APNIC resource allocations

SANOG 13

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What's an IP Address?

- Internet infrastructure addresses
- Uniquely assigned to Internet endpoints
- Usage is publicly registered
- Addresses are a finite "Common Resource"
- Addresses are "IPv4" or "IPv6"
  - IPv4: 4 billion unique addresses
  - IPv6: 256 million trillion addresses?

Where do IP addresses come from?

IETF

Standards

IANA

Allocation

APNIC

Allocation

*

ISP

Assignment

end user
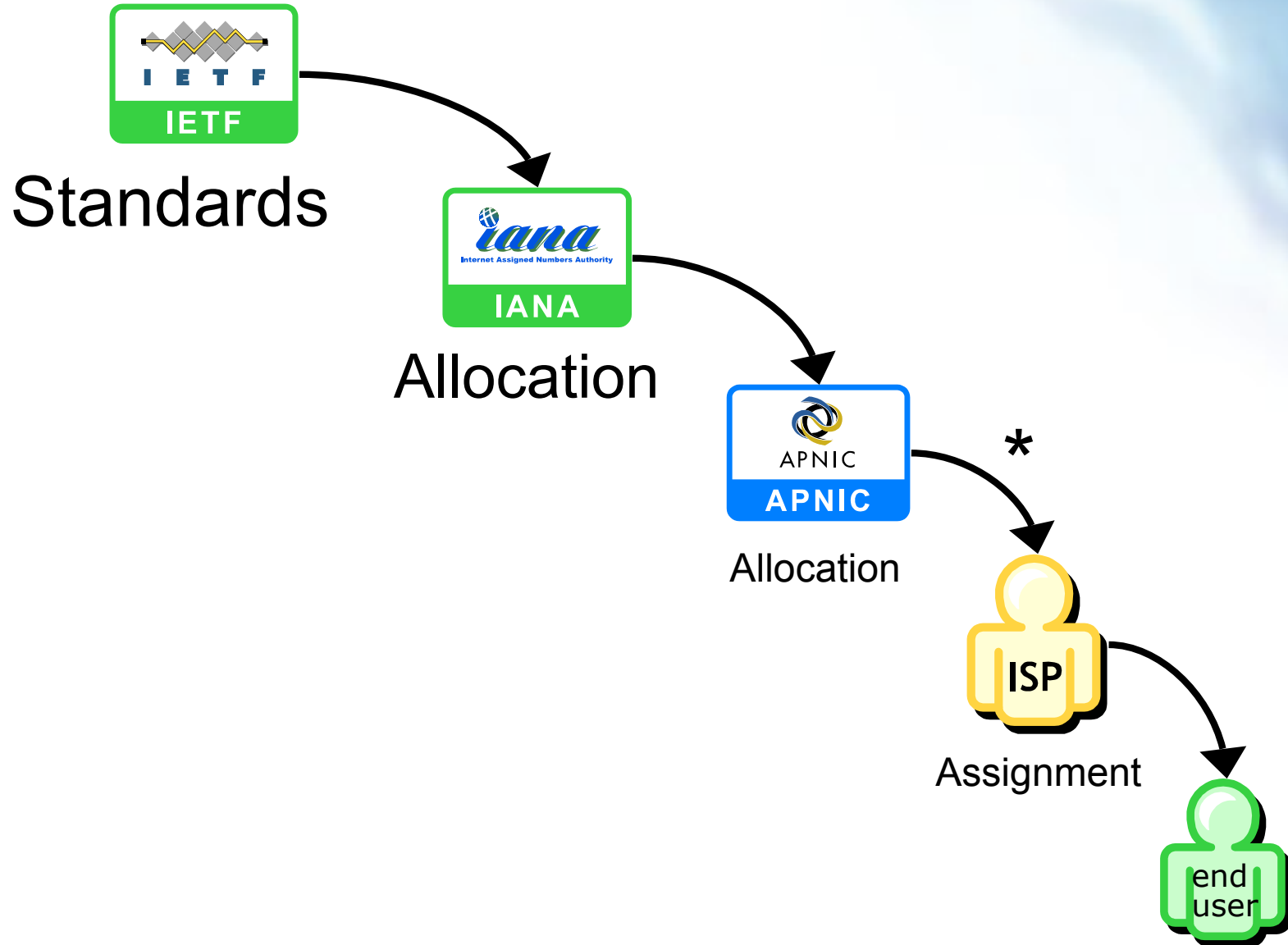
APNIC Members in South Asia
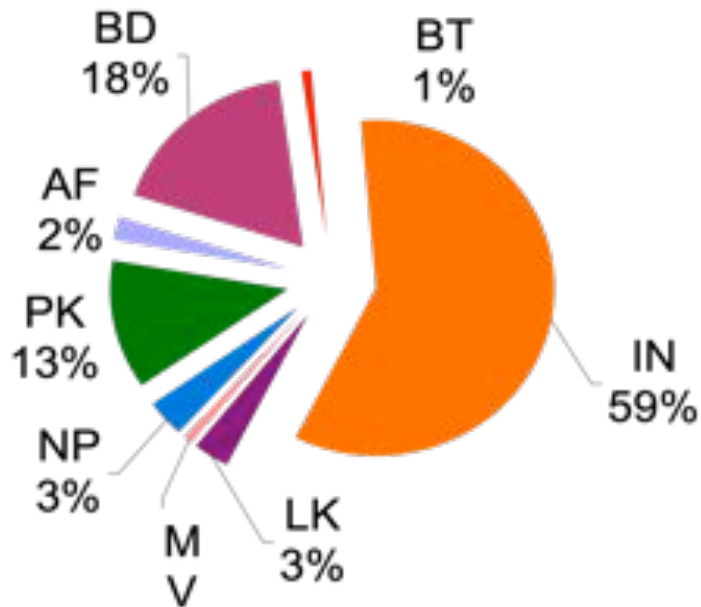
Total SA members: 438

Total APNIC members: 1760
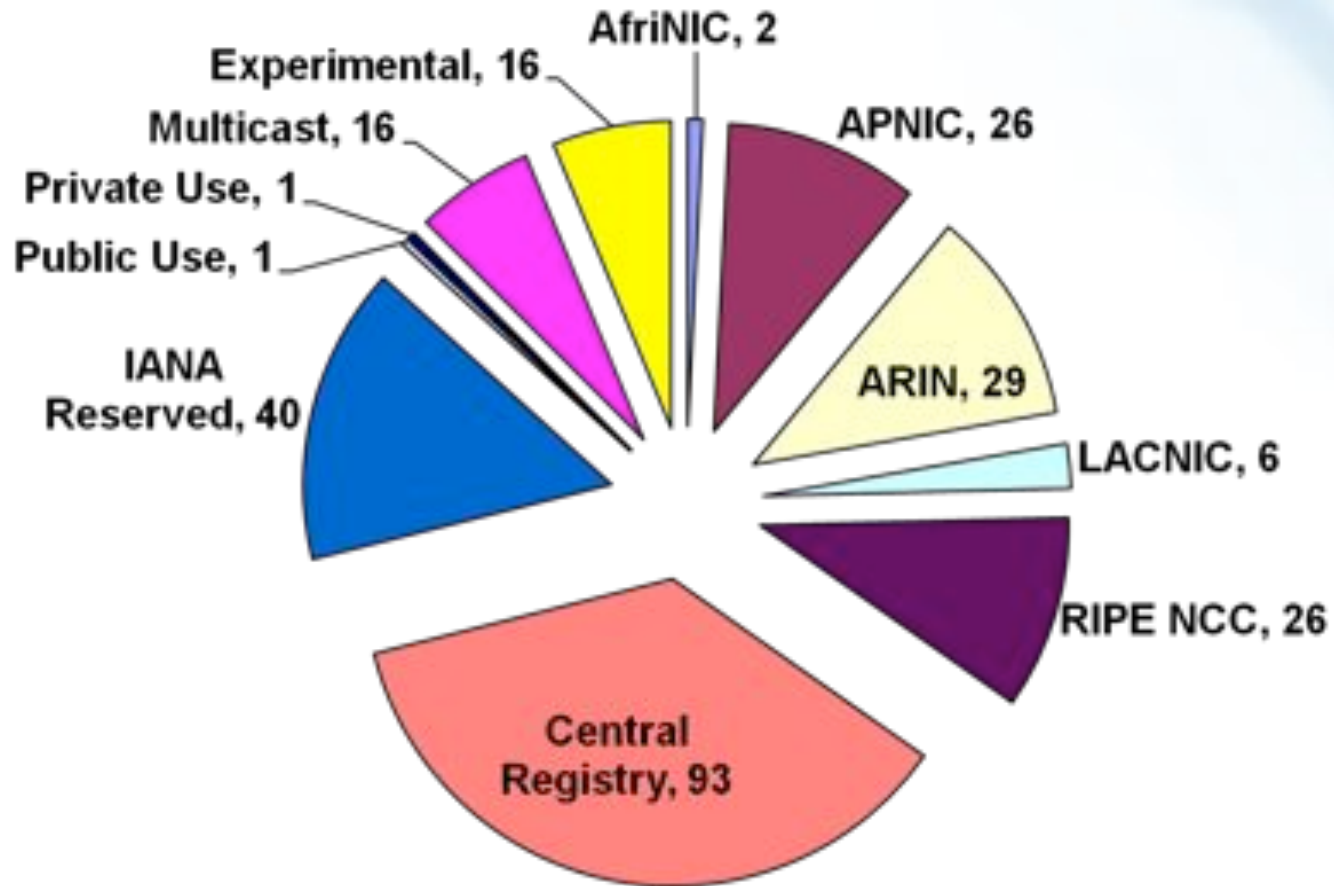
IN 258

BD 77
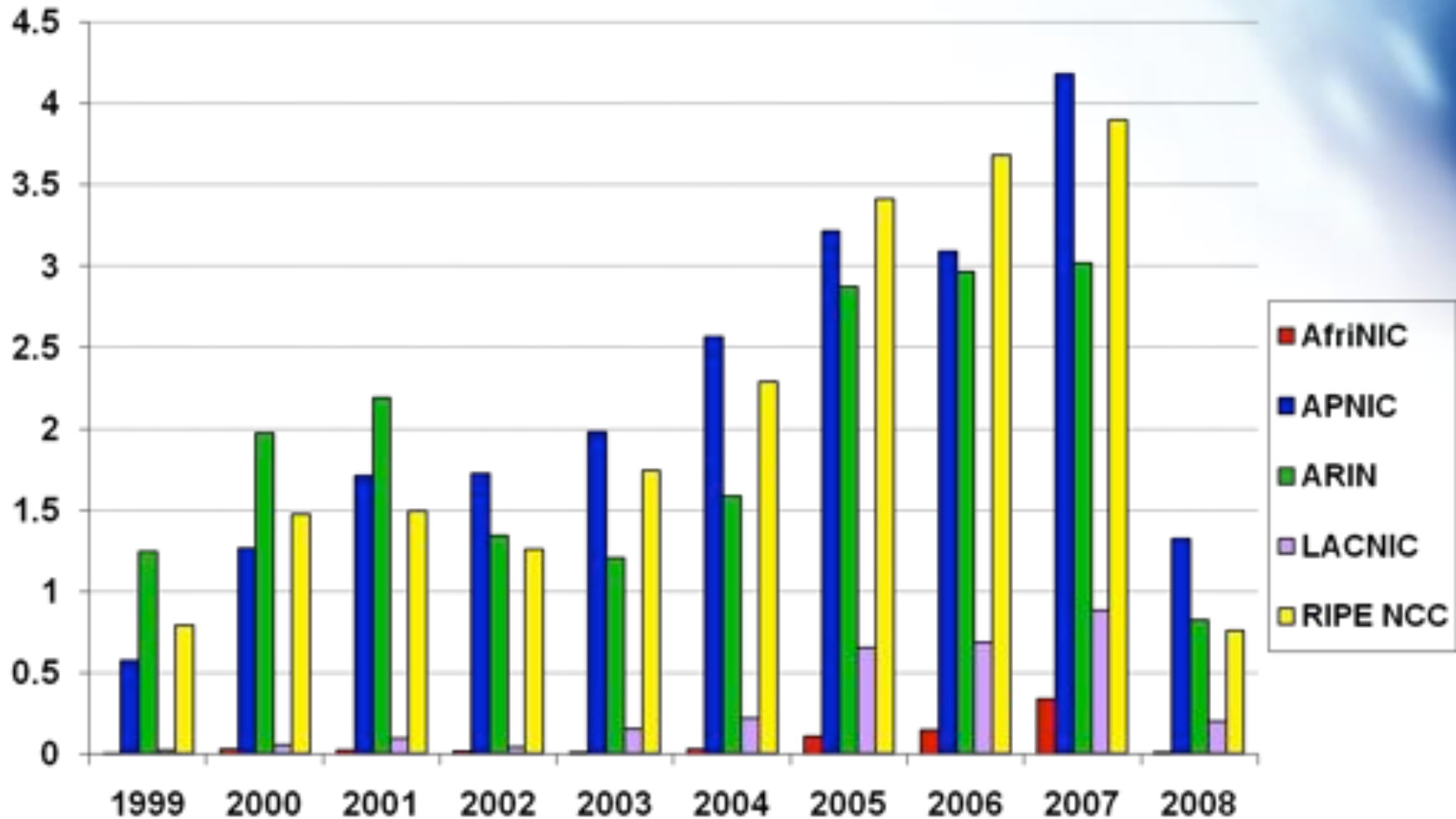
PK 55

NP 15

SL 15

AF 10

BT 4

MV 4

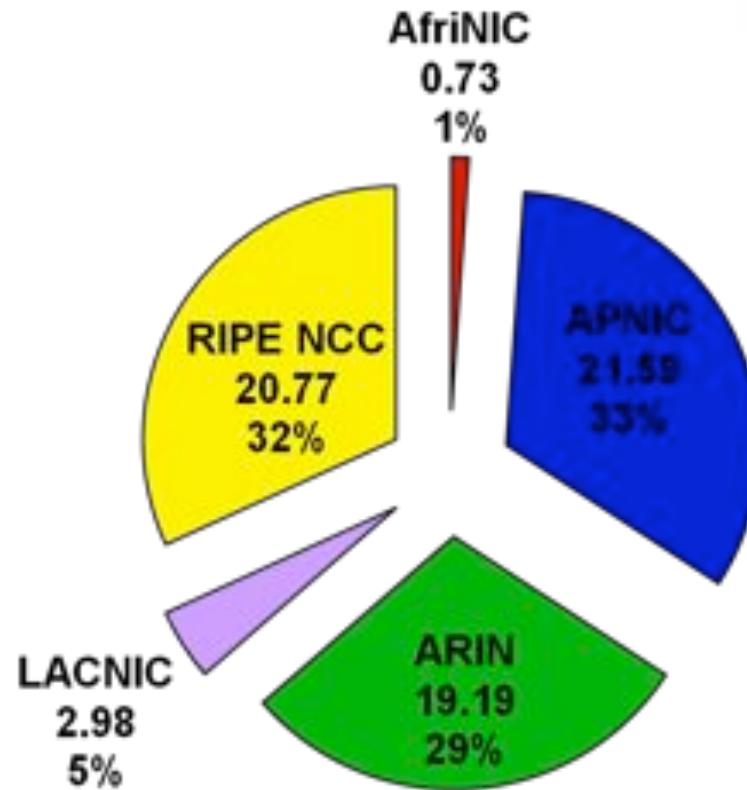# Distribution of IPv4 /8 blocks

Total /8 blocks: 256

IPv4 allocations RIRs to LIRs/ISPs

Yearly comparison (/8s) - data up to Mar 2008

IPv4 allocations RIRs to LIRs/ISPs
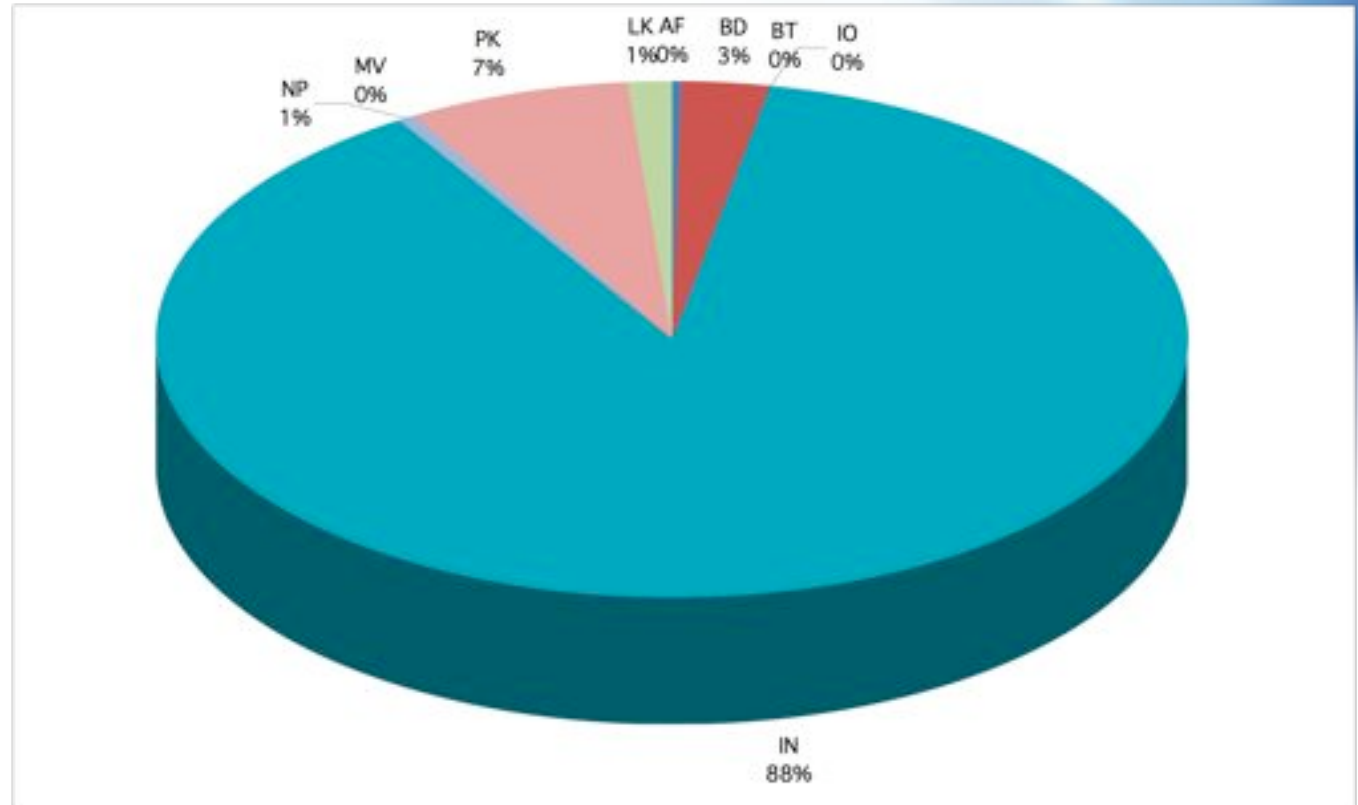## Cumulative total (Jan 1999 – Mar 2008)

IPv4 delegations in South Asia

Allocation in /24

AF 256
BD 1957
BT 88
IN   60994
IO   0
LK 1152
NP 382
PK 5022
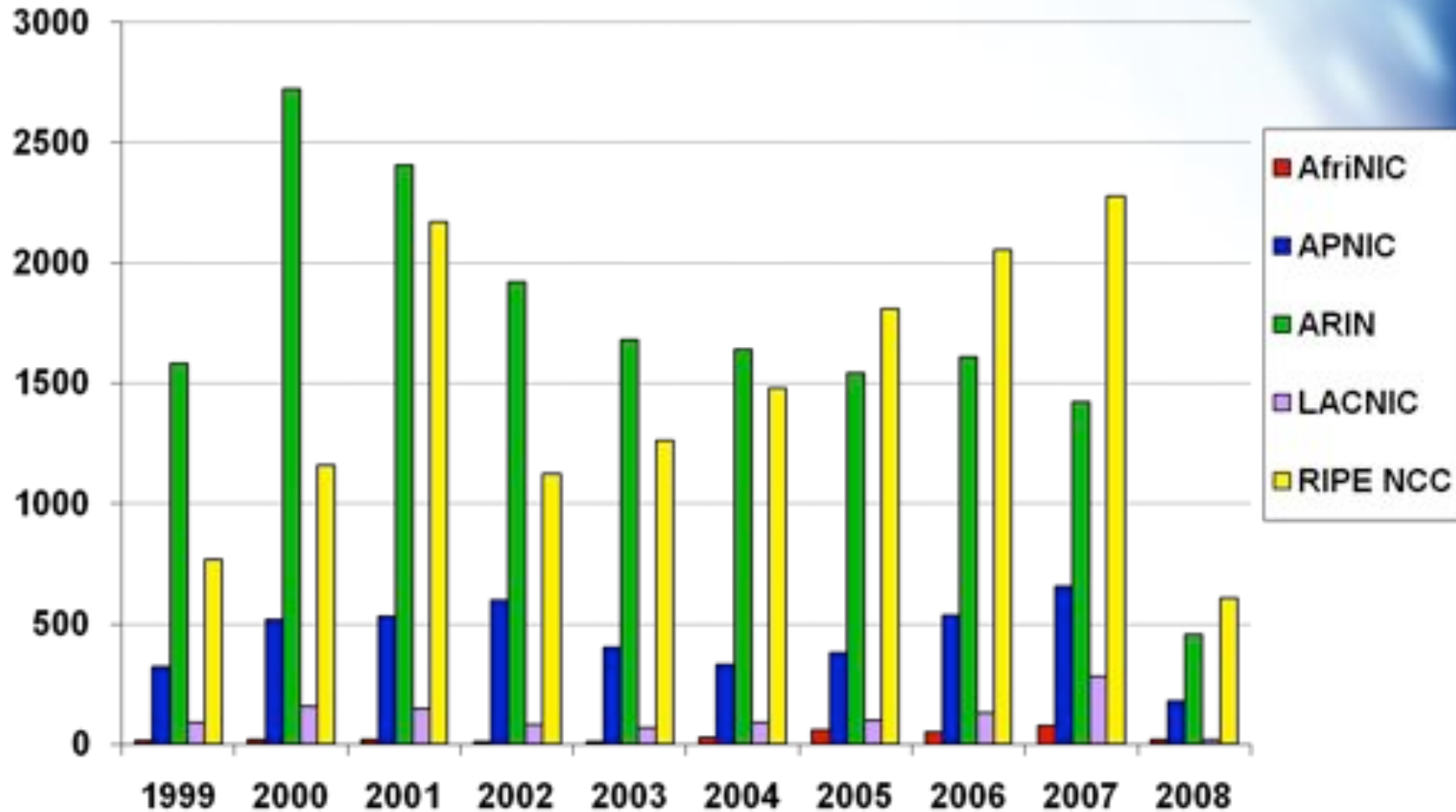**MV 146**

as of July 31, 2008

Total SA delegations : 69997 /24
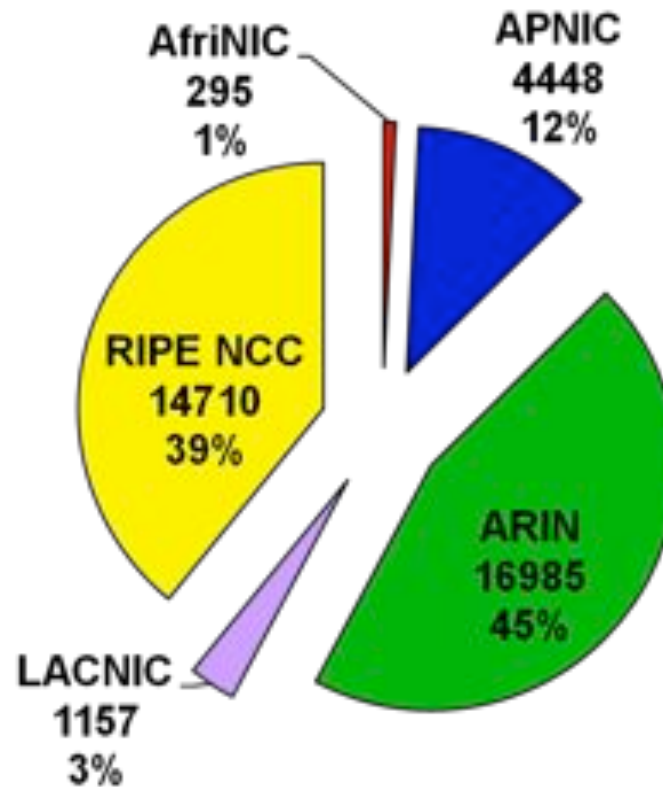Total APNIC delegations: 1855089 /24s

ASN assignments: RIRs to LIRs/ISPs

Yearly comparison - data up to Mar 2008

ASN assignments: RIRs to LIRs/ISPs

Cumulative total (Jan 1999 – Mar 2008)

AfriNIC 295 1%

APNIC 4448 12%

RIPE NCC 14710 39%

ARIN 16985 45%

LACNIC 1157 3%

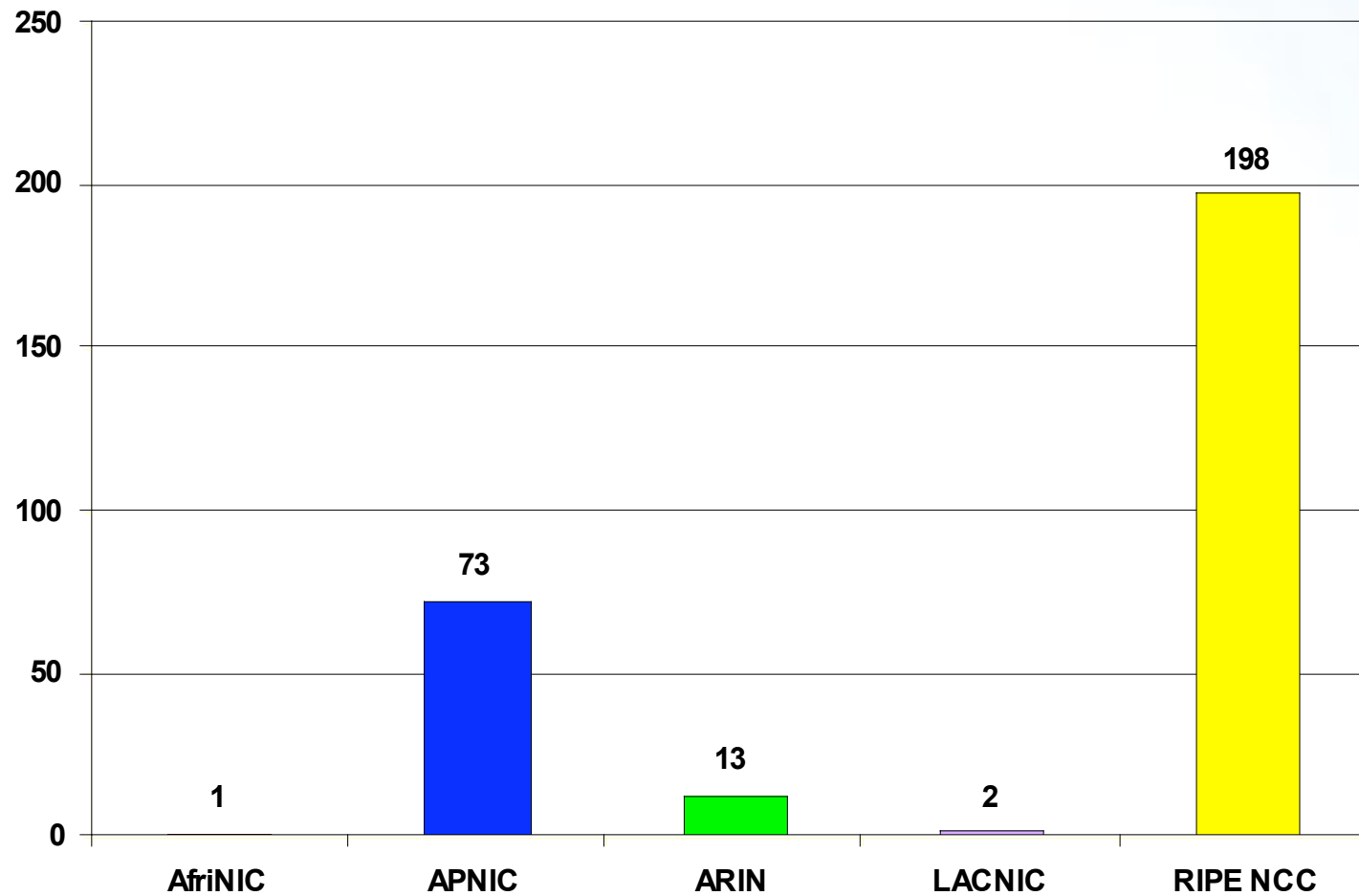# ASN assignments in South Asia

AF 6
BD 82
BT 4
IN   257
IO   1
LK 16
NP 24
PK 43
MV 2
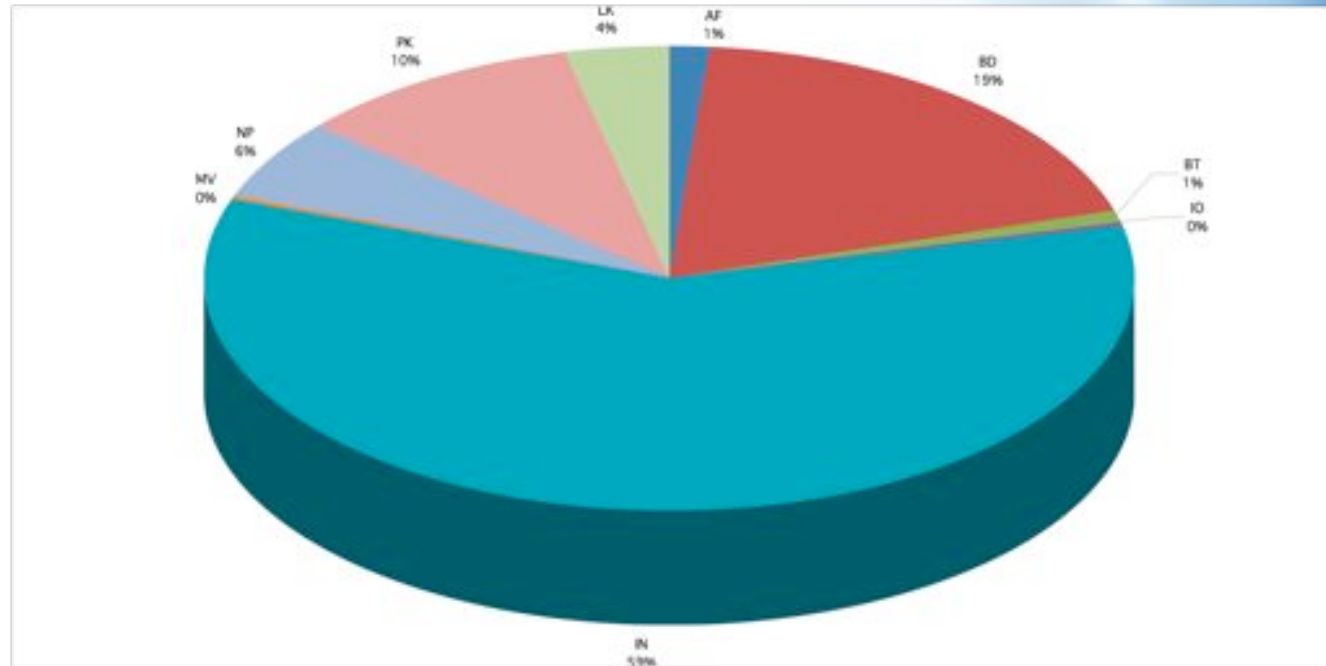
Total SA assignment: 435
Total APNIC assignment: 4681

IANA IPv6 allocations to RIRs

issued as /23s prior to Oct 2006

IANA IPv6 allocations to RIRs
issued in Oct 2006

RIR	IPv6 Address
AfriNIC	2C00:0000::/12
APNIC	2400:0000::/12
ARIN	2600:0000::/12
LACNIC	2800:0000::/12
RIPE NCC	2A00:0000::/12

Some /23s from the previous slide are incorporated in these /12s

IPv6 Allocations: RIRs to LIRs/ISPs

Yearly comparison – data up to Mar 2008

IPv6 allocations RIRs to LIRs/ISPs
Cumulative total (Jan 1999 – Mar 2008)

AfriNIC
45
3%

APNIC
351
20%

RIPE NCC
867
50%

ARIN
369
21%

LACNIC
113
6%
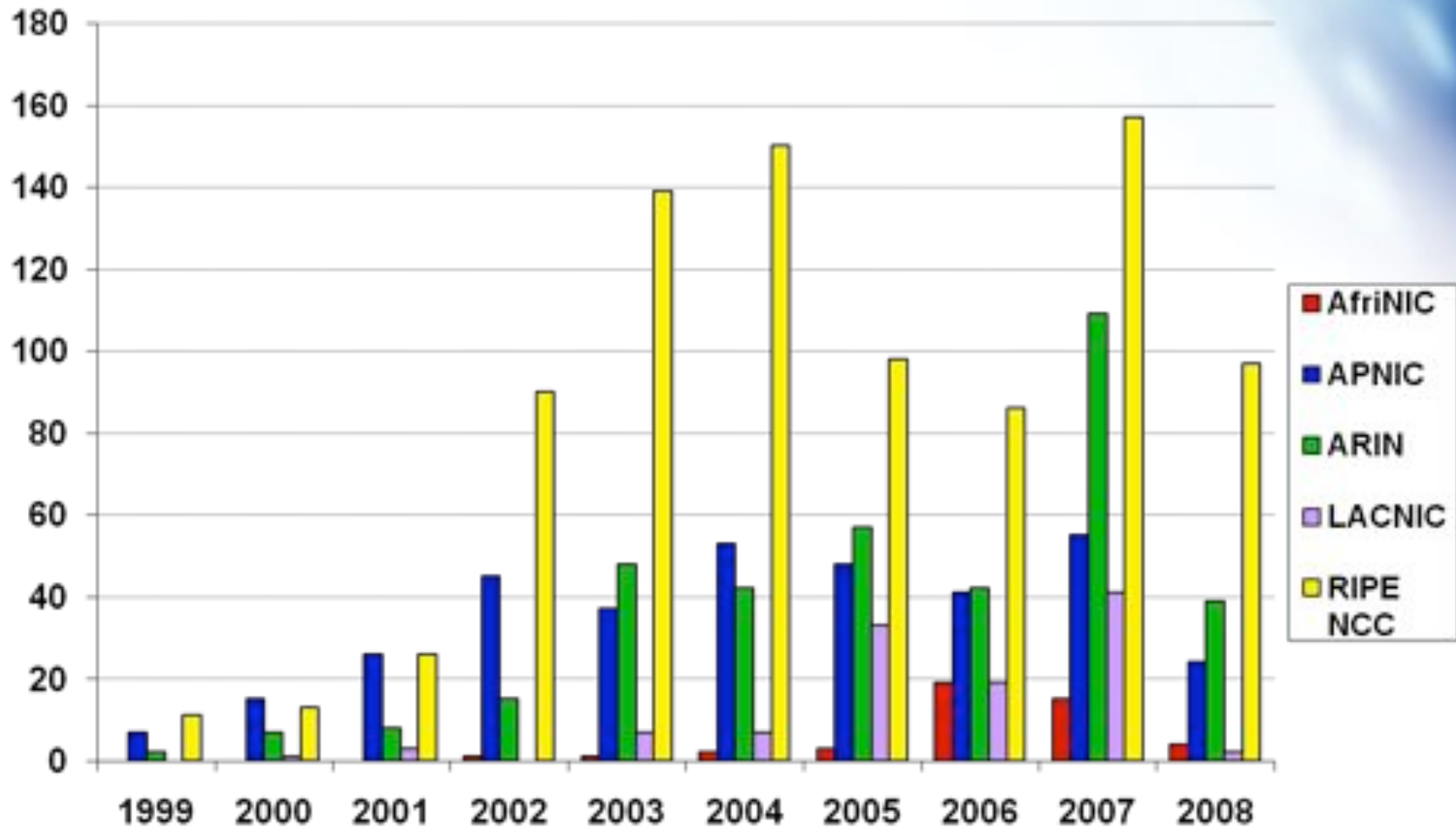
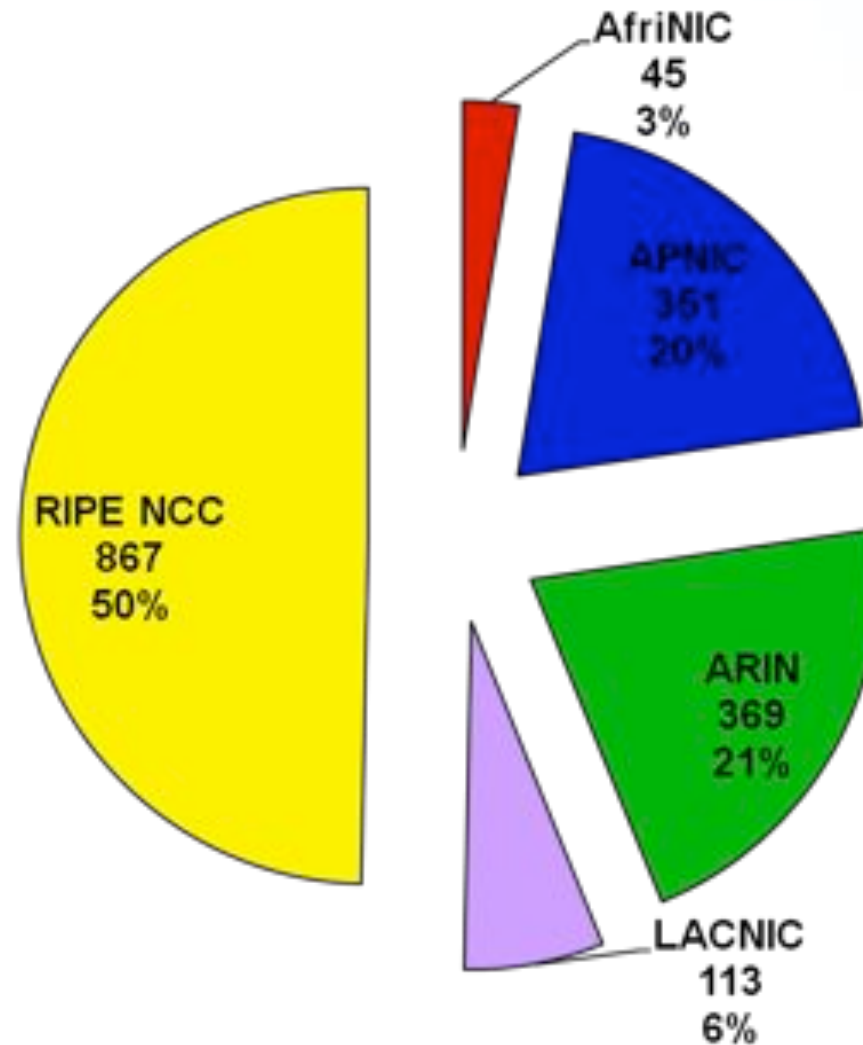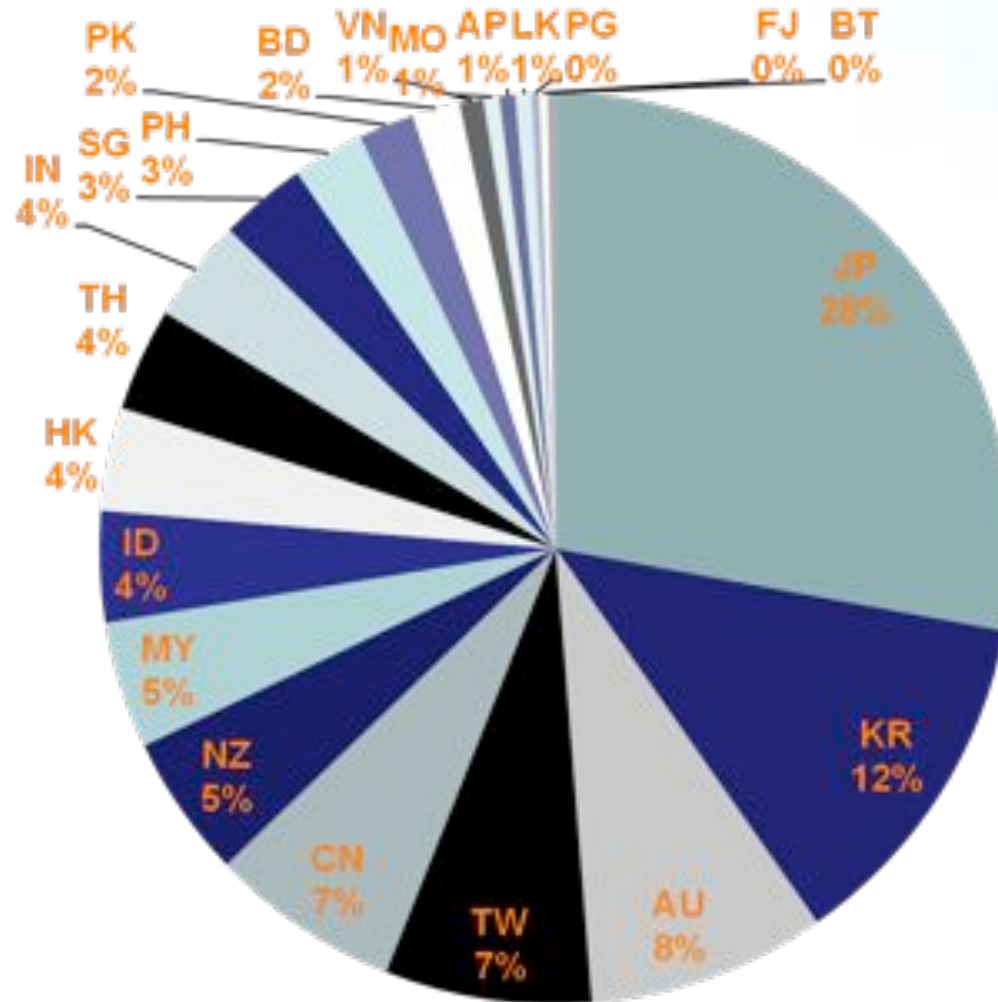# APNIC IPv6 delegations by year (allocation)
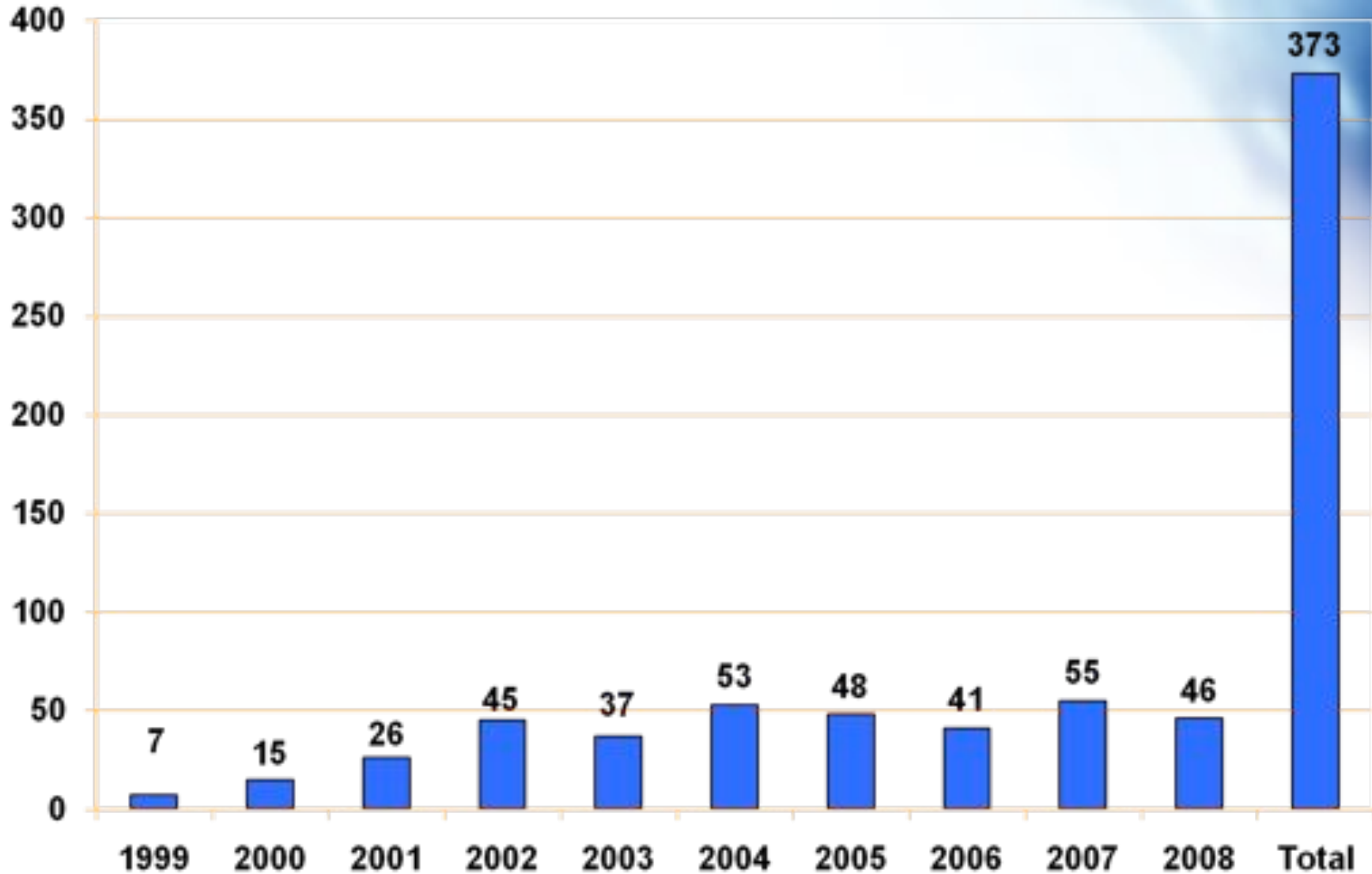
Source: APNIC statistic data, as of May 2008

APNIC IPv6 allocation by economy

IPv6 delegations in South Asia

Economy	Number
BD	6
IN	17
LK	2
PK	7
Total	32

Total IPv6 delegations in SA: 32(/32)

Total IPv6 delegations in AP : 455(/32)

Recently implemented policies (August 2008)

- prop-053: Changing minimum IPv4 allocation size to /22

  - The minimum IPv4 allocation size was reduced from /21 to /22

- prop-057: Proposal to change IPv6 initial allocation criteria

  - Current LIRs with an existing IPv4 allocation from APNIC or an NIR can now justify an IPv6 initial allocation without documenting a plan for making 200 assignments.

Recently implemented policies (February 2009)

- prop-062: Use of final /8
  - Each APNIC account holder will be eligible to request and receive a single allocation from the last remaining /8 worth of space in the unallocated pool. In addition, APNIC will reserve a /16 from the final /8 worth of space for future uses, as yet unforeseen.

- prop-066: Ensuring efficient use of historical IPv4 resources
  - All historical address allocations will be included when assessing a network's eligibility for more IPv4 addresses.

Recently implemented policies (February 2009)

- prop-064: Change to assignment policy for AS numbers
  - From 1 July 2009, if a network requests a two-byte AS number from APNIC, the network will need to document why it cannot use a four-byte AS number.

Policy proposals at APNIC 27

- IPv4 transfer proposals
  - prop-050: IPv4 address transfers
  - prop-067: A simple transfer proposal
- Discussion on proposals continuing from APNIC 26:
  - prop-060: Change in the criteria for the recognition of NIRs in the APNIC region
  - prop-063: Reducing timeframe of IPv4 allocations from twelve to six months

APNIC meetings

- APNIC 27
  - With APRICOT 2009, Manila, Philippines,
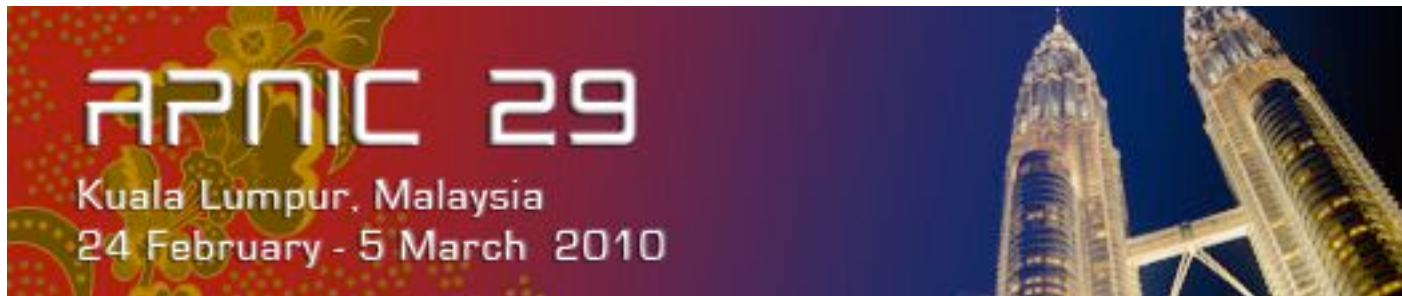 - 23 - 27 February 2009
- All invited !!!

  http://www.apnic.net/meetings

APNIC meeting remote participation

- ## Contribute on the public mailing lists

  - http://www.apnic.net/community/lists/index.html

- ## Participate remotely

  - Participate in discussions, ask questions to the presenter, voice your opinion through jabberchat

  - Webcast, podcast, live transcripts
    - http://www.apnic.net/meetings/remote/

APNIC meetings – future…

APNIC 28
Beijing, China   24-28 August 2009

APNIC 29
Kuala Lumpur, Malaysia
24 February - 5 March 2010

In conjunction with APRICOT 2010

- All invited !!!
  - http://www.apnic.net/meetings

Thank you!

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