

# APNIC 2020 Survey Appendix B

## Survey Data Tables & Segmentation by Region & Classification of Economies

# Overview

This Appendix B provides the full results for all questions asked in the 2020 APNIC Survey.

These are presented as full frequency and / or mean scores. When analysing the survey data, the data has been cross tabulated the results by respondents' relationship with APNIC (Member or Stakeholder), APNIC sub-region (East Asia, Oceania, South East Asia and South Asia) and Classification of Economies (Least Developed Economies (LDEs)) or Other (Developed or Developing).

Questions marked with an asterix (\*) were asked only of APNIC Members. Individual responses from economies associated with non-APNIC regions were excluded.

## Q2. What is your role within the organisation?

|   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                                   | 1624  | 1120    | 504          | 255       | 296     | 439     | 562        | 476  | 1148  |
| Network/Systems Operations Engineer/Manager   | 39%   | 43%     | 30%          | 35%       | 43%     | 40%     | 38%        | 42%  | 37%   |
| Network/Systems Planning Engineer/Manager     | 26%   | 29%     | 21%          | 29%       | 24%     | 23%     | 28%        | 32%  | 24%   |
| IT Support                                    | 16%   | 14%     | 22%          | 9%        | 18%     | 18%     | 18%        | 20%  | 15%   |
| Manager                                       | 13%   | 13%     | 13%          | 21%       | 13%     | 11%     | 12%        | 12%  | 14%   |
| Academic/Research                             | 11%   | 8%      | 16%          | 12%       | 5%      | 13%     | 11%        | 10%  | 11%   |
| CEO/COO/CFO                                   | 9%    | 11%     | 6%           | 5%        | 13%     | 7%      | 12%        | 12%  | 8%    |
| CTO/CIO                                       | 8%    | 10%     | 4%           | 5%        | 11%     | 6%      | 10%        | 9%   | 8%    |
| Product/Peering/Interconnect Engineer/Manager | 6%    | 7%      | 2%           | 6%        | 6%      | 6%      | 4%         | 4%   | 6%    |
| Project Manager                               | 5%    | 5%      | 7%           | 6%        | 5%      | 5%      | 5%         | 4%   | 5%    |
| Student                                       | 5%    | 4%      | 8%           | 4%        | 3%      | 5%      | 7%         | 6%   | 4%    |
| Other   | 4%    | 3%      | 7%           | 2%        | 6%      | 4%      | 5%         | 4%   | 5%    |
| Trainer                                       | 4%    | 3%      | 7%           | 2%        | 3%      | 5%      | 5%         | 4%   | 4%    |
| Software Engineer                             | 3%    | 3%      | 5%           | 4%        | 4%      | 2%      | 3%         | 2%   | 4%    |
| Sales / Marketing                             | 2%    | 3%      | 2%           | 3%        | 2%      | 3%      | 2%         | 1%   | 3%    |
| Applications Developer                        | 2%    | 2%      | 2%           | 3%        | 3%      | 2%      | 1%         | 1%   | 3%    |

Q3. What is your organisation's relationship with APNIC?

|                                  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|----------------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                      | 1624  | 1120    | 504          | 255       | 296     | 439     | 562        | 476  | 1148  |
| APNIC Member/Account Holder      | 69%   | 100%    | 0%           | 65%       | 73%     | 67%     | 71%        | 74%  | 67%   |
| Member of an NIR in APNIC Region | 16%   | 0%      | 51%          | 25%       | 8%      | 19%     | 14%        | 13%  | 17%   |
| Other Stakeholder                | 15%   | 0%      | 49%          | 11%       | 18%     | 13%     | 15%        | 12%  | 16%   |

Q4. How many times have you used an APNIC service, contacted or interacted with APNIC in the past two (2) years?

|                             | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-----------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                 | 1624  | 1120    | 501          | 255       | 296     | 438     | 561        | 475  | 1146  |
| None                        | 15%   | 10%     | 26%          | 15%       | 7%      | 17%     | 18%        | 17%  | 14%   |
| 1-5 times                   | 42%   | 45%     | 37%          | 47%       | 52%     | 41%     | 36%        | 36%  | 45%   |
| More than 5 times           | 29%   | 34%     | 17%          | 29%       | 32%     | 26%     | 30%        | 29%  | 29%   |
| Don't know/I can't remember | 14%   | 11%     | 20%          | 9%        | 8%      | 16%     | 17%        | 18%  | 12%   |

## Q5. Over the past 2 years have you?



|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1379  | 1007    | 372          | 216       | 276     | 365     | 461        | 393  | 986   |
| * MyAPNIC  | 69%   | 69%     | -            | 61%       | 80%     | 57%     | 74%        | 76%  | 66%   |
| APNIC website                                      | 60%   | 56%     | 70%          | 56%       | 63%     | 54%     | 65%        | 60%  | 59%   |
| APNIC Whois database                               | 52%   | 55%     | 44%          | 85%       | 56%     | 48%     | 52%        | 51%  | 53%   |
| * IP address or AS number resource application     | 42%   | 42%     | -            | 38%       | 41%     | 40%     | 45%        | 44%  | 40%   |
| APNIC training (face-to-face or online)            | 41%   | 39%     | 45%          | 31%       | 42%     | 48%     | 40%        | 44%  | 39%   |
| * APNIC Helpdesk                                   | 37%   | 37%     | -            | 31%       | 36%     | 30%     | 46%        | 46%  | 34%   |
| APNIC Blog   | 33%   | 31%     | 37%          | 30%       | 32%     | 32%     | 36%        | 37%  | 31%   |
| * Resource certification (RPKI)                    | 27%   | 27%     | -            | 27%       | 21%     | 23%     | 32%        | 36%  | 22%   |
| APNIC Conference, APRICOT or another APNIC event   | 27%   | 24%     | 34%          | 28%       | 24%     | 26%     | 28%        | 30%  | 25%   |
| * New membership account                           | 25%   | 25%     | -            | 21%       | 23%     | 20%     | 31%        | 30%  | 23%   |
| Met with an APNIC representative                   | 22%   | 19%     | 28%          | 21%       | 24%     | 19%     | 24%        | 15%  | 21%   |
| * APNIC's EC election                              | 20%   | 20%     | -            | 15%       | 8%      | 13%     | 36%        | 39%  | 12%   |
| * APNIC reverse DNS service (as an address holder) | 18%   | 18%     | -            | 19%       | 16%     | 15%     | 19%        | 19%  | 18%   |
| * IPv4 address transfer (as source or recipient)   | 16%   | 16%     | -            | 18%       | 15%     | 13%     | 17%        | 18%  | 15%   |
| Presentation by APNIC representative               | 16%   | 12%     | 25%          | 13%       | 18%     | 15%     | 15%        | 15%  | 16%   |
| **Contacted APNIC with a query                     | 13%   | -       | 13%          | 8%        | 23%     | 11%     | 13%        | 10%  | 14%   |
| APNIC Internet Directory                           | 11%   | 9%      | 18%          | 14%       | 9%      | 9%      | 13%        | 11%  | 11%   |
| * APNIC Annual Report                              | 10%   | 10%     |              | 16%       | 10%     | 5%      | 10%        | 10%  | 10%   |
| Special Interest Groups (SIGs)                     | 8%    | 6%      | 13%          | 9%        | 7%      | 4%      | 11%        | 10%  | 7%    |
| APNIC Foundation activities (of any kind)          | 7%    | 5%      | 11%          | 5%        | 8%      | 7%      | 7%         | 6%   | 7%    |
| APNIC Policy Development Process                   | 6%    | 5%      | 9%           | 27%       | 5%      | 4%      | 8%         | 8%   | 5%    |
| * APNIC RDAP service                               | 4%    | 4%      | -            | 4%        | 2%      | 3%      | 5%         | 4%   | 3%    |
| APNIC NetOX  | 2%    | 2%      | 2%           | 3%        | 1%      | 2%      | 3%         | 2%   | 2%    |
| None of these                                      | 2%    | 1%      | 5%           | 1%        | 1%      | 4%      | 2%         | 3%   | 2%    |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>MyAPNIC</b>   |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b> | 0%    | 0%      |              | 2%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>         | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>         | 1%    | 1%      |              | 2%        | 1%      | 1%      | 1%         | 1%   | 1%    |
| <b>Neutral</b>   | 5%    | 5%      |              | 9%        | 7%      | 7%      | 2%         | 2%   | 7%    |
| <b>5</b>         | 7%    | 7%      |              | 12%       | 8%      | 8%      | 4%         | 5%   | 9%    |
| <b>6</b>         | 48%   | 48%     |              | 51%       | 51%     | 52%     | 44%        | 45%  | 49%   |
| <b>Excellent</b> | 38%   | 38%     |              | 24%       | 34%     | 31%     | 49%        | 47%  | 33%   |
| <b>Top 3</b>     | 93%   | 93%     |              | 87%       | 93%     | 91%     | 98%        | 97%  | 91%   |
| <b>Mean</b>      | 6.14  | 6.14    |              | 5.77      | 6.11    | 6.05    | 6.39       | 6.35 | 6.04  |
| <b>Std. Dev.</b> | 0.91  | 0.91    |              | 1.19      | 0.86    | 0.90    | 0.71       | 0.74 | 0.97  |

|                      | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|----------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC website</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>     | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>             | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>             | 1%    | 1%      | 0%           | 1%        | 1%      | 1%      | 1%         | 0%   | 1%    |
| <b>Neutral</b>       | 6%    | 5%      | 7%           | 10%       | 5%      | 7%      | 3%         | 3%   | 7%    |
| <b>5</b>             | 10%   | 9%      | 11%          | 16%       | 8%      | 12%     | 5%         | 5%   | 11%   |
| <b>6</b>             | 45%   | 45%     | 44%          | 44%       | 45%     | 47%     | 45%        | 47%  | 44%   |
| <b>Excellent</b>     | 39%   | 40%     | 37%          | 30%       | 42%     | 34%     | 46%        | 45%  | 37%   |
| <b>Top 3</b>         | 93%   | 94%     | 92%          | 89%       | 94%     | 92%     | 97%        | 97%  | 92%   |
| <b>Mean</b>          | 6.16  | 6.18    | 6.10         | 5.92      | 6.22    | 6.06    | 6.33       | 6.33 | 6.09  |
| <b>Std. Dev.</b>     | 0.87  | 0.86    | 0.89         | 0.96      | 0.84    | 0.89    | 0.76       | 0.73 | 0.91  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                       | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-----------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>Whois database</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>      | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>              | 0%    | 0%      | 1%           | 1%        | 1%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>              | 0%    | 0%      | 1%           | 2%        | 0%      | 0%      | 0%         | 0%   | 1%    |
| <b>Neutral</b>        | 6%    | 6%      | 5%           | 11%       | 10%     | 5%      | 1%         | 2%   | 8%    |
| <b>5</b>              | 9%    | 8%      | 15%          | 17%       | 6%      | 12%     | 4%         | 7%   | 10%   |
| <b>6</b>              | 44%   | 43%     | 48%          | 42%       | 45%     | 49%     | 40%        | 40%  | 45%   |
| <b>Excellent</b>      | 40%   | 43%     | 29%          | 28%       | 37%     | 35%     | 54%        | 51%  | 36%   |
| <b>Top 3</b>          | 93%   | 94%     | 92%          | 87%       | 89%     | 95%     | 98%        | 98%  | 91%   |
| Mean                  | 6.16  | 6.22    | 5.95         | 5.80      | 6.08    | 6.14    | 6.46       | 6.40 | 6.07  |
| Std. Dev.             | 0.89  | 0.85    | 0.98         | 1.06      | 0.98    | 0.80    | 0.68       | 0.71 | 0.94  |

|   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>IP address/AS number resource applications</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                                  | 0%    | 0%      |              | 0%        | 0%      | 0%      | 1%         | 1%   | 0%    |
| <b>2</b>  | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>  | 1%    | 1%      |              | 4%        | 4%      | 1%      | 0%         | 0%   | 2%    |
| <b>Neutral</b>                                    | 9%    | 9%      |              | 11%       | 18%     | 8%      | 3%         | 2%   | 12%   |
| <b>5</b>  | 6%    | 6%      |              | 11%       | 5%      | 11%     | 3%         | 3%   | 8%    |
| <b>6</b>  | 41%   | 41%     |              | 37%       | 38%     | 47%     | 40%        | 45%  | 39%   |
| <b>Excellent</b>                                  | 42%   | 42%     |              | 39%       | 36%     | 34%     | 53%        | 49%  | 38%   |
| <b>Top 3</b>                                      | 89%   | 89%     |              | 86%       | 79%     | 91%     | 96%        | 97%  | 86%   |
| Mean  | 6.12  | 6.12    |              | 5.96      | 5.86    | 6.05    | 6.41       | 6.38 | 6.00  |
| Std. Dev.   | 1.01  | 1.01    |              | 1.12      | 1.20    | 0.92    | 0.83       | 0.81 | 1.07  |



**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                       | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-----------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Training</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>      | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>              | 0%    | 0%      | 1%           | 0%        | 0%      | 0%      | 1%         | 0%   | 0%    |
| <b>3</b>              | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>        | 3%    | 3%      | 2%           | 2%        | 3%      | 3%      | 2%         | 2%   | 4%    |
| <b>5</b>              | 7%    | 7%      | 9%           | 11%       | 6%      | 8%      | 4%         | 5%   | 8%    |
| <b>6</b>              | 38%   | 37%     | 40%          | 29%       | 29%     | 46%     | 40%        | 36%  | 38%   |
| <b>Excellent</b>      | 52%   | 53%     | 48%          | 59%       | 61%     | 43%     | 53%        | 57%  | 49%   |
| <b>Top 3</b>          | 97%   | 97%     | 97%          | 98%       | 97%     | 97%     | 97%        | 98%  | 96%   |
| <b>Mean</b>           | 6.38  | 6.40    | 6.32         | 6.45      | 6.48    | 6.28    | 6.42       | 6.48 | 6.33  |
| <b>Std. Dev.</b>      | 0.77  | 0.76    | 0.81         | 0.75      | 0.76    | 0.76    | 0.75       | 0.68 | 0.81  |

|                       | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-----------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Helpdesk</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>      |       |         |              |           |         |         |            |      |       |
| <b>2</b>              | 1%    | 1%      |              | 2%        | 0%      | 0%      | 1%         | 1%   | 0%    |
| <b>3</b>              | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>        | 4%    | 4%      |              | 7%        | 8%      | 3%      | 1%         | 0%   | 6%    |
| <b>5</b>              | 6%    | 6%      |              | 9%        | 10%     | 6%      | 4%         | 4%   | 8%    |
| <b>6</b>              | 39%   | 39%     |              | 46%       | 32%     | 44%     | 39%        | 44%  | 36%   |
| <b>Excellent</b>      | 50%   | 50%     |              | 37%       | 51%     | 48%     | 56%        | 50%  | 50%   |
| <b>Top 3</b>          | 95%   | 95%     |              | 91%       | 92%     | 98%     | 98%        | 99%  | 94%   |
| <b>Mean</b>           | 6.33  | 6.33    |              | 6.07      | 6.25    | 6.36    | 6.45       | 6.39 | 6.29  |
| <b>Std. Dev.</b>      | 0.87  | 0.87    |              | 1.04      | 0.94    | 0.72    | 0.82       | 0.83 | 0.90  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Blog</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>  | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>          | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>          | 0%    | 1%      | 0%           | 0%        | 1%      | 0%      | 1%         | 1%   | 0%    |
| <b>Neutral</b>    | 7%    | 7%      | 7%           | 11%       | 5%      | 9%      | 5%         | 6%   | 7%    |
| <b>5</b>          | 8%    | 8%      | 9%           | 12%       | 7%      | 11%     | 5%         | 7%   | 9%    |
| <b>6</b>          | 45%   | 44%     | 48%          | 42%       | 35%     | 48%     | 51%        | 52%  | 42%   |
| <b>Excellent</b>  | 39%   | 41%     | 36%          | 35%       | 52%     | 32%     | 38%        | 35%  | 42%   |
| <b>Top 3</b>      | 93%   | 93%     | 93%          | 89%       | 94%     | 91%     | 94%        | 93%  | 92%   |
| <b>Mean</b>       | 6.16  | 6.18    | 6.12         | 6.02      | 6.33    | 6.03    | 6.21       | 6.14 | 6.17  |
| <b>Std. Dev.</b>  | 0.87  | 0.88    | 0.85         | 0.96      | 0.88    | 0.89    | 0.81       | 0.84 | 0.89  |

|                                       | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---------------------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>Resources Certification (RPKI)</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                      | 0%    | 0%      |              | 0%        | 2%      | 0%      | 0%         | 0%   | 1%    |
| <b>2</b>                              | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>                              | 1%    | 1%      |              | 2%        | 0%      | 0%      | 0%         | 0%   | 2%    |
| <b>Neutral</b>                        | 5%    | 5%      |              | 12%       | 5%      | 3%      | 3%         | 3%   | 6%    |
| <b>5</b>                              | 4%    | 4%      |              | 5%        | 2%      | 5%      | 4%         | 5%   | 4%    |
| <b>6</b>                              | 44%   | 44%     |              | 54%       | 41%     | 49%     | 40%        | 40%  | 47%   |
| <b>Excellent</b>                      | 46%   | 46%     |              | 27%       | 50%     | 43%     | 53%        | 53%  | 41%   |
| <b>Top 3</b>                          | 94%   | 94%     |              | 85%       | 93%     | 97%     | 97%        | 97%  | 91%   |
| <b>Mean</b>                           | 6.26  | 6.26    |              | 5.90      | 6.27    | 6.31    | 6.43       | 6.43 | 6.15  |
| <b>Std. Dev.</b>                      | 0.90  | 0.90    |              | 1.02      | 1.11    | 0.72    | 0.71       | 0.71 | 1.00  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Conferences, APRICOT &amp; Events</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                               | 0%    | 0%      | 1%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 2  | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 3  | 0%    | 0%      | 0%           | 0%        | 1%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>                                 | 5%    | 4%      | 8%           | 10%       | 9%      | 4%      | 2%         | 6%   | 5%    |
| 5  | 8%    | 8%      | 7%           | 7%        | 10%     | 10%     | 4%         | 6%   | 8%    |
| 6  | 34%   | 34%     | 33%          | 33%       | 22%     | 42%     | 34%        | 34%  | 33%   |
| <b>Excellent</b>                               | 53%   | 54%     | 51%          | 50%       | 57%     | 44%     | 60%        | 54%  | 53%   |
| <b>Top 3</b>                                   | 94%   | 96%     | 91%          | 90%       | 90%     | 96%     | 98%        | 94%  | 94%   |
| Mean   | 6.33  | 6.38    | 6.24         | 6.23      | 6.24    | 6.25    | 6.53       | 6.36 | 6.32  |
| Std. Dev.                                      | 0.89  | 0.82    | 1.03         | 0.96      | 1.06    | 0.81    | 0.65       | 0.85 | 0.92  |

|                               | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-------------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>New membership account</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>              | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 2                             | 0%    | 0%      |              | 3%        | 0%      | 0%      | 0%         | 0%   | 1%    |
| 3                             | 4%    | 4%      |              | 3%        | 6%      | 0%      | 3%         | 3%   | 4%    |
| <b>Neutral</b>                | 6%    | 6%      |              | 6%        | 13%     | 10%     | 1%         | 1%   | 9%    |
| 5                             | 8%    | 8%      |              | 16%       | 6%      | 12%     | 4%         | 1%   | 12%   |
| 6                             | 41%   | 41%     |              | 52%       | 40%     | 44%     | 39%        | 41%  | 41%   |
| <b>Excellent</b>              | 41%   | 41%     |              | 19%       | 35%     | 35%     | 54%        | 53%  | 34%   |
| <b>Top 3</b>                  | 90%   | 90%     |              | 87%       | 81%     | 90%     | 96%        | 96%  | 87%   |
| Mean                          | 6.08  | 6.08    |              | 5.68      | 5.85    | 6.04    | 6.40       | 6.40 | 5.90  |
| Std. Dev.                     | 1.06  | 1.06    |              | 1.17      | 1.22    | 0.93    | 0.84       | 0.86 | 1.11  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                                      | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--------------------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>Met with APNIC representative</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                     | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>                             | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>                             | 1%    | 1%      | 1%           | 2%        | 0%      | 0%      | 1%         | 0%   | 1%    |
| <b>Neutral</b>                       | 2%    | 2%      | 4%           | 4%        | 6%      | 1%      | 0%         | 0%   | 3%    |
| <b>5</b>                             | 6%    | 5%      | 8%           | 7%        | 6%      | 9%      | 4%         | 8%   | 5%    |
| <b>6</b>                             | 28%   | 26%     | 31%          | 41%       | 22%     | 33%     | 23%        | 27%  | 28%   |
| <b>Excellent</b>                     | 63%   | 67%     | 56%          | 46%       | 66%     | 57%     | 72%        | 65%  | 62%   |
| <b>Top 3</b>                         | 97%   | 98%     | 95%          | 93%       | 94%     | 99%     | 99%        | 100% | 96%   |
| Mean                                 | 6.51  | 6.57    | 6.38         | 6.24      | 6.48    | 6.46    | 6.66       | 6.58 | 6.47  |
| Std. Dev.                            | 0.77  | 0.71    | 0.86         | 0.92      | 0.87    | 0.72    | 0.64       | 0.63 | 0.83  |

|                          | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC EC Election</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>         | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>                 | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>                 | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 1%    |
| <b>Neutral</b>           | 11%   | 11%     |              | 22%       | 13%     | 12%     | 6%         | 9%   | 14%   |
| <b>5</b>                 | 8%    | 8%      |              | 13%       | 19%     | 18%     | 4%         | 5%   | 13%   |
| <b>6</b>                 | 46%   | 46%     |              | 39%       | 50%     | 47%     | 48%        | 45%  | 46%   |
| <b>Excellent</b>         | 35%   | 35%     |              | 26%       | 19%     | 24%     | 42%        | 41%  | 26%   |
| <b>Top 3</b>             | 89%   | 89%     |              | 78%       | 88%     | 88%     | 94%        | 91%  | 85%   |
| Mean                     | 6.03  | 6.03    |              | 5.70      | 5.75    | 5.82    | 6.25       | 6.19 | 5.83  |
| Std. Dev.                | 0.95  | 0.95    |              | 1.11      | 0.93    | 0.94    | 0.81       | 0.88 | 1.01  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                    | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>Reverse DNS</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>   | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>           | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>           | 2%    | 2%      |              | 0%        | 3%      | 0%      | 1%         | 2%   | 2%    |
| <b>Neutral</b>     | 5%    | 5%      |              | 10%       | 6%      | 0%      | 3%         | 2%   | 6%    |
| <b>5</b>           | 10%   | 10%     |              | 7%        | 12%     | 15%     | 6%         | 5%   | 12%   |
| <b>6</b>           | 46%   | 46%     |              | 59%       | 39%     | 59%     | 37%        | 49%  | 45%   |
| <b>Excellent</b>   | 37%   | 37%     |              | 24%       | 39%     | 26%     | 52%        | 42%  | 35%   |
| <b>Top 3</b>       | 93%   | 93%     |              | 90%       | 91%     | 100%    | 96%        | 97%  | 92%   |
| Mean               | 6.13  | 6.13    |              | 5.97      | 6.06    | 6.10    | 6.36       | 6.29 | 6.05  |
| Std. Dev.          | 0.90  | 0.90    |              | 0.87      | 1.03    | 0.64    | 0.85       | 0.79 | 0.94  |

|                            | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|----------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>IP address transfer</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>           | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>                   | 1%    | 1%      |              | 4%        | 0%      | 0%      | 0%         | 0%   | 1%    |
| <b>3</b>                   | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>             | 8%    | 8%      |              | 4%        | 6%      | 15%     | 5%         | 2%   | 11%   |
| <b>5</b>                   | 10%   | 10%     |              | 19%       | 10%     | 9%      | 5%         | 11%  | 10%   |
| <b>6</b>                   | 49%   | 49%     |              | 44%       | 48%     | 55%     | 50%        | 51%  | 49%   |
| <b>Excellent</b>           | 32%   | 32%     |              | 30%       | 35%     | 21%     | 40%        | 36%  | 30%   |
| <b>Top 3</b>               | 92%   | 92%     |              | 93%       | 94%     | 85%     | 95%        | 98%  | 88%   |
| Mean                       | 6.04  | 6.04    |              | 5.89      | 6.13    | 5.82    | 6.24       | 6.22 | 5.95  |
| Std. Dev.                  | 0.91  | 0.91    |              | 1.12      | 0.85    | 0.95    | 0.78       | 0.71 | 0.99  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                           | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC presentation</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>          | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>                  | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>                  | 0%    | 1%      | 0%           | 0%        | 2%      | 0%      | 0%         | 0%   | 1%    |
| <b>Neutral</b>            | 3%    | 3%      | 3%           | 0%        | 4%      | 7%      | 0%         | 0%   | 5%    |
| <b>5</b>                  | 6%    | 6%      | 7%           | 14%       | 0%      | 7%      | 6%         | 7%   | 6%    |
| <b>6</b>                  | 39%   | 34%     | 45%          | 39%       | 37%     | 43%     | 38%        | 39%  | 39%   |
| <b>Excellent</b>          | 51%   | 56%     | 46%          | 46%       | 57%     | 43%     | 56%        | 54%  | 50%   |
| <b>Top 3</b>              | 96%   | 96%     | 97%          | 100%      | 94%     | 93%     | 100%       | 100% | 95%   |
| Mean                      | 6.37  | 6.41    | 6.33         | 6.32      | 6.43    | 6.20    | 6.51       | 6.47 | 6.34  |
| Std. Dev.                 | 0.78  | 0.81    | 0.74         | 0.72      | 0.85    | 0.88    | 0.61       | 0.63 | 0.83  |

|                      | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|----------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Contact</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>     | 0%    |         | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>             | 0%    |         | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>             | 2%    |         | 2%           | 0%        | 0%      | 0%      | 7%         | 0%   | 3%    |
| <b>Neutral</b>       | 4%    |         | 4%           | 0%        | 13%     | 0%      | 0%         | 0%   | 5%    |
| <b>5</b>             | 6%    |         | 6%           | 0%        | 6%      | 9%      | 0%         | 0%   | 8%    |
| <b>6</b>             | 37%   |         | 37%          | 40%       | 25%     | 45%     | 40%        | 33%  | 38%   |
| <b>Excellent</b>     | 51%   |         | 51%          | 60%       | 56%     | 45%     | 53%        | 67%  | 48%   |
| <b>Top 3</b>         | 94%   |         | 94%          | 100%      | 88%     | 100%    | 93%        | 100% | 93%   |
| Mean                 | 6.31  |         | 6.31         | 6.60      | 6.25    | 6.36    | 6.33       | 6.67 | 6.23  |
| Std. Dev.            | 0.92  |         | 0.92         | 0.55      | 1.06    | 0.67    | 1.05       | 0.50 | 0.97  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                                 | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---------------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Internet Directory</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>                        | 1%    | 1%      | 0%           | 3%        | 0%      | 0%      | 0%         | 0%   | 1%    |
| <b>3</b>                        | 1%    | 2%      | 0%           | 0%        | 4%      | 0%      | 2%         | 2%   | 1%    |
| <b>Neutral</b>                  | 9%    | 9%      | 9%           | 7%        | 15%     | 18%     | 2%         | 0%   | 13%   |
| <b>5</b>                        | 10%   | 7%      | 15%          | 10%       | 8%      | 15%     | 7%         | 4%   | 13%   |
| <b>6</b>                        | 38%   | 37%     | 40%          | 47%       | 35%     | 39%     | 36%        | 42%  | 37%   |
| <b>Excellent</b>                | 40%   | 44%     | 36%          | 33%       | 38%     | 27%     | 54%        | 51%  | 36%   |
| <b>Top 3</b>                    | 89%   | 88%     | 91%          | 90%       | 81%     | 82%     | 97%        | 98%  | 86%   |
| Mean                            | 6.06  | 6.08    | 6.03         | 5.97      | 5.88    | 5.76    | 6.39       | 6.40 | 5.92  |
| Std. Dev.                       | 1.04  | 1.12    | 0.94         | 1.13      | 1.21    | 1.06    | 0.82       | 0.78 | 1.10  |

|                            | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|----------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Annual Report</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>           | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>                   | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>                   | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>             | 13%   | 13%     |              | 13%       | 10%     | 15%     | 14%        | 17%  | 12%   |
| <b>5</b>                   | 5%    | 5%      |              | 4%        | 10%     | 15%     | 0%         | 0%   | 7%    |
| <b>6</b>                   | 45%   | 45%     |              | 50%       | 60%     | 46%     | 36%        | 43%  | 46%   |
| <b>Excellent</b>           | 36%   | 36%     |              | 33%       | 20%     | 23%     | 50%        | 40%  | 34%   |
| <b>Top 3</b>               | 87%   | 87%     |              | 88%       | 90%     | 85%     | 86%        | 83%  | 88%   |
| Mean                       | 6.04  | 6.04    |              | 6.04      | 5.90    | 5.77    | 6.22       | 6.07 | 6.03  |
| Std. Dev.                  | 0.98  | 0.98    |              | 0.95      | 0.85    | 1.01    | 1.02       | 1.05 | 0.95  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                                     | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-------------------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>Special Interest Group (SIG)</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                    | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 2                                   | 1%    | 0%      | 2%           | 0%        | 0%      | 0%      | 2%         | 0%   | 2%    |
| 3                                   | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>                      | 5%    | 5%      | 4%           | 11%       | 6%      | 0%      | 4%         | 7%   | 3%    |
| 5                                   | 17%   | 20%     | 13%          | 21%       | 6%      | 20%     | 15%        | 17%  | 17%   |
| 6                                   | 43%   | 40%     | 47%          | 42%       | 33%     | 60%     | 44%        | 44%  | 42%   |
| <b>Excellent</b>                    | 35%   | 35%     | 34%          | 26%       | 56%     | 20%     | 35%        | 32%  | 36%   |
| <b>Top 3</b>                        | 94%   | 95%     | 94%          | 89%       | 94%     | 100%    | 94%        | 93%  | 95%   |
| Mean                                | 6.05  | 6.05    | 6.04         | 5.84      | 6.39    | 6.00    | 6.04       | 6.00 | 6.08  |
| Std. Dev.                           | 0.93  | 0.87    | 1.00         | 0.96      | 0.85    | 0.65    | 0.99       | 0.89 | 0.95  |

|                         | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Foundation</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>        | 1%    | 2%      | 0%           | 0%        | 5%      | 0%      | 0%         | 0%   | 2%    |
| 2                       | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 3                       | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>          | 3%    | 0%      | 7%           | 10%       | 5%      | 4%      | 0%         | 0%   | 5%    |
| 5                       | 9%    | 15%     | 2%           | 10%       | 5%      | 12%     | 10%        | 8%   | 9%    |
| 6                       | 41%   | 46%     | 36%          | 50%       | 36%     | 46%     | 39%        | 46%  | 39%   |
| <b>Excellent</b>        | 46%   | 38%     | 55%          | 30%       | 50%     | 38%     | 52%        | 46%  | 45%   |
| <b>Top 3</b>            | 96%   | 98%     | 93%          | 90%       | 91%     | 96%     | 100%       | 100% | 94%   |
| Mean                    | 6.24  | 6.13    | 6.38         | 6.00      | 6.14    | 6.19    | 6.42       | 6.38 | 6.20  |
| Std. Dev.               | 0.95  | 1.02    | 0.85         | 0.94      | 1.39    | 0.80    | 0.67       | 0.65 | 1.04  |



**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC Policy Development Process</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>                        | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 2                                       | 1%    | 0%      | 3%           | 5%        | 0%      | 0%      | 0%         | 0%   | 2%    |
| 3                                       | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>                          | 7%    | 10%     | 3%           | 0%        | 15%     | 0%      | 9%         | 7%   | 8%    |
| 5                                       | 18%   | 18%     | 19%          | 42%       | 0%      | 14%     | 14%        | 13%  | 21%   |
| 6                                       | 39%   | 39%     | 38%          | 37%       | 23%     | 64%     | 34%        | 43%  | 36%   |
| <b>Excellent</b>                        | 35%   | 33%     | 38%          | 16%       | 62%     | 21%     | 43%        | 37%  | 34%   |
| <b>Top 3</b>                            | 92%   | 90%     | 94%          | 95%       | 85%     | 100%    | 91%        | 93%  | 91%   |
| Mean                                    | 5.98  | 5.96    | 6.00         | 5.53      | 6.31    | 6.07    | 6.11       | 6.10 | 5.91  |
| Std. Dev.                               | 1.01  | 0.96    | 1.11         | 1.12      | 1.11    | 0.62    | 0.96       | 0.88 | 1.08  |

|                           | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---------------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| <b>APNIC RDAP service</b> |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b>          | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 2                         | 3%    | 3%      |              | 17%       | 0%      | 0%      | 0%         | 0%   | 4%    |
| 3                         | 3%    | 3%      |              | 0%        | 20%     | 0%      | 0%         | 0%   | 4%    |
| <b>Neutral</b>            | 8%    | 8%      |              | 33%       | 0%      | 0%      | 0%         | 0%   | 13%   |
| 5                         | 6%    | 6%      |              | 0%        | 0%      | 13%     | 6%         | 8%   | 4%    |
| 6                         | 31%   | 31%     |              | 33%       | 40%     | 38%     | 25%        | 23%  | 35%   |
| <b>Excellent</b>          | 50%   | 50%     |              | 17%       | 40%     | 50%     | 69%        | 69%  | 39%   |
| <b>Top 3</b>              | 86%   | 86%     |              | 50%       | 80%     | 100%    | 100%       | 100% | 78%   |
| Mean                      | 6.08  | 6.08    |              | 4.83      | 5.80    | 6.38    | 6.63       | 6.62 | 5.78  |
| Std. Dev.                 | 1.27  | 1.27    |              | 1.83      | 1.64    | 0.74    | 0.62       | 0.65 | 1.44  |

**Q6. Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?**

*(Only the specific services selected at Q5 presented to each respondent – n=various)*

|                  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| NetOX            |       |         |              |           |         |         |            |      |       |
| <b>Very Poor</b> | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>         | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>3</b>         | 0%    | 0%      | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>Neutral</b>   | 7%    | 5%      | 14%          | 0%        | 25%     | 14%     | 0%         | 0%   | 9%    |
| <b>5</b>         | 14%   | 14%     | 14%          | 17%       | 25%     | 14%     | 8%         | 14%  | 14%   |
| <b>6</b>         | 31%   | 41%     | 0%           | 0%        | 50%     | 43%     | 33%        | 29%  | 32%   |
| <b>Excellent</b> | 48%   | 41%     | 71%          | 83%       | 0%      | 29%     | 58%        | 57%  | 45%   |
| <b>Top 3</b>     | 93%   | 95%     | 86%          | 100%      | 75%     | 86%     | 100%       | 100% | 91%   |
| Mean             | 6.21  | 6.18    | 6.29         | 6.67      | 5.25    | 5.86    | 6.50       | 6.43 | 6.14  |
| Std. Dev.        | 0.94  | 0.85    | 1.25         | 0.82      | 0.96    | 1.07    | 0.67       | 0.79 | 0.99  |

Q8. What do you think are the main barriers to participation in APNIC community activities?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
|  | 1624  | 1120    | 504          | 255       | 296     | 439     | 562        | 476  | 1148  |
| Cost-related factors                           | 39%   | 40%     | 38%          | 31%       | 39%     | 40%     | 44%        | 47%  | 36%   |
| Lack of time to participate                    | 34%   | 35%     | 31%          | 25%       | 56%     | 31%     | 27%        | 24%  | 38%   |
| Geographical-related factors                   | 29%   | 31%     | 27%          | 33%       | 28%     | 30%     | 28%        | 29%  | 30%   |
| Skills and knowledge-related factors           | 20%   | 18%     | 24%          | 18%       | 19%     | 24%     | 20%        | 23%  | 19%   |
| Language-related factors                       | 17%   | 17%     | 17%          | 36%       | 4%      | 20%     | 13%        | 19%  | 16%   |
| Technical challenges with remote participation | 16%   | 15%     | 19%          | 12%       | 16%     | 20%     | 17%        | 18%  | 16%   |
| Accessibility / Disability-related factors     | 3%    | 3%      | 4%           | 2%        | 1%      | 3%      | 5%         | 6%   | 2%    |
| Age-related factors                            | 2%    | 2%      | 4%           | 1%        | 1%      | 4%      | 3%         | 3%   | 2%    |
| Gender-related factors                         | 1%    | 1%      | 2%           | 1%        | 2%      | 2%      | 1%         | 1%   | 2%    |
| Other  | 2%    | 2%      | 2%           | 2%        | 4%      | 1%      | 1%         | 1%   | 2%    |
| No significant barriers to participation       | 21%   | 21%     | 19%          | 20%       | 18%     | 18%     | 23%        | 19%  | 21%   |

Q10. Where should APNIC place additional focus to encourage greater diversity of participation in community activities?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
|  | 1623  | 1120    | 503          | 255       | 296     | 439     | 562        | 476  | 1147  |
| Language diversity                                 | 36%   | 36%     | 36%          | 55%       | 12%     | 43%     | 36%        | 42%  | 33%   |
| Cultural diversity                                 | 26%   | 25%     | 30%          | 36%       | 23%     | 22%     | 29%        | 28%  | 26%   |
| Age diversity (e.g. youth)                         | 20%   | 18%     | 24%          | 18%       | 21%     | 21%     | 18%        | 18%  | 20%   |
| Improved accessibility for those with disabilities | 16%   | 16%     | 17%          | 5%        | 12%     | 18%     | 23%        | 26%  | 12%   |
| Gender diversity                                   | 9%    | 8%      | 10%          | 6%        | 15%     | 6%      | 8%         | 8%   | 9%    |
| Other  | 4%    | 4%      | 6%           | 2%        | 7%      | 3%      | 5%         | 4%   | 5%    |
| No diversity support required from APNIC           | 28%   | 31%     | 20%          | 21%       | 43%     | 26%     | 22%        | 18%  | 32%   |

Q11. \*Thinking about APNIC overall, how would you rate:



|                            | Total       | Members     | Stakeholders | East Asia  | Oceania    | SE Asia    | South Asia | LDEs       | Other      |
|----------------------------|-------------|-------------|--------------|------------|------------|------------|------------|------------|------------|
| <b>Quality of Service</b>  | <b>1119</b> | <b>1119</b> | <b>0</b>     | <b>165</b> | <b>217</b> | <b>296</b> | <b>397</b> | <b>353</b> | <b>766</b> |
| Very Poor                  | 0%          | 0%          |              | 0%         | 0%         | 0%         | 0%         | 0%         | 0%         |
| 2                          | 0%          | 0%          |              | 0%         | 0%         | 0%         | 0%         | 0%         | 0%         |
| 3                          | 0%          | 0%          |              | 1%         | 0%         | 0%         | 0%         | 0%         | 1%         |
| Neutral                    | 7%          | 7%          |              | 9%         | 10%        | 7%         | 3%         | 3%         | 9%         |
| 5                          | 9%          | 9%          |              | 11%        | 11%        | 9%         | 6%         | 7%         | 9%         |
| 6                          | 45%         | 45%         |              | 50%        | 45%        | 51%        | 39%        | 40%        | 47%        |
| Excellent                  | 39%         | 39%         |              | 29%        | 33%        | 33%        | 52%        | 50%        | 34%        |
| Top 3                      | 92%         | 92%         |              | 90%        | 89%        | 93%        | 97%        | 97%        | 90%        |
| Mean                       | 6.15        | 6.15        |              | 5.98       | 5.99       | 6.10       | 6.41       | 6.37       | 6.05       |
| Std. Dev.                  | 0.89        | 0.89        |              | 0.92       | 1.00       | 0.83       | 0.74       | 0.75       | 0.94       |
| <b>Value of services</b>   | <b>1119</b> | <b>1119</b> | <b>0</b>     | <b>165</b> | <b>217</b> | <b>296</b> | <b>397</b> | <b>353</b> | <b>766</b> |
| Very Poor                  | 0%          | 0%          |              | 0%         | 0%         | 0%         | 0%         | 0%         | 0%         |
| 2                          | 0%          | 0%          |              | 0%         | 1%         | 0%         | 0%         | 0%         | 0%         |
| 3                          | 0%          | 0%          |              | 0%         | 1%         | 0%         | 0%         | 0%         | 1%         |
| Neutral                    | 8%          | 8%          |              | 8%         | 13%        | 7%         | 4%         | 3%         | 10%        |
| 5                          | 8%          | 8%          |              | 10%        | 12%        | 10%        | 4%         | 5%         | 9%         |
| 6                          | 43%         | 43%         |              | 44%        | 38%        | 51%        | 40%        | 40%        | 44%        |
| Excellent                  | 40%         | 40%         |              | 37%        | 34%        | 32%        | 53%        | 51%        | 35%        |
| Top 3                      | 91%         | 91%         |              | 92%        | 84%        | 93%        | 96%        | 97%        | 89%        |
| Mean                       | 6.13        | 6.13        |              | 6.10       | 5.86       | 6.08       | 6.42       | 6.39       | 6.02       |
| Std. Dev.                  | 0.94        | 0.94        |              | 0.90       | 1.17       | 0.85       | 0.74       | 0.74       | 1.00       |
| <b>Value of membership</b> | <b>1119</b> | <b>1119</b> | <b>0</b>     | <b>165</b> | <b>217</b> | <b>296</b> | <b>397</b> | <b>353</b> | <b>766</b> |
| Very Poor                  | 0%          | 0%          |              | 0%         | 0%         | 0%         | 0%         | 0%         | 0%         |
| 2                          | 0%          | 0%          |              | 0%         | 1%         | 0%         | 0%         | 0%         | 0%         |
| 3                          | 1%          | 1%          |              | 0%         | 3%         | 0%         | 1%         | 1%         | 1%         |
| Neutral                    | 10%         | 10%         |              | 8%         | 17%        | 11%        | 3%         | 4%         | 12%        |
| 5                          | 10%         | 10%         |              | 16%        | 12%        | 8%         | 7%         | 10%        | 10%        |
| 6                          | 41%         | 41%         |              | 41%        | 34%        | 46%        | 40%        | 39%        | 41%        |
| Excellent                  | 39%         | 39%         |              | 34%        | 33%        | 34%        | 49%        | 46%        | 35%        |
| Top 3                      | 89%         | 89%         |              | 92%        | 79%        | 89%        | 96%        | 95%        | 86%        |
| Mean                       | 6.05        | 6.05        |              | 6.01       | 5.72       | 6.04       | 6.33       | 6.27       | 5.95       |
| Std. Dev.                  | 1.01        | 1.01        |              | 0.92       | 1.28       | 0.94       | 0.79       | 0.84       | 1.06       |

Q11. \*\* Overall, how would you rate your experience dealing with APNIC?

|                  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
|                  | 502   | 0       | 502          | 90        | 79      | 143     | 163        | 121  | 381   |
| <b>Very Poor</b> | 0%    |         | 0%           | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| <b>2</b>         | 2%    |         | 2%           | 0%        | 3%      | 3%      | 1%         | 2%   | 2%    |
| <b>3</b>         | 1%    |         | 1%           | 1%        | 0%      | 3%      | 1%         | 2%   | 1%    |
| <b>Neutral</b>   | 13%   |         | 13%          | 22%       | 8%      | 12%     | 12%        | 16%  | 12%   |
| <b>5</b>         | 11%   |         | 11%          | 16%       | 3%      | 17%     | 9%         | 14%  | 10%   |
| <b>6</b>         | 47%   |         | 47%          | 43%       | 44%     | 46%     | 50%        | 43%  | 48%   |
| <b>Excellent</b> | 26%   |         | 26%          | 18%       | 43%     | 20%     | 26%        | 23%  | 27%   |
| <b>Top 3</b>     | 84%   |         | 84%          | 77%       | 90%     | 83%     | 85%        | 80%  | 85%   |
| Mean             | 5.8   |         | 5.8          | 5.5       | 6.2     | 5.6     | 5.8        | 5.6  | 5.8   |
| Std. Dev.        | 1.1   |         | 1.1          | 1.1       | 1.1     | 1.2     | 1.1        | 1.2  | 1.1   |

Q13. Thinking about Internet-related services, products or activities, what are the MAIN STRATEGIC challenges facing your organisation? Please rank these in order of priority, where 1 is the greatest challenge. Top Rank

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 286   | 230     | 56           | 29        | 68      | 64      | 118        | 85   | 201   |
| Cost control of hardware, software, and network investment                         | 17%   | 18%     | 13%          | 10%       | 19%     | 19%     | 17%        | 19%  | 16%   |
| Compliance with regulatory requirements  | 16%   | 15%     | 23%          | 3%        | 9%      | 20%     | 22%        | 19%  | 15%   |
| Hiring and / or keeping skilled employees  | 15%   | 16%     | 13%          | 24%       | 18%     | 13%     | 11%        | 11%  | 17%   |
| Security risks which affect business   | 15%   | 14%     | 16%          | 0%        | 25%     | 6%      | 17%        | 16%  | 14%   |
| Scaling up capacity to meet market demands   | 9%    | 10%     | 5%           | 14%       | 9%      | 11%     | 8%         | 7%   | 10%   |
| Introduction of new products and services to improve business and stay competitive | 9%    | 10%     | 5%           | 14%       | 9%      | 14%     | 5%         | 7%   | 9%    |
| Adapting business model to meet market changes                                     | 7%    | 7%      | 11%          | 21%       | 9%      | 5%      | 4%         | 4%   | 9%    |
| Keeping pace with new technologies   | 6%    | 6%      | 5%           | 7%        | 1%      | 5%      | 9%         | 11%  | 4%    |
| Access to reliable and credible Internet Industry data                             | 5%    | 4%      | 9%           | 7%        | 1%      | 8%      | 6%         | 7%   | 4%    |

Q14. Thinking again about your Internet-related services, products or activities, what are the MAIN operational challenges facing your organisation? (Top Rank)

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1573  | 1087    | 486          | 252       | 295     | 425     | 531        | 444  | 1129  |
| Handling of security incidents   | 23%   | 21%     | 25%          | 26%       | 20%     | 21%     | 25%        | 27%  | 21%   |
| Managing cost of systems, network operations, and security                                 | 18%   | 17%     | 19%          | 15%       | 26%     | 20%     | 13%        | 14%  | 19%   |
| Coping with IPv4 shortage  | 13%   | 16%     | 7%           | 19%       | 8%      | 12%     | 14%        | 12%  | 13%   |
| Automation of network & systems operations   | 11%   | 11%     | 10%          | 6%        | 12%     | 11%     | 11%        | 11%  | 11%   |
| Deployment of IPv6 in our network  | 10%   | 9%      | 10%          | 8%        | 6%      | 10%     | 12%        | 12%  | 9%    |
| Management of Internet traffic, transit & peering and network capacity                     | 9%    | 9%      | 7%           | 8%        | 9%      | 8%      | 9%         | 9%   | 8%    |
| Keeping up with the pace of technology changes (e.g. SDN, NFV, blockchain)                 | 8%    | 7%      | 10%          | 11%       | 6%      | 8%      | 7%         | 7%   | 8%    |
| Managing the impact of new Internet technologies (e.g. 5G, IoT) on existing infrastructure | 6%    | 5%      | 8%           | 7%        | 5%      | 6%      | 6%         | 5%   | 6%    |
| Benchmarking and adopting best practices in network operations                             | 4%    | 4%      | 4%           | 2%        | 7%      | 5%      | 2%         | 2%   | 4%    |



Q16. Thinking about network security, what are the MAIN challenges facing your organisation?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1623  | 1120    | 503          | 255       | 296     | 439     | 562        | 476  | 1147  |
| DDoS attacks   | 41%   | 44%     | 32%          | 51%       | 24%     | 40%     | 46%        | 48%  | 38%   |
| Phishing, spam, malware, ransomware                                    | 40%   | 41%     | 36%          | 37%       | 49%     | 35%     | 40%        | 38%  | 40%   |
| Staff lack awareness of security issues                                | 30%   | 27%     | 36%          | 27%       | 40%     | 29%     | 28%        | 29%  | 31%   |
| Blacklisting of our IP addresses                                       | 23%   | 26%     | 15%          | 16%       | 16%     | 22%     | 31%        | 28%  | 21%   |
| Lack of expertise in implementing enterprise-wide security programs    | 20%   | 19%     | 24%          | 16%       | 21%     | 25%     | 19%        | 19%  | 21%   |
| Routing security   | 20%   | 21%     | 18%          | 20%       | 16%     | 21%     | 20%        | 23%  | 19%   |
| Intrusion and other breaches   | 18%   | 19%     | 16%          | 31%       | 22%     | 16%     | 11%        | 11%  | 21%   |
| Lack of clear directives/policies from relevant government authorities | 16%   | 14%     | 21%          | 11%       | 12%     | 18%     | 20%        | 21%  | 14%   |
| Inadequate security policies   | 16%   | 14%     | 19%          | 20%       | 18%     | 15%     | 14%        | 18%  | 15%   |
| Lack of application security   | 13%   | 13%     | 13%          | 8%        | 15%     | 14%     | 12%        | 12%  | 13%   |
| Handling abuse and incident reports                                    | 12%   | 11%     | 14%          | 12%       | 12%     | 14%     | 11%        | 11%  | 13%   |
| Lack of clear directives/policies from management                      | 11%   | 11%     | 13%          | 11%       | 11%     | 13%     | 11%        | 12%  | 11%   |
| Lack of security for IoT applications                                  | 11%   | 11%     | 11%          | 7%        | 11%     | 10%     | 12%        | 11%  | 11%   |
| Other  | 2%    | 2%      | 2%           | 2%        | 4%      | 1%      | 1%         | 1%   | 2%    |

Q17. How might APNIC best assist you or others with network security challenges?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1623  | 1120    | 503          | 255       | 296     | 439     | 562        | 476  | 1147  |
| Increase security-focused Training courses (DDoS prevention, Security policy development etc.)   | 49%   | 51%     | 44%          | 48%       | 40%     | 50%     | 55%        | 58%  | 45%   |
| Collaboration with other technical security organizations to share information and best practice | 37%   | 39%     | 34%          | 42%       | 40%     | 37%     | 34%        | 36%  | 38%   |
| Sharing of security insights on the APNIC Blog and website                                       | 26%   | 27%     | 24%          | 23%       | 26%     | 30%     | 24%        | 21%  | 28%   |
| Engagement with governments in the region about the issues of cyber security                     | 24%   | 22%     | 29%          | 25%       | 19%     | 21%     | 30%        | 31%  | 21%   |
| Encourage CERT development and information sharing between CERTs and the APNIC community         | 19%   | 17%     | 24%          | 23%       | 22%     | 20%     | 18%        | 17%  | 20%   |
| Enhance security content in APNIC conferences  | 14%   | 13%     | 16%          | 15%       | 11%     | 15%     | 14%        | 14%  | 14%   |
| APNIC is already doing all it can to assist with these challenges                                | 8%    | 8%      | 7%           | 4%        | 11%     | 6%      | 7%         | 6%   | 9%    |
| None of these  | 2%    | 2%      | 2%           | 2%        | 4%      | 1%      | 1%         | 1%   | 3%    |

Q19. \*Thinking about the scarcity of IPv4 addresses, what are the MAIN challenges facing your organisation?



|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1119  | 1119    | 0            | 165       | 217     | 296     | 397        | 353  | 766   |
| Deploying IPv6   | 34%   | 34%     |              | 36%       | 28%     | 38%     | 36%        | 34%  | 34%   |
| The cost of buying IPv4 addresses                                | 27%   | 27%     |              | 24%       | 20%     | 30%     | 30%        | 29%  | 25%   |
| Finding available IPv4 addresses                                 | 26%   | 26%     |              | 28%       | 15%     | 26%     | 30%        | 26%  | 25%   |
| It is not an issue for my organisation                           | 22%   | 22%     |              | 16%       | 37%     | 19%     | 17%        | 18%  | 23%   |
| Cost and complexity of NATs                                      | 16%   | 16%     |              | 16%       | 16%     | 17%     | 17%        | 18%  | 16%   |
| IPv4 address transfer policies                                   | 14%   | 14%     |              | 21%       | 9%      | 14%     | 14%        | 16%  | 14%   |
| “Health” of IPv4 addresses being transferred (e.g. blacklisting) | 13%   | 13%     |              | 12%       | 10%     | 11%     | 15%        | 14%  | 12%   |
| Don’t know   | 4%    | 4%      |              | 2%        | 5%      | 4%      | 5%         | 5%   | 4%    |
| Other  | 1%    | 1%      |              | 2%        | 0%      | 1%      | 1%         | 0%   | 1%    |

Q20. \*Thinking about the scarcity of IPv4 addresses, which, if any, of the following IPv4 activities do you think APNIC should undertake?



|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 879   | 879     | 0            | 139       | 136     | 239     | 330        | 288  | 591   |
| Reclaim unused IPv4 resources which have no existing (or contactable) holder     | 40%   | 40%     |              | 40%       | 46%     | 37%     | 39%        | 36%  | 42%   |
| Analyse and identify unused IPv4 addresses                                       | 39%   | 39%     |              | 30%       | 26%     | 46%     | 43%        | 40%  | 38%   |
| Attempt to recover unused IPv4 resources from identified address holders         | 29%   | 29%     |              | 26%       | 25%     | 26%     | 35%        | 36%  | 26%   |
| Work with resource holders to optimise IPv4 address usage                        | 26%   | 26%     |              | 28%       | 23%     | 25%     | 28%        | 29%  | 24%   |
| Serve actively as an IPv4 address broker   | 16%   | 16%     |              | 25%       | 21%     | 14%     | 13%        | 11%  | 18%   |
| Ensure consistent treatment of “historical” and “current” IPv4 resource holdings | 16%   | 16%     |              | 17%       | 17%     | 18%     | 14%        | 16%  | 16%   |
| Don’t know   | 8%    | 8%      |              | 6%        | 10%     | 5%      | 9%         | 9%   | 7%    |

Q21. \*Has your organisation already deployed or are you ready for deployment of IPv6?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1118  | 1118    | 0            | 165       | 217     | 296     | 396        | 352  | 766   |
| Yes, IPv6 is fully deployed in our networks and customer service               | 20%   | 20%     |              | 36%       | 15%     | 19%     | 15%        | 13%  | 23%   |
| Yes, IPv6 is deployed in our core networks but not in access or other networks | 23%   | 23%     |              | 23%       | 18%     | 23%     | 26%        | 24%  | 22%   |
| We have an IPv6 deployment plan  | 32%   | 32%     |              | 24%       | 22%     | 32%     | 43%        | 46%  | 26%   |
| We do not have any IPv6 deployment plans                                       | 25%   | 25%     |              | 17%       | 45%     | 26%     | 16%        | 17%  | 28%   |

Q22. \* What is preventing IPv6 deployment in access or other networks?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 262   | 262     | 0            | 39        | 40      | 69      | 105        | 88   | 174   |
| Lack of demand for IPv6 from customers                         | 53%   | 53%     |              | 51%       | 60%     | 61%     | 49%        | 52%  | 54%   |
| Lack of knowledge and expertise on IPv6                        | 31%   | 31%     |              | 28%       | 30%     | 28%     | 37%        | 39%  | 28%   |
| Lack of CPE (customer equipment) that supports IPv6            | 26%   | 26%     |              | 21%       | 20%     | 26%     | 30%        | 34%  | 21%   |
| Lack of business/technical advantages or reasons to adopt IPv6 | 24%   | 24%     |              | 31%       | 38%     | 25%     | 14%        | 15%  | 28%   |
| Lack of IPv6 support in network management/security systems    | 18%   | 18%     |              | 23%       | 15%     | 7%      | 24%        | 25%  | 15%   |
| Lack of support for IPv6 amongst vendors                       | 11%   | 11%     |              | 10%       | 18%     | 6%      | 12%        | 11%  | 11%   |
| Our upstream providers or peers do not support IPv6            | 8%    | 8%      |              | 5%        | 5%      | 12%     | 8%         | 5%   | 10%   |
| None of these  | 5%    | 5%      |              | 5%        | 5%      | 7%      | 4%         | 2%   | 6%    |
| Other  | 4%    | 4%      |              | 5%        | 3%      | 6%      | 1%         | 1%   | 6%    |

Q23. \*Which of the following APNIC activities do you believe are the most important to encouraging IPv6 adoption in the APNIC region?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1119  | 1119    | 0            | 165       | 217     | 296     | 397        | 353  | 766   |
| Providing basic and advanced training on IPv6  | 36%   | 36%     |              | 30%       | 34%     | 36%     | 40%        | 42%  | 34%   |
| Sharing deployment case studies and best current practices about IPv6                      | 29%   | 29%     |              | 35%       | 32%     | 29%     | 27%        | 27%  | 31%   |
| Providing Technical Assistance on IPv6 deployment  | 26%   | 26%     |              | 15%       | 20%     | 28%     | 33%        | 31%  | 23%   |
| Promoting IPv6 to hardware, software and/or content providers                              | 21%   | 21%     |              | 26%       | 24%     | 17%     | 21%        | 18%  | 23%   |
| Facilitating knowledge sharing between member organisations on IPv6 deployment experiences | 19%   | 19%     |              | 19%       | 19%     | 16%     | 22%        | 24%  | 17%   |
| Promoting IPv6 to government and related organisations                                     | 18%   | 18%     |              | 24%       | 14%     | 21%     | 18%        | 17%  | 19%   |
| Promoting IPv6 to customers (business and retail)  | 18%   | 18%     |              | 22%       | 16%     | 19%     | 14%        | 15%  | 19%   |
| Promoting IPv6 to management and/or decision makers  | 16%   | 16%     |              | 19%       | 16%     | 19%     | 14%        | 14%  | 18%   |
| APNIC should take no action to promote or assist with the deployment of IPv6               | 2%    | 2%      |              | 1%        | 3%      | 2%      | 1%         | 1%   | 2%    |
| Other  | 1%    | 1%      |              | 2%        | 3%      | 1%      | 0%         | 0%   | 2%    |

Q24. Please indicate the extent to which you are aware of, and have deployed, the following

|   | Total       | Members     | Stakeholders | East Asia  | Oceania    | SE Asia    | South Asia | LDEs       | Other       |
|---|-------------|-------------|--------------|------------|------------|------------|------------|------------|-------------|
| <b>RPKI</b>                                 | <b>1622</b> | <b>1119</b> | <b>503</b>   | <b>255</b> | <b>296</b> | <b>439</b> | <b>561</b> | <b>475</b> | <b>1147</b> |
| I am not aware of this                      | 31%         | 27%         | 38%          | 27%        | 33%        | 31%        | 31%        | 30%        | 31%         |
| I am aware of this but have not deployed it | 32%         | 28%         | 39%          | 38%        | 36%        | 30%        | 27%        | 25%        | 34%         |
| We have plans to deploy this                | 16%         | 17%         | 13%          | 11%        | 17%        | 17%        | 16%        | 15%        | 16%         |
| This is deployed in our networks            | 22%         | 27%         | 10%          | 23%        | 14%        | 23%        | 26%        | 31%        | 19%         |

|   | Total       | Members     | Stakeholders | East Asia  | Oceania    | SE Asia    | South Asia | LDEs       | Other       |
|---|-------------|-------------|--------------|------------|------------|------------|------------|------------|-------------|
| <b>ROA</b>                                  | <b>1622</b> | <b>1119</b> | <b>503</b>   | <b>255</b> | <b>296</b> | <b>439</b> | <b>561</b> | <b>475</b> | <b>1147</b> |
| I am not aware of this                      | 36%         | 32%         | 45%          | 37%        | 42%        | 38%        | 32%        | 29%        | 39%         |
| I am aware of this but have not deployed it | 25%         | 22%         | 33%          | 28%        | 29%        | 25%        | 23%        | 21%        | 27%         |
| We have plans to deploy this                | 13%         | 13%         | 12%          | 10%        | 10%        | 14%        | 14%        | 14%        | 13%         |
| This is deployed in our networks            | 26%         | 32%         | 11%          | 25%        | 19%        | 23%        | 31%        | 36%        | 21%         |

|   | Total       | Members     | Stakeholders | East Asia  | Oceania    | SE Asia    | South Asia | LDEs       | Other       |
|---|-------------|-------------|--------------|------------|------------|------------|------------|------------|-------------|
| <b>ROV</b>                                  | <b>1622</b> | <b>1119</b> | <b>503</b>   | <b>255</b> | <b>296</b> | <b>439</b> | <b>561</b> | <b>475</b> | <b>1147</b> |
| I am not aware of this                      | 50%         | 48%         | 55%          | 50%        | 53%        | 50%        | 51%        | 51%        | 50%         |
| I am aware of this but have not deployed it | 25%         | 23%         | 30%          | 29%        | 30%        | 26%        | 21%        | 19%        | 28%         |
| We have plans to deploy this                | 15%         | 17%         | 10%          | 12%        | 11%        | 15%        | 16%        | 17%        | 14%         |
| This is deployed in our networks            | 9%          | 12%         | 4%           | 9%         | 5%         | 9%         | 12%        | 13%        | 8%          |



Q25. How could APNIC support your organisation to learn more about, or deploy RPKI / ROA / ROV?

|   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size   | 1493  | 1007    | 486          | 234       | 282     | 402     | 508        | 424  | 1069  |
| Online training   | 67%   | 67%     | 69%          | 57%       | 66%     | 70%     | 70%        | 67%  | 67%   |
| Technical Assistance  | 37%   | 38%     | 35%          | 31%       | 32%     | 41%     | 40%        | 40%  | 36%   |
| Case studies of successful implementation                             | 27%   | 28%     | 26%          | 46%       | 28%     | 23%     | 21%        | 23%  | 29%   |
| Face to face training   | 20%   | 19%     | 24%          | 15%       | 21%     | 20%     | 24%        | 26%  | 18%   |
| Cost / benefit analysis and reports                                   | 14%   | 15%     | 12%          | 18%       | 14%     | 14%     | 12%        | 10%  | 15%   |
| Promotion to managers and executives about the benefits of deployment | 13%   | 13%     | 15%          | 13%       | 15%     | 15%     | 11%        | 12%  | 14%   |
| Other   | 2%    | 2%      | 1%           | 2%        | 2%      | 1%      | 1%         | 0%   | 2%    |

Q26. Have you completed any APNIC training in the past two (2) years?

|   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size   | 1623  | 1120    | 503          | 255       | 296     | 439     | 562        | 476  | 1147  |
| Yes, face to face training                                    | 23%   | 23%     | 23%          | 25%       | 27%     | 26%     | 19%        | 26%  | 21%   |
| Yes, online self-paced training on APNIC Academy              | 23%   | 22%     | 25%          | 12%       | 19%     | 23%     | 29%        | 29%  | 20%   |
| Yes, online live training on APNIC Academy or other platforms | 20%   | 20%     | 19%          | 13%       | 17%     | 23%     | 22%        | 22%  | 19%   |
| No  | 45%   | 46%     | 43%          | 55%       | 48%     | 37%     | 43%        | 39%  | 48%   |
| Can't remember  | 6%    | 5%      | 8%           | 6%        | 3%      | 9%      | 5%         | 5%   | 6%    |

Q27. Why have you not attended training on the past two years?

|  | Total | Members | Stakeholders* | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|---------------|-----------|---------|---------|------------|------|-------|
| Sample Size                                    | 731   | 515     | 216           | 141       | 143     | 161     | 242        | 186  | 545   |
| I didn't know about the training opportunities | 40%   | 36%     | 51%           | 40%       | 35%     | 39%     | 46%        | 45%  | 39%   |
| I don't have time                              | 21%   | 22%     | 19%           | 30%       | 30%     | 20%     | 8%         | 6%   | 26%   |
| It's too expensive                             | 17%   | 18%     | 14%           | 9%        | 10%     | 22%     | 25%        | 27%  | 14%   |
| The location(s) are not suitable               | 15%   | 16%     | 12%           | 18%       | 13%     | 19%     | 12%        | 9%   | 17%   |
| The courses are not suited to my role / job    | 11%   | 9%      | 14%           | 9%        | 15%     | 9%      | 11%        | 8%   | 12%   |
| I couldn't get management approval             | 10%   | 11%     | 9%            | 9%        | 9%      | 15%     | 8%         | 11%  | 10%   |
| Training is not offered in my local language   | 8%    | 9%      | 6%            | 14%       | 1%      | 6%      | 12%        | 16%  | 5%    |
| Other  | 6%    | 7%      | 4%            | 6%        | 9%      | 7%      | 4%         | 5%   | 7%    |
| The topics are too basic                       | 3%    | 4%      | 1%            | 2%        | 5%      | 4%      | 2%         | 2%   | 3%    |

Q28. Which of the following training activities would be of MOST value to your organisation?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1623  | 1120    | 503          | 255       | 296     | 439     | 562        | 476  | 1147  |
| Online Virtual Labs  | 54%   | 55%     | 52%          | 46%       | 56%     | 53%     | 57%        | 57%  | 53%   |
| Online self-paced training   | 45%   | 44%     | 45%          | 36%       | 58%     | 45%     | 40%        | 36%  | 48%   |
| Full training certification  | 42%   | 40%     | 46%          | 24%       | 42%     | 46%     | 46%        | 44%  | 41%   |
| Online live training sessions scheduled for local time zones                             | 39%   | 39%     | 40%          | 28%       | 44%     | 40%     | 43%        | 36%  | 41%   |
| Advanced hands-on face-to-face training courses  | 39%   | 38%     | 42%          | 31%       | 36%     | 37%     | 48%        | 53%  | 33%   |
| Customised Technical Assistance on deployment (after attending training)                 | 30%   | 29%     | 30%          | 23%       | 28%     | 31%     | 35%        | 37%  | 27%   |
| Collaboration with universities to train the next generation of engineers                | 27%   | 24%     | 33%          | 22%       | 21%     | 29%     | 31%        | 32%  | 25%   |
| Training delivered in my local language by people who are familiar with my local economy | 27%   | 27%     | 26%          | 40%       | 9%      | 31%     | 28%        | 30%  | 25%   |
| Training materials available in my local language  | 25%   | 24%     | 27%          | 46%       | 6%      | 29%     | 25%        | 30%  | 23%   |
| Customised training relevant to local needs (not off the shelf)                          | 23%   | 22%     | 25%          | 20%       | 19%     | 25%     | 27%        | 29%  | 21%   |
| Training on new technologies   | 10%   | 9%      | 12%          | 4%        | 8%      | 10%     | 13%        | 11%  | 9%    |
| None of these  | 2%    | 2%      | 1%           | 1%        | 3%      | 2%      | 1%         | 1%   | 2%    |

Q30. What types of Internet trend and benchmarking data services would be of MOST USE to your organization?

|   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|---|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size   | 1624  | 1120    | 504          | 255       | 296     | 439     | 562        | 476  | 1148  |
| Network threats and security (e.g. Routing anomalies, intrusion detection, security alerts) | 54%   | 54%     | 54%          | 56%       | 68%     | 49%     | 51%        | 54%  | 54%   |
| Network infrastructure, topology, usage   | 43%   | 43%     | 44%          | 39%       | 46%     | 42%     | 46%        | 48%  | 41%   |
| Use of specific technologies (e.g. IPv6, DNSSEC, RPKI)                                      | 35%   | 36%     | 35%          | 40%       | 40%     | 33%     | 31%        | 29%  | 38%   |
| Use of new technologies (e.g. SDN, NFV)   | 32%   | 33%     | 31%          | 37%       | 28%     | 33%     | 31%        | 30%  | 33%   |
| ASN/IPv4/IPv6 distribution and usage  | 32%   | 32%     | 30%          | 29%       | 17%     | 32%     | 40%        | 36%  | 30%   |
| Internet business and operational benchmarks  | 20%   | 19%     | 21%          | 15%       | 14%     | 23%     | 23%        | 25%  | 17%   |
| Industry and market trends and information  | 18%   | 18%     | 18%          | 26%       | 17%     | 18%     | 15%        | 12%  | 21%   |
| Pricing or charging information (for customer and/or infrastructure services)               | 17%   | 16%     | 18%          | 16%       | 16%     | 20%     | 17%        | 20%  | 16%   |
| Use of specific vendors for various products  | 9%    | 9%      | 10%          | 5%        | 10%     | 10%     | 11%        | 11%  | 9%    |
| None of the above   | 3%    | 3%      | 2%           | 1%        | 4%      | 3%      | 2%         | 1%   | 3%    |
| Other   | 0%    | 0%      | 1%           | 1%        | 0%      | 0%      | 0%         | 0%   | 0%    |

Q32. If additional resources were available for Internet development, through assistance for community organisations or supporting shared infrastructure, where do you want APNIC to focus its efforts?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                                      | 1624  | 1120    | 504          | 255       | 296     | 439     | 562        | 476  | 1148  |
| Supporting DNS root and TLD servers              | 38%   | 38%     | 36%          | 32%       | 37%     | 38%     | 40%        | 37%  | 38%   |
| Supporting IXPs                                  | 35%   | 37%     | 31%          | 34%       | 36%     | 46%     | 27%        | 30%  | 37%   |
| Internet industry associations                   | 35%   | 34%     | 38%          | 33%       | 33%     | 36%     | 36%        | 37%  | 34%   |
| On CERTs   | 33%   | 31%     | 39%          | 36%       | 44%     | 32%     | 28%        | 25%  | 36%   |
| On NOGs  | 32%   | 34%     | 28%          | 34%       | 32%     | 30%     | 34%        | 42%  | 28%   |
| Supporting CDN caches                            | 31%   | 33%     | 26%          | 29%       | 20%     | 32%     | 41%        | 40%  | 27%   |
| On IGFs or Schools of Internet Governance (SIGs) | 19%   | 16%     | 26%          | 18%       | 13%     | 19%     | 23%        | 22%  | 17%   |
| On NRENs   | 8%    | 6%      | 10%          | 6%        | 2%      | 8%      | 11%        | 11%  | 6%    |
| None of these                                    | 6%    | 7%      | 5%           | 3%        | 10%     | 6%      | 6%         | 5%   | 7%    |

Q33. If additional resources were available for Internet development in information services, what would provide your organisation with the most benefit?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1624  | 1120    | 504          | 255       | 296     | 439     | 562        | 476  | 1148  |
| New information about security incidents and threats | 52%   | 52%     | 54%          | 49%       | 61%     | 52%     | 51%        | 53%  | 52%   |
| Information about Internet performance               | 32%   | 33%     | 29%          | 26%       | 28%     | 37%     | 34%        | 33%  | 32%   |
| Internet industry metrics and trends                 | 30%   | 32%     | 27%          | 43%       | 28%     | 35%     | 23%        | 23%  | 33%   |
| Information on infrastructure growth                 | 27%   | 28%     | 25%          | 21%       | 18%     | 27%     | 35%        | 34%  | 24%   |
| Information about national policies and regulations  | 24%   | 21%     | 29%          | 25%       | 28%     | 20%     | 22%        | 21%  | 24%   |
| Information about infrastructure costs               | 19%   | 18%     | 21%          | 22%       | 15%     | 17%     | 22%        | 22%  | 18%   |
| None of these  | 3%    | 3%      | 3%           | 2%        | 5%      | 2%      | 2%         | 2%   | 3%    |

Q34. \*Thinking about your membership of APNIC, please indicate how much you AGREE with the following:

| APNIC is sufficiently open and transparent in its activities | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1119  | 1119    | 0            | 165       | 217     | 296     | 397        | 352  | 766   |
| Strongly disagree  | 1%    | 1%      |              | 1%        | 0%      | 1%      | 2%         | 1%   | 1%    |
| 2  | 1%    | 1%      |              | 1%        | 1%      | 0%      | 0%         | 0%   | 1%    |
| 3  | 1%    | 1%      |              | 3%        | 1%      | 1%      | 1%         | 1%   | 1%    |
| Neutral  | 7%    | 7%      |              | 8%        | 12%     | 8%      | 4%         | 4%   | 9%    |
| 5  | 9%    | 9%      |              | 21%       | 7%      | 6%      | 8%         | 9%   | 10%   |
| 6  | 50%   | 50%     |              | 48%       | 52%     | 55%     | 47%        | 47%  | 52%   |
| Strongly agree   | 30%   | 30%     |              | 18%       | 26%     | 28%     | 40%        | 39%  | 26%   |
| Top 3  | 90%   | 90%     |              | 87%       | 85%     | 90%     | 94%        | 94%  | 88%   |
| Mean   | 6.0   | 6.0     |              | 5.6       | 5.8     | 6.0     | 6.1        | 6.1  | 5.9   |
| Std. Dev.  | 1.1   | 1.1     |              | 1.1       | 1.1     | 1.0     | 1.0        | 1.0  | 1.1   |

| APNIC is respected in the Internet community | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                                  | 1119  | 1119    | 0            | 165       | 217     | 296     | 397        | 352  | 766   |
| Strongly disagree                            | 1%    | 1%      |              | 1%        | 0%      | 1%      | 2%         | 2%   | 1%    |
| 2  | 0%    | 0%      |              | 0%        | 0%      | 0%      | 0%         | 0%   | 0%    |
| 3  | 1%    | 1%      |              | 2%        | 0%      | 0%      | 1%         | 1%   | 1%    |
| Neutral                                      | 5%    | 5%      |              | 7%        | 9%      | 5%      | 2%         | 2%   | 7%    |
| 5  | 6%    | 6%      |              | 10%       | 8%      | 7%      | 3%         | 4%   | 8%    |
| 6  | 43%   | 43%     |              | 52%       | 46%     | 47%     | 36%        | 37%  | 46%   |
| Strongly agree                               | 43%   | 43%     |              | 28%       | 37%     | 40%     | 57%        | 54%  | 38%   |
| Top 3  | 93%   | 93%     |              | 90%       | 91%     | 93%     | 95%        | 95%  | 92%   |
| Mean   | 6.2   | 6.2     |              | 5.9       | 6.1     | 6.2     | 6.4        | 6.3  | 6.1   |
| Std. Dev.                                    | 1.0   | 1.0     |              | 1.1       | 1.0     | 1.0     | 1.0        | 1.0  | 1.0   |

Q36. Which of these phrases best describes the way you speak about APNIC to others?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                                  | 1624  | 1122    | 502          | 255       | 296     | 439     | 562        | 476  | 1148  |
| I am critical of APNIC without being asked   | 2%    | 3%      | 2%           | 2%        | 1%      | 3%      | 3%         | 3%   | 2%    |
| I tend to be cretical of APNIC if I am asked | 3%    | 3%      | 3%           | 2%        | 1%      | 4%      | 2%         | 3%   | 3%    |
| I am neutral                                 | 29%   | 27%     | 35%          | 35%       | 28%     | 33%     | 25%        | 25%  | 31%   |
| I speak well about APNIC if I am asked       | 46%   | 49%     | 39%          | 45%       | 45%     | 46%     | 46%        | 47%  | 45%   |
| I speak highly of APNIC without being asked  | 20%   | 19%     | 21%          | 16%       | 24%     | 14%     | 23%        | 22%  | 19%   |
| NET  | 100%  | 100%    | 100%         | 100%      | 100%    | 100%    | 100%       | 100% | 100%  |
| Average                                      | 3.8   | 3.8     | 3.7          | 3.7       | 3.9     | 3.6     | 3.8        | 3.8  | 3.8   |



Q40. What type of organisation do you work for?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size                            | 1,539 | 1057    | 482          | 235       | 277     | 419     | 539        | 485  | 1081  |
| Internet Service Provider (ISP)        | 34%   | 41%     | 18%          | 29%       | 23%     | 34%     | 44%        | 47%  | 28%   |
| Academic / Educational / Research      | 15%   | 12%     | 22%          | 13%       | 13%     | 19%     | 14%        | 11%  | 17%   |
| Telecommunications / Mobile Operator   | 11%   | 12%     | 8%           | 16%       | 12%     | 11%     | 9%         | 10%  | 11%   |
| Other                                  | 7%    | 6%      | 10%          | 3%        | 11%     | 8%      | 5%         | 4%   | 8%    |
| Government / Regulator / Municipality  | 6%    | 5%      | 10%          | 3%        | 12%     | 6%      | 6%         | 7%   | 6%    |
| Hosting / Data Centre                  | 5%    | 5%      | 4%           | 7%        | 8%      | 5%      | 2%         | 1%   | 7%    |
| Enterprise / Manufacturing / Retail    | 4%    | 4%      | 5%           | 5%        | 4%      | 4%      | 3%         | 2%   | 5%    |
| Banking / Financial                    | 4%    | 4%      | 4%           | 5%        | 5%      | 3%      | 4%         | 5%   | 3%    |
| Software Vendor                        | 3%    | 2%      | 5%           | 4%        | 1%      | 1%      | 4%         | 3%   | 3%    |
| Non Profit / NGO / Internet Community  | 3%    | 2%      | 6%           | 4%        | 5%      | 1%      | 2%         | 2%   | 3%    |
| Media / Entertainment                  | 2%    | 2%      | 2%           | 5%        | 2%      | 1%      | 1%         | 2%   | 2%    |
| Domain Name Registry / Registrar       | 1%    | 2%      | 1%           | 4%        | 2%      | 1%      | 0%         | 0%   | 2%    |
| Internet Exchange Point (IXP)          | 1%    | 2%      | 1%           | 1%        | 0%      | 2%      | 2%         | 2%   | 1%    |
| NREN / Research Network                | 1%    | 1%      | 1%           | 0%        | 0%      | 1%      | 2%         | 2%   | 1%    |
| Hardware Vendor                        | 1%    | 0%      | 2%           | 1%        | 0%      | 1%      | 1%         | 1%   | 1%    |
| Industrial (Construction, Mining, Oil) | 1%    | 1%      | 1%           | 0%        | 1%      | 0%      | 1%         | 1%   | 1%    |
| Infrastructure (Transport, Hospital)   | 1%    | 0%      | 1%           | 0%        | 1%      | 1%      | 0%         | 0%   | 1%    |

Q41. Do you have a disability that requires APNIC to make adjustments so you can engage with us online or at events?

|                   | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|-------------------|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size       | 1624  | 1122    | 502          | 255       | 296     | 439     | 562        | 476  | 1148  |
| Yes               | 5%    | 4%      | 5%           | 8%        | 1%      | 5%      | 5%         | 6%   | 4%    |
| No                | 88%   | 88%     | 87%          | 84%       | 96%     | 84%     | 87%        | 85%  | 89%   |
| Prefer not to say | 8%    | 8%      | 8%           | 8%        | 4%      | 10%     | 8%         | 8%   | 7%    |

Q42. How well can you speak, read and write English?

|  | Total | Members | Stakeholders | East Asia | Oceania | SE Asia | South Asia | LDEs | Other |
|--|-------|---------|--------------|-----------|---------|---------|------------|------|-------|
| Sample Size  | 1624  | 1122    | 502          | 255       | 296     | 439     | 562        | 476  | 1148  |
| I am fluent in English   | 42%   | 44%     | 37%          | 9%        | 89%     | 26%     | 42%        | 33%  | 46%   |
| I can understand most English and have English conversations comfortably | 31%   | 31%     | 33%          | 25%       | 10%     | 43%     | 38%        | 38%  | 29%   |
| I can understand some English and have basic English conversations       | 22%   | 20%     | 25%          | 49%       | 1%      | 26%     | 18%        | 25%  | 20%   |
| I understand little English and need assistance                          | 5%    | 4%      | 6%           | 17%       | 0%      | 5%      | 2%         | 4%   | 5%    |