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IPv6: The Global Perspective

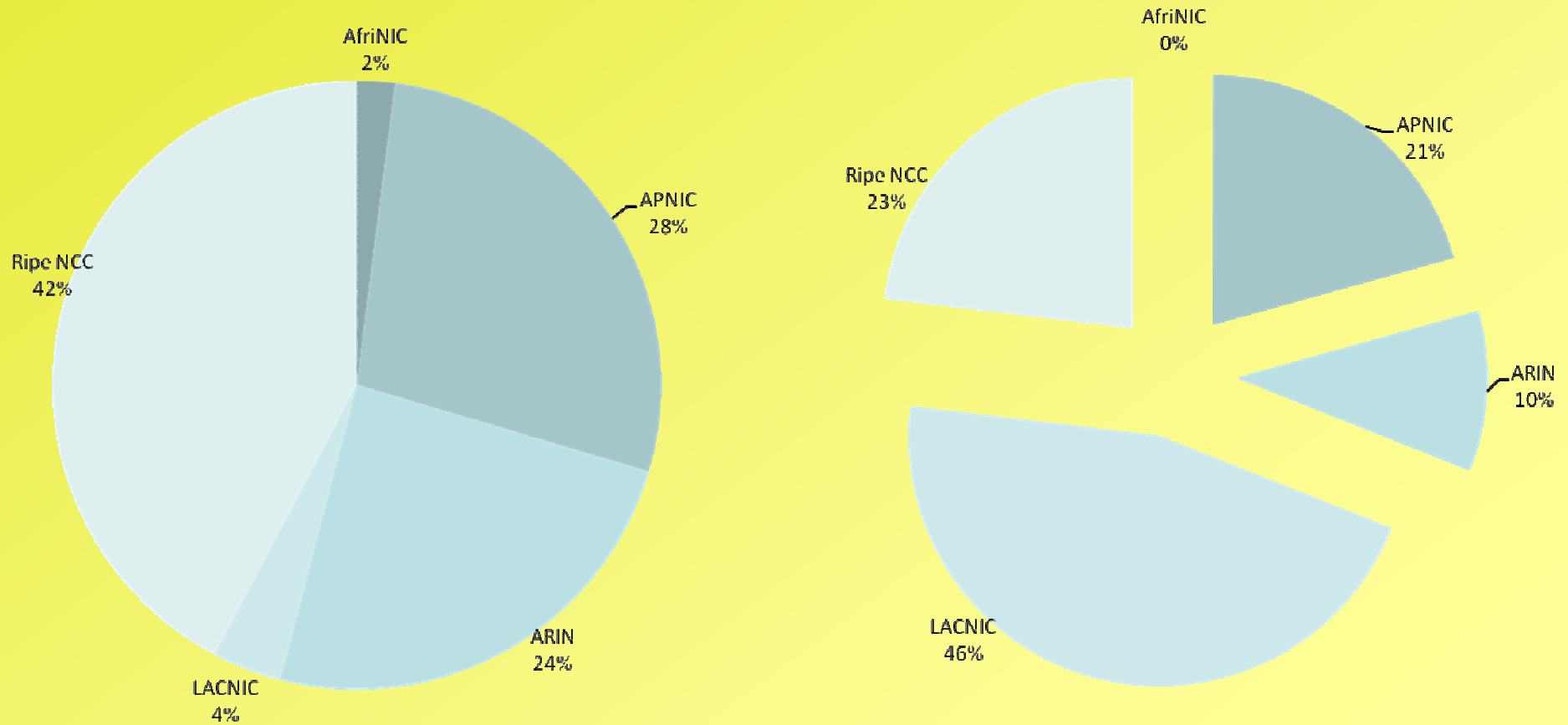
New Zealand IPv6 Hui
Christchurch, Auckland and Wellington,
New Zealand
19, 20 and 21 August 2009

An OECD Perspective

- ❑ Derived from “Information and Communications Technology OECD Communications Outlook 2009”
- ❑ 1300 prefixes announced in IPv6 routing table at end of 2008 vs 260,000 IPv4 prefixes
- ❑ At end 2008 RIRS had allocated 3091 IPv6 allocations
 - ❑ USA 22%
 - ❑ Japan 8%
 - ❑ Germany 7%
 - ❑ UK 5%
 - ❑ Netherlands 3%
 - ❑ France 2%

Distribution of IPv6 Allocations by RIRs

Year-end 2008



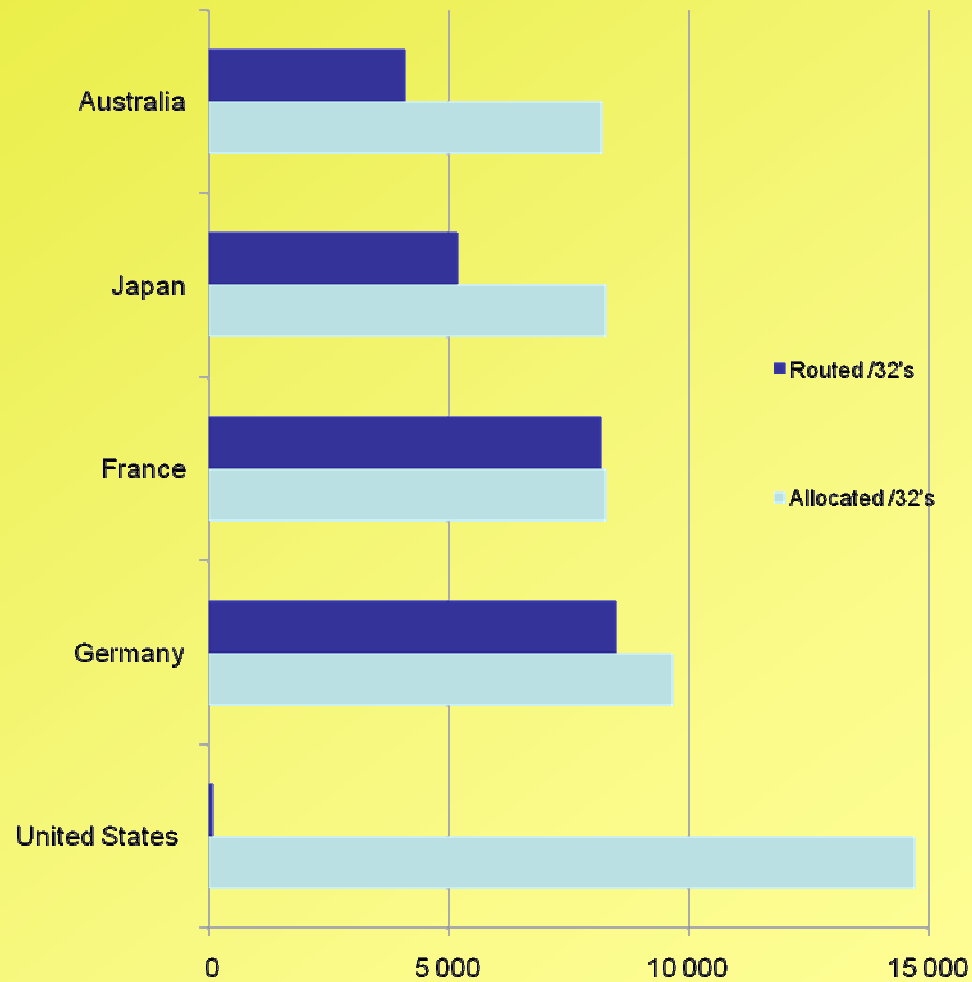
Some Selected Large IPv6 Allocations

Substantial movement commencing in 2006/2007

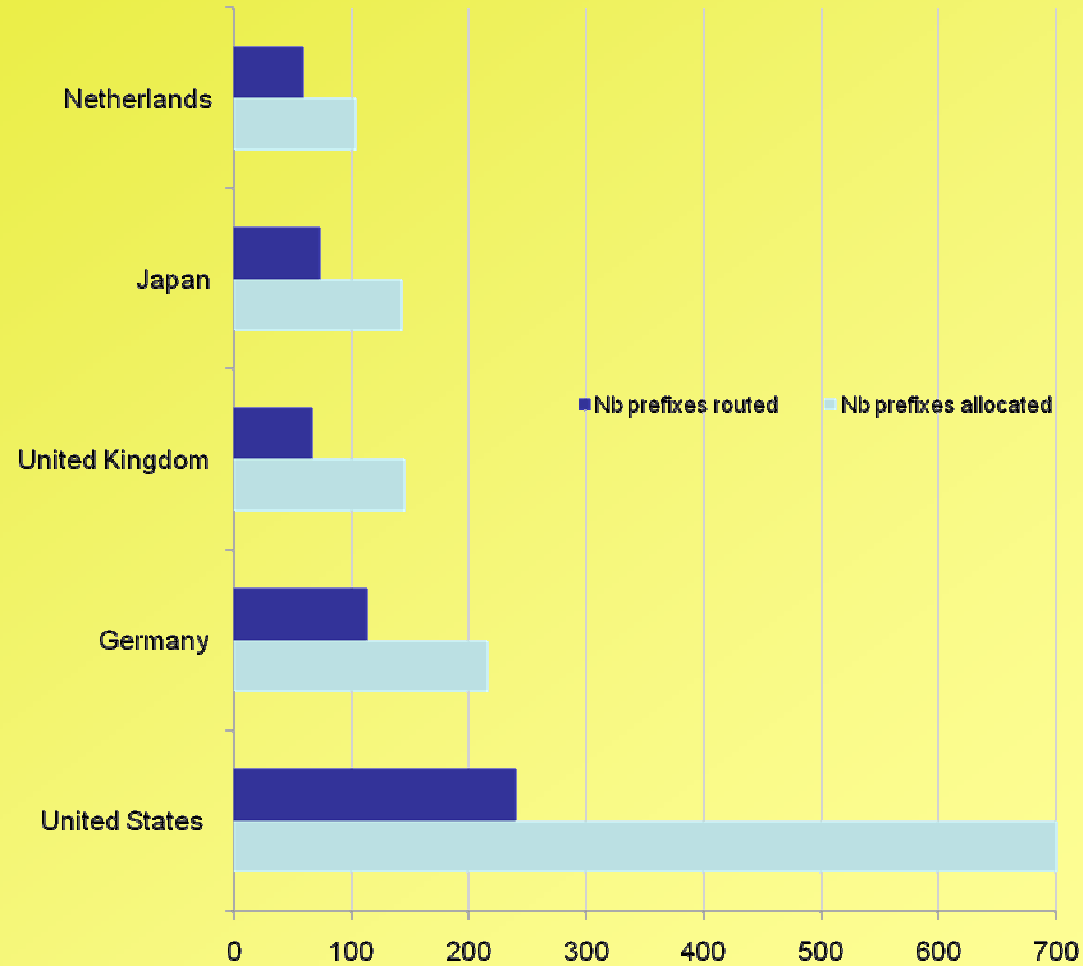
Prefix	Company	Date (yyyy/mm/dd)
2003::/19	Deutsche Telekom, Germany	13/01/2005
2a01:c000::/19	France Telecom, France	30/12/2005
2a01:2000::/20	Telecom Italia, Italy	16/05/2006
2001:2000::/20	TeliaSonera, European Union	10/05/2004
2400:2000::/20	Softbank BB IPv6 Network, Japan	12/07/2005
2400::/20	Korea Telecom, Korea	1/06/2005
2401:6000::/20	Australian Government Department of Defence, Australia	10/08/2007
2608::/22	United States Department of Defense (DoD), United States	6/05/2008
2402::/22	Korean Education Network, Korea	20/10/2006
2a00:2000::/22	British Telecom, United Kingdom	29/08/2007
2600:800::/27	MCI / Verizon Business, United States	8/01/2007
2a01:2e0::/28	PLUSGSM, Poland	19/03/2007
2404:180::/28	Samsung Networks, Korea	28/08/2006
2610:080::/29	RCN Corporation, United States	2/06/2006
2600::/29	Sprint, United States	21/12/2006

Source: OECD, extracted from RIR IP Whois databases.

Distribution of IPv6 Allocations by Number of Allocations



Distribution of IPv6 Allocations by Size of Allocation



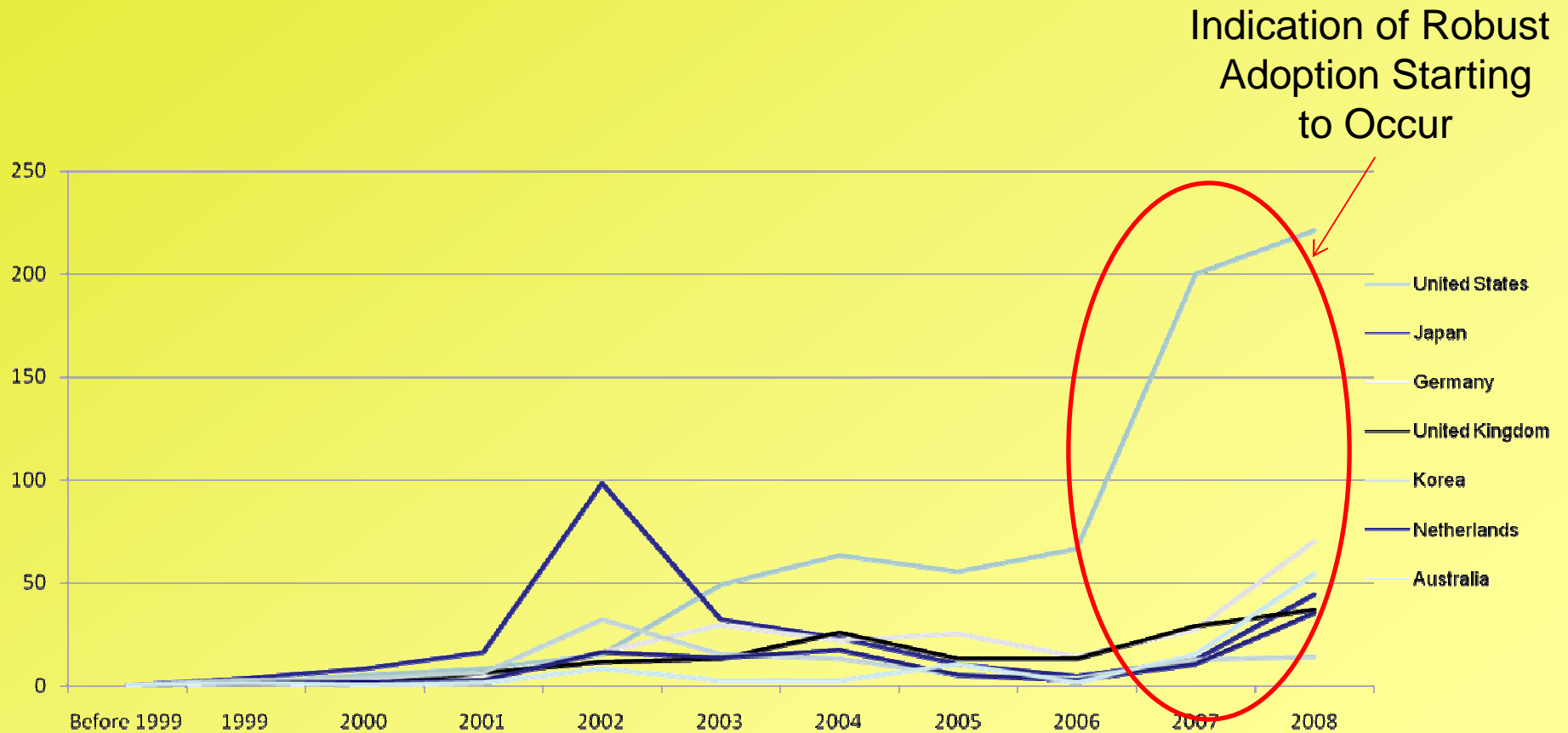
Allocation vs Routing

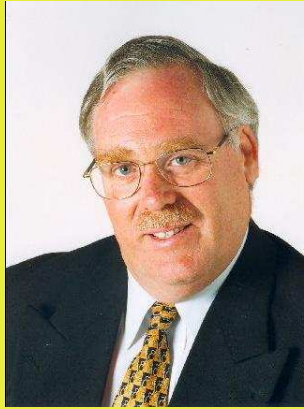
❑ By the end of 2008:

- ❑ About 50% of allocated IPv6 prefixes were visible in the IPv6 routing tables on average
- ❑ Significant variation from country to country
 - ❑ USA: 224 routed prefixes
 - ❑ Germany: 108 routed prefixes
 - ❑ Japan: 70 routed prefixes
 - ❑ United Kingdom: 65 routed prefixes
 - ❑ Netherlands: 53 routed prefixes
- ❑ Japan had an early lead in 2001 due to its national strategy
- ❑ USA took lead in 2007 with Office of management Budget Initiative
- ❑ Australia now well positioned

Numbers of IPv6 Allocations

Top Eight OECD Countries, 1999 to 2008





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Thanks for Your
Attention

Questions?