

IPv6 Status Update

IPv6 SIG

7 Sep 2006

APNIC 22, Kaohsiung, Taiwan

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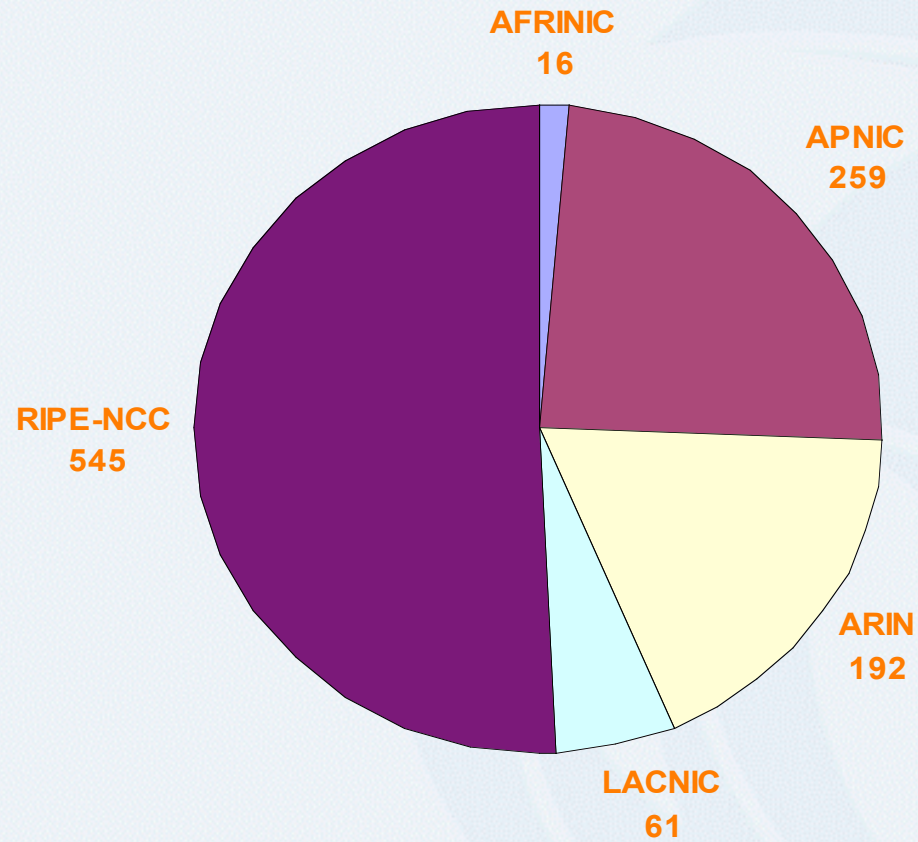
Overview

- RIRs allocation statistics
- APNIC allocation & assignment statistics
- Assignment registration
- Global IPv6 routing table
- Member survey on IPv6 deployment

Note: Data valid as of 15 Aug 2006

RIRs allocations to LIRs/ISPs

Numbers of allocations as of 15 Aug 2006
Total: 1057





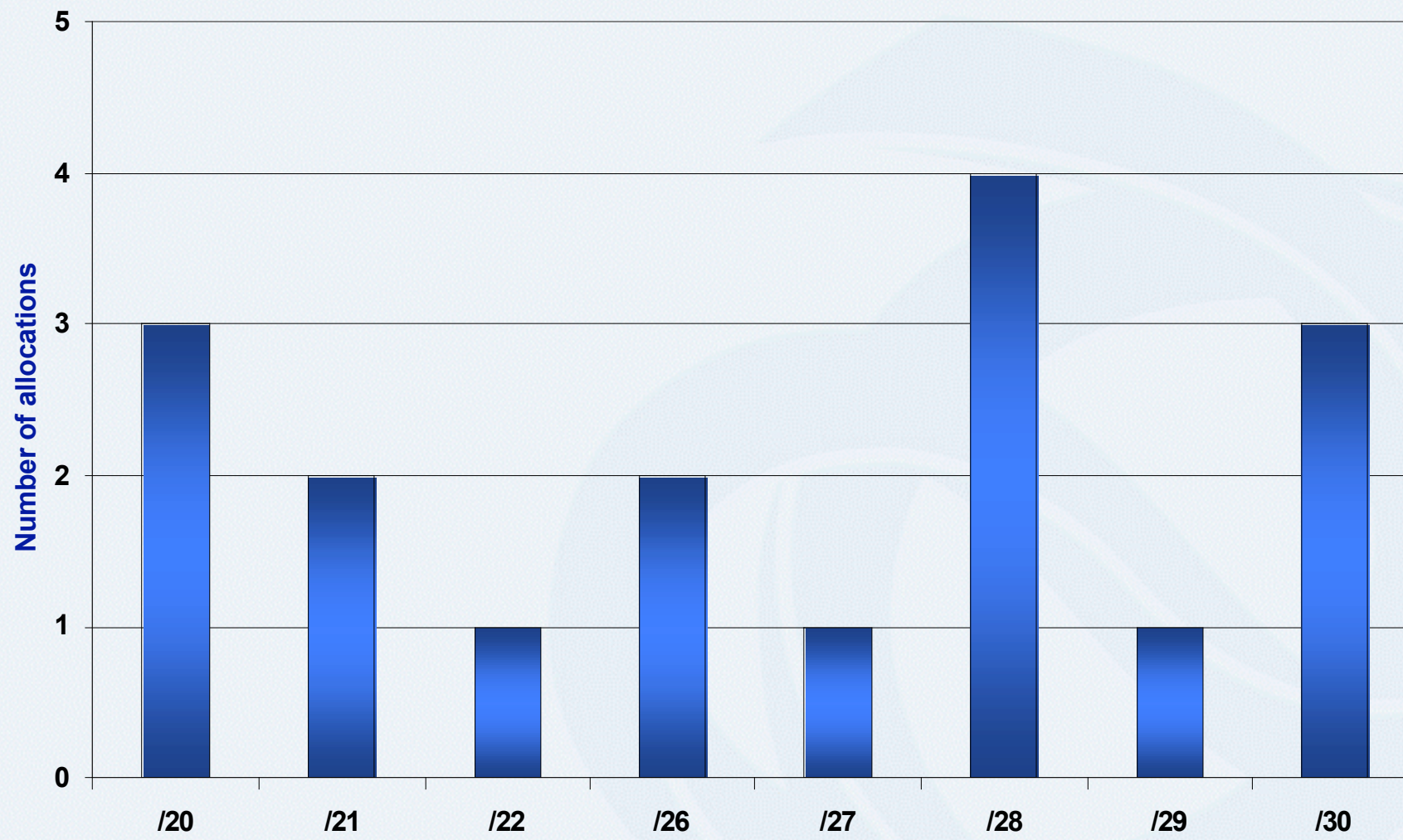
APNIC allocations by year



Total : 259

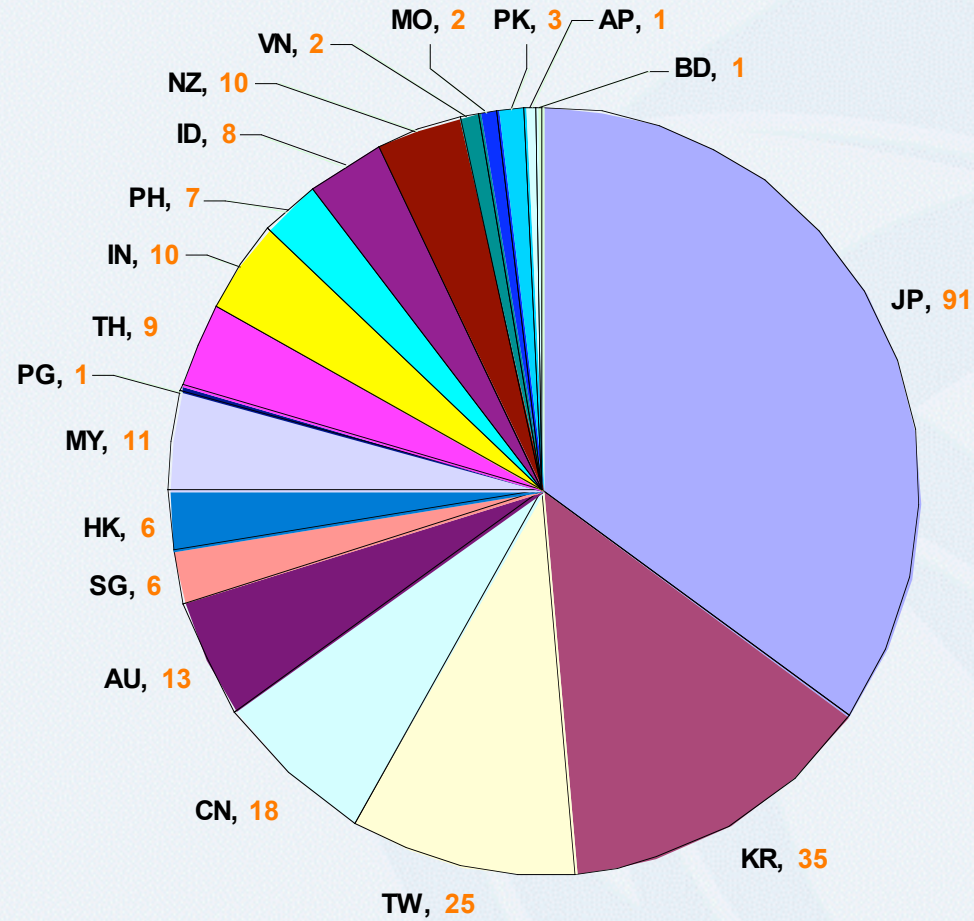


APNIC allocations > /32

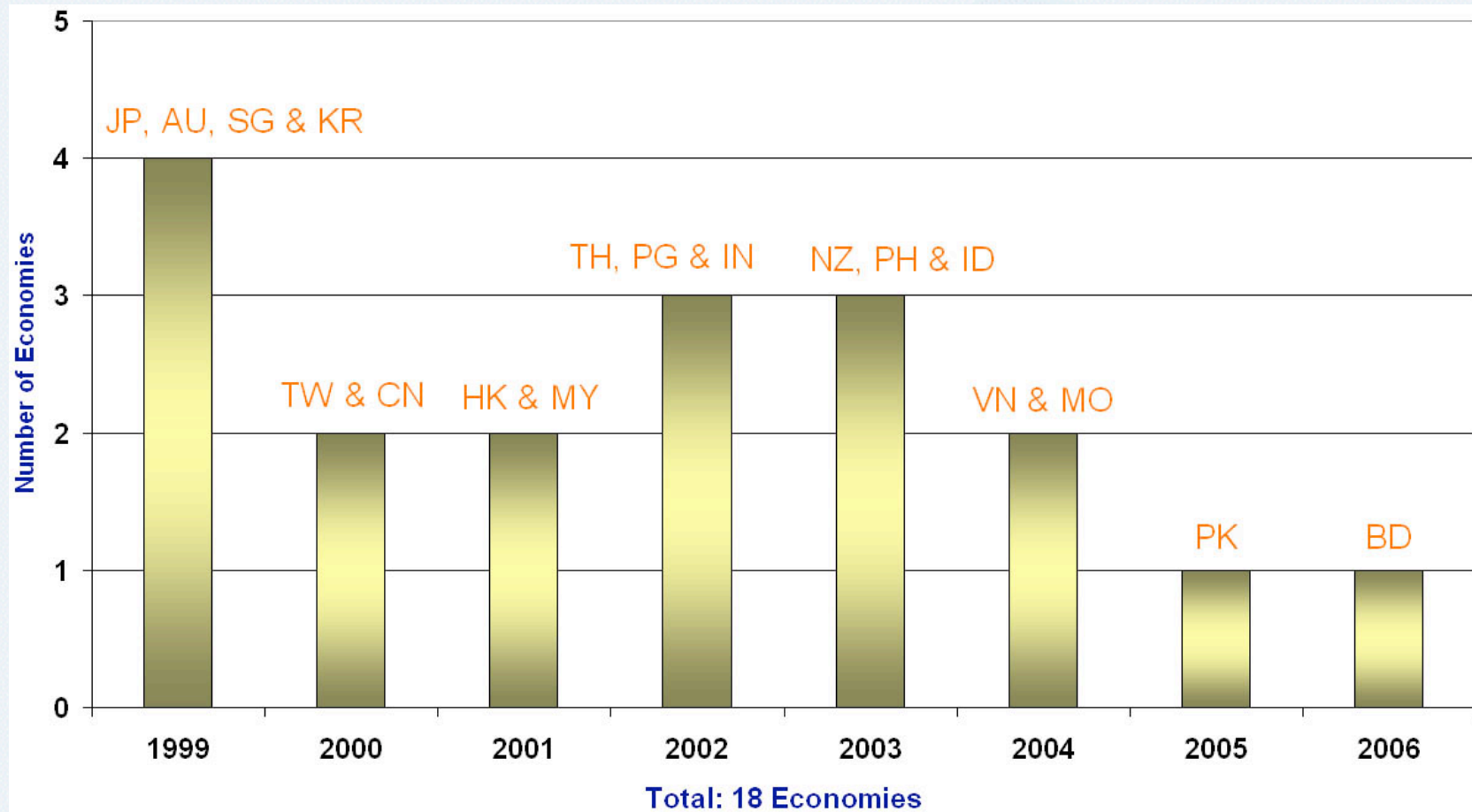


Total: 17

APNIC allocations by economy

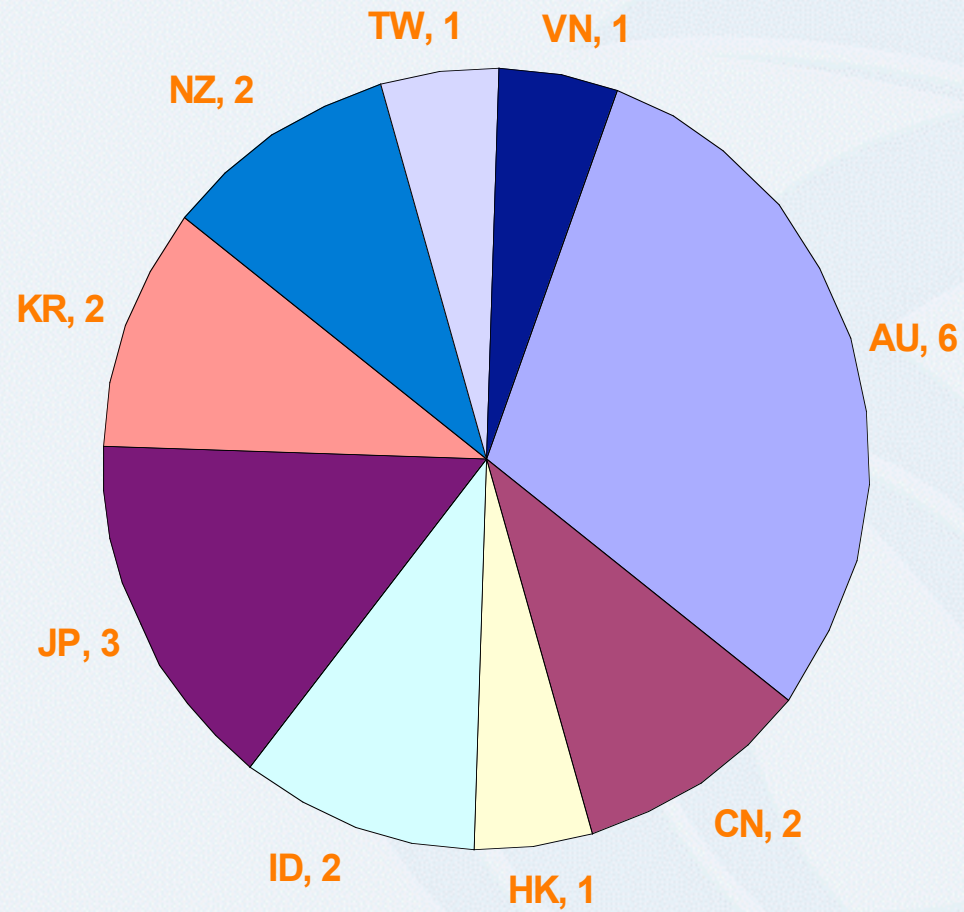


Economy uptake by year

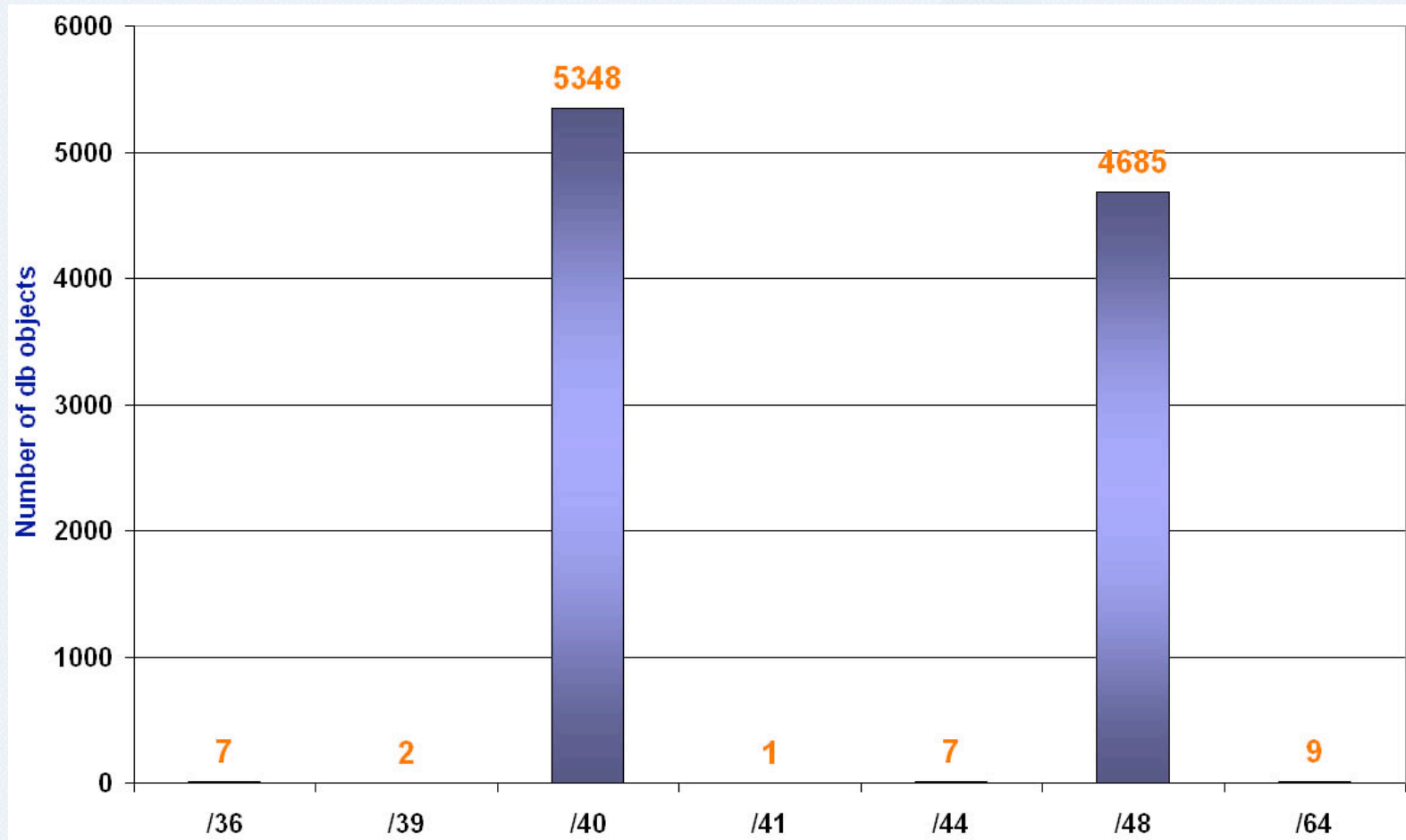


IPv6 IX assignments

All /48s, except 4 are /64s



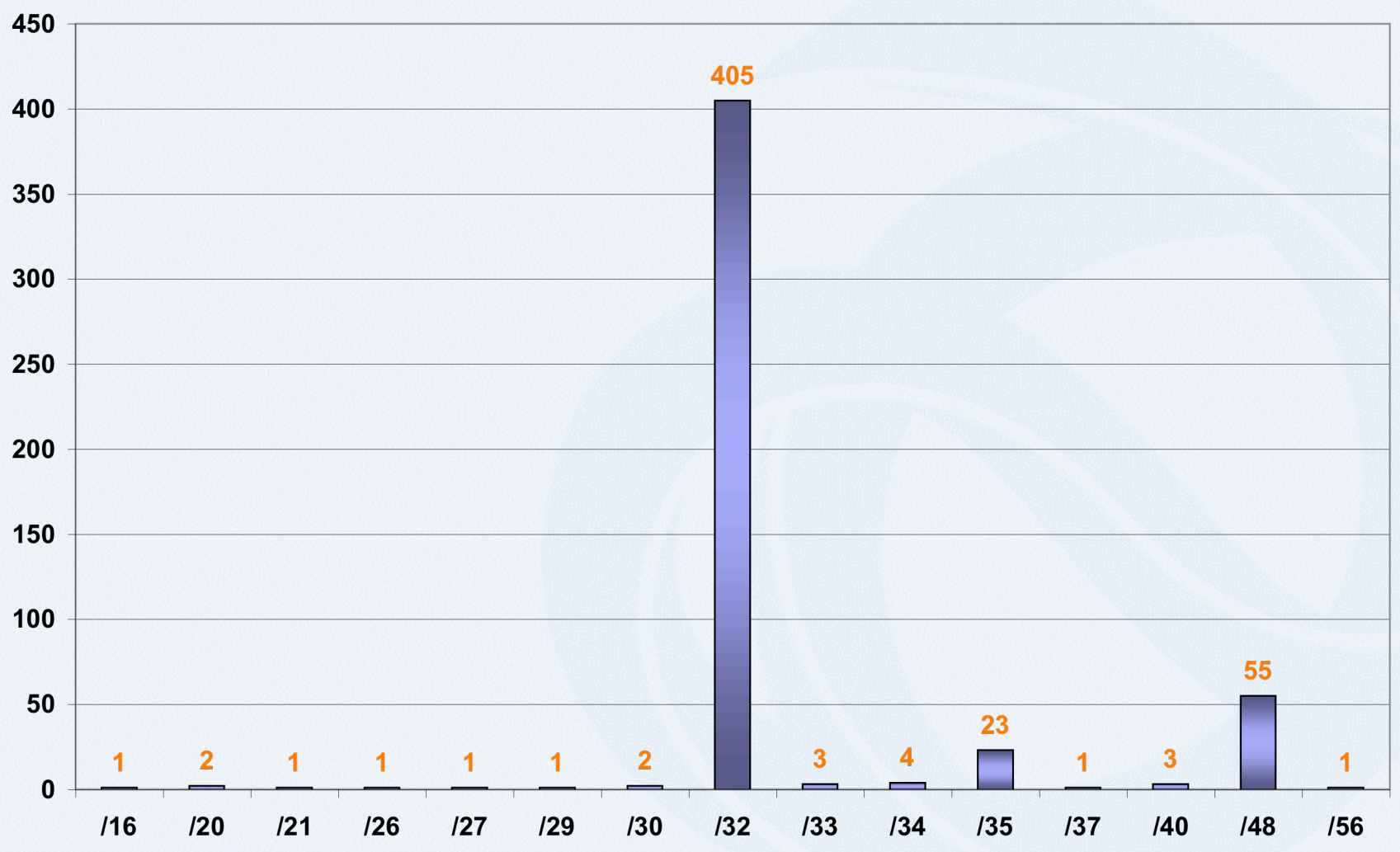
Whois assignment registration





IPv6 routing table

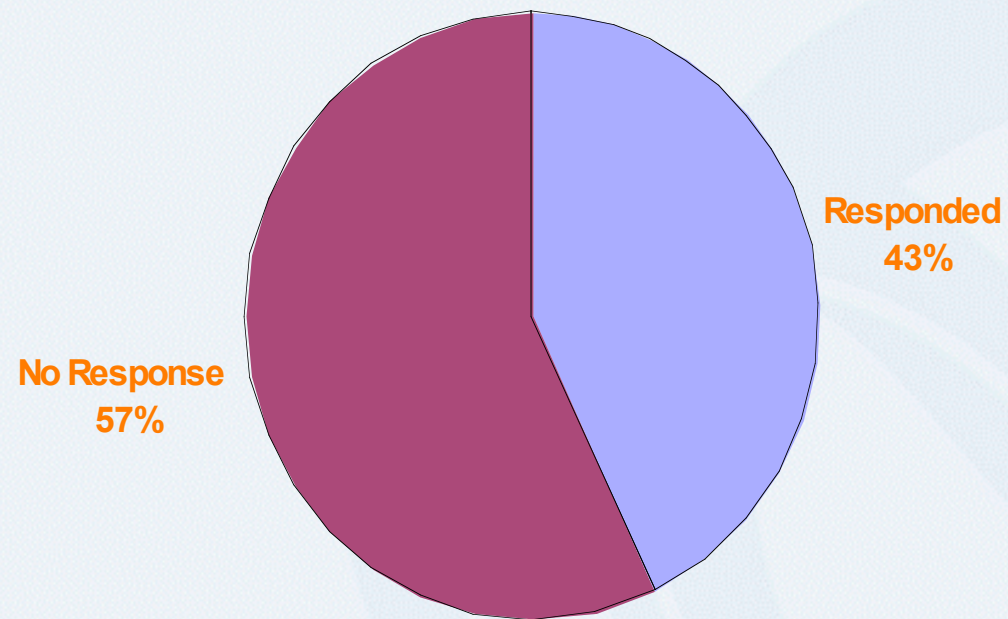
Data from APNIC Brisbane router on 23 Aug 2006



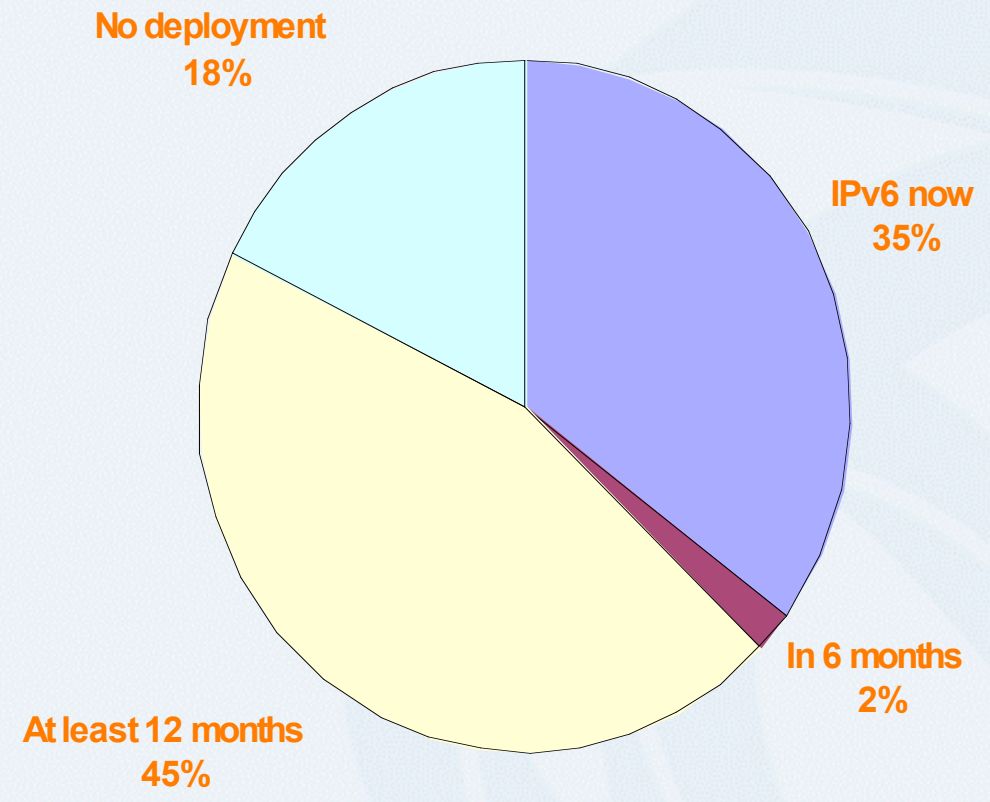
Members survey on IPv6 deployment

Members survey on IPv6 deployment

Allocations > than 2 years

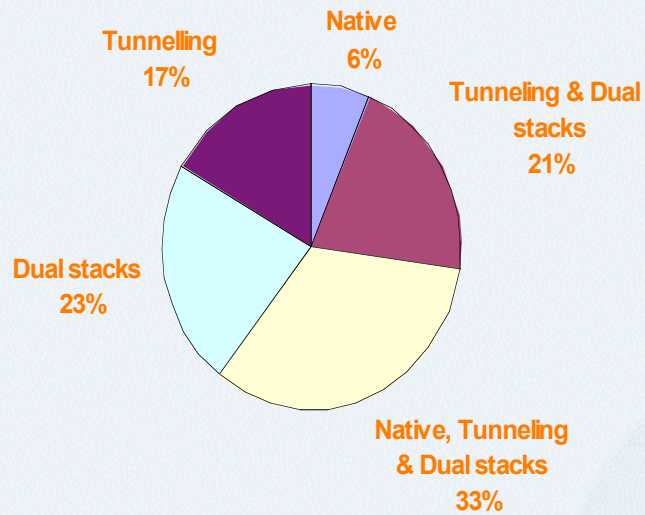


IPv6 deployment status

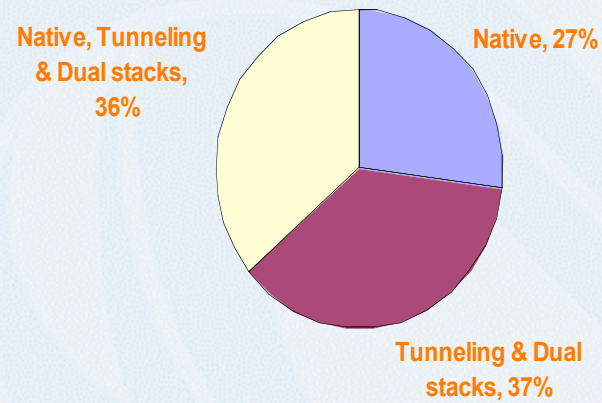


Network type - 2002 & 2006

2006



2002



Equipment/software deployed

- Cisco/Juniper/ Huawei /Bitway/ Hitachi/Foundry/ Yamaha routers
- FreeBSD/Linux /Solaris/Windows 2003 & XP
- Hexago migration/ Windows XP tunnel brokers
- IBM x225, HP DL3600

* Text underlined - 2002 survey

Deployment difficulty (2002)

- Lack of software
- Address administration
- Merging v6 network with v4
- Implementation of routing protocol
- Troubleshooting using tunneling

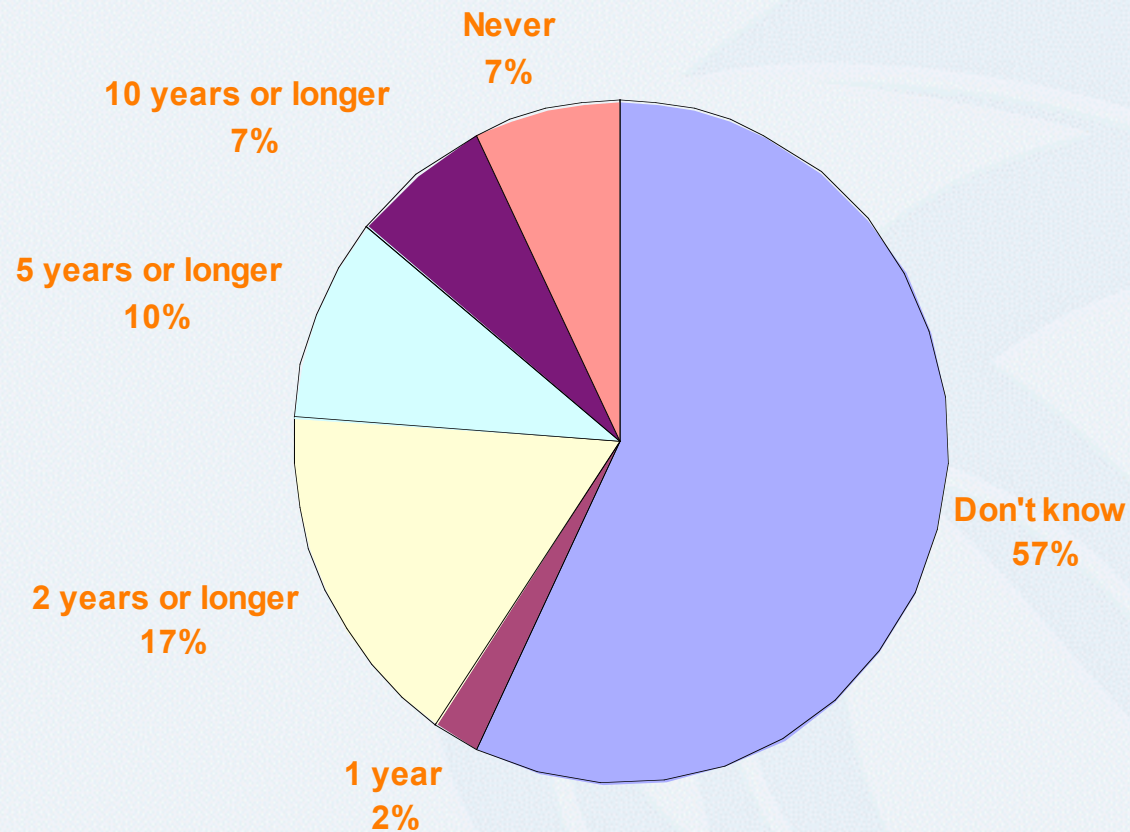
Deployment difficulty (2006)

- Lack of demand
- **Lack of software** (esp end users applications)
- Uncertain ROI (return on investment)
- Higher cost network deployment
- Incompatible software/hardware
- Lack of vendor support
- Lack of budget
- Changes in policy vs service specification
- Lack of IPv6 expertise
- Renumbering
- Security concerns

Services provided

- Leased line (11)
- Transit (2)
- DNS (3), WWW (1), FTP (1)
- Streaming & video conferencing (1)
- Dual stack IPv6 link & tunnel broker (3)
- ADSL (3)
- Shared hosting (3)
- IP phone (3)
- Data centre (4)
- IX (3)

Projections on reaching HD ratio 0.8?



Questions?

More information:

- <http://www.apnic.net/db/ranges.html>
- <http://www.iana.org/assignments/ipv6-tla-assignments>
- <http://www.ripe.net/rs/ipv6/stats/index.html>

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