

# Draft Proposal 2010-10

## Global Policy for IPv4 Allocations by the IANA Post Exhaustion

ARIN XXVI  
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# Housekeeping

## Definitions

- ICANN (IANA)
- Legacy address space
- RFC 2050
- Needs basis
- ASO AC/NRO NC

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# Problem Statement

- V4 Addresses could be stranded at the IANA post depletion
- Current allocation process ends at N=5
- Stranding may prevent the return of space to IANA

# Global Policy Proposal

- Provides for the IANA to allocate v4 addresses post depletion
- Defined eligibility criteria
- Published distribution method
- Public reporting
- Maintain the values of RFC 2050

# Why not just adopt 2009-06?

- Transferring addresses without need is a roadblock to global consensus
- Mandatory return is a roadblock to global consensus

# Regional Feedback

RIR	2009-06	2010-10	ACTION
AFRINIC	<ul style="list-style-type: none"> <li>•Consensus</li> </ul>	<ul style="list-style-type: none"> <li>•Support</li> </ul>	None required
APNIC	<ul style="list-style-type: none"> <li>•Consensus</li> </ul>	<ul style="list-style-type: none"> <li>•Needed</li> <li>•Not Needed</li> <li>•Distribution Broke</li> <li>•CIDR language</li> <li>•Transfer restriction = meddling in local policy</li> </ul>	<ul style="list-style-type: none"> <li>•Updated distribution mechanism to insure fairness</li> <li>•Updated CIDR language</li> <li>•Transfer language maintained, level setting</li> </ul>
ARIN	<ul style="list-style-type: none"> <li>•Non needs based transfer at an RIR unacceptable</li> <li>•Consensus without mandatory return</li> <li>•Prevents global consensus</li> </ul>	<ul style="list-style-type: none"> <li>•Needed</li> <li>•Not Needed</li> <li>•APNIC feedback repeated</li> </ul>	<ul style="list-style-type: none"> <li>•Updated proposal submitted with respect to APNIC and RIPE feedback</li> </ul>
LACNIC	<ul style="list-style-type: none"> <li>•Consensus</li> </ul>	<ul style="list-style-type: none"> <li>•No feedback</li> </ul>	TBD
RIPE	<ul style="list-style-type: none"> <li>•Consensus</li> </ul>	<ul style="list-style-type: none"> <li>•Needs to be discussed</li> <li>•Not Needed</li> <li>•Distribution broken</li> <li>•CIDR language</li> </ul>	<ul style="list-style-type: none"> <li>•Updated distribution mechanism to insure fairness</li> </ul>

# 2010-10

## How does it work?

- If v4 addresses are returned to the IANA
  - Placed in a pool for redistribution
  - Allocated to eligible RIR's
  - Equal sized allocations to eligible RIR's
  - Non-Transferable
  - Open
  - Transparent

# Comparing like-proposals

## 2009-06

- Allow IANA to re-allocate returned addresses
- Available addresses evenly split between RIR's
- Allows for new RIR's to obtain v4 addresses
- Mandatory returns

## 2010-10

- Allow IANA to re-allocate returned addresses
- Available addresses evenly split between RIR's with need
- Inter and Intra RIR transfer policy hook
- Provides total /10 reservation exception
- No mandatory returns



# Why Mandatory Return Fails

- Threat conditions are rapidly evolving
- An RIR could abandon needs based allocations at any time without a codified agreement
- Unforeseen circumstances could evolve in any region and global policy is too slow to react and leaving to chance is a large risk
- A redistribution of address space should not result in less stewardship; roadblock

# Removing Roadblocks

- RIR's have returned address space previously
- No reason to believe that it won't happen again if roadblocks are removed
- Lack of a policy may prevent further returns

# Why Transfer of Space Fails

- Needs basis system is fair until broken
- Sending space to any RIR that has significant dis-similar standards is inequitable
- Any RIR could abandon needs based allocations at any time without a codified agreement
- Can not reach consensus in all RIR regions

# Why a Transfer Hook?

- Transfer hooked into proposal
  - Allows RIR communities to develop better transfer requirements
  - Thought it separated the proposal from the politics
  - Will reach global consensus with transfer-ability
- How does it work?
  - RIR communities come up with a proposal
    - Global or Globally Coordinated
    - Two sentences or two hundred
    - RIR communities retain the power to decide

# Summary

- Conceptually the same as 2009-6
- Removes the transfer and mandatory return issues that are unable to reach consensus globally
- Allows two control mechanisms for RIR communities to address allocation size and transfer
- Insures that if there is need and there are v4 addresses at the IANA that they will be distributed
- Removes roadblocks with respect to the return of addresses to the IANA