



APNIC Open Address Policy Meeting

Special Interest Group Session

March 2nd, Korea, Seoul



Problem Definition

Under what circumstances should APNIC make Provider-Independent (PI) assignments?



Background

Many requests received for small assignments

- Multi-homed networks, 'essential infrastructure' eg. public exchange points, country code TLDs

Routing table size concerns

- Explosion of routing tables with /24 prefixes
- Response was 'non-member' policy



Motivation

APNIC procedures

- Assign PI to NON-MEM with one-time payment of US\$8,192 (formal)
- More recently, assign PI through existing members without charge to both applicant and member (informal)

Inconsistent across membership

- APNIC needs a clearer policy framework when assigning Provider Independent (PI) addresses



Current Status

Other RIRs

- RIPE NCC
 - Assign PI to end-users only through members
 - End-users must give reasons
 - No minimum assignment size
- ARIN
 - Organisation must be multi-homed and should utilise /21 and demonstrate need for /20
 - Exception: Public IXes can receive /24 but should not be routed on the Internet



Discussion

3 Areas need to be considered:

- Technical
- Administrative
- Financial



Considerations

Technical

- Type of site?
 - Should small assignments available for “essential infrastructure”?
 - If yes, what is “essential infrastructure”?
Root servers, domain registries, RIRs, NIRs, IX'es
- Size of site?
 - How large (hosts) should a site be before a PI assignment can be made?
- Type of connectivity?
 - BGP mandatory criteria?
 - Type of multi-homing relevant?



Considerations

Administrative

- PI via APNIC members not well known
 - No formal relationship or contract between APNIC and end-user
- NIRs may also have different policies- leading to lack of consistency across the region

Financial

- Should PI requestors be APNIC member of some form?
- Is the current charging model for non-mem (US\$8192) adequate?



Summary

- ONLY non-member policy with fee of US\$8,192
- ONLY members submit requests on behalf of their customers (no fee to both members and their customers)
- CONTINUE with the current procedure (use both of the above)
- NEW procedure with a special PI membership category with strictly defined eligibility criteria and fee structure



Recommendations

NEW procedure

- With a special PI category with strictly defined eligibility criteria, fee structure and contract (or lease)

Reasons

- Contract enables management of resources to be formalised
 - eg. registration, transfers, reverse-dns services
 - Resources always subject to current policies
 - Contractual framework allow recovery of unused resources
- Consistency across region