



APNIC

# APNIC Status Report

ARIN VI Public Policy Meeting  
2-4 October 2000



# Overview

APNIC

- ◆ News
- ◆ Membership Growth
- ◆ Statistics
- ◆ Activities
- ◆ Priorities

- ◆ Total number of medals won - top 5
  - ◆ USA 97
  - ◆ RUSSIA 88
  - ◆ CHINA 59
  - ◆ AUSTRALIA 58
  - ◆ GERMANY 57

## ◆ Medals per million inhabitants

◆ AUSTRALIA	3.02
◆ GERMANY	0.68
◆ RUSSIA	0.60
◆ USA	0.35
◆ CHINA	0.04

Source: [www.medaltally.com](http://www.medaltally.com)



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# News - APNIC Open Policy Meeting

- ◆ 25-27 Oct, Brisbane, Australia
  - ◆ Plenary, AC Election & Members Meeting
  - ◆ Special Interest Groups (SIGs)
    - ◆ Routing, Database, Address Policy & IPv6
  - ◆ Training & tutorials
    - ◆ APNIC policies & procedures, IPv6, RPSL & DNS
  - ◆ Hostmaster consultations
  - ◆ BOFs
    - ◆ Membership Agreement, Multi-homing, CA Authority, and Exchange Points



- ◆ DRAFT agenda - Address Policy SIG
  - ◆ IPv6 policy review
  - ◆ IP addresses for GPRS backbone & mobile phones
  - ◆ Cable network assignment policies review
  - ◆ PI assignment criteria
  - ◆ PA first allocation criteria
  - ◆ Common registry evaluation principles



# Membership Growth

APNIC

## ◆ Monthly total members (2nd quarter)

	<u>2000</u>	<u>1999</u>
◆ April	479	279
◆ May	505	294
◆ Jun	518	302
◆ Jul	540	320

## ◆ Monthly total new members (2nd quarter)

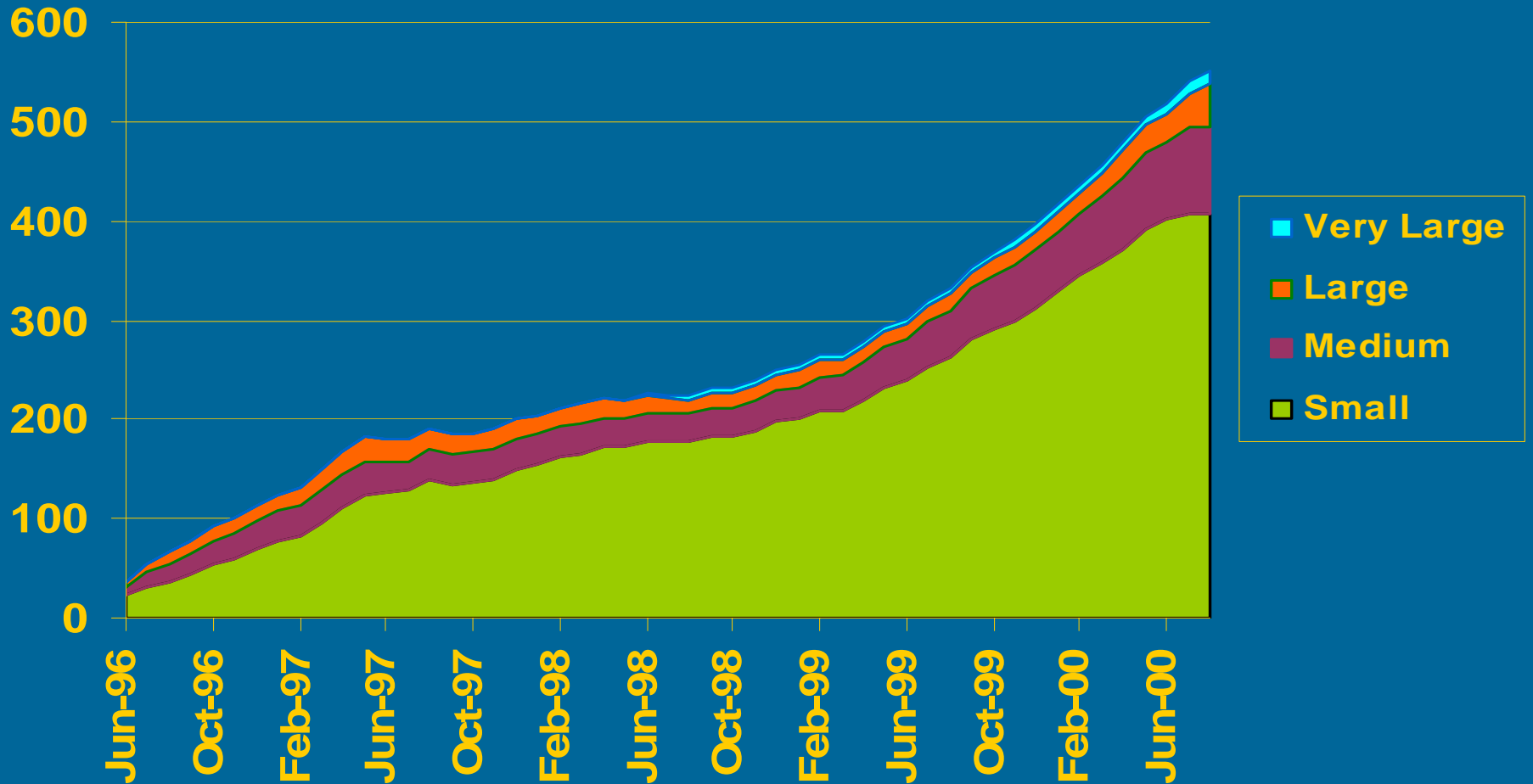
	<u>2000</u>	<u>1999</u>
◆ April	23	14
◆ May	30	17
◆ Jun	20	10
◆ Jul	26	18

**July totals 68% increase over 1999**



# Membership Growth

APNIC

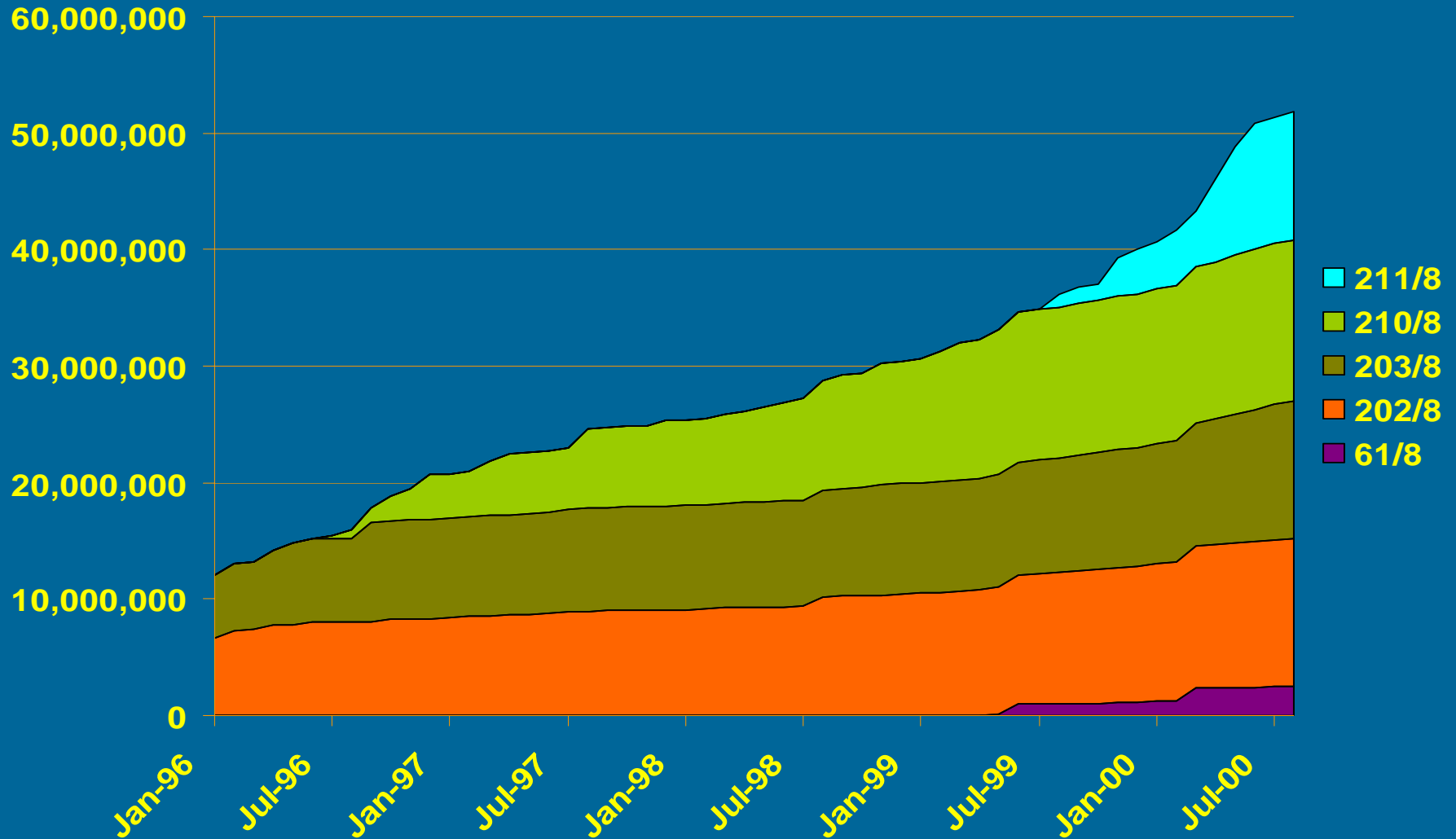






# IPv4 Address Space Usage

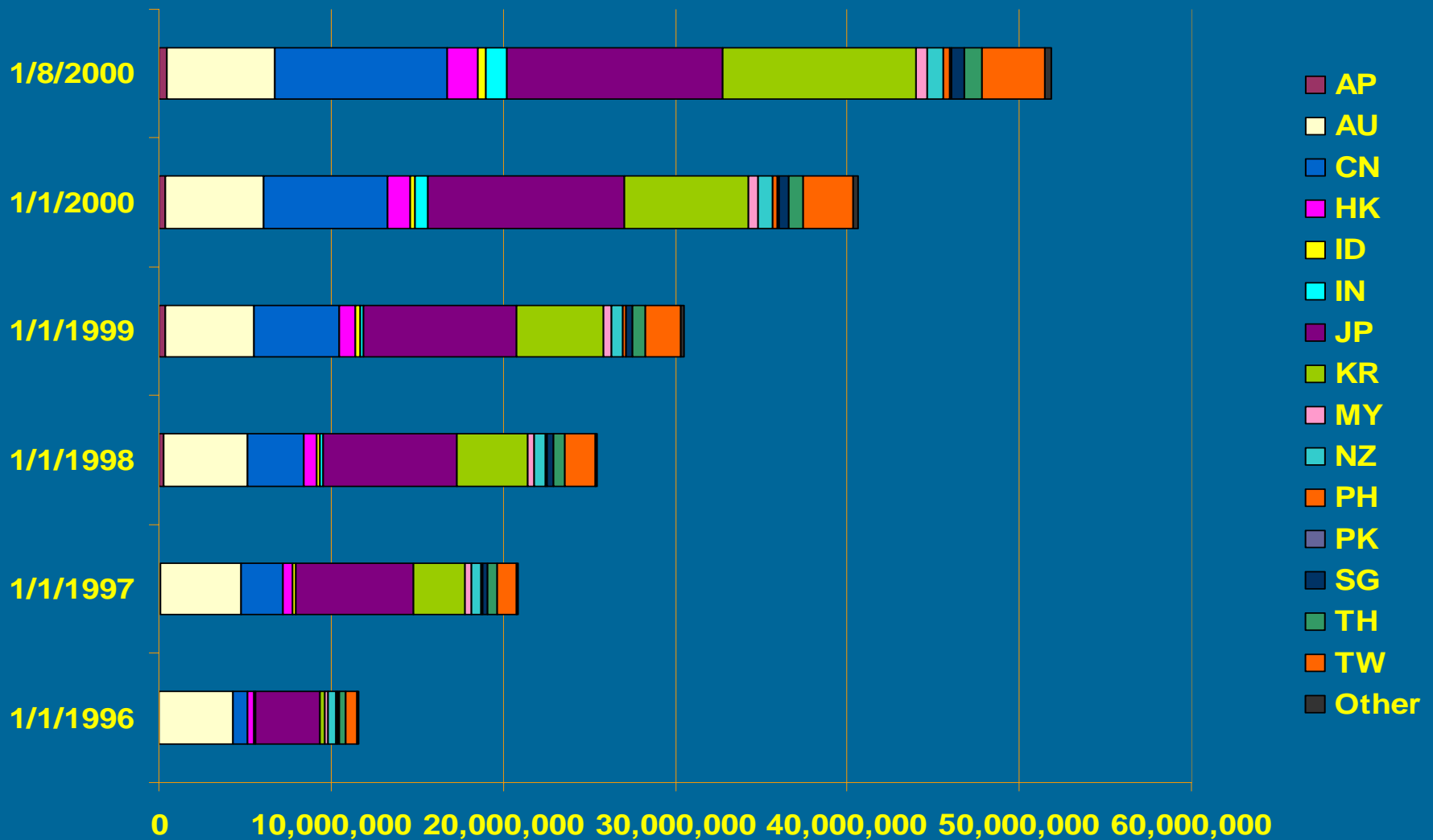
APNIC





# IPv4 Allocations - Distribution

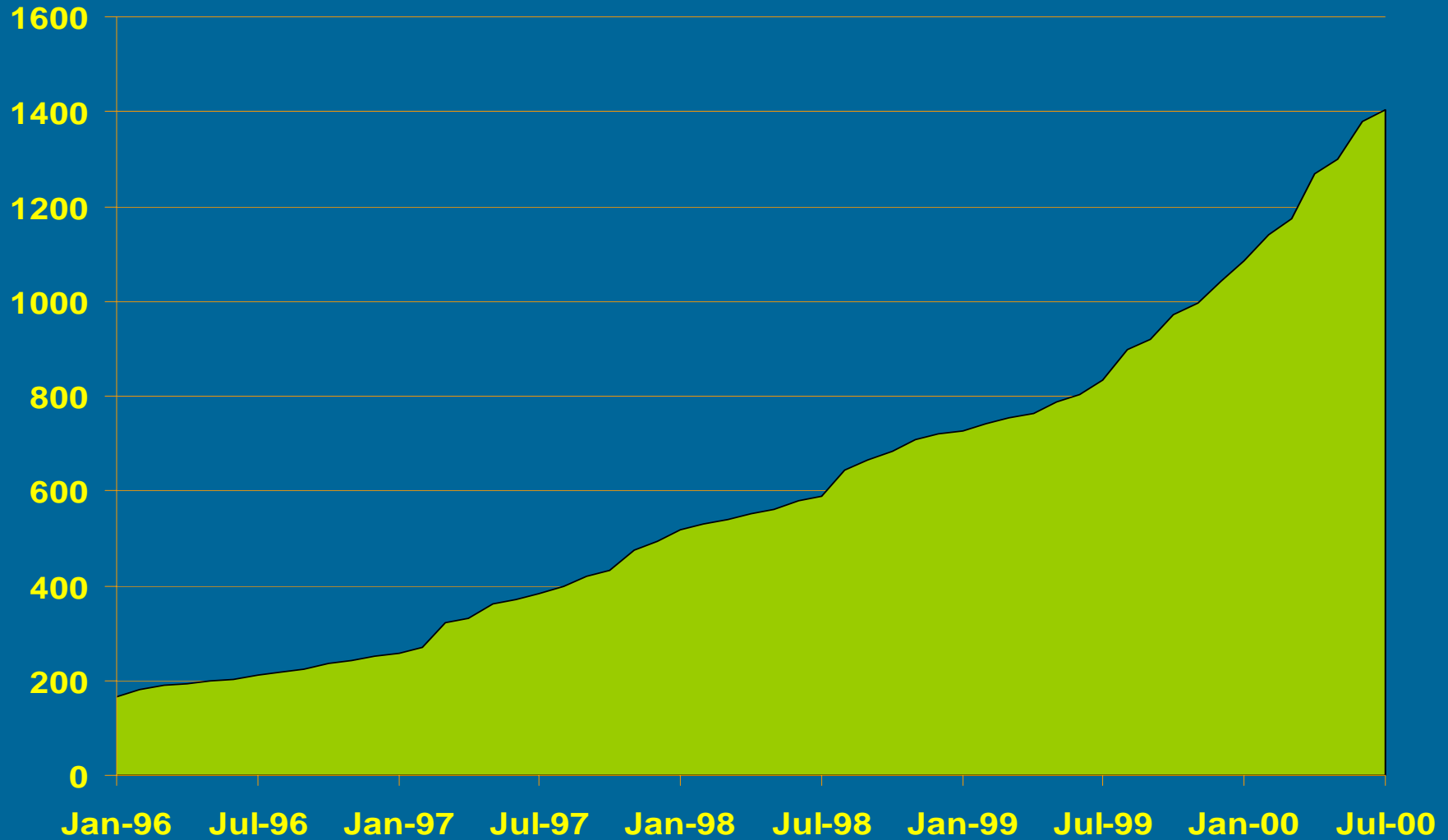
APNIC





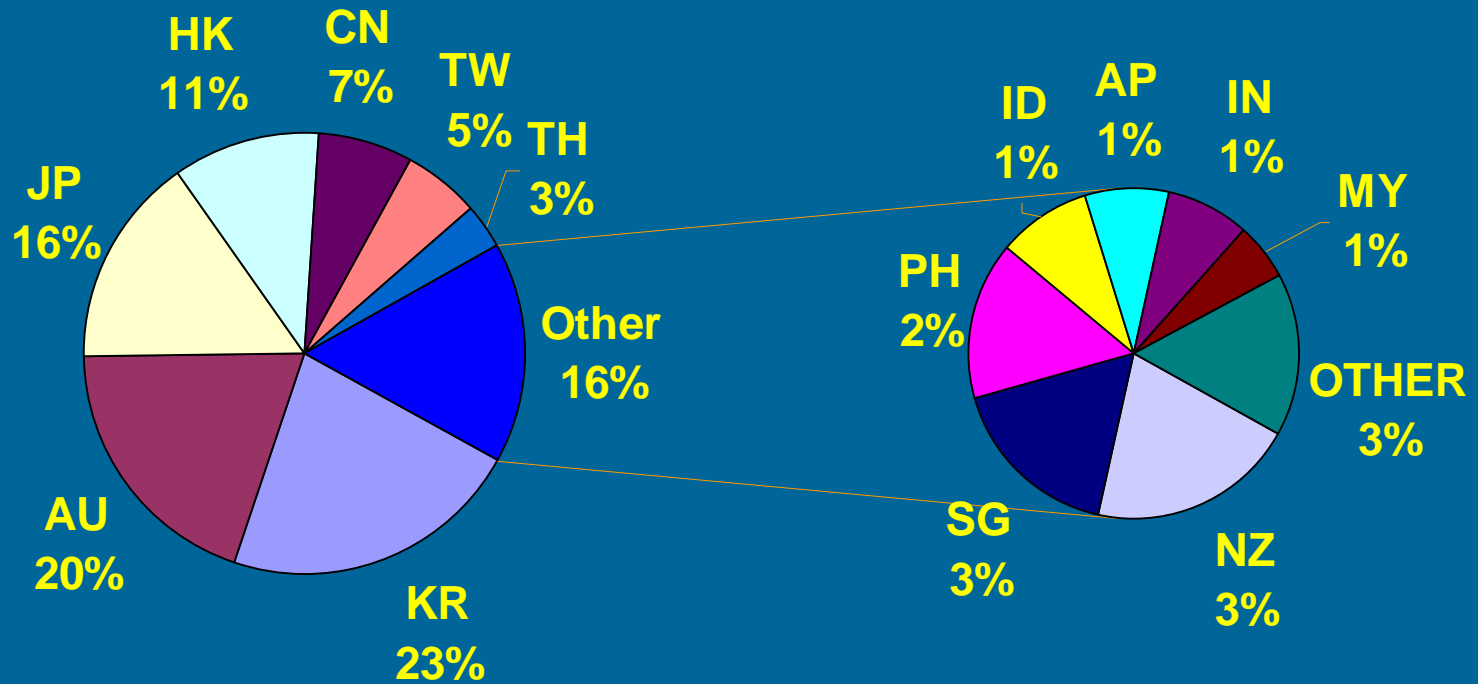
# ASN Allocations - Total

APNIC





# ASN Allocations - Distribution





# APNIC Resources

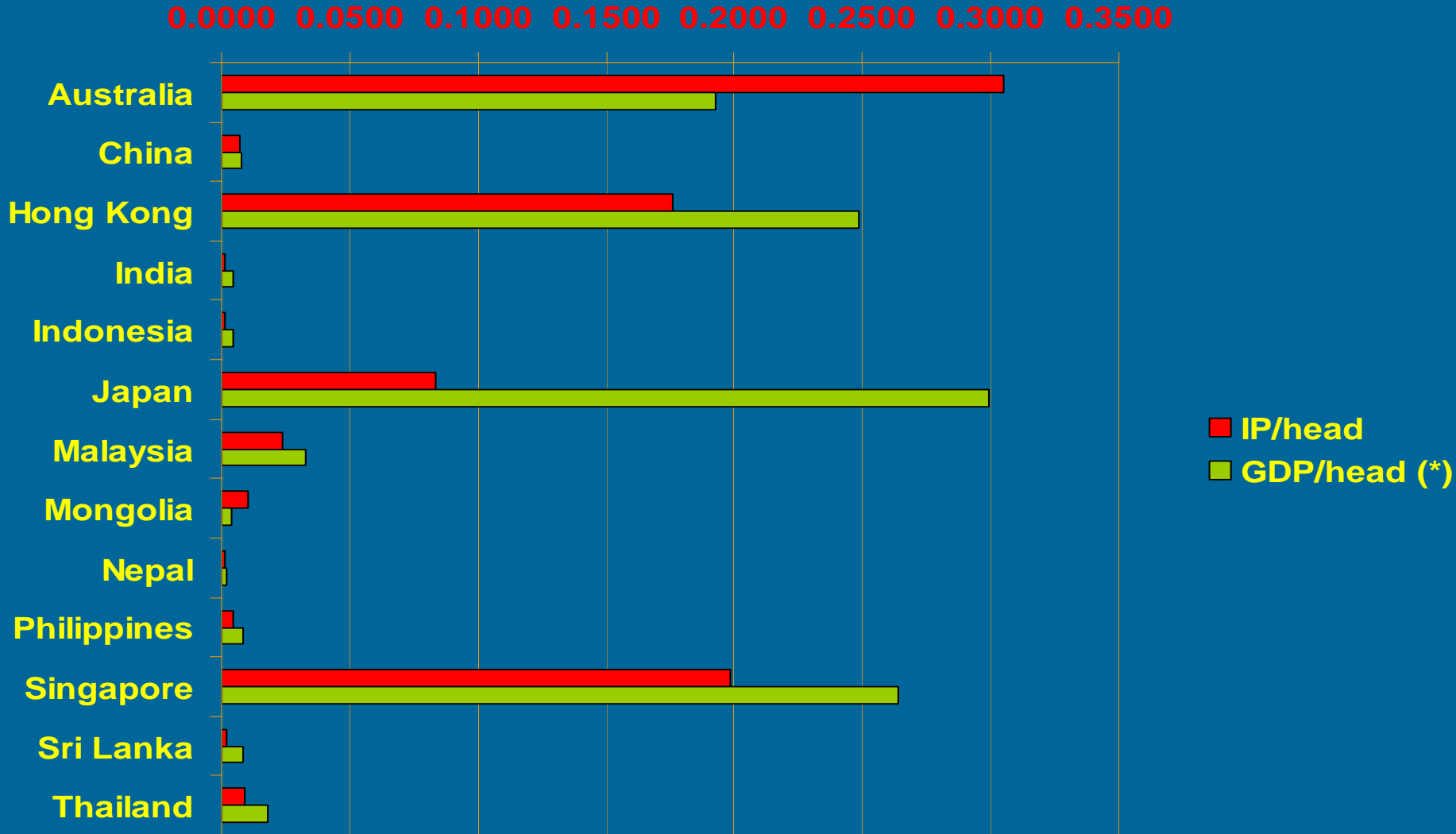
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- ◆ Consumption rate (3 years)
  - ◆ IPv4      755,000 IP/month      (0.54 x /8 p.a.)
  - ◆ ASN      28 ASN/month      (341 p.a.)
- ◆ Consumption rate (1 year)
  - ◆ IPv4      1,312,000 IP/month      (0.94 x /8 p.a.)
  - ◆ ASN      43 ASN/month      (524 p.a.)
- ◆ Consumption rate (6 months)
  - ◆ IPv4      1,698,000 IP/month      (1.21 x /8 p.a.)
  - ◆ ASN      47 ASN/month      (568 p.a.)



# IP usage & GDP per Head

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# IPv6 Allocations - Distribution

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- ◆ IPv6 allocations
  - ◆ 'Steady trickle'
  - ◆ 20 requests received
  - ◆ 16 allocations in total
    - ◆ JP (9) KR (3) AU (1) SG (1) TW (1) CN (1)
  - ◆ Excellent RIR co-operation
- ◆ IPv6 policy document revision ongoing
  - ◆ Substantial input from IETF
  - ◆ Discussion at members meeting



- ◆ NIRs
  - ◆ KRNIC trainee hostmaster - 3 months at APNIC
  - ◆ Aim to improve understanding of NIR
  - ◆ Other NIR trainees planned - APJII Indonesia
- ◆ RIRs
  - ◆ Policy co-ordination & documentation
  - ◆ Mutual attendance at meetings
  - ◆ Assistance to RIPE NCC
    - ◆ To assist with workload





- ◆ Course schedule developed
  - ◆ From 'Expressions of Interest'
  - ◆ Co-locate training with outreach work where possible
- ◆ Open seminars & training
  - ◆ Co-presented with APTLD/APIA
- ◆ To promote awareness of Internet Governance and APNIC
  - ◆ Aug - Indonesia
  - ◆ Sep - Vietnam and Thailand
  - ◆ Oct - Brisbane (training only)
  - ◆ Nov - NZ (Pacific Islands), Korea and Taiwan



## ◆ Content

- ◆ New modules on IPv6, SPAM and IP address management of different network topologies

## ◆ Delivery

- ◆ Whois server database demonstrations
- ◆ Video capturing tool to record how to fill in web request forms



- ◆ Call for translation proposals
  - ◆ Translating APNIC core documents into major languages of region
    - ◆ Proposals received from CN, TW, SG, ID, JP, KR
- ◆ NIR policy document translations into English
  - ◆ Assisted by APNIC hostmasters
    - ◆ CNNIC - China
    - ◆ TWNIC - Taiwan (ongoing)



# Software and Automation

APNIC

- ◆ Migration internal data to relational DB (mysql)
  - ◆ Completed consistency checking of address allocation data
- ◆ ISP Parser and Analyser
  - ◆ Tool to support users and data analysis for hostmasters
  - ◆ Usability testing planned in October with members
- ◆ New 'Whois' client library
  - ◆ Submitted to CPAN
  - ◆ Online at <http://www.apnic.net/apnic-bin/whois2.pl>



# Special Projects

APNIC

- ◆ Certification authority (X.509)
  - ◆ Response to member concerns on security
  - ◆ Feasibility project underway
    - ◆ Identity certificates for APNIC members will be issued at APNIC meeting
    - ◆ Used for secure access to web site, encrypted and signed email
- ◆ ‘MyAPNIC’ member pages
  - ◆ Integrating secure access to billing, ticketing, whois DB and request data of member



# Priorities 2000/2001

APNIC

- ◆ Improved quality of service
  - ◆ Software to support request process
  - ◆ 'Help-desk' to support users
  - ◆ Improved member security through CA project
  - ◆ Improved documentation
- ◆ Statistical analysis
  - ◆ To support policy development
- ◆ Staffing
  - ◆ Sufficient to meet demand!



# Questions?

APNIC



# RIPE NCC Status Report

*ARIN VI Public Policy Meeting  
2-4 October 2000*





# Outline

- News
- Statistics
- Achievements
- Activities
- Priorities



# News

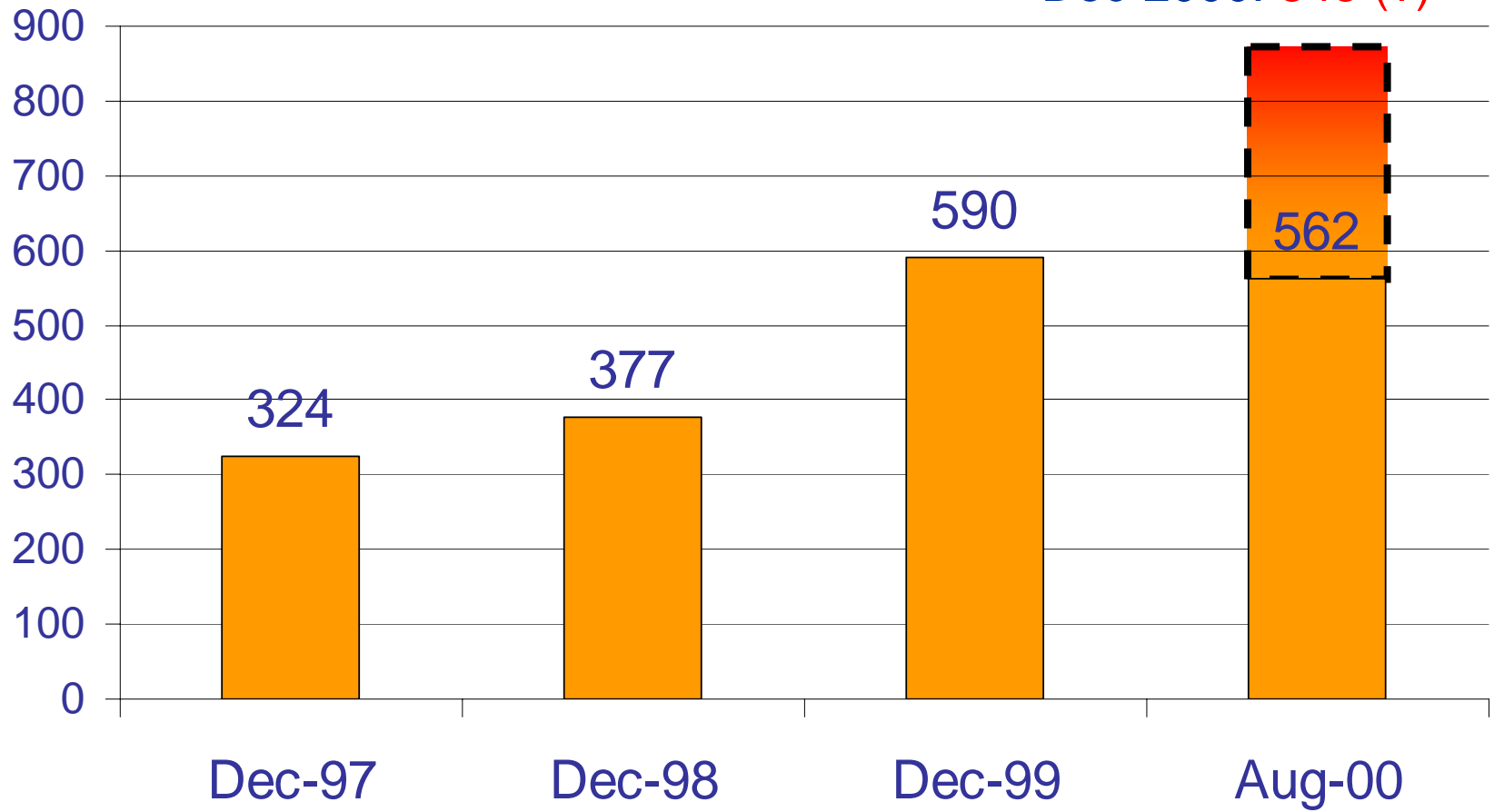
- Minimum Allocation Policy changed (/20)
- <lir-help@ripe.net> helpdesk mailbox
- Improve & update documentation (on-going)
- Tools BoF at RIPE 37



# LIR Growth 97-00

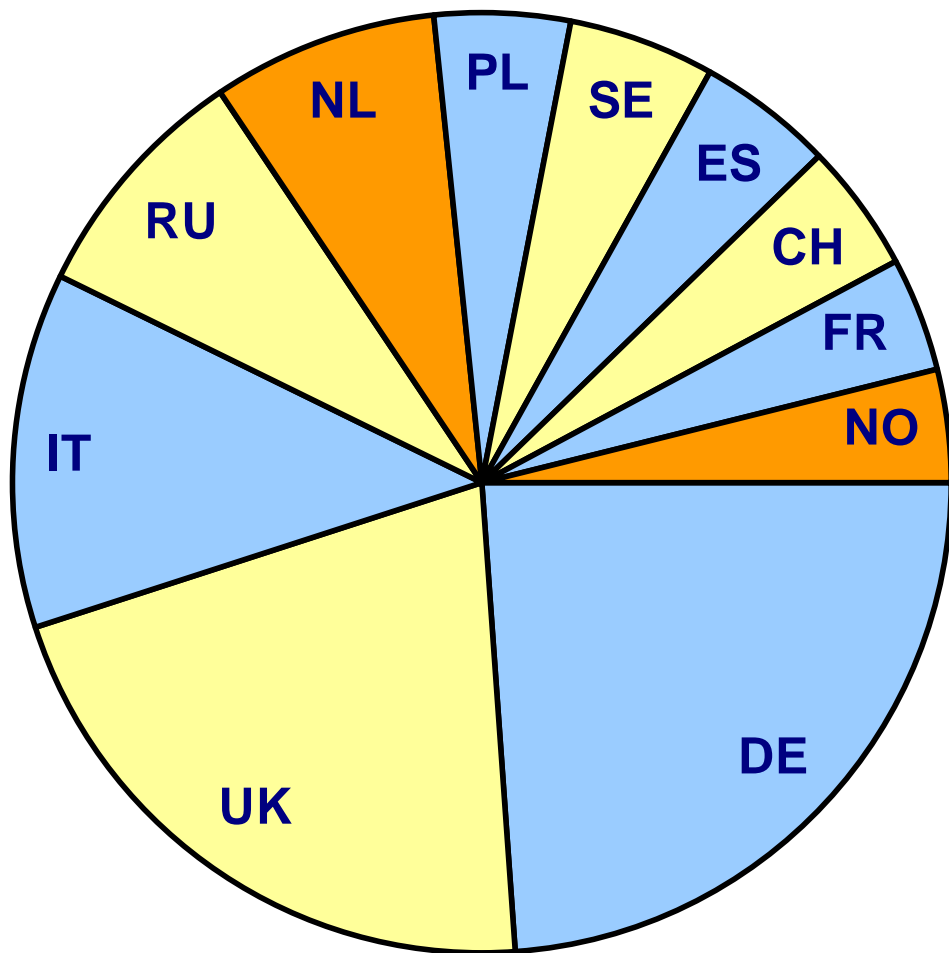
(current membership total: ~ 2500)

Dec-2000: 843 (?)

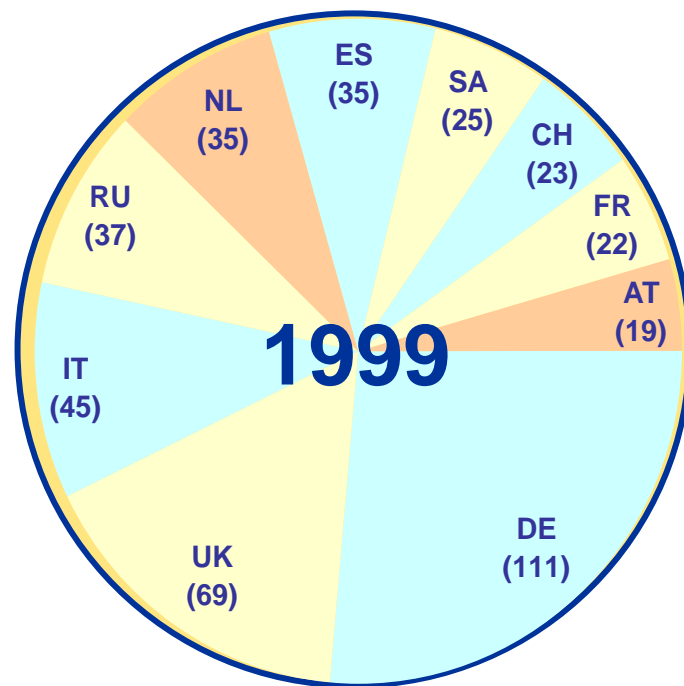




# Top10 New LIRs 2000 to Date



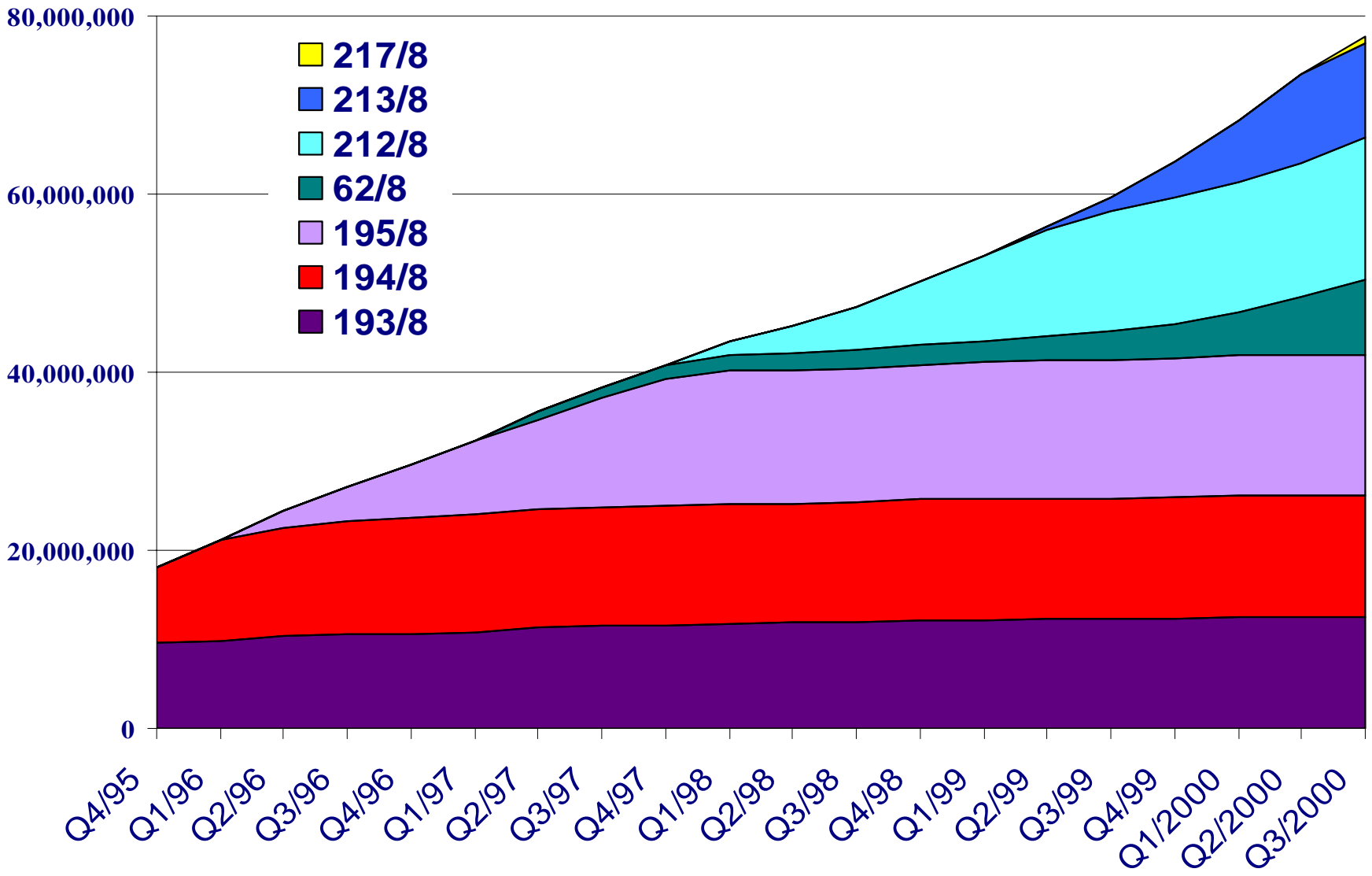
Jan-Aug 2000:  
562



Jan-Aug 1999:  
380



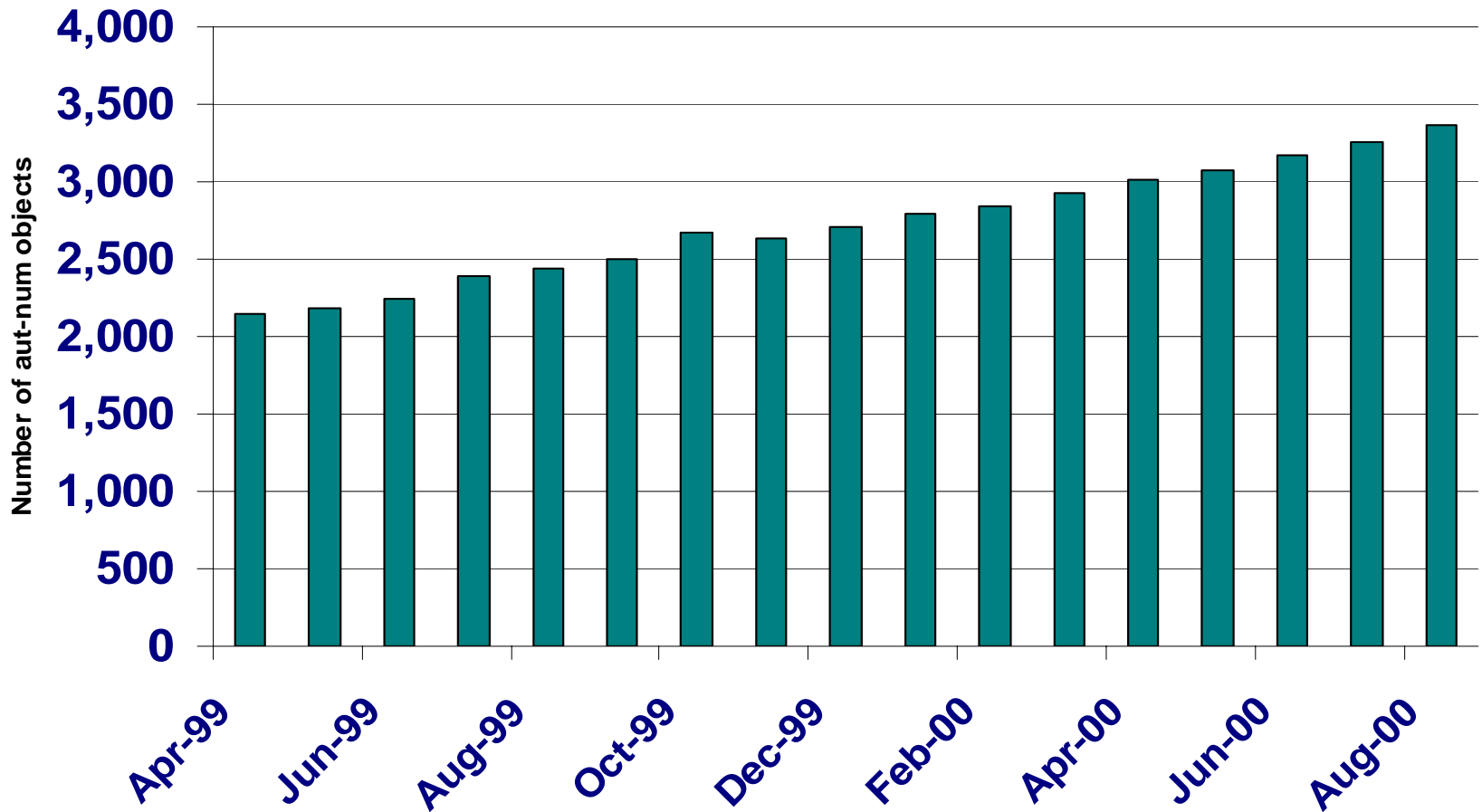
# Address Space Usage





# AS Numbers

## During Last 12 months



# Consumption rates

- 97-98
  - 691,467 IPv4 Addresses per month (0.62 /8 p.a.)
  - 41 AS numbers per month
- 1999
  - 1,178,027 IPv4 Addresses per month (0.80 /8 p.a.)
  - 54 AS numbers per month
- 2000
  - 2,237,389 IPv4 Addresses per month (1.2 /8 p.a.)
  - 82 AS numbers per month

# IPv6

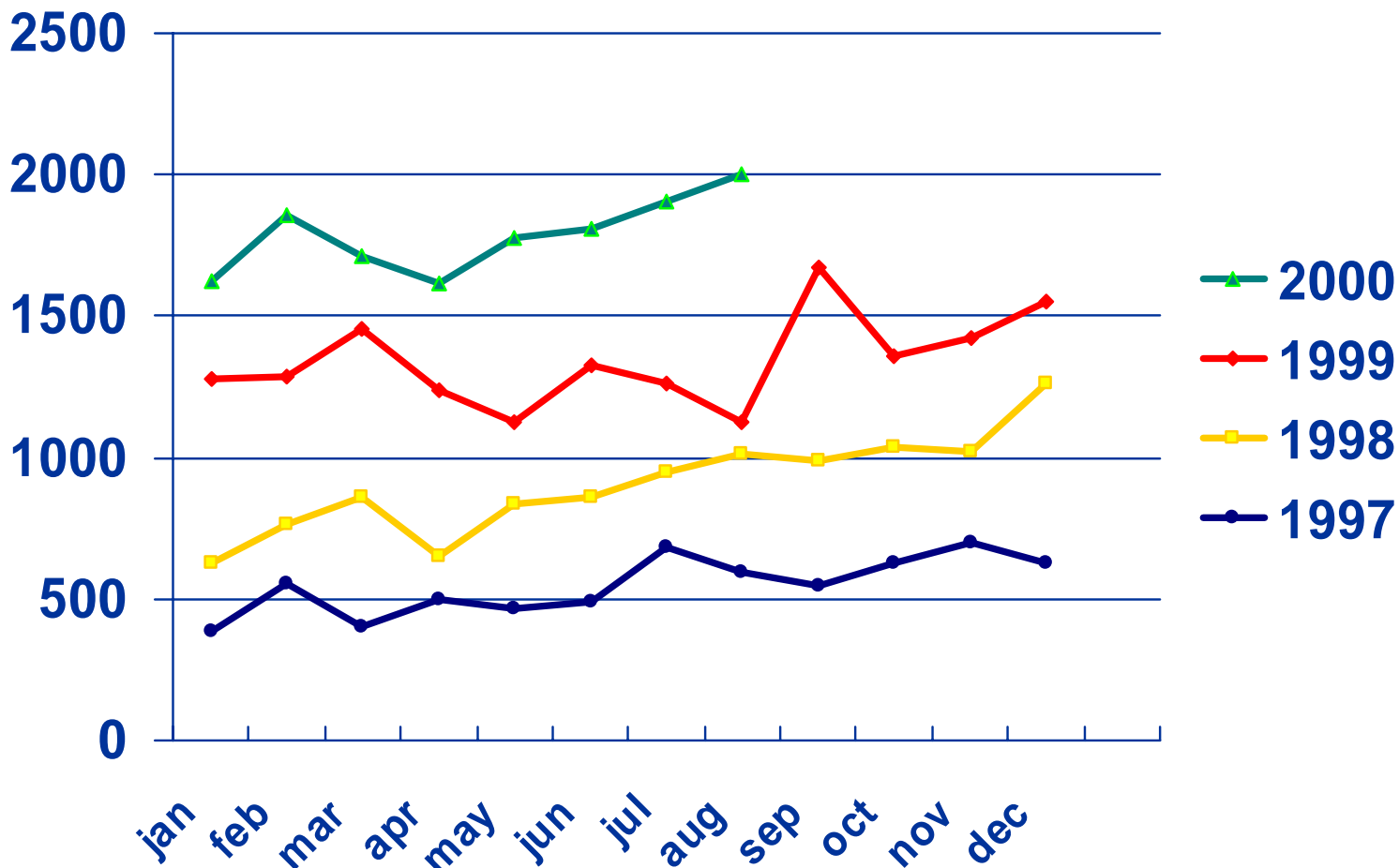
- 21 sub-TLAs Allocated
  - 7 DE
  - 2 EU, 2 FR, 2 UK
  - 1 AT, 1 CH, 1 GR, 1 NL, 1PT, 1 RU, 1 SE, 1 PL
  - 10 ranges reverse delegated
- Excellent co-operation between RIRs
  - Common evaluation of requests

<http://www.ripe.net/ripe/docs/ripe-196.html>





# Number of new requests in <hostmaster@ripe.net>





# RS Achievements

- LIR booklet ready
- TIP list
  - <http://www.ripe.net/ripenncc/tips/tips3.html>
- Extended and improved FAQ
  - <http://www.ripe.net/ripenncc/faq/index.html>
- ‘Asused public’ further improved
- More pro-active AW raises!
- Further improved automation and efficiency



# Courses & External Comms.

- LIR Training Courses
  - 41 courses planned for 2000
  - Increased number of participants per course to 30

<http://www.ripe.net/ripenncc/mem-services/training/>
- RIPE NCC awareness
  - Established relations with ETSI
  - RIPE NCC / GSM Assoc. joint press release
  - Meetings with Members of European Parliament and national governments

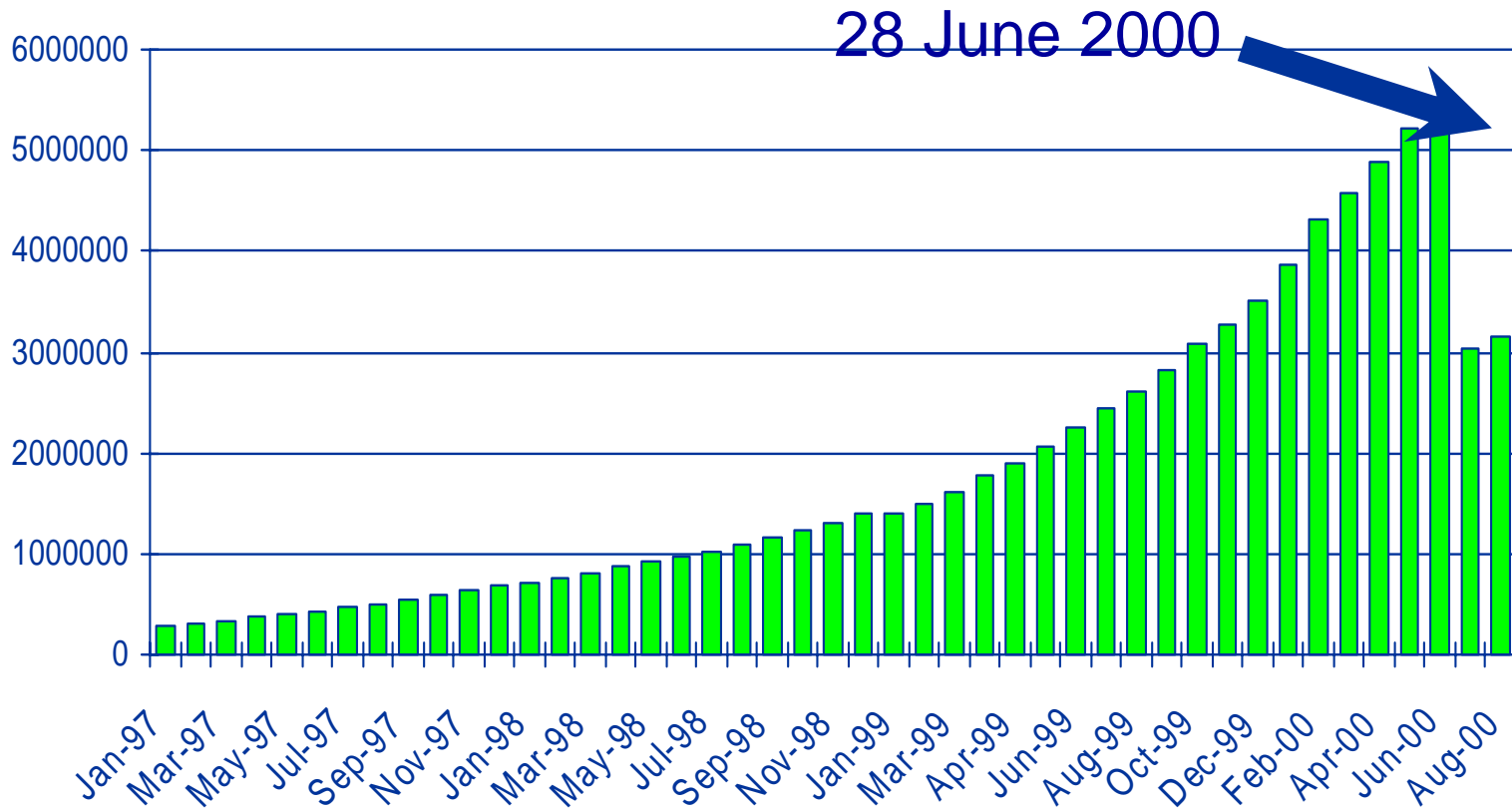


# RIPE Database

- Domain objects in the RIPE Database
  - < 20% of RIPE Database (57% at RIPE 36)
  - 4 ccTLD registries moved since RIPE 36
- Database reimplementation
  - <http://www.ripe.net/ripenncc/pub-services/db/reimp>
- Routing Registry Consistency
  - Increase the accuracy of the Routing Registry



# 3 Million Objects



# New Projects

- TTM: Test Traffic Measurements
  - Becoming a member service - final proposal at RIPE 37
- PAM2001-Workshop
  - Call for Papers issued
  - <http://www.ripe.net/pam2001>
- RIS: Routing Information Service
  - collect routing info. between ASes & AS development over time
- Security Deployment
  - New project, started June 2000
  - Project Plan in development / BoF at RIPE38



# RIR Co-ordination

- Policy co-ordination
  - IPv6 discussions at IETF
- Assistance from APNIC staff (Thanks!)
- Common evaluation of requests
  - (IPv6, GPRS, large and complex requests etc.)
- RIR staff attending RIPE, ARIN and APNIC meetings
- Support of LACNIC and AfriNIC setup



# NCC Next Steps

- Further automate internal tools and processes
- Complete infrastructure overhaul
- Extend tools for members
- Update and improve external documentation
- Migrate to new DB software
- Introduce TTM as a service
- Further formalise ICANN relations





# RIPE NCC Priorities

- Ensure and further improve stable, reliable and high quality services
- Respond to members needs and propose and develop services as needed
- Further increase RIPE NCC and RIPE awareness



## Medals / million square miles

- **GERMANY 413**
- USA 26
- AUSTRALIA 19
- CHINA 15
- RUSSIA 13



## Medals / RIR Service Region

- RIPE NCC: 556
- APNIC: 188
- ARIN: 185

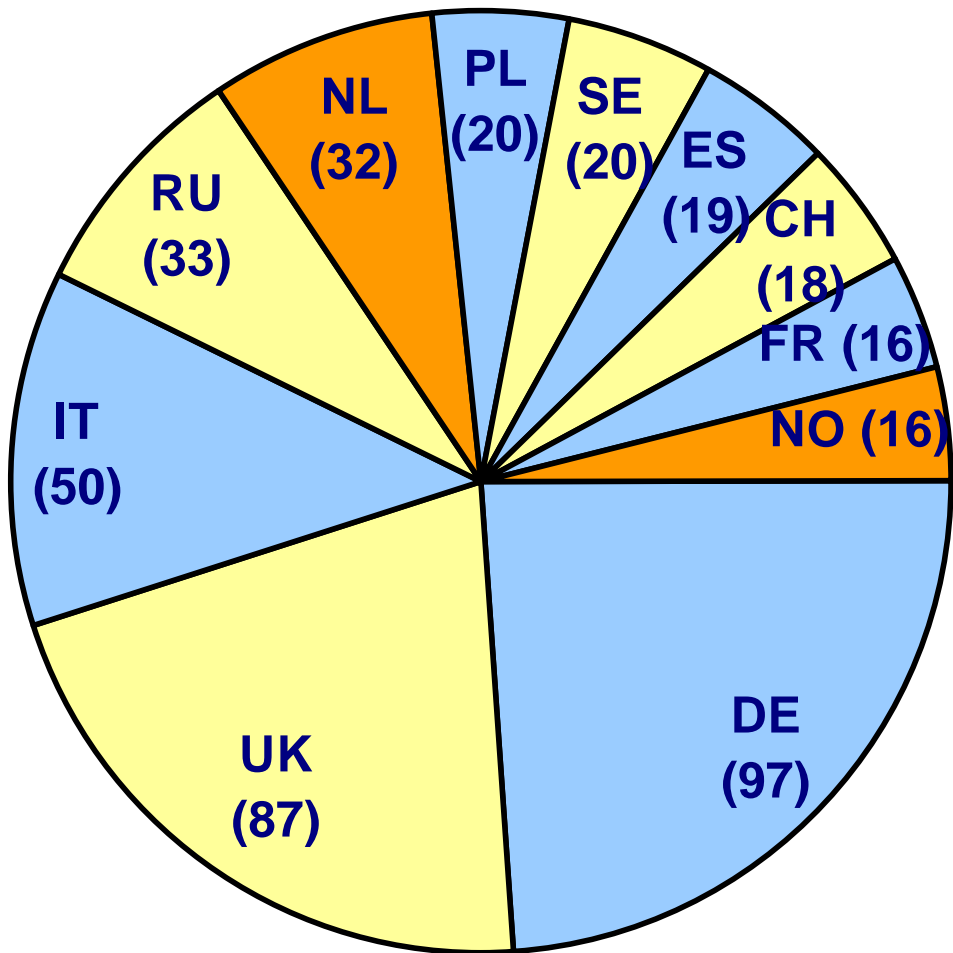
# Questions and Answers



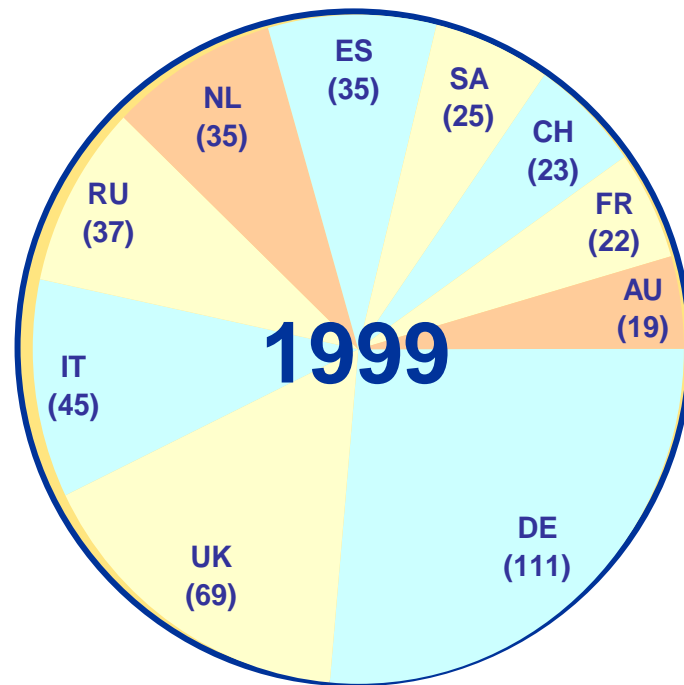
<http://www.ripe.net/ripencc/about/presentations/index.html>



# Top10 New LIRs 2000 to Date



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LACNIC

# LACNIC STATUS

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ARIN VI  
Herndon, VA  
October, 2000

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<http://www.lacnic.org>



LACNIC

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Work based on:

Criteria for Establishment of New Regional Internet Registries Document.

MoU ASO

RFC 2050, RFC 1918, RFC 1930, etc.

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<http://www.lacnic.org>



The region of coverage should meet the scale to be defined by ICANN, given the need to avoid global address fragmentation.

Coverage:

Caribbean countries.

Latin-American countries.

LACNIC Operational Center:

São Paulo, Brasil.





The new RIR must demonstrate that it has the broad support of the LIRs (ISP community) in the proposed region.

## Part I

Supporting Letter at LACNIC website

- 149 individual supports.
- 107 Companies.
- 16 Countries.

\*Telecommunications Regulatory Bodies from LAC Region (20 countries) have shown their support through their resolution statement after their III Summit Meeting. [http://www.ahciet.net/actividades/cumbre\\_reg](http://www.ahciet.net/actividades/cumbre_reg)



The new RIR must demonstrate that it has the broad support of the LIRs (ISP community) in the proposed region.

## Part II

60% actual Latin-American ARIN's members have signed the letter support in the website or have shown their support by email.

Some LACNIC presentations

- Globecom, Rio Janeiro, December 1999
- AHCNET Internet 2000, Santiago Chile, June 2000
- Latin-American and Caribbean Workshop, Mexico City, July 2000.



Bottom-up self-governance structure for setting local policies.

According to MoU we will establish mechanism for open forums for regional policies discussion.

December 15<sup>th</sup> Buenos Aires, Argentine open forum for LACNIC policies discussion.

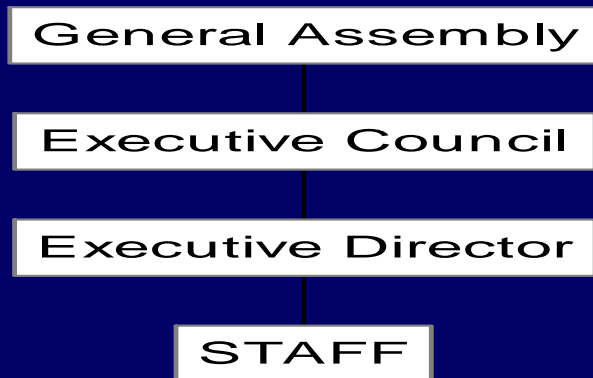


Neutrality and impartiality in relation to all interested parties and particularly the LIRs

Policies draft document finished.  
/20 minimum allocation.

Bylaws document finished.  
not-for-profit.

open and based on membership (those who receive services from LACNIC, those who are willing to join to the LACNIC membership)





## Technical Expertise

In the start-up, staff and infrastructure will be provided by NIC-Brazil.

Both ARIN's National LIRs, Brazil and Mexico, have been involved in LACNIC policies development.

NIC-Brazil agrees in guarantee all the operational resources for 2 years.



Adherence to global policies regarding address space conservation, aggregation and registration.

IPv4, IPv6, ASN, Reverse DNS delegation LACNIC policies are based on

- RFC documents.
- APNIC Policies.
- ARIN Policies
- RIPE Policies.

Spanish version already in LACNIC website.

English version will be ready for Brisbane Meeting and publish in LACNIC website.



## Activity Plan

Document not ready yet. This plan should include the traditional RIRs activities and additional services LAC community as:

Training  
Information Services  
Coordination tasks  
Etc,

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The staff and infrastructure provided by NIC-Brazil will be totally independent from domain name activities and the staff will be submitted to LACNIC policies and purposes only.



## Funding Model

Not-for-profit organization.

In the start-up, NIC-Brazil will take care of the LACNIC costs. (2 years)

Final funding model in process according to Brazil Economy.

Structure fee same as ARIN.





## Record Keeping

English official language of the Registry System.

Core documentation (at least):

- Policies
- Bylaws
- Procedures
- Website
- Whois DB
- Service staff.
- Meeting (simultaneous translations)



## Confidentiality

Information collected by a RIR in the registration process must be kept in strict confidence and uses for registration purposes only.



Present to the AC ASO at Brisbane a formal advance document according to the Emerging RIR Document.

Start technical steps in order to settle a dependable staff and infrastructure (In coordination with the other RIRs, mainly ARIN).

Organize open forum for LACNIC policies (first at Buenos Aires, Argentine in December).

Complete Emerging RIR document guidelines (including technical issues) by ICANN meeting in March 2001.



LACNIC

# LACNIC STATUS

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Questions?

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<http://www.lacnic.org>