

Policy Document Review Report

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Documentation review

- As requested by the Policy SIG Chairs and the APNIC EC
- At [APNIC 48](#) and [APNIC 49](#)

Scope

- Review of the APNIC Policy, Policy Development Process (PDP) and SIG Guidelines
- The documents in scope include:
 - APNIC-127-v008, the [APNIC Internet Number Resource Policies](#),
 - APNIC-111-v002, the [Policy development process](#), and
 - The un-numbered [APNIC SIG Guidelines](#).
- APNIC Members and staff operational comments / feedback / concerns
- Comparison with current practice
- Review of community inputs / proposals
 - Since APNIC 33

Brief background

- Current policy document is the result of a merger of several policy documents in 2015
 - Policy environment for Internet number resource distribution in the Asia Pacific
 - Policies for IPv4 address space management in the Asia Pacific region
 - IPv6 address allocation and assignment policy
 - Experimental allocations policy
 - Policies for Autonomous System number management in the Asia Pacific region
 - APNIC transfer, merger, acquisition, and takeover policy
 - Policies for historical Internet resources in the APNIC Whois Database

Policy document - current structure

Part 1: Policy Environment

Scope, Definitions, Goals, Principles, Procedures, Historical resources, Experimental allocations

Part 2: IPv4 Policy

Criteria - initial & subsequent delegations, Transfers

Part 3: IPv6 Policy

Criteria - initial & subsequent allocation & assignment, Transfers

Part 4: ASN Policy

Criteria for delegations, Transfers

Appendix A: HD Ratio



Why?

- Significantly reduced maintenance overhead
- Increased accessibility and ease-of-use
- Removal of duplicate content
- Easier analysis
- Easier to provide a change log

Output of this review

- Clean-up of typos, incorrect links, references and sections
 - For example: “account for at least eighty percent...” and “based on the umber of users...”
- Highlight any observations and/or operational concerns
- Improve document structure for ease of use and analysis
- Help the community to put forward proposals that would result in change to current practice

Observations

- IPv4 and IPv6 policies have different definitions. IPv4 refers to ‘End User’ and IPv6 refers to ‘End-site’. There is only a definition for End-site in the document.
 - “An end site is defined as an end-user (subscriber) who has a business relationship with a service provide...”
 - End-users is an IPv4 term. End-site is the correct IPv6 phrasing.
 - It’s not clear and may be confusing to new resource requestors.
- No clear set of rules to determine which terms require a definition.
 - For example, there is a definition for aut-num object, but not for any other whois object.
 - May be add a reference to the Whois Guide <https://www.apnic.net/manage-ip/using-whois/guide/>

Observations...

- Registration requirements (section 5.3) for each resource type (section 5.3.1, 5.3.2, and 5.3.3)
 - Are the registration requirements for the three resource types so different from each other?
 - Could make it be better by unifying the policies
- Sections 5.6 and 5.6.1 are repetitive
 - Resource request supportive documentation
 - 5.6.1 could be deleted

Observations...

- There are definitions of Usage rate and Utilization.
 - Usage rate applies to IPv4 only, but it doesn't say it. Utilization is for IPv6. This could be made clearer by indicating that Usage rate applies only to IPv4, or just use **utilization** for both IPv4 and IPv6.
- In the Transfers definition (2.12), the use of the word “re-allocation” is potentially misleading as a transfer is not necessarily an allocation/assignment. It is also not a resource taken from the free pool which is the action most commonly associated with the word allocation.
 - **Re-delegated** would be a better word, or **transfer of registration** might be more accurate.
- Separate transfer policies for each resource type. The downside to this is that it is quite repetitive and an overhead to the size of the document.
 - One possible approach is to combine all the transfer policies together (Part 5) instead of a repetitive section for each resource type.

Policy document - proposed structure

Part 1: Policy Environment

Scope, Definitions, Goals, Principles, Procedures, Historical resources, Experimental allocations

Part 2: IPv4 Policy

Criteria - initial & subsequent delegations

Part 3: IPv6 Policy

Criteria - initial & subsequent allocation & assignment

Part 4: ASN Policy

Criteria for delegations

Part 5: Transfer Policy

Criteria, IPv4, IPv6, ASN, Inter-RIR, M&A

Appendix A: HD Ratio



Operational concern - 1

- There is no clarity in the definitions and elsewhere in the document about whether **claimed** Historical resources should be treated as “Current” resources or not.
 - Historical resources are Internet resources registered under early registry policies without formal agreements.
 - Registrations transferred to APNIC as part of the AUNIC to APNIC migration.
 - Registrations transferred as part of the Early Registration Transfer (ERX) project.
 - Historical APNIC resources.
 - Prior to the introduction of APNIC Membership structure.

Operational concern - 2

- Address space – Section 2.2
 - There is confusion about whether Allocated address space can be used for sub-delegating to customers, as well as be assigned in their own network infrastructure.
 - The only direct indication in the policy that LIRs may assign space to themselves for their own infrastructure is in the [definition of an LIR at 2.1.3](#).
 - This is somewhat contradicted by the definition of [Delegated address space at 2.2.1](#), which implies that Assignments are for an organization's own infrastructure and Allocations are for subsequent delegation to customers.

Operational concern - 3

- Recovery of unused historical resources – Section 4.2.1
 - Current policy text says that the Secretariat will “contact networks responsible for historical address space in the APNIC region that has not been globally routed since 1 January 1998” and try to recover them for future delegation. Should the Secretariat continue this practice and contact historical resource holders who have not routed their resources for an extended period of time?
 - The text in [Prop-017](#) proposes that the Secretariat should try and recover un-routed historical space that has not been used for “a reasonable period of time”.
 - Whether this is meant to be an ongoing process is not clear from the proposal itself. However, it does say “After this project is complete, the process of monitoring the “used” status of APNIC address blocks may be operationalised, so that this status information is available for use in cases of membership closure, transfer or dispute.”



Operational concern - 4

- **Assignment window for LIRs – Section 5.2.1**

- The Secretariat rarely receives SORs (second opinion requests) anymore. Is this process obsolete?
 - This policy is implemented through a process called Second Opinion Request (SOR), where a new resource holder must send network information for their customer network and their proposed assignment size for review and approval by APNIC Hostmasters.
 - To help LIRs understand and comply with APNIC policies and the address management goals.
 - For IPv4 the policy is probably obsolete and irrelevant. For IPv6 the policy was recently obsoleted and is no longer active with the implementation of [Prop-033](#). (obsoleted from the policy and moved to IPv6 Guidelines.)

Operational concern - 5

- Experimental allocations policy – Section 5.7
 - Can the Secretariat delegate IPv4 resources from last /8 under the Experimental allocations policy?
 - The policy predates the PDP.
 - The [Experimental Allocations Policy](#) was first published 29 December 2003 as a document [apnic-109-v001](#).
 - There have been no proposed changes to this policy since the introduction of the PDP.

Operational concern - 6

- Providing ASN to customer – Section 12.4
 - Where an LIR has requested an ASN for their customer and the customer ceases to receive service from the LIR or returns the ASN for any reason, can that AS number be the subject of a transfer?
 - This reflects the long-standing policy practice where a resource is delegated for immediate use and if it is no longer needed it should be returned to the issuing registry. As the ASN is no longer being used by the LIRs customer it is no longer being used for the purpose it was assigned and must be returned.
 - Section 12.4, here it explains that assignments to organizations that will provide the ASN to one of its customers are subject to additional terms. These include: “Any ASNs returned to the requesting organization must then be returned to APNIC or the relevant NIR.”
 - However, the above contradicts with Section 13.0 – ASN Transfers
 - “For transfers from an APNIC source, the source entity must be the currently registered holder of the resource, and not be involved in any dispute as to the status of those resources.”

What's next...

- Proposals, proposals, proposals
- Policy hackathon
- Working groups

Thank you!

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