# IPv4 Addressing in China

CNNOG 3

21-22 April 2006, Beijing

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# Overview

- IPv4 Addressing in China
- Internet Registry Structure
- IPv4 address allocation statistics
  - Global, AP region and China
- Where to request IPv4 addresses?
- IPv4 Address management policies
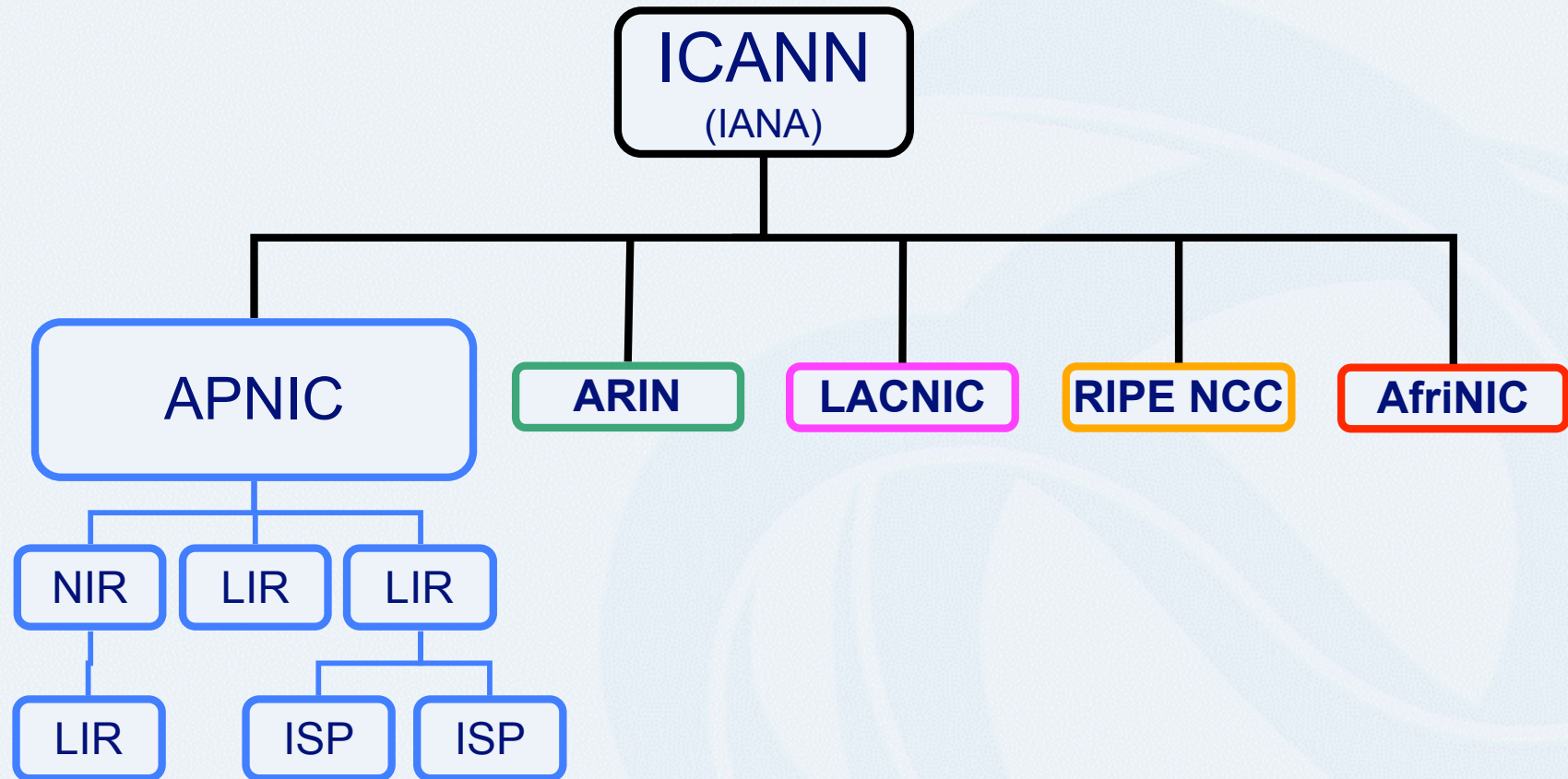- Other information

# IPv4 Addressing in China

- China has 77,710,848 IPv4 addresses as at 31 March 2006. It is equal to 4.63 * /8.
- IPv4 address space is not running out immediately, IANA still has 62 * /8 reserved for future allocations.
- There are strong growth of IPv4 address allocations to China since 2000.
- Organisation in China like others go through the same process to receive IPv4 addresses.

# Internet Registry Structure

# Internet Registry Structure

```
                    ICANN
                    (IANA)

  APNIC     ARIN   LACNIC   RIPE NCC   AfriNIC

NIR   LIR   LIR

LIR         ISP   ISP
```
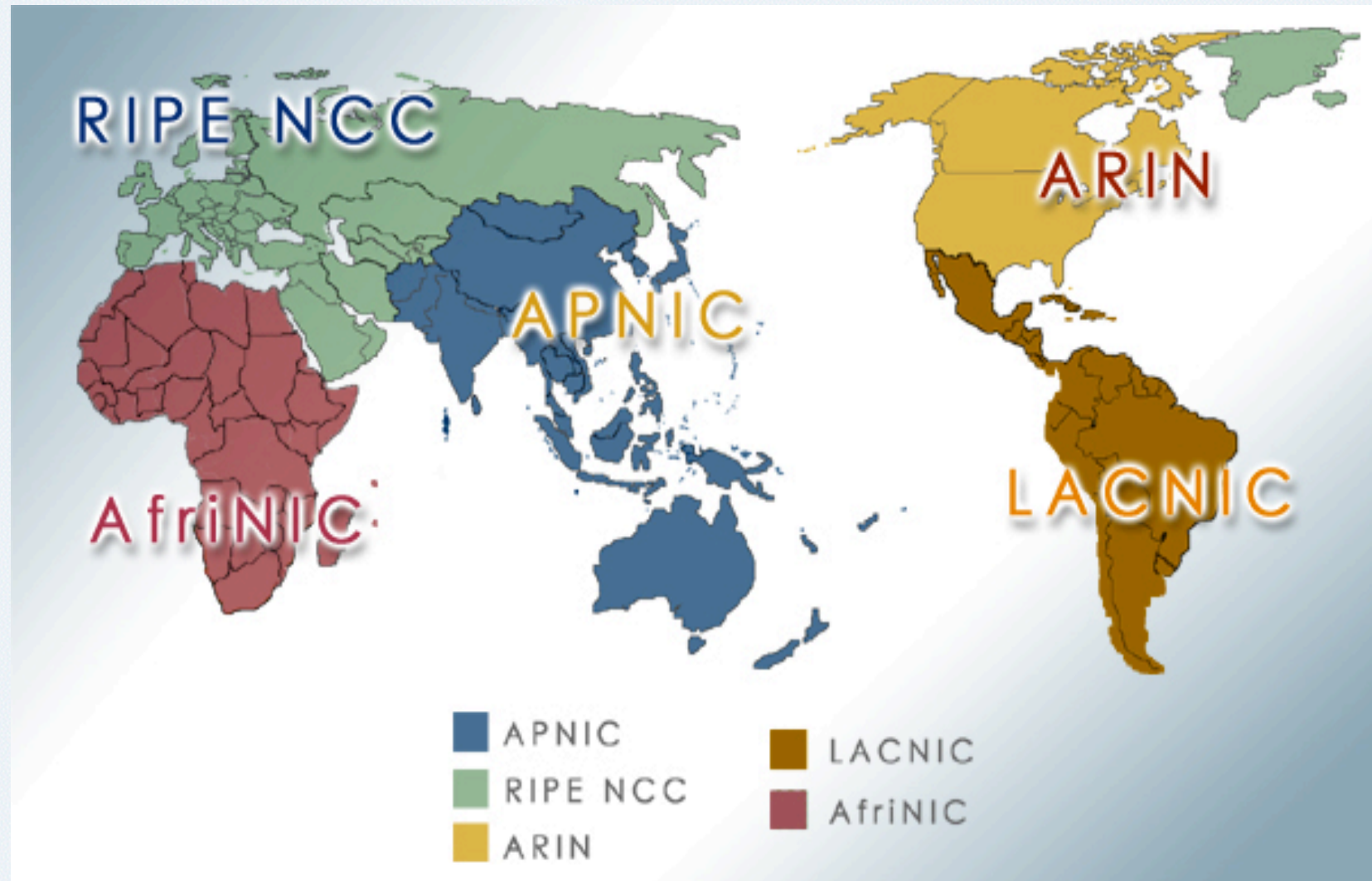
# What is APNIC?

- Regional Internet Registry (RIR) for the Asia Pacific region
  - One of five RIRs currently operating around the world
  - Non-profit, open membership organisation
  - Responsible for distributing Internet resources throughout the AP region
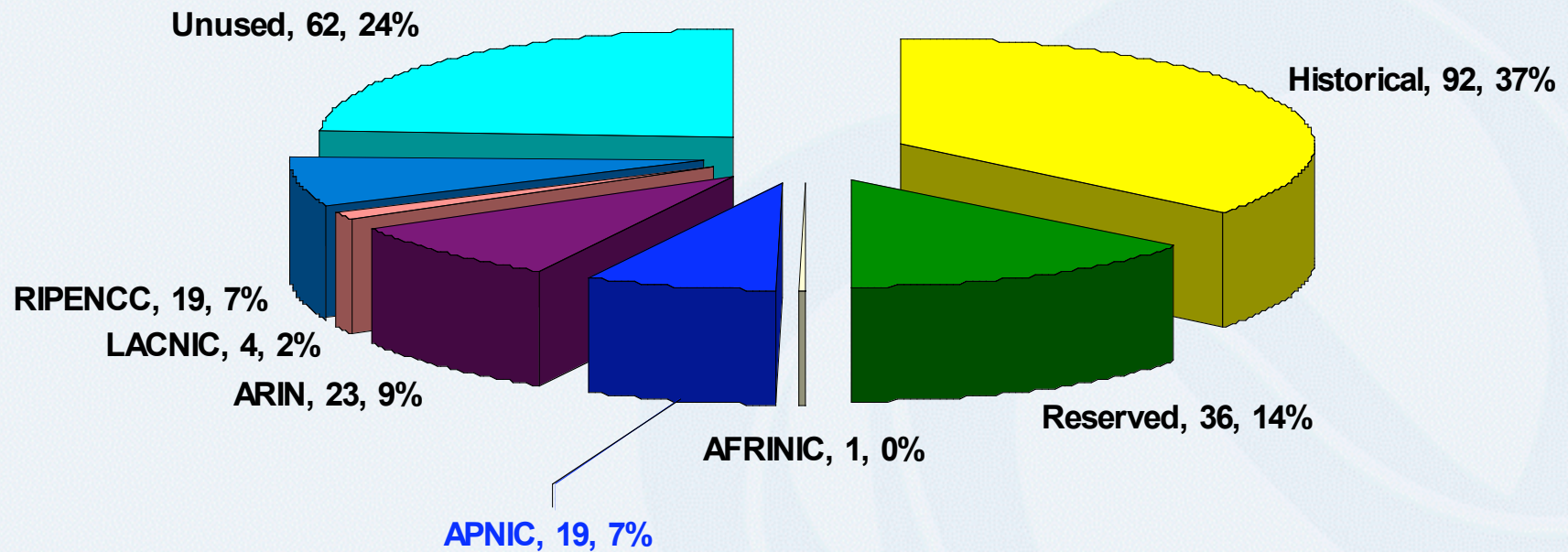  - Industry self regulatory body

# Where is APNIC Region?
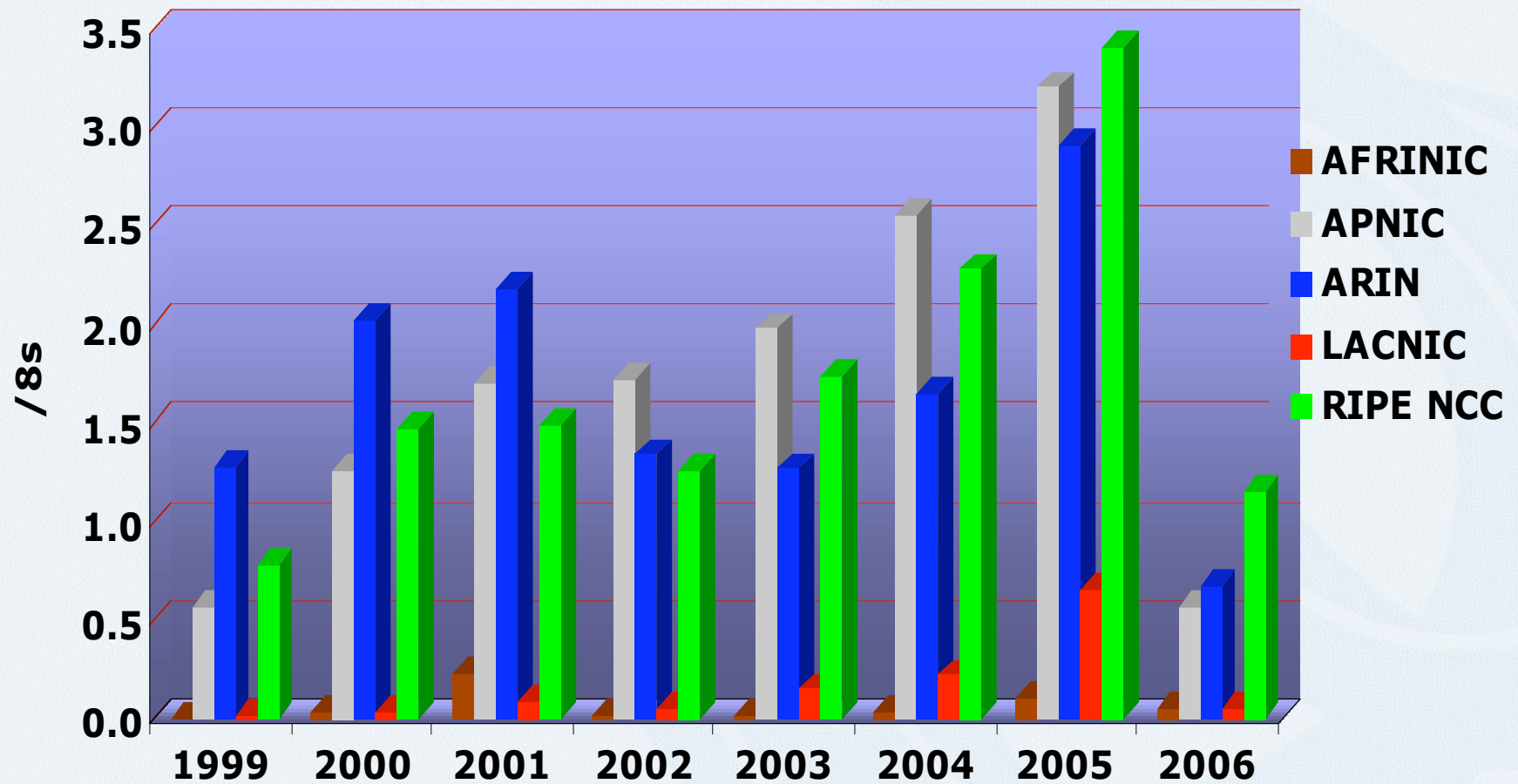
# IPv4 Address Allocation Statistics
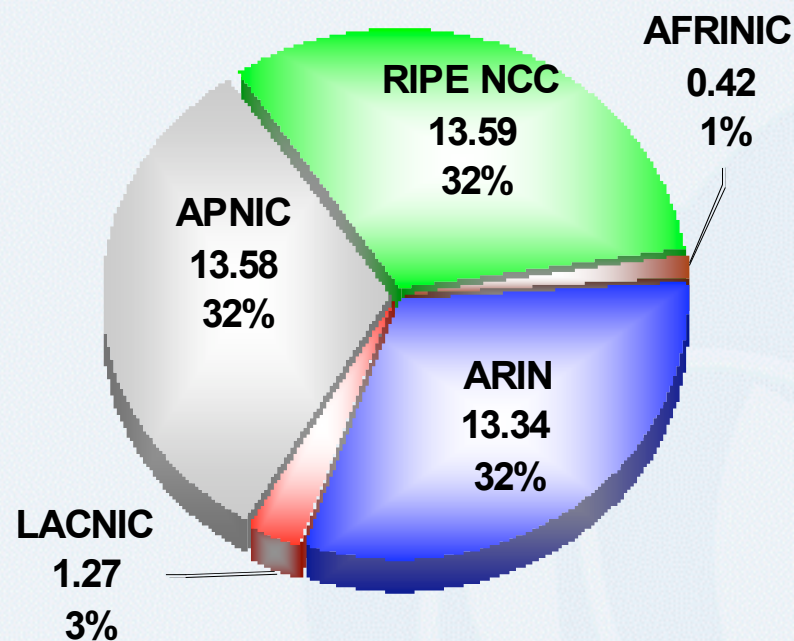
# IPv4 /8 Address Space Status



Unused, 62, 24%

Historical, 92, 37%

RIPENCC, 19, 7%

LACNIC, 4, 2%

ARIN, 23, 9%

Reserved, 36, 14%

AFRINIC, 1, 0%

APNIC, 19, 7%

# IPv4 Allocations from RIRs to LIRs/ISPs Yearly Comparison

# IPv4 Allocations RIRs to LIRs/ISPs

Cumulative Total (Jan 1999 – Mar 2006)

AFRINIC
0.42
1%

RIPE NCC
13.59
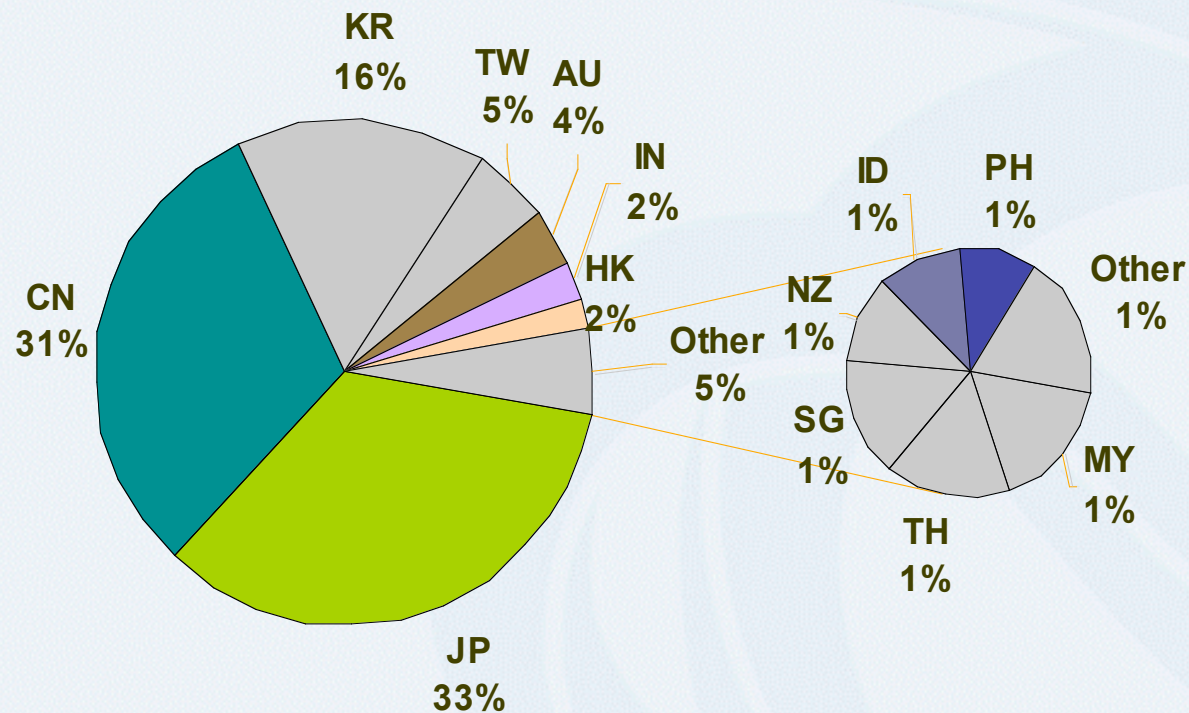32%

APNIC
13.58
32%

ARIN
13.34
32%

LACNIC
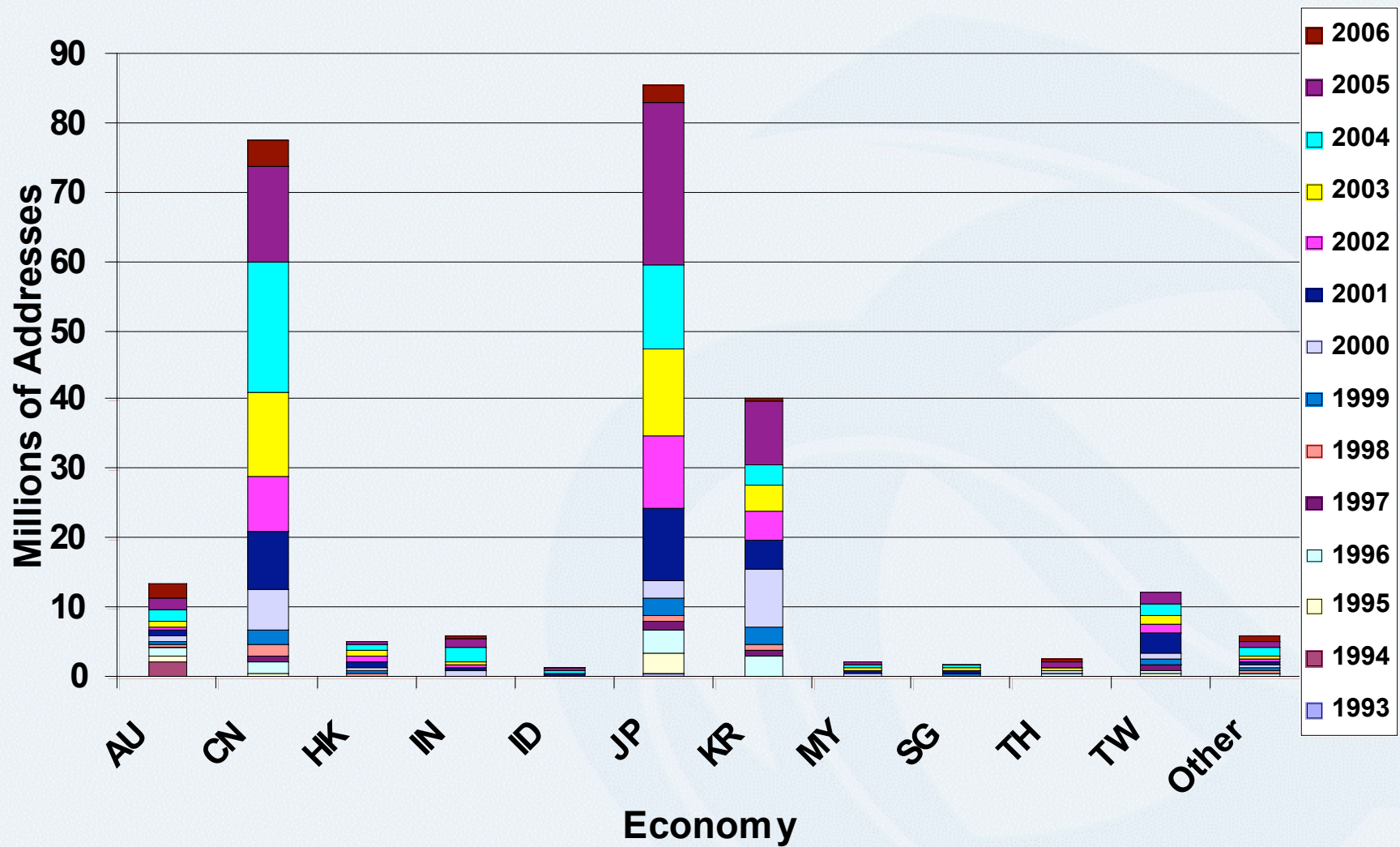1.27
3%

# RIR IPv4 Allocations by Economy
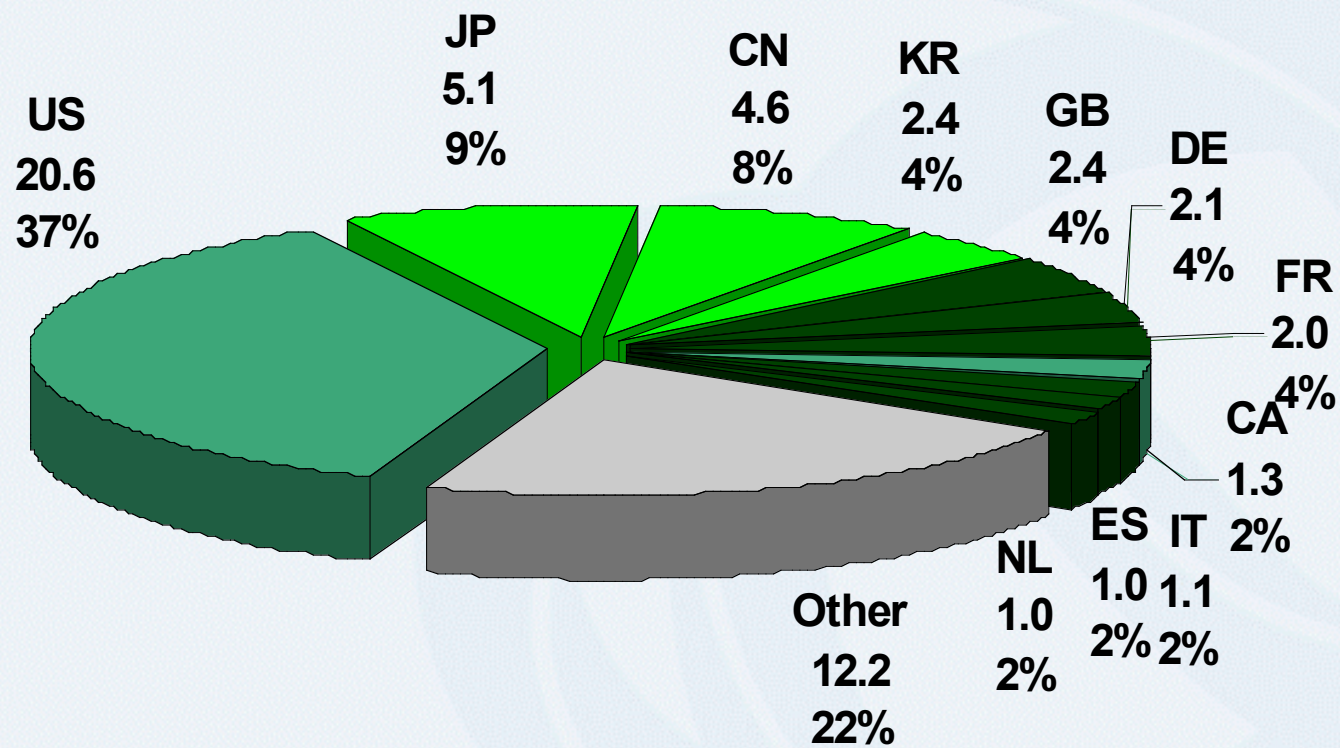
# IPv4 Address Allocations by Economy in AP Region
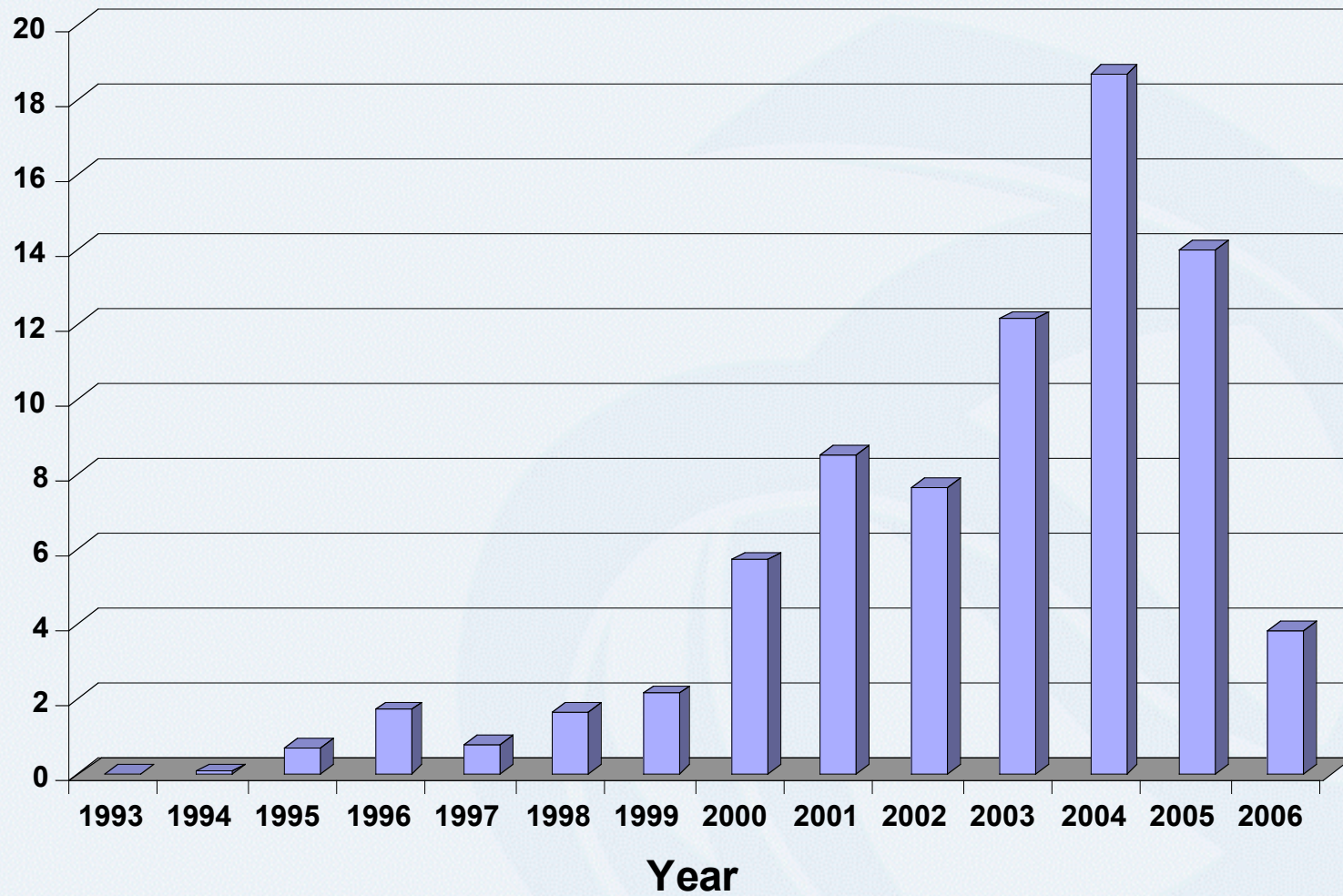
# IPv4 Address Allocations by Economy by Year in AP Region

# IPv4 Address Allocations to China by Year

# Where to Request IP Addresses?

- 1. From your upstream ISP
  - Receive an assignment or sub-allocation
  - Address space is non-portable
- 2. From CNNIC
  - CNNIC member
  - Address space is portable
- 3. From APNIC
  - APNIC member
  - Address space is portable

# IPv4 Address Allocation Policies

- Policies for IPv4 address space management in the Asia Pacific region
  - http://www.apnic.net/docs/policy/add-manage-policy.html
- All IPv4 address allocations are made according to demonstrated need under a consistent set of policies.
- It is fair to every economy and organisation.

# Know More about IP Addressing

- Visit our website
  - http://www.apnic.net
- Attend our training
  - We have training in China every year
  - Just had one in April and another one will be in Oct 2006.
- Contact our helpdesk
  - Phone: 61-7-3858 3188
  - Speak your languages ☺

# Questions?

# Thanks!