An Update to the IPv4 Guideline

By

IPv4 Guideline Working Group

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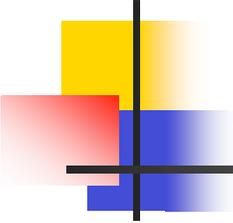
Agenda

- Background information
- Problem
- Targets
- Proposed Update to the guideline
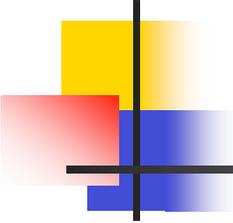
Background

- This proposal is a follow-up to action item "pol-17-007" of APNIC 17 informational proposal, 'Subsequent allocation criteria for DSL and cable services'

- Ipv4 guideline working group opened on august 2004

- WG-ipv4-guide started to review and modify the 'APNIC guidelines for ipv4 allocation and assignment requests' on September 2004

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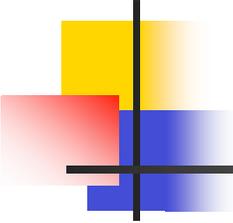
Problem

- The criteria described in the APNIC Guideline takes into account only the number of subscribers, which may not fully reflect the actual need
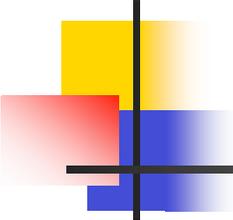
Targets

- To add the support for DSL services
- To add the consideration about IP-based utilization as the criteria of applying the subsequent allocation

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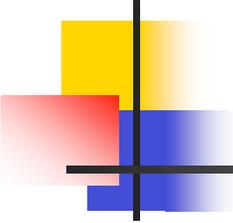
Current Statements

10.2. Criteria for subsequent allocations to cable or DSL services

Organizations seeking subsequent allocations to cable and DSL services must provide the following information:

- headend information specifying the number of CMTS devices planned per headend;
- the projected number of subscribers within 3 months;
- growth rate based on average growth per month over past three months (as an option, the ISP can supply a MRTG to support growth rate evaluation);
- projected number of subscribers within 12 months (if the projection is significantly higher than that predicted by the growth rate, then an additional explanation will be required); and
- Purchase receipts for equipment (if requested by APNIC or the NIR).

Furthermore, if greater than a /22 is used in a cable or xDSL network, then special verification may be required, consisting of detailed information from a headend chosen at random by APNIC or the NIR.
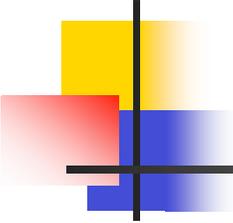
Updated Statements

10.2. Criteria for subsequent allocations to cable or DSL services

Organizations seeking subsequent allocations to cable and DSL services must provide the following information:

- headend information specifying the number of CMTS **or B-RAS** devices planned per headend;

- the projected number of subscribers within 3 months;

- growth rate based on average growth **or IP utilization** per month over past three months (as an option, the ISP can supply a MRTG to support growth rate evaluation);

- projected number of subscribers, **DSL/Cable circuits subscribed or IP addresses consumed by subscribers at peak time** within 12 months (if the projection is significantly higher than that predicted by the growth rate, then an additional explanation will be required); and

- Purchase receipts for equipment (if requested by APNIC or the NIR).

Furthermore, if greater than a /22 is used in a cable or xDSL network, then special verification may be required, consisting of detailed information from a headend chosen at random by APNIC or the NIR.

Summary of Update

- Added the B-RAS as the headend device to be considered in DSL service in item 1.

- Added the IP utilization as an option to be considered on determining the past growth rate and add the RADIUS/DHCP log as a support information in item 3.

- Added the subscribed DSL/Cable circuits and consumed IP utilisation as options of the projection in item4.

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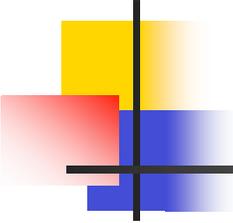
Detail of Update (1)

- Added the B-RAS as the headend device to be considered in DSL service

- Rationale:
  - More accurate term for the xDSL service

- Result:
  - "headend information specifying the number of CMTS or B-RAS devices planned per headend"
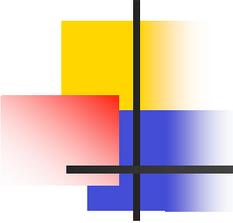
Detail of Update (2)

- Added the IP utilization as an option to be considered on determining the past growth rate and add the RADIUS/DHCP log as an support information

- Rationale:
  - More flexible option to address the LIR needs

- Result:
  - "growth rate based on average growth or IP utilization per month over past three months (as an option, the ISP can supply a MRTG or RADIUS/DHCP server log(for example) to support growth rate evaluation)"
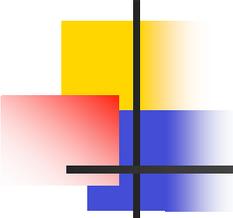
Detail of Update (3)

- Adding the subscribed DSL/Cable circuits and consumed IP utilization as options of the projection

- Rationale:
  - More flexible option to address the LIR needs

- Result:
  - projected number of subscribers, DSL/Cable circuits subscribed or IP addresses consumed by subscribers at peak time within 12 months (if the projection is significantly higher than that predicted by the growth rate or IP utilisation, then an additional explanation will be required)
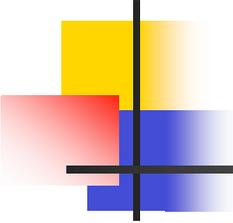
Conclusion

- Address space should be allocated based on the real needs of LIRs, which in turn can be justified by variety of supporting information

- This revision provides more flexible criteria and justification than the old one

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Thanks !

Any Question?
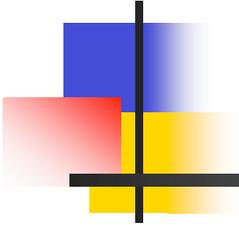
Appendix
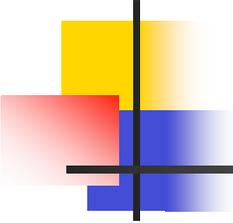
Other Opinions

- **Suggestions from Tim Jones of APNIC**
  - expand the projection period from "3 months" to "6 months" in item 2
  - ISP should fill out the following form to provide information

```
<example>
Headend |Homes | Device |Capacity|Current|IP |Device|G-rate/
        passed                   users       added  month
-------------------------------------------------------------
Brisbane 15000  Motorola   1000     750  800    1    1254
```

- **These suggestions didn't reach consensus and are still open to discuss in the working group**

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