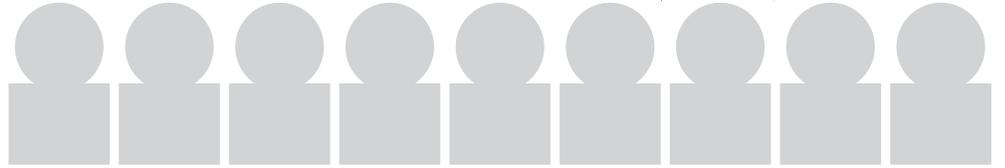


Discussion Guide



ARIN XXIX Draft Policies and the PDP

<https://www.arin.net/ARIN-XXIX/>

Welcome

Policies in the ARIN region are developed by the Internet community using the open and transparent process described in the ARIN Policy Development Process (PDP). The Internet community develops policies via discussion on the ARIN Public Policy Mail List (PPML) and at the ARIN Public Policy Meetings. Anyone may participate in the process – ARIN membership is not required.

The ARIN Board of Trustees adopts draft policies recommended to it by the ARIN Advisory Council if the Board determines that the PDP has been followed, that support and consensus for a policy has been reached among the community, and if the draft policies are consistent with ARIN's Articles of Incorporation and Bylaws and with the applicable laws and regulations.

The ARIN Public Policy Meeting is conducted in an orderly manner to understand the sense of the majority, to respect the views of the minority, and to protect the interests of those absent. Accordingly, the flow of the meeting is structured according to a published agenda and participants are expected to follow Meeting Courtesies and the Rules of Discussion.

Meeting Courtesies

All participants are requested to:

1. Either mute or turn off all communications devices such as cell phones, PDAs, and pagers.
2. Mute the audio output of their computers and other electronic devices.
3. Listen to the speakers and not engage in activities that are unrelated to the draft policy being discussed, such as processing e-mail.

Draft Policy Discussion Structure

Policy development is facilitated by the use of a structured process at the Public Policy Meeting. The steps in this process are:

1. Draft Policy Introduction: The history of the draft policy, including the date of introduction, the date of designation as a draft policy, and any previous considerations is presented. The presentation also identifies the ARIN Advisory Council members who are shepherds of the draft policy. In addition, ARIN staff and legal assessments are reviewed.
2. Presentation: A member of the ARIN Advisory Council (or the petitioner) presents the draft policy.
3. Discussion: Discussion of the draft policy is conducted using the Rules of Discussion in the meeting program.

ARIN XXVIII DISCUSSION GUIDE

For Discussion

This document contains the draft policies on the ARIN XXIX agenda. The text of the draft policies in this document is up to date through 25 April 2012.

Included at the end of this document is a copy of ARIN's Policy Development Process (PDP).

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Draft Policy ARIN-2011-1: ARIN Inter-RIR Transfers

https://www.arin.net/policy/proposals/2011_1.html

On 16 December 2012 the ARIN Board of Trustees took the Advisory Council's recommendation to adopt Draft Policy ARIN-2011-1: Inter-RIR Transfers formally under advisement pending a final community discussion at the ARIN XXIX Public Policy Meeting in Vancouver, British Columbia.

14 October 2011

Summary:

This revised proposal directly modifies section 8.3 "Transfers to Specified Recipients" to allow specified transfers to or from organizations in other regions, and it eliminates the single aggregate language.

Policy Statement:

8.3 Transfers to Specified Recipients

In addition to transfers under section 8.2, IPv4 number resources may be released to ARIN by the authorized resource holder or another RIR, in whole or in part, for transfer to another specified organizational recipient. Organizations in the ARIN region may receive transferred number resources under RSA if they can demonstrate the need for such resources in the amount which they can justify under current ARIN policies.

IPv4 address resources may be transferred to organizations in another RIR's service region if they demonstrate need to their region's RIR, according to that RIR's policies. Inter-regional transfers may take place only via RIRs who agree to the transfer and share compatible, needs-based policies. Such resources must be transferred in blocks of /24 or larger and will become part of the resource holdings of the recipient RIR.

Rationale:

Since individual RIRs now allow transfers, it makes sense to be able to transfer between regions as well.

Timetable for implementation: Upon ratification by the ARIN Board of Trustees

STAFF ASSESSMENT

ARIN Staff Comments

- The phrase, "compatible, needs-based policies" is not specifically defined. If adopted, staff would consider a "compatible, needs-based policy" for outward transfers as a transfer policy at another RIR that requires the recipient to have operational need for the address space, and to demonstrate that need to their RIR for transfer approval.
- Allowing the transfer of number resources between RIRs will require careful coordination between RIRs in order to avoid reverse DNS zone fragmentation and synchronization problems. The ability to maintain the necessary coordination between RIRs is unproven if Inter-RIR transfers become extremely common.

- This proposal doesn't have any provisions to preclude organizations that have recently obtained IPv4 resources from ARIN from immediately releasing them for profit to a specified recipient. This policy may provide incentive for organizations to game the system by obtaining resources based on justified need, when the real intent is to sell them for profit. This behavior would directly violate certain terms and conditions of the RSA, but may be difficult for staff to distinguish from bona fide changes in circumstances.

- General Staff Implementation Plan:

For transfers from the ARIN region into another RIR region:

1. ARIN receives the transfer request template from the requestor and verifies that they are the authorized registrant of the resources.
2. ARIN verifies that the recipient RIR has been confirmed to have a compatible needs-based transfer policy and then forwards the request to the recipient RIR.
3. The Recipient RIR determines if the recipient meets its relevant policies.
4. The Recipient RIR confirms to ARIN that the customer has met its transfer policy as a recipient, and asks ARIN to authorize the release of the resource to the recipient RIR.
5. ARIN coordinates with the Recipient RIR to complete the transfer.

For transfers into the ARIN region from another RIR region:

1. ARIN receives the transfer request template from the source RIR verifying that their customer is authorized to submit the transfer.
2. ARIN contacts the proposed resource recipient to gather initial data needed to justify the 8.3 transfer and obtains a signed RSA from the resource recipient.
3. ARIN applies its relevant policy criteria to the resource recipient.
4. When ready to approve, ARIN will contact the source RIR and have them authorize the release of the resource to ARIN.
5. ARIN approves the transfer, receives transfer fee payment from the recipient, and will then complete the request by coordinating with the source RIR on the final transfer of the resource into the ARIN database (and de-registration from the source database), including the DNS zone coordination.

ARIN General Counsel

Adoption of this policy will materially assist ARIN's legal position.

Resource Impact:

This policy would have major**resource impact from an implementation aspect. It is estimated that implementation would occur within 9-12 months after ratification by the ARIN Board of Trustees. The following would be needed in order to implement:

- Careful coordination between the RIRs on DNS issues and updates
- Updated guidelines
- Staff training

Draft Policy 2011-7: Compliance Requirement

https://www.arin.net/policy/proposals/2011_7.html

Advisory Council Shepherds: **Chris Grundemann and Owen DeLong**

22 February 2012

Summary:

This proposal requires ARIN staff to identify customers who are out of compliance with policy, and to eventually withhold services for those who fail to come into compliance within a designated time. Staff is to contact customers who are out of compliance with policy and give them 30 days to respond to our contact and to demonstrate they've begun to take corrective measures within 60 days. If either of these criteria is not met, the policy instructs staff to cease providing reverse DNS services to the customer or to begin reclamation efforts after 90 days.

Policy Statement:

In section 12.4, replace:

Organizations found by ARIN to be materially out of compliance with current ARIN policy shall be requested or required to return resources as needed to bring them into (or reasonably close to) compliance.

With:

Organizations found by ARIN to be out of compliance with current ARIN policy shall be required to update reassignment information or return resources as needed to bring them into (or reasonably close to) compliance.

(Leave paragraph 12.4.a. and 12.4.b. unchanged)

Replace section 12.5 with:

Except in cases of fraud when immediate action can be taken, an organization shall be given thirty (30) days to respond. If an organization fails to respond within thirty (30) days, ARIN may

cease providing reverse DNS services to that organization. If progress of resource returns or record corrections has not occurred within sixty (60) days after ARIN initiated contact, ARIN shall cease providing reverse DNS services for the resources in question. ARIN shall negotiate a longer term with the organization if ARIN believes the organization is working in good faith to restore compliance and has a valid need for additional time.

Replace section 12.6 with:

At any time ninety (90) days after initial ARIN contact, ARIN may initiate the revocation of any resources issued by ARIN as required to bring the organization into overall compliance. Except in cases of fraud, or violations of policy, an organization shall be given a minimum of six months to effect a return. ARIN shall negotiate a longer term with the organization if ARIN believes the organization is working in good faith to restore compliance and has a valid need for additional time to renumber out of the affected blocks. ARIN shall follow the same guidelines for revocation that are required for voluntary return in paragraph 12.4.b. above.

Rationale:

Version 5 further addresses PPML and AC feedback since the last PPM.

Version 4 addresses all feedback received at the ARIN PPM in Philadelphia. Mostly small textual changes - does re-introduce the 6 month window for resource revocations (it now remains in section 12.6).

Version 3 addresses remaining legal concerns with specific wording.

Version 2 addresses several staff and legal concerns with the original text of this policy by clarifying the language and making it more concrete.

To date the community has not documented or firmly established use of an effective enforcement mechanism. This policy will support current policy and compel those who are allocated ARIN resources to maintain the proper WHOIS records in accordance with ARIN NRPM. While it is recognized this is not an absolute solution to ensure compliance, it is the best method under current ARIN policies.

Timetable for implementation: Immediate

STAFF ASSESSMENT

ARIN Staff Comments

- The term “out of compliance” is not well defined anywhere within this policy. Without additional criteria, staff will continue to interpret this term somewhat liberally, and to apply it at our discretion using our best judgment and consideration of existing factors. Only those organizations that we deem to be significantly in violation of existing policy will be flagged for further review and audit.
- Removing an organization’s reverse DNS and/or reclaiming their IP number resources will be likely to have a negative impact on their ability to conduct business.

ARIN General Counsel

This policy has significant legal implications, as it requires ARIN to withdraw services that may impact innocent and bona fide third parties utilizing the resources. Any revocation made pursuant to this revised policy could result in litigation.

Resource Impact:

This policy would have moderate resource impact from an implementation aspect. It is estimated that implementation could occur within 6 – 9 months after ratification by the ARIN Board of Trustees.

The following would be needed in order to implement:

- Updated guidelines and website documentation
- Staff training
- Software tools would need to be developed to track the 30 and 60-day deadlines.

Draft Policy 2012-1: Clarifying Requirements for IPv4 Transfers

https://www.arin.net/policy/proposals/2012_1.html

Advisory Council Shepherds: **Dan Alexander and David Farmer**

11 April 2012

Summary:

This proposal would modify the 8.3 transfer policy and implement an inter-RIR transfer policy (both for IPv4 addresses only).

For 8.3 transfers, recipients would be limited to 24 months need and the organization releasing the resources can't have received additional IPv4 addresses from ARIN in the previous 12 months and will be ineligible to receive additional IPv4 addresses for 12 months after the transfer.

For transfers from ARIN to another RIR, the releasing org must be the authorized holder, can't have received additional IPv4 addresses from ARIN in the previous 12 months, and will be unable to obtain additional IPv4 addresses from ARIN for 12 months following the transfer, and the recipient org must qualify to receive the resources under the other RIR's policies.

For transfers to ARIN from another RIR, the other RIR must verify the releasing org is the authorized resource holder, and the recipient may request up to a 24-month supply of IPv4 addresses.

Policy Statement:

Current text:

Replace Section 8.3 with

8.3 Transfers between Specified Recipients within the ARIN Region.

In addition to transfers under section 8.2, IPv4 numbers resources may be transferred according to the following conditions.

Conditions on source of the transfer:

- The source entity must be the current registered holder of the IPv4 address resources, and not be involved in any dispute as to the status of those resources.
- The source entity will be ineligible to receive any further IPv4 address allocations or assignments from ARIN for a period of 12 months after a transfer approval, or until the exhaustion of ARIN's IPv4 space, whichever occurs first.
- The source entity must not have received a transfer, allocation, or assignment of IPv4 number resources from ARIN for the 12 months prior to the approval of a transfer request. This restriction does not include M&A transfers.
- The minimum transfer size is a /24

Conditions on recipient of the transfer:

- The recipient must demonstrate the need for up to a 24 month supply of IP address resources under current ARIN policies and sign an RSA.
- The resources transferred will be subject to current ARIN policies.

Add Section 8.4 Inter-RIR Transfers to Specified Recipients

Inter-regional transfers may take place only via RIRs who agree to the transfer and share reciprocal, compatible, needs-based policies.

Conditions on source of the transfer:

- The source entity must be the current rights holder of the IPv4 address resources recognized by the RIR responsible for the resources, and not be involved in any dispute as to the status of those resources.
- Source entities outside of the ARIN region must meet any requirements defined by the RIR where the source entity holds the registration.
- Source entities within the ARIN region will not be eligible to receive any further IPv4 address allocations or assignments from ARIN for a period of 12 months after a transfer approval, or until the exhaustion of ARIN's IPv4 space, whichever occurs first.
- Source entities within the ARIN region must not have received a transfer, allocation, or assignment of IPv4 number resources from ARIN for the 12 months prior to the approval of a transfer request. This restriction does not include M&A transfers.
- The minimum transfer size is a /24.

Conditions on recipient of the transfer:

- The conditions on a recipient outside of the ARIN region will be defined by the policies of the receiving RIR.
- Recipients within the ARIN region will be subject to current ARIN policies and sign an RSA for the resources being received.
- Recipients within the ARIN region must demonstrate the need for up to a 24 month supply of IPv4 address space.
- The minimum transfer size is a /24

Rationale:

The original text of this proposal attempted to clarify the requirements of an IPv4 address transfer while protecting any resources remaining in the ARIN free pool. This revision is a result of feedback from the mailing list, ARIN Staff, and discussions with the original author. The one key point that has been removed from the original text is that a needs based review remains in place.

The current text attempts to retain the original concepts of protecting an ARIN free pool, and incorporating it with the point of bringing resources under RSA. The resulting text attempts to put safeguards in place on the practice of paid transfers by creating a black out period for transfers and requests to the free pool. The text also tries to incorporate discussions regarding inter-RIR transfers and come up with language that includes the free pool protections for transfers in and out of the Region.

Timetable for implementation: Immediate

STAFF ASSESSMENT

ARIN Staff Comments

- The timer for when the 12-month period before the transfer begins is undefined. When would staff start the timer? From the day the transfer request is submitted to ARIN? Or on the future approval date of the proposed transfer? Staff believes it would be logical to count back 12 months from the date of the transfer approval.
- This proposal imposes a 12-month waiting period on organizations wishing to transfer IPv4 address space from ARIN to another region on either side of the transfer (both pre-xfer and post-xfer). This would be a good deterrent to organizations intending to “flip” IPv4 address space via an 8.3 transfer.
- Should this same limitation be imposed on organizations wishing to transfer IPv4 space from another region into the ARIN region such that the releasing org cannot have received IPv4 address space from their RIR within the 12-month period prior to the transfer? This again would deter flipping IPv4 addresses via an 8.3 transfer and bring parity to the policy for transfer both to and from the ARIN region.
- The concise language in the phrase, “reciprocal, compatible, needs-based policies” is a very good improvement to this policy text and makes it very clear. It ensures that both RIRs have reciprocal inter-RIR policies, inter-RIR policies which are compatible with one another, and general number resource policies which are needs-based.

ARIN General Counsel

There are no legal concerns regarding the policy except for some logical suggestions counsel has made to the policy text regarding inter region transfers. Other changes in the policy appear to have solved other legal concerns expressed in previous comments on earlier versions of this policy.

Resource Impact:

This policy would have major resource impact from an implementation aspect. It is estimated that implementation would occur within 12 months after ratification by the ARIN Board of Trustees. The following would be needed in order to implement:

- Careful coordination between the RIRs on DNS issues and updates for the inter-rir transfers
- Potential issues include:
 - Zone fragmentation
 - DNS synchronization problems
 - Potential administrative and operational issues in coordinating reverse addressing
- RPKI implications
- Updated guidelines
- Staff training

Draft Policy 2012-2: IPv6 Subsequent Allocations Utilization Requirement

https://www.arin.net/policy/proposals/2012_2.html

Advisory Council Shepherds: **Heather Schiller and Cathy Aronson**

22 February 2012

Summary:

The intent of this proposal is to allow an additional way for ISP's that have already begun using their IPv6 space but who may not have sufficiently planned for longer term growth, to receive an additional allocation. This policy would allow an organization to qualify for an additional IPv6 allocation if they can show that 75% of their IPv6 address space as a whole is subnetted, provided that each subnet has at least 1 customer or infrastructure assignment/allocation.

Policy Statement:

Proposal text:

Modify 6.5.3.b as follows:

An LIR may request a subsequent allocation when they can show utilization

of:

75% or more of their total address space

or

more than 90% of any serving site

or

when 75% of the aggregate has been subnetted, and each subnet contains at least 1* customer or infrastructure allocation or assignment

(*1 can be replaced here with any reasonable number)

Rationale:

If you are executing to a long term plan, you should be able to continue to execute on your approved allocation and assignment plan regardless of the number of regions/groupings you originally planned for. We want to promote tie downs on nibbles and long term planning.

Timetable for implementation: Immediate

STAFF ASSESSMENT

ARIN Staff Comments

If this policy were to be implemented exactly as written, ARIN staff would approve an additional IPv6 allocation as long as a network had subnetted at least 75% of their IPv6 allocation, with at least one customer or internal assignment/allocation in each subnet. ARIN would not evaluate subnet size; as long as any portion of a subnet is used, then that subnet would be considered to be fully used, regardless of its size. Effectively, this allows an operator to qualify for IPv6 addresses any time they want, because it's trivial to subnet out 75% of an allocation(s) and use at least a tiny portion of each, and may not encourage conservation of IPv6 address space.

If the author's intent is to allow operators to make reasonable decisions about their IPv6 deployment, another option would be to simplify the IPv6 additional allocation policy to allow an operator to qualify for more IPv6 addresses when they can show a need for them.

Alternatively, if the author's intent is to have ARIN staff evaluate whether those decisions are reasonable, then specific criteria needs to be laid out to give staff guidance as to how we do that (e.g. block size, timeframes, etc.). The author's original proposal rationale stated that the expectation would be for ARIN to use its discretion to weed out such requests, but there is no policy basis for doing so. Nothing in this text gives staff any basis for rejecting any subnet size, regardless of how reasonable we think it is.

If the author wants ARIN to review requests to determine if technically reasonable, than some criteria or guidance must be provided within the policy text.

ARIN General Counsel

This policy poses no significant legal issues.

Resource Impact:

This policy would have minimal resource impact from an implementation aspect. It is estimated that implementation could occur within 3 months after ratification by the ARIN Board of Trustees.

The following would be needed in order to implement:

- Guidelines and procedures need to be updated
- Staff training

Draft Policy 2012-3: ASN Transfers

https://www.arin.net/policy/proposals/2012_3.html

Advisory Council Shepherds: **Scott Leibrand and Bill Sandiford**

14 March 2012

Summary:

This proposal would allow organizations to transfer ASNs in addition to IPv4 address space in an 8.3 transfer to specified recipients.

Policy Statement:

In NRPM 8.3, replace "IPv4 number resources" with "IPv4 number resources and ASNs".

Rationale:

There are legitimate use cases for transferring ASNs, and no significant downsides (identified to date) of allowing it.

Timetable for implementation: Immediate

STAFF ASSESSMENT

ARIN Staff Comments

If implemented as written, the 24-month utilization requirement in 8.3 would not apply to ASN requests since 8.3 clearly says "how the addresses will be utilized in 24 months". Staff would apply the current ASN policy, which requires an organization to be multi-homed or to immediately become multi-homed.

ARIN General Counsel

This creates no legal concerns and may actually facilitate any bankruptcy proceedings where ASNs are involved.

Resource Impact:

This policy would have minimum resource impact from an implementation aspect. It is estimated that implementation would occur within 3 months after ratification by the ARIN Board of Trustees. The following would be needed in order to implement:

- Updated guidelines
- Staff training

Draft Policy 2012-4: Return to 12 Month Supply and Reset Trigger to /8 in Free Pool

https://www.arin.net/policy/proposals/2012_4.html

Advisory Council Shepherds: **Robert Seastrom and David Farmer**

14 March 2012

Summary:

This proposal would revert NRPM section 4.2.4.4 "Subscriber Members After One Year" back to an earlier version in which an organization may request up to a 12 month supply of IPv4 addresses. At the time that the ARIN free pool is the equivalent of a /8, an organization would only be able to request a 3 month supply.

Policy Statement:

4.2.4.4. Subscriber Members After One Year

After an organization has been a subscriber member of ARIN for one year, they may choose to request up to a twelve (12) month supply of IP addresses.

When the ARIN Free Pool is down to the equivalent of one /8, excluding all special reservations, the length of supply that an organization may request will be reduced. An organization may choose to request up to a three (3) month supply of IP addresses. Any request that reduces the ARIN free pool below the /8 threshold

above will trigger the reduction for that and all subsequent requests by all organizations.

Rationale:

There has been discussion in the community that ARIN's inventory of IPv4 addresses may be excessive given the reduction in the rate of consumption which is concurrent with the reduction to a 3 month supply when ARIN received its last /8 at IANA run-out. And that such an excess inventory in the ARIN region may be damaging the transition to IPv6 by elongating the amount of time between ARIN's exhaustion and exhaustion by other RIR's, thus creating a dangerous skew across parts of Internet in the need to transition to IPv6. One solution for this issue is to increase ARIN's rate of consumption by restoring the a 12 month supply of addresses.

ARIN's stewardship responsibilities are of primary concern in this region. However, restoring the a 12 month supply of addresses is consistent with these stewardship responsibilities. Asking businesses to request addresses on a three month basis with

such large inventory available at ARIN unnecessarily increases the cost and complexity of operating networks; repeated and slow interactions with ARIN, duplicate paperwork requirements and an inefficient use of resources by all compound the pain.

The original intent of ARIN-2009-8 “Equitable IPv4 Run-Out” wasn’t necessarily to slow the consumption of IPv4 but to limit the competitive disadvantage created by unequal run-out. However, when the trigger of IANA run-out was selected it wasn’t anticipated that ARIN would have more than 5 /8s in inventory when the IANA run-out occurred. Therefore, restoring the 12-month supply and resetting the trigger for a reduction to a 3-month supply to a locally controlled event seems consistent with the original intent of ARIN-2009-8 as well.

Considering that the ARIN region has consumed significantly less than a /8 since the 3-month supply was triggered at IANA run-out approximately a year ago; Resetting the trigger for the 3-month supply to /8 in the free pool, excluding all special reservations, seems reasonable. The special reservations to be excluded, should include all reservations made in policy, including those in sections 4.4, 4.10, any new reservations made by subsequent policies, and may also include reservations for draft policies in process at the board’s discretion, such as Draft Policy ARIN-2011-5: Shared Transition Space for IPv4 Address Extension.

Please Note: By triggering on any request that would drop the free pool below /8 it is possible that there will be slightly more or slightly less than /8 available after the triggering request is fulfilled. The size of the triggering request and the exact amount above /8 available in the free pool will determine how much more or less than /8 will be available after the triggering request is fulfilled. This could be as much as 3/4 of the triggering request above /8 or as much as 1/4 of the triggering request below /8 available after fulfilling the triggering request.

To help clarify how this policy proposal changes Section 4.2.4.4, the current policy text as of Feb 10, 2012 is included below;

4.2.4.4. Subscriber Members After One Year

After an organization has been a subscriber member of ARIN for one year, they may choose to request up to a 12-month supply of IP addresses.

When ARIN receives its last /8, by IANA implementing section 10.4.2.2, the length of supply that an organization may request will be reduced. An organization may choose to request up to a 3-month supply of IP addresses.

Timetable for implementation: Immediate

STAFF ASSESSMENT

ARIN Staff Comments

Background Information for consideration:

Currently, ARIN has ~1,900 /24s free, ~800 /23s free, ~400 /22s free, etc. These smaller blocks are very useful to a large segment of ARIN’s customers as we typically issue mostly small blocks to customers on a daily basis. The total number of these small,

discontiguous IPv4 blocks fluctuates often due to returns and revocations, which are quite common with these smaller blocks.

In contrast, ARIN has a very limited supply of large aggregates – currently there is a single contiguous /8 free (104.0.0.0/8), two /9s, three /10s, five /11s, etc. Because we have a limited number of these larger aggregates, we will exhaust the supply of large aggregates long before we exhaust the supply of smaller aggregates. We see very little churn with these larger blocks as ARIN rarely receives back large aggregates for re-distribution.

It is important to note that NRPM 4.1.6 prevents ARIN from issuing multiple prefixes to satisfy a single request – e.g. a large operator cannot receive a /12 allocation comprised of multiple prefixes.

- Taking the above information into consideration, staff believes it may be operationally prudent and practicable to reserve a single contiguous /8 to serve as the trigger for this policy.
 - Doing it this way offers a fixed, easily understood target for the community to track.
 - It’s a very clear window into our inventory status, and is therefore more transparent to the community.
 - It would allow operators to better plan for the future as ARIN policy switches from a 12-month allocation window back to a 3-month allocation window.
- Issuing a 12-month supply of IPv4 addresses will likely significantly accelerate the depletion of ARIN’s existing IPv4 free pool. Historically, ARIN’s IPv4 consumption rate was roughly doubled when issuing a 12-month supply vs a 3-month supply.
 - From 2008 through 2010, ARIN issued 3.36, 2.46, and 2.69 /8s respectively when issuing a 12-month supply, vs 1.32 /8s in 2011 when the 3-month supply policy went into effect.
- With the reintroduction of a 12-month supply window, there is the possibility that several very large requests could quickly deplete ARIN’s free pool. In light of this fact, the community may want to consider bringing back a maximum allocation/ assignment size.

ARIN General Counsel

The policy proposal is a major event, since it will dramatically change the date of IPV4 run out at ARIN. This is a profound policy, but not legal change.

Resource Impact:

This policy would have major resource impact from an implementation aspect. It is estimated that implementation would occur within 3 months after ratification by the ARIN Board of Trustees. The following would be needed in order to implement:

- Software needed to track the /8 equivalent trigger
- Updated guidelines
- Staff training

POLICY DEVELOPMENT PROCESS

This version of the ARIN Policy Development Process was published on 7 January 2009. It supersedes the previous version.

Part One – Principle

1. Purpose

This document describes the ARIN Policy Development Process (PDP). The ARIN PDP is the process by which all policies governing the management of Internet number resources in the ARIN region are developed by and for the ARIN community. ARIN's Internet number resource policies are documented community decisions that directly determine the rules by which ARIN manages and administers Internet number resources.

Internet number resource policies are developed in an open and transparent manner by the Internet community. Anyone may participate in the process - ARIN membership is not required. The Policy Development Process (PDP) described in this document defines how policy is established in the ARIN region. Part I of this document provides background information regarding the ARIN PDP and Part II provides the details of the process.

2. Scope

1. Policies developed through the PDP are community selfregulatory statements that mandate or constrain actions. They apply throughout the ARIN region. Policies contribute to the security and stability of the Internet as they foster good stewardship of Internet number resources by ensuring fair distribution of resources and facilitating the operation of the Internet by those who use them.
2. Policies developed through the PDP do not describe a step-by-step process. Such a process is called a procedure. Procedures are established by the policy implementer to execute the policy in such a manner to comply with the policy.
3. Policies developed through the PDP do not define a service to be offered by ARIN.
4. Policies developed through the PDP do not define or establish ARIN fees. All matters concerning fees are a fiduciary responsibility of the Board of Trustees.
5. The ARIN Board of Trustees adopts draft policies recommended to it by the ARIN Advisory Council if the Board determines that the PDP has been followed, that support and consensus for a policy has been reached among the community, and if the draft policies are consistent with ARIN's Articles of Incorporation and Bylaws and with the applicable laws and regulations.
6. Internet number resource policies are distinctly separate from ARIN general business practices and procedures. ARIN's general business practices (including fees) and procedures are not within the purview of the Policy Development Process. (The ARIN Consultation and Suggestion Process can be used to propose changes in non-policy areas.)
7. This version of the ARIN PDP is designed to bring forth clear, technically sound and useful policy; reduce overlapping policy proposals; require both staff and legal assessments; give adequate opportunity for discussion prior to each public

policy meeting; and provide a means of review prior to possible adoption. The PDP empowers the ARIN Advisory Council as a policy development body with checks and balances, and maintains an open and transparent process.

3. Policy Development Principles

All policies are developed following three principles: open, transparent, and bottom-up.

3.1. Open

All policies are developed in an open forum in which anyone may participate. There are no qualifications for participation. Policy discussions in the ARIN region are conducted in an open, publicly accessible forum that consists of a Public Policy Mail List (PPML) and the Public Policy Meeting (PPM). Anyone may subscribe to the PPML and anyone may attend a PPM via the Internet or in person.

3.2. Transparent

All aspects of the PDP are documented and publicly available via the ARIN website. The PPML is archived. The proceedings of each PPM are published. All policies are documented in the Number Resource Policy Manual (NRPM). All policy statements in the NRPM are cross referenced to the original policy proposal, the archives of the PPML, all related PPM proceedings, and the minutes of the appropriate Advisory Council and the ARIN Board of Trustees meetings. Finally any procedures that are developed to implement the policy are documented, publicly available, and not deviated from by the ARIN staff.

3.3. Bottom Up

All policies in the ARIN region are developed by the ARIN community from the bottom up. The community initiates proposals; the ARIN Advisory Council develops the proposals into draft policies which are then discussed by the community. When the Advisory Council determines that the community has reached consensus on a proposal it recommends it to the Board of Trustees who after receipt adopts the draft policy as a policy. The Board of Trustees may not disapprove a policy, but if it has concerns about a draft policy, it may refer it back to the Advisory Council for further work.

4. Policy Development Process Philosophy

Internet number resource management requires good stewardship and judicious management. Thus policies must be developed that ensure fair distribution, meet technical requirements, and enable administration. All policy statements must be clear, complete, and concise. The criteria that are defined must be simple and obtainable.

4.1. Fair Distribution

Although the available amount of Internet number resources appears to be infinitely large, their defined characteristics create a finite resource to which principles of conservation must be applied. These defined characteristics include the recognition of network topology realities. To prevent capricious consumption such as stockpiling, Internet number resource policies provide for the distribution according to demonstrated operational needs.

4.2. Technical Requirements

Policies must meet the technical requirements for the way that they are used in the operational environment. Policies must allow for aggregation of Internet number resources in a hierarchical manner to permit the routing scalability which is necessary for proper Internet routing. However, policies cannot guarantee routability of any particular Internet number resource as that is dependent on the actions of the individual Internet operators. Policies must not create a situation in which Internet number resources intended for public operation are not globally unique.

4.3. Administration

Policies must enable administration and management of Internet number resources that is neutral, impartial, and consistent. Policies must be unambiguous and not subject to varying degrees of interpretation.

5. Terms

Proposal

An idea for a policy that is submitted to the Advisory Council using the policy proposal template.

Draft Policy

A policy proposal that has been developed by the Advisory Council from individual submitted proposals or merged proposals, reviewed by ARIN staff and legal counsel, and posted for discussion on the PPML.

Policy

A draft policy that has the support of the community and the Advisory Council, and has been adopted by the Board of Trustees.

6. The PDP Cycle

The policy development process is composed of a five (5) phase cycle – need, discussion, consensus, implementation, and evaluation.

6.1. Need

The PDP cycle begins with the identification of a need for either a new policy or the revision or elimination of an existing policy. This need is usually determined by a change in technology, a change in the operational environment of the Internet, or the result of the experience of the implementation of an existing policy.

6.2. Discussion

Draft policies are discussed by the community both on the public policy mailing list and in the public policy meeting.

6.3. Consensus

The Advisory Council determines the consensus of the community regarding the draft policy. It evaluates the type and amount of support and opposition to a policy as expressed by the community on the ppml and in the public policy meeting.

6.4. Implementation

The policy is implemented by ARIN staff using published procedures.

6.5. Evaluation

The implementation experience of the policy is periodically reviewed by the staff who reports the results to the Advisory Council and the community.

Part Two – The Policy Development Process

This section provides the details of the ARIN Policy Development Process. A graphical flow depiction of the process is provided at Appendix A. All days are calendar days unless otherwise specified.

1. The Policy Proposal

Policy proposals may be submitted by anyone in the global Internet community except for members of the ARIN Board of Trustees or the ARIN staff. Proposals may be submitted any time to the ARIN staff for delivery to the Advisory Council using the template at Appendix B. There is no deadline for the submittal of policy proposals. Besides delivering the policy proposal to the Advisory Council, the staff will post the policy proposal to the public policy mailing list so that the community will be provided the ability to comment on the proposal. Policy proposals posted to the PPML by individuals will not be considered by the Advisory Council until the proposal is submitted to the staff and delivered to them. Only policy proposals that are developed into draft policies by the Advisory Council, or successfully petitioned, will be discussed for adoption on the PPML and at the public policy meeting.

2. Draft Policy

Upon receipt of a policy proposal, the Advisory Council assumes control of the proposal. The Advisory Council evaluates policy proposals and develops them into technically sound and useful draft policies that, if adopted, will make a positive contribution to the Number Resource Policy Manual. The development of draft policy consists of several steps.

2.1. Clarity & Understanding

Upon receipt of a policy proposal the ARIN staff will work with the proposal originator to ensure there is clarity and understanding of the proposal text. Staff does not evaluate the proposal itself at this time, their only aim is to make sure that they understand the proposal and believe that the community will as well. Staff reports the results of this step to the Advisory Council within 10 days.

2.2. Development & Evaluation

The Advisory Council develops a draft policy. During this effort they may take any action such as rewrite, abandon, merge various proposals, or use a proposal as an idea to generate a draft policy. The Advisory Council must make a decision regarding any policy proposal at their next regularly scheduled meeting that occurs after the Advisory Council receives the Clarity and Understanding Report from staff. If the period before the next regularly scheduled meeting is less than 10 days, then the period may be extended to the subsequent regularly scheduled meeting, but the period shall not be extended beyond 45 days. The Advisory Council will announce its decision regarding any policy proposal once they have decided how to utilize the proposal.

Once the Advisory Council crafts a draft policy it submits it for staff and legal review. This review will be completed within 10 business days. Upon receipt of the staff and legal comments, the Advisory Council examines staff and legal comments to ensure its understanding and resolve any issues that may have been raised. These comments may cause the Advisory Council to revise its draft policy.

2.3. Discussion & Review

Once the Advisory Council completes its work on a draft policy, to include the staff and legal reviews, it publishes the draft policy and accompanying staff and legal reviews on the PPML for review and discussion. In order for a draft policy to be considered for adoption discussion at a public policy meeting it must be published on the PPML at least 35 days prior to the public policy meeting.

2.4 Discussion Petition

Any member of the community, including a proposal originator, may initiate a Discussion Petition if they are dissatisfied with the action taken by the Advisory Council regarding any specific policy proposal. If successful, this petition will change the policy proposal to a draft policy which will be published for discussion and review by the community on the PPML and at an upcoming public policy meeting.

The Discussion Petition must be initiated within 5 business days of announcement of the Advisory Council's decision regarding a specific policy proposal; the petition must include the proposal and a petition statement. The petition duration is 5 business days. The ARIN President determines if the petition succeeds (success is support from at least 10 different people from 10 different organizations). In order to be considered at an upcoming public policy meeting, the petition must be successfully completed at least 35 days prior to that meeting.

A successful petition may result in competing versions of the same draft policy. Staff and legal reviews will be conducted and published for successful petitions.

All draft policies that are selected by the Advisory Council or successfully petitioned are published for review and discussion on the public policy mailing list.

3. Public Policy Meeting

Those draft policies that are published at least 35 days prior to a public policy meeting will be placed on the agenda of that meeting for adoption discussion. In the period leading up to the public policy meeting changes may be made to the text of the draft policy. At 10 days prior to the public policy meeting no further changes will be made to the draft policy text so that a single text for each draft policy is considered at the meeting. The text remains frozen until after the completion of the public policy meeting.

The draft policies that have been selected by the Advisory Council are presented by the Advisory Council at the public policy meeting. Draft policies resulting from successful petitions are presented by the petitioner. Competing draft policies, if any, will be discussed together. Discussion and votes at the meeting are for the consideration of the Advisory Council.

4. Consensus

4.1 Discussion Evaluation

At the conclusion of the public policy meeting, the Advisory Council controls all draft policies, including those that were successfully petitioned. The Advisory Council reviews all draft policies and, taking into account discussion on the PPML and

at the public policy meeting, decides what to do with each one within 30 days following the public policy meeting. The Advisory Council may take any action such as rewrite, merge, abandon, or send to last call the draft policies. The results of the Advisory Council's decisions are announced to the PPML. Draft policies that are not abandoned or sent to last call are placed on the AC docket for further development and evaluation.

4.2 Last Call Petition

Any member of the community, including a proposal originator, may initiate a Last Call Petition if they are dissatisfied with the action taken by the Advisory Council regarding any draft policy. If successful, this petition will move the draft policy to last call discussion and review by the community on the PPML.

The Last Call Petition must be initiated within 5 business days of the announcement of the Advisory Council's decision regarding a specific draft policy; the petition must include the draft policy and a petition statement. The petition duration is 5 business days. The ARIN President determines if the petition succeeds (success is support from at least 10 different people from 10 different organizations).

4.3 Last Call

The Advisory Council selects draft policies that have the support of the community and the Advisory Council and sends these draft policies to a last call for review and discussion by the community on the PPML. The last call period will be for a minimum of 10 days. The Advisory Council may decide that certain draft policies require a longer last call period of review, such as those that were revised based on comments received while the text was frozen. If the Advisory Council sends a draft policy to last call that is different from the frozen version, then the Advisory Council will provide an explanation for all changes to the text.

4.4. Last Call Review

Within 30 days of the end of last call the Advisory Council determines consensus for each draft policy by reviewing last call comments, revisiting its decision (the Advisory Council may take any action such as rewrite, merge, or abandon), and determining readiness for consideration by the Board of Trustees. If the Advisory Council modifies a draft policy, it will be sent to another last call or may be placed back on the docket of the Advisory Council for further development and evaluation.

The results of the Advisory Council's decisions are announced to the PPML. The Advisory Council forwards the draft policies that it supports to the Board of Trustees for consideration.

4.5 Board of Trustees Consideration Petition

Any member of the community may initiate a Board of Trustees Consideration Petition if they are dissatisfied with the action taken by the Advisory Council regarding any last call review. If successful, this petition will move the draft policy for consideration by the Board of Trustees. The Board of Trustees Consideration Petition must be initiated within 5 business days of the announcement of the Advisory Council's decision regarding a specific last call review of a draft policy; the

petition must include the draft policy and a petition statement. The petition duration is 5 business days. The ARIN President determines if the petition succeeds (success is support from at least 10 different people from 10 different organizations).

5. Board of Trustees Review

The ARIN Board of Trustees reviews and evaluates each draft policy within 30 days of receipt. The Board examines each draft policy in terms of fiduciary risk, liability risk, conformity to law, development in accordance with the ARIN PDP, and adherence to the ARIN Articles of Incorporation and Bylaws. The Board may adopt, reject or remand draft policies to the Advisory Council. Rejections will include an explanation. Remands will include an explanation and a recommendation. The Board may also seek clarification from the Advisory Council without remanding the draft policy. The results of the Board's decision are announced to the community via PPML.

6. Implementation

The projected implementation date of the policy is announced at the time that adoption of the policy is announced. ARIN staff updates the NRPM to include the adopted policy and implements and publishes a new version of the manual.

7. Special Policy Actions

7.1. Emergency PDP

The Board of Trustees may initiate the Emergency PDP by declaring an emergency and posting a draft policy to the PPML for discussion for a minimum of 10 business days. The Advisory Council will review the draft policy within 5 business days of

the end of the discussion period and make a recommendation to the Board of Trustees. If the Board of Trustees adopts the policy, it will be presented at the next public policy meeting for reconsideration.

7.2. Policy Suspension

If, after a policy has been adopted, the Board receives credible information that a policy is flawed in such a way that it may cause significant problems if it continues to be followed, the Board of Trustees may suspend the policy and request a recommendation from the Advisory Council on how to proceed. The recommendation of the Advisory Council will be published for discussion on the PPML for a period of at least 10 business days. The Board of Trustees will review the Advisory Council's recommendation and the PPML discussion. If suspended, the policy will be presented at the next scheduled public policy meeting in accordance with the procedures outlined in this document.

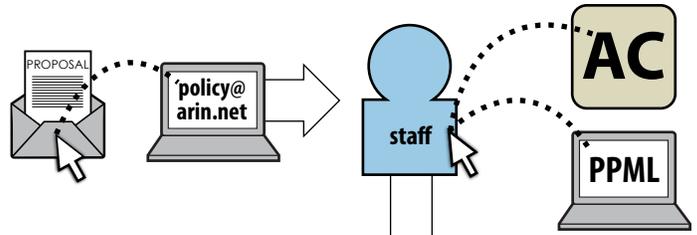
If, after a policy has been ratified and put into effect, the Board of Trustees receives credible information that a policy is flawed in such a way that it may cause unforeseen problems if it is continued to be followed, the Board may suspend the policy and request a recommendation from the ARIN Advisory Council on how to proceed. The Advisory Council's recommendation will be posted for discussion on the Public Policy Mailing List for a period of at least ten working days.

Appendix A: PROCESS FLOW CHART

1 Proposal

Submittal

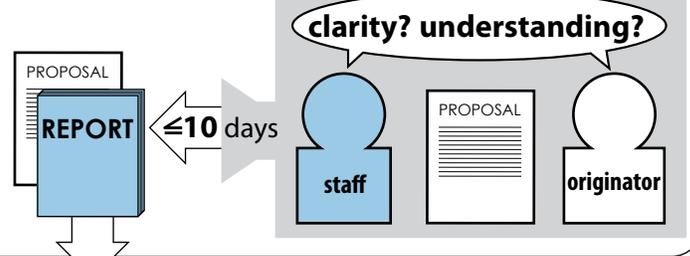
- By anyone at anytime (not Staff or BoT)
- Submit template to policy at ARIN
- Staff posts the proposal to PPML and forwards it to the AC.



2 Draft Policy

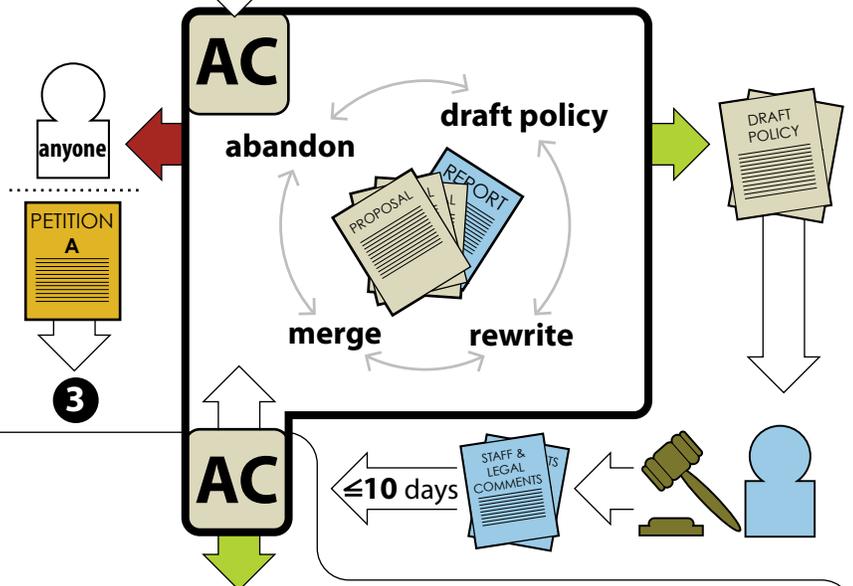
a. Clarity & Understanding

- Staff and originator work together to ensure clarity and understanding of what is being proposed.
- Staff does not evaluate the proposal.
- Staff reports the result of this step to the AC within 10 days.



b. Development & Evaluation

- AC assumes control of all proposals.
- AC develops and evaluates proposals to only bring forth technically sound policies that make a positive contribution to the Number Resource Policy Manual. The AC may rewrite, merge, abandon, etc.; for example, they may use a proposal as an idea to generate a draft policy.
- AC must submit for Staff and Legal review if it intends to move a draft policy forward. Review comments must be understood and addressed. Text may be revised in response.
- AC must make a decision regarding any proposal within 30 days of receipt (approx.).
- Decisions posted to PPML.



c. Discussion & Review

- AC selects sound and useful draft policies for community discussion.
- Relevant staff and legal comments are published with each draft policy.
- Anyone may initiate Discussion Petition (Petition A*) if dissatisfied with AC action.
- Staff and legal reviews are conducted for successful petitions.
- Draft policy is posted to PPML for community discussion and review.

AC selects...



3 Public Policy Meeting

- The PPM agenda will contain those draft policies that will have been on the PPML for at least 35 days prior to the meeting.



Draft policy text is frozen 10 days prior to PPM so that a single text for each draft policy is considered at the meeting.



- The AC presents draft policies at the Public Policy Meeting; the successful petitioner presents their draft policy. Competing proposals will be discussed together.

3 Public Policy Meeting (cont.)

Discussion and votes at the meeting are for the consideration of the AC.

4 Consensus

a. Discussion Evaluation

- AC controls all draft policies.
- AC considers list and meeting discussion and may rewrite, merge, abandon, send to last call, etc.
- Draft policies not abandoned or sent to last call are placed on AC's docket for further development and evaluation.
- AC's decisions are posted to PPML.
- Anyone may initiate Last Call Petition (Petition B*) if dissatisfied with AC action.
- AC must make a decision within 30 days of the PPM.

b. Last Call

AC selects draft policies that have support both in the community and the AC and sends them to a last call for comments on the PPML for at least 10 days. If text is different from the frozen version, AC will explain.

c. Last Call Review

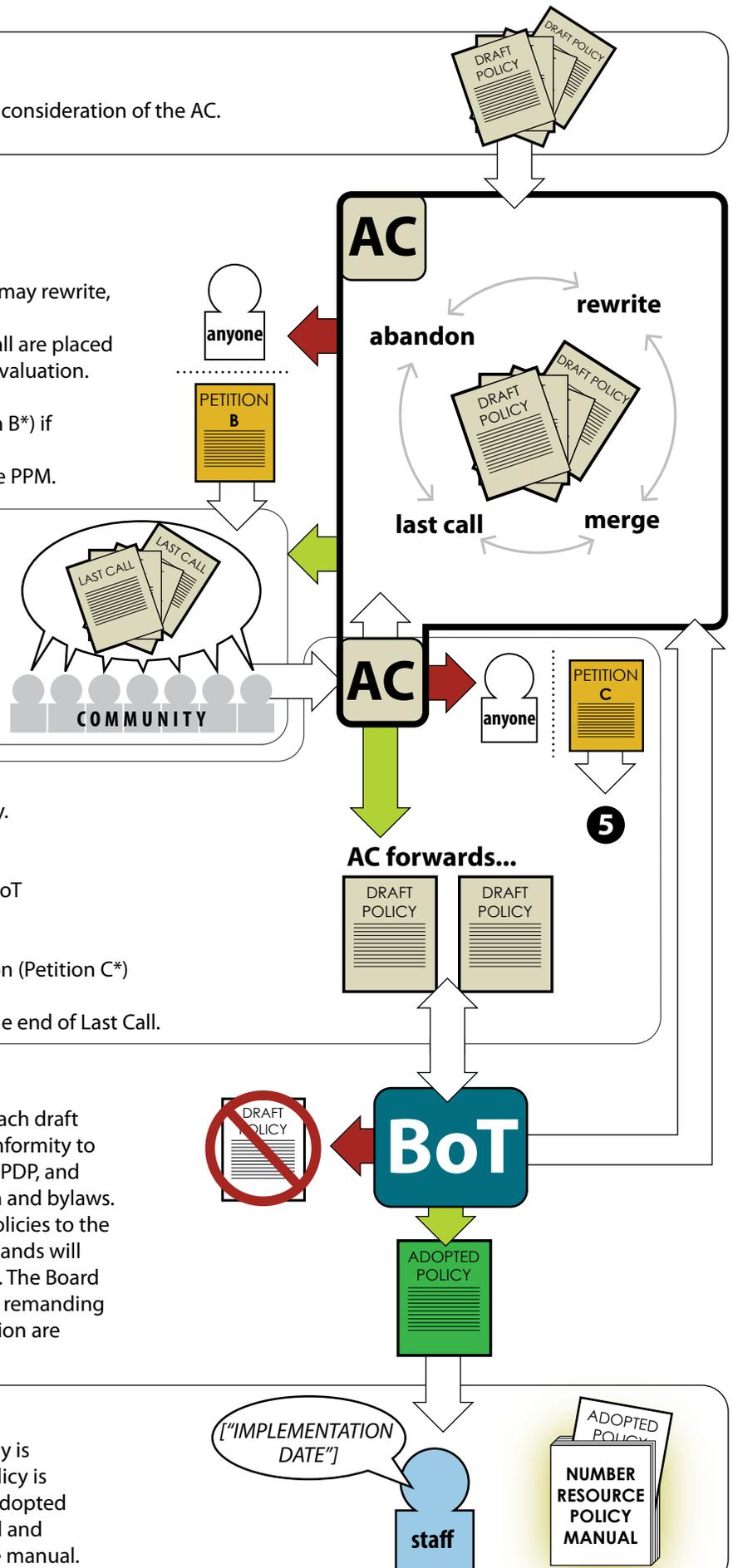
- AC determines consensus for each draft policy.
 - Reviews last call comments
 - Revisits earlier decision
 - Determines readiness for consideration by BoT
- AC may revise and repost to last call.
- AC's decisions are posted to PPML.
- Anyone may initiate BoT Consideration Petition (Petition C*) if dissatisfied with AC action.
- AC determines consensus within 30 days of the end of Last Call.

5 Board of Trustees Review

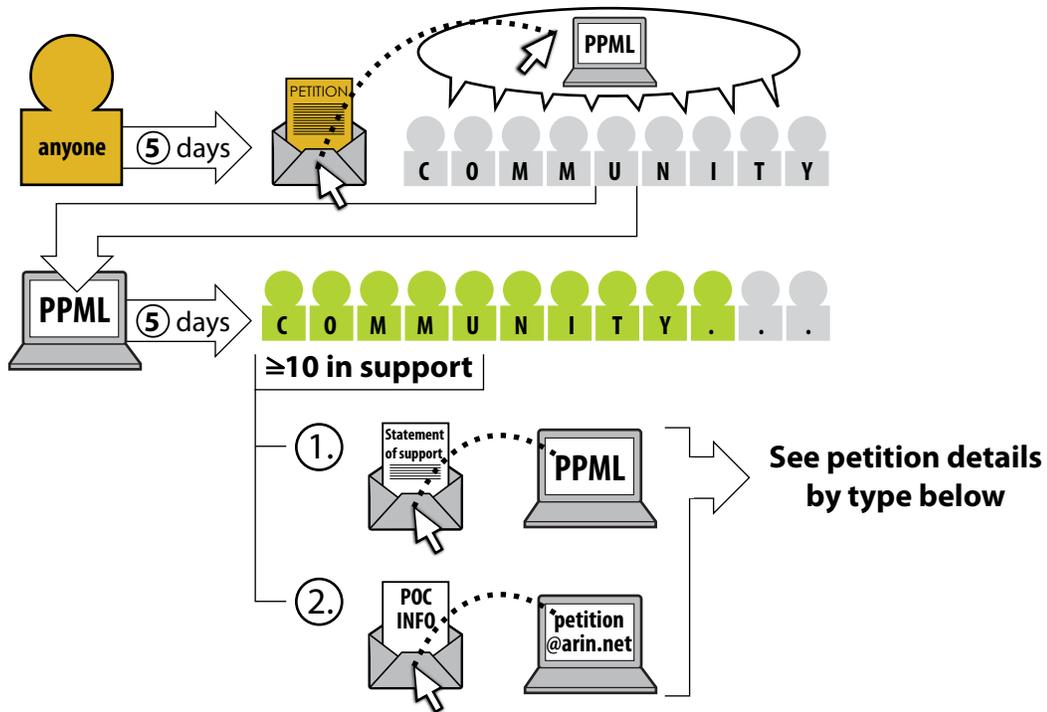
Within 30 days of receipt the Board examines each draft policy in terms of fiduciary risk, liability risk, conformity to law, development in accordance with the ARIN PDP, and adherence to the ARIN Articles of Incorporation and bylaws. The Board may adopt, reject or remand draft policies to the AC. Rejections will include an explanation. Remands will include an explanation and a recommendation. The Board may also seek clarification from the AC without remanding the draft policy. The results of the Board's decision are announced to the community via PPML.

6 Implementation

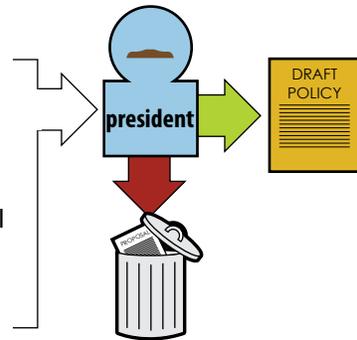
The expected implementation date of the policy is announced at the time that adoption of the policy is announced. ARIN staff updates to include the adopted policy into the Number Resource Policy Manual and implements and publishes a new version of the manual.



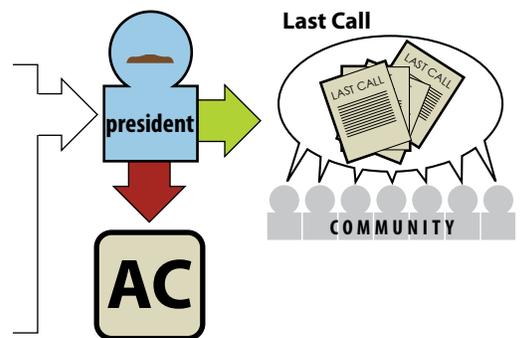
Appendix A: PDP PETITIONS



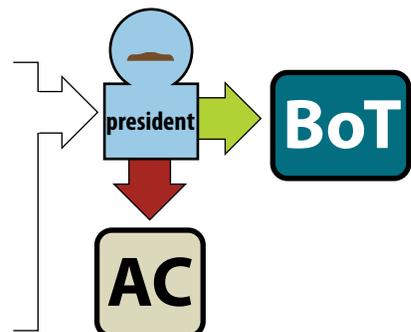
Discussion Petition - If any member of the community, including a proposal originator, is dissatisfied with the AC action on a policy proposal they can initiate a Discussion Petition to move this particular proposal to the PPML for discussion as a draft policy. Anyone may initiate the petition on the PPML (within 5 business days of publication of the AC's decision); the petition must include the proposal and a petition statement. The petition duration is 5 business days. The ARIN President determines if the petition succeeds. Success is support from at least 10 different people from 10 different organizations.



Last Call Petition - If any member of the community, including a proposal originator, is dissatisfied with the AC action on a draft policy they can initiate a Last Call Petition to move this particular draft policy to the PPML for last call. Anyone may initiate the petition on the PPML (within 5 business days of the publication of the AC's decision); the petition must include the draft policy and a petition statement. The petition duration is 5 business days. The ARIN President determines if the petition succeeds. Success is support from at least 10 different people from 10 different organizations.



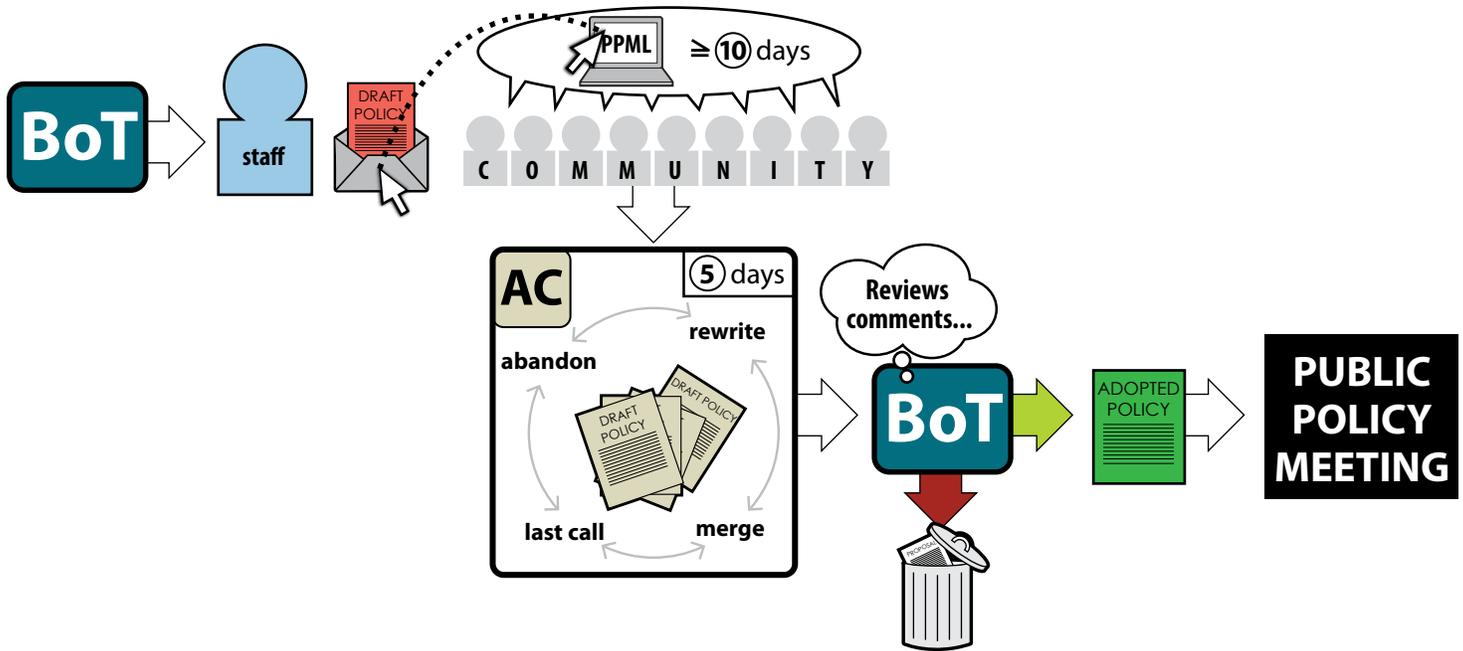
BoT Consideration Petition - If any member of the community is dissatisfied with the AC action on a draft policy they can initiate a Board of Trustees Consideration Petition to move this particular draft policy for consideration by the Board of Trustees. Anyone may initiate the petition on the PPML (within 5 business days of the publication of the AC's decision); the petition must include the draft policy and a petition statement. The petition duration is 5 business days. The ARIN President determines if the petition succeeds. Success is support from at least 10 different people from 10 different organizations.



Appendix A: SPECIAL BoT POLICY ACTIONS

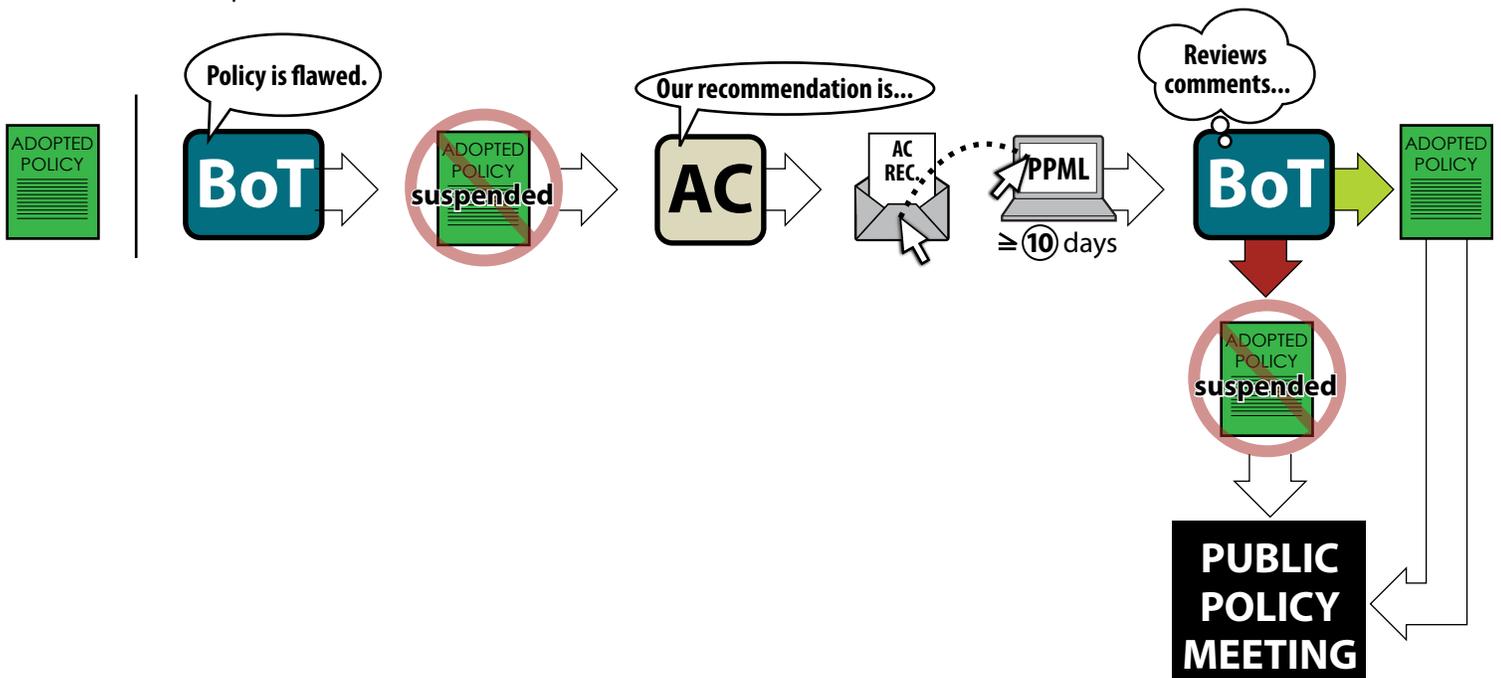
Emergency PDP

The Board of Trustees may initiate the Emergency PDP by declaring an emergency and posting a draft policy to the PPML for discussion (minimum 10 business days). The AC will review the draft policy within 5 business days of the end of the discussion period and make a recommendation to the BoT. If the BoT adopts the policy, it will be presented at the next PPM for reconsideration.



Policy Suspension

If, after a policy has been adopted, the BoT receives credible information that a policy is flawed in such a way that it may cause significant problems if it is continued to be followed, the BoT may suspend the policy and request a recommendation from the AC on how to proceed. The AC's recommendation will be posted for discussion on the PPML for a period of at least 10 business days. The BoT will review the AC's recommendation and the list discussion. If suspended, the policy will be presented at the next scheduled PPM in accordance with the procedures outlined in this document.



Appendix B: PROPOSAL TEMPLATE

Guidelines for Completing the ARIN Policy Proposal Template are available at: https://www.arin.net/policy/pdp_appendix_b.html.

Template: ARIN-POLICY-PROPOSAL-TEMPLATE-2.0

1. Policy Proposal Name:
2. Proposal Originator
 1. name:
 2. email:
 3. telephone:
 4. organization:
3. Proposal Version:
4. Date:
5. Proposal type:
new, modify, or delete.
6. Policy term:
temporary, permanent, or renewable.
7. Policy statement:
8. Rationale:
9. Timetable for implementation:

END OF TEMPLATE

