2008-06: Use of Final /8
version 2

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Changes from version 1

- Removed distinction between new and existing LIRs

- Emphasised that LIRs only get one allocation from the /8

- Updated status of similar policy proposals in other RIR regions

Introduction

- This proposal describes how RIPE NCC should handle the final /8 of IPv4 resources it holds once the IANA pool is depleted

History

- Policy 2008-03 requests IANA to allocate one /8 to each RIR
- The goal of 2008-03 is that each RIR community can plan to use its final /8 in a way that suits its needs
  - 2008-06 inspired by the desire for such a plan

Details of the Proposal

1. LIRs receive RIPE NCC's minimum allocation from this /8, regardless of LIR size or needs

   – They will receive this address space once they fulfil the criteria to receive IPv4 addresses according to RIPE NCC's allocation policy in force at the time

   – They can only receive one allocation from this /8

Details of the Proposal

2. A /16 is reserved for future use, as yet unforeseen

   – Internet is a disruptive technology and we cannot predict what might happen; prudent to keep a /16 in reserve, just in case

   – In the event that this /16 remains unused in the time the remaining /8 covered by this policy proposal has been allocated to LIRs, it returns to the pool to be distributed as per item 1.

Arguments For:

- RIPE NCC's final /8 will have a special policy applicable to it
  - This avoids the risk of one or a few organisations consuming the entire block with a well crafted and fully justified resource application

Arguments Against:

- Some organisations may believe and can demonstrate that their IPv4 requirements are larger than RIPE NCC's minimum allocation
  - Final /8 is not intended as a solution to the growth needs of a few organisations, but for assisting with the transition from IPv4 to IPv6
- Some organisations may set up multiple LIR registrations in an effort to get more address space than proposed
  - RIPE NCC must be vigilant regarding these, but the authors accept that it is hard to ensure complete compliance

Questions?

Situation in other RIRs

- APNIC region implemented in February 2009:
  - Proposal-062 reserves a /8 out of APNIC's remaining pool once IANA free pool has run out
    - LIRs receive minimum allocation
    - /16 set aside for unforeseen circumstances
- ARIN region implemented in April 2009:
  - Proposal 2008-5 reserves a /10 out of ARIN's IPv4 pool to facilitate IPv6 transition
    - Allocation sizes range from /24 to /28 depending on need

Situation in other RIRs

- LACNIC region has approved
  - LAC-2008-04 reserves a /12 out of LACNIC's remaining pool once IANA free pool has run out
    - From this /12, new LIRs receive a /22, "critical infrastructure" receives a /24
- AfriNIC region in discussion
  - afpol-v4200901 reserves a /8 out of AfriNIC's remaining pool once the IANA pool has run out
    - From this /8, LIRs receive a /23. /16 set aside for unforeseen circumstances
    - LIRs must also show an IPv6 adoption plan (8 month implementation, verified by AfriNIC)