# Prop-075
Ensuring efficient use of historical AS numbers

APNIC 28 Policy SIG

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Background

- The 16 bit ASN pool is reaching exhaustion, but many networks are not prepared for 32 bit ASNs.

- APNIC can reclaim unused AS numbers assigned under current policies.

- APNIC can also reclaim unused historical IPv4 address space.

- But there is no equivalent policy for historical AS numbers.
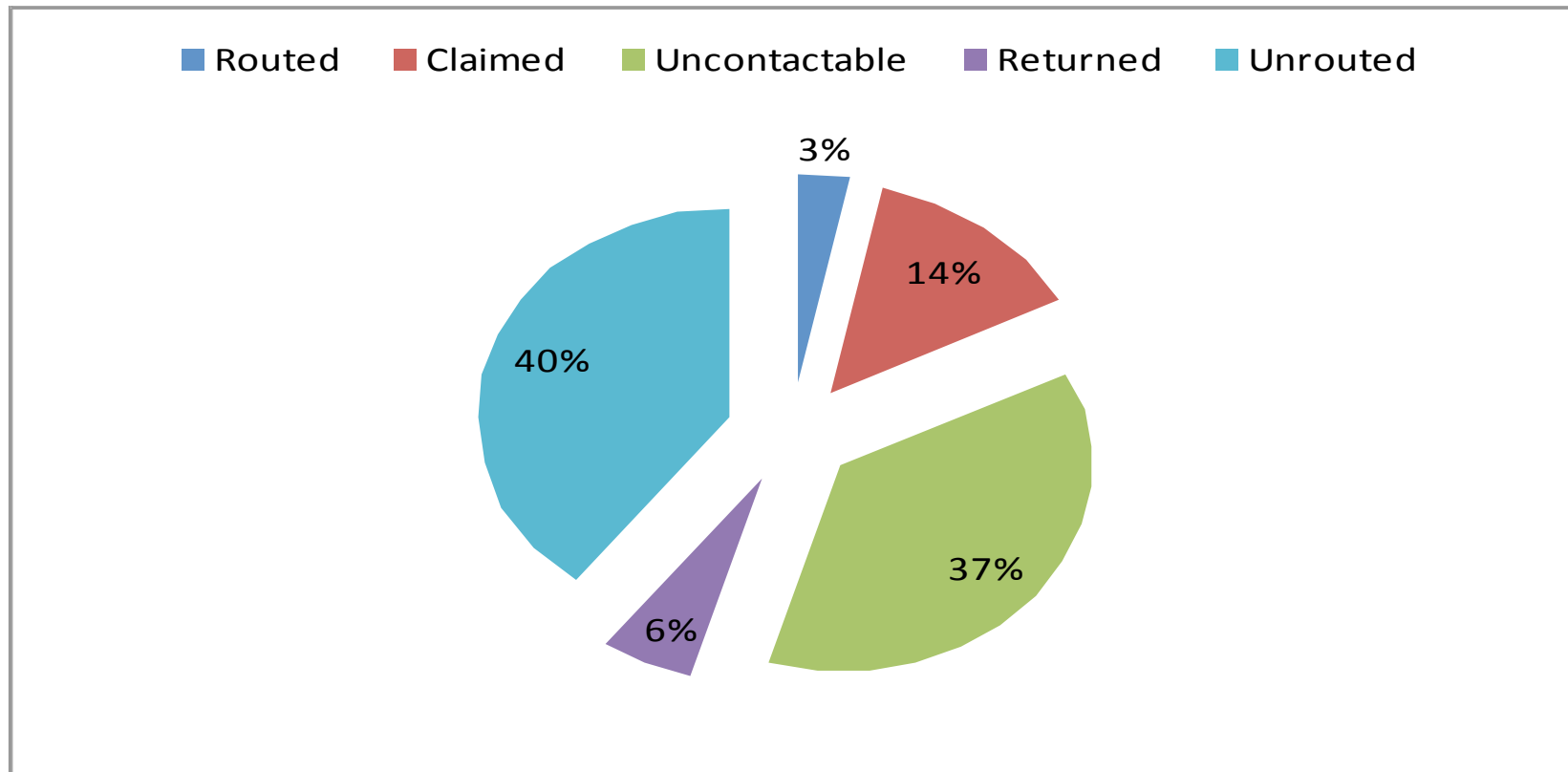
IANA 16 bit ASN allocations

Currect APNIC ASN policy

- http://www.apnic.net/policy/asn-policy#8
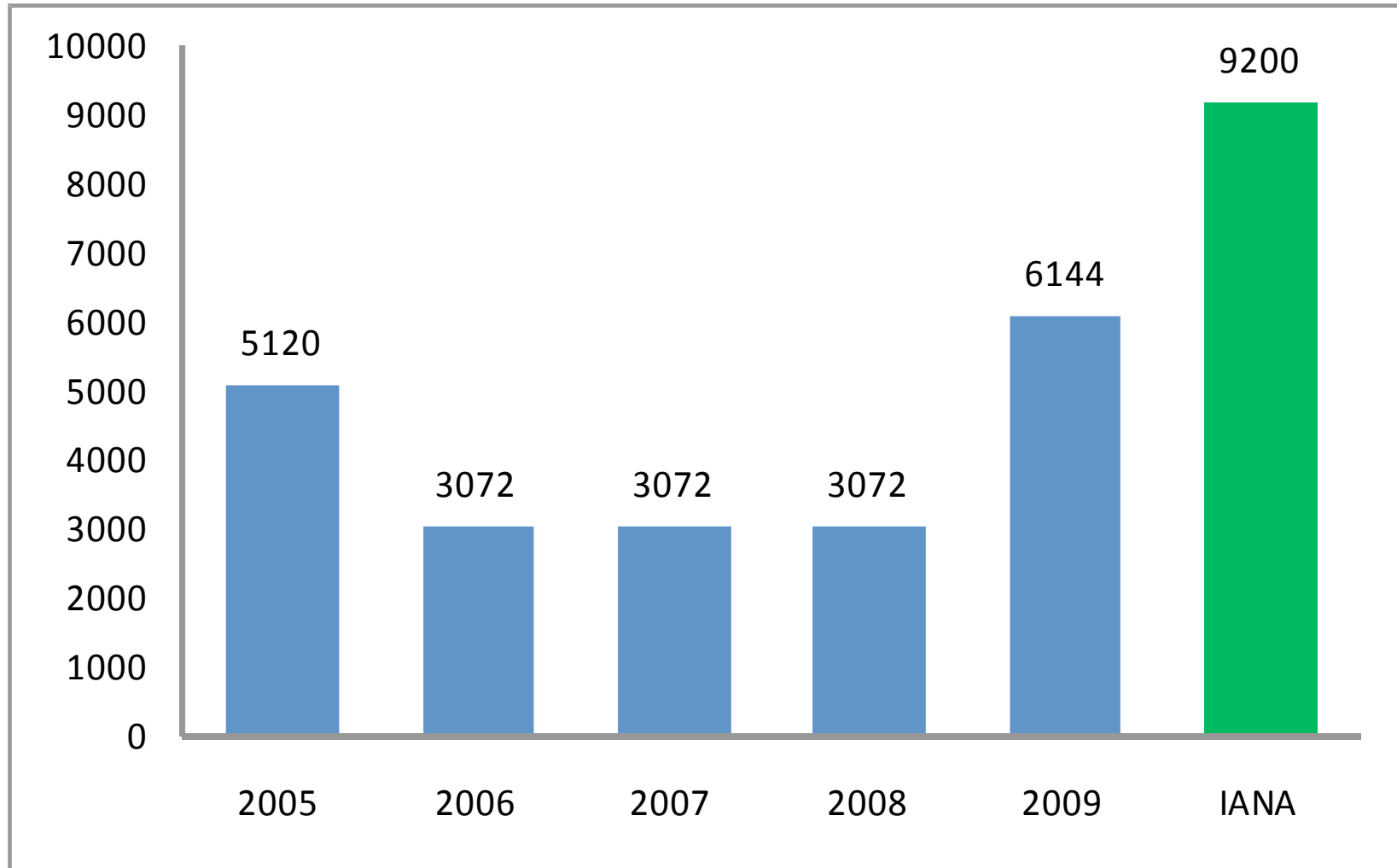
- Return of unused ASNs

- It is a condition of ASN assignment that if an ASN is not being used by the organisation that originally received it, then the ASN should be returned.

Recliam unsued historical IPv4

- http://www.apnic.net/policy/proposals/prop-017

- Identified total 2079 unrouted prefixes

Legend: ■ Routed ■ Claimed ■ Uncontactable ■ Returned ■ Unrouted

3%
14%
40%
37%
6%

Introduction

- This is a policy proposal to recover unused historical AS numbers for eventual reassignment to other APNIC account holders.

Definitions

- Historical AS numbers:
  - Historical resources AS numbers that were registered under early registry policies without formal agreements.

- Unused AS numbers:
  - Any AS number which has not appeared in the global routing tables for some specified period of time, as determined by the Routing Information Service (RIS) or other agreed means.

Details of the proposal

- It is proposed that APNIC recover historical AS numbers that have not been used for a reasonable period of time.

- After a period of time, reclaimed AS numbers can be re-assigned.

- If organization with unused AS numbers wishes to hold on to the AS number, APNIC will not reclaim.

Administrative procedure 1

- The APNIC Secretariat will identify unused historical AS numbers and generate a list.

- The APNIC Secretariat will notify organizations responsible for unused historical AS numbers by all available means and contact the associated NIR if applicable.

Administrative procedure 2

- The AS number will be reclaimed if:
  - The AS number holder agrees to return the AS number. or
  - No response is received after 3 contacts in 3 months.

- The AS number will not be reclaimed if:
  - AS number holder does not agree to return the AS number.
  - No response is received after 3 contacts in 3 months. (option 2)

Administrative procedure 3

- All reclaimed AS numbers will be removed from public APNIC Whois Database and kept in the APNIC unallocated pool for 12 months before redistribution to other networks.

- All reclaimed AS numbers will be removed from public APNIC Whois Database and will be used for redistribution after IANA 2-byte ASN pool run out. (option 2)

Some figures

- APNIC managed 16 bit ASNs – 5780
  - Advertised 3,755
  - Unadvertised 1,717
  - APNIC pool 308

- Unclaimed ERX ASN – 51
- Unclaimed APNIC historical ASN -34

Data as of 17th Aug 2009

Advantages and disadvantages

- ## Advantages
  - This proposal would release unused AS numbers back into the unassigned pool.

- ## Disadvantages
  - This proposal would result in a minor increase in the workload of APNIC hostmasters.

Others

- There is no direct impact to normal APNIC members.
- NIRs are encouraged to help APNIC reclaim unused historical AS numbers within their economies.

- No similar policy exists in other regions.

Questions?

Thank You !