IPv6 Allocation Status Report

IPv6 Technical SIG

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Overview

- RIR IPv6 Statistics
- Allocation/Assignment Statistics
- IPv6 Routing Table
- Whois Database Registrations

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RIR IPv6 Allocations (as of July 2005)
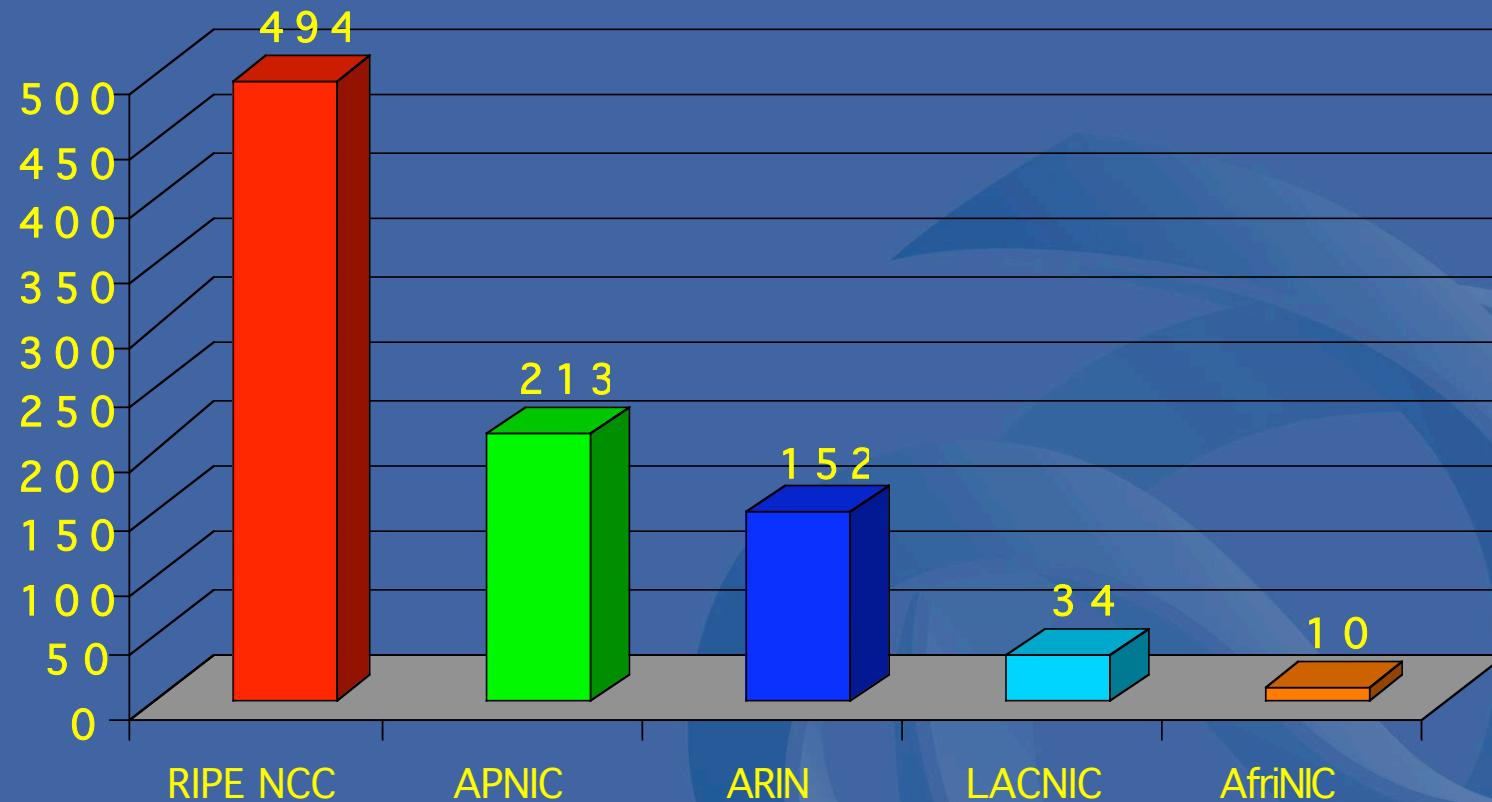
Note: number of "various sizes" allocations

Amount of address space allocated by each RIR in /48s (21/08/2005)

Millions

1200	
1000	
800	
600	
400	
200	
0	

1093.16505
1021.60794
10.68241   2.55590   0.6553

RIPE NCC   APNIC   ARIN   LACNIC   AfriNIC

Source: http://www.ripe.net/rs/ipv6/stats/

4
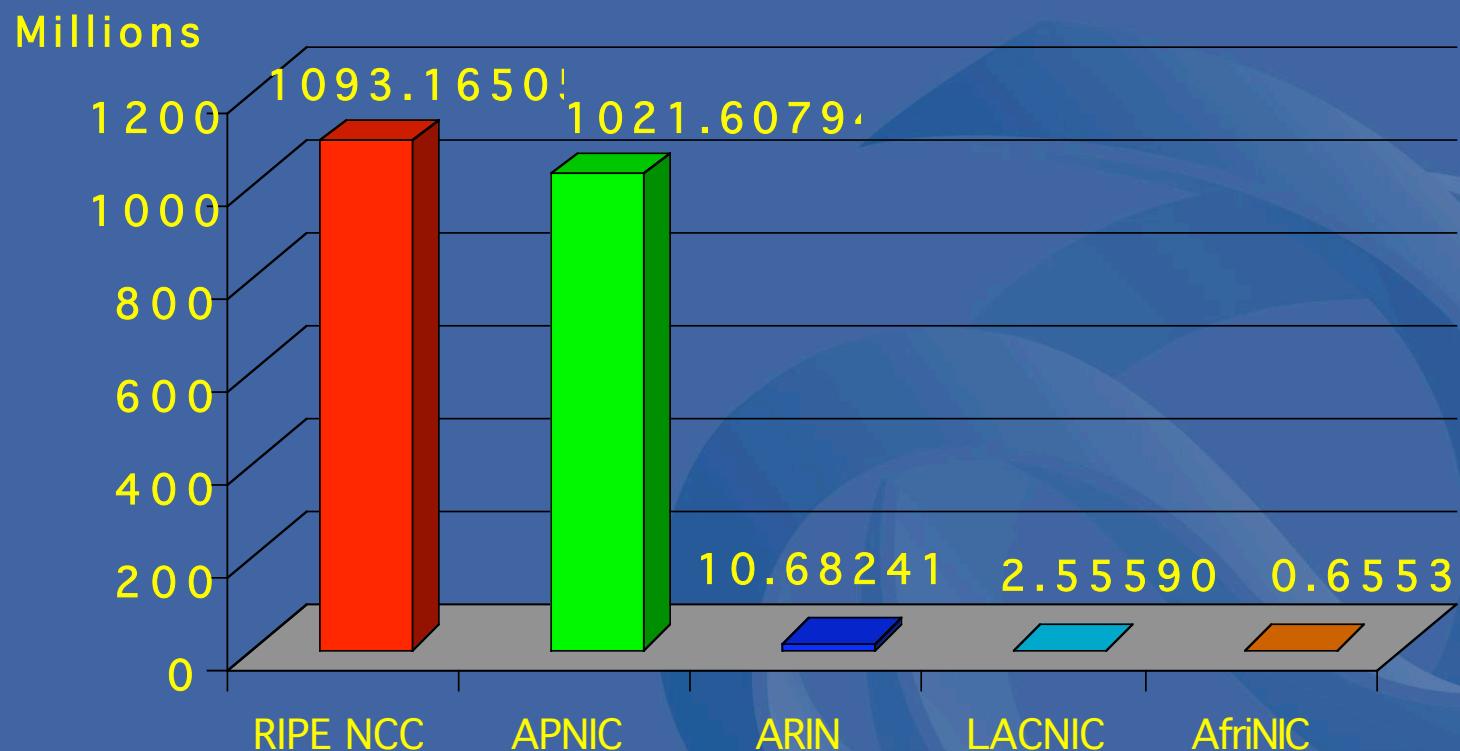
IANA IPv6 Allocations to APNIC

- 2001:0200::/23 (Jul 99)
- 2001:0C00::/23 (May 02)
- 2001:0E00::/23 (Jan 03)
- 2001:4400::/23 (Jun 04)
- 2001:8000::/19 (Nov 04)
- 2001:A000::/20 (Nov 04)
- 2400:0000::/19 (May 05)
- 2400:2000::/19 (Jul 05)
- 2400:4000::/21 (Aug 05)

IANA IPv6 Allocations to APNIC (no of /23s)

Bar chart:
- 1999: 1
- 2002: 1
- 2003: 1
- 2004: 25
- 2005: 36
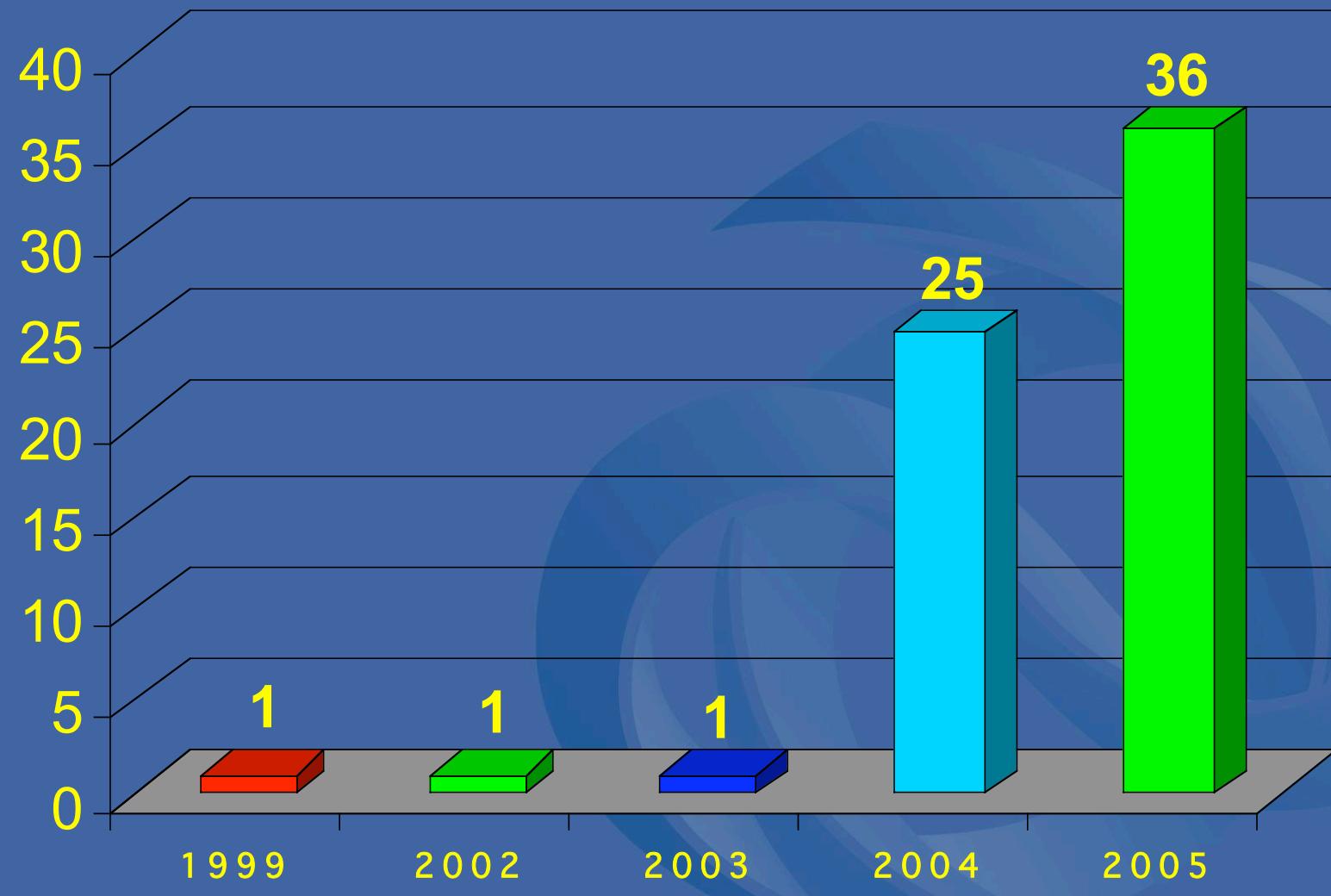
As of August 2005

Total APNIC IPv6 Allocations by Economy
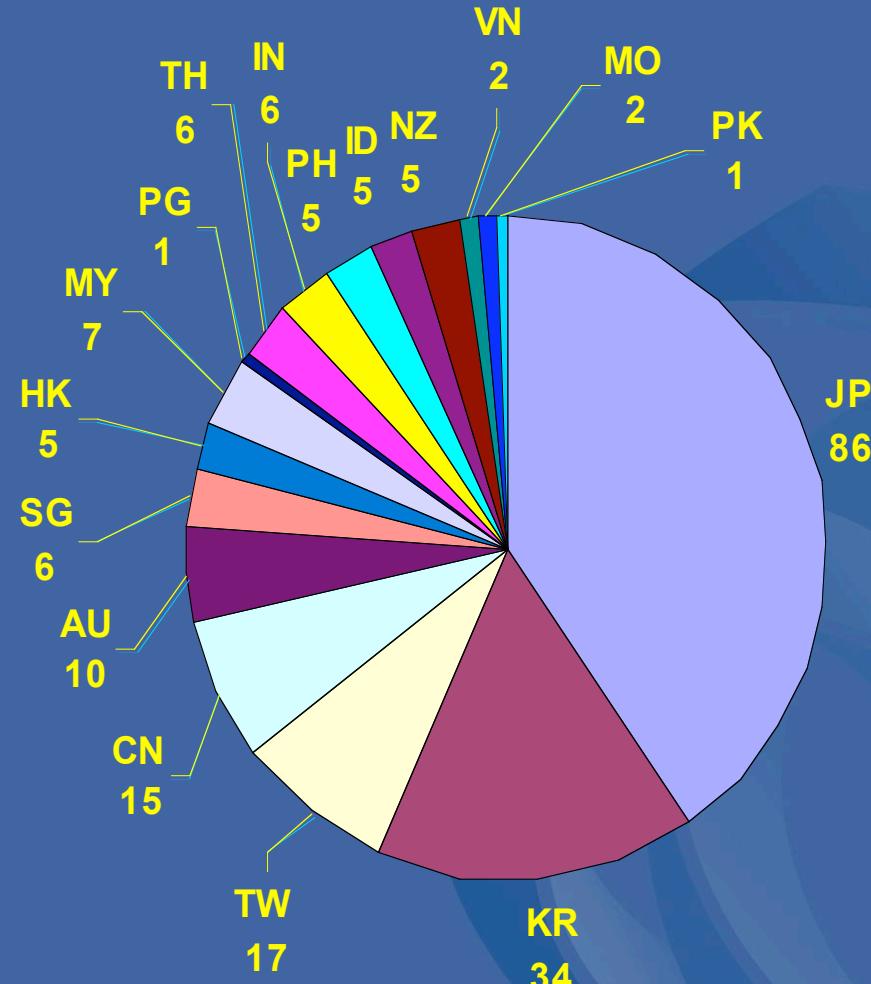
APNIC IPv6 Allocations by Year
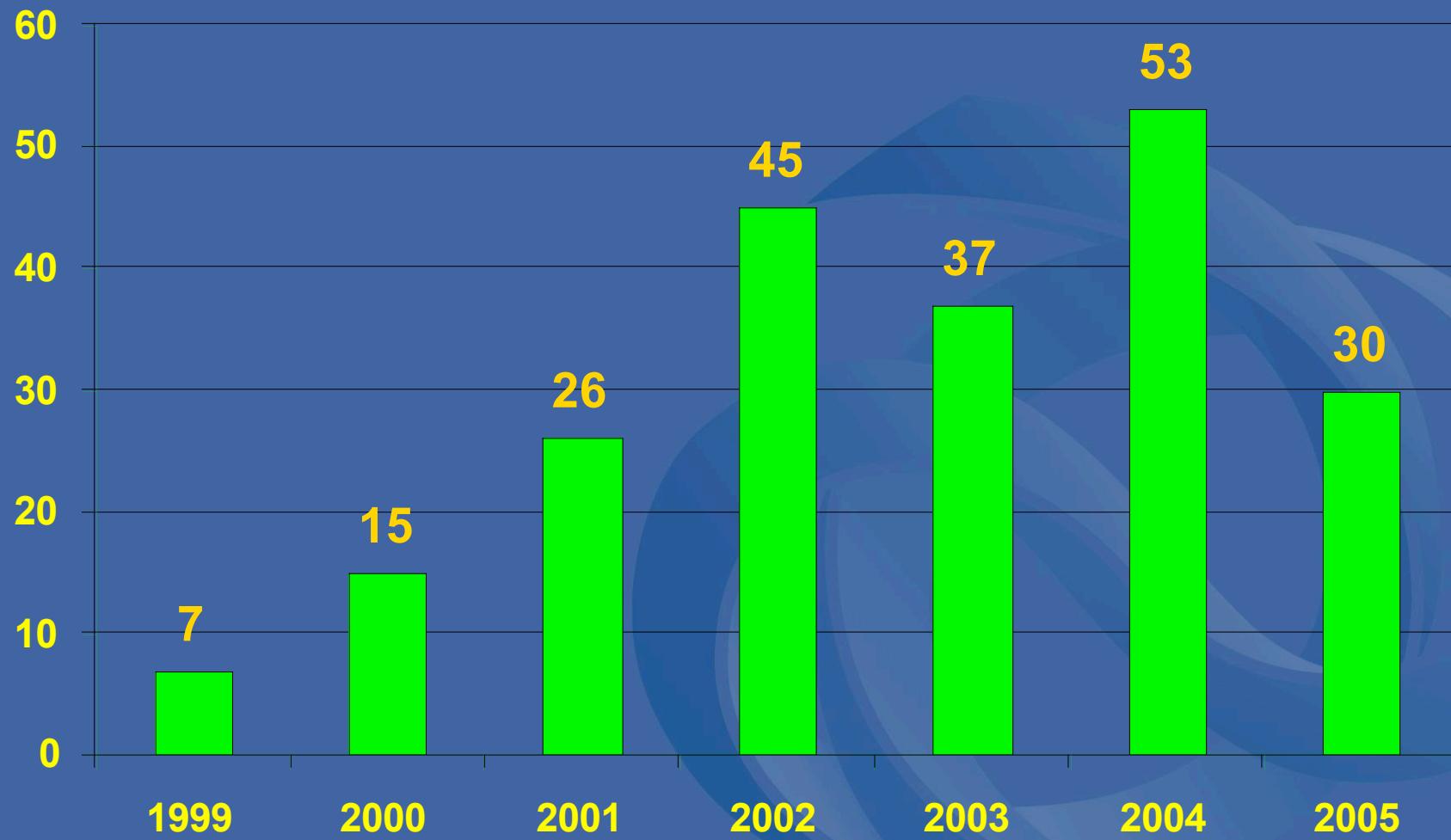
Large IPv6 Allocations

- IPv6 allocations to IPv4 networks
    - /20 JP – Softbank
    - /28 JP – Vectantnet
    - /20 KR – Kornet
    - /30 NZ – Telstra Clear
- Expansion of the initial allocation space for existing v6
    - /21 + /30 JP (kept initial /30) - NTT-WEST
    - /20 AU (renumbering initial /32) - Telstra

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New Fee Structure for NIR and Confederations

- 90% discount will be applied to per address fees
  - NIR members with existing IPv4 infrastructure only

- Waived per address fees for allocations
  - confederation members
 - will maintain a single pool

Experimental Allocations

- Experimental Networks
    - 2001:0DE0::/32 Allocation for WIDE Japan
        - IPv6 allocation for a field test of v6 DNS service with anycasting

    - Document of the experiment will soon be published at the following URL:
      http://icons.apnic.net/index.php?option=com_docman&task=cat_view&gid=95&Itemid=93

IPv6 IX Assignments (/64 & /48)

CN 1
TW 1
VN 1
ID 1
HK 1
NZ 2
JP 3
KR 2
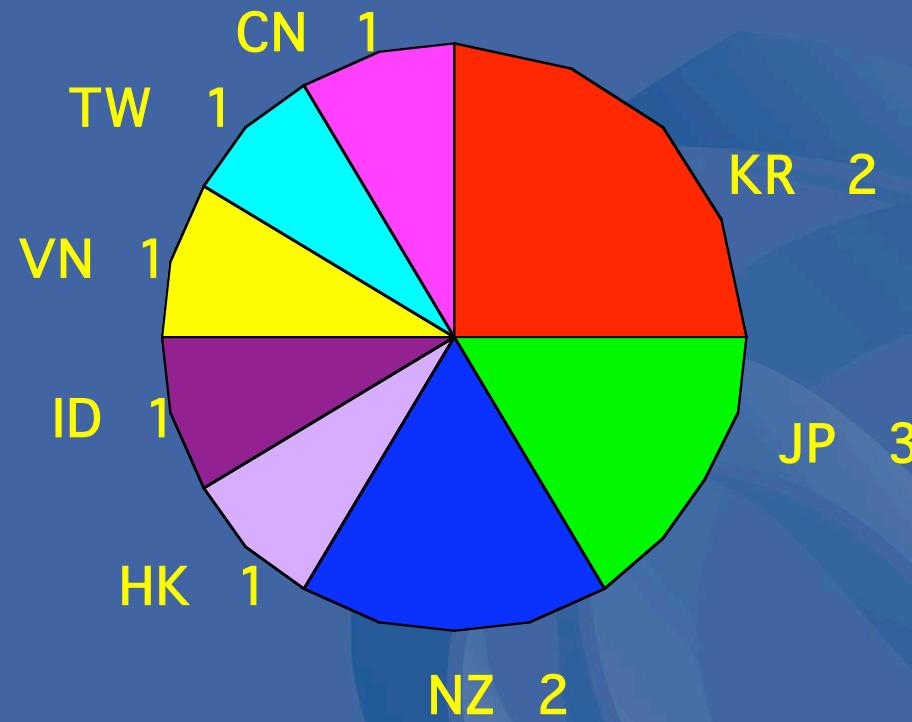
IPv6 Critical Infrastructure Assignments (/32)

CN 2
JP 4
TW 1
VN 1
ID 1
KR 2
HK 1
AP 1

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IPv6 Routing Table

Prefix Size — # Announcements

Prefix Size	# Announcements
/19	1
/20	3
/21	1
/24	34
/27	1
/28	33
/30	2
/32	483
/33	2
/34	1
/35	23
/40	32
/45	1
/48	88
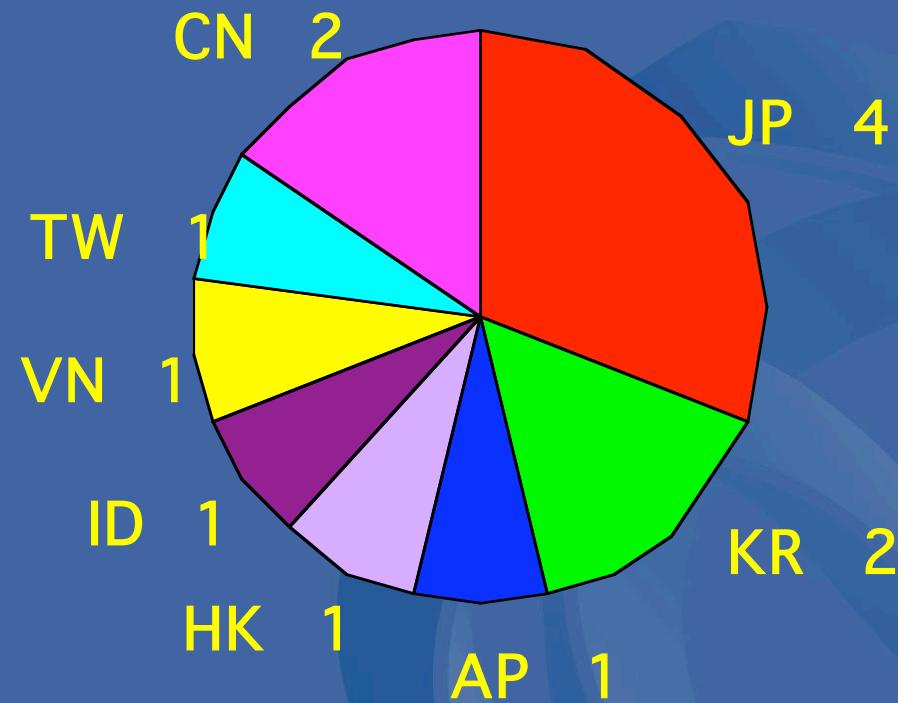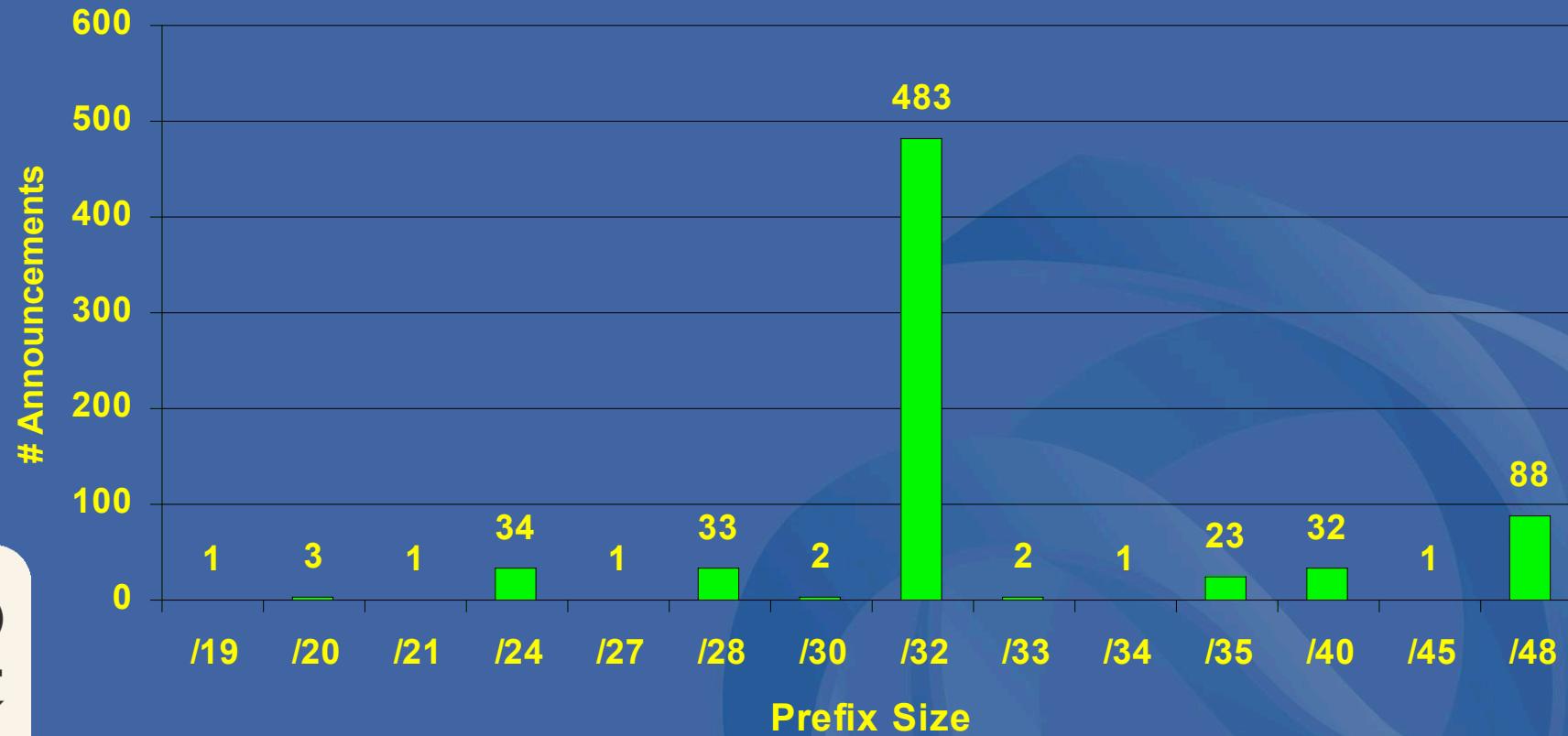
Data obtained from AS4608 on 4 Aug 2005

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APNIC whois Assignment Registrations

Chart: Total (y-axis, 0 to 6000) vs Prefix Size (x-axis)

Prefix Size	Total
/36	12
/39	2
/40	455
/41	1
/44	6
/48	4803
/64	5

Questions?

- Thank you!

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