2010-4: Rework of IPv6 Allocation Criteria

2010-4: The Problem Statement

- The language in the current IPv6 allocation criteria is awkward and not well understood by many

- Multihomed ISPs will likely use a routing slot regardless of the number of customers they have

- A number of people in the community think the current 200 customer threshold is too high

2010-4: What does it do?

- Replaces 6.5.1 with more easy to understand plain language

- Rearranges 6.5.1 putting initial allocation size first, followed with criteria for making allocations

  – Allows the easy addition of new criteria in the future with out rearranging the policy again

2010-4: What does it do?

- Allows ISP that meet one of the following Criteria to receive a minimum allocation of /32 or larger
  - Having a previous IPv4 allocation
  - Are or immediately becoming IPv6 Multihomed, or;
  - By providing a plan detailing, assignments over 1, 2, and 5 year periods, with at least 50 within 5 years

2010-4: What does it do?

- Makes explicit that IPv6 allocations can be received for services that are not necessarily connected to the Internet
  - In these cases additional information is necessary to justify the allocation
- Such as for:
  - Smart Grids
  - Special Industry networks (Banking, Stock Market, Auto Parts Suppliers, etc…)
  - Overlay networks

2010-4: The Proposal

6.5.1. Initial allocations for ISPs and LIRs

6.5.1.1. Initial allocation size

Organizations that meet at least one of the following criteria are eligible to receive a minimum allocation of /32. Requests for larger allocations, reasonably justified with supporting documentation, will be evaluated based on the number of existing users and the extent of the organization's infrastructure.

2010-4: The Proposal

6.5.1.2. Criteria for initial allocation to ISPs

Organizations may justify an initial allocation for the purpose of assigning addresses to other organizations or customers that it will provide IPv6 Internet connectivity to, with an intent to provide global reachability for the allocation within 12 months, by meeting one of the following additional criteria:

a. Having a previously justified IPv4 ISP allocation from ARIN or one of its predecessor registries, or;

b. Currently being IPv6 Multihomed or immediately becoming IPv6 Multihomed and using an assigned valid global AS number, or;

c. By providing a reasonable plan detailing assignments to other organizations or customers for one, two and five year periods, with a minimum of 50 assignments within 5 years.

2010-4: The Proposal

6.5.1.3. Criteria for initial allocation to other LIRs

Organizations may justify an initial allocation for the purpose of assigning addresses to other organizations or customers that it will provide IPv6 based network connectivity services to, not necessarily Internet connected, by meeting one of the following additional criteria:

a. Having a previously justified IPv4 ISP allocation from ARIN or one of its predecessor registries, or;

b. By providing a reasonable technical justification, indicating why an allocation is necessary, including the intended purposes for the allocation, and describing the network infrastructure the allocation will be used to support. Justification must include a plan detailing assignments to other organizations or customers for one, two and five year periods, with a minimum of 50 assignments within 5 years.

2010-4: Discussion Questions?

- Is 50 the right number of customers?
- Would it be useful to include a /40 option for smaller ISPs?
  - Basically incorporating some ideas from 2010-7

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Questions/Comments?