



# Protecting Number Resources

Draft Policy 2011-2

**Advisory Council Shepherds:**

Marc Crandall

Scott Leibrand

# 2011-2 – Rationale

## (Protecting Number Resources)

- ARIN has generally only reactively looked for fraudulently obtained or abandoned number resources, generally via reports to <https://www.arin.net/resources/fraud/>.
- ARIN is in a good position to identify these resources due to ARIN's access to records that are not available to the public, and the record of interactions (or lack thereof) with the resource holder.



# 2011-2 – Summary

## (Protecting Number Resources)

- Requires ARIN staff to proactively seek fraudulently obtained or abandoned number resources.
- ARIN would then seek the return these resources under existing NRPM 12 processes.
- Report on policy activities delivered at each ARIN meeting.



## 2011-2 – Implementation Suggestions (Protecting Number Resources)

- Balance amount of proactive work vs. fiscal viability
- Reach for low-hanging fruit (examples):
  - Check resources without a valid point-of-contact
  - Reclaim resources that aren't being routed
- ARIN could report on:
  - Quantity of resources returned
  - The cost of conducting this activity
  - Obtain feedback from the membership (should more/less resources should be devoted, etc.).



# 2011-2 – Policy Text

## (Protecting Number Resources)

ARIN shall use any reasonable and practical methods to proactively look for fraudulently obtained or abandoned number resources and seek the return of those resources to ARIN.

Abandoned resources include, but are not limited to:

- resources with no valid POC (per section 3.6),
- resources assigned or allocated to a deceased individual,
- resources assigned or allocated to a defunct or otherwise no longer viable entity, and
- resources declared unused or abandoned by the organization to which they are allocated.

A report of activities under this policy shall be delivered at each ARIN meeting.



# 2011-2 – Staff Assessment

**Legal: Liability Risk? – No legal comments**

## **Staff Comments: Issues/Concerns?**

- 1.Requires extra time and staff.
- 2.Financial implications due 1) additional staff 2) time involved in investigating/reclaiming resources, and 3) potential additional legal fees involved.
- 3.Reclamation of legacy resources is complex.

## **Resource Impact?**

- Implementation: Moderate
- Execution: Significant

**Assessment available in Discussion Guide**



# 2011-2

## Protecting Number Resources

# Discussion?





# Protecting Number Resources

Draft Policy 2011-2



# Reference

## (NRPM 3.6 Annual Whois POC Validation)

### 3.6 Annual Whois POC Validation

#### 3.6.1 Method of Annual Verification

During ARINs annual Whois POC validation, an email will be sent to every POC in the Whois database. Each POC will have a maximum of 60 days to respond with an affirmative that their Whois contact information is correct and complete. Unresponsive POC email addresses shall be marked as such in the database. If ARIN staff deems a POC to be completely and permanently abandoned or otherwise illegitimate, the POC record shall be marked invalid. ARIN will maintain, and make readily available to the community, a current list of number resources with no valid POC; this data will be subject to the current bulk Whois policy.



# Reference

## (NRPM 12 Resource Review 1/3)

1. ARIN may review the current usage of any resources maintained in the ARIN database. The organization shall cooperate with any request from ARIN for reasonable related documentation.
2. ARIN may conduct such reviews:
  - a. when any new resource is requested,
  - b. whenever ARIN has reason to believe that the resources were originally obtained fraudulently or in contravention of existing policy, or
  - c. at any other time without having to establish cause unless a full review has been completed in the preceding 24 months.
3. At the conclusion of a review in which ARIN has solicited information from the resource holder, ARIN shall communicate to the resource holder that the review has been concluded and what, if any, further actions are required.



# Reference

## (NRPM 12 Resource Review 2/3)

4. 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.
  - a. The degree to which an organization may remain out of compliance shall be based on the reasonable judgment of the ARIN staff and shall balance all facts known, including the organization's utilization rate, available address pool, and other factors as appropriate so as to avoid forcing returns which will result in near-term additional requests or unnecessary route de-aggregation.
  - b. To the extent possible, entire blocks should be returned. Partial address blocks shall be returned in such a way that the portion retained will comprise a single aggregate block.
5. If the organization does not voluntarily return resources as requested, ARIN may revoke any resources issued by ARIN as required to bring the organization into overall compliance. ARIN shall follow the same guidelines for revocation that are required for voluntary return in the previous paragraph.



# Reference

## (NRPM 12 Resource Review 3/3)

6. 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 substantially restore compliance and has a valid need for additional time to renumber out of the affected blocks.
7. In case of a return under paragraphs 12.4 through 12.6, ARIN shall continue to provide services for the resource(s) while their return or revocation is pending, except any maintenance fees assessed during that period shall be calculated as if the return or revocation was complete.
8. This policy does not create any additional authority for ARIN to revoke legacy address space. However, the utilization of legacy resources shall be considered during a review to assess overall compliance.
9. In considering compliance with policies which allow a timeframe (such as a requirement to assign some number of prefixes within 5 years), failure to comply cannot be measured until after the timeframe specified in the applicable policy has elapsed. Blocks subject to such a policy shall be assumed in compliance with that policy until such time as the specified time since issuance has elapsed.

