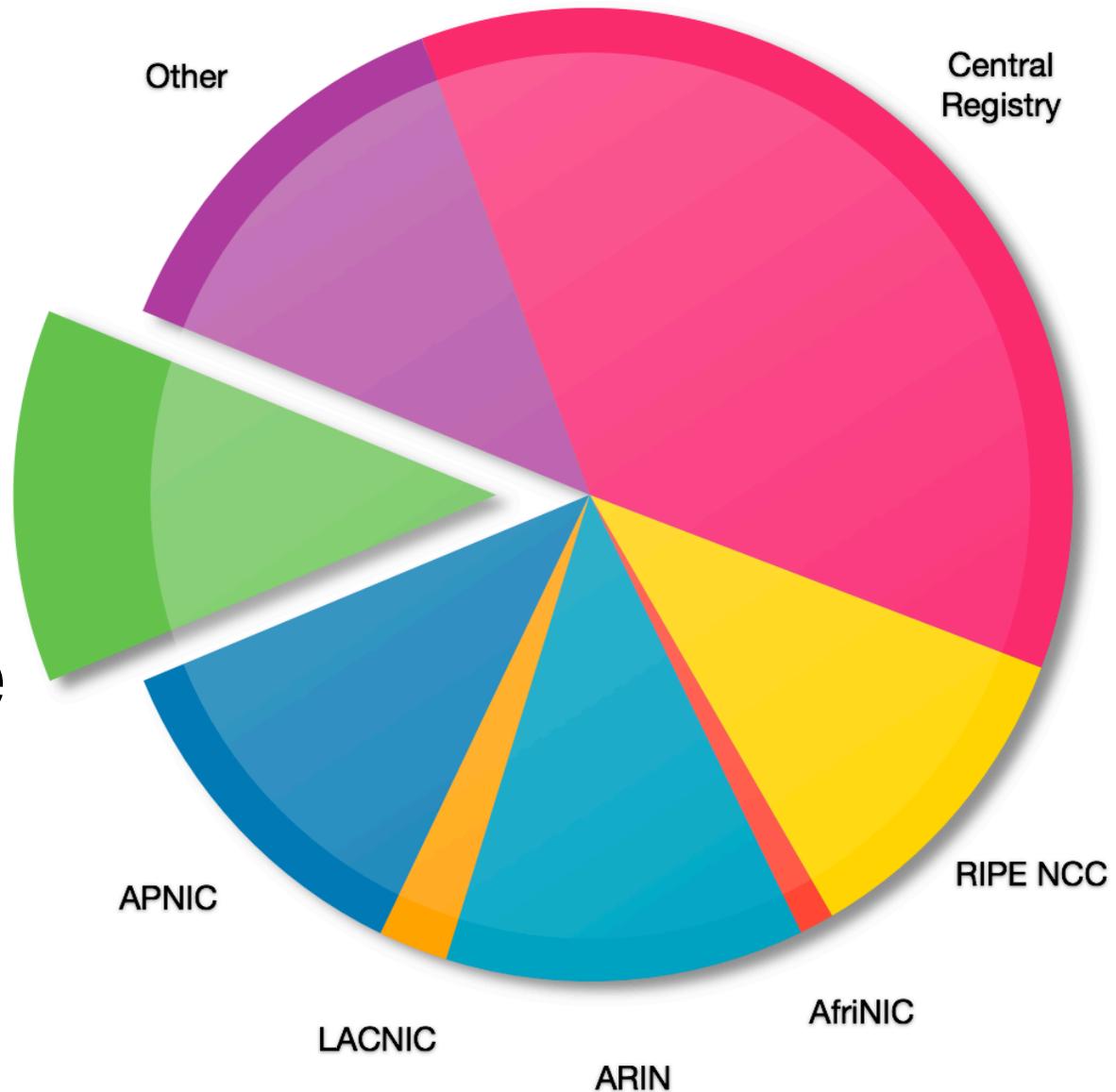


IPv4 address space distribution

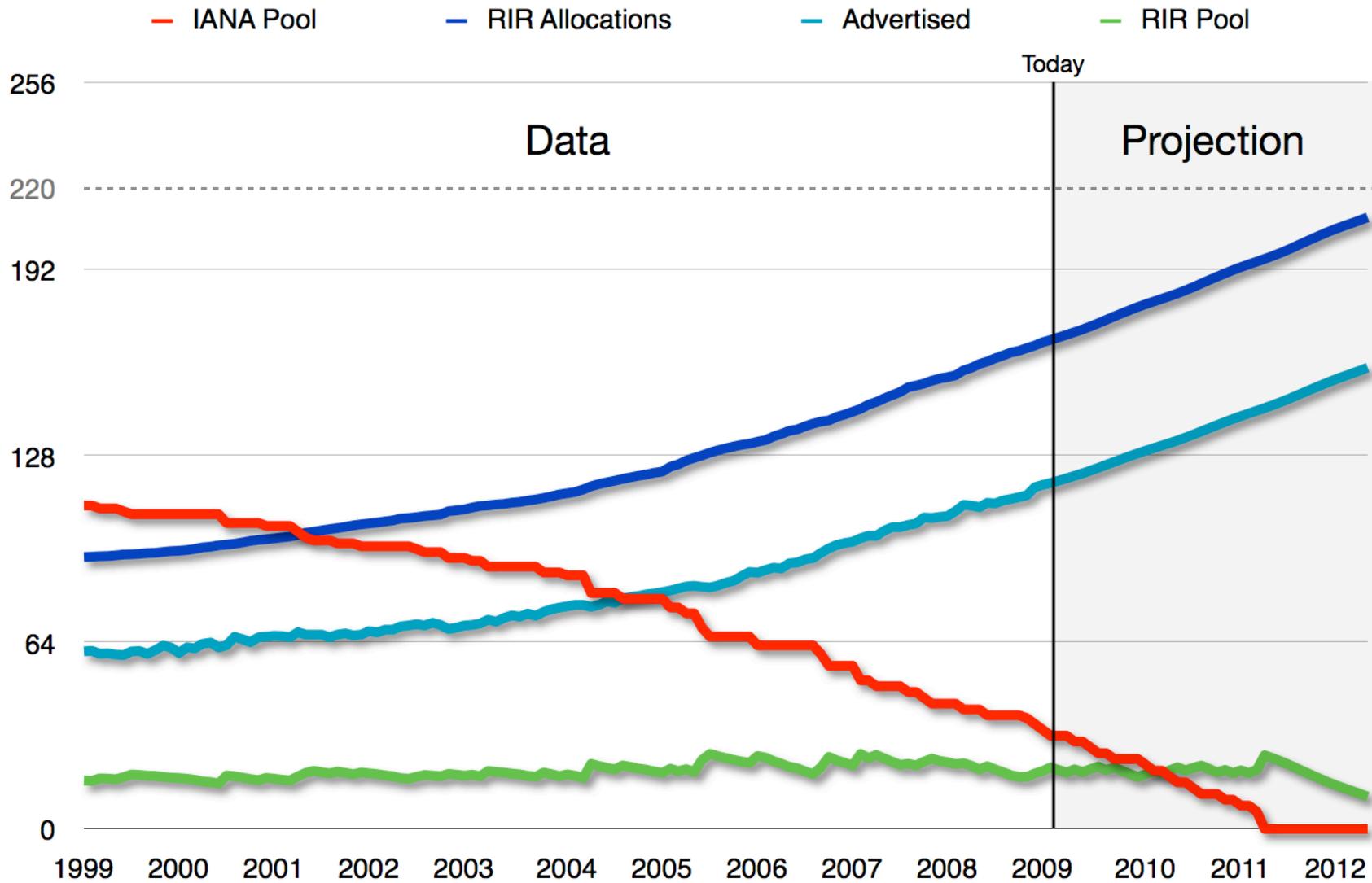


Only 32 /8s left in IPv4 address pool

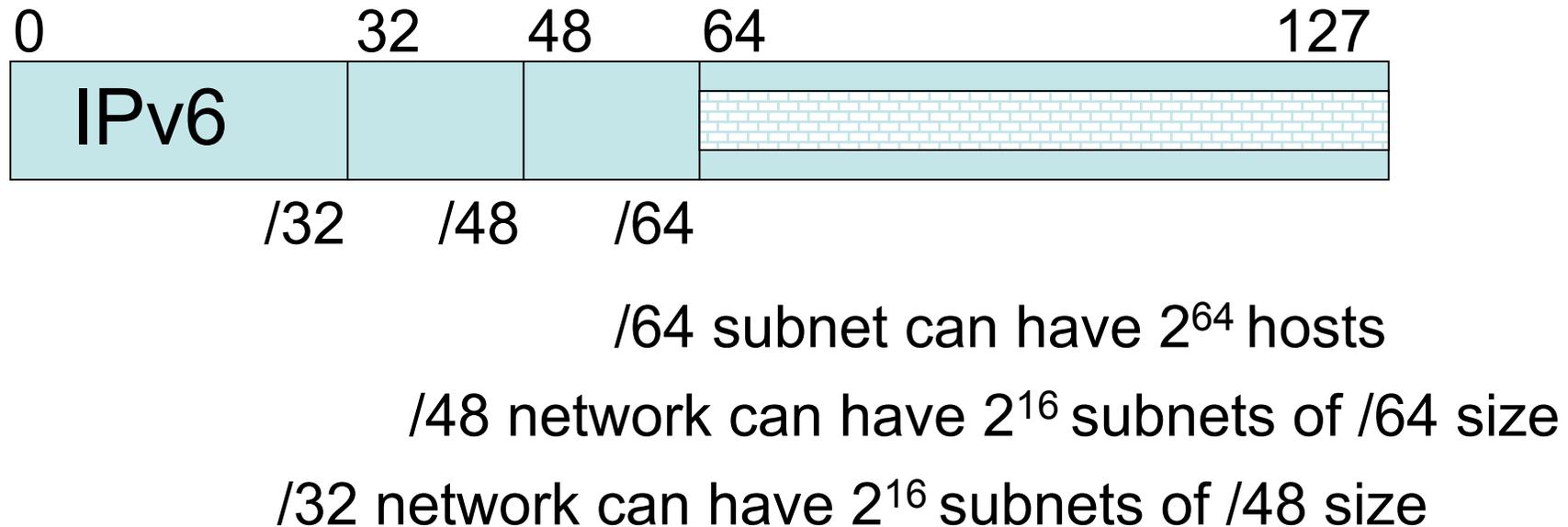
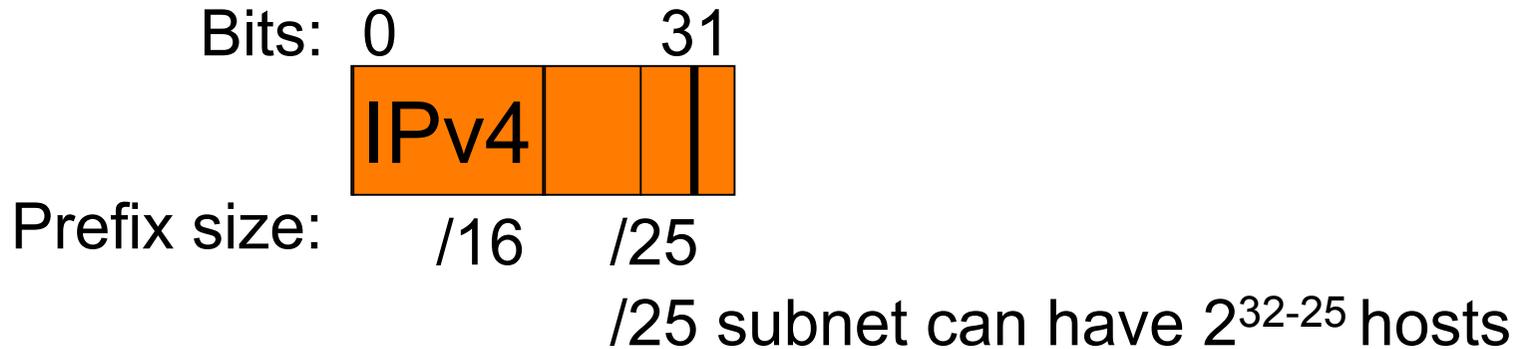
12%
available



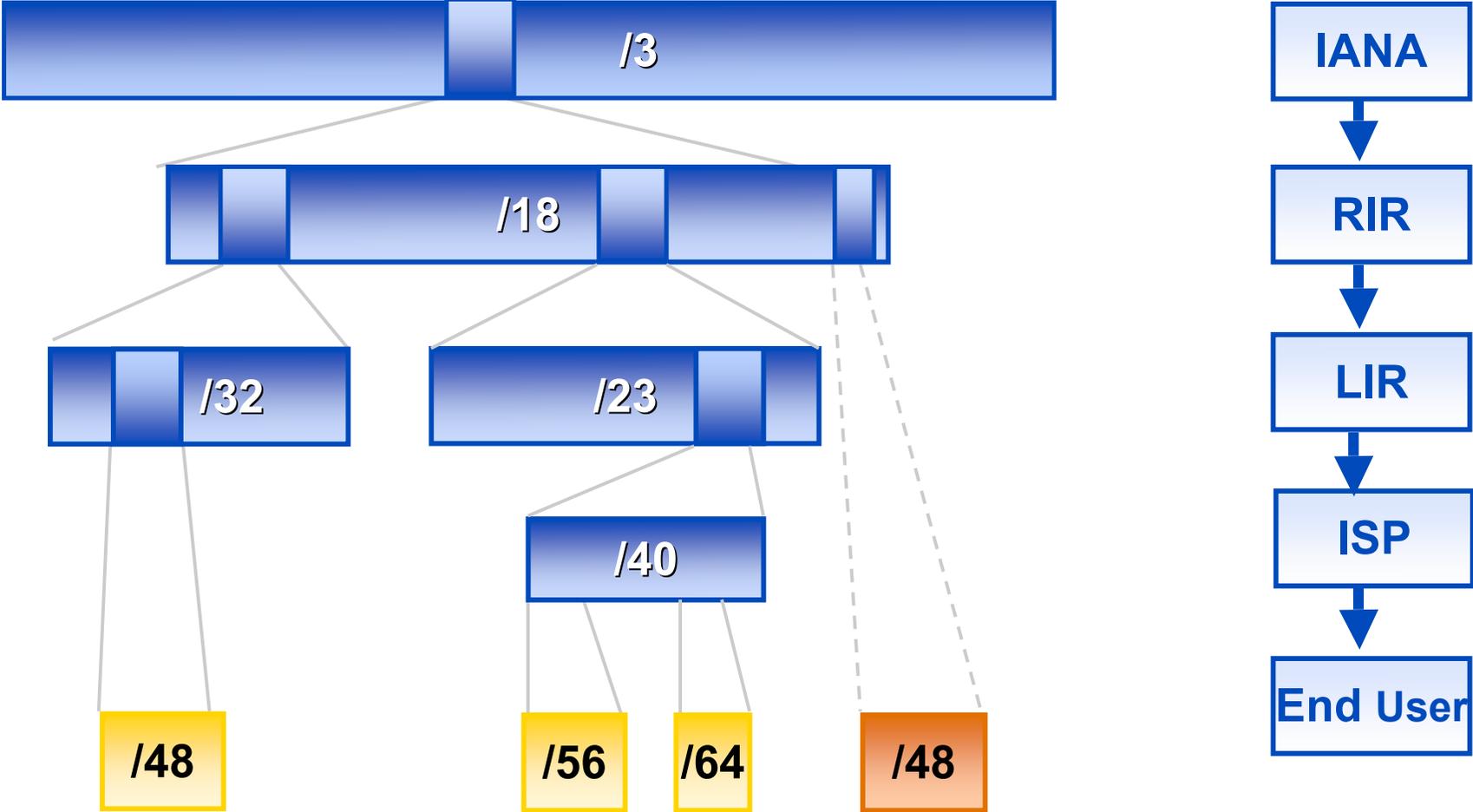
Running out in 2012?



Addressing basics

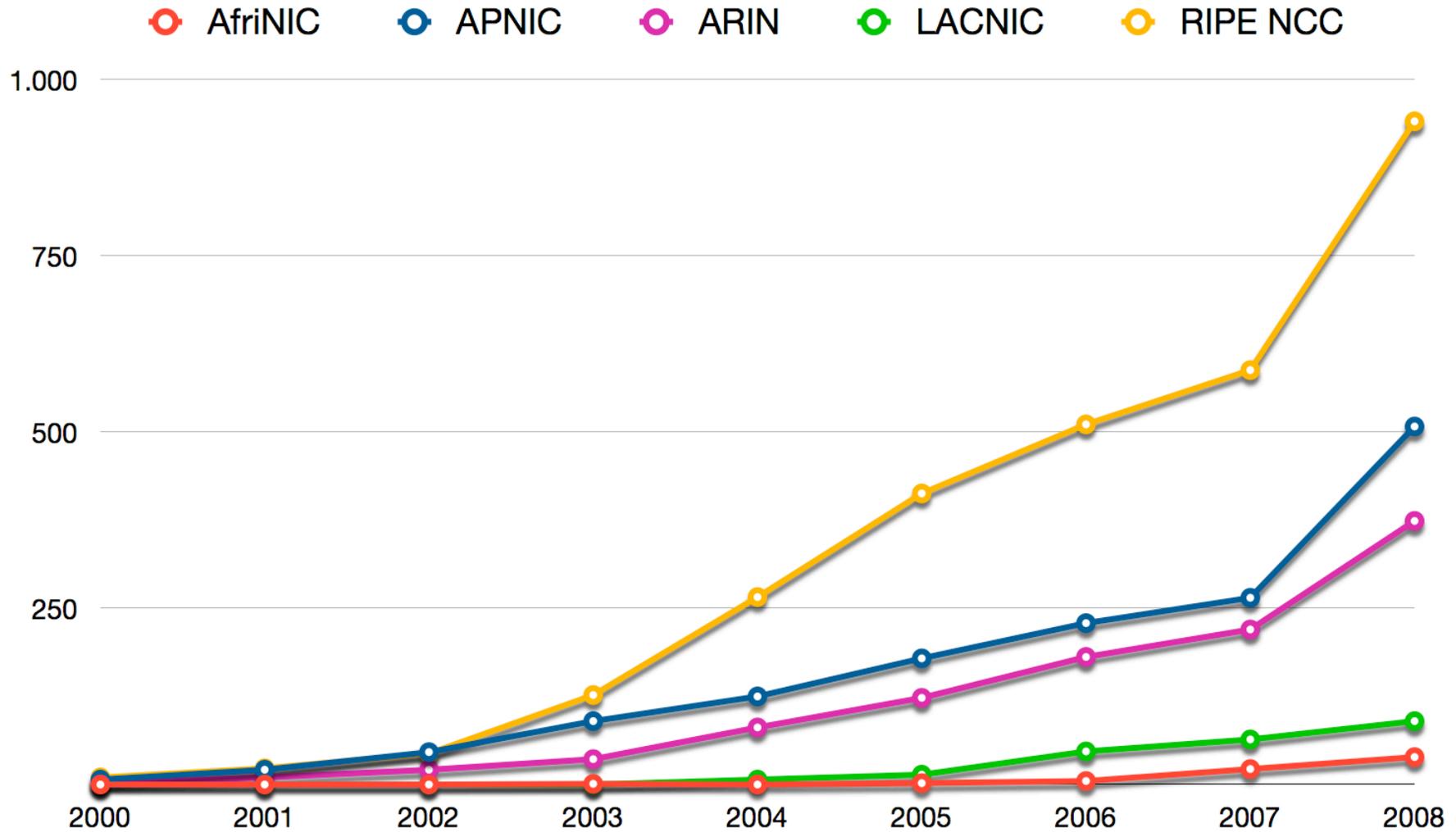


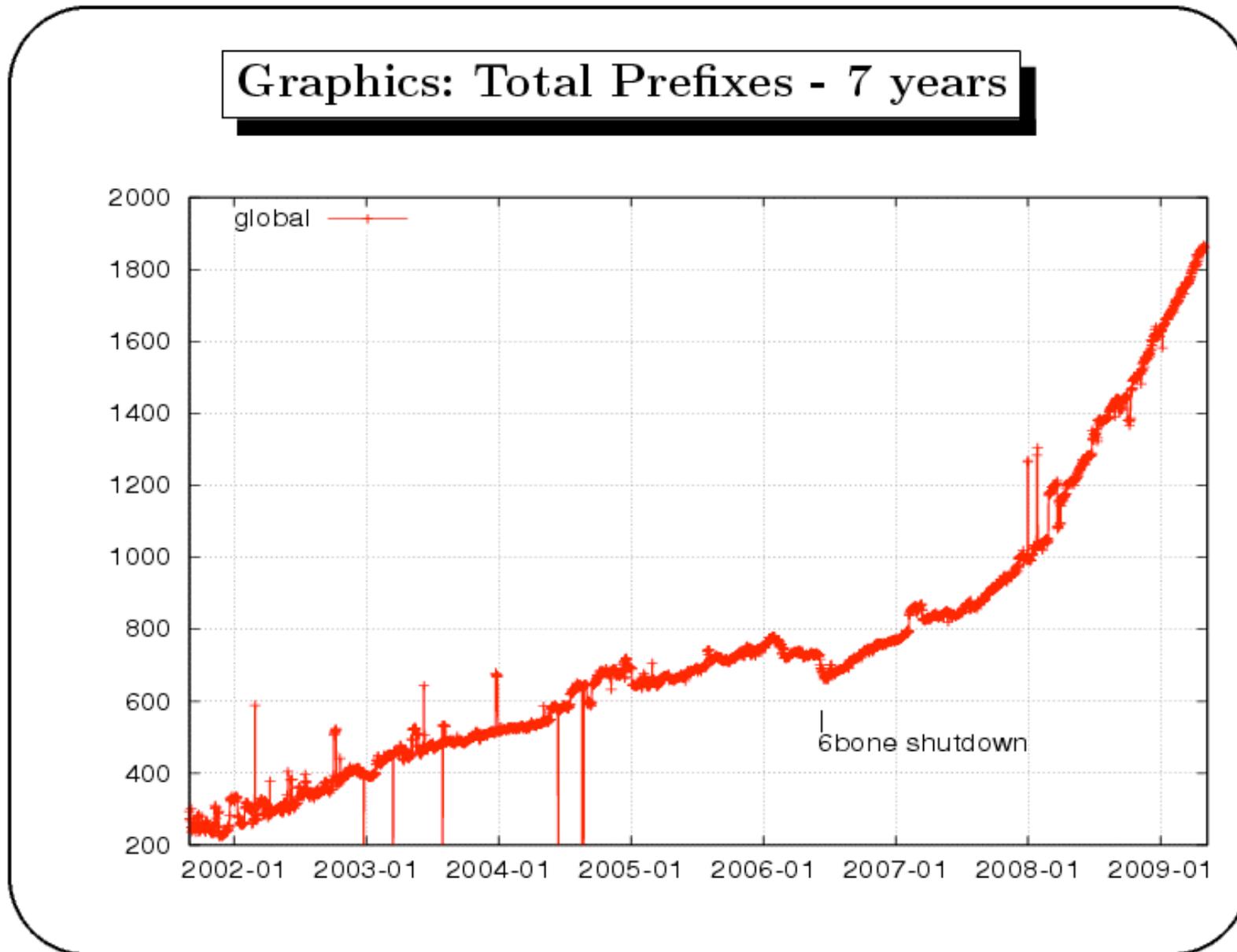
IPv6 address space distribution



 Allocation  Assignment  PI Assignment

IPv6 allocations by region

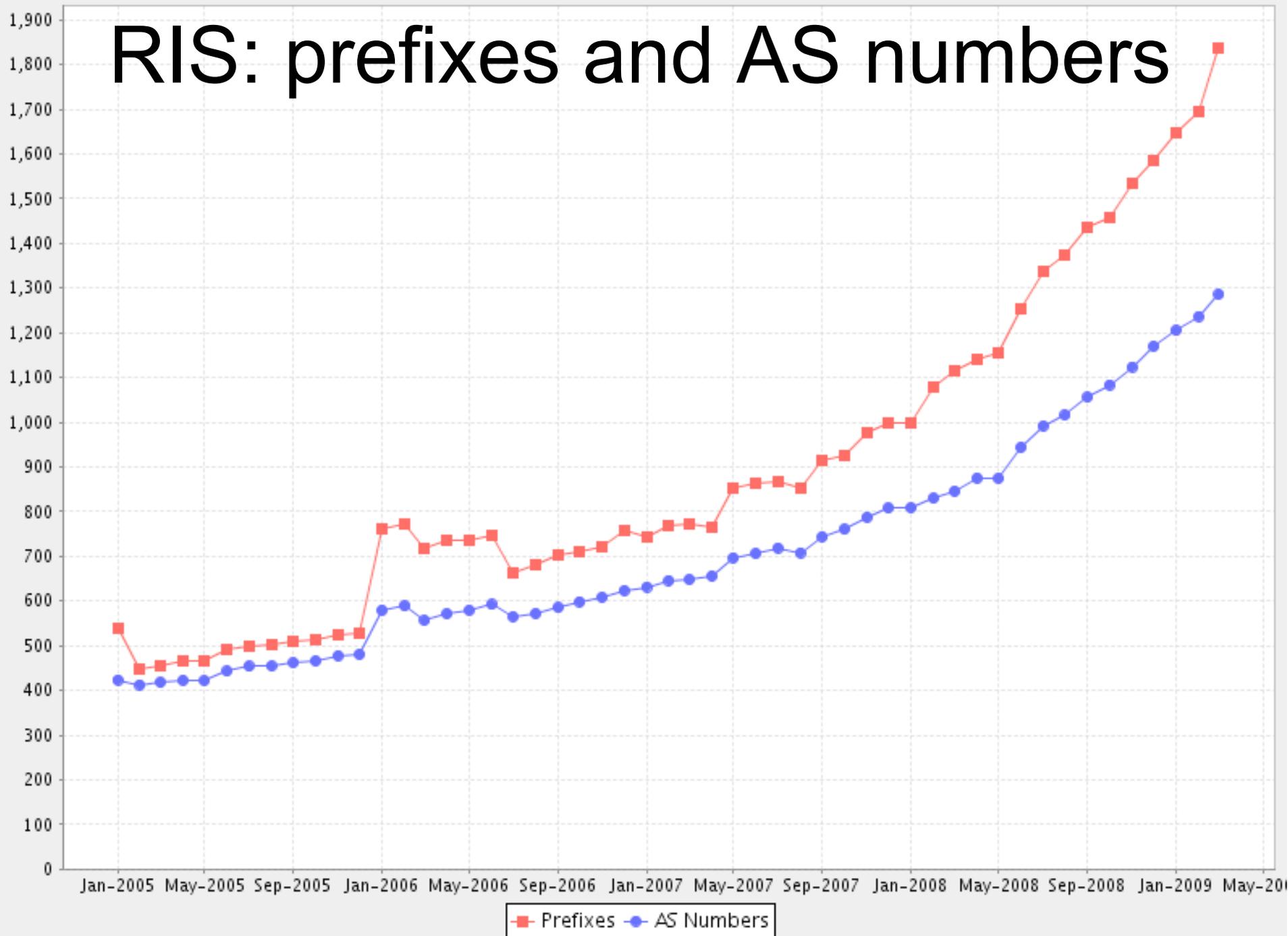




Source: <http://www.space.net/~gert/RIPE/>

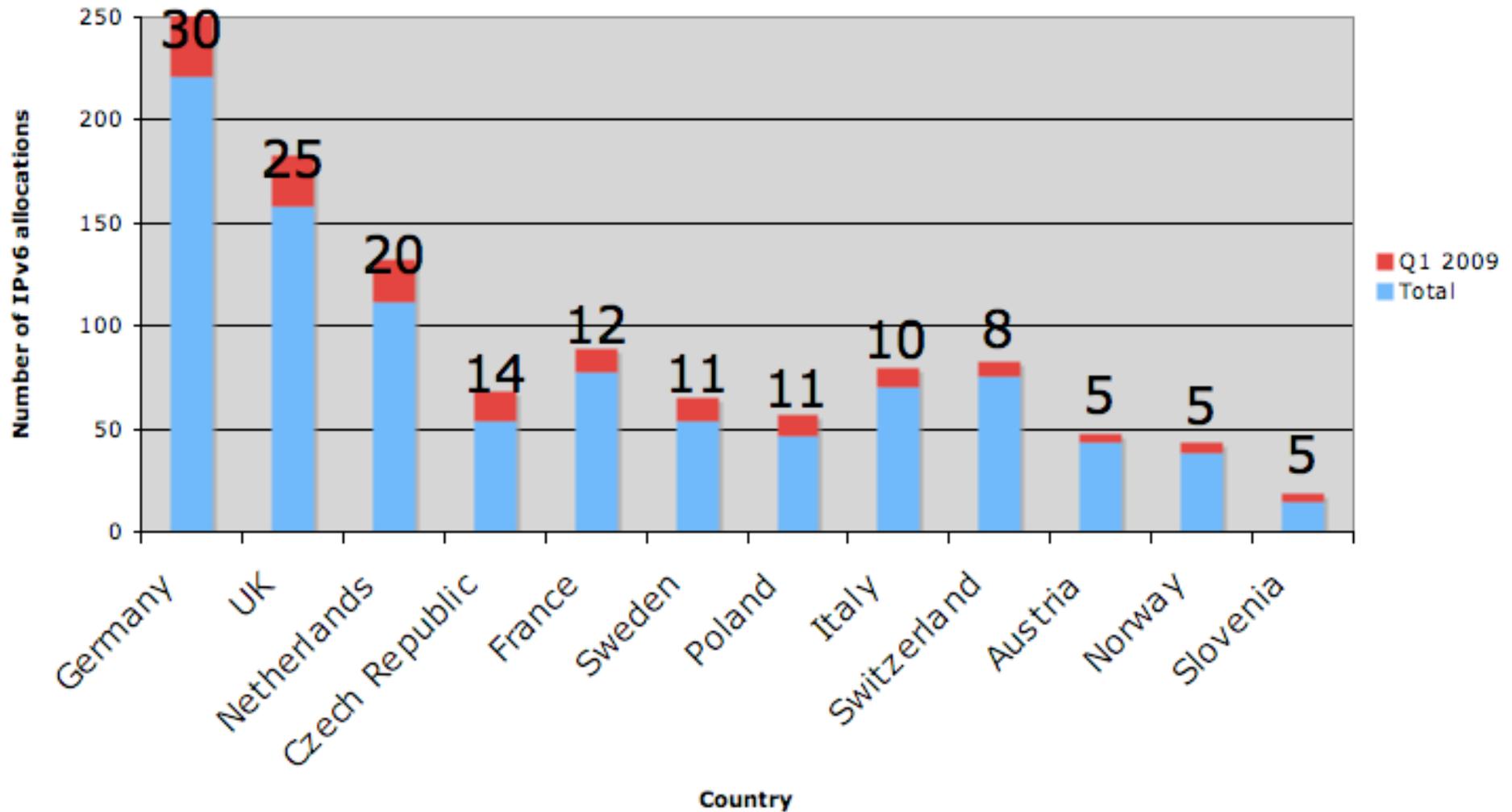
IPv6 Deployment

RIS: prefixes and AS numbers



Top 12 countries in Q1 2009

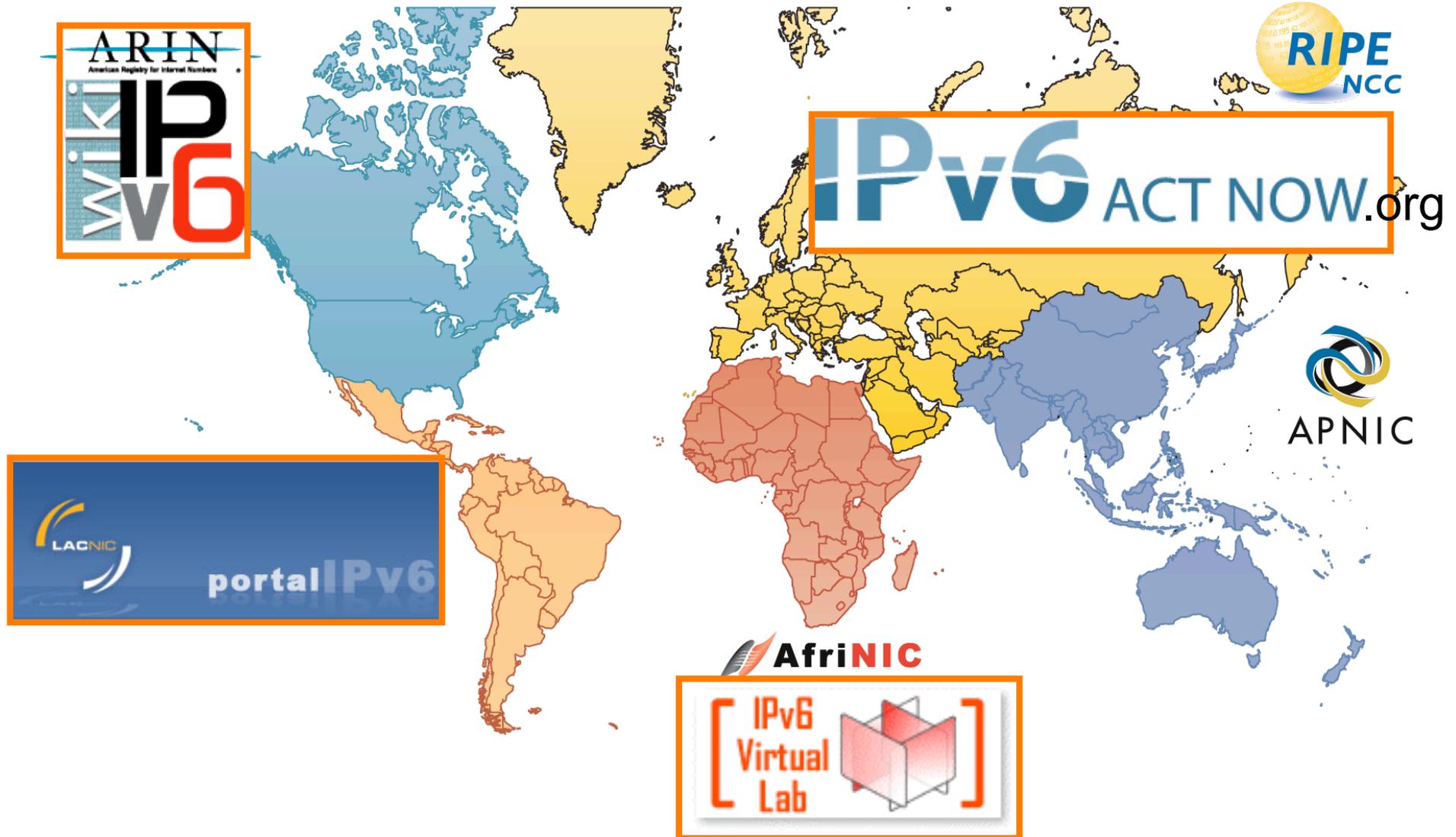
IPv6 in Europe



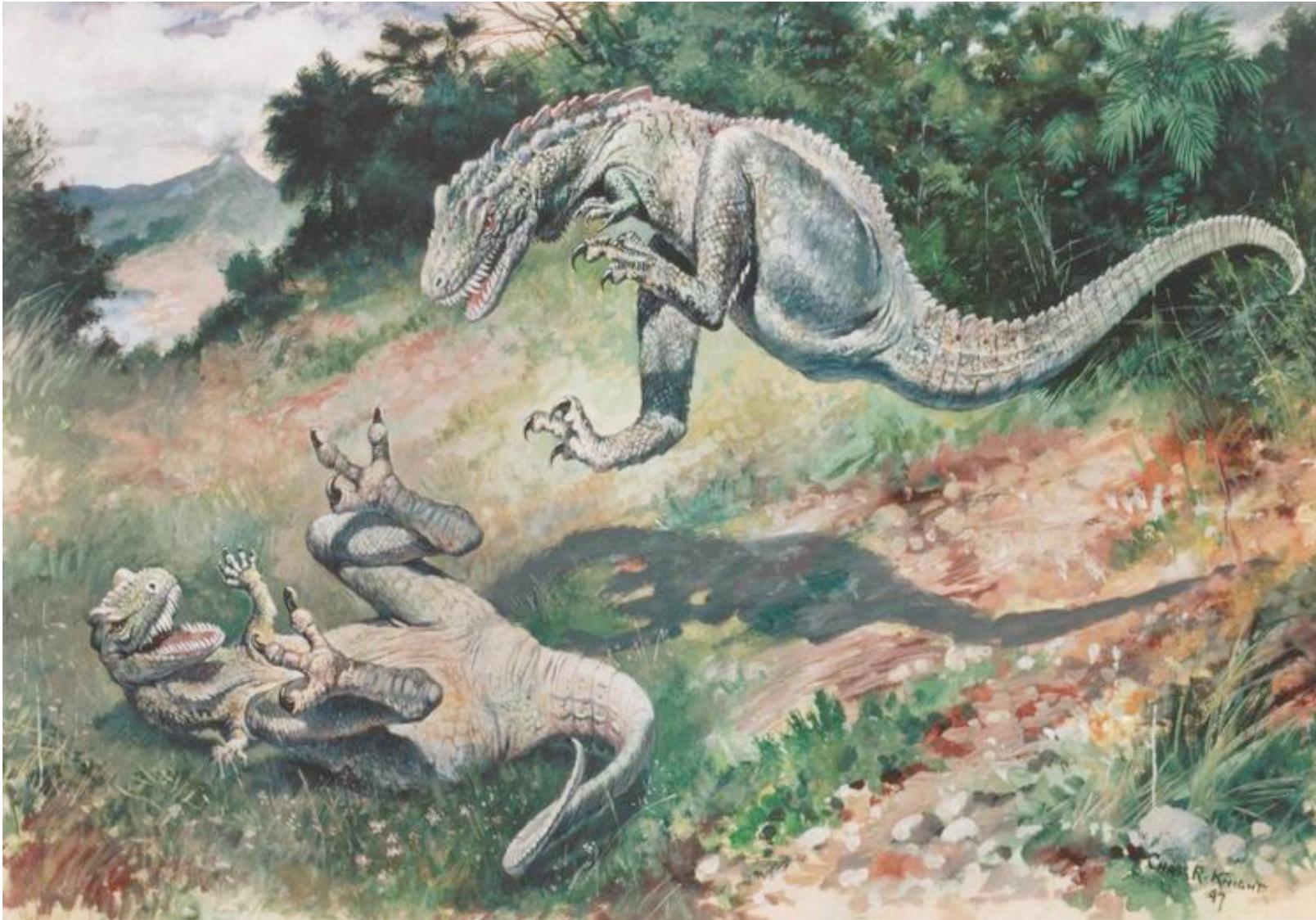
Dual-stack: IPv4 and IPv6 together



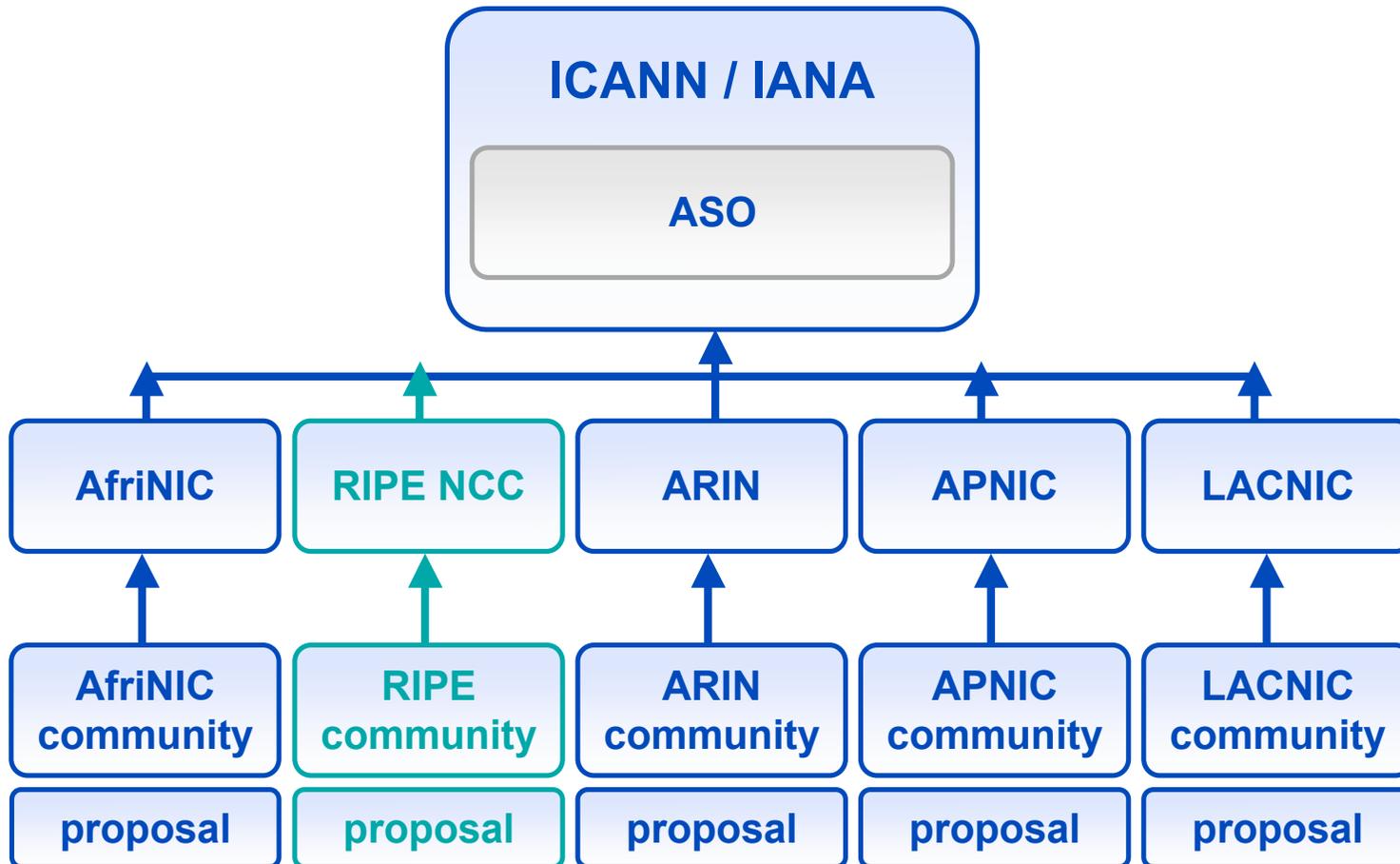
RIRs' IPv6 initiatives



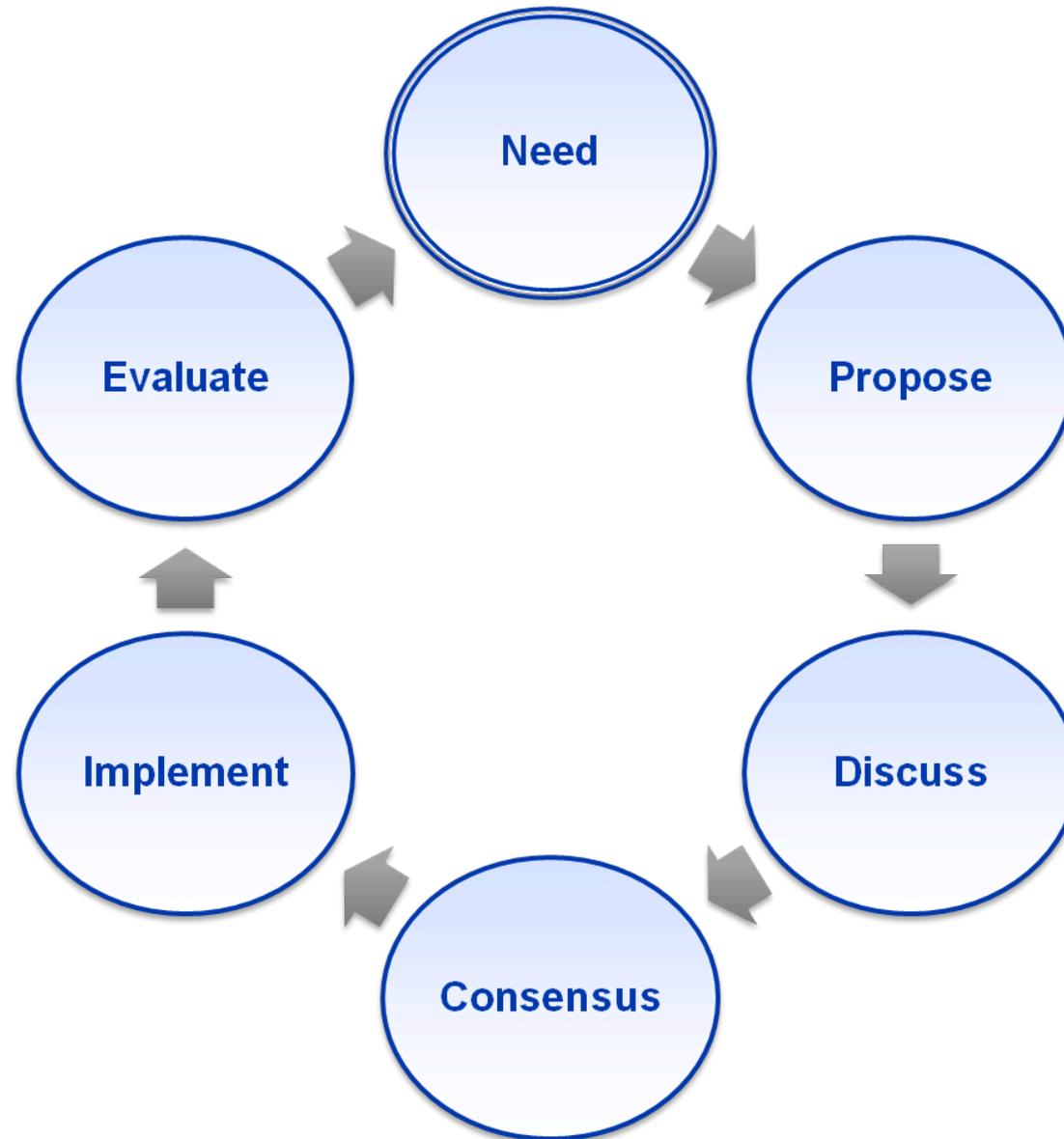
How is the policy made



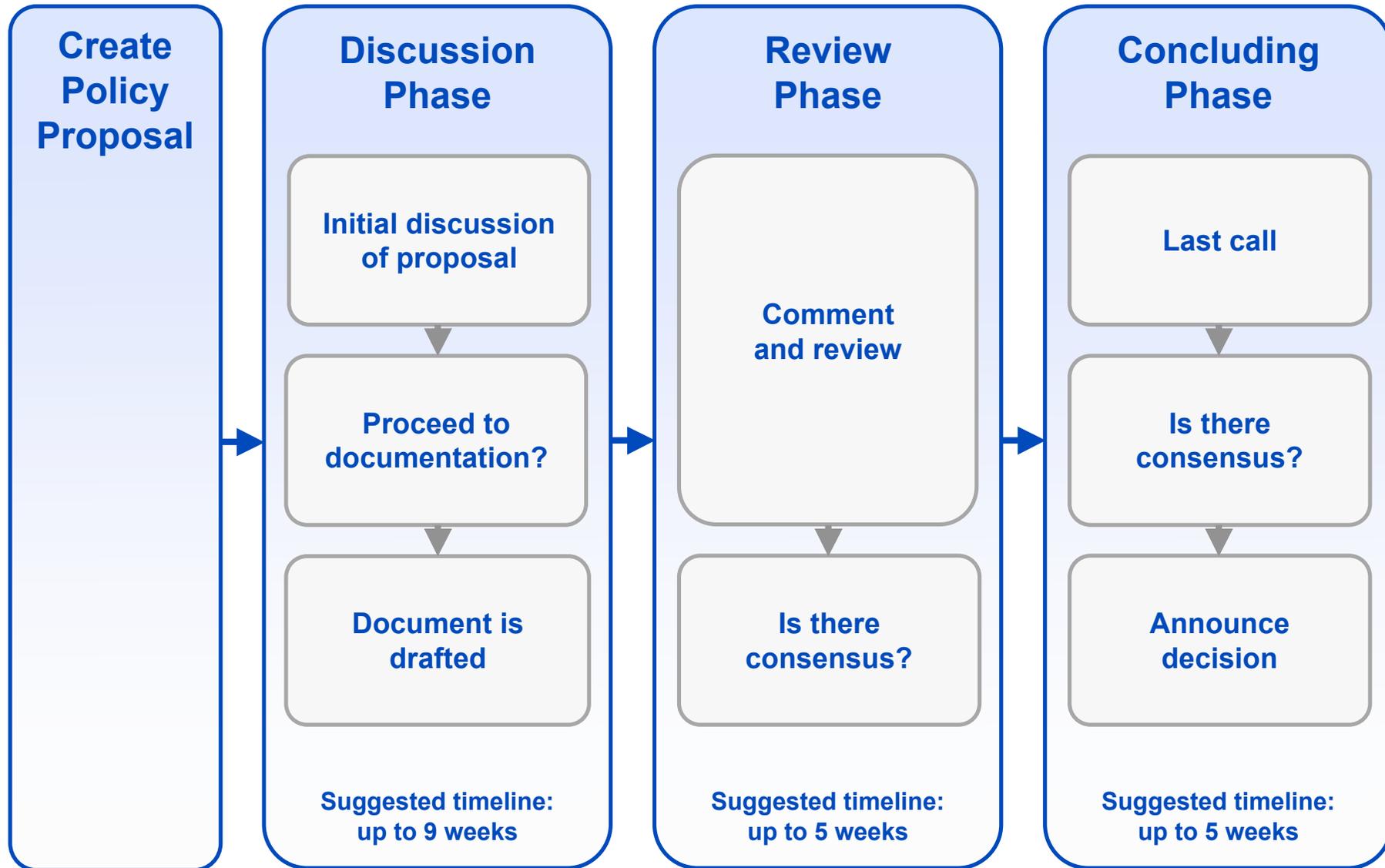
Who makes policies?



Policy development cycle



Policy development process





RIPE 58
4-8 MAY 2009, AMSTERDAM



RIPE 57
DUBAI, 26-30 OCTOBER 2008

Hosted by:
etisalat



 **RIPE 56**
BERLIN, 5-9 MAY 2008
Session Archives



From Hankins, Nanog45

RIR ASN Allocation Schedule



2007 and 2008:

- 16-bit ASN default
- 32-bit ASN optional

January 1, 2009:

- 32-bit ASN default
- 16-bit ASN optional

January 1, 2010:

- No distinction between 16-bit and 32-bit ASNs
- 32-bit ASN only
- Unallocated 16-bit ASNs are reserved

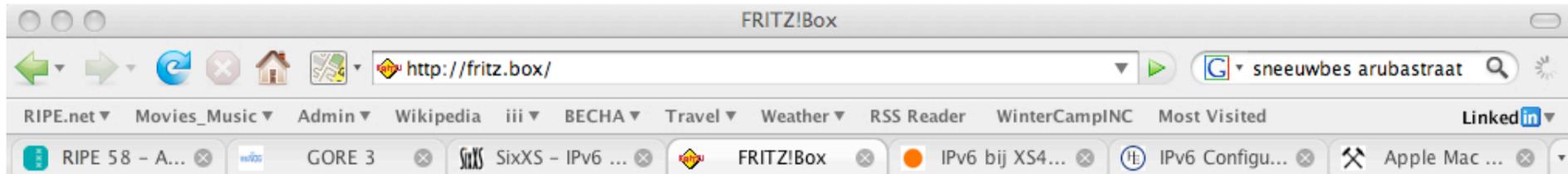


You
are
here!

RIR ^[1]	32-bit ASNs Allocated	32-bit ASNs Advertised
AfriNIC	4	1
APNIC	84	6
ARIN	7	2
RIPE NCC	24	7
LACNIC	1	0

[1] <http://www.potaroo.net/tools/asn32/>

First woman on native IPv6 ;-)



FRITZ!Box

Start Menu Settings

Overview

Product Information

FRITZ!Box Fon WLAN 7270 Laboratory version 54.04.94-13860
Laboratory version: [Information and Feedback](#)

Interface Information

DSL	<input checked="" type="checkbox"/>	ready
DECT	<input type="checkbox"/>	off
WLAN	<input checked="" type="checkbox"/>	on, secured
LAN	<input checked="" type="checkbox"/>	connected (LAN 1)
USB-Geräte	<input type="checkbox"/>	no device connected

Connection Information

Internet	<input checked="" type="checkbox"/>	[[connected since seit [[07/05/2009, 11:39]] Uhr.]] IP address: 82.164.216.205
Internet, IPv6	<input checked="" type="checkbox"/>	[[connected since seit [[07/05/2009, 11:39]] Uhr.]] IPv6-Präfix: 2001:980:3043::/48
Internet telephony	<input type="checkbox"/>	FRITZ!Box has no registration information for an Internet telephony provider.

Refresh Help

My prefix is 2001:980:3043::/48

LIR course slogans... about IPv4

- Will work for /24
- RIPE NCC - absolutely classless
- You're too late - we have a /8
- Soon it will be all too late, no space to allocate
- You have reached the end of the Internet



• IPv4 - eats, shoots and leaves!

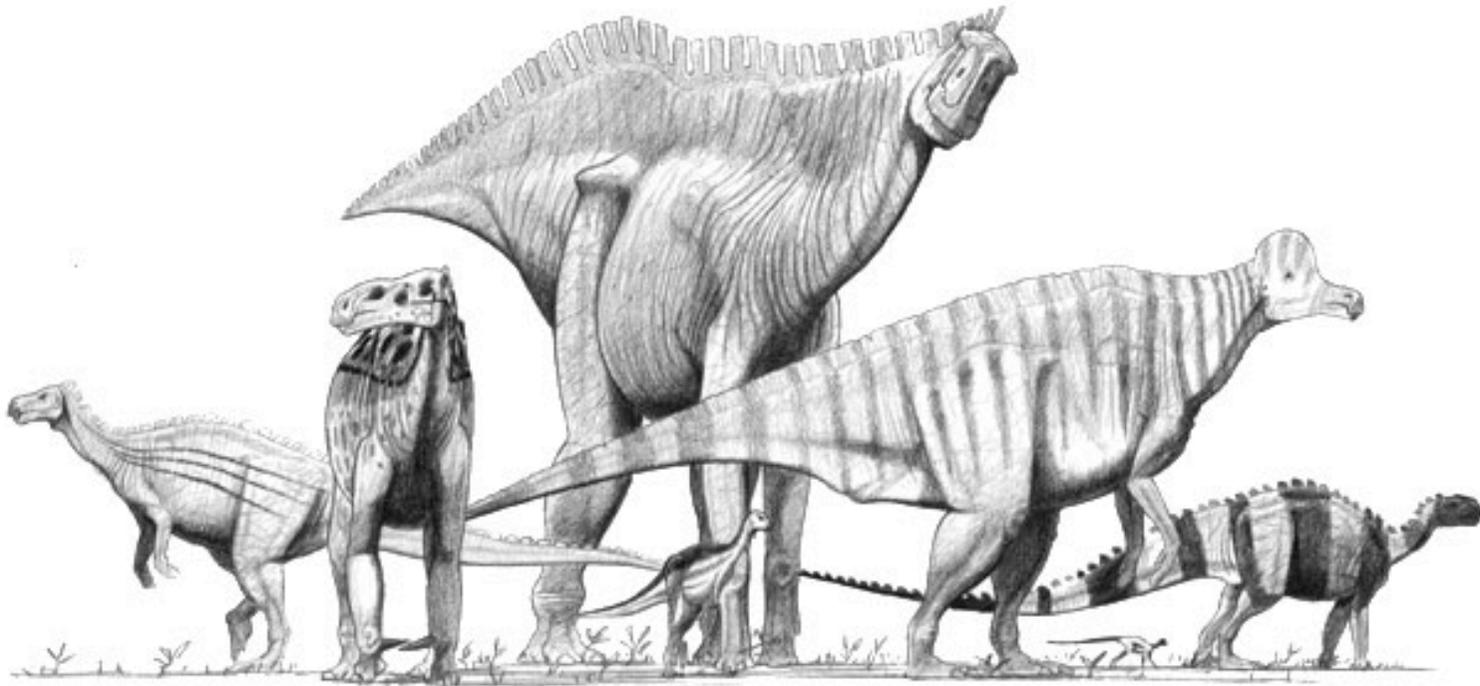
LIR course slogans... about IPv6

- I will miss IPv4
- Know what to do with your /32
- 2011: make a date with a /48
- Get your IPv6, because the clock ticks
- IPv6 is the fix
- Ignoring IPv6 since 1996

Get your IPv6 now!



Take part in influencing the future of the Internet



BECHA@ripe.net