



Creating policies that work for you

APNIC 21
Perth, Australia
February 27, 2006



Today's schedule



- | | |
|------------------|---|
| 9 am - 10.30 am | Internet development: Technical infrastructure, education, policy & APNIC |
| 11 am - 12.30 pm | Creating policies that work for you |
| 2 pm - 3.30 pm | Efficient address space management tools |
| 4 pm - 5.30 pm | Managing your "old" address space |

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Creating policies that work for you

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Managing your "old" address space



Presenters

- Save Vocea
 - Policy Development Manager
- Amante Alvaran
 - Training Officer



Maximise address space potential by ...

- Understanding why a knowledge of Internet resource policy is important to your business
- Learning how to participate to ensure your needs are met
- Understanding how easy it is to participate in policy creation



What do we mean by “policy”?

- A set of agreed principles which define Internet Resource management
- Scope
 - Anything related to management of Internet resources
 - eg. reverse-DNS, Whois Database, IPv4 & IPv6 addresses, AS numbers
- Out of scope
 - Mandating certain technical behaviour or ‘policing’ ISP business practices

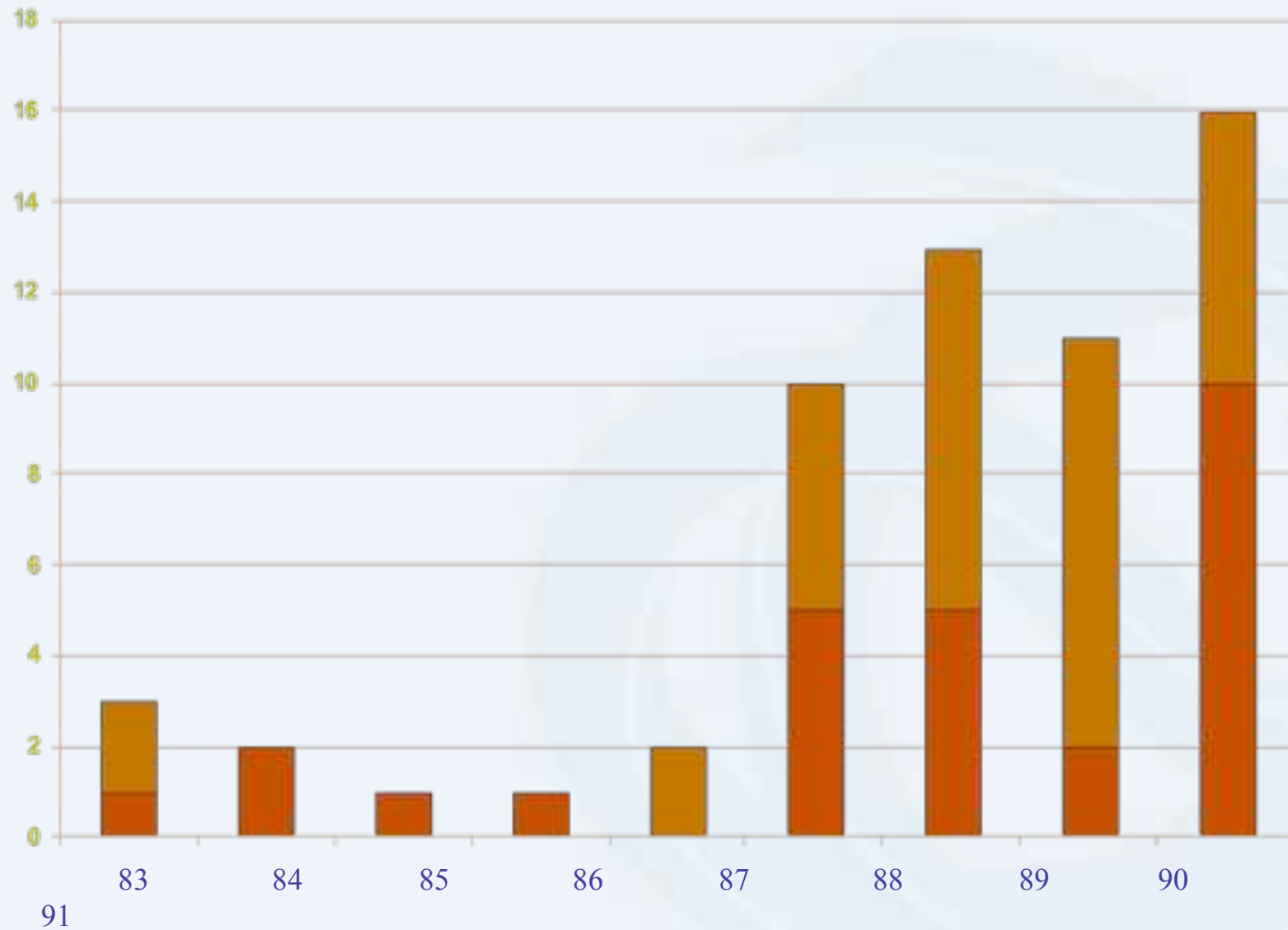
Early years: 1981 – 1992



“The assignment of numbers is also handled by Jon. If you are developing a protocol or application that will require the use of a link, socket, port, protocol, or network number **please contact Jon to receive a number assignment.**” (RFC 790)



Addresses and Routing: '83 – '91



Addresses and Routing: '83 – '91



Why do we need policies?



- Manage and stabilise addressing and routing growth

Conservation

- Efficient use of resources
- Based on demonstrated need

Aggregation

- Limit routing table growth
- Support provider-based routing

Registration

- Ensure uniqueness
- Facilitate trouble shooting

- Answering industry needs

- ISP industry needs access to resources on an equal basis
- Uniqueness, fairness and consistency

Enter the RIRs: 1992



1992:

“...it has become clear that these problems are likely to become critical within the next one to three years.” (RFC1366)

“...it is [now] desirable to consider delegating the registration function to an organization in each of those geographic areas.” (RFC 1338)

Today: 2002 – 2006

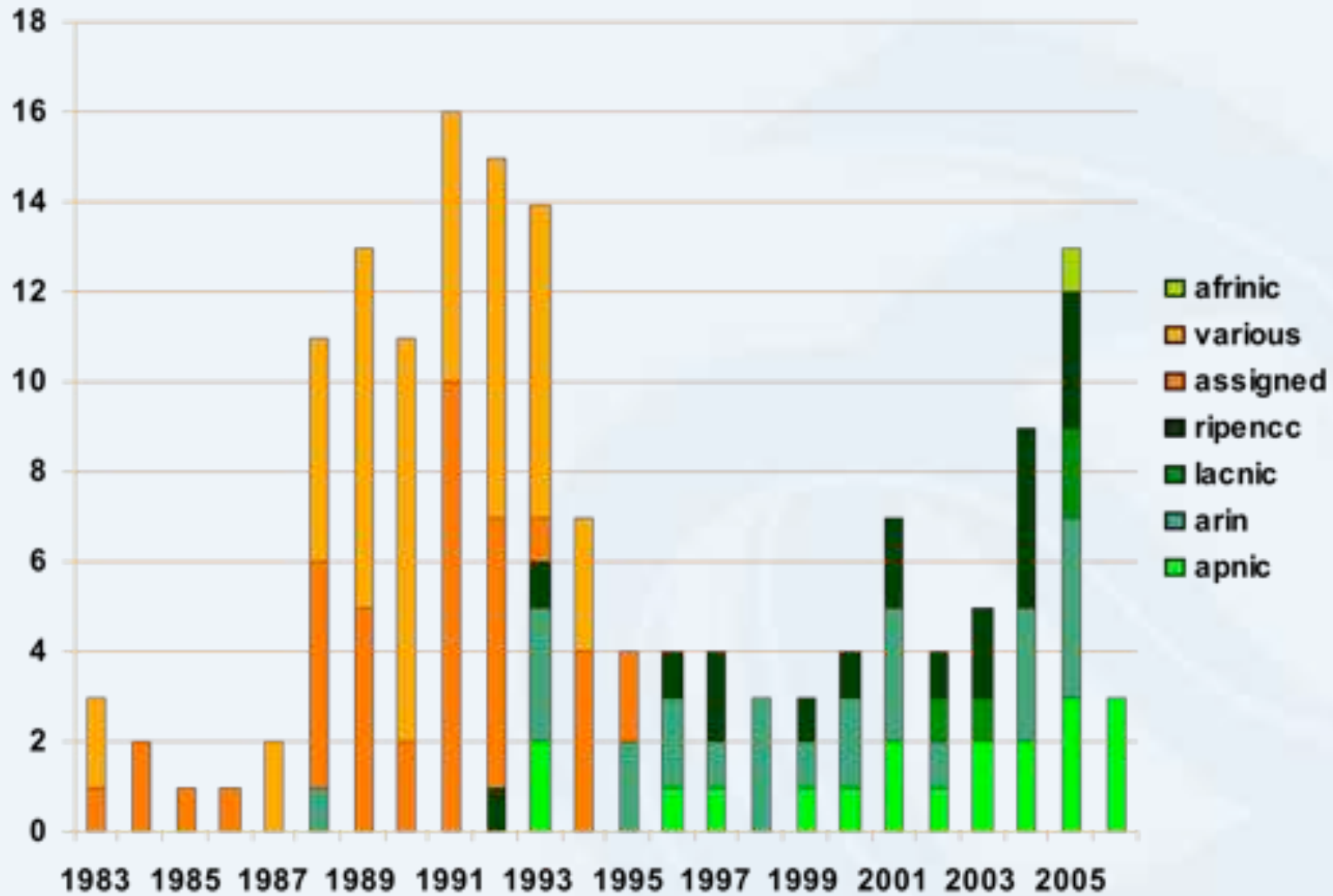


2004

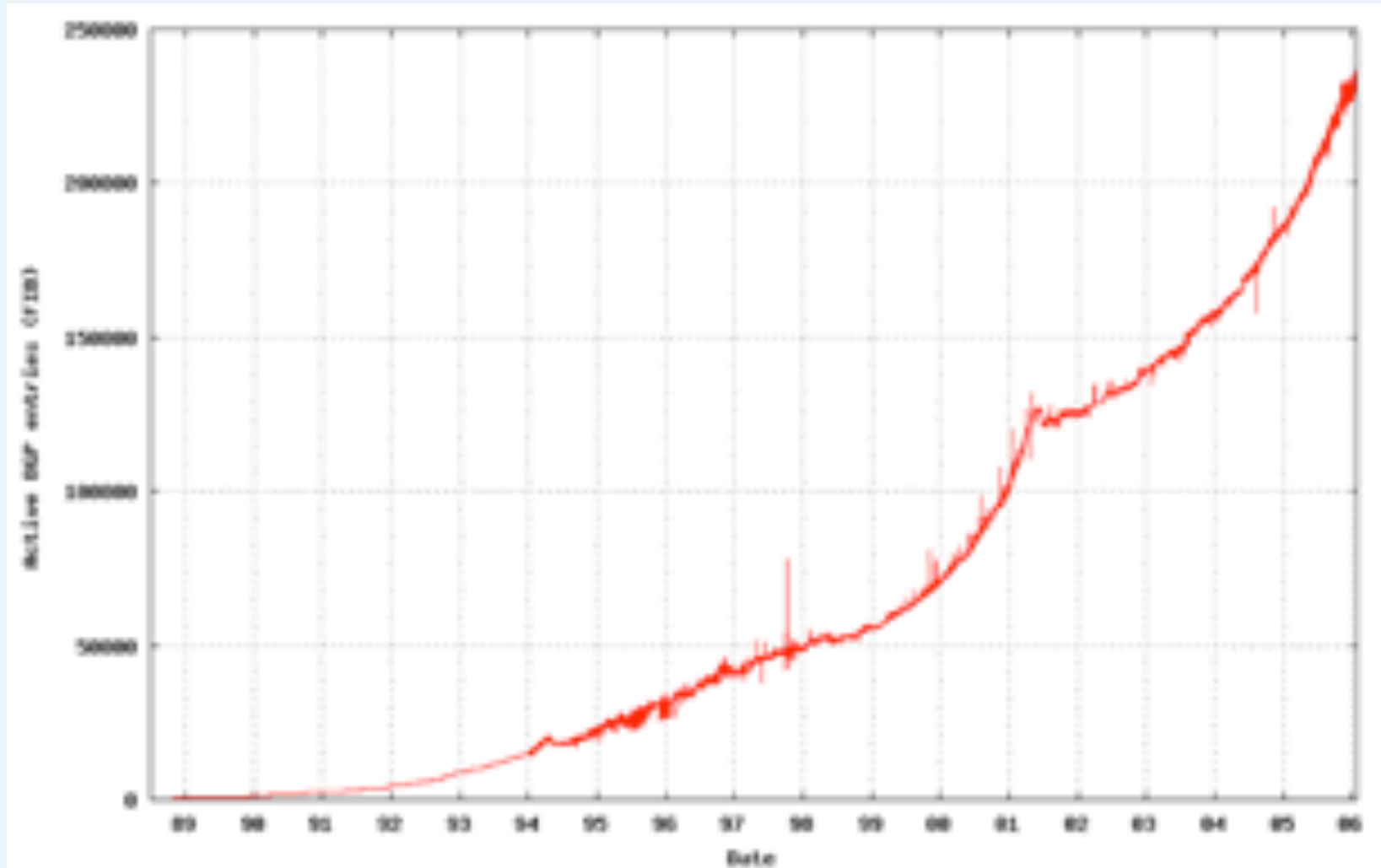
Number Resource Organisation



Address distribution to 2006 - /8

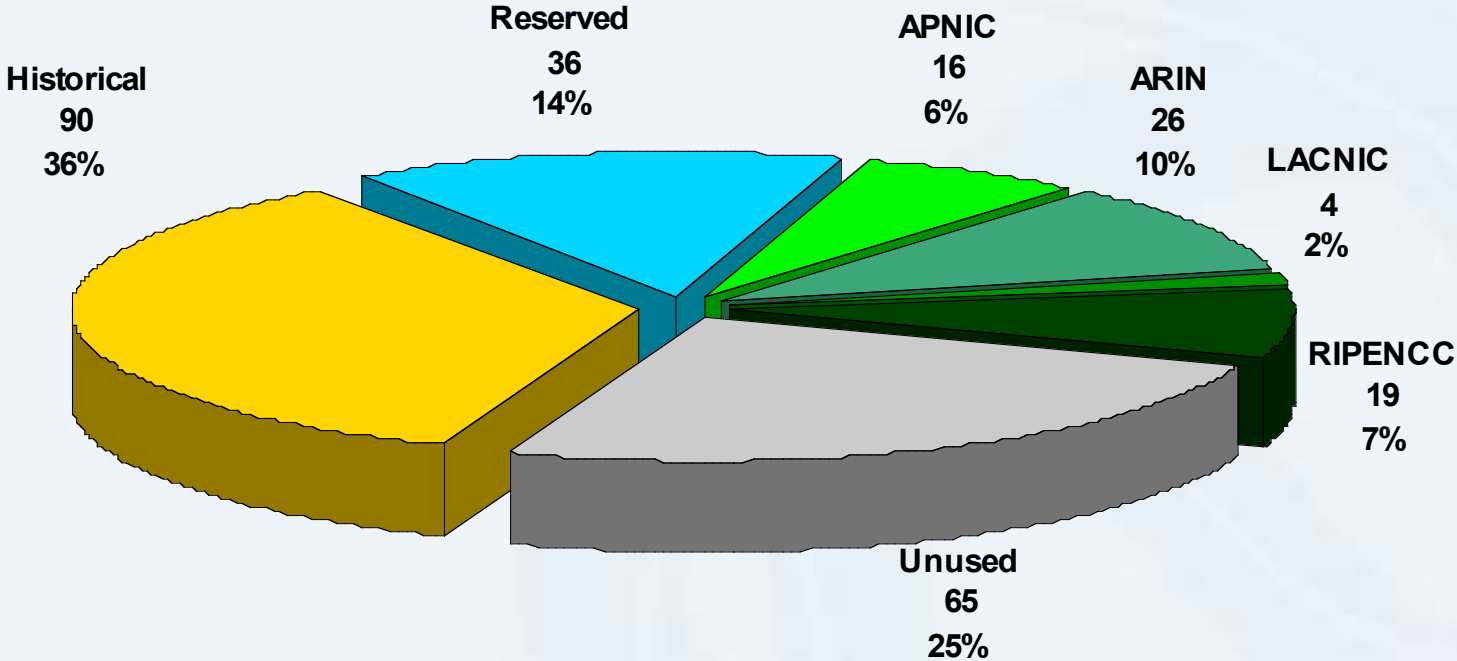


Routing table to 2006



More data in <http://bgp.potaroo.net/>

IPv4 – IANA distribution



Why have an interest in policy?



- Business reasons
 - Policy affect your business operating environment and are constantly changing
 - Ensure your 'needs' are met
- Responsibility as APNIC member
 - Be aware of the current policies for managing address space allocated to you

Discussion

- Who has submitted a policy proposal?
- If not, why not?
 - Time poor, not interested, didn't know you could, not your responsibility to do so?
- Recognise that there are problems
 - APNIC is trying to make things easy with an evolutionary approach
 - eg. RSS mailing lists, and new for this meeting podcasts & audio only stream
 - eLearning for training



Demonstration



- Process of submitting proposal form
 - http://www.apnic.net/cgi-bin/policy_proposal.pl
- Recognise you are at this meeting but may not attend future meetings
 - Ways to stay “informed with minimal effort”
 - Catering to on-demand need
 - RSS mailing list announcements
 - Archives of webcasts, podcasts of sessions

Policy proposal web-form



APNIC online form - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://www.apnic.net/cgi-bin/policy_proposal.pl

Firefox Help Firefox Support Plug-in FAQ

APNIC policy proposal form

This form will help you to structure your policy proposal. After you submit this form, an APNIC staff member will contact you to discuss the detail of your proposal, help you to make any clarifications (if necessary), and help you to send it to the appropriate Special Interest Group (SIG) for public discussion.

You can submit proposals at any time. But please remember that a decision can only be made on a proposal if it is submitted to the SIG mailing list and to the SIG Chair at least four weeks before the start of the Open Policy Meeting.

Your name	<input type="text"/>
Your email address:	<input type="text"/>
Cc email address:	<input type="text"/>
Names of any co-authors:	<input type="text"/>
SIG for discussion: Nominate the SIG you think is most appropriate for discussing this proposal.	<input checked="" type="radio"/> Not sure <input type="radio"/> Database <input type="radio"/> IX <input type="radio"/> IRR <input type="radio"/> Policy <input type="radio"/> DNS operations <input type="radio"/> IPv6 Technical <input type="radio"/> Routing
Title of proposal:	<input type="text"/>
Introduction: A very brief description of your proposal	<input type="text"/>

Done

Ways to participate



The policy development process



Need Discuss Consensus Implement



Elements of the process



WGs: semi formal, volunteer group tasked by a SIG to work on a particular project until completed eg. 'Broadband'

Member Meeting

MM: forum specific to APNIC business eg. fee structure, election of executive council & endorsement of policy decisions

Working Groups

Open Policy Meeting & Mailing Lists

Special Interest Groups

SIGs: Formal groups that discuss broad areas of policy relevant to the APNIC internet community

BOFs: Informal meetings to exchange ideas eg. CA BOF, SPAM, ICONs
Need to hold at least one to form new SIG

Birds of a Feather

Facilitating the process

- Policy development facilitation
 - APNIC secretariat is first contact
 - SIG chairs check suitability
 - Discussion in appropriate mailing list
 - Discussion in upcoming SIG and AMM
 - Decision by consensus

- Want a policy change?
 - Discuss with peers
 - Submit a proposal using the form
 - Don't need to be a member to participate
 - Secretariat happy to assist if needed



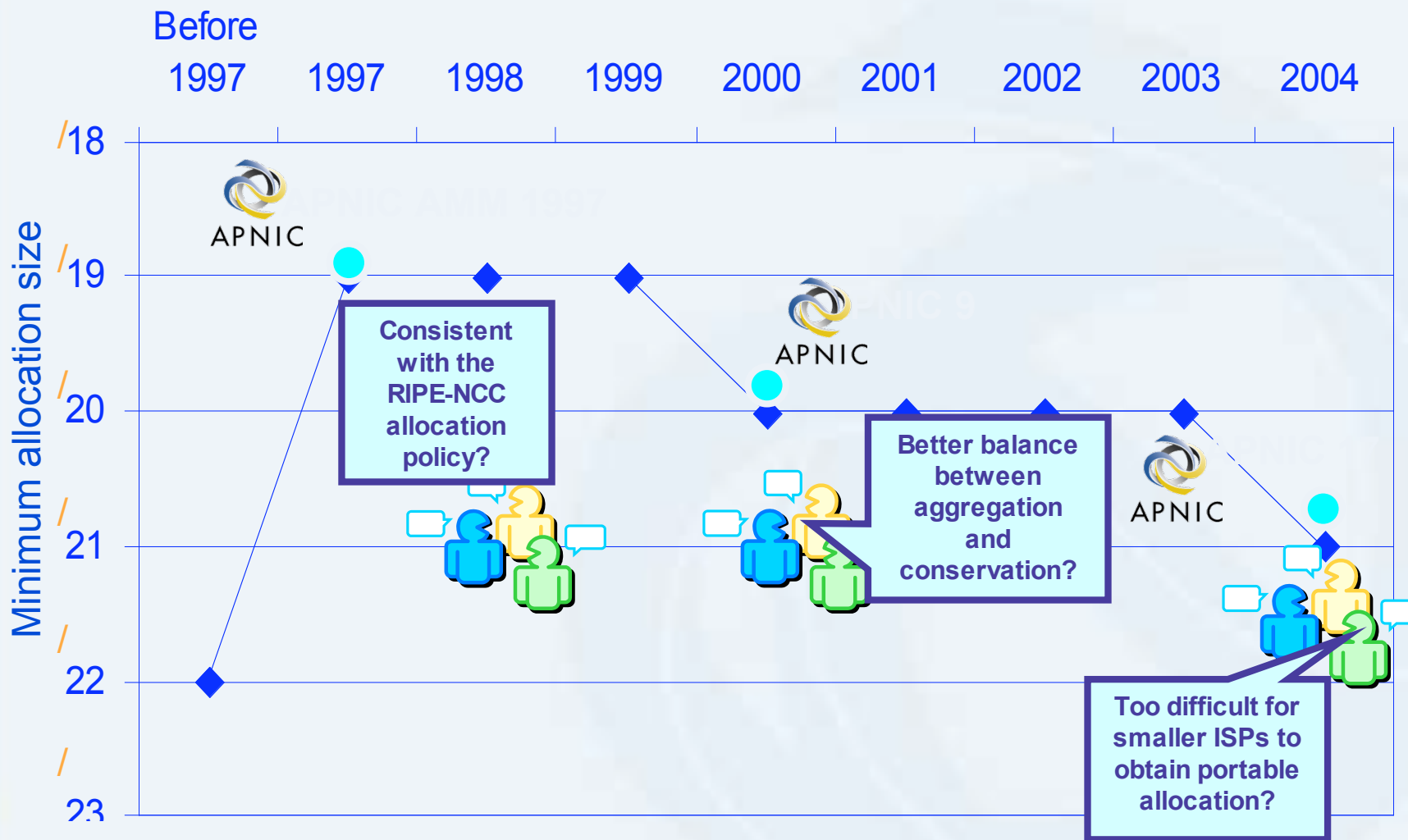


Case studies

Overview

- IPv4 minimum allocation size
- Privacy of address assignments
- Prevent routing of 'dark' address space
- Portable IPv6 address space assignment

Case 1 – IPv4 allocation size





Case 2

- prop-007-v001: Privacy of customer assignment records
 - Discussed in APNIC 16
- Objective
 - Protect ISP customer assignment information
 - Defines private & public information
- Motivation
 - Privacy and legal responsibility
 - Database registration accuracy
- Adopted
 - Provision of hidden attributes within APNIC database for use with inetnum, inet6num and autnum



Case 3

- prop-023-v001: A proposal to prevent the routing of ‘dark’ address space (‘unallocated’)
 - Discussed in APNIC 18
- Objective:
 - APNIC to revoke allocated IP address space to offenders routing un-allocated address space used for illegal or unsavory practices, eg. Spam
- Motivation
 - Curb spammers
- Did not get support

Case 4

- 2006-4: IPv6 direct portable assignments for end sites
 - New proposal in ARIN for upcoming ARIN XVII (April 2006)
- Objective
 - Orgs multihoming in IPv4 to qualify for portable assignment in IPv6
- Motivation
 - Orgs need to multihome in IPv6
 - No real solution yet

Current policy proposals



The screenshot shows the APNIC policy proposals page. At the top, there's a navigation bar with the APNIC logo and the text 'Asia Pacific Network Information Centre'. Below this, a breadcrumb trail reads 'You're here: Home > APNIC documents > APNIC policy proposals'. A search box labeled 'Quick Links' is also present. The main content area is titled 'APNIC policy proposals' and features a section for 'Current proposals'. This section contains a table with two columns: 'Proposal reference' and 'Description'. The table lists several proposals, including those related to IPv6 IRR services, DNS deprecation, and AS number policies. Below the table, there is a paragraph explaining the policy tracking system implemented in June 2003 and a link to 'SIG archives'. A section for 'Previous proposals' includes a link to the 'Policy proposal archive'. The browser's address bar shows the URL 'http://www.apnic.net/docs/policy/proposals/index.html'.

Proposal reference	Description
prop-005-v005	Internet Assigned Numbers Authority (IANA) policy for allocation of IPv6 blocks to Regional Internet Registries
prop-019-v001	A proposal for whois database query
prop-020-v001	Application of the HD ratio to IPv4
prop-025-v001	Proposal on IPv6 IRR service at APNIC
prop-028-v001	Abolishing IPv6 per address fee for NIRs
prop-030-v002	Deprecation of ip6.int reverse DNS service in APNIC
prop-031-v002	Proposal to amend APNIC IPv6 assignment and utilisation requirement policy
prop-032-v001	4-byte AS number policy proposal

What's next?



- This week
 - Attend APNIC 21
 - Discussions are held in SIG sessions and AMM
 - Attend various tutorials
 - Meet and discuss with APNIC staff and hostmaster
- Subscribe to ML if you haven't done so
 - Follow the discussions
 - Contribute to the community, post your thoughts



Summary

- Policies evolve and change continually to reflect changing environment
- Policies are important as they define the way that you use, manage and obtain resources and can impact your business
- We recognise that you have competing priorities
 - We're trying to make it easier for you
- If you have a problem, it's easier to become involved and be heard

Thank you for listening

Questions?



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