Problem Statement

Current Text (21 June 2024)

The term "Internet Exchange Point" appears in the Number Resource Policy Manual (NRPM) as an entity eligible for special allocations and treatment but is not clearly defined. This proposal seeks to define the term as it relates to ARIN policies.

Policy Statement

2.18 Internet Exchange Point:

An Internet Exchange Point, also known as an Exchange Point, Internet Exchange, IX, IXP or NAP, is a shared, physical switching fabric used by three or more autonomous systems for the exchange of data destined for and between their respective networks.

Timetable for Implementation: Immediate.

Proposed Changes

Add a new section for the definition for IXP

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Action	Date
Proposal	22 April 2024
Draft Policy	21 May 2024
Revision	21 June 2024

Staff and Legal Review (3 October 2024)

Staff Understanding:

This draft policy introduces a new subsection to the Number Resource Policy Manual defining an Internet exchange point. The proposed definition specifies in part that an Internet exchange point must consist of three or more autonomous systems. Section 4.4 Micro-allocation supports this specification by stating that an Internet exchange point requires a minimum of three other participants, which is consistent with the proposed definition.

However, section 6.10.1 Micro-allocations for Critical Infrastructure currently states that Internet exchange point operators require a minimum of only two other participants, which creates a discrepancy. Staff recommends addressing and resolving this discrepancy.

Staff and Legal Review (Cont.)

Implementable as Written?: Yes

Impact on ARIN Registry Operations and Services: None

Legal Review: No material legal issue

Implementation Timeframe Estimate: 3 Months

Implementation Requirements:

- Staff Training

- Updates to public documentation

- Updates to internal procedures and guidelines

Proposal/Draft Policy Text Assessed: 21 June 2024

Draft Policy ARIN-2024-4: Internet Exchange Point Definition

Community Feedback

I think that prescribing a specific transport technology is flawed.

...I agree with others on this. There have been many IXPs which use other layer-2 protocols than Ethernet, and there exist quite a few right now today which use other layer-2 protocols internally, even if they present Ethernet ports to participants. Over-prescriptivity is the bane of good policy.

I agree that it should be a shared segment fabric

Policy Impact

Allows ARIN and the community to communicate effectively when discussing Internet exchange points and requests made for resources pertaining to these entities.

Also impacts Draft policy ARIN 2024-5 - Rewrite of NRPM Section 4.4 Micro-Allocation section. **4.4.1 Internet Exchange Assignments**

Draft Policy ARIN-2024-4: Internet Exchange Point Definition

Questions for the Community

Given the Staff and Legal Review, does the number of participants need to be two or three to qualify as an Internet exchange point?

Should section 6.10.1 Micro-allocations for Critical Infrastructure be corrected to say (minimum of three total), or should the definition of IXP for this proposal be modified to say (...used by two or more autonomous systems...)?