ARIN CUSTOMER SATISFACTION RESEARCH

PREPARED BY ROCKBRIDGE ASSOCIATES, INC.

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Table of Contents

• Study Objectives
• Background & Methodology
• Executive Summary & Recommendations
• Detailed Findings
  – Satisfaction & Loyalty
  – Performance & Expectations
  – ARIN Positioning
  – Familiarity & Usage of ARIN Products and Services
  – Demographics, Firmographics & Other Issues
Study Objectives

• ARIN, a nonprofit member-based organization, supports the operation of the Internet through the management of Internet number resources throughout its service region; coordinates the development of policies by the community for the management of Internet Protocol number resources; and advances the Internet through information outreach. ARIN is one of five Regional Internet Registries (RIRs) in the world.

• Rockbridge Associates conducted this customer/member satisfaction survey to help ARIN better understand members’ satisfaction and needs as the Internet number registry landscape evolves. The study objectives were as follows:
  – Determine members' expectations and needs from ARIN
  – Assess current satisfaction with ARIN's services and operations
  – Determine any unmet needs members have
  – Identify and prioritize areas for improvement
  – Assess current perceptions of the organization within the Internet community
  – Identify opportunities to better engage the Internet community in terms of outreach, education and fostering participation
Background & Methodology

• This report provides results to a survey of ARIN members, customers, and community. An online survey was conducted between February 10 and February 25, 2014.

• 699 individuals participated in the survey, and have the following relationships with ARIN:
  – 324 – Has a direct allocation of IP addresses (IPv4, IPv6) from ARIN, and is a member.
  – 353 - Has a direct assignment of Internet number resources (IPv4, IPv6, ASN) from ARIN.
  – 16 - Has no direct Internet number resources from ARIN, but uses some ARIN services.
  – 6 - Has no direct Internet number resources from ARIN, and does not use ARIN services, but is part of the ARIN community.

• The median survey time was 18 minutes.

• The margin of sampling error at a 95% level of confidence for aggregate results is +/- 3%. The margin of error is larger for subgroups of the data.

• The Mean Loyalty Index is a derived measure that takes satisfaction with meeting needs, satisfaction with value, and likelihood to continue ARIN into account. The three measures factor into the index equally (each accounting for a third). A score of “100” means perfect scores were received for each component of the index.
Executive Summary

• Community satisfaction with ARIN is generally high (70% say the organization is meeting needs).
  – Those working for larger companies have higher satisfaction with ARIN.

• Approximately half of community members surveyed are moderately or very familiar with ARIN. Familiarity is much higher among Internet Service Providers (75%).

• WHOIS, ARIN Online and Reverse DNS are the most utilized products and services and satisfaction with these items is high.

• Meeting attendance is low with just 13% of surveyed community members having attended an event in the past 12 months.

• Participation in the Policy Development Process is also low with just 5% having taken part in the last 12 months. Top reasons for not getting involved include a lack of time, satisfaction with current policy and the belief that involvement has no impact.

• Virtual contact through email and ARIN online are the most preferred way to interact with the organization. Still, one-quarter prefer to communicate by phone.

• There is a significant interest in ARIN-provided training in the community. Training on new developments in the industry, such as IPv6, and ARIN tools are likely to be the most popular.
Executive Summary – ARIN Performance

• ARIN community members have high expectations of an excellent Internet Number Registry. ARIN, although it has strong performance in many of these areas, has room to grow to meet these expectations on all service dimensions.

• ARIN does particularly well on Internet Governance, Financial Services and Engineering
  – Quality, reliability and relevance of tools are particular strengths in Engineering.

• The greatest opportunities are in Registration Services and Communications/Outreach
  – Consistent with other technical services, community members believe the transfer listing service is of a high level of quality, usability and reliability. However, Registration Services is an opportunity for ARIN because of concerns about timeliness and clarity of resource requests and transfers.
  – Additionally, Communications/Outreach can improve by providing more clarity and communications about the organization to members and by increasing transparency.

• Customer Service provided by staff has strengths and weaknesses
  – Community members see ARIN staff as a strength of the organization.
  – However, similar to concerns in Registration Services, Customer Service suffers from perceptions that requests are not processed by staff in a timely manner and that there is clarity missing from information provided.
Recommendations

• ARIN should use the scorecard information to establish a formal goal for future improvement – performance is currently 12 points below what is expected to be “excellent”.

• Customers are finding it difficult to find the content they need on the website. Given its overarching impact, ARIN should make improving the usability and navigation of its website a top priority. Navigational testing may be useful to guide these improvements.

• Although ARIN makes every effort to provide its members full-disclosure, many still find it lacks transparency; this may be an issue of members not knowing that information exists (or where to find it) versus the information simply not being available or disclosed, especially given the difficulty the community has in finding content on the website.

• It is clear that ARIN's members want it to be easier and quicker to obtain Internet number resources. ARIN should review its process to identify any bottlenecks or pain points, ensuring that it clearly outlines and guides customers through the steps of the process.

• ARIN’s customer service staff need to respond to requests more quickly and better address complex issues (that may impact customer bottom-lines more than routine issues). A clear, user-friendly interface may have the added benefit of reducing the burden on ARIN's customer service staff.

• There is a perception that policy development is dominated by the more involved and vocal members. To create a more inviting environment for participation in policy development ARIN could consider offering mailing lists or other feedback mechanisms directed exclusively at new members or policy development "rookies". This would help make the process less intimidating, and allow ARIN to engage and elicit feedback from a broader range of individuals.
SATISFACTION & LOYALTY
ARIN does a good job meeting the needs of its community; seven in ten are satisfied that the organization is meeting needs.

- Larger companies (over 100 employees) are more satisfied with ARIN.
- Non-ISPs are more satisfied with the fees they pay (69% compared to 60% of ISPs).

**Overall Loyalty Metrics**

- **Mean Loyalty Index* (n=677)**: 79
- **Satisfaction with Meeting Needs (n=699)**: 70%
  - Highly Satisfied: 70%
  - Somewhat Satisfied: 23%
  - Dissatisfied: 7%
- **Satisfaction with Fees (n=677)**: 67%
  - Highly Satisfied: 67%
  - Somewhat Satisfied: 25%
  - Dissatisfied: 8%
- **Likelihood to Continue Using ARIN (n=699)**: 68%
  - Highly Likely: 68%
  - Somewhat Likely: 19%
  - Not Likely: 13%

*Combines satisfaction with meeting needs, satisfaction with value, and likelihood to continue using equally into one measure

Q1. Thinking about your interactions with ARIN and the products and services it provides, how satisfied are you with ARIN in meeting your organization’s needs?
Q2. How satisfied are you with the value you receive from ARIN based on the fees you pay?
Q3. If you had the option to choose another registry services provider, how likely would you be to continue using ARIN services?
Highly satisfied community members say their experiences have been positive and easy. Those with lower satisfaction cite difficulty working with ARIN to meet their business needs.

Reasons for High Overall Satisfaction
(6 or 7 on 7-point Satisfaction Scale)

“I have been very please with my interactions with them.”

“I believe ARIN has organized IP allocations in the correct manner.”

“No problems with getting what I need done. I gave it a 6 instead of a 7 for the learning curve/complexity involved.”

“There is a lot of paperwork and the website can feel like a maze. But they are fair about their assignments and the people are very helpful.”

“Recent updates to web management of IP space was a huge improvement over the early 2000's and resources for information.”

“Good online tools. Minimal interaction required.”

“I needed some help within the last couple months to sort out some legacy problems and your support exceeded my expectations in getting this resolved.”

Reasons for Low Overall Satisfaction
(1 or 2 on 7-point Satisfaction Scale)

“In my attempt to receive an IPv6 allocation, I ran into a bureaucratic nightmare that effectively prevented me from receiving an allocation.”

“Every time I try to make any changes through ARIN the bureaucracy is just insane. No one can explain how to perform the simplest of requests.”

“We have several legacy IP addresses from 10+ years back and trying to get them updated with our new Organizational name has been such a challenge that we have just left it alone. Very difficult to get records updated and transfer process/form old/cumbersome.”

“Instead of helping new ISP startups (especially VPS providers), ARIN is currently effectively making everything to make growth a very painful process. This makes absolutely no sense, especially considering that ARIN is funded by the same businesses.”

“Your pursuit of your policies is discriminatory against small business.”
Those satisfied with the fees believe they are reasonable for the services provided or are legacy members who do not pay anything. Many members of the community dissatisfied with the fees find new IPv6 costs too high.

**Reasons for High Overall Satisfaction Based on Fees Paid**

(6 or 7 on 7-point Satisfaction Scale)

- “Seems we get a reasonable service for a reasonable rate.”
- “Excellent work completing what we ask for in a timely manner.”
- “The fees are very reasonable. I actually think they should be raised.”
- “The fees are a little high for imaginary property, but not out of reach for even small organizations.”
- “We don’t pay a high fee for the services we receive. We don’t need much in the way of services either. So, value matches in my opinion.”
- “I felt that the fee schedule was explained very well in advance and they were fair.”
- “Not paying anything for an old Class C.”
- “Being rated a legacy address allocation, the fees paid are minimal, and the services available are great for the cost.”

**Reasons for Low Overall Satisfaction Based on Fees Paid**

(1 or 2 on 7-point Satisfaction Scale)

- “Too much of the high fees go to items unrelated to the services provided.”
- “Pay too much for what is essentially an automated process. Seems like there is way too much bureaucracy and I am concerned about proposed fees for IPv6 address space which frankly would be ludicrous.”
- “I’m very disappointed that IPv6 costs extra (double in our case!).”
- “ARIN only makes it more difficult for an ISP to function as a business. The amount of nonsense we had to go through so far (and continuing to go through) when dealing with ARIN is unspeakable.”
- “Numbers are free. ARIN provides very little value for what is basically a free (but limited) resource. ARIN needs to provide more value for the money.”
- “Not sure what value I get.”
PERFORMANCE & EXPECTATIONS
Overview of How Performance and Expectation are Measured

- A scorecard was developed by capturing perceived performance and expectation on 33 specific attributes grouped into 8 dimensions: Policy Development (6 items), Registration Services (5), Engineering (4), Financial Services (2), Communications/Outreach (6), ARIN Meetings (3), Customer Service (5), and Internet Governance (2).

- For each of the 33 items, community members were asked two questions:
  1) **Performance**: How well does this describe ARIN? (Scale of 1 to 10)
  2) **Expectation**: How well does this describe an “excellent” Internet Number Registry organization? (same scale)

- Actual success is defined as the gap between Expectation and Performance. In the long run, ARIN should focus on closing gaps to come as close as possible to (or even exceeding) expectations of community members.

- In its planning, ARIN should focus on gaps on individual items as well as the aggregate for each of the eight dimensions.

- The following pages report the scorecard results, starting with the high level view across the 8 dimensions.
### How to Read Scorecard Results

**Example Performance and Expectations**
% Describes ARIN/an Excellent Organization (Top 3 Box)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>ARIN's Current Performance</th>
<th>Expectations/Where Members Think ARIN Should Be</th>
<th>Difference Between Expectations Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Example</td>
<td>72%</td>
<td>89%</td>
<td>17</td>
</tr>
<tr>
<td>Attribute #1</td>
<td>79%</td>
<td>91%</td>
<td>12</td>
</tr>
<tr>
<td>Attribute #2</td>
<td>65%</td>
<td>86%</td>
<td>21</td>
</tr>
</tbody>
</table>

**Points from Expectations**

*Note: data not real*

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything).

---Dashed lines show expectations
Based on community expectations, there is some room for improvement on all of ARIN’s service dimensions. ARIN does the best job (smallest gaps) meeting expectations on Internet Governance, Engineering and Financial Services. The greatest improvement opportunity lies in Communications/Outreach, where expectations are high but performance low.

**Overall Performance and Expectations**

% Describes ARIN/an Excellent Organization (Top 3 Box)

<table>
<thead>
<tr>
<th>Service</th>
<th>Overall</th>
<th>Performance</th>
<th>Expectations</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>76%</td>
<td>88%</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Internet Governance</td>
<td>81%</td>
<td>88%</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Financial Services</td>
<td>83%</td>
<td>93%</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Engineering</td>
<td>79%</td>
<td>89%</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>ARIN Meetings</td>
<td>65%</td>
<td>77%</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Customer Service</td>
<td>79%</td>
<td>92%</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Policy Development</td>
<td>74%</td>
<td>87%</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Registration Services</td>
<td>77%</td>
<td>91%</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Communication Outreach</td>
<td>70%</td>
<td>87%</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Internet Governance is one of ARIN’s strengths. A large majority of the community believes ARIN supports efforts to keep Internet number registries self-regulated and takes an appropriately active role in Internet governance, and performance is close to expectations for an excellent provider.

<table>
<thead>
<tr>
<th>Internet Governance Performance and Expectations</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Internet Governance</td>
<td>81% 88% 7</td>
</tr>
<tr>
<td>Supports efforts to keep Internet number registries self-governed, as defined by the needs of their respective communities</td>
<td>84% 90% 6</td>
</tr>
<tr>
<td>Takes an active role in Internet governance</td>
<td>78% 86% 8</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Financial Services is another relative strength for ARIN, with high performance that is not far from high expectations. The biggest opportunity for improvement is in clarity of invoicing and payment procedures.

### Financial Services Performance and Expectations

% Describes ARIN/an Excellent Organization (Top 3 Box)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Financial Services</td>
<td>10</td>
</tr>
<tr>
<td>Provides timely and appropriate responses for billing and administration inquiries</td>
<td>9</td>
</tr>
<tr>
<td>Invoicing and payment processing procedures are explained clearly</td>
<td>12</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations
ARIN performs well on Engineering with the highest rating and smallest gap on the quality and reliability of technical services. Timely delivery of new services and enhancements has the most room for improvement.

### Engineering Performance and Expectations
% Describes ARIN/an Excellent Organization (Top 3 Box)

<table>
<thead>
<tr>
<th>Services</th>
<th>Rating</th>
<th>Expectations</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Engineering</td>
<td>79%</td>
<td>89%</td>
<td>10</td>
</tr>
<tr>
<td>Technical services operate at a high level of quality and reliability</td>
<td>85%</td>
<td>92%</td>
<td>7</td>
</tr>
<tr>
<td>Tools and resources (such as WHOIS, WhoWas, DNS, etc) are easy to understand</td>
<td>82%</td>
<td>92%</td>
<td>10</td>
</tr>
<tr>
<td>Provides tools and user resources that are relevant and useful to me</td>
<td>78%</td>
<td>88%</td>
<td>10</td>
</tr>
<tr>
<td>New technical services and enhancements are delivered in a timely manner</td>
<td>70%</td>
<td>85%</td>
<td>15</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Expectations for Meetings are lower than most other service dimensions and ARIN performs moderately well compared to them. Just half of the community feel that the content of ARIN meetings make them want to attend. The community rates ARIN higher on the election process being easy to understand and use, but expectations are also high.

### ARIN Meetings Performance and Expectations

<table>
<thead>
<tr>
<th>% Describes ARIN/an Excellent Organization (Top 3 Box)</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall ARIN Meetings</td>
<td>12</td>
</tr>
<tr>
<td>Election process for the Board and Advisory Council is clear and transparent</td>
<td>8</td>
</tr>
<tr>
<td>Election process is easy to understand and use by eligible voters</td>
<td>13</td>
</tr>
<tr>
<td>The content and activities of meetings are at a level of importance and interest that I want to attend</td>
<td>14</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Although ARIN performs well on Customer Service, it falls below community expectations which are high in this area. ARIN has the greatest improvement opportunities on providing clear information and working with customers to resolve complex issues.

### Customer Service Performance and Expectations

<table>
<thead>
<tr>
<th>Customer Service</th>
<th>% Describes ARIN/an Excellent Organization (Top 3 Box)</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Customer Service</strong></td>
<td>79%</td>
<td>92%</td>
</tr>
<tr>
<td>Has the right people for the job on staff</td>
<td>81%</td>
<td>91%</td>
</tr>
<tr>
<td>Staff interacts effectively with customers and members</td>
<td>79%</td>
<td>89%</td>
</tr>
<tr>
<td>Provides timely responses to requests</td>
<td>81%</td>
<td>95%</td>
</tr>
<tr>
<td>Provides clear and accurate information to customers and members</td>
<td>76%</td>
<td>92%</td>
</tr>
<tr>
<td>Staff works with customers to resolve complex issues</td>
<td>77%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Timeliness, clarity and staff issues are the most frequently cited areas for improvement on Customer Service.

### Suggestions for Improving Customer Service

#### Timeliness

- “There needs to be a way to get a hold of a knowledgeable human in real-time.”
- “Speed response time. Recognize that this is an area that warrants practical solutions to business and marketplace needs and issues.”
- “While I understand that ARIN receives many requests, often I feel that ARIN staff did not even read my emails completely. The response time is also quite slow.”
- “Provide 24x7 services using an automated system.”
- “ARIN needs to extend hours of operations.”
- “Provide feedback more frequently on running tickets that may take several days to resolve. Going 3,4,5 days without any feedback at all is at least unnerving.”

#### Clarity

- “Less insider jargon in the policies and explanations. Gets a little confusing sometimes.”
- “Some people as in myself, had never registered for IP’s or an ASN. It would have been nice for someone to have given me a short welcome letter telling me what I needed to have ready before applying.”
- “The instructions need less legalese and more average human talk.”
- “Send more info about ARIN services and the work they do to members.”
- “The transfer process is painful - at least the old form. Hard to understand what legal paperwork is required. Tickets are just closed referencing a website instead of providing specifics.”

#### Staff

- “More consistency in customer service and less nitpicking by certain staff.”
- “Terse answers from disinterested, overworked staff seems to be the norm when somebody who is new to the process has a question and reaches out for help so they can "do it right" and not be a burden. ARIN has a rep for being scary, mean, and unapproachable.”
- “ARIN will likely need to hire more staff, or train more internal staff on the more complex services it offers. We are seeing some delays in responses, we feel as though only one person is knowledgeable on various services such as RPKI.”
ARIN nearly perfectly meets expectations in implementing policy that adheres to what is developed, ratified and published. The major gap area is in allowing individual participation in the process (expectations are high). Other areas with improvement opportunity include being to adapt quickly to industry change, useful and fair resource management, and effective board oversight.

### Policy Development Performance and Expectations

**% Describes ARIN/an Excellent Organization (Top 3 Box)**

<table>
<thead>
<tr>
<th>Policy Development</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Policy Development</td>
<td>13</td>
</tr>
<tr>
<td>Implements policy adhering to the community-developed and Board ratified policies, as they appear in the Number Resource Policy Manual</td>
<td>4</td>
</tr>
<tr>
<td>The Advisory Council is effective in its role facilitating the Policy Development Process</td>
<td>10</td>
</tr>
<tr>
<td>The Board is effective in their oversight of the Policy Development Process</td>
<td>14</td>
</tr>
<tr>
<td>Has a Policy Development Process which creates useful and fair Internet number resource management policy</td>
<td>15</td>
</tr>
<tr>
<td>Policy Development Process allows policies to change quickly enough in response to changes in the industry</td>
<td>16</td>
</tr>
<tr>
<td>Policy Development Process allows any interested individual to participate</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>74%</th>
<th>87%</th>
</tr>
</thead>
<tbody>
<tr>
<td>81%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>73%</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>76%</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>75%</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>69%</td>
<td>85%</td>
<td></td>
</tr>
<tr>
<td>71%</td>
<td>89%</td>
<td></td>
</tr>
</tbody>
</table>
Registration Services is an area of key opportunity for ARIN to improve. In particular, clarity of the registration process is a key gap area for ARIN to focus on. Timeliness of resource and transfer requests are also an issue.

- There are major differences in how companies of different sizes perceive the clarity of the process to obtain Internet number resources. Small companies, with less than 100 employees, are significantly less likely to feel ARIN’s process is clear and straightforward.

### Registration Services Performance and Expectations

% Describes ARIN/an Excellent Organization (Top 3 Box)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Registration Services</td>
<td>14</td>
</tr>
<tr>
<td>The Registration Services Department adheres to policies published in the Number Resource Policy Manual</td>
<td>2</td>
</tr>
<tr>
<td>The transfer listing service operates at a high level of quality, usability, and reliability</td>
<td>12</td>
</tr>
<tr>
<td>Resource requests are processed in a timely manner</td>
<td>15</td>
</tr>
<tr>
<td>Transfer requests are processed in a timely manner</td>
<td>17</td>
</tr>
<tr>
<td>The process to obtain Internet number resources is clear and straightforward</td>
<td>24</td>
</tr>
</tbody>
</table>

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Communications and Outreach should be a top focus area for ARIN. ARIN does the best job of meeting expectations on communicating organization activities, and needs the most improvement on having an easily navigable website, transparency, and clarity of communicating plans.

- Improvement on Communication/Outreach can be targeted at specific groups. Those in smaller companies have difficulty navigating the website while those with low familiarity with the organization have trouble getting communications about ARIN’s activities. Community members in technical occupations are more likely than managers to expect and credit ARIN for transparency.

### Communications/Outreach Performance and Expectations

<table>
<thead>
<tr>
<th>% Describes ARIN/an Excellent Organization (Top 3 Box)</th>
<th>Points from Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Communications/Outreach</td>
<td>70% 87% 17</td>
</tr>
<tr>
<td>Clearly communicates the organization’s activities (meetings, elections, etc.)</td>
<td>70% 79% 9</td>
</tr>
<tr>
<td>Communicates in a way that meets my needs</td>
<td>74% 90% 16</td>
</tr>
<tr>
<td>Offers sufficient opportunities to obtain customer and member feedback</td>
<td>71% 87% 16</td>
</tr>
<tr>
<td>Clearly communicates the organization’s future plans</td>
<td>68% 85% 17</td>
</tr>
<tr>
<td>Is a transparent organization</td>
<td>71% 90% 19</td>
</tr>
<tr>
<td>I am able to easily navigate the website to find the content I need</td>
<td>68% 90% 22</td>
</tr>
</tbody>
</table>

Dashed lines show expectations.

Q4. The following is a list of features you may expect from ARIN or a professional organization with a similar purpose. For each feature below, please provide two ratings: 1) ARIN’s performance: rate how well each feature describes ARIN, 2) Your expectation: rate how well each feature describes an “excellent organization” with the same mission as ARIN (realizing that you may not expect even an excellent organization to be a perfect “10” on everything). Dashed lines show expectations.
Identifying Priorities: How to Read Quadrants

- A quadrant approach is used to classify different performance attributes by their level of priority. Each of the 33 attributes is plotted by (a) its importance in driving overall loyalty, and (b) by the size of the performance gap. Each attribute is plotted by (a) its importance in driving overall loyalty, and (b) by the size of the performance gap:
  - Importance was derived statistically based on how well an attribute explains the mean loyalty index (average of satisfaction with meeting needs, satisfaction with value, and likelihood to continue using ARIN).
- Attributes in the same performance dimension are indicated by their marker colors.
- The quadrant map on the following slide is divided into four areas:
  - **Strengths** (High Importance and Small Gap) – these areas define the ARIN's current added value.
  - **Opportunities** (High Importance and Large Gap) – these areas should be the top focus to improve satisfaction and loyalty.
  - **Secondary Strengths** (Lower Importance and Small Gap) – these strengths could be leveraged to shore up loyalty.
  - **Secondary Opportunities** (Lower Importance but Large gaps) – these areas could be problems if not addressed, but are not priorities.
The dedication of ARIN staff is a key strength for the organization as is its ability to implement community created policy. Key opportunities center around timeliness, communication clarity and transparency.

Wording of some features has been shortened due to space constraints. See following slides for full feature text.
ARIN Positioning
A majority of community members believe ARIN adheres to the values of an open internet and cares about its members and customers. Those more familiar with ARIN are less positive about its image, particularly in the area of being “bureaucratic.”

**Descriptions of ARIN**
(n=699)

<table>
<thead>
<tr>
<th>Description</th>
<th>Adheres to the values of an open Internet</th>
<th>Cares about customers and members</th>
<th>Is responsive to the needs of its community</th>
<th>Uses its financial resources efficiently</th>
<th>Bureaucratic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describes ARIN</td>
<td>66%</td>
<td>58%</td>
<td>54%</td>
<td>33%</td>
<td>28%</td>
</tr>
<tr>
<td>Somewhat describes ARIN</td>
<td>17%</td>
<td>25%</td>
<td>22%</td>
<td>16%</td>
<td>32%</td>
</tr>
<tr>
<td>Does not describes ARIN</td>
<td>4%</td>
<td>7%</td>
<td>8%</td>
<td>45%</td>
<td>15%</td>
</tr>
<tr>
<td>Not sure</td>
<td>13%</td>
<td>9%</td>
<td>16%</td>
<td>15%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Q11. We are interested in your perceptions of ARIN. Please tell us how well the following statements describe ARIN.
Different image areas very in how much they impact loyalty to ARIN (defined by a composite of satisfaction, value, and willingness to switch if given a choice). The most important image areas are being responsive to community needs, caring about customers, and using financial resources efficiently.

### ARIN Image (n=699)

<table>
<thead>
<tr>
<th>Priority Index*</th>
<th>Importance^</th>
<th>% Describes Well (8-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses its financial resources efficiently</td>
<td>1.5</td>
<td>23%</td>
</tr>
<tr>
<td>Is responsive to the needs of its community</td>
<td>1.2</td>
<td>25%</td>
</tr>
<tr>
<td>Cares about customers and members</td>
<td>1.0</td>
<td>24%</td>
</tr>
<tr>
<td>Adheres to the values of an open Internet</td>
<td>0.7</td>
<td>20%</td>
</tr>
<tr>
<td>Bureaucratic</td>
<td>0.2</td>
<td>7%</td>
</tr>
</tbody>
</table>

A **Priority Index** identifies areas where ARIN should focus most on managing its image. The highest indexed area is in the perception of using financial resources efficiently. Convincing people ARIN is effective here will have the greatest impact on loyalty.

*Priority Index = Importance x % Needs Improvement (rated (1-7) * 10

^Based on correlation with likelihood to continue using ARIN in Q3 Q10. Below is a list of events and meetings facilitated by ARIN. Please check the ones you have attended in the past two years
FAMILIARITY & USAGE OF ARIN PRODUCTS AND SERVICES
Just over half of community members are at least moderately familiar with ARIN, though only a tenth are highly familiar.

- Familiarity is much higher among Internet Service Providers; 75% of ISPs are highly/moderately familiar with ARIN, compared to 49% of Non-ISPs.

### Familiarity with ARIN

<table>
<thead>
<tr>
<th></th>
<th>Total (n=699)</th>
<th>ISPs (n=157)</th>
<th>Non-ISPs (541)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very familiar</td>
<td>11%</td>
<td>18%</td>
<td>9%</td>
</tr>
<tr>
<td>Moderately familiar</td>
<td>43%</td>
<td>57%</td>
<td>40%</td>
</tr>
<tr>
<td>Slightly familiar</td>
<td>40%</td>
<td>24%</td>
<td>45%</td>
</tr>
<tr>
<td>Not at all familiar</td>
<td>5%</td>
<td>2%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Q6. How familiar are you with ARIN and its activities?
The majority is familiar with every ARIN product or service. Not surprisingly, WHOIS and IPv4 head the list.

Familiarity with ARIN Products and Services
(n=699)

- WHOIS: 97%
- IPv4 Registration: 97%
- ARIN Online: 96%
- ASN Registration: 93%
- Reverse DNS: 93%
- IPv6 Registration: 93%
- Internet Routing Registry: 86%
- Registration Services Help Desk: 86%
- Resource Transfer Services: 82%
- Mailing Lists: 80%
- Bulk WHOIS: 80%
- DNSSEC: 79%
- Fraud Reporting: 75%
- Financial Services Help Desk: 73%
- RPKI: 70%
- RESTful: 69%
- Consultation and Suggestion Process: 69%
- Specified Transfer Listing Service: 69%
- SWIP: 66%
- WhoWas: 63%

Q7. Below is a list of services and products developed by ARIN. For each one, please indicate how frequently you use each product or service (not familiar was an option).
WHOIS is the most frequently used ARIN product followed by ARIN Online and Reverse DNS. Several products and services appear to be narrowly marketed with up to one-third of community members completely unaware of the many products and services.

**Use of ARIN Products and Services**
(n=699)

- **WHOIS**: 57% Use Monthly or More, 33% Use Less than Monthly
- **ARIN Online**: 30% Use Monthly or More, 58% Use Less than Monthly
- **IPv4 Registration**: 6% Use Monthly or More, 80% Use Less than Monthly
- **ASN Registration**: 3% Use Monthly or More, 72% Use Less than Monthly
- **Reverse DNS**: 24% Use Monthly or More, 43% Use Less than Monthly
- **Internet Routing Registry**: 10% Use Monthly or More, 45% Use Less than Monthly
- **Registration Services Help Desk**: 3% Use Monthly or More, 49% Use Less than Monthly
- **IPv6 Registration**: 3% Use Monthly or More, 42% Use Less than Monthly
- **Mailing Lists**: 14% Use Monthly or More, 20% Use Less than Monthly
- **Resource Transfer Services**: 2% Use Monthly or More, 28% Use Less than Monthly
- **Bulk WHOIS**: 7% Use Monthly or More, 21% Use Less than Monthly
- **SWIP**: 8% Use Monthly or More, 19% Use Less than Monthly
- **RESTful**: 6% Use Monthly or More, 21% Use Less than Monthly
- **DNSSEC**: 4% Use Monthly or More, 21% Use Less than Monthly
- **WhoWas**: 4% Use Monthly or More, 20% Use Less than Monthly
- **Financial Services Help Desk**: 1% Use Monthly or More, 21% Use Less than Monthly
- **RPKI**: 2% Use Monthly or More, 16% Use Less than Monthly
- **Fraud Reporting**: 3% Use Monthly or More, 14% Use Less than Monthly
- **Consultation and Suggestion Process**: 2% Use Monthly or More, 15% Use Less than Monthly
- **Specified Transfer Listing Service**: 1% Use Monthly or More, 15% Use Less than Monthly

“I don’t think I have any need to use it.”
“I rarely if ever, need it.”
“I’m not really sure what it is.”
“Didn’t know it was available.”

- Community members who do not use ARIN Online do not need it or have little knowledge of what it offers.

Q7. Below is a list of services and products developed by ARIN. For each one, please indicate how frequently you use each product or service.
Q9a. Why haven’t you used ARIN Online?
Satisfaction is high with ARIN’s most frequently used products (WHOIS and Reverse DNS). At least two out of three tend to be satisfied with any product or service.

<table>
<thead>
<tr>
<th>Product/Service</th>
<th>% Highly Satisfied (6-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHOIS</td>
<td>83%</td>
</tr>
<tr>
<td>Reverse DNS</td>
<td>78%</td>
</tr>
<tr>
<td>IPv4 Registration</td>
<td>76%</td>
</tr>
<tr>
<td>WhoWas</td>
<td>76%</td>
</tr>
<tr>
<td>ASN Registration</td>
<td>76%</td>
</tr>
<tr>
<td>ARIN Online</td>
<td>74%</td>
</tr>
<tr>
<td>Financial Services Help Desk</td>
<td>73%</td>
</tr>
<tr>
<td>SWIP</td>
<td>72%</td>
</tr>
<tr>
<td>Bulk WHOIS</td>
<td>72%</td>
</tr>
<tr>
<td>Internet Routing Registry</td>
<td>71%</td>
</tr>
<tr>
<td>DNSSEC</td>
<td>71%</td>
</tr>
<tr>
<td>Registration Services Help Desk</td>
<td>71%</td>
</tr>
<tr>
<td>IPv6 Registration</td>
<td>71%</td>
</tr>
<tr>
<td>RESTful</td>
<td>67%</td>
</tr>
<tr>
<td>Fraud Reporting</td>
<td>66%</td>
</tr>
<tr>
<td>Mailing Lists</td>
<td>65%</td>
</tr>
<tr>
<td>Consultation and Suggestion Process</td>
<td>65%</td>
</tr>
<tr>
<td>Resource Transfer Services</td>
<td>64%</td>
</tr>
<tr>
<td>RPKI</td>
<td>64%</td>
</tr>
<tr>
<td>Specified Transfer Listing Service</td>
<td>63%</td>
</tr>
</tbody>
</table>

Q8. How satisfied are you with each of the following products and services offered by ARIN?
The vast majority of the community does not attend ARIN events.

Q10. Below is a list of events and meetings facilitated by ARIN. Please check the ones you have attended in the past two years.

Attendance of ARIN Events
(n=699)

- Public Policy and Members’ Meeting – Remote: 7%
- ARIN on the Road: 5%
- Public Policy Consultations at NANOG: 5%
- Public Policy and Members’ Meeting – In-person: 3%
- None of the above: 87%
ARIN community members mentioned a number of other meetings they attend in connection with their jobs. NANOG, CISCO, other RIRs and IPv6 related events were most frequently mentioned.

8% said they attended events and meetings related to Internet number registry topics that were **not** facilitated by ARIN.

### Events include:

- AFRINIC
- APNIC
- CANTO
- CES
- ChimeNET
- Cisco Live
- Cisco-related classes
- CTA
- Educause
- FISPA
- FOSDEM Presentations
- GPN Annual Meeting
- IANA
- ICANN
- IETF
- IGF
- Internet2
- Interop
- IPv6 IPvAM and DNS Seminar
- IPv6 Adoption Conference
- IPv6 Training
- ITU
- LACNIC
- NANOG
- Opnetwork in DC
- OTA Conventions
- RIPE
- USG/IAWG
- Wispa
Virtual methods are the most common way members of the community contact ARIN; email and contact through ARIN online are the most frequently cited.

Contact with ARIN in the Past 12 Months
(n=699)

- Responded to an email sent by ARIN: 59%
- Contacted ARIN through ARIN online: 44%
- Requested a resource: 40%
- Contacted the Registration Services Help Desk: 32%
- Contacted the Financial Services Help Desk: 20%
- Contacted ARIN by telephone: 20%
- Taken an ARIN survey about a registration transaction: 14%
- Voted in an election: 12%
- Posted to an ARIN mailing list: 6%
- Used the ARIN Consultation and Suggestion Process: 3%
- Interacted with ARIN via social media: 2%
- None of the above: 18%
Recent contact methods reflect community member preference as the vast majority desire to communicate via email and the Internet. However, a fourth prefers telephone.

Q13. What is your preferred method of interacting with the ARIN organization? Please check all that apply.
Few community members have participated in the Policy Development Process in the last year. A lack of time, satisfaction with current policy and a belief that individuals do not think they can have an impact are top reasons why community members do not participate.
There is strong interest in training provided by ARIN. IPv6 deployment and more information on how to use ARIN tools and services are likely to be the most popular training courses.

Training Interest
(n=699)

“Transfer resources from one organization to another.”
“DNS and Reverse DNS.”
“RESTful”
“How to change registration when your company changes names.”

Q16. For which of the following topics would you be interested in formal training provided by ARIN? Please select all that apply.
There is room for improvement on mailing list satisfaction. Barely half of users are satisfied with their ability to comment and participate using lists.

Mailing List Satisfaction

Mailing List Examples Shown in Survey
- ARIN Announce
- ARIN Discuss
- ARIN Public Policy Mailing List
- ARIN Consult
- ARIN Suggest
- ARIN Tech Discuss
- ARIN Issued

<table>
<thead>
<tr>
<th>Mailing List</th>
<th>Highly Satisfied (6-7)</th>
<th>Somewhat Satisfied (4-5)</th>
<th>Dissatisfied (1-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARIN Announce</td>
<td>48%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>ARIN Discuss</td>
<td>53%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>ARIN Public Policy Mailing List</td>
<td>38%</td>
<td>10%</td>
<td>51%</td>
</tr>
</tbody>
</table>

Total (n=699)
- Highly Satisfied: 43%
- Somewhat Satisfied: 53%
- Dissatisfied: 38%

Mailing List User (n=239)
- Highly Satisfied: 48%
- Somewhat Satisfied: 41%
- Dissatisfied: 51%

Non-User (n=460)
- Highly Satisfied: 38%
- Somewhat Satisfied: 51%
- Dissatisfied: 38%

Q15. How satisfied are you with your ability to comment and participate using ARIN Mailing lists?
Current unsatisfied list users believe the process is intimidating and ineffective.

**Reasons for Lower Satisfaction**
(Among those who rated satisfaction less than a 5 on a 7-point scale)

- **It is somewhat intimidating to participate in the Mailing List discussions**
  - Total (n=254)
  - Mailing Lists User (n=53)
  - Non-User (n=201)
  - 17% (28%)
  - 13% (28%)
  - 28% (28%)

- **Mailing Lists do not effectively foster discussions**
  - 17% (25%)
  - 15% (15%)

- **Mailing Lists are not an effective way to interact with ARIN**
  - 15% (21%)
  - 14% (14%)

- **Mailing List discussions do not stay on topic**
  - 11% (17%)
  - 10% (10%)

- **Other**
  - 36% (36%)
  - 36% (36%)

- **Not Sure**
  - 30% (36%)
  - 25% (25%)
  - 31% (31%)

- **Non-users of mailing lists have low satisfaction largely due to low awareness of the lists. Users feel it is difficult to keep up and that lists are for a select group of “insider” members.**

  - “These tend to be dominated by the same individuals that push their agenda.”
  - “Small number of vocal participants.”
  - “There are insiders and outsiders and we’re not insiders.”
  - “Purpose of mailing lists not clear.”
  - “Impossible to keep up.”

- “I don’t know about ARIN mailing lists.”
- “Not sure how to get on the list.”
- “Email is cluttered with other work content making following a list difficult.”
- “Too much traffic.”
DEMOGRAPHICS,
FIRMOGRAPHICS &
OTHER ISSUES
• Almost half of community members who participated in the survey are a network engineer.
• The average years in the profession is 17.

### Years in Profession (n=699)

<table>
<thead>
<tr>
<th>Years in Profession</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>0%</td>
</tr>
<tr>
<td>2 to 5 years</td>
<td>3%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>11%</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>22%</td>
</tr>
<tr>
<td>16 to 20 years</td>
<td>26%</td>
</tr>
<tr>
<td>21 or more years</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Average Years in Profession</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

### Occupation (n=698)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Engineer</td>
<td>46%</td>
</tr>
<tr>
<td>Management</td>
<td>26%</td>
</tr>
<tr>
<td>Systems Administrator</td>
<td>17%</td>
</tr>
<tr>
<td>Software Coder/Developer</td>
<td>3%</td>
</tr>
<tr>
<td>Marketing/Business Development</td>
<td>1%</td>
</tr>
<tr>
<td>Attorney/Legal Services</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
</tbody>
</table>
Company Characteristics

- The community members come from a wide spectrum of organization types.
- Half come from organizations with 500 or more employees, and most are based in the U.S.

### Type of Company (n=698)

<table>
<thead>
<tr>
<th>Type of Company</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet service provider</td>
<td>22%</td>
</tr>
<tr>
<td>Education</td>
<td>18%</td>
</tr>
<tr>
<td>Internet content provider</td>
<td>8%</td>
</tr>
<tr>
<td>Government</td>
<td>6%</td>
</tr>
<tr>
<td>Network access provider</td>
<td>5%</td>
</tr>
<tr>
<td>Hardware/software vendor</td>
<td>5%</td>
</tr>
<tr>
<td>Mobile network provider</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>30%</td>
</tr>
<tr>
<td>None of the above</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Number of Employees (n=698)

- Average # of Employees: 741

- 1: 3%
- 2-24: 17%
- 25-49: 6%
- 50-99: 5%
- 100-499: 19%
- 500-999: 9%
- 1,000 or more: 41%

### Location of Company (n=698)

- United States: 86%
- Canada: 11%
- Puerto Rico: <1%
- Jamaica: <1%
- Saint Barthelemy: <1%
- Cayman Islands: <1%
- Other: 2%
RPKI and IPv6 Deployment are still not the norm among ARIN community member companies.

**RPKI Usage**
- 6% currently utilize RPKI
- 28% do not currently utilize RPKI, but plan to in the future
- 34% do not currently utilize RPKI, and do not plan to in the future
- 32% are not sure

**IPv6 Deployment**
- 24% have already deployed IPv6 in some manner
- 7% have a formal plan to deploy IPv6 in some manner
- 46% intend to deploy IPv6 in the future but do not have a formal plan
- 17% have no plans to deploy IPv6
- 6% are not sure