

~~ARIN~~

@NANOG<sup>59</sup>

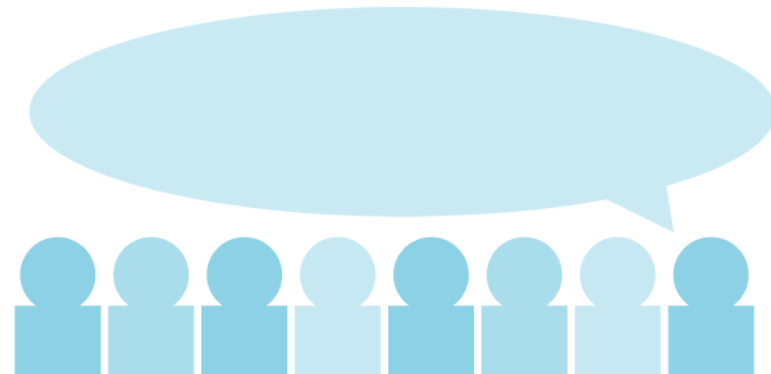


PUBLIC POLICY

CONSULTATION

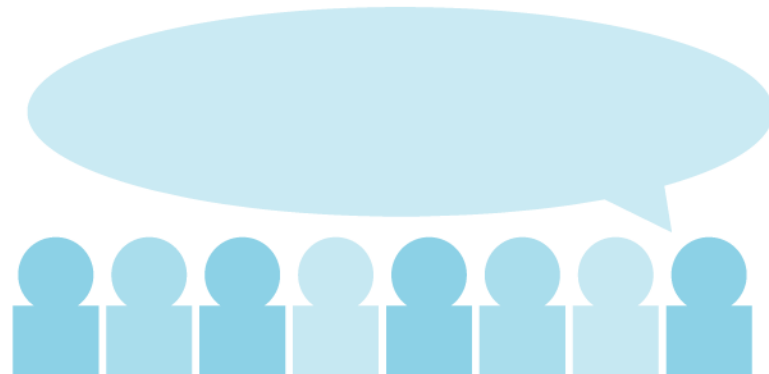
# Public Policy Consultation

- ***An open public discussion of Internet number resource policy held by ARIN facilitating in-person and remote participation.***
  - ***May be held at ARIN's Public Policy Meetings and at other forums as approved by the ARIN Board of Trustees.***



# Agenda

- **Update on AC Activities**
- **Recommended Draft Policy ARIN-2013-4: RIR Principles**
- **Draft Policy ARIN-2013-6: Allocation of IPv4 and IPv6 Address Space to Out-of-region Requestors**
- **Draft Policy ARIN-2013-7: Merge IPv4 ISP and End-User Requirements**



# Welcome Remote Participants!

[https://www.arin.net/ppc\\_nanog59/](https://www.arin.net/ppc_nanog59/)

**Webcast**

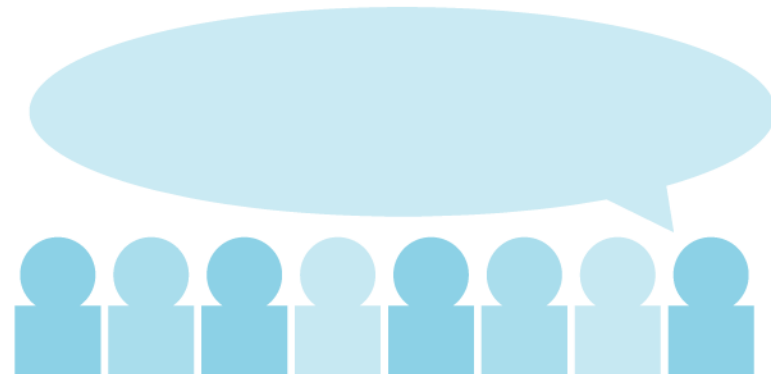
**Live Transcript**

**Downloadable  
meeting materials**

**Chat rooms**

- On-record  
Virtual microphone

- Hands-up  
Show of hands



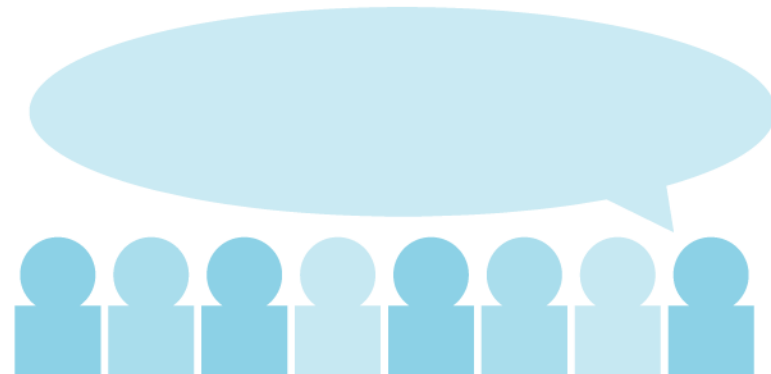
## Rules & Reminders

- **The Chair moderates discussions of draft policies so that all can speak and all can be heard.**
- **Please clearly state your name and affiliation each time you are recognized at the microphone.**
- **Please comply with the rules and courtesies outlined in the Discussion Guide.**



## At the Head Table...

- **Paul Andersen, *Vice Chair and Treasurer***
- **John Curran, *President & CEO***
- **Chris Grundemann, *AC***
- **David Farmer, *AC***
- **Scott Leibrand, *AC***
- **John Sweeting, *AC Chair***



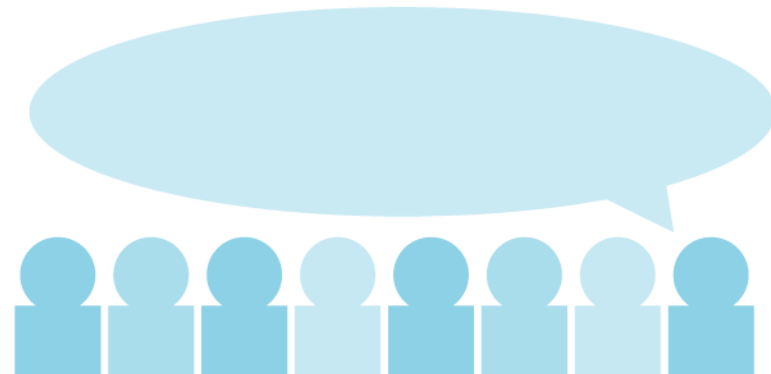


# Update on Advisory Council Activities

John Sweeting, AC Chair

# Current Proposals & Draft Policies

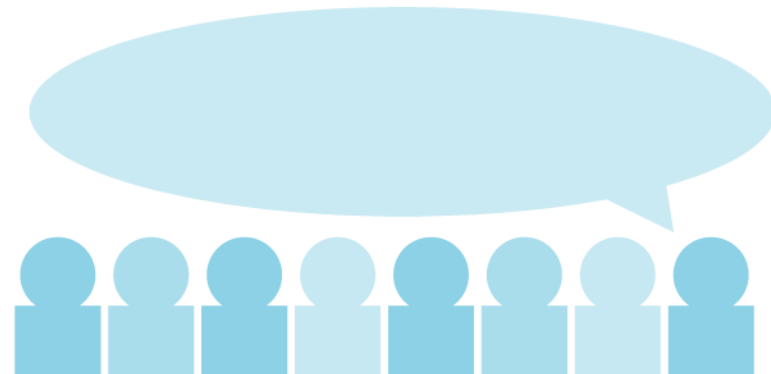
- **No proposals on docket at this time**
- **3 Draft Policies**
  - **AC needs your feedback to help us determine what to do with these**
    - **Are they fair, technically sound and supported by you?**



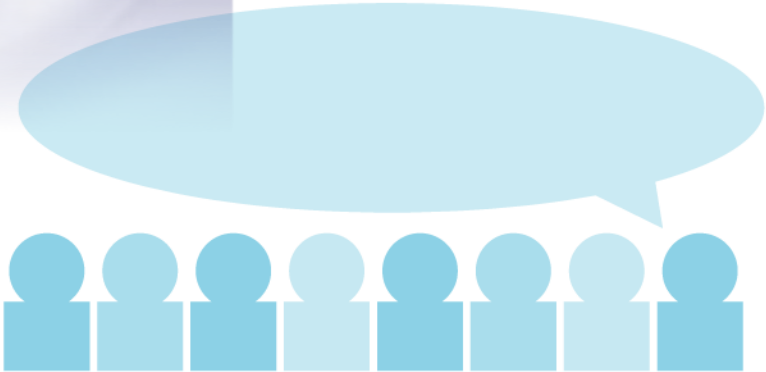


## AC meeting on Friday

- Recommended Draft Policy ARIN-2013-4: RIR Principles
  - **Can go to last call**
- Draft Policy ARIN-2013-6: Allocation of IPv4 and IPv6 Address Space to Out-of-region Requestors
  - **Work in progress**
- Draft Policy ARIN-2013-7: Merge IPv4 ISP and End-User Requirements
  - **Work in progress**



# PUBLIC POLICY CONSULTATION





**Recommended Draft Policy**

**2013-4**

**RIR Principles**

# 2013-4 - History

1. **Origin: ARIN-prop-187 (April 2013)**
2. **AC Shepherds: Chris Grundemann, Cathy Aronson, and Owen DeLong**
3. **Accepted as Draft Policy – May**
4. **Presented – ARIN PPC at NANOG 58 (June)**
5. **Revised in July and August**
6. **Staff assessment - September**
7. **AC recommended adoption – September**
8. **Recommended Draft Policy online & in Discussion Guide**

[https://www.arin.net/policy/proposals/2013\\_4.html](https://www.arin.net/policy/proposals/2013_4.html)

# 2013-4 – ARIN Staff Summary

- **Adds text to the NRPM which codifies the guiding principles of the registry system as registration, conservation, routability, and stewardship.**

# 2013-4 – Status at other RIRs

- **New similar proposal at LACNIC**
  - LAC-2013-02 Principles Governing the Distribution of Number Resources
  - Purpose: “To group the principles governing the distribution of Internet number resources in a single, initial paragraph.”
  - <http://www.lacnic.net/documents/10834/393498/lac-2013-02-EN.pdf>

# 2013-4 – Staff Assessment

## Staff Comments: Issues/Concerns?

- Staff notes that the proposal does not appear to change any existing processes or procedures.
- Inclusion into the policy manual will make it more clear to the community the principles under which ARIN has operated.
- Staff notes that registration, conservation, and routability already exist in the NRPM, the term stewardship would be new.
- Note that the ARIN PDP contains the following: "4. Principles of Internet Number Resource Policy" Internet number resource policy must satisfy three important principles, specifically: 1) enabling fair and impartial number resource administration, 2) technically sound (providing for uniqueness and usability of number resources), and 3) supported by the community." Furthermore RFC 7020 refers to "1) Allocation Pool Management, 2) Hierarchical Allocation, and 3) Registration Accuracy".

## Resource Impact: Minimal (3 months)

- Updated guidelines and staff training

# 2013-4 – Legal Assessment

- **The text of the policy does not create a material legal issue for ARIN. Any effort like this to accurately incorporate in writing the concepts that animate ARIN's activity is a positive development.**



# 2013-4 – PPML Discussion

- **No comments since being recommended for adoption**
- Earlier Draft Policy discussion included:
  - “...all three previous principles must be balanced with one another, and stewardship is the principle which informs that balancing act...”
  - “Don't call it "stewardship." Call it what you just called it: Balance. Better yet, crib from NRPM 6.3.8 and tell us how to weigh the three principles in order to achieve balance.”
  - “Is this intended to be a 'global policy'”?



**Recommended Draft Policy**

**2013-4**

**RIR Principles**

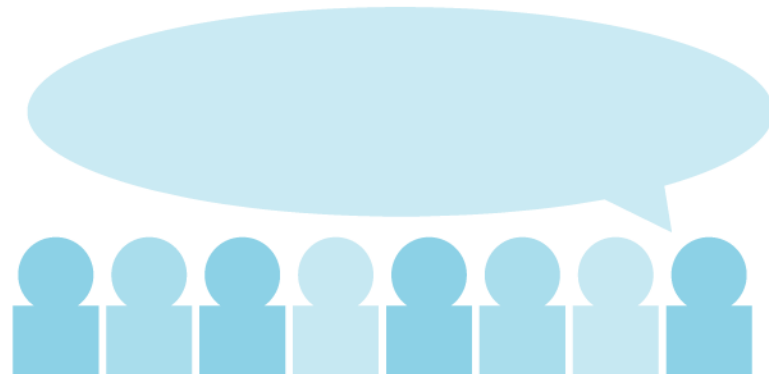
## ARIN-2013-4

- **What:** A clear definition of the common principles and goals which guide our community
- **Where:** In the ARIN NRPM
  - **Owned by the community**
  - **Established process for change**
- **Why:** Clarity and Community Control
  - **Cleanup of RFC2050 has deprecated the text**
  - **Cut and paste of RFC2050 text resulted in issues**
    - Some practices have been over taken by events
    - Lack of clarity



## RIR Principles

- Registration
- Conservation
- Routability
- Stewardship



# Registration and Routability

- **Registration:**
  - Ensuring uniqueness of the number resource, and accurate documentation of who is using it
  - Wide spread agreement this is the most critical aspect of stewardship
  - Moved to the first principle in the list
- **Routability:**
  - The ability to have a routing system that can continue to scale.
  - Wide spread agreement that we need to consider the future scalability of the Internet system



# Conservation Defined

- Dictionary.com:
  - **prevention of injury, decay, waste, or loss**
  - **the careful utilization of a natural resource in order to prevent depletion**
- Science Dictionary:
  - **The protection, preservation, management, or restoration of natural environments and the ecological communities that inhabit them. Conservation is generally held to include the management of human use of natural resources for current public benefit and sustainable social and economic utilization.**



# Sustainability Defined

- Sustainability:
  - the ability to be sustained, supported, upheld, or confirmed
  - Environmental Science. the quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance: The committee is developing sustainability standards for products that use energy.
- Sustainable:
  - capable of being supported or upheld, as by having its weight borne from below
  - able to be maintained or kept going, as an action or process: a sustainable negotiation between the two countries.



# Conservation vs. Sustainability

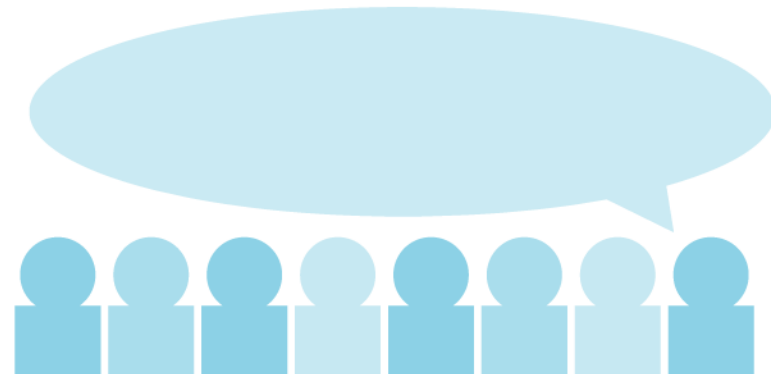
- Objection:
  - ***“Conservation only makes sense when ARIN is giving out a virtually free resource from a common pool”***
  - ***“Post ARIN depletion we are talking about sustainability which means getting resources to people who need them”***
- Response:
  - **Sustainability is a property of the resource**
  - **Conservation is the act of providing sustainability**
  - **We are not conserving only the free pool**
    - Free pool actually buffer against abuse
  - **IP addresses are a public good**
    - Stewardship means protection, preservation, and management of the public good – AKA: Conservation.





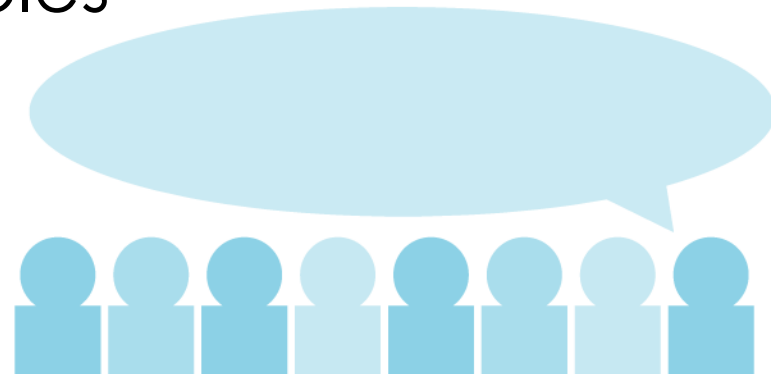
# Stewardship Defined

- Dictionary.com:
  - **the responsible overseeing and protection of something considered worth caring for and preserving: New regulatory changes will result in better stewardship of lands that are crucial for open space and wildlife habitat.**



## Stewardship in 2013-4

- Overarching principle
- Requires and allows balancing of other three principles
  - **Balance different for each resource type**
- How-to balance all principles in each section is what remainder of NRPM is for – not a goal of these principles



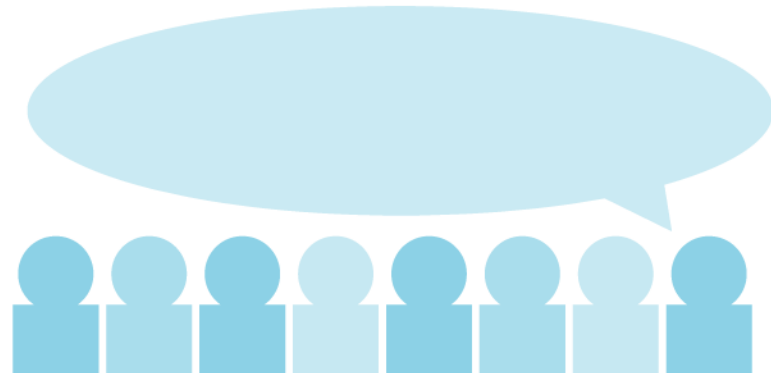
# Changing Principles?

- **Not** creating new principles
  - **Putting principles in a place that can be owned and managed by the community**
  - **Putting the principles in a place that can be easily referenced**
  - **Per staff assessment, does not change ARIN practices**
- If the principles need to be changed, lets first agree on the current principles as they are, and then work from there to change them



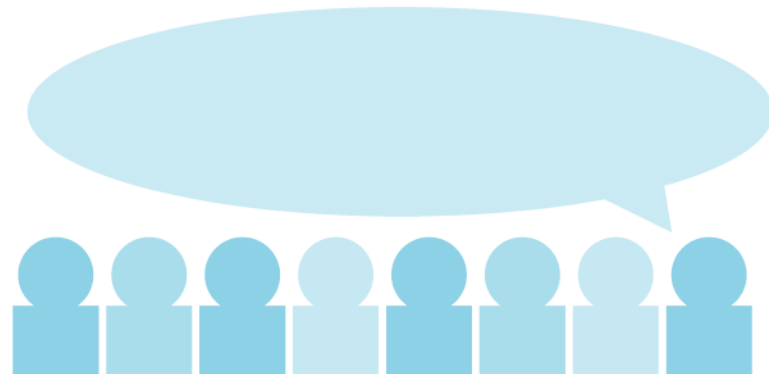
# Proposed Changes

Minor changes proposed to be made after this meeting.



## Section Title

- Principles and Goals of the **Internet Registry System**
- Principles and Goals of the **American Registry for Internet Numbers (ARIN)**



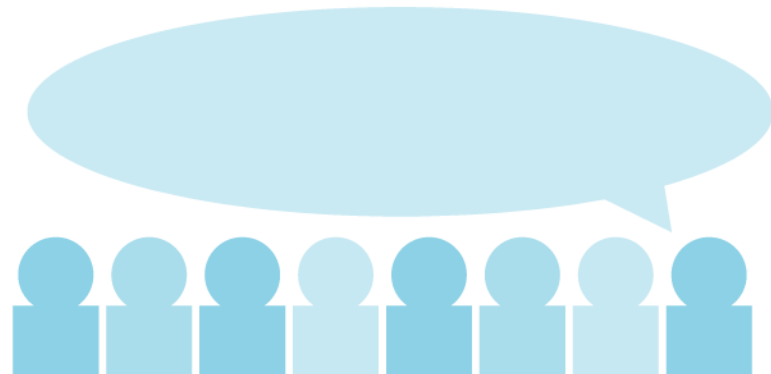
# Stewardship

- The principle of stewardship guarantees the application of these principles when managing Internet number resources.
- The fundamental purpose of Internet number stewardship is to distribute unique number resources to entities building and operating networks thereby facilitating the growth and sustainability of the Internet for the benefit of all.
- It should be noted that the above goals may sometimes be in conflict with each other and with the interests of individual end-users or network operators. Care must be taken to ensure balance with these conflicting goals given the resource availability, relative size of the resource, and number resource specific technical dynamics, for each type of number resource. **For example, Conservation often requires greater consideration in IPv4 address distribution due to the limited size of the address space, Routability has a higher weight for the massive IPv6 address space, and AS numbers place the highest value on Registration because they come from a moderately sized pool and are not subject to aggregation.**



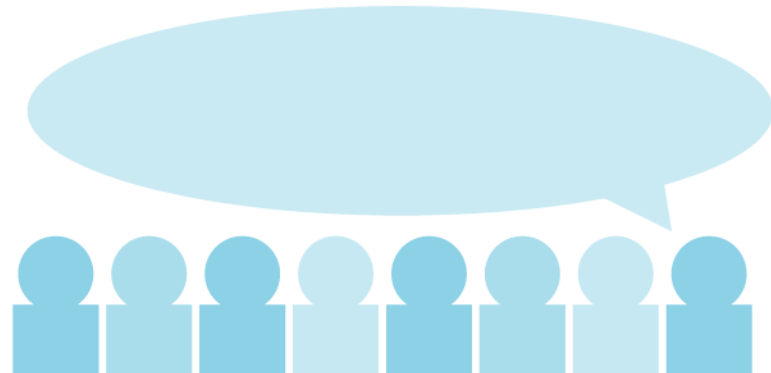
# Discussion

ARIN-2013-4  
RIR Principles



# Draft Policy Text

ARIN-2013-4 v3





# Registration

- The principle of registration guarantees the uniqueness of Internet number resources.
- Provision of this public registry documenting Internet number resource allocation, reallocation, assignment, and reassignment is necessary:
  - a) to ensure uniqueness,
  - b) to provide a contact in case of operational/ security problems,
  - c) to provide the transparency required to ensure that Internet number resources are efficiently utilized, and
  - d) to assist in IP allocation studies.



# Conservation

- The principle of conservation guarantees sustainability of the Internet through efficient utilization of unique number resources.
- Due to the requirement for uniqueness, Internet number resources of each type are drawn from a common number space. Conservation of these common number spaces requires that Internet number resources be efficiently distributed to those organizations who have a technical need for them in support of operational networks.



# Routability

- The principle of routability guarantees that Internet number resources are managed in such a manner that they may be routed on the Internet in a scalable manner.
- While routing scalability is necessary to ensure proper operation of Internet routing, allocation or assignment of Internet number resources by ARIN in no way guarantees that those addresses will be routed by any particular network operator.



# Stewardship

- The principle of stewardship guarantees the application of these principles when managing Internet number resources.
- The fundamental purpose of Internet number stewardship is to distribute unique number resources to entities building and operating networks thereby facilitating the growth and sustainability of the Internet for the benefit of all.
- It should be noted that the above goals may sometimes be in conflict with each other and with the interests of individual end-users or network operators. Care must be taken to ensure balance with these conflicting goals given the resource availability, relative size of the resource, and number resource specific technical dynamics, for each type of number resource. For example, Conservation often requires greater consideration in IPv4 address distribution due to the limited size of the address space, Routability has a higher weight for the massive IPv6 address space, and AS numbers place the highest value on Registration because they come from a moderately sized pool and are not subject to aggregation.





## **Draft Policy 2013-6**

**Allocation of IPv4 and IPv6 Address  
Space to Out-of-region Requestors**

# 2013-6 - History

1. **Origin: ARIN-prop-189 (May 2013)**
2. **AC Shepherds: David Farmer, Bill Darte, and Milton Mueller**
3. **Accepted as Draft Policy – June**
4. **Revised - September**
5. **Staff assessment – September**
6. **Revised again - September**
7. **Draft Policy online & in Discussion Guide**

[https://www.arin.net/policy/proposals/2013\\_6.html](https://www.arin.net/policy/proposals/2013_6.html)

# 2013-6 – ARIN Staff Summary

- **This policy would require requesters to provide proof of legal presence within the ARIN region and to demonstrate that a majority (or plurality) of their technical infrastructure and customers are within the ARIN region in order to qualify and receive IPv4 and IPv6 addresses.**

# 2013-6 – Status at other RIRs

- **AFRINIC:** "AfriNIC resources are for AfriNIC service region and any use outside the region should be solely in support of connectivity back to the AfriNIC region."
  - <http://www.afrinic.net/en/library/policies/697-ipv4-soft-landing-policy>
- **APNIC:** No specific policy text.
- **LACNIC proposal**
  - “Principles Governing the Distribution of Number Resources”
  - “1.11 Principles for Proper Administration and Stewardship
  - “The numbering resources under the stewardship of LACNIC must be distributed among organizations legally constituted within its service region and mainly serving networks and services operating in this region. External clients connected directly to main infrastructure located in the region are allowed.”
  - <http://www.lacnic.net/documents/10834/393498/lac-2013-02-EN.pdf>
- **RIPE:** “Membership is open without conditions.”



# 2013-6 – Staff Assessment

## Staff and Legal Assessment of the 4 Sep version

### Staff Comments: Issues/Concerns?

- Formalizes ARIN's existing practice with respect to requiring the requestor to have a legal presence in the ARIN region and to operate a network in region.
- Would also create new practice and processes via inclusion of the statement "a plurality of resources requested from ARIN must be justified by technical infrastructure and customers located within the ARIN service region".
  - Could create a scenario where a network can't get IPv4/IPv6 addresses from any RIR.
  - Unclear how the location of hosted customers is defined.
  - There are potential implications with respect to IPv6 and proposed policy text; in particular, does the community want an organization to be able to get all space from one RIR when it comes to IPv6?

### Resource Impact: Minimal (3 months)

- Updated guidelines and staff training

# 2013-6 – Legal Assessment

- The current draft seeks to fill an important gap in ARIN’s policies; more specifically, policy guidance that clearly describes the degree to which a proposed recipient of number resources from ARIN has to have real installations and customers in the ARIN region.
- From a legal standpoint, there are two possible spectrum points of policy to avoid: first, having inadequate policy guidance would leave policy implementation subject to a high degree of staff interpretation; and at the other end, adopting an overly prescriptive guidance or standard that fails to permit multinational business entities to obtain number resources that are needed both in the ARIN region and outside of the ARIN region from ARIN. Both extremes are unattractive for a standard setting organization such as ARIN.
- In particular, the current text: ‘plurality of resources requested from ARIN must be justified by technical infrastructure and customers located within the ARIN service region’ should be carefully evaluated, as it sets the policy requirement of ‘plurality’ that may prove unnecessarily restrictive in some cases. A lower standard is recommended to avoid otherwise valid requesters for address resources from being precluded from obtaining number resources.
- Note that policy language which provides for reasonable restrictions (e.g. requiring more than a fictitious or tenuous and limited presence for the recipient to receive the resources in this region and/or clear intention to make use of some of the resources within the region) can be adopted without creating serious legal risk.

# 2013-6 – Work in Progress

## Draft policy still being developed by the AC

- Posted to PPML and presented for community discussion
  - Fair and Impartial Number Resource Administration?
  - Technically Sound?
  - Supported by the Community?
- Staff/legal assessment to be performed again upon request of AC (when draft is fully developed)

# 2013-6 – Recent PPML Discussion

- "'Plurality' is a precisely defined mathematical concept. The part I have a problem with is 'a network located within the ARIN service region.'"
- "As far as law enforcement agencies are concerned, the problem is not so much a question of depletion of the IPv4 pool but of traceability back to the attacker... Maybe ARIN's policy should be consistent regarding the allocation of both IPv4 and IPv6 addresses requesting that stakeholders have sufficient attachment to the region prior to receiving IP addresses from ARIN."
- "ARIN-2013-6 would be a change to the existing policy, as it would make clear that customer growth in-region would be necessary to justify requests, whereas presently we have some folks requesting resources using nominal equipment within the region and backed by extensive customer growth external to the region."



## **Draft Policy 2013-6**

**Allocation of IPv4 and IPv6 Address  
Space to Out-of-region Requestors**

# What's the Problem

- **There is really no policy for who is eligible to receive resources from ARIN**
- **Staff's primary reference for existing operational practice is Section 2.2 – the definition of an RIR**

Regional Internet Registries (RIRs) are established and authorized by respective regional communities, and recognized by the IANA to serve and represent large geographical regions. The primary role of RIRs is to manage and distribute public Internet address space within their respective regions.
- **But this really isn't policy, it's a definition within Policy**

# What's the Problem - continued

- **For the most part, the intent is to formalize existing operational practice into policy**
  - But as we talk about the issues it seems we don't necessarily have clear consensus for all the existing operational practices
- **Many people assume that they can't use ARIN issued resources outside the ARIN region**
  - Nothing in policy clearly says you can or can't
  - But, Section 2.2 is easily interpreted by some to imply you can't

# 2013-6 – Current Text

**Organizations requesting Internet number resources from ARIN must provide proof that they (1) are an active business entity legally operating within the ARIN service region, and (2) are operating a network located within the ARIN service region. In addition to meeting all other applicable policy requirements, a plurality of new resources requested from ARIN must be justified by technical infrastructure or customers located within the ARIN service region, and any located outside the region must be interconnected to the ARIN service region. The same technical infrastructure or customers cannot be used to justify resources in more than one RIR.**



# Four Major Parts to the Policy

1. **Presence within Region, both legal and technical**
2. **Some amount (more than a trivial amount) of resources must be justified from within region, a plurality (or maybe a minimum percentage)**
3. **Out of region use is explicitly allowed, but must be part of an infrastructure interconnected to the region**
4. **The same customers or technical infrastructure can not be used to justify overlapping requests to multiple RIRs**

# Presence within Region

- **“an active business entity legally operating within the ARIN service region”**
  - Current operational practice requires “business entity formed within region”
  - This language relaxes policy to allow foreign business entities that are “legally operating within the ARIN service region” to also receive resources
- **“operating a network located within the ARIN service region”**
  - This is fairly self-explanatory, if you are not operating a network within the ARIN region, why should you be getting any resources from ARIN?

# Out of Region Use

- **This policy explicitly allows out of region use**
  - Current lack of clear policy makes the status of out of region use unclear and confusing
  - Many people assume they can only use ARIN resources within the ARIN region, even if this is not the technical superior solution for them or the Internet as a whole
- **Out of region use should be interconnected to the region**
  - A discrete network within another region should use resources from that region's RIR

# Overlapping request to RIRs

- **The same customers or technical infrastructure cannot be used to justify overlapping requests to multiple RIRs**
  - This is fairly self-explanatory, but there are some corner cases that should be considered
  - This should not prevent a web server or router from having addresses from multiple RIRs at the same time

# Plurality vs. Minimum Percentage

- **A Plurality standard requires that ARIN issued resources are used within the ARIN region more than they are used in any other region**
  - But the totality out of region use could be more than within the region
- **A Minimum Percentage would only require more than trivial amount of ARIN issued be used within the ARIN region**
  - 20% seems reasonable – this is the minimum percentage that could be a Plurality
  - But it would be possible for ARIN issued resources to be mostly used within another single region

# Other Issues

- **Allocations or assignments to Individuals not allowed**
  - This is the current operational practice, should this be changed?
- **No intent for retroactive effects**
  - The policy does not invalidate any previous allocation made based on good faith information
- **The policy is not intended to require an overall plurality, but what is used to justify new requests**

**In my opinion, the BIG Question is**

# **Plurality vs. Minimum Percentage**

**And if minimum percentage, what is the right percentage? 10%, 15%, **20%**, 25%, 30%**

**Your thoughts please.**

# Discussion





**Draft Policy 2013-7**  
**Merge IPv4 ISP and End-User**  
**Requirements**

# 2013-7 - History

1. **Origin: ARIN-prop-190 (July 2013)**
2. **AC Shepherds: Scott Leibrand and Bill Sandiford**
3. **Accepted as Draft Policy – August**
4. **Draft Policy online & in Discussion Guide**

**[https://www.arin.net/policy/proposals/2013\\_7.html](https://www.arin.net/policy/proposals/2013_7.html)**

# 2013-7 – ARIN Staff Summary

- From the problem statement: “The proposal attempts to reconcile the differences in requirements for obtaining PA and PI IPv4 address resources.”

# 2013-7 – Status at other RIRs

- One similar proposal under discussion:
- RIPE Proposal 2013-06 PA/PI Unification IPv6 Address Space
  - For IPv6 “...this proposal removes the difference between PI and PA; sub-allocation and Assignment”
    - Comment: “I support the general direction of this proposal. If it included v4, I would still be in favor.”

# 2013-7 – Work in Progress

## Draft policy still being developed by the AC

- Posted to PPML and presented for community discussion
  - Fair and Impartial Number Resource Administration?
  - Technically Sound?
  - Supported by the Community?
- Staff/legal assessment to be performed upon request of AC (when draft is fully developed)

# 2013-7 – Recent PPML Discussion

**“A unified set of requirements is a big step in the right direction and should simplify things.”**



**Draft Policy 2013-7**  
**Merge IPv4 ISP and End-User**  
**Requirements**

# 2013-7 – Rationale

The policy experience report at ARIN 31, and subsequent discussions, have highlighted that:

- While many aspects of policy are the same for ISPs and end-users, there is enough of a difference (i.e. on the size of allocations/assignments) to push applicants for a favorable definition.
- The NRPM has become an unnecessarily complex document as a result of quickly evolving requirements.
- Small networks may not qualify for transfers and have no way to get space after ARIN's free pool runs out.

This proposal is an attempt to simplify one part of the document in a way that is easily understood even though it intentionally leaves other parts unresolved. This was done to keep the scope to something that could realistically be discussed.



# 2013-7 – Status

**2013-7 is a Draft Policy (not a Recommended Draft), which means the AC will not be sending it to last call immediately after this meeting.**

**Instead, we are seeking community feedback on the policy, so it can be more fully developed and discussed, and possibly recommended for adoption after a future PPM/PPC.**

# 2013-7 – Summary of changes

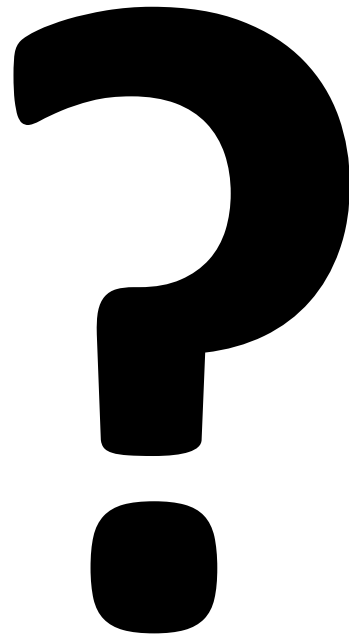
	Existing End User Policy	Existing LIR/ISP Policy	Proposed Changes
Minimum initial allocation/assignment	<ul style="list-style-type: none"> <li>• /20 single-homed</li> <li>• /24 multi-homed</li> </ul>	<ul style="list-style-type: none"> <li>• /20 single-homed</li> <li>• /22 multi-homed</li> </ul>	<ul style="list-style-type: none"> <li>• /22 single-homed</li> <li>• /24 multi-homed</li> </ul>
Utilization requirements for initial request	<ul style="list-style-type: none"> <li>• 25% immediately utilized with a 50% utilization within a year.</li> </ul>	<ul style="list-style-type: none"> <li>• Fully utilized a single-homed /20 from upstream provider with a three month plan</li> <li>• Utilize 50% of previous multi-homed assignments of at least a /22</li> </ul>	<ul style="list-style-type: none"> <li>• Initial block would be 80% utilized within three months</li> </ul>
Utilization requirements for subsequent request	<ul style="list-style-type: none"> <li>• At least 80% utilization on all previous assignments</li> </ul>	<ul style="list-style-type: none"> <li>• All previous allocations and 80% of most recent allocation</li> </ul>	<ul style="list-style-type: none"> <li>• All previous allocations and 80% of most recent allocation/assignment</li> </ul>
Amount or timeframe of subsequent requests	<ul style="list-style-type: none"> <li>• 12 months 50% utilized</li> </ul>	<ul style="list-style-type: none"> <li>• Request up to 3 months</li> </ul>	<ul style="list-style-type: none"> <li>• Request up to 12 months</li> </ul>

# 2013-7 – Feedback needed

To further develop 2013-7, the AC needs feedback on questions like these:

- Do you agree with the idea behind this policy?
- Which requirements should we use in each case (when ISP and End User requirements are different)?
- What distinctions should remain between LIR/ ISPs and End Users?

# 2013-7 – Discussion



# 2013-7 – NRPM Section Changes

- Remove section 4.1.1 Routability
- Rewrite section 4.1.5 Determination of resource requests
- Remove section 4.1.7 RFC2050
- Rename section header 4.2 Allocations to ISPs (Requirements for Requesting Initial Address Space)
- Remove section header 4.2.1 Principles and promote subsections
- Rewrite section 4.2.1.1 Purpose
- Remove section 4.2.1.4 Slow start
- Remove section 4.2.1.5 Minimum allocation
- Remove section 4.2.2.1 Standard or non-multihomed (and subsections)
- Remove section 4.2.2.2 Multihomed (and subsections)
- Rewrite section 4.2.2 with combined wording to replace sections that are being removed. See details below.
- Replace section 4.2.4 ISP Additional Requests (and subsections)
- Move original section 4.3.5 to new combined section 4.2.7. (unchanged text)
- Remove section 4.2.5 Web Hosting Policy
- Remove section 4.3 End-users-Assignments to end-users (and subsections)
- Remove section 4.9 Minimum allocation for the Caribbean and North Atlantic Islands (and subsections)

# 2013-7 – Summary of requirement changes

- Minimum allocation for a single-homed ISP is reduced from a /20 to /22.
- Minimum allocation for a multi-homed ISP is reduced from a /22 to a /24.
- The distinction between subscriber members who are before or after a one year anniversary is removed.
- Minimum assignments for a single-homed end user is reduced from a /20 to a /22.
- The requirement that multi-homed, end-user assignments smaller than a /20 be made from a block reserved for that purpose is removed.
- The utilization requirements on an initial end-user assignment changes from 25% immediate, 50% within one year to 80% within three months. This is offset by the lowering of the minimum block size requirement for single-homed networks.
- The timeframe for additional ISP allocations is changed from three months back to one year.
- The special section for the Caribbean region is integrated into the same requirements as the rest of the region with the existing /22 and the addition of an option for a multi-homed /24.

# 2013-7 – Details (1)

- Remove section 4.1.1 Routability
  - In merging the PI and PA requirements this section seems unnecessary in the newer version. It is also not necessary for the NRPM to suggest who or where an organization obtains resources.
- Renumber and rewrite section (4.1.5 Determination of IP address allocation size)
  - Remove: "Determination of IP address allocation size is the responsibility of ARIN."
  - Replace with: (4.1.1 Determination of resource requests) "Determining the validity of the amount of requested IP address resources is the responsibility of ARIN."
  - Rationale: The specific use of "allocation" does not propagate to end-user assignments in the proposed, merged instance. It is also an attempt to clarify that it is the validity of the request that is more the focus than the amount of resources requested. This does not prevent ARIN from suggesting that a smaller block would be justified where a larger one would not, but also does not suggest that it is ARIN's sole discretion to judge the size of the blocks needed.
- Remove section 4.1.7 RFC2050
  - With RFC2050 being updated the debate needs to occur whether this section should be retained in the principles of the IPv4 policy section. This may be better addressed by ARIN-2013-4.
- Rename section header (4.2 Allocations to ISPs Requirements for Requesting Initial Address Space)
  - New section name: 4.2 Resource Requirements

# 2013-7 – Details (2)

- Remove section 4.2.1 Principles and promote subsections
  - **In merging the requirements of section 4.2 and 4.3 this section becomes overly complicated and this was an attempt to simplify.**
- Replacement section (4.2.1 Purpose)
  - **Remove: "ARIN allocates blocks of IP addresses to ISPs for the purpose of reassigning that space to their customers."**
  - **Replace with: "ARIN provides blocks of IP addresses to network operators for the purpose of using these resources on their network."**
  - **Rationale: The distinction is removed between end-users and ISP's to provide a unified set of requirements.**
- Remove section 4.2.1.4 Slow start
  - **In an attempt to merge ISP and end user assignments it was desired to not take any functionality away that already existed for one or the other and balance this with transfer requirements.**
- Remove section 4.2.1.5 Minimum allocation
  - **In an attempt to merge ISP and end user assignments it was desired to not take any functionality away that already existed for one or the other and balance this with transfer requirements.**
- Remove section 4.2.2.1 Standard or non-multihomed (and subsections)
  - **This is being replaced with the merged text in the proposed section 4.2.5.**
- Remove section 4.2.2.2 Multihomed (and subsections)
  - **This is being replaced with the merged text in the proposed section 4.2.5.**



## 2013-7 – Details (3)

- Rewrite section 4.2.2 with combined wording to replace sections that are being removed.
  - **Replacement section (4.2.5 Minimum Size and Utilization)**
  - **A /24 is the minimum sized block to be provided to a multi-homed network.**
  - **A /22 is the minimum sized block to be provided to a single-homed network.**
  - **Through appropriate documentation like reassignment information of blocks from an upstream provider, or other means requested by ARIN, it must be shown how an initial block would be 80% utilized within three months. It must be agreed upon that the newly requested IP address space will be used to renumber out of any current addresses, which will be returned to their upstream provider(s). Blocks smaller than the minimum should be obtained from an upstream provider.**
- Replace section 4.2.4 ISP Additional Requests (and subsections)
  - **Replacement section (4.2.6 Subsequent Requests)**
  - **All previously received IP address resources must be efficiently utilized, and at least 80% of their most recent IP block(s) in order to obtain approval of receiving up to an additional 12-month supply of IP address resources.**
- Move original section 4.3.5 to new combined section 4.2.7. (unchanged text)
- Remove section 4.2.5 Web Hosting Policy
  - **This is being replaced with the merged text in the proposed section 4.2.5 and 4.2.6**
- Remove section 4.3 End-users-Assignments to end-users (and subsections)
  - **This is being replaced with the merged text in the proposed section 4.2.5 and 4.2.6**
- Remove section 4.9 Minimum allocation for the Caribbean and North Atlantic Islands (and subsections)
  - **This is being replaced with the merged text in the proposed section 4.2.5 and 4.2.6**

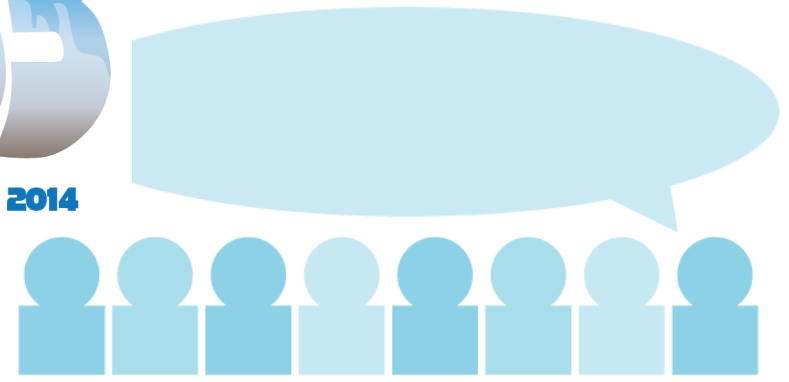
## 2013-7 – Diff

The diff is too big to paste here, unfortunately.

It's available at:

[https://www.arin.net/policy/proposals/ARIN-prop-190%20proposed\\_text\\_changes.pdf](https://www.arin.net/policy/proposals/ARIN-prop-190%20proposed_text_changes.pdf)

# Future ARIN Meeting



Thank you!

