



ARIN XXVI

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Policy Experience Report

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Purpose

- Review existing policies
 - Ambiguous text/Inconsistencies/Gaps/Effectiveness
- Identify areas where new or modified policy may be needed
 - Operational experience
 - Customer feedback
- Provide feedback to community
- Make recommendations

Policy Reviewed

- **NRPM 10.3 IANA Policy for Allocation of ASN Blocks to RIRs (2-byte and 4-byte ASNs)**

IANA Policy for Allocation of ASN Blocks to RIRs (NRPM 10.3)

1. *Allocation Principles*

IANA allocates ASNs to RIRs in blocks of 1024 ASNs. In this document the term "ASN block" refers to a set of 1024 ASNs. Until 31 December 2009, allocations of 2-byte only and 4-byte only ASN blocks will be made separately and independent of each other.

This means until 31 December 2010, RIRs can receive two separate ASN blocks, one for 2-byte only ASNs and one for 4-byte only ASNs from the IANA under this policy. After this date, IANA and the RIRs will cease to make any distinction between 2-byte only and 4-byte only ASNs, and will operate ASN allocations from an undifferentiated 4-byte ASN allocation pool.*

***Recently ratified global policy changes date from Dec 31, 2009 to Dec 31, 2010.**

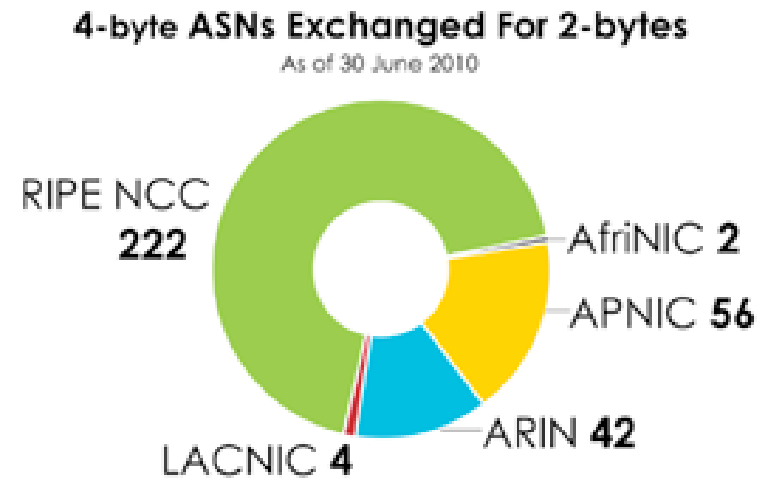
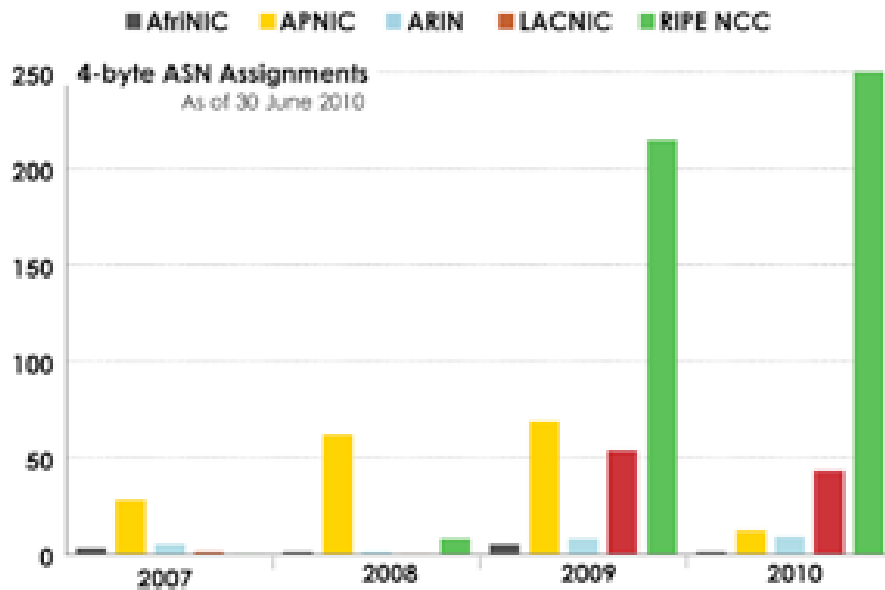
Current Practice

- **ARIN assigns lowest numbers first thus ensuring that the 2-bytes are issued first**
 - Customer has option to choose 2-byte or 4-byte
 - Staff ensures customer really wants 4-byte ASN before issuing
 - Will exchange 4-byte ASN when asked

4-byte ASN Stats

- **Since policy inception in 2007:**
 - 448 requests for 4-byte ASNs
 - 379 changed request to 2-byte
 - 69 4-byte ASNs issued
 - 42 exchanged for 2-byte ASNs
 - 27 4-byte ASNs issued as of today
- **Typical reason for exchange:**
“Upstream said their router wouldn’t support 4-byte ASN”

Global 4-byte ASN Stats



Current Situation

- Many 4-byte ASNs still being returned for 2-byte ASNs due to lack of router support
- The global pool of 2-byte ASNs is almost depleted: only 8 blocks of 2-byte ASNs remain at IANA
- Network managers and router vendors must ensure that their networks and products are compatible with 4-byte ASNs

