

# RIPE NCC Status

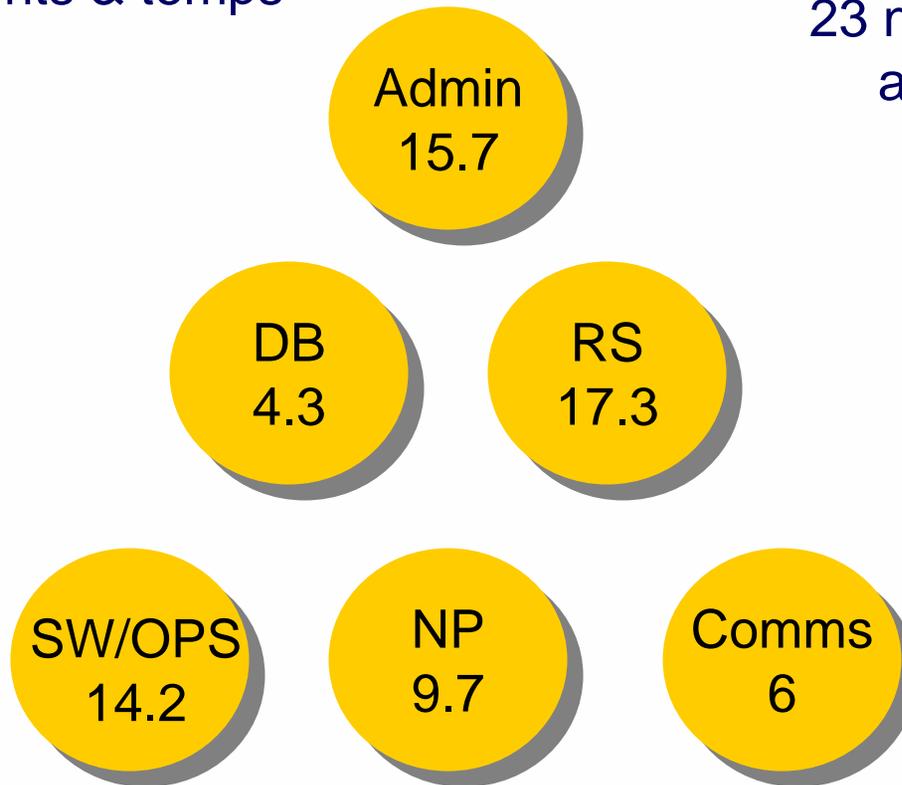


# Headcount

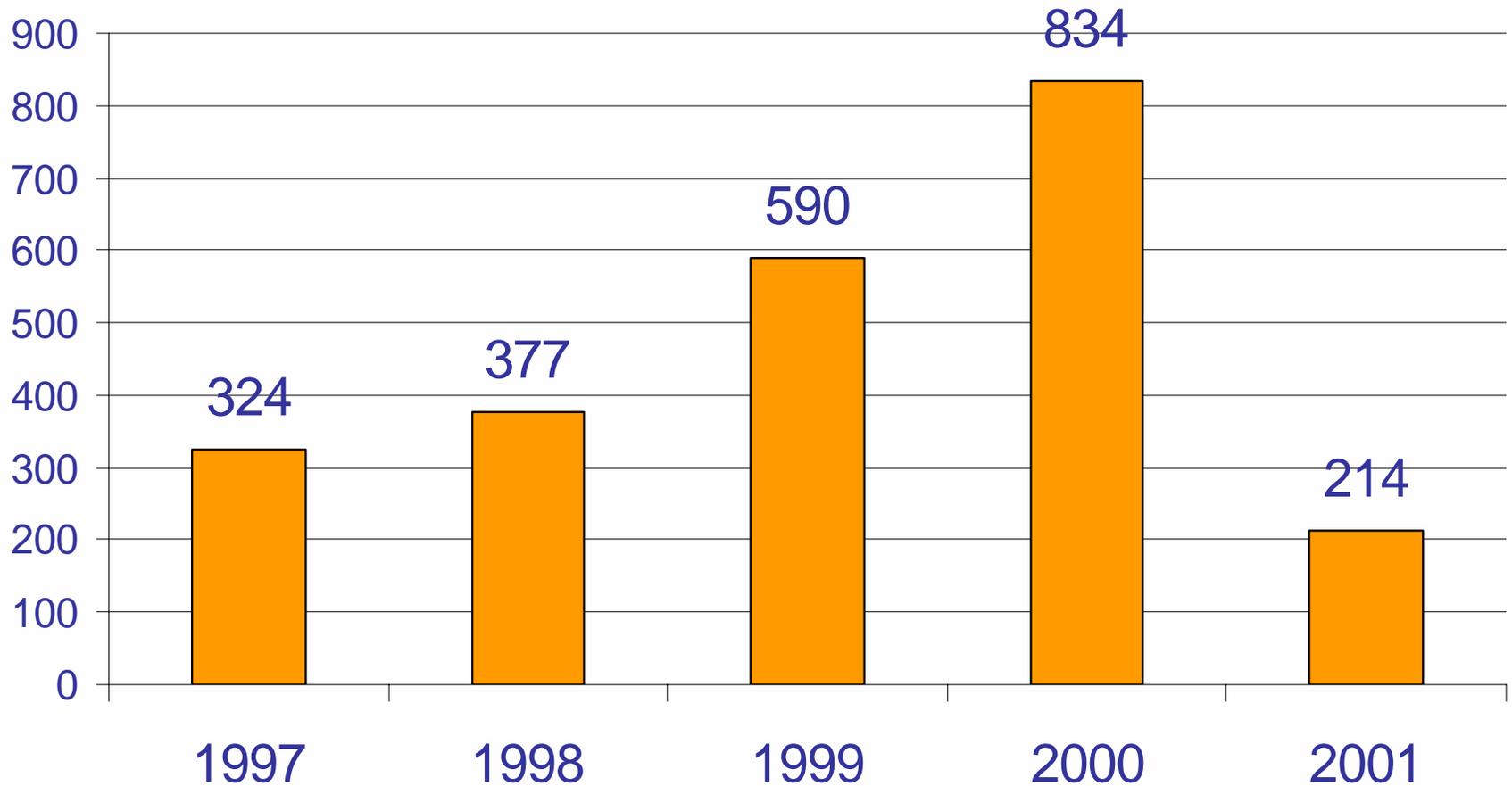
Including students & temps  
(In FTEs)

**Total 67.2**

23 nationalities  
at last count



# LIR Growth 1997-2001



# Workload

1997 Average requests/month 547

**FTE Hostmasters 9 (61 req/hm)**

1998 Average requests/month 905

**FTE Hostmasters 12 (75 req/hm)**

1999 Average requests/month 1280

**FTE Hostmasters 14 (91 req/hm)**

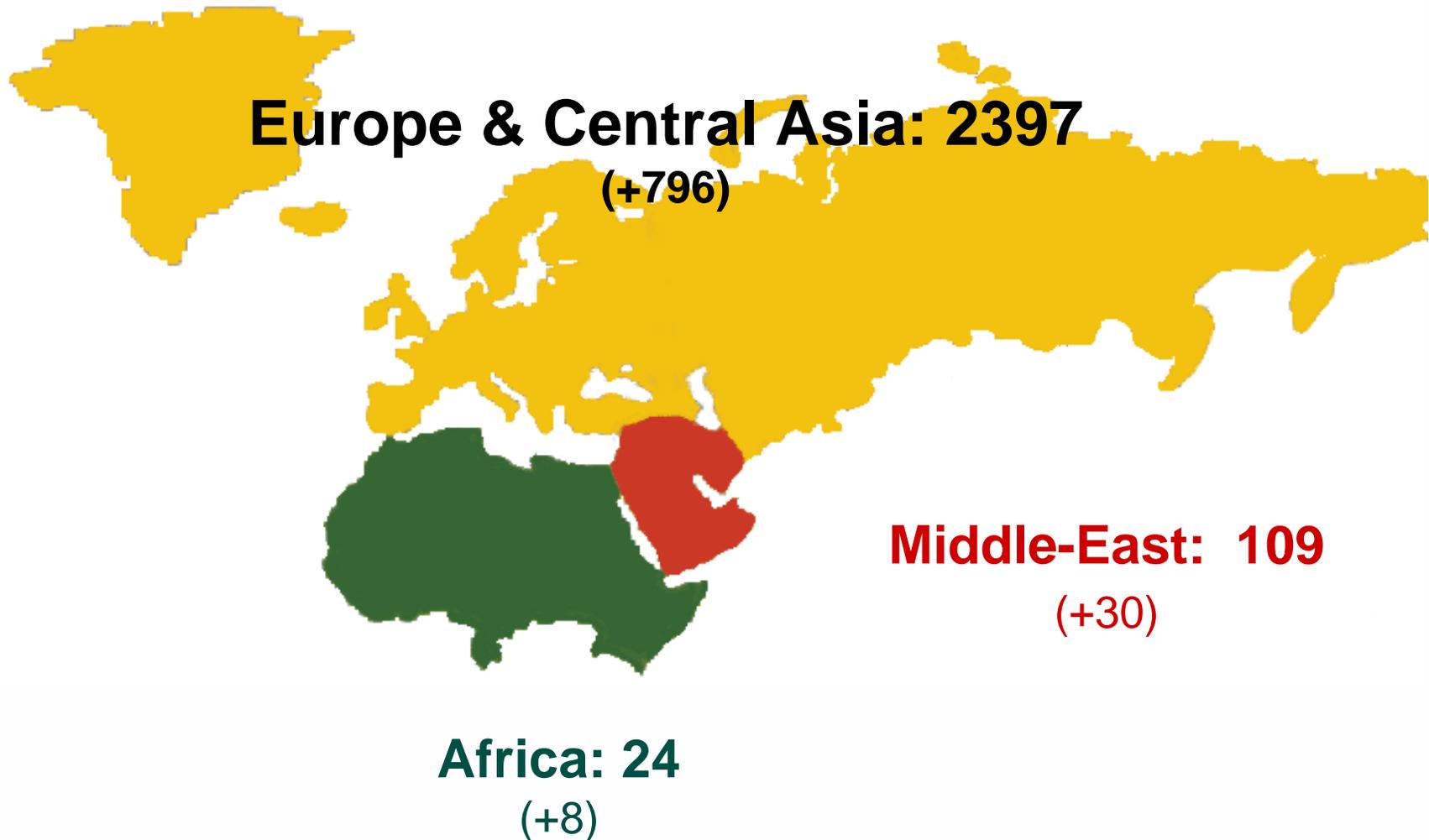
2000 Average requests/month 1555

**FTE Hostmasters 14 (111 req/hm)**

*2001 Average requests/month 1681*

***FTE Hostmasters 15 (112 req/hm)***

# Total LIRs per Region



# Training Courses

- 2000
  - 41 LIR courses
  - 26 countries
  - 919 people
- 2001 plans
  - 50 courses planned
  - 1500 attendees?

# RIPE Database

- Domain Cleanup: Big domains are out!
- Version 3.0 of the database software
  - Migration to the new RIPE database  
23 April ...



# New Projects

- Routing Information Service
  - collectors at NCC, LINX, AMSIX, SFINX
  - more planned, where? ARIN region...
  - ongoing development, regular service later in 2001
- DISI
  - **D**eployment of **I**nternet **S**ecurity **I**nfrastructures
- PAM – Conference April
- Test Traffic Measurements...

# Test Traffic Measurements



- one way delay measuring
- service available to the entire community
- expecting substantial growth in network
- see brochures at registration desk

# Communications

- ASO Secretariat migrated to RIPE NCC
  - web site
  - AC meetings
  - General admin. Support
- Informational visits with Governments and Members of European Parliament
- Outreach
  - Integrating new players
  - Various Forums

# RIPE NCC Next Steps

- Migrate to new database software
- Add resilience to Registration Services
- Complete the infrastructure overhaul
- Enlarge TTM network
- Continue outreach
- New level of RIR co-ordination
- Sign the ICANN contract...

# RIPE 39

The RIPE 39 Meeting will take place from 30 April until 4 May 2001 in Bologna, Italy.



# Questions and Answers





APNIC

# APNIC Update

ARIN-VII

San Francisco, April 2001

- Year 2000 Overview
- Membership
- Human Resources
- Resource Services
- Activities and Projects
- Meetings

# Year 2000 Overview

- Membership
  - Members: from 381 to 602 (58% growth)
  - Countries: 37 of 62 AP economies
- Resource Allocations
  - IPv4: from 2.42 to 3.71 x /8 (53% growth)
  - IPv6: from 6 to 24 subTLAs (400% growth)
  - ASN: from 1042 to 1663 (60% growth)
- Secretariat
  - Staff: from 12 to 22 staff members (45% growth)
    - Representing 13 AP economies
  - Tickets: 25,337 processed



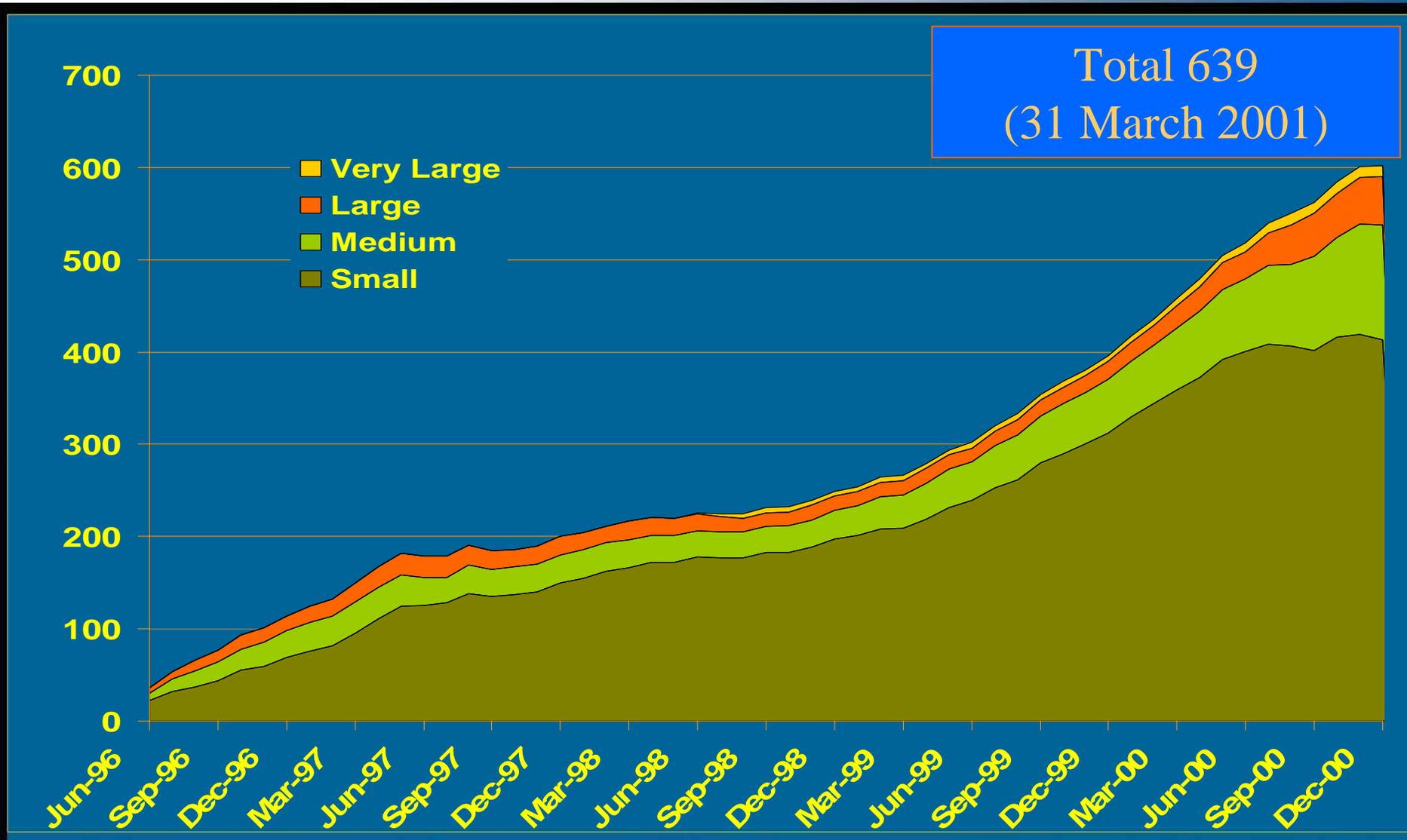
APNIC

# APNIC Status Report

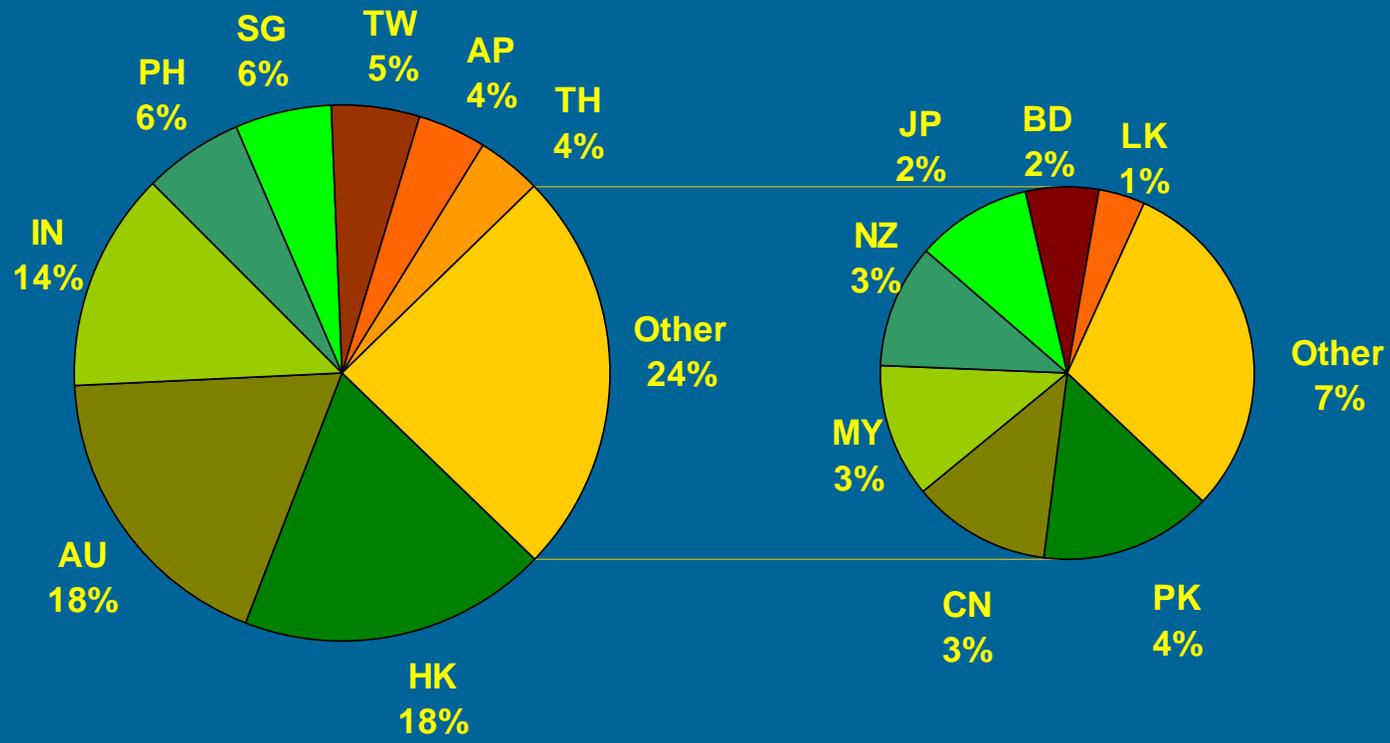
## Membership



# How many APNIC Members?



# Where are APNIC Members?





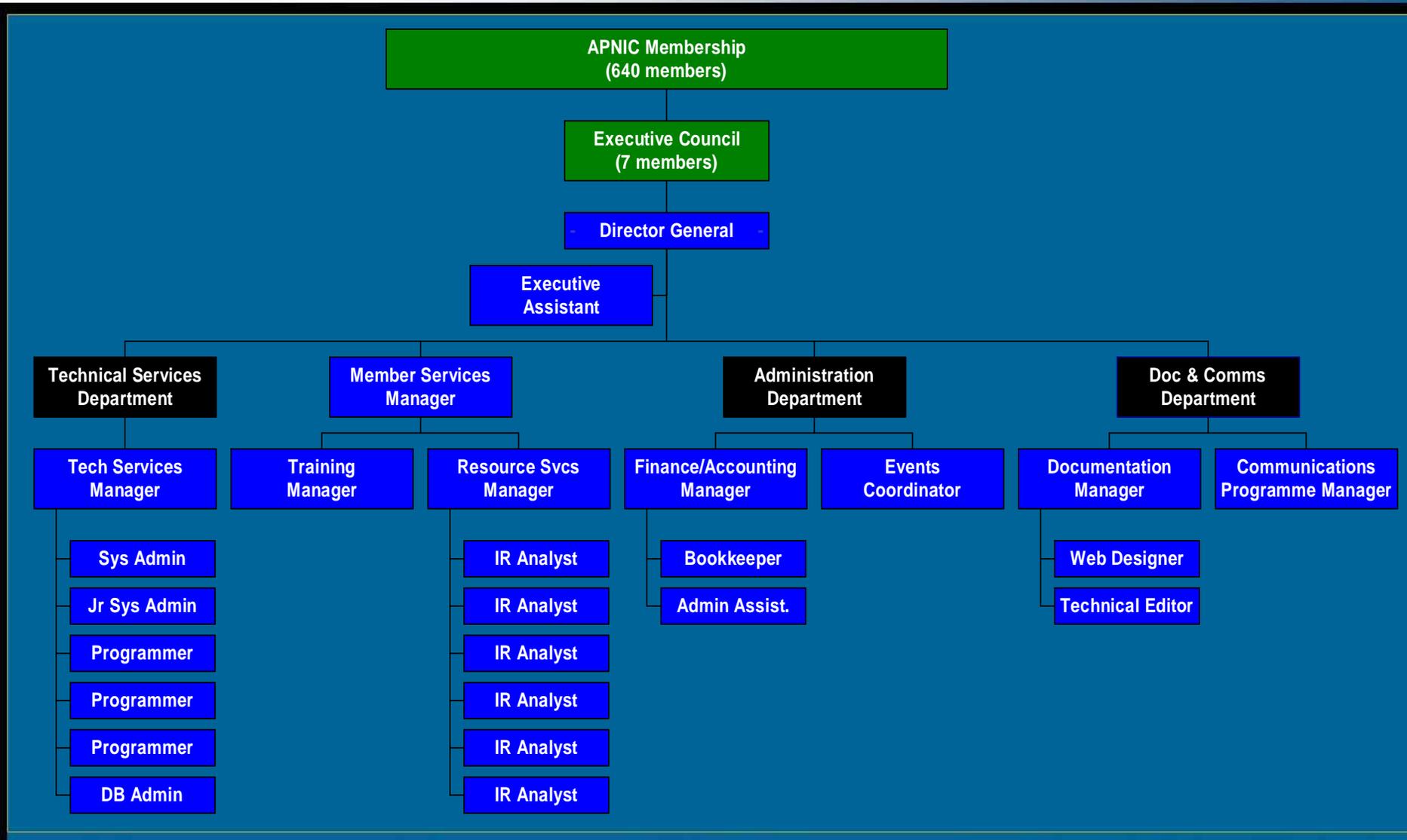
APNIC

# APNIC Status Report

## Human Resources



# APNIC Structure





APNIC

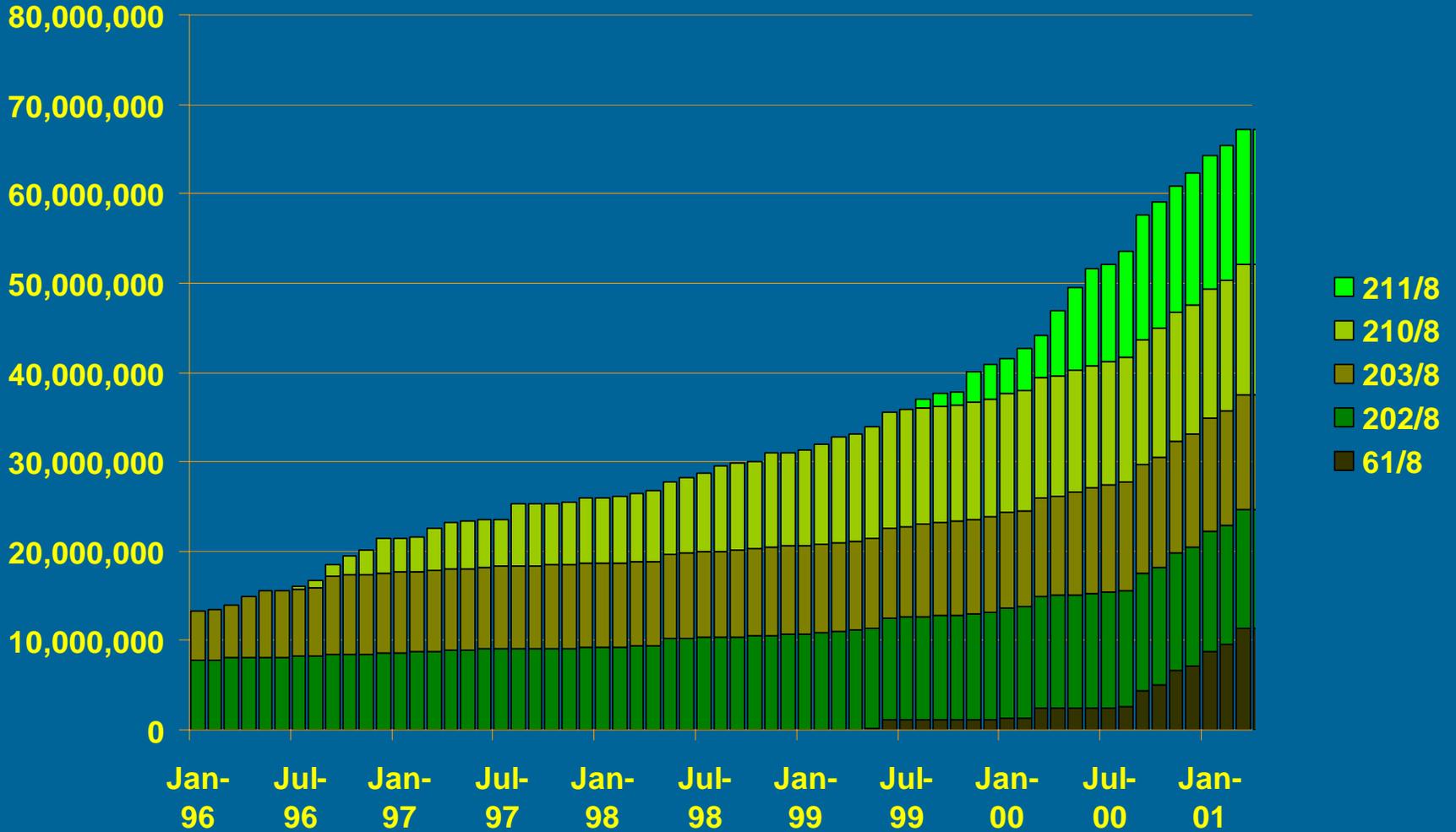
# APNIC Status Report

## Resource Services



APNIC

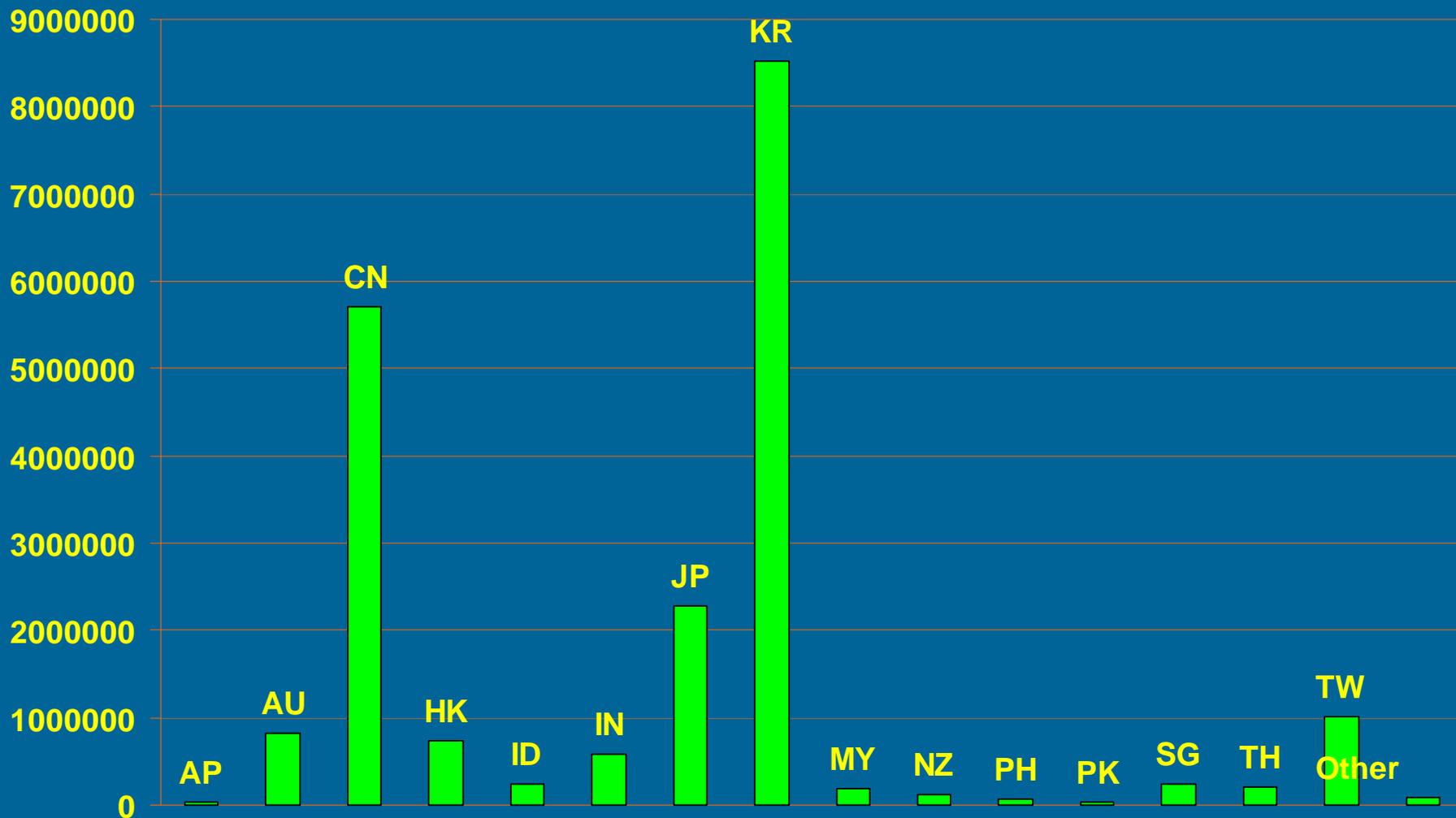
# IPv4 Allocations - Total





APNIC

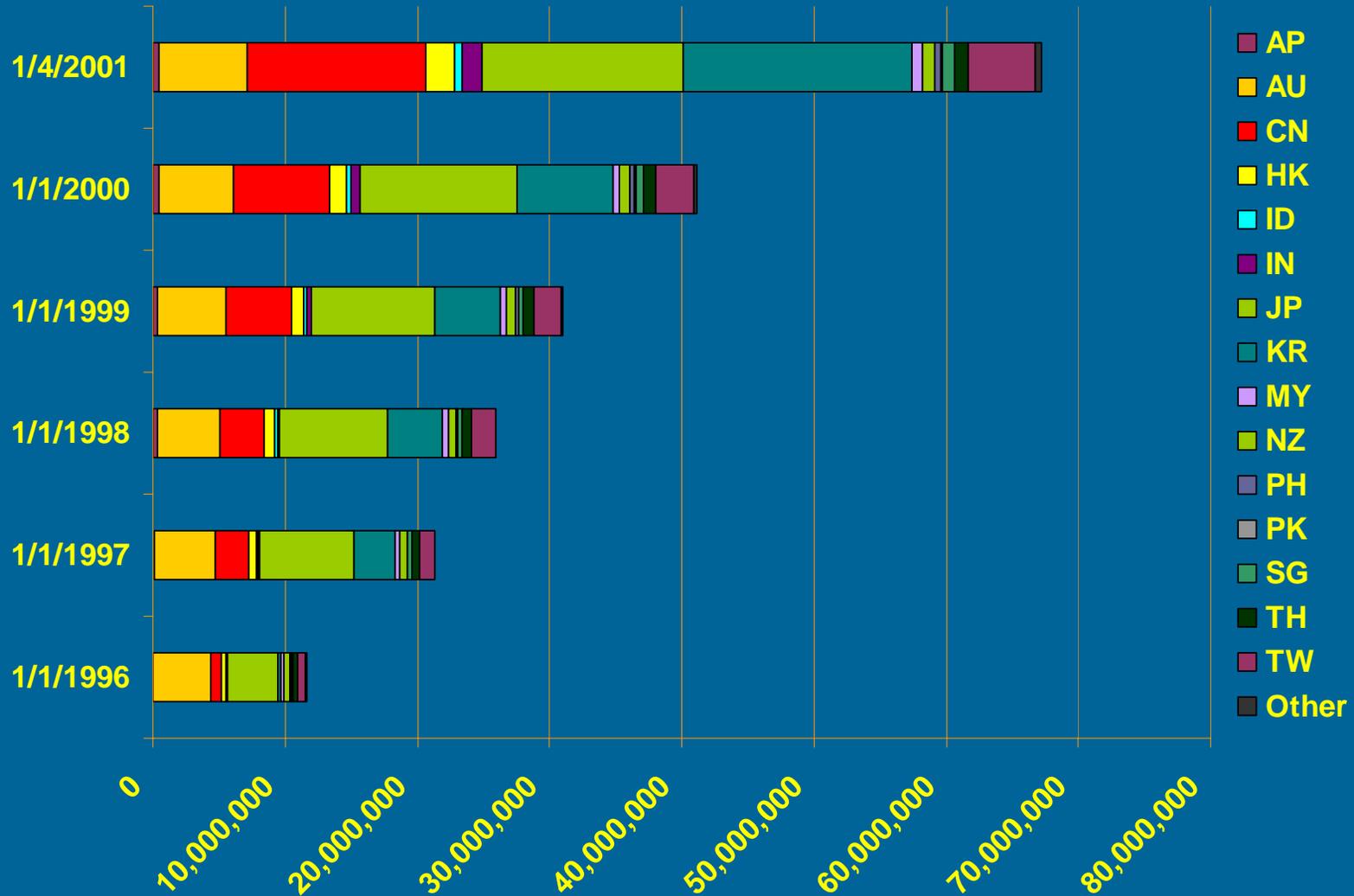
# IPv4 Allocations - 2000



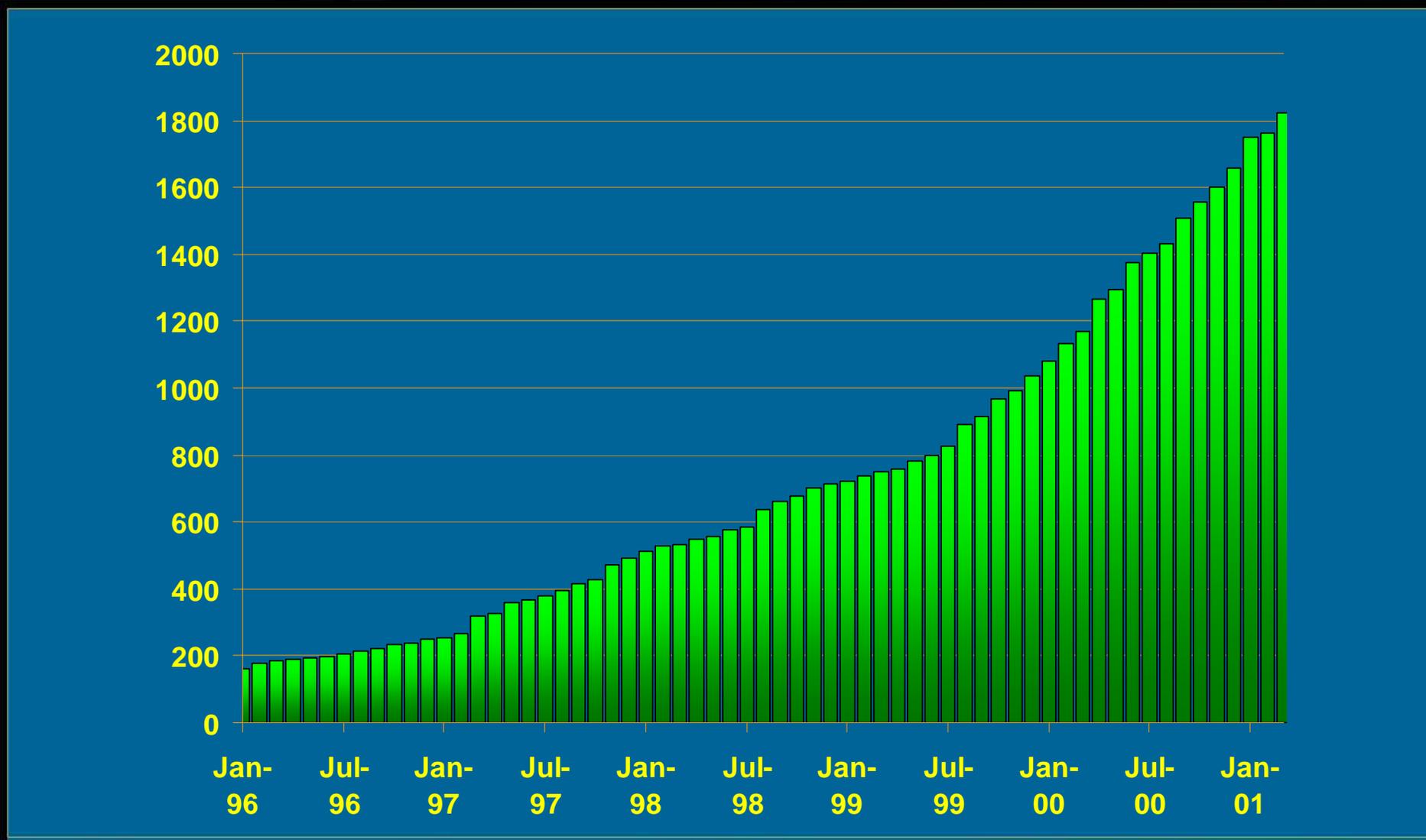


APNIC

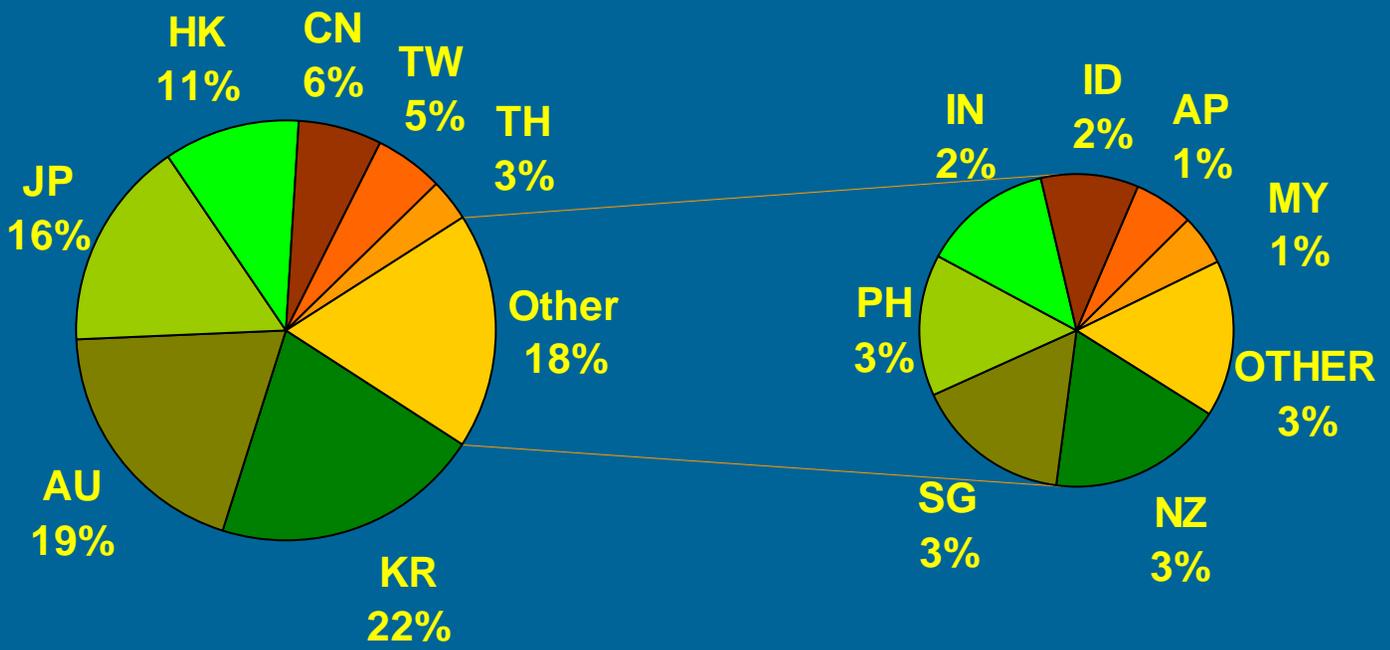
# IPv4 Allocations – Distribution



# ASN Allocations - Total



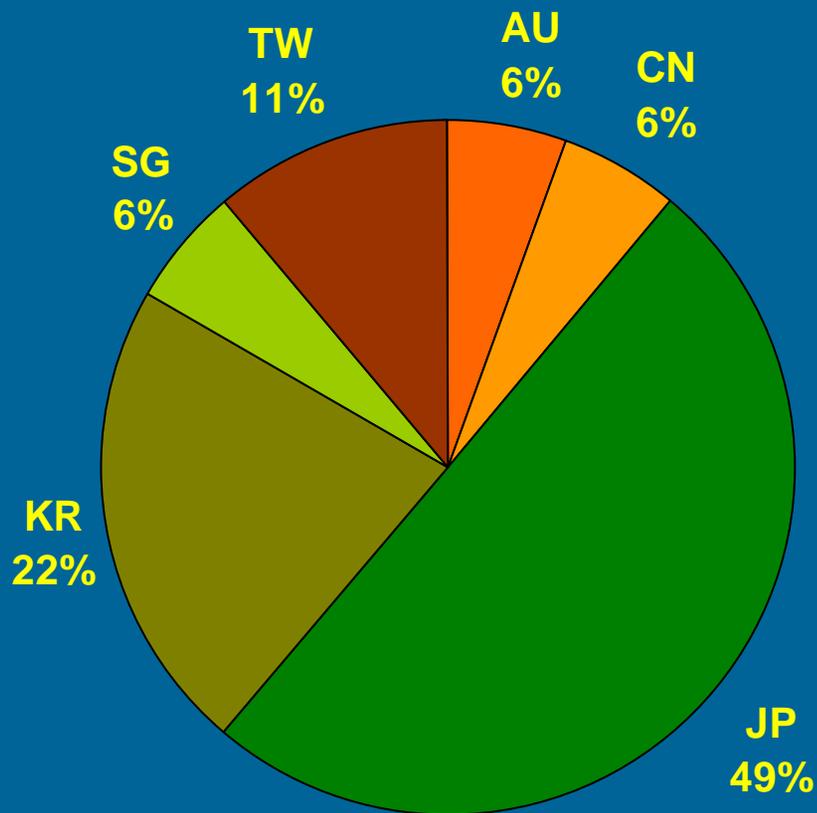
# ASN Allocations - Distribution





APNIC

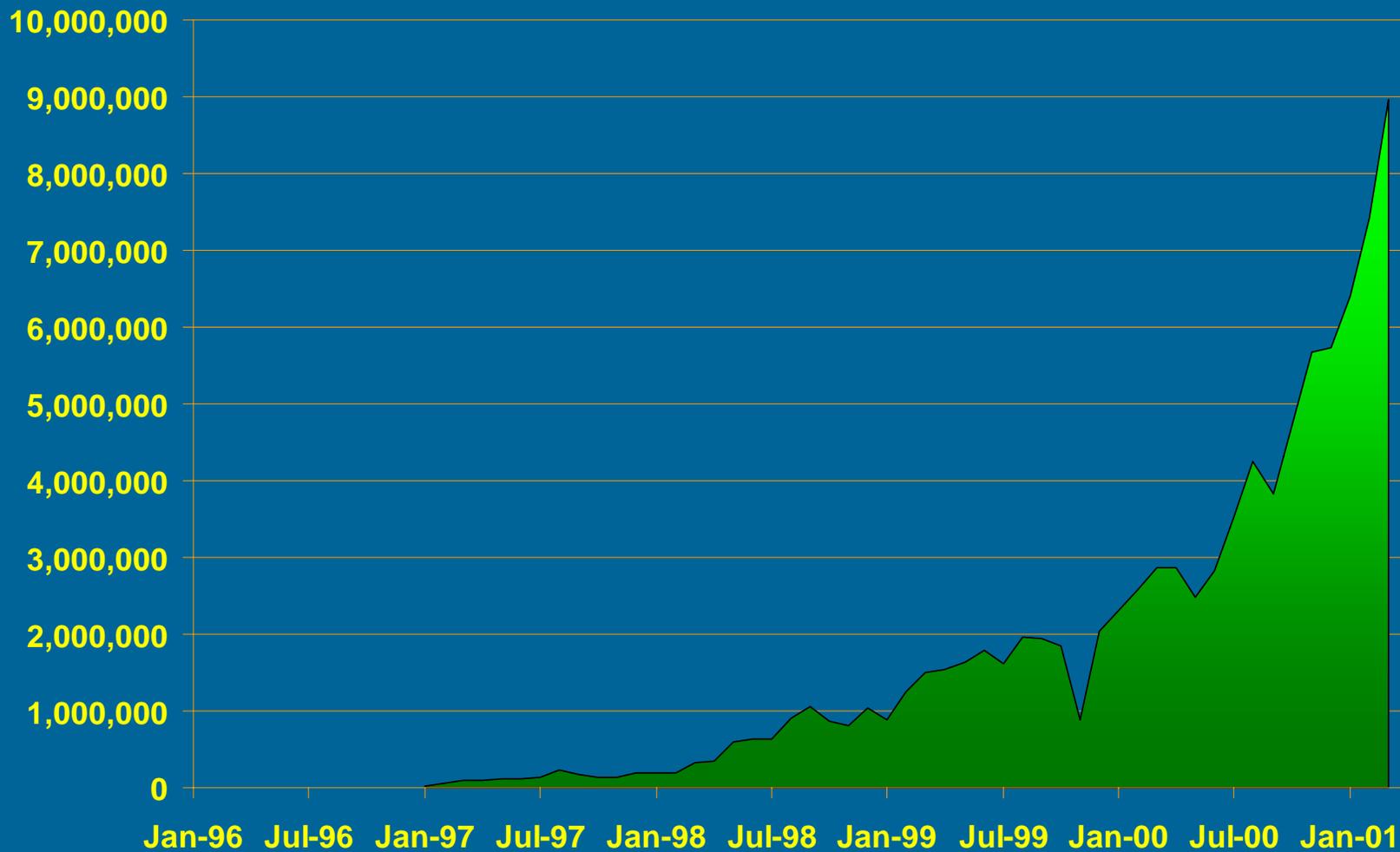
# IPv6 Allocations - Distribution





APNIC

# Whois Queries





APNIC

# APNIC Status Report

## Activities and Projects

- Training courses in 2000
  - KR, CN, ID, VN, TH, AU, NZ/Pacific, TW
  - 350 trainees in total
  - Regular evaluation and review
- Training course in 2001
  - MY, SG, IN, HK\*
  - 200-250

- APNIC Seminars
  - Open events held in most training locations
  - ICANN/Governance seminars with APTLD
    - ID & NZ
- Schedule under development
  - “Expressions of Interest” may be submitted

- Complete
  - Automated in-addr form processing
  - AS number parser
- Under development
  - Automated ISP request parsing\* (beta)
  - Upgraded ticketing system - RT2 (beta)
  - Allocation manager
  - Membership manager (beta)
  - New accounts system integration
  - “MyAPNIC”

# Automated ISP request parsing

APNIC - ISP Address Request - 1 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

 Asia Pacific Network Information Centre

[Services](#) | [Membership](#) | [Information](#) | [Documents](#) | [Training](#) | [Contact](#) | [Search](#)

## APNIC - ISP Address Request

### Applicant information

APNIC will use these contact details for all correspondence relating to this request. Please enter the APNIC account name of the organisation that requires the address space.

Your name:	<input type="text"/>	?
Your email address:	<input type="text"/>	
APNIC account name: <small>Example: SPARKYNET-ID</small>	<input type="text"/>	?
Create password for this request (4-8 characters):	<input type="text"/>	?
Confirm password:	<input type="text"/>	

[ [Documentation and Text Only Version](#) ] [ [Help](#) ]

1. applicant 2. contact 3. network 4. connect 5. config 6. customer 7. infra 8. plan 9. comments 10. confirm

Last modified February 23 2001 | © 2001 APNIC Pty. Ltd. Comments to: [webmaster@apnic.net](mailto:webmaster@apnic.net)

Local intranet

# Automated ISP request parsing

APNIC - ISP Address Request - 3 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

 Asia Pacific Network Information Centre

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## APNIC - ISP Address Request

### Network name

The details you provide here will be used to identify the proposed network in the APNIC Whois database.

**Name of network:**  ?  
Example: SPARKYNET

**Description of organisation:**  ?  
Example: SparkyNet, Sdn Bhd, Internet Service Provider, Pinang, Malaysia

**Country:**   ?

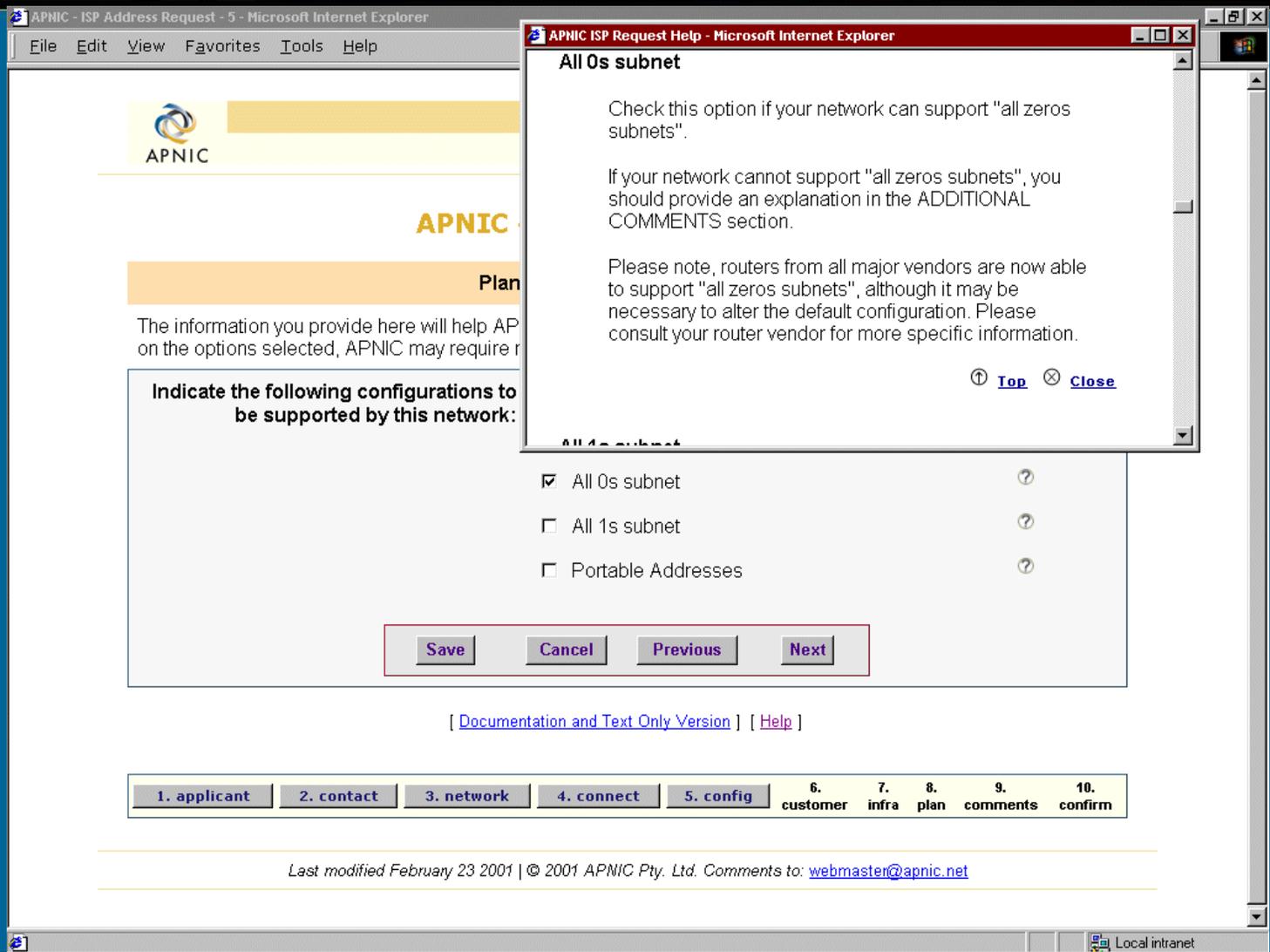
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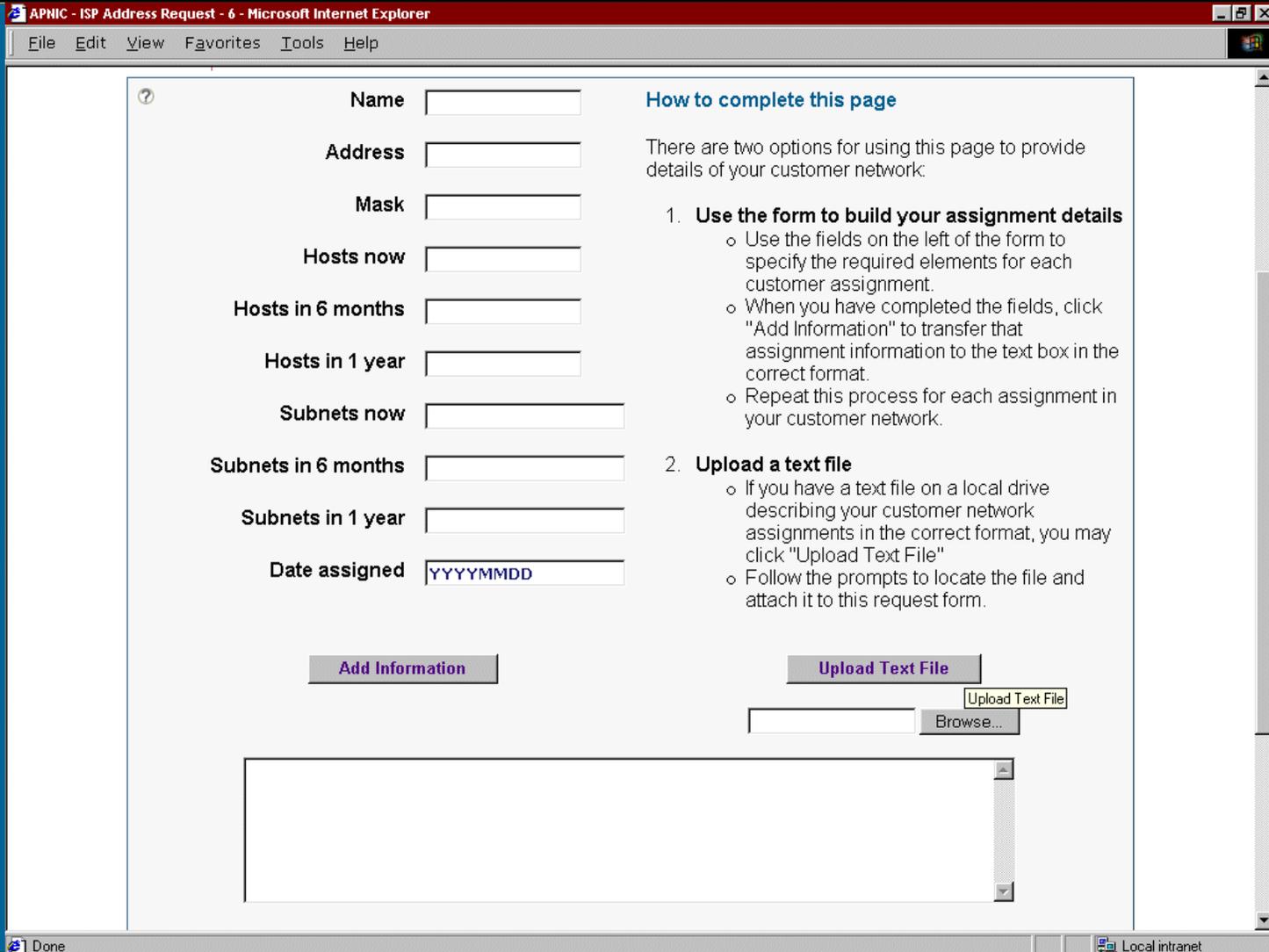
Local intranet

# Automated ISP request parsing



The screenshot shows a Microsoft Internet Explorer browser window displaying the APNIC ISP Address Request form. The browser's address bar shows "APNIC - ISP Address Request - 5 - Microsoft Internet Explorer". The page features the APNIC logo and a navigation menu with items like "Plan". The main content area contains the text: "The information you provide here will help APNIC on the options selected, APNIC may require r". Below this is a section titled "Indicate the following configurations to be supported by this network:" with three checkboxes: "All 0s subnet" (checked), "All 1s subnet", and "Portable Addresses". At the bottom of this section are buttons for "Save", "Cancel", "Previous", and "Next". A help dialog box titled "APNIC ISP Request Help - Microsoft Internet Explorer" is open over the form, displaying the text: "All 0s subnet", "Check this option if your network can support 'all zeros subnets'.", "If your network cannot support 'all zeros subnets', you should provide an explanation in the ADDITIONAL COMMENTS section.", and "Please note, routers from all major vendors are now able to support 'all zeros subnets', although it may be necessary to alter the default configuration. Please consult your router vendor for more specific information." The dialog box also includes "Top" and "Close" links.

# Automated ISP request parsing



APNIC - ISP Address Request - 6 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

**Name**

**Address**

**Mask**

**Hosts now**

**Hosts in 6 months**

**Hosts in 1 year**

**Subnets now**

**Subnets in 6 months**

**Subnets in 1 year**

**Date assigned**

**How to complete this page**

There are two options for using this page to provide details of your customer network:

- Use the form to build your assignment details**
  - Use the fields on the left of the form to specify the required elements for each customer assignment.
  - When you have completed the fields, click "Add Information" to transfer that assignment information to the text box in the correct format.
  - Repeat this process for each assignment in your customer network.
- Upload a text file**
  - If you have a text file on a local drive describing your customer network assignments in the correct format, you may click "Upload Text File".
  - Follow the prompts to locate the file and attach it to this request form.

Done Local intranet

# Policy Developments

- APNIC Fee Structure
  - Category now determined by allocations
    - Active for new members and renewals
- Address policy changes
  - Regular allocations from 61/8
  - Minimum allocation /20
  - Lease-based allocations
    - All active from August 2000

# Service Developments

- In-addr redistribution
  - Transfer of legacy whois & in-addr from ARIN
- IRR
  - Server platform research and selection
    - RIPE DBv3
  - Porting/testing new RIPE NCC server
  - Public beta with APNIC data – February
    - [rpsl.apnic.net](http://rpsl.apnic.net)

# Certification Authority

- Response to member concerns on security
  - Email authentication and privacy
  - Website authorisation
- X.509 certificates
  - Industry-standard “single-password” system
- Trial certificates being issued now
  - Identity certificates for APNIC members
  - Later: Attribute certs for resource allocations



APNIC

# APNIC Status Report

## Meetings

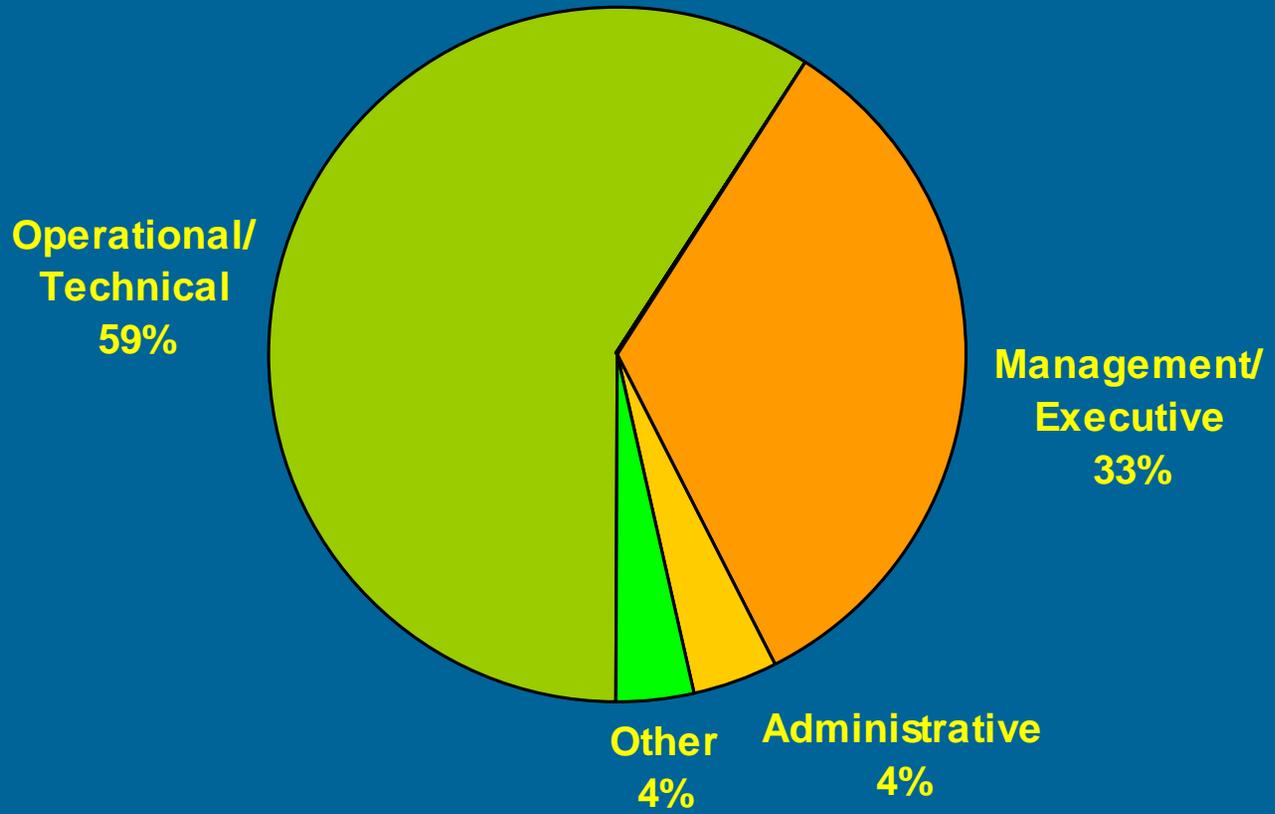
# Meetings

- APNIC-10, Brisbane, October 2000
- New meeting format
  - 1 day APNIC training
  - 3 day standalone meeting
  - Policy, technical tracks and tutorials
  - SIGs, plenary sessions and BOFs
    - Routing, DB, DNS, Address Policy, IPv6
  - APNIC Member Meeting

# Meetings

- APNIC-11, Kuala Lumpur, February-March 2000
- In conjunction with APRICOT
  - APNIC provided conference track
    - APNIC training course
    - SIGs, BOFs
    - Hostmaster consultation sessions
    - APNIC Member Meeting

# Attendee Profile



# Next Meeting

- APNIC-12
  - 28-31 August 2001
  - Taipei, TW
  - Hosted by TWNIC



APNIC

# APNIC Update

*Questions?*



LACNIC

# LACNIC STATUS

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ARIN VII  
San Francisco , CA  
April, 2001

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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.

ASO MoU.

RFC 2050, RFC 1918, RFC 1930, etc.



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

Coverage:  
Latin-American countries.

LACNIC Operational Center:  
San Paulo, Brazil.

Herndon, VA USA  
Amsterdam, Netherlands  
Brisbane, QLD, Australia



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

- 151 individual supports.
- 108 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

80% actual Latin-American ARIN's members have signed the letter support in the website or have shown their support by email.



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

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

Email lists at LACNIC website.

Local meetings in different countries.

In December 6<sup>th</sup> 2000 Buenos Aires, Argentine we had an open regional forum for LACNIC policies discussion. More than 100 participants. (Including ICANN's director and staff, ARIN, ASO AC members ).



Bottom-up self-governance structure for setting local policies.  
(2)

Some points raised by ISP in Buenos Aires Open Forum

Bootstrap period. (not enough portable space outside Brazil and Mexico)

Reassignment policies

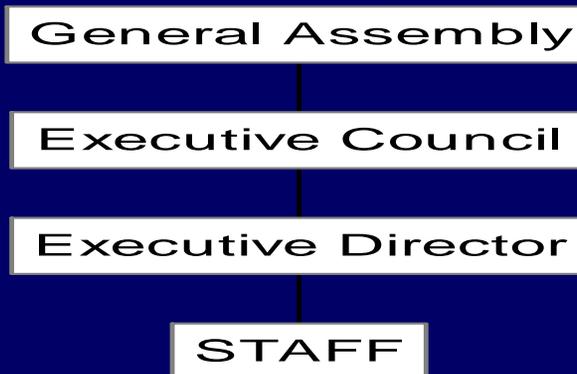


Neutrality and impartiality in relation to all interested parties and particularly the LIRs

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. The staff intend to be International

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

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

RIRs feedback and support.

April 19<sup>th</sup> y 20<sup>th</sup> ARIN will visit LACNIC's facility in Sao Paulo in order to verify infrastructure.



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.

Participation in all three RIR members meetings.

Part of ASO AC as observers and listeners.



## 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,

-----  
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 used for registration purposes only.



Start technical steps in order to settle a dependable staff and infrastructure (In coordination with ARIN). *Hiring now !*

Complete Emerging RIR document guidelines (including technical issues) and present an first official request of recognition by ICANN meeting in Sweden. Second shot in ICANN Meeting in Montevideo, Uruguay.

When ? It will depend on our negotiation with ICANN Board and staff. I hope this year.



LACNIC

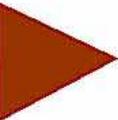
# LACNIC STATUS

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Questions?

<http://www.lacnic.org>

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# AFRINIC UPDATE REPORT

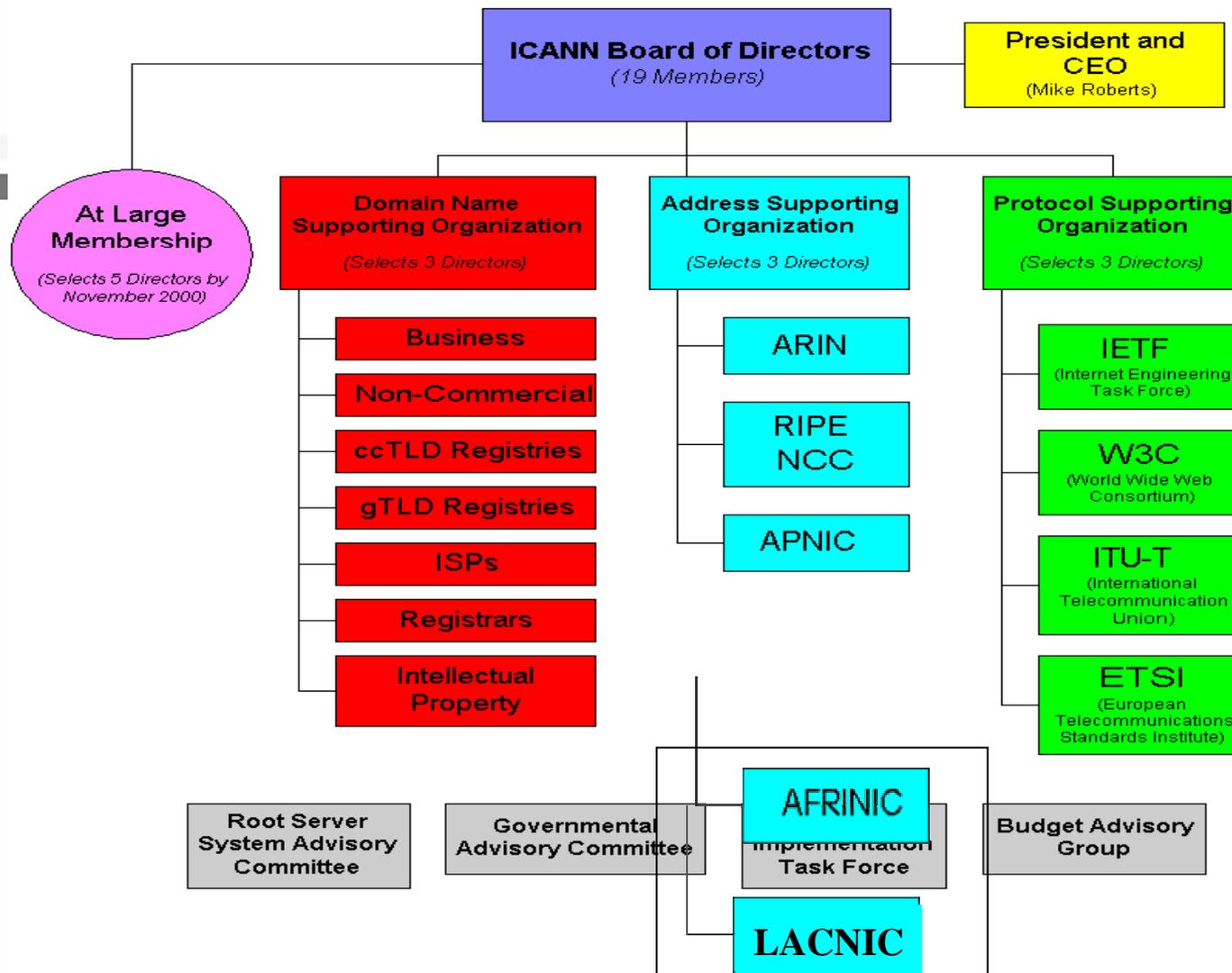


Mouhamet DIOP - AFRINIC

E-mail: [mouhamet@sonatel.sn](mailto:mouhamet@sonatel.sn)

SENEGAL

# ICANN Organizational Chart

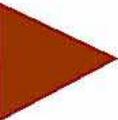


(c) 2000 Internet Corporation for Assigned Names and Numbers. All rights reserved.

# Goals of the Internet Registry System

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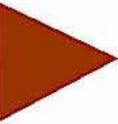
- Fair distribution of address space
- Conservation
  - prevention of stockpiling of addresses
- Aggregation
  - hierarchical distribution of globally unique address space
  - permits aggregation of routing information
- Registration
  - provision of public registry
  - ensures uniqueness and enables troubleshooting



# The 10 Emergy RIR criteria

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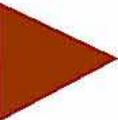
1. **The region of coverage should meet the scale to be defined by ICANN, given the need to avoid global address fragmentation**
2. **The new RIR must demonstrate that it has the broad support of the LIRs (ISP community) in the proposed region**
3. **Bottom-up self-governance structure for setting local policies**
4. **Neutrality and impartiality in relation to all interested parties, and particularly the LIRs**
5. **Technical expertise**
6. **Adherence to global policies regarding address space conservation, aggregation and registration**
7. **A published activity plan**
8. **A published budget and funding model**
9. **Proper record keeping of registry activities**
10. **Commitment to appropriate levels of confidentiality**



# Afrinic Organisation

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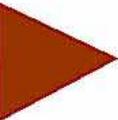
- Six SubRegions:
  - North
  - west
  - Central
  - East
  - South
  - Indian Ocean
- Representatives based on different languages
  - a primary
  - an alternate



# AFRINIC – Slow Start Process

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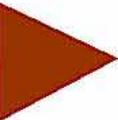
- AFRINIC
  - South Africa May 2000 & Banjul June 2000
  - Afrinic General Annual Assembly - May 2001
  - RIPE training after the Afnog meeting.
  - New BoT will be elected during the May meeting
  - Technical Staff selection process for RIPE hosting
- AFNOG
  - AFNOG second annual workshop in Accra
  - Meeting in Accra – Ghana – 5<sup>th</sup> to 13<sup>rd</sup> May 2001
- And then the agenda will be continued...
  - Recognition process under ICANN/ASO



# AFRINIC : How to start operations ?

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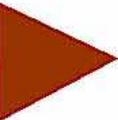
- Where will AFRINIC be located ?
  - Fiscal issue only & Flexibility to set up - Long process
- When will AFRINIC operations start ?
  - Find the staff - Sign agreement with RIPE and START !!
- Who supports AfriNIC : “GREAT & LARGE CONSENSUS”
- Who will AFRINIC SERVE ?
  - Choice or geographic criteria for african ISPs ?
- Who will run AFRINIC operations ?
  - International staff
- Who will fund AFRINIC operations ?
  - RIRs, Sponsors (NSRC, INTIF, PNUD, etc.) & Members



# AFRINIC activities

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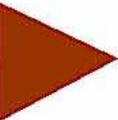
- AFNOG (African Operators Group) - (like APRICOT & NANOG)  
Cape Twon May 2000 - Accra Ghana May 2001
- AC meeting (Face to face & Teleconferences)
  - ASO First general assembly in Budapest
  - AC & APNIC annual meetings in Brisbane
  - AC teleconferences (August, September, October, Dec, etc.)
- Listener/Observer Status at the AC
  - Ant Brooks (ZA), Mouhamet DIOP (SN) and Nii Quaynor (GH)
- Drafts documents
  - Address Policy submitted to AfrinIC BoT for adoption
  - Funding Model also submitted to Afrinic BoT for further discussion
- Meeting of the steering group
  - Africa - Banjul June 2000
  - LA - ICANN meeting



# AFRINIC future activities

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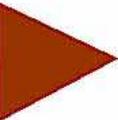
- Registration Services
  - IP allocations
  - IP assignments / approvals
  - AS # assignments
- Reverse DNS management
  - xxx.in-addr.arpa reverse zones
  - secondary for ccTLDs
- AFRINIC database maintenance
  - vital information for operations
  - address space, domains, routes, autonomous systems, person objects



# Initial Funding Model

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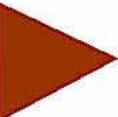
- Membership fee (Formal and informal) AfriNIC;
- Subscription fee for bulk registration services (for ISPs);
- Registration & Maintenance fees
- Support from existing RIRs
  - Membership fees from African members (RIPE & ARIN) ...
  - Support for training (RIPE, ARIN, APNIC)
  - Hosting for the technical staff (RIPE)
- Funds from sponsors (NSRC, INTIF, PNUD, etc.)



# Address Space Procedures - References

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- RFC 2050 for global policy
- RIPE
  - European Internet Registry Policies and Procedures - Document ID « Ripe 185 »
- APNIC
  - Policy for address space management in the Asian Pacific region - APNIC 076
- ARIN
  - Guidelines for Requesting Initial Address Space
    - Guidelines for Requesting Additional IP Address Space



## Working Documents ...

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- Membership agreement
- Charging procedure
- Policy for Allocation & assignment
- Public meeting Policy guidelines
  
- <http://www.afrinic.org>
- <http://www.afnog.org>