ETNO: IPv4 Exhaustion

Los Angeles, 28 October 2007

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

Focus: IPv4 and Network Operators

- The IPv4 Exhaustion issue is well understood
- Why use this opportunity to cover it
  - Very important to ETNO members
  - Consensus amongst European Telecom Operators
- Goals
  - Not to rehash the IPv4 Exhaustion model

No Global Consensus

- While many proposals for managing IPv4 exhaustion have emerged
  - There is no global consensus on a single proposal
  - Or, on a combination of approaches
- Obviously, a topic for the this ICANN meeting
  - And upcoming RIR meetings around the world
- However . . .
  - The free pool continues to be used up while we talk

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

ETNO Discussions

- Discussions led by Group of Experts (Numbering, Addressing and Naming Issues Working Group)
- Responded to initial policy proposals to help derive a European position
- IPv4 ETNO Common Position agreed using established procedures – requires 100% agreement by all ETNO members

Do Not Abandon RIR Process

- ETNO thinks a key principle in the remaining time for the IPv4 free pool will be . . .
  - Using the existing Internet community organizations that have bottom-up and inclusive stakeholder based processes
- ETNO does not support the intervention of organizations outside the traditional IP addressing community
- ETNO does not want to see government intervention in the allocation of IP address space
- ETNO supports the process and principles that underlie the five RIRs

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

Existing RIR Processes Work

- Many IPv4 Exhaustion proposals suggest countdowns or set asides
  - These are not needed and are artificial
- RIRs should simply use the allocation processes it always has for the remaining IPv4 pool
  - No need to change
- Set asides only serve to bring the date of free pool exhaustion forward
  - For no good technical reason
- The existing RIR policies for IPv4 allocation are proven, time-tested and appropriate for future allocation

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

No IP Marketplace

- ETNO believes that a marketplace in IP addressing is contrary to the principles of fair play and conservation through which IP addresses have been allocated in the past
- Development of a market for IP addresses should be strongly discouraged
  - Legal, informal and illegal trading of IP addresses should be strongly discouraged
- The RIRs – as well as their membership – should identify strategic actions that would help meet this goal

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

Needs Based Allocations

- The remaining free pool for IPv4 should be allocated based on needs
  - As we have always done
- Geographic/regional set asides must be discouraged
- A global, needs-based approach prevents global organizations from IP address “shopping”
- The availability of allocations from one region – while RIR pools were depleted in other regions – would not be an acceptable situation
  - This invites government intervention
  - Competition issues arise here as well

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

Address Policy

- If new IPv4 policy emerges
  - The existing RIR policy development process should be used
  - No need/desire for a new policy making structure within RIRs
- The ISP and carrier community needs predictability and continuity on this
  - Evolution in IPv4 allocation policy should go through the same, thoughtful process as any other policy change in RIRs

Global Information Sharing

- Accurately informed IP addressing stakeholders are critical
  - The visibility of exhaustion is increasing
    - More extensive of reporting of assignments and allocation is needed
    - Not just to the addressing community, but to media and governments and other parties who will become interested in the next few years
- There is a need for a globally acceptable independent modeling tool
  - Such a tool should be independent of individuals who potentially have agendas to pursue or conflicts of interest
  - This could be a jointly commissioned activity of the RIRs

Legacy Blocks

- ETNO would like to see IANA and ARIN continue to work with legacy owners of /8s
  - Continuing effort to recycle unused addresses
  - Recent success at IANA with net 12
  - Potential to add other /8s to the global pool
- All RIRs, perhaps through the NRO, should continue to emphasize that the “recycling” activity should continue
  - While it may not make an enormous difference in the amount of time we have before exhaustion
  - . . . It does make sense in terms of stewardship of the IPv4 space
  - . . . It does make sense to re-allocate what isn’t really being used

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

ETNO Commitment

- ETNO members believes that these principles should be the basis for any agreement on appropriate measures and actions
- ETNO – as an organization – will work within RIPE to help encourage the adoption of these principles
- ETNO will work as a contributing and positive membership organization to the debate in ETNO noting that it
  - Represents 43 members across 34 countries representing a telecoms market of many billions of euros
  - Uses internal agreement mechanisms to agree the view that is represented at external forums, such as RIPE, for those members who are interested but unable to attend RIPE meetings

etno
EUROPEAN TELECOMMUNICATIONS NETWORK OPERATORS' ASSOCIATION

Conclusion

- ETNO believes that any solution to IPv4 pool exhaustion should be based on these five key principles regarding
  - Use the existing IP addressing community
  - Allocations, now and always, should be needs-based
  - No IP addressing marketplace should be allowed to emerge
  - Policy should be done through existing, predictable process
  - Legacy blocks should be treated separately