RIPE NCC Survey 2013

September 9, 2013

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A. Introduction from the Managing Director of the RIPE NCC

It is with great pleasure I present to you the final report from the RIPE NCC Survey 2013, produced by the Oxford Internet Institute (OII). The OII played a most important role, providing objective, independent analysis of the data, having no connection with the RIPE NCC. Equally critically, they provided absolute anonymity to respondents, removing identifying information before providing any material to the RIPE NCC.

This project to gain feedback from the RIPE NCC membership and other interested parties began in November 2012 with focus groups and interviews to determine the issues that would be raised in the survey.

RIPE NCC members and other interested parties responded in numbers far in excess of that for any survey the RIPE NCC has conducted in its history. Over 3,000 people, including from 75 of the 76 countries in our service region, responded to our requests to participate, giving us not only a fantastic response in terms of numbers but also in terms of diversity and reach.

This diversity in response is also reflected in the statistics provided for industry type, position, size of organisation and length of time as a RIPE NCC member. A large proportion of those who responded joined the RIPE NCC since 2011, while 88% in total had not responded to our previous large-scale survey. So it is great to see that we are hearing from new members and from those we have not heard from in some time, as well as from those who are involved frequently.

The large number of responses and their geographic diversity determine how this report is presented. As we usually see in our surveys, many of the subject areas surveyed bring a common response from all regions and most respondent types. However, the wide range of issues means that opinion can vary greatly by region and even by country.

For this reason, the survey covers all areas by overall results. From the table of contents, we hope you will be able to easily find the results relating to your own region and industry, as well as those issues of most concern to you. The regional breakdowns are listed along the following lines: Western Europe, South East Europe, the Eurasia Network Operators Group (ENOG) region, the Middle East Network Operators Group (MENOG) region and responses from outside the RIPE NCC service region.

Similarly, the concerns and opinions of RIPE NCC members can often differ from those of non-RIPE NCC members, so statistics from each of these groups is presented separately where necessary.

The survey report includes appendices that provide every single piece of information received in the survey. All statistics from every question as well as every open response is included. We hope you will let us know if you have feedback.

We are aware that not everyone has time to read through hundreds of pages of statistics and comments, so with this in mind we provide an Executive Summary that outlines concisely the reasons the RIPE NCC carries out these surveys, how the survey was conducted, the key findings from each area surveyed and the plans to follow through on the feedback received.

The key findings from the survey that were identified by the OII are outlined in the Executive Summary and in the main report on each section. In general, we are delighted that the satisfaction rating for the RIPE NCC and its services and activities scored highly and that there were many constructive comments in all areas. Some notable points that arose throughout the survey were:

- Many new RIPE NCC members are not aware of our services and activities
- Language considerations came up in a number of areas, especially training, registration services and contacting the RIPE NCC
- Participants asked for a greater local presence from the RIPE NCC
- Improved web site navigation and functionality was requested
- The RIPE Database is difficult for newcomers to update
- There should be emphasis on remote training so all members have acess to quality training

We will publish a further report on the actions taken by the RIPE NCC that will update you on the progress resulting from your survey feedback. The findings from this survey also feed into the RIPE NCC Activity Plan and Budget 2014, which we hope you will also read and comment on to the RIPE NCC Executive Board.

Finally, I wish to thank those who took the time to participate in this survey. The survey has provided the largest source of feedback from the RIPE NCC membership and other parties interested in the Internet since the formation of the RIPE NCC. This means the RIPE NCC has a huge repository of data that it can use to improve and develop in the coming years. For this we are truly grateful.

Axel Pawlik
Managing Director
RIPE NCC

B. Focus Group and Interview Report

The RIPE NCC has been conducting member surveys for over a decade. Over that time, the focus group and interview process has evolved to ensure that the actual survey questions are clearly focused on capturing information that truly reflects members' needs and views. A key element of this has been the recognition that, while members have many common interests, they are not a homogeneous group. Their needs vary by sub-region, size, technical maturity and a variety of other factors.

When these surveys commenced, the organisation was much smaller and technically focused and those who participated were almost exclusively RIPE NCC members.

The Regional Internet Registries (RIRs) have always been very open organisations with democratic structures and bottom-up policy decision-making processes. Some non-members responded to the initial 2002 survey, and these were mainly members of the other two RIRs that existed at that time (APNIC and ARIN). As a consequence, the second survey had a section for "Stakeholders" to cover the needs of this group.

Since then, the RIPE NCC's interaction with external parties, such as the EU, governments, law enforcement agencies (LEAs), Telecommunication Regulatory Authorities (TRAs) and others, has grown. In this 2013 survey, the non-member category has been described as "Other Interested Parties".

Since the RIPE NCC is fully aware of the need to adequately serve this broad-ranging variation in interests, it means that each survey instrument must be carefully designed to support all these different types of input.

While focus groups and interviews have been held in the past, this time the focus group process has been enhanced. Individual interviews were held with members of the RIPE NCC as well as representatives from other interested parties, such as government and LEAs, who have an interest in the working of the Internet in general and the RIPE NCC in particular. Focus groups and interviews took place in:

- Belgium
- Germany
- Ireland
- Kuwait
- Lebanon
- The Netherlands
- Poland
- Russia
- Serbia
- Spain
- Ukraine
- United Arab Emirates
- United Kingdom

Over 100 people were invited to attend the focus groups, including both new and older RIPE NCC members, outspoken participants in the RIPE community, representatives from government and law enforcement agencies, as well as individuals from relevant organisations such as Internet Exchange Points (IXPs) and national research and education networks (NRENs).

Those attending participated enthusiastically and with, as anticipated, a diverse and constructive range of views.

Issues for Discussion in the Focus Groups and Interviews

1. **IPv6**
   IPv6 deployment in your country and what the RIPE NCC can do to help with deployment in the region

2. **Internet Governance**
   The various Internet governance forums available to the Internet community

3. **Corporate Governance**
   The corporate governance of the RIPE NCC and the use of the members' service fees

4. **Routing Security and Resource Certification (RPKI)**
   The importance of routing security as an issue and the certification of Internet number resources

5. **Membership and Stakeholder Outreach**
   The level of outreach and support that your region receives from the RIPE NCC

6. **Training and Development**
   The training services that are offered by the RIPE NCC, particularly with regards to IPv6 training

7. **IPv4 Address Transfers**
   The role that the RIPE NCC plays in facilitating IPv4 address transfers

8. **RIPE NCC Services**
   The statistical services that are offered by the RIPE NCC, such as RIPEstat, and how useful these services are to the Internet community in your country

9. **RIPE NCC Priorities**
   The main priority areas that the RIPE NCC should be focusing on

Other Issues

Participants were encouraged to raise any other issues they wished or to give emphasis to those of special importance to their circumstances or locality.

Summary of Main Comments Made by Participants

It should be noted that the comments and views that follow are very much influenced by local circumstances. Such circumstances include the availability of training, infrastructure development, country/region economics and other factors.

Importantly, this means that the post survey analysis and subsequent action by the RIPE NCC will need to take critical account of local needs.

The RIPE NCC is generally viewed as an objective, well-informed organisation seeking to meet members' varied needs, but is at the same time neutral between members.

1. IPv6

IPv6 adoption is happening but is much slower than expected. This is for three main reasons:

- Lack of resources or willingness to invest;
- Lack of information or training; and
- The general view and acceptance that network address translation (NAT) will solve any problems, especially with the growing use of carrier-grade NATs (CGNs)

It was perceived in the focus groups that this last point would provide operational problems in the medium to long term. The views show the variation of opinion among members in the different areas of the RIPE NCC service region.

While government bodies are active seekers of statistics and trends on IPv6 adoption, there was little optimism that governments would use legislation or regulation to promote adoption.

It was a widespread view that ongoing communication and information on IPv6 development will be necessary by the RIPE NCC and others. A number of participants noted that the RIPE NCC should be approaching and educating at the corporate level rather than at the technical level.

2. Internet Governance

The RIPE NCC is seen as a defender against the autocratic governance model proposed by the ITU. This is especially so with smaller ISPs that do not have the resources to participate in the debate but who also expect that they will receive regular reports of developments and opportunities to express their own views on RIPE NCC strategy. While interaction with governments and LEAs was supported in principle, this is

also seen as part of demonstrating that the RIR model of governance and policy-making is truly effective.

3. Corporate Governance

Some participants suggested that the service provided by the RIPE NCC declines the greater the distance they are from Amsterdam. The prime function of the RIPE NCC continues to be seen as the registry function together with directly related activities, while infrastructure development and management was also important.

There were a number of areas where more effort was seen as necessary, such as:

- Reviewing the Policy Development Process (PDP)
- Ensuring that employers saw the value of their staff attending RIPE Meetings
- Giving members a better understanding of the decision-making processes
- Members needing more help in understanding RIPE NCC General Meeting voting and decision-making

Several people expressed concern about the way the RIPE NCC Charging Scheme discussion was conducted in 2012; some also considered that the ultimate decision to have one fee per LIR was unfair to small members despite the majority decision, and there was some speculation as to the percentage of members who actually voted and the size distribution of the majority vote.

There was a general feeling that there was a lack of prior member discussion on new projects, leading to the organisation spending money without a clear mandate.

Despite these criticisms, the large majority of attendees stated that they had considerable trust in both the RIPE NCC Executive Board and in the staff. The external relations work of the RIPE NCC in the Middle East was especially recognised.

For many focus group attendees, current fees were considered to be relatively low and not a critical issue for their organisation, while the RIPE NCC finances were well and prudently managed.

4. Routing Security and Resource Certification (RPKI)

While members agreed that security was important, the issue of member consent to RPKI was an area of general concern. It was felt that a considerable amount of money had been spent by the RIPE NCC without adequate debate and that ultimately the RIPE NCC was telling members what was good for them. There were other security options that members did not have a serious opportunity to consider. There remained a series of unanswered questions:

- Will ISPs be able to afford the cost?
- Will they receive adequate benefit from the cost?
- Is route validation by the RIPE NCC a legitimate part of their activities?
- Will governments make regulations in regard to routing security?
- Despite the investment, should other options still be considered?
- What can be done to educate members more on the options?

5. Membership and Stakeholder Outreach

It was recognised generally that there is a need to define who the different groups of stakeholders are, why the RIPE NCC needs to contact them and about what issues. There was a desire to see objective measures in this area, and regional meetings were given as an example of where goals (and whether or not they were achieved) need to be laid out.

It was felt that there needs to be a programme that encourages government representatives, LEAs and others to not only attend RIPE Meetings but also to participate and explain their roles.

Consideration should be given to translating critical material into other major RIPE NCC service region languages.

The RIPE NCC needs to continually project itself as the main trusted source of information in this area.

6. Training and Development

The greatest need is for localised training – don't just train in major/capital cities. To this end, local people should be considered as source of translation and delivery of training material with the RIPE NCC ensuring quality assurance. There is a feeling that RIPE NCC training staff are not at the leading edge of current technical knowledge. There needs to be flexibility in training to reflect the different ways that some countries deal with number resources.

Training documentation standards need improvement; the LIR Portal is difficult to use and documentation is hard to find. Is there a database of available training material? Webinars, video training and remote training are good ideas but need to be presented in other languages, e.g. Russian and Arabic.

7. IPV4 Address Transfers

The role of the RIPE NCC should be to make transfers as easy as possible. People do not want transfers going underground. While it could be argued that "easy" transfers

delay IPv6 adoption – this seems to be an unfounded proposition – people do not want a black market for IPv4 addresses. There needs to be a clear, simple process for member use, which also ensures database integrity.

More effort needs to be made in recovering legacy address space and making much of that space in the ARIN region available to members of the RIPE NCC and other RIRs.

A shortage of addresses presents particular problems in the Middle East, Russia and other countries that feel that they have been denied a "fair share".

8. RIPE NCC Services

Questions were asked about the usefulness of the monitoring tools. It was suggested that there should be more guidelines and a better process for starting new services. It was noted that RIPE Atlas is an interesting project and there is support in some quarters to keep it running – but is it absolutely necessary, and would it increase members' profit or just their expenses? RIPEstat was seen as a useful tool for some but it cannot be effectively used without good training or some level of familiarity.

LIR Portal ticketing needs to be improved and additional features such as historical archives and current ticket status added.

The continuation of DNSMON and DNS secondary services is supported but more public interfaces are necessary.

9. Summary of RIPE NCC Main Priorities

The priorities listed below have all been addressed in more detail in the appropriate section above.

- The core function as a registry and the maintenance of an accurate and up-to-date WHOIS service
- For the Middle East, the addressing of local issues that are specific to that region's concerns
- Continue and enhance the involvement with key external bodies such as the EU, governments, LEAs, TRAs and other Internet bodies such as the IETF, ISOC, ICANN and IANA
- Localise training, enhance training methodologies and focus on local needs as well as delivery
- Where appropriate, expand training to other interested parties, some of whom would consider paying
- Increase IPv6 awareness broadly

- Ensure that changes are widely and openly debated before expenditure on development
- Improve the PDP process and review other processes
- Maximise the utilisation of available IPv4 addresses and ensure that this pool is augmented when and wherever possible
- Improve LIR Portal ticketing and provide additional features
- Translate critical material into major RIPE NCC service region languages

Desiree Miloshevic & John Earls
July 2013

C. Executive Summary

Background to RIPE NCC Survey 2013

The RIPE NCC Survey 2013 is the sixth of its kind that the RIPE NCC has commissioned since 2002, and it is the second to probe the opinions of both RIPE NCC members and non-members, who are referred to in the survey as "other interested parties". The survey asked these groups to rate and comment on the current RIPE NCC service offering and the direction the organisation should take in the coming years.

To ensure the anonymity of respondents and the neutral analysis of results, the RIPE NCC re-commissioned an independent organisation with experience in the Internet industry and with conducting industry analysis. The Oxford Internet Institute (OII) was asked to administer the 2013 survey on its behalf. Visiting Research Associate Desiree Miloshevic, together with Scott Hale, Ginette Law and Joshua Melville from the OII, led the analysis team.

The RIPE NCC Senior Management and Executive Board tasked the OII with:

- Getting feedback from RIPE NCC members and other interested parties on the performance of the RIPE NCC;
- Soliciting the opinion of RIPE NCC members and other interested parties on the direction the RIPE NCC should take in the coming years;
- Identifying the key areas in which the RIPE NCC should concentrate its efforts;
- Examining the requirements of members and other interested parties in the different geographical areas of the RIPE NCC service region as well as the views of the Internet community around the world; and
- Attracting as many responses as possible.

Methodology

The survey was formulated following the focus groups that were conducted with RIPE NCC members and other interested parties in the RIPE NCC service region in November 2012 and earlier in 2013 to identify the issues that concerned them and to get their opinions on the issues that should be raised in the survey (see section B).

RIPE NCC members from all categories, ranging from small to large membership organisations, were consulted, as well as representatives from government, regulatory bodies and other interested parties in the RIPE NCC service region. Participants in the focus groups received a list of subject areas for discussion prior to the meetings so that they could prepare for the focus group sessions (see section B).

RIPE NCC members and other interested parties who attended the focus groups informed the consultants of the issues that concerned them most. The survey questionnaire was formulated using this feedback as a basis.

The survey questions were divided into fourteen sections:

1. General RIPE NCC Services
2. Membership Administration
3. Corporate Governance
4. Registry and Resource Distribution
5. Internet Governance and External Relations
6. Training and Education
7. RIPE NCC Outreach and External Relations
8. IPv6 Deployment
9. RIPE NCC Tools and Measurements
10. RIPE NCC Communications
11. RIPE Meetings
12. RIPE Policy Development Process (PDP)
13. RIPE Database
14. Network Security

The online survey was launched on 17 May 2013 and closed on 24 June 2013. The third party tool SurveyMonkey was used to collect responses and the OII had sole control of the SurveyMonkey account for the duration of the survey. Most questions asked respondents to rate their satisfaction, awareness or opinion of importance on a scale from 1 (Low) to 7 (High). Respondents could choose Not Applicable or No Comment if they wished. A small number of mandatory questions were included in the survey. Participants also had the opportunity to leave comments in each section. Most questions were optional, so the response rate for a single question may vary. The Appendices to the survey report contain all question charts and all the comments made by respondents exactly as entered.

It should be noted that qualitative data and comments collected through this online survey may at times be biased or not fully represent the RIPE NCC's membership and community. Open-ended questions were not compulsory to answer. Data was only collected in English. Many people who participated in the survey may not have sufficient English skills or knowledge about their organisation to feel inclined to leave comments. Nonetheless, the data collected for this study (both quantitative and qualitative) provides rich information that should assist the RIPE NCC in meeting its objectives.

Survey Participants

The survey received a total of 3,631 respondents from 114 countries, almost three times the number of responses collected in 2011. 75 of the 76 countries in the RIPE NCC service region were represented. Overall, 2,167 respondents completed the survey to the last page, which is by far the most a RIPE NCC survey has received to date. The biggest responding countries were generally those with the largest membership base.

Russian Federation	401
Germany	321
United Kingdom	283
The Netherlands	209
Italy	184
Spain	153
France	144
Sweden	133
Poland	118
Switzerland	112

Of the total respondents, 80% indicated that they were members of the RIPE NCC while the remaining 20% represented other interested parties. These other interested parties are noted as such in the charts that follow.

Are you a RIPE NCC Member?

Yes (Member) — 80%
No (OIP) — 20%
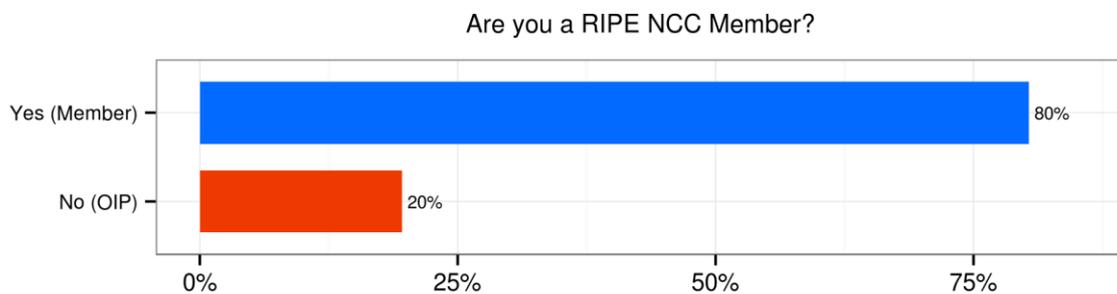
N=3631; Members=2919; Other interested parties (OIP)=712

Respondents per country (top 10)

Russian Federation — 309
Germany — 280
United Kingdom — 210
Netherlands — 163
Italy — 160
Spain — 134
France — 129
Sweden — 111
Poland — 104
Switzerland — 102

Number of respondents
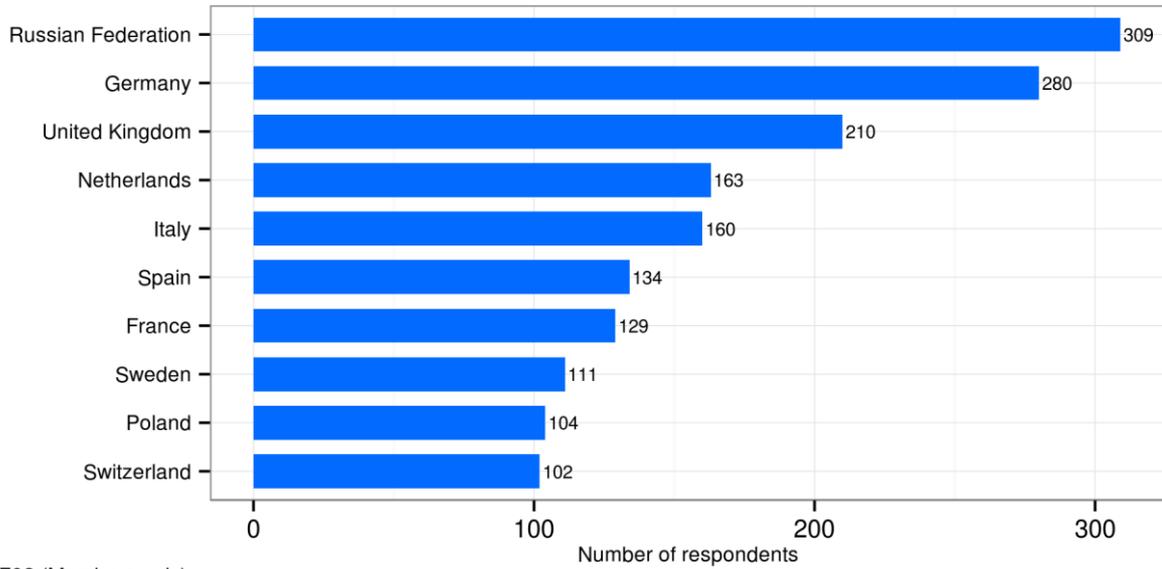
N=1702 (Members only)

Respondents per country (top 10)

Russian Federation — 92
United Kingdom — 73
United States — 60
Netherlands — 46
Germany — 41
Italy — 24
Sweden — 22
Spain — 19
Turkey — 16
Macedonia — 16

Number of respondents
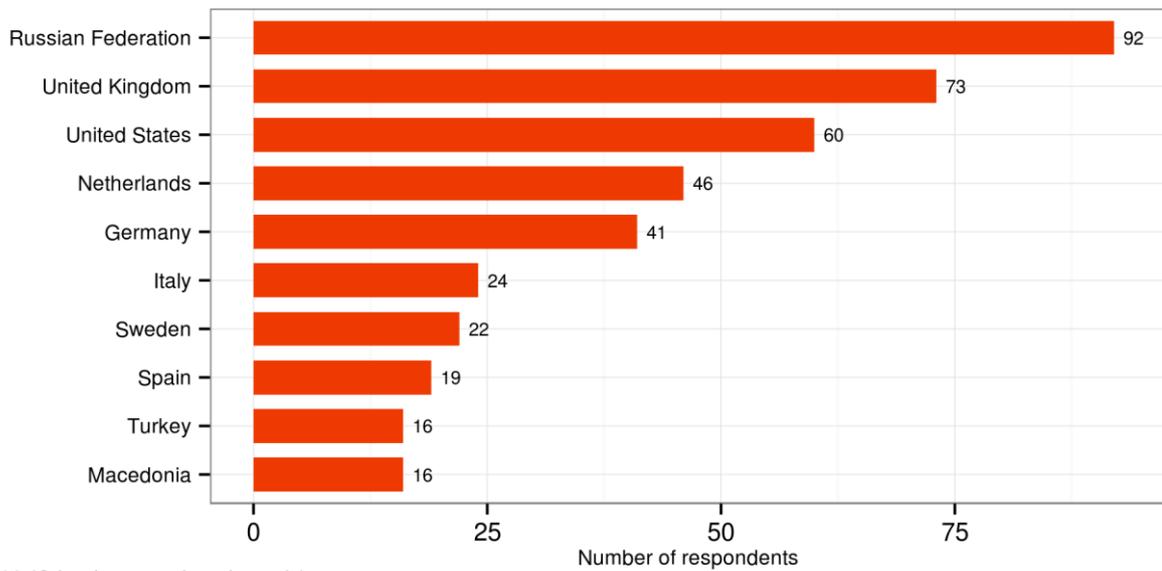
N=409 (Other interested parties only)

Respondent Organisation Types

More than half of the respondents indicated that they worked for an ISP while other major groups included hosting companies, data centres and academic institutes. Around two-thirds of these organisations were small to medium-sized entities with the remaining third classifying themselves as large or very large.

Organisation Type

| Organisation Type	Percentage
Internet Service Provider	52%
Hosting company	14%
Other	12%
Data centre	5%
Academic institution	4%
Other not-for-profit Internet company	3%
Mobile operator	3%
Government agency	3%
DNS ccTLD/gTLD	2%
Internet Exchange Point	1%
Regional Internet Registry	1%
Regulatory body	0%
Law enforcement	0%
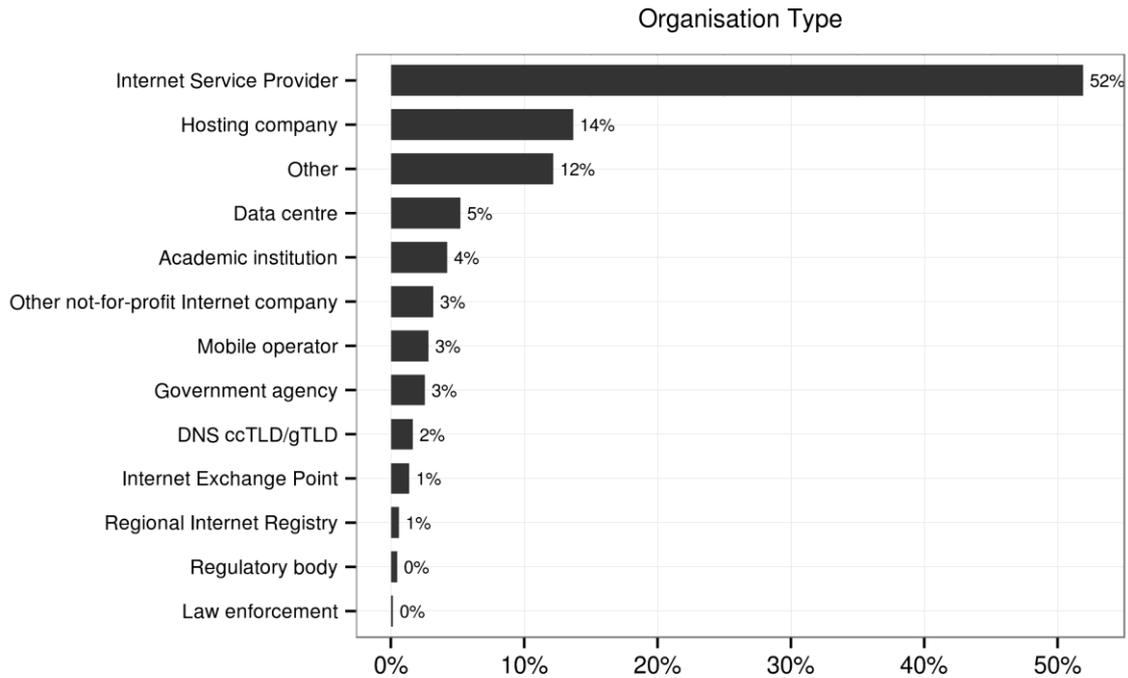
N=2167 (Members and other interested parties)

Respondent Roles

More than half of the respondents were network operators/engineers; around 15% were corporate managers; 15% were systems administrators; and the rest were made up of a variety of other positions.

Position/Title
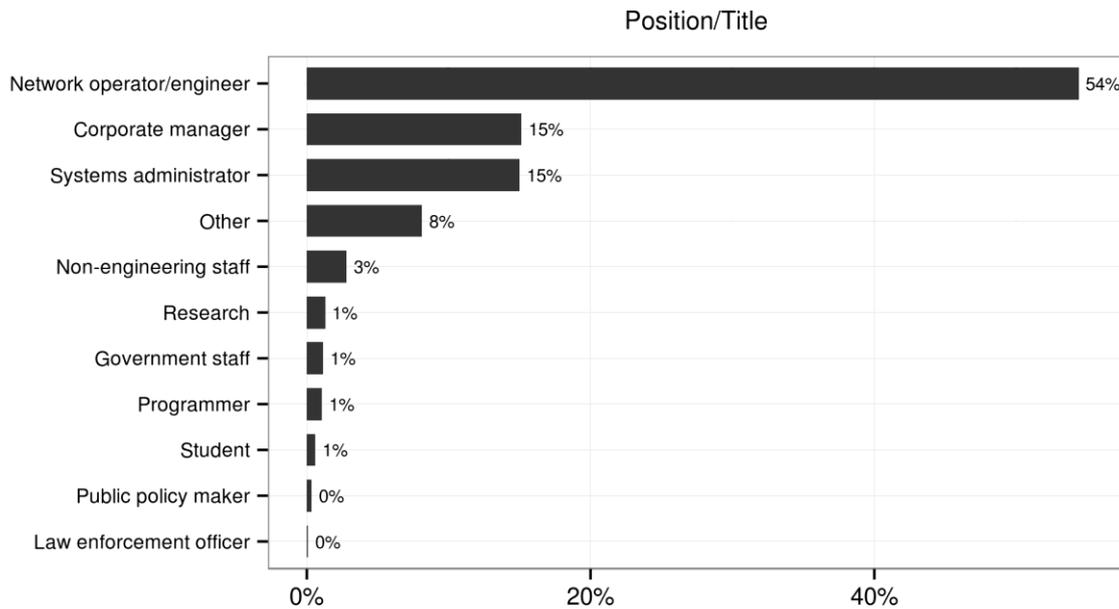
N=2167 (Members and other interested parties)

Membership Duration and Recent Experiences

A range of older and newer members participated in the survey. Newer members indicated that they were generally satisfied with the support given through the membership process (mean=5.98, n=760) and the process itself of becoming a RIPE NCC member (mean=5.76, n=760).

How long have you been a RIPE NCC member?

Duration	Percentage
0-2 years	29%
3-5 years	23%
6-10 years	22%
>10 years	23%
I don't know	3%
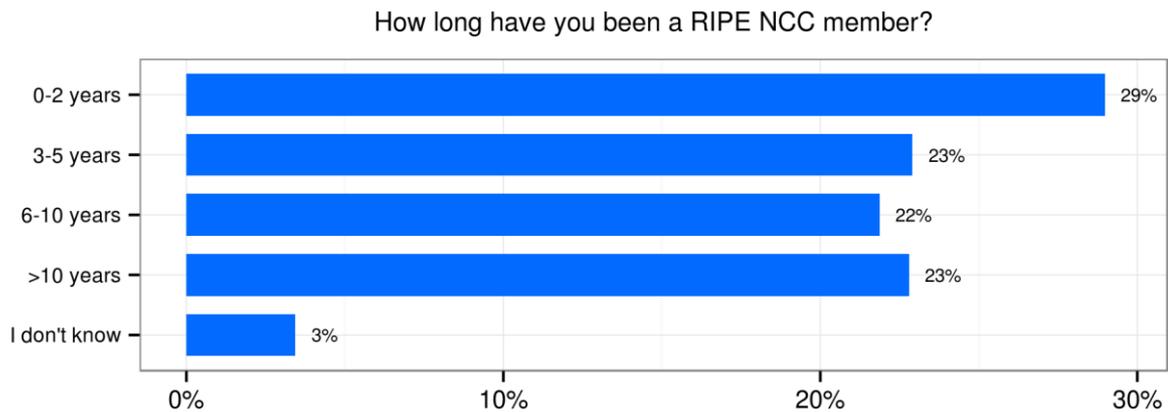
N=2881 (members only)

Participants who have been RIPE NCC members for longer than two years were asked to rate their experience in dealing with the RIPE NCC over the past two years. Just over half responded that their experience was about the same while 36% said it had improved. Only 2% said their experience had become worse.

How would you rate your overall experience in dealing with the RIPE NCC in the past two years?

Rating	Percentage
Better	36%
About the same	52%
Worse	2%
I don't know	10%
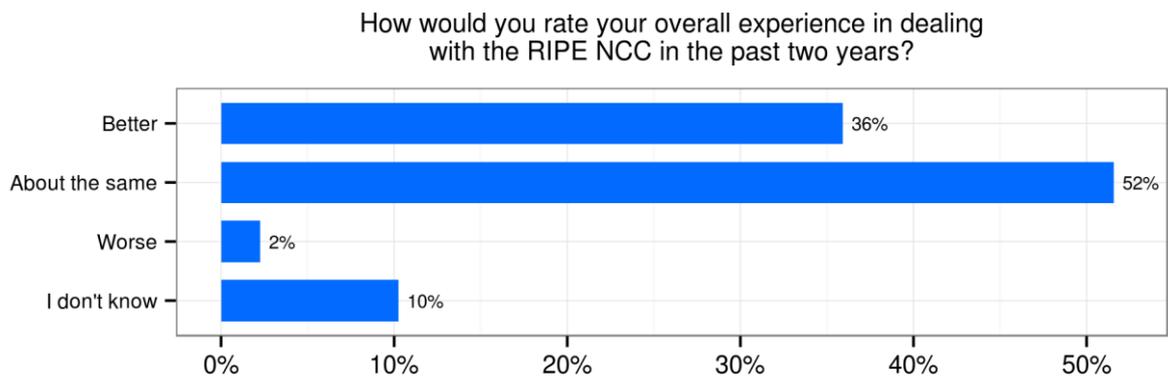
N=1902 (members only)

There was an abundance of new respondents who participated in the 2013 survey compared to the previous edition conducted in 2011. (In 2011, there were 1,266 participants, and 825 completed the survey.) This increase in participation greatly strengthens the findings from the survey, allowing the RIPE NCC to make decisions about its services, activities and administration that are informed based on a large sample of respondents.

Did you participate in the RIPE NCC Survey 2011?

N=2864 (Members only)

Did you participate in the RIPE NCC Survey 2011?
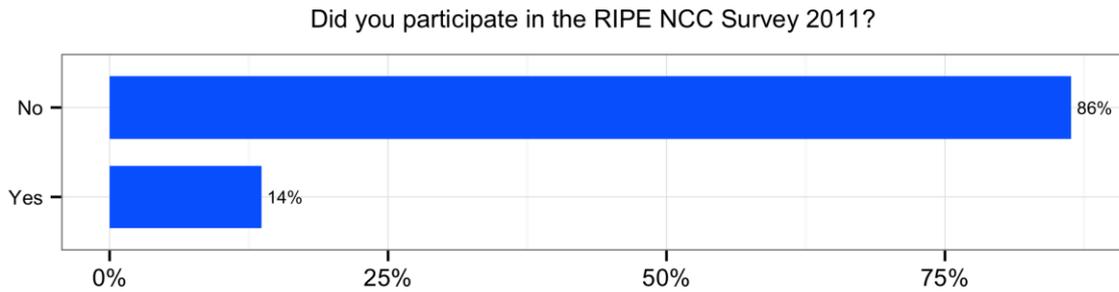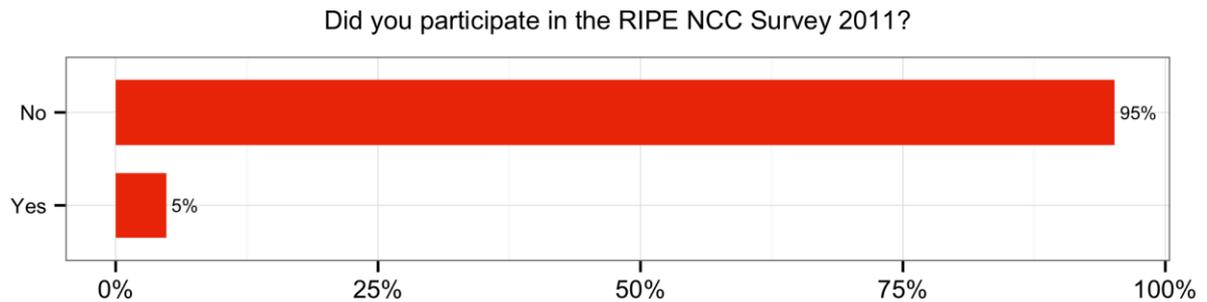
N=705 (Other interested parties only)

Ratings on Services

Awareness levels for core services rated very highly among members, although awareness-raising efforts are needed in other areas such as Resource Certification (RPKI), K-root operations and DNS Monitoring.

Please rate your awareness level for the following services from 1 to 7

Service	Mean Awareness
The RIPE Database	6.07
The LIR Portal	5.93
Resource registration or requests	5.74
Reverse DNS	5.40
Training services	5.13
Meeting support	4.64
RIPE Atlas	4.50
IP Analyser	4.49
RIPEstat	4.41
DNS Monitoring	4.14
K-root operations	4.00
Resource Certification (RPKI)	3.95

Mean Awareness: 1 Lowest, 7 Highest

N=2219 (Members only)

Satisfaction levels were high across all services provided by the RIPE NCC, including for those where awareness levels were relatively low.

Please rate your satisfaction level with the following from 1 to 7

Service	Mean Satisfaction
The RIPE Database	6.09
The LIR Portal	5.99
Reverse DNS	5.94
Training services	5.87
Resource registration or requests	5.86
Meeting support	5.77
RIPEstat	5.71
IP Analyser	5.71
K-root operations	5.66
RIPE Atlas	5.65
DNS Monitoring	5.53
Resource Certification (RPKI)	5.28

Mean Satisfaction: 1 Lowest, 7 Highest

N=2165 (Members only)

The importance ratings for RIPE NCC services showed high levels for the core services of RIPE Database, resource registration, the LIR Portal and reverse DNS, with all these scoring over 6 out of 7.

Please rate the importance level of the following services and activities from 1 to 7
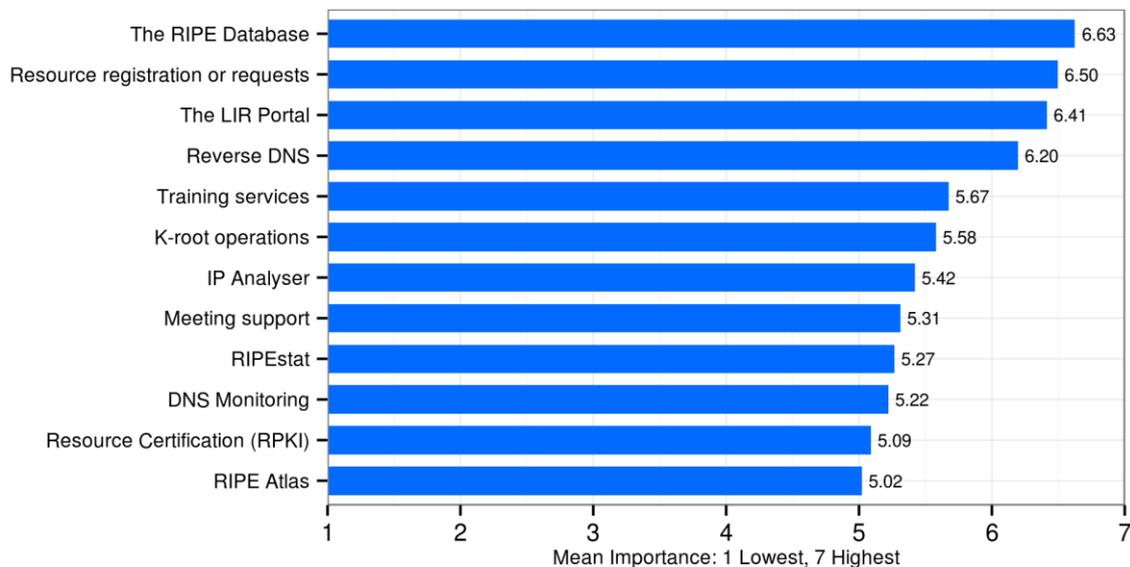
N=2173 (Members only)

Open Questions

All individual comments are anonymised and provided in Appendix 3. The comments highlighted in the text of the survey report are those that appeared most commonly for each question.

Overview of Findings

In general, respondents were very satisfied with the way the RIPE NCC provided and delivered its services. However, there were some awareness issues of non-core services. All core and non-core services received ratings of over 5 out of 7 with regards to their importance.

The vast majority of respondents found the ways in which they can contact the RIPE NCC Customer Services and the support that they received from them to be extremely satisfactory. In general, phone contact would be appreciated, as would longer online chat service hours and assistance in languages other than English.

The RIPE NCC's corporate governance structure rated highly. Some respondents suggested increasing the total amount of members on the RIPE NCC Executive Board, increasing operational transparency and ensuring that the membership is engaged early in major decision-making processes.

Many comments indicated that respondents do not vote at RIPE NCC General Meetings because they simply did not have the time to get involved. Quite a number indicated that they had only recently become members and felt they were too new to the process to be involved, or they found the voting process too complicated.

In general, the respondents indicated that they were quite satisfied with visibility of the RIPE NCC's Internet governance and external relations work. They found the RIPE NCC's engagement with governments in its service region to be very important as well as the RIPE NCC's representation of their interests to governments.

Those that had participated in onsite training courses were extremely satisfied with the courses, the level of technical training provided by the RIPE NCC and the training documentation provided by the RIPE NCC. The E-learning Centre and the RIPE NCC webinars both received very high ratings. Around two thirds of the respondents indicated that the RIPE NCC should further develop its remote training options.

The survey respondents were quite evenly split about whether or not the RIPE NCC should train external parties to be trainers, with about one third supporting this, one third not and one third not knowing.

With regards to providing training in other languages, around 41% of respondents indicated that the RIPE NCC should invest in providing training and documentation in languages other than English; 47% indicated that the RIPE NCC should not do this; 12% did not know.

About two-thirds of the respondents indicated that their organisation had a formal plan for IPv6 deployment. About a third of the respondents indicated that they had an IPv6 transition budget. And two-thirds indicated that their organisation had staff trained for IPv6 deployment.

With regards to assisting IPv6 take-up, respondents suggested that the RIPE NCC needed to help in convincing decision makers via business cases, as well as clearly highlighting the advantages of IPv6, making IPv6 address requests much easier, or possibly stopping the handing out of IPv4 addresses and not allowing IPv4 transfers to take place.

Many respondents indicated that the RIPE NCC measurement tools were not easy to find on the website and that they were not aware of most of them. Some suggested providing training for the use of these tools while others simply asked to make them more user-friendly. A number of respondents suggested publishing real world use cases of these tools. There were also requests to allow access to the raw data, create more APIs and make them open source.

When asked if the RIPE NCC should invest member funds in communicating in languages other than English, some 2,172 respondents answered this question. Of those, 35% said "Yes"; 52% said "No"; and 13% did not know. A number of respondents felt that it was a good idea but that the RIPE NCC should only translate a small amount of the web content. Others suggested that, even if it's not official translations, a RIPE NCC staff member that can explain things (by phone, email or in person) in a local language would be beneficial.

Many of the respondents indicated that the website navigation needed to be improved, as well as the website usability and structure. A number of respondents suggested multilingual support on the website while others suggested using simpler English with fewer acronyms.

Respondents suggested that the RIPE NCC could further help facilitate networking opportunities between attendees at RIPE Meetings. A high number of respondents requested that the RIPE NCC publish information that could help explain the benefits and value of attending RIPE Meetings that they could give to their management.

A significant number of respondents indicated that the RIPE Database was difficult for newcomers to understand and update. There were numerous suggestions to develop a more user-friendly interface and provide more tutorials, more how-to documents, better syntax error explanations and more FAQs.

Many respondents indicated that the RIPE NCC should promote the use of their tools to the Internet security industry, as well as increasing engagement with that industry. About a third of the respondents suggested further development of Resource Certification (RPKI).

Finally, many comments suggested that the survey was much too long and that this needs to be shortened next time.

D. Overall Results

Overview

The survey questions were divided into fourteen sections:

1. General RIPE NCC Services
2. Membership Administration
3. Corporate Governance
4. Registry and Resource Distribution
5. Internet Governance and External Relations
6. Training and Education
7. RIPE NCC Outreach and External Relations
8. IPv6 Deployment
9. RIPE NCC Tools and Measurements
10. RIPE NCC Communications
11. RIPE Meetings
12. RIPE Policy Development Process (PDP)
13. RIPE Database
14. Network Security

Sections 1 to 6 focus on responses from RIPE NCC members only; Section 7 focuses on other interested party responses; and Sections 8 to 14 examine both member and other interested party responses. Section 8 also looks at responses by industry type and/or where it was interesting to highlight differences. Part D of the report provides a separate analysis of selected questions by region.

Note: All rating questions in the survey asked respondents to rate on a scale of 1 to 7, with 1 being Lowest and 7 being Highest. The option Not Applicable was also available in the rating questions.

RIPE NCC Member Responses

1. RIPE NCC General Services

RIPE NCC members were first asked some general questions regarding their satisfaction with RIPE NCC services and activities.

The majority of respondents were more than satisfied with the services and activities provided by the RIPE NCC. While in general respondents were very aware of the RIPE NCC core services, many respondents indicated that they were only moderately aware of services such as RIPE Atlas, IP Analyser, RIPEstat, DNS Monitoring, K-root operations and Resource Certification (RPKI).

Satisfaction with the way the RIPE NCC offered these services was also high with an average of 5.76 out of 7.

When it came to the importance of the range of services that the RIPE NCC offered, the RIPE Database, resource registration and resource requests, the LIR Portal and reverse DNS were rated as extremely important with scores of more than 6 out of 7, and all other services were rated as being relatively important, with scores of more than 5 out of 7.

Additional comments pointed out that RIPE NCC was too bureaucratic and that procedures needed to be simplified with better descriptions of how to get through the paperwork, and that these should be written in simple English. Comments noted that the performance of the LIR Portal was too slow and that it could better integrate other services such as RIPE Database login and updates. They also had trouble navigating around the website and felt that the RIPE Database updates are too cumbersome.

The services/activities

N=2673 (members only)

Please rate your awareness level for the following services from 1 to 7

Service	Mean Awareness
The RIPE Database	6.07
The LIR Portal	5.93
Resource registration or requests	5.74
Reverse DNS	5.40
Training services	5.13
Meeting support	4.64
RIPE Atlas	4.50
IP Analyser	4.49
RIPEstat	4.41
DNS Monitoring	4.14
K-root operations	4.00
Resource Certification (RPKI)	3.95

Mean Awareness: 1 Lowest, 7 Highest

N=2219 (Members only)

Please rate your satisfaction level with the following from 1 to 7

Service	Mean Satisfaction
The RIPE Database	6.09
The LIR Portal	5.99
Reverse DNS	5.94
Training services	5.87
Resource registration or requests	5.86
Meeting support	5.77
RIPEstat	5.71
IP Analyser	5.71
K-root operations	5.66
RIPE Atlas	5.65
DNS Monitoring	5.53
Resource Certification (RPKI)	5.28

Mean Satisfaction: 1 Lowest, 7 Highest

N=2165 (Members only)

Please rate the importance level of the following services and activities from 1 to 7

The RIPE Database	6.63
Resource registration or requests	6.50
The LIR Portal	6.41
Reverse DNS	6.20
Training services	5.67
K-root operations	5.58
IP Analyser	5.42
Meeting support	5.31
RIPEstat	5.27
DNS Monitoring	5.22
Resource Certification (RPKI)	5.09
RIPE Atlas	5.02

Mean Importance: 1 Lowest, 7 Highest
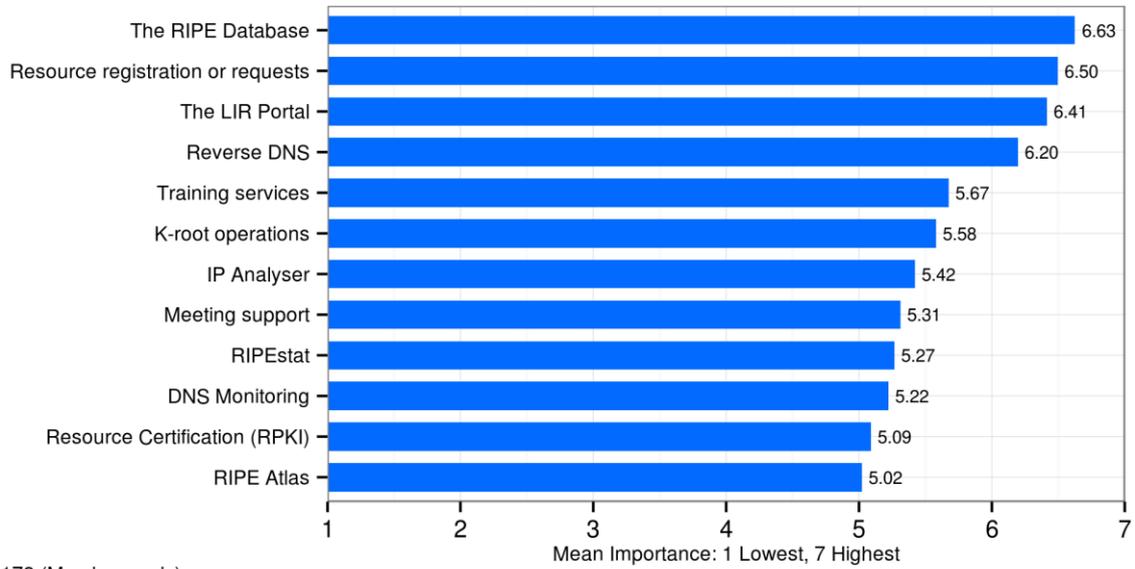
N=2173 (Members only)

2. Membership Administration

The vast majority of respondents found the ways in which they can contact the RIPE NCC Customer Services Department and the support that they received from them to be extremely satisfactory.

There were a number of respondents that indicated that the email responses were slow, and in some cases they felt that this was due to the time differences across the service region. They suggested that either 24-hour service or regional offices could help alleviate this issue. Several respondents indicated that they would prefer to contact Customer Services and have their problem dealt with via telephone, and that the Chat Service hours should be extended. A number of respondents suggested having customer service requests dealt with in several service region languages other than English.

It was also suggested by numerous respondents that the customer services ticket system should be incorporated into the LIR Portal so that members could see the content, history and current status of their tickets.

Please rate your satisfaction level with the following from 1 to 7

The quality of the support I receive from customer services	6.07
The ways I can contact customer services	5.96

Mean Satisfaction: 1 Lowest, 7 Highest
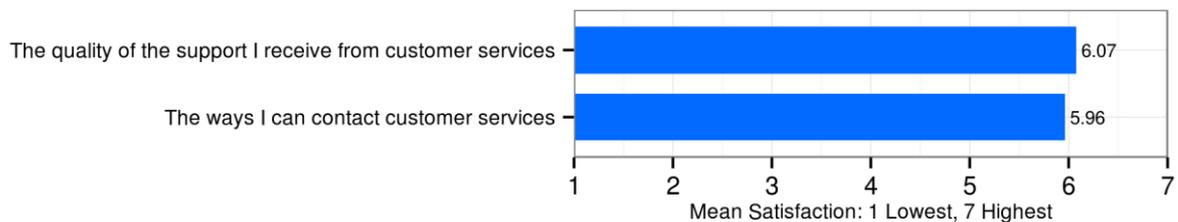
N=2041 (members only)

Respondents indicated that they were very satisfied with the RIPE NCC's payment and administration options as well as the LIR Portal features that supported these options.

Others indicated that electronic invoicing would be appreciated; the RIPE NCC should account for local regulations that may cause payments to be delayed; and showing the receipt of payment in the LIR Portal via a billing tracker would be appreciated.

Please rate your satisfaction level with the following from 1 to 7

Payment options and administration services	5.80
LIR Portal payment and support features	5.77

Mean Satisfaction: 1 Lowest, 7 Highest
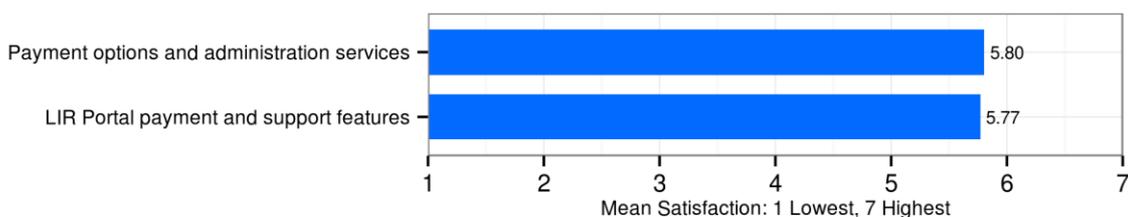
N=1810 (Members only)

3. Corporate Governance

The RIPE NCC's corporate governance structure received an average satisfaction rating of 5.44 out of 7. Some respondents suggested increasing the total amount of members on the RIPE NCC Executive Board or the amount of candidates that put themselves forward for the Board; increasing operational transparency; and ensuring that the membership is engaged early in major decision-making processes.

RIPE NCC's corporate governance structure

Mean Satisfaction: 1 Lowest, 7 Highest

N=1354 (members only)
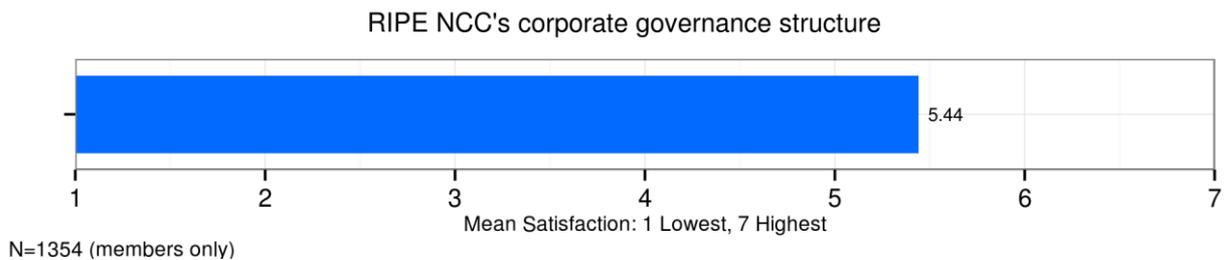
The RIPE NCC Executive Board's leadership of the RIPE NCC, the use of the membership's funds by the RIPE NCC and the RIPE NCC's engagement with the membership on important issues all scored over 5.4 out of 7.

Please rate your satisfaction level with the following from 1 to 7

Mean Satisfaction: 1 Lowest, 7 Highest

N=1591 (Members only)
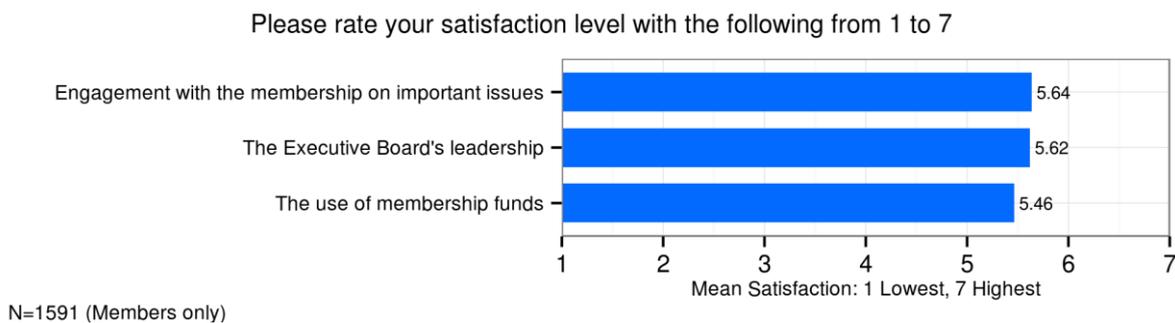
Roughly four out of five respondents who said they voted gave a score of 5 or higher for their satisfaction level with the RIPE NCC's General Meeting voting procedures (mean=5.76, n=363).

Over 81% of respondents indicated that they do not vote at RIPE NCC General Meetings. This is mainly due to the fact that they trust other members to make the right decision; another person casts their votes; they do not care about the issues being voted on; they found the voting procedures too difficult; or they found that the voting procedures were not well communicated.

Many respondents indicated that they simply did not have the time to get involved. Quite a number indicated that they only recently became a member and felt that they were too new to the process to be involved. They felt they had a lack of information on topics or Executive Board candidates. Some indicated that language issues stood in the way of understanding the voting procedures.

Others mentioned that they do not want to send a copy of their passport or identification via fax to the RIPE NCC.

Do you vote on General Meeting resolutions and/or
in RIPE NCC Executive Board elections?

No	81%
Yes	19%
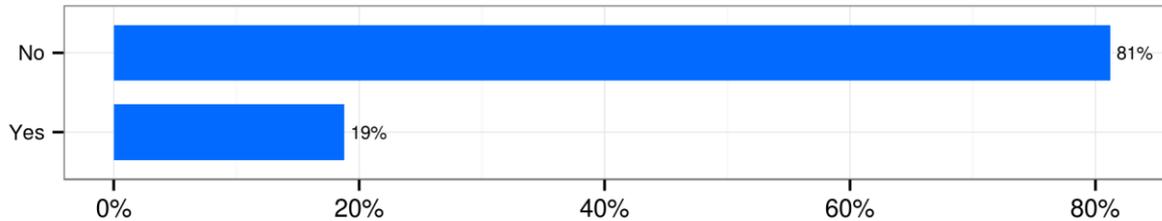
N=2113 (members only)

How would you improve the RIPE NCC General Meeting voting procedures?

Improve communication around voting	58%
Simplify the procedures	54%
Communicate about voting in languages other than English	22%
Other (please specify)	12%
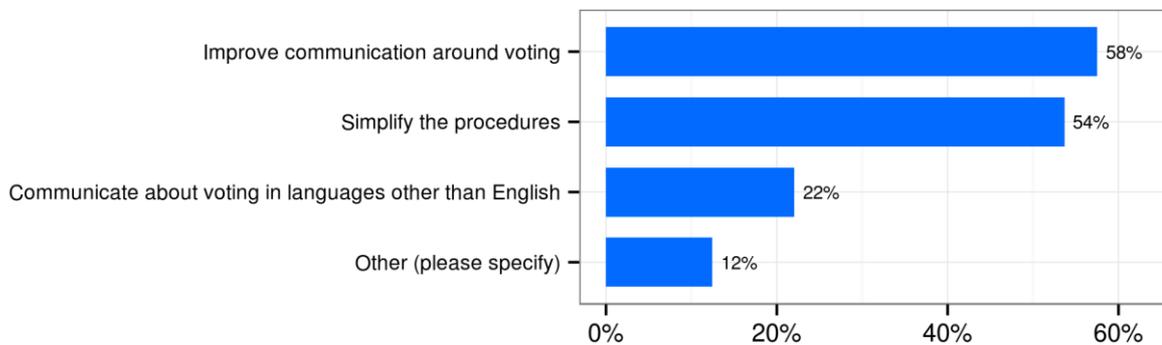
N=313 (members only)

Why do you not vote on RIPE NCC General Meeting resolutions
or in RIPE NCC Executive Board elections?

I trust other members to vote in the right way	49%
Another person casts the vote for my organisation	19%
Other (please specify)	19%
Voting procedures are not well communicated	17%
Voting procedures are too difficult	16%
I don't care about the issues being voted upon	14%
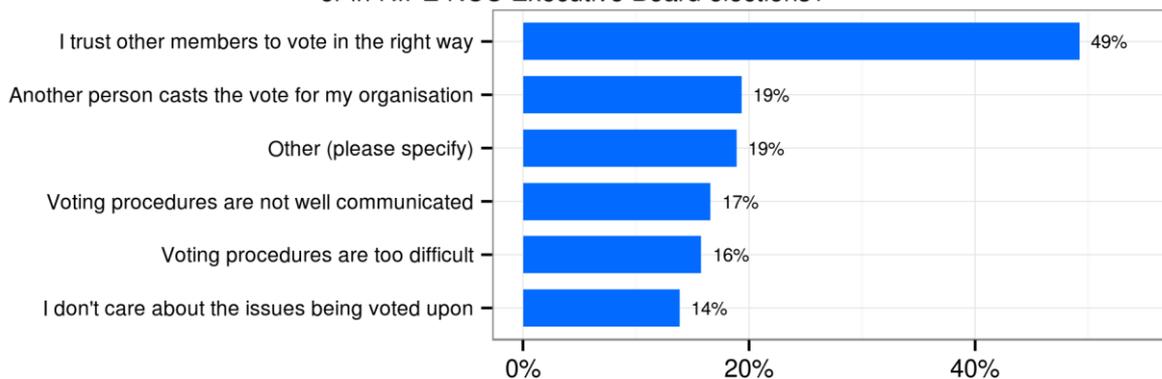
N=1680 (members only)

4. Registry and Resource Distribution

Respondents indicated that they were very satisfied with the procedures for obtaining number resources; the quality of the responses to registration enquiries; the LIR Portal features that support registration enquiries; and the accuracy and robustness of the registrations in the RIPE Database.

Please rate your satisfaction level with the following from 1 to 7
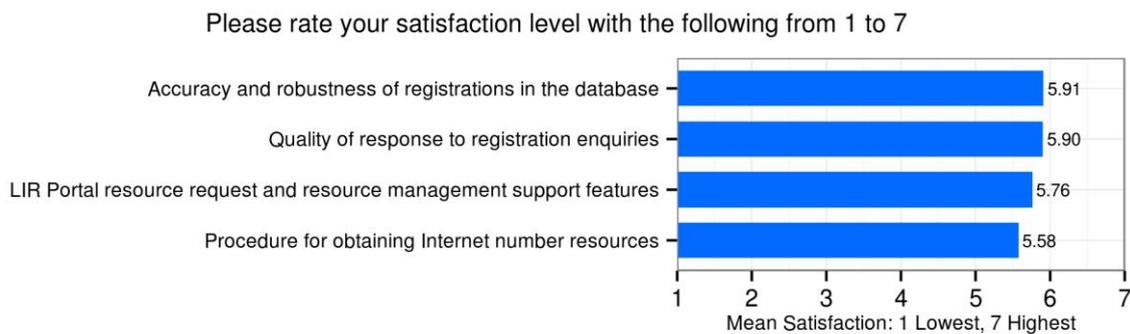
N=1995 (Members only)

A number of respondents indicated that they felt that the registration procedures needed to be simplified and that the process was too time consuming. Comments indicated that the explanations and terminology used in the information is too complex and needs to be explained in a simpler manner. It was also suggested that Registration Services might consider using an online chat facility.

Other respondents indicated that the registry and RIPE Database editing process was too complicated, cumbersome and difficult for first-time users to properly understand.

It was also suggested that the LIR Portal should provide more details about LIR assignments and a historical archive of email interaction between LIRs and the RIPE NCC.

Most respondents indicated that the RIPE NCC should play a medium-to-high role in IPv4 address transfers. However, what that role should be seemed to vary according to the comments collected.

What role or roles do you think the RIPE NCC should play in IPv4 address transfers?
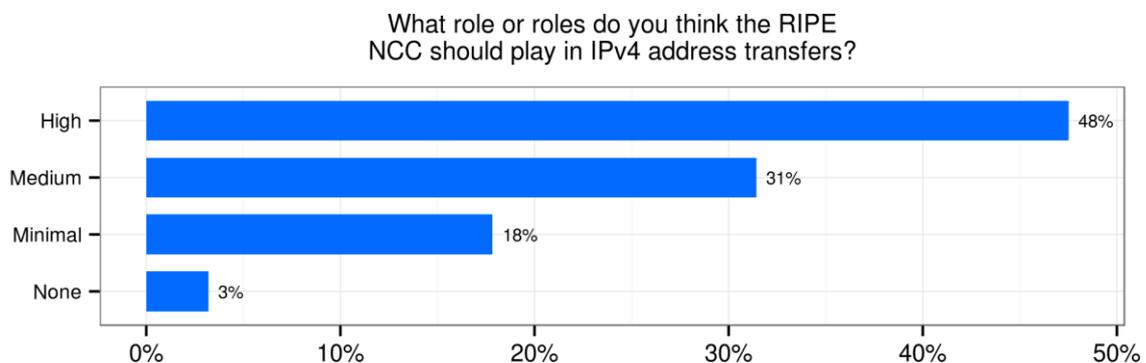
N=2023 (members only)

Many respondents indicated that the RIPE NCC should ensure the return of unused IPv4 address space and allocate it to those that need them.

Some felt that transfers should not be permitted because this would only slow IPv6 take-up.

Others indicated that the RIPE NCC should assist and support the development of an inter-RIR policy as a soon as possible; the RIPE NCC should make intra-RIR transfers easier to help prevent a black market; and the quality of RIPE Database data should be ensured.

5. Internet Governance and External Relations

Respondents indicated that they were relatively satisfied with the visibility of the RIPE NCC's Internet governance and external relations work (mean=5.03, N=1448). Items related to Internet governance and external relations all seemed relatively important with mean scores above 5 on a scale of 7.

The RIPE NCC's work to help local Internet communities to engage with governments also rated highly, as did the RIPE NCC's work to help local Internet communities to engage with regulators, law enforcement agencies and other intergovernmental organisations.

Please rate the importance level of the following from 1 to 7

	Mean Importance: 1 Lowest, 7 Highest
Engagement with governments in its service region	5.37
Representation of your interests to governments	5.30
Local Internet community engagement with intergovernmental organisations	5.26
Local Internet community engagement with governments	5.24
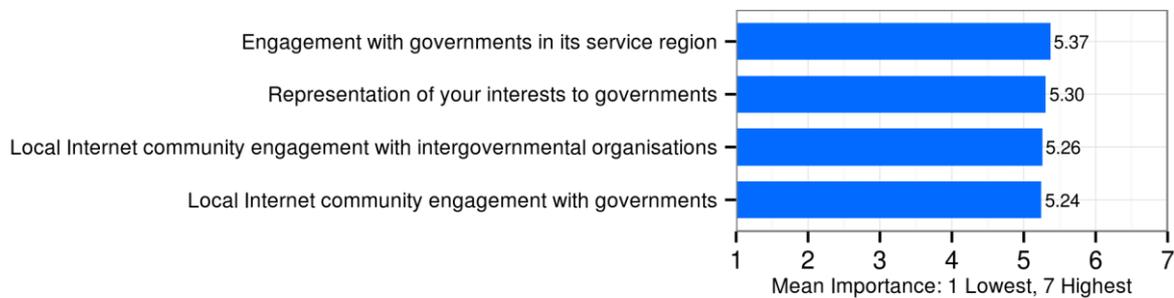
N=1517 (members only)

In regard to how the RIPE NCC should allocate resources to engage with governments, about two thirds indicated that the RIPE NCC should represent its members' interests to government and that resources should be allocated to training and knowledge sharing to promote better public policy. Around one third of the respondents suggested increasing public/private sector cooperation activities and allocating resources to the RIPE NCC Roundtable Meetings for governments and related bodies.

What should the RIPE NCC allocate resources to?

Training and knowledge sharing for public policy	65%
Representing our membership's interests to government	65%
Roundtable Meetings for governments and related bodies	39%
Increasing public/private sector cooperation activities	35%
Other (please specify)	2%
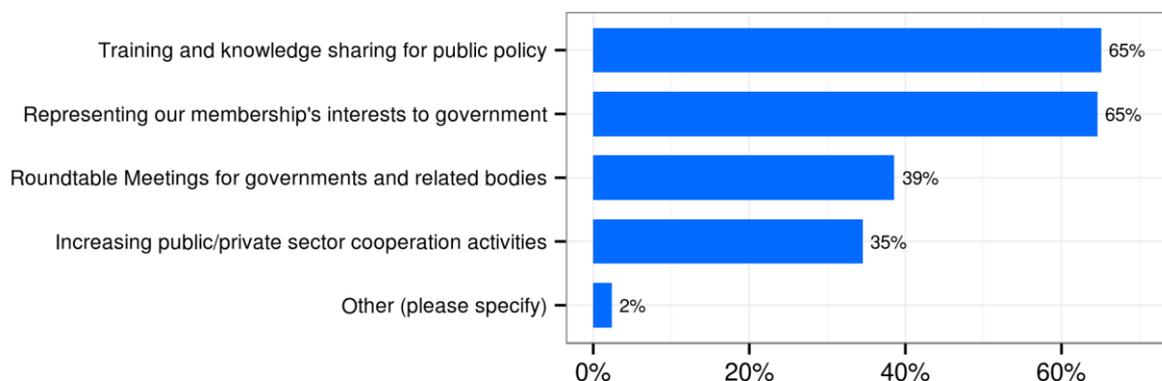
N=1802 (members only)

A few respondents indicated that the RIPE NCC should not get involved in politics at all, and others said the RIPE NCC should be wary of representing the members' interests. Other respondents indicated that the RIPE NCC should do its best to promote "net neutrality"; tell governments to keep their hands off the Internet; and spend more time convincing governments to aid the IPv6 rollout.

Members were asked in which regional outreach forums and groups the RIPE NCC should be actively involved. Those who responded to the question most frequently chose national network operating groups (NOGS) and the Eurasia Network Operators Group (ENOG). Almost 50 percent of these members indicated that the RIPE NCC should be involved in these regional outreach forums or groups. Forty percent or more who answered the question also thought that the RIPE NCC should be involved in others groups such as Regional NOGs from other RIR regions, the Middle East Network Operators Group (MENOG) and the South East Europe (SEE) Regional Meetings.

Please choose the regional outreach forums and groups
that the RIPE NCC should be actively involved with

| Group	Percentage
National NOGs	49%
Eurasia Network Operators Group (ENOG)	49%
Regional NOGs from other RIR regions	43%
Middle East Network Operators Group (MENOG)	41%
South East Europe (SEE) Regional Meetings	40%
Other (please specify)	3%
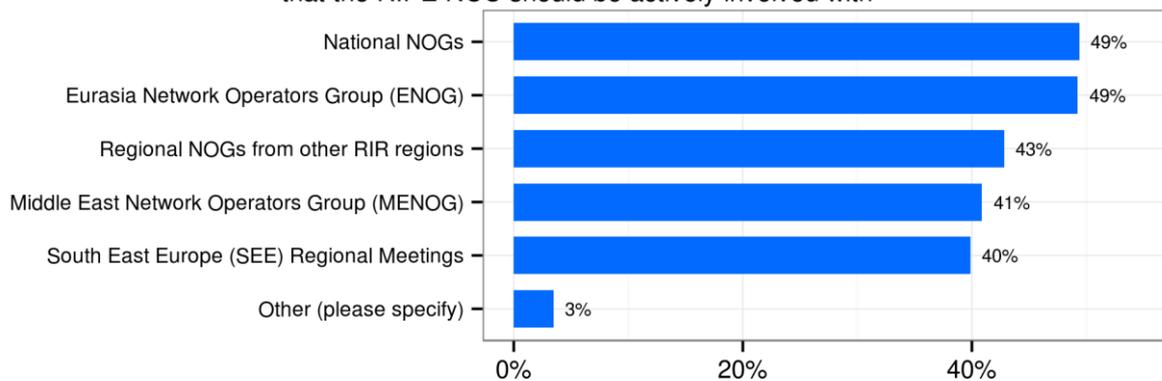
N=1590 (members only)

Most member respondents thought that the RIPE NCC should engage with government at a moderate level (51 percent). Most also thought that the extent of the RIPE NCC's work with law enforcement agencies (LEAs) should be moderate to low (70 percent). Twenty percent thought that the RIPE NCC's engagement should be high in this area while 10 percent didn't think the RIPE NCC should be engaging with LEAs at all.

What should be the extent of the RIPE NCC's work with government?
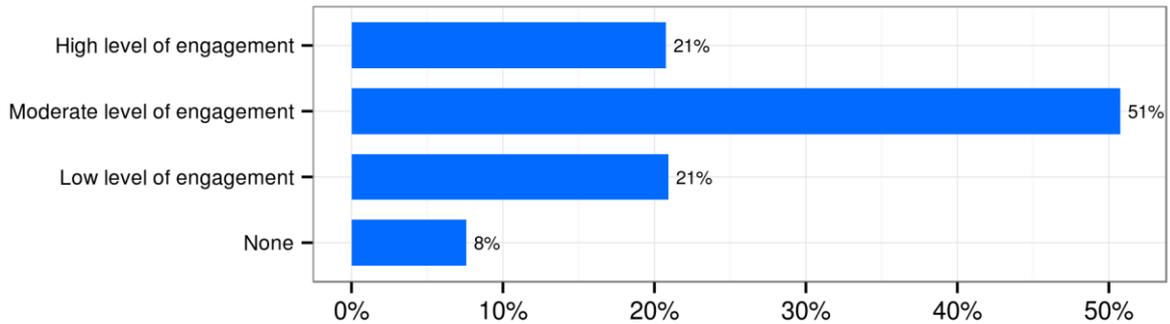
N=1860 (members only)

What should be the extent of the RIPE NCC's work with law enforcement agencies (LEAs)?
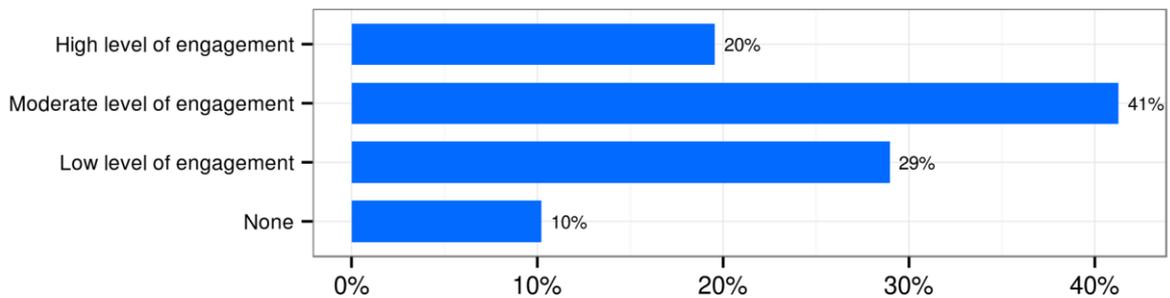
N=1868 (members only)

6. Training and Education

Forty-one percent of members who responded to the question (n=1916) indicated that they had attended a RIPE NCC onsite training course; only 24 percent of those who answered said they had used the RIPE NCC's E-Learning Centre; 15 percent said they had attended a RIPE NCC webinar.

Have you attended a RIPE NCC onsite training course?

N=1916 (members only)

Have you used the RIPE NCC's E-Learning Centre?

N=1912 (members only)

Have you attended any of the RIPE NCC's webinars?
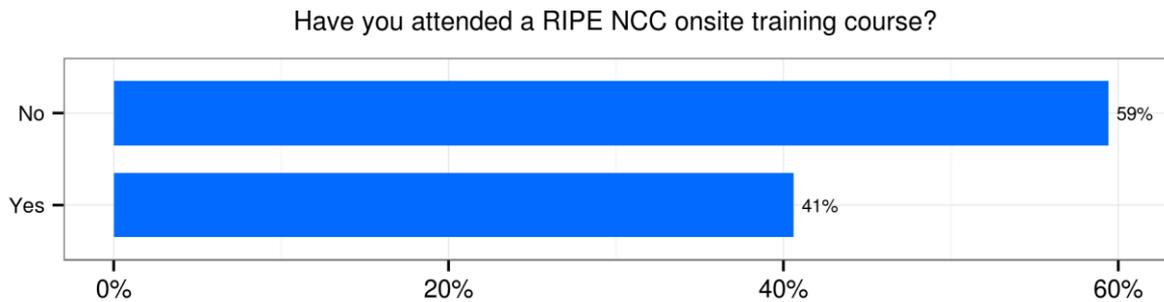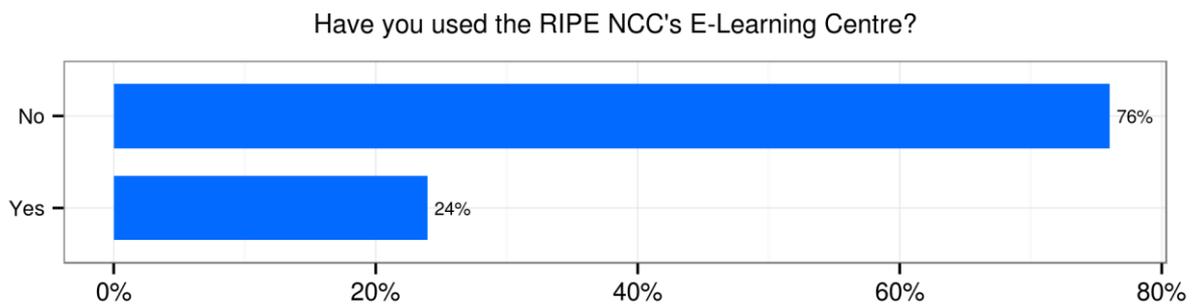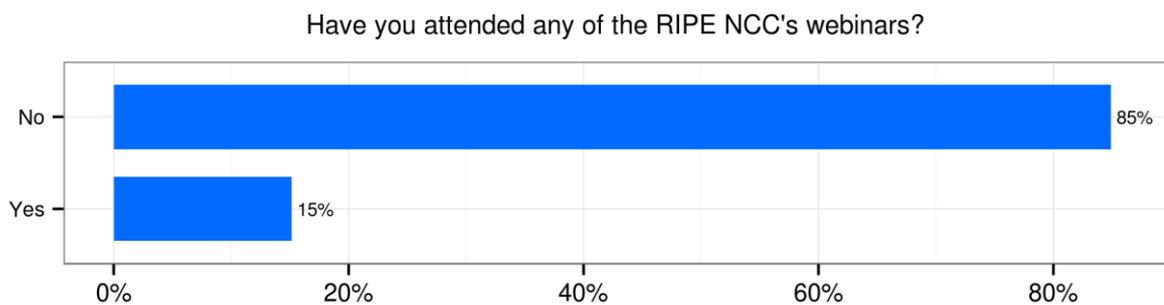
N=1910 (members only)

Those that had participated in onsite training courses were extremely satisfied with the course, the level of technical training provided by the RIPE NCC and the training documentation provided by the RIPE NCC.

The E-learning Centre and the RIPE NCC webinars received very high ratings. Around two thirds of the respondents indicated that the RIPE NCC should further develop its remote training options.

Please rate your satisfaction level with the following from 1 to 7
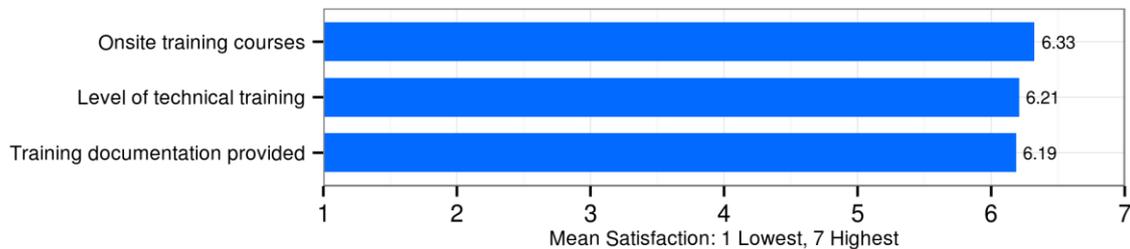
N=780 (Members only)

Please rate your satisfaction level with the following from 1 to 7
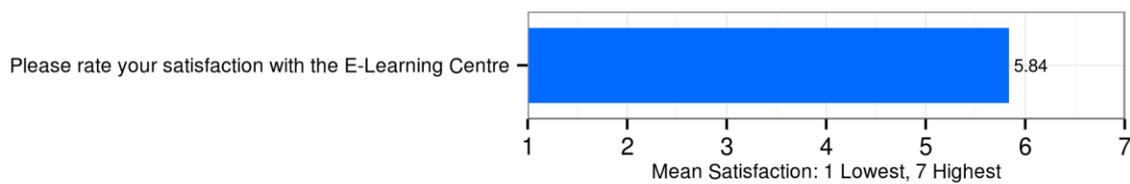
N=462 (Members only)

Please rate your satisfaction level with the following from 1 to 7
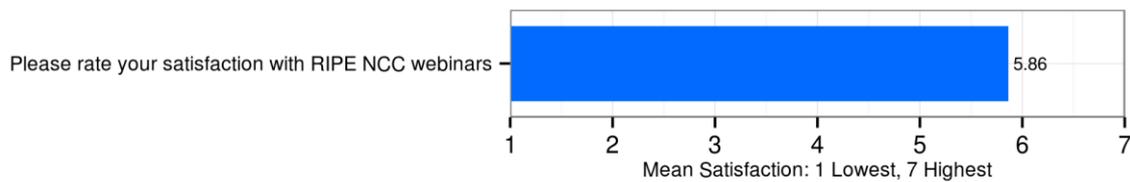
N=282 (Members only)

Many respondents suggested that the RIPE NCC could provide IPv6 training courses on deployment scenarios, implementation, transition techniques, ISP best common practice documents (BCPs) and IPv6 for decision makers. Many other respondents suggested providing training on routing and BGP best common practice documents (BCPs). Network security, IPv6 security, BCPs for routing security, DDoS, DNSSEC and RPKI were also suggested as options for training courses.

The survey respondents were quite evenly split about whether or not the RIPE NCC should train external parties to be trainers, with about one third supporting this, one third not and one third not knowing.

Quite a number of respondents indicated that this might be a good idea, especially if it meant that there would be more local training courses and they could be given in local languages. There were some concerns that the quality of the training might be sacrificed.

Some respondents indicated that they had concerns that these parties becoming trainers might be aiming to maximise profits or have other motives for doing this. It was put forward that the RIPE NCC should consider using local not-for-profit organisations to do this. Others suggested that only current RIPE NCC members should be allowed to take on this role.

A number of respondents did not like the idea and felt that the RIPE NCC should spend more resources on creating better videos of the trainers and make these available online.

Should the RIPE NCC train external parties
to be trainers in RIPE NCC-related areas?

No	35%
Yes	32%
I don't know	32%
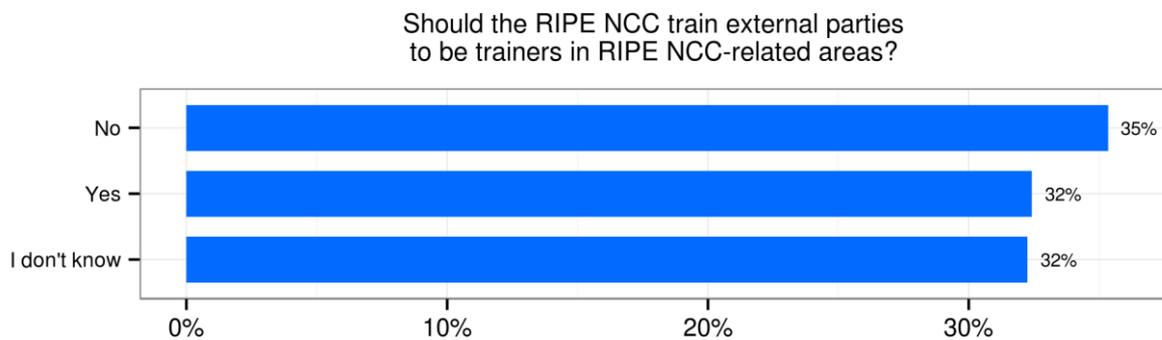
N=1882 (members only)

Some 37 percent of the respondents indicated that the RIPE NCC should give more preference to training in developing countries than in developed countries while 32 percent indicated that the RIPE NCC should not do this; 31 percent did not know.

Some respondents indicated that training should be offered where it is demanded or needed and this should have nothing to do with whether the country is classified as "developing" or not. Others suggested that rather than doing this, the RIPE NCC should spend more resources on online training that would be equally available to everyone no matter which country they came from.

Should the RIPE NCC invest in developing its remote training options?

Yes	65%
I don't know	27%
No	9%
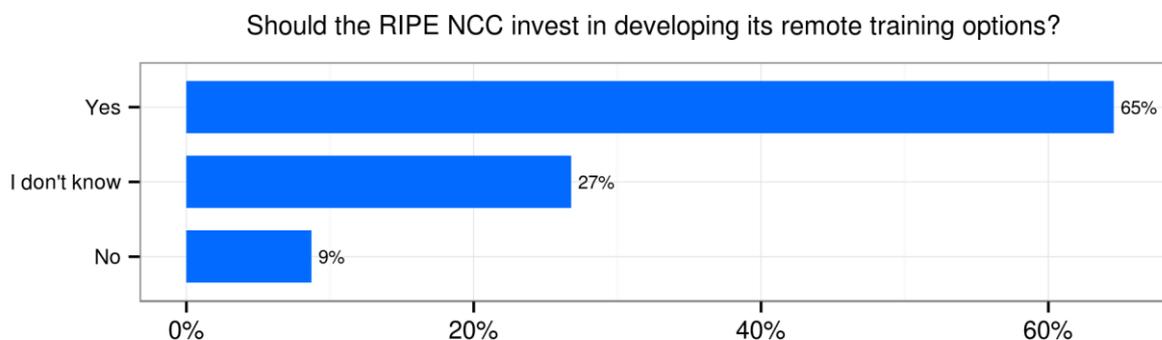
N=1887 (members only)

Around 41 percent of respondents indicated that the RIPE NCC should invest in providing training and documentation in languages other than English; 47% indicated that the RIPE NCC should not do this; 12 percent did not know.

A number of respondents indicated that English is the language of choice for both the Internet and the technical community. They suggested that a lot of the material could be simplified into much plainer English.

Should the RIPE NCC invest in converting training courses and documentation into languages other than English?

No	47%
Yes	41%
I don't know	12%
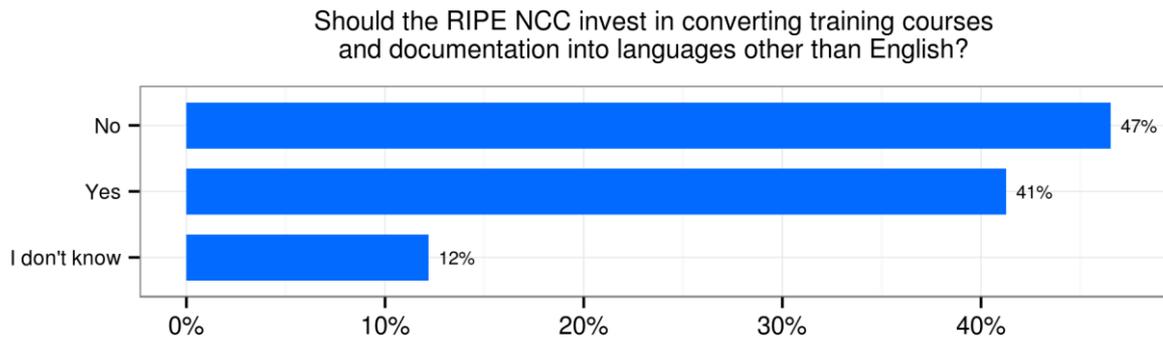
N=1880 (members only)

Other Interested Party Responses

7. RIPE NCC Outreach and External Relations

Other interested parties were asked about their areas of interest that were related to the RIPE NCC's outreach and external relations. IPv6 was of most interest to other interested parties (79 percent). Internet security (75 percent), Internet governance (57 percent) and critical Internet infrastructure protection also interested most other interested parties who responded to this question.

Which of the following areas are of interest to you?

Area	Percentage
IPv6	79%
Internet security	75%
Internet governance	57%
Critical Internet infrastructure protection	54%
Privacy	44%
Cybercrime	38%
Public policy	34%
Other (please specify)	6%
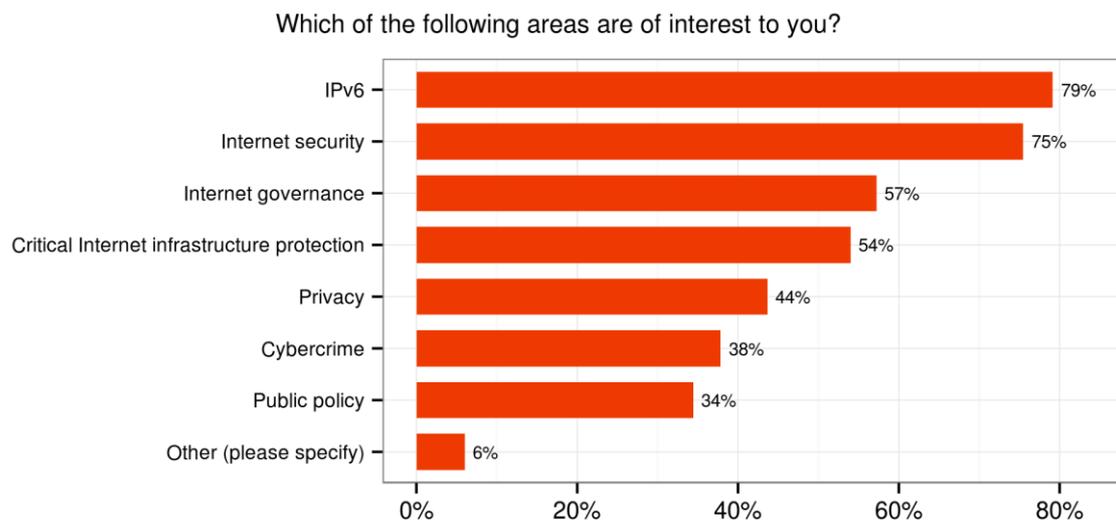
N=465 (Other interested parties only)

Other interested parties were also asked what benefits they perceived from engaging with the RIPE NCC. Closer links with the technical community (67 percent), the opportunity to monitor Internet developments (56 percent) and learning more about critical Internet resources seemed the most beneficial. Other additional benefits mentioned were information and experience exchange as well as access to the RIPE NCC's community network (and international community).

What benefits do you see from engaging with the RIPE NCC?

| Benefit	Percentage
Closer links with the technical community	67%
The opportunity to monitor Internet developments	56%
Learning more about critical Internet resources	53%
Expert advice on Internet-related matters	48%
Experience with Internet governance	43%
Other (please specify)	3%
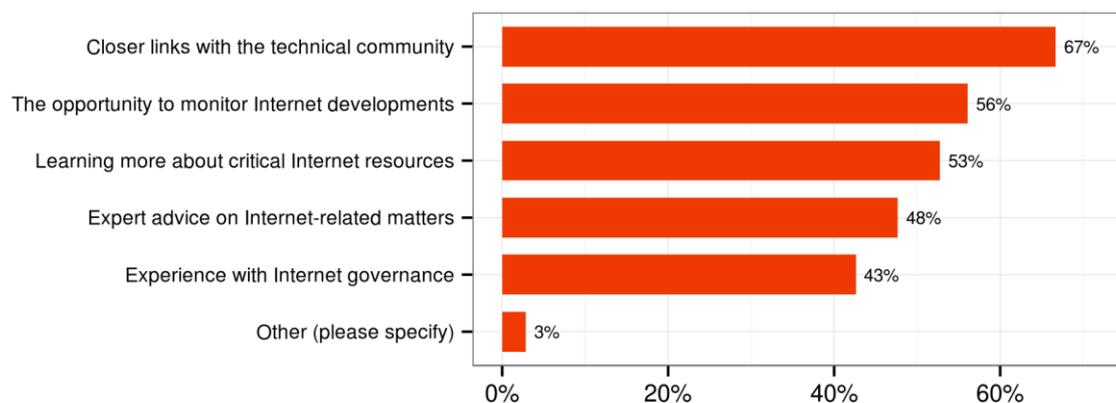
N=453 (Other interested parties only)

Levels of satisfaction for the consensus-based system of decision-making within the industry were reasonable (mean=5.30, n=434).

Please rate your satisfaction level with the following from 1 to 7

Consensus-based system of decision making within the industry — 5.30

Mean Satisfaction: 1 Lowest, 7 Highest
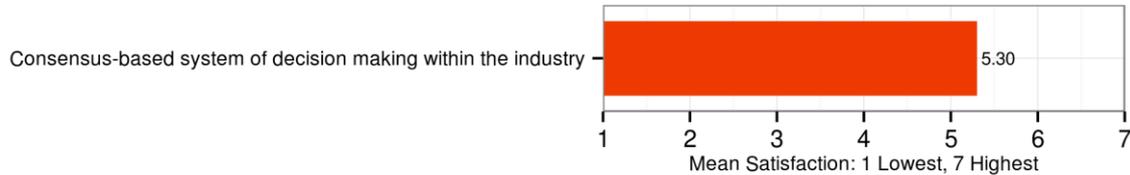
N=434 (Other interested parties only)

Other interested parties believed that the RIPE NCC should have a moderate to high level of engagement when working with governments as well as with law enforcement agencies (LEAs).

What should be the extent of the RIPE NCC's work with law enforcement agencies (LEAs)?

High level of engagement — 27%
Moderate level of engagement — 36%
Low level of engagement — 22%
None — 6%
I don't know — 8%
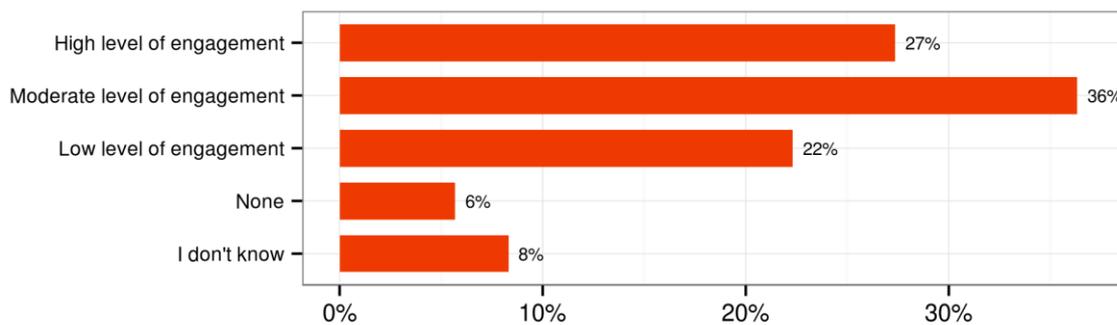
N=457 (Other interested parties only)

Respondents were asked what the RIPE NCC could do to improve their outreach to government and regulators in their country. Producing explanations for non-technical policymakers and providing consultation for technical issues being discussed in public policy forums were more frequently chosen. Fifty percent of other interested parties also thought that that the RIPE NCC should coordinate workshops and informational sessions at Internet governance events.

Others suggested that the RIPE NCC should communicate with governments in other languages; organise workshops for governments; organise joint meetings with governments and regulators; or send representatives to government workshops and seminars.

What can the RIPE NCC do to improve outreach to government and regulators in your country?

Produce explanations for non-technical policymakers	65%
Provide consultation for technical issues being discussed in public policy forums	58%
Coordinate workshops and informational sessions at Internet governance events	50%
Organise meetings targeted at governments	48%
Organise events in conjunction with governments	38%
Other (please specify)	5%
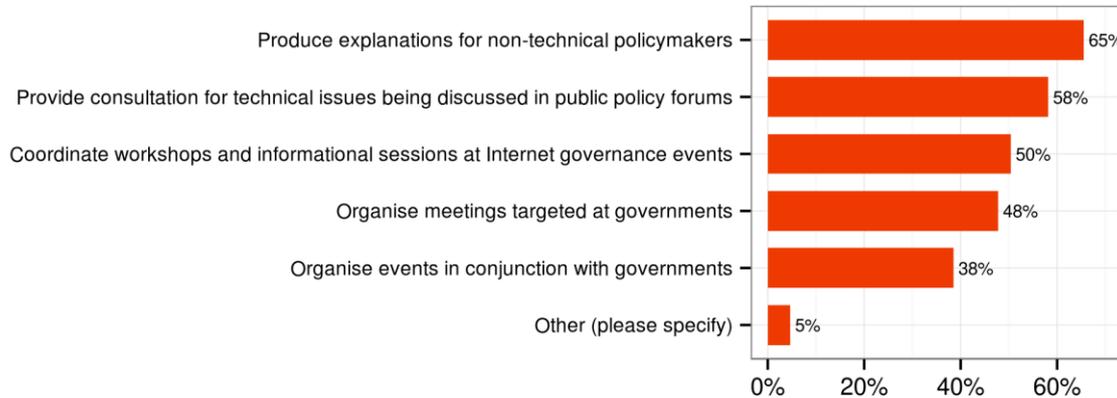
N=452 (Other interested parties only)

Other groups, forums or organisations that it was suggested the RIPE NCC should also actively collaborate with included ISOC, ICANN, the ITU, IEE/IETF, NGOs that promote Internet rights, universities, technical NGOs and national regulators. There were quite a few comments suggesting that the RIPE NCC should not have communications with government.

A majority of other interested parties indicated that the RIPE NCC should provide training in critical Internet resources management (74 percent), IPv6 deployment (71 percent) and routing security (59 percent).

In which of the following areas should the RIPE NCC provide training courses to non-RIPE NCC members?

Critical Internet resources management	74%
IPv6 deployment	71%
Routing security	59%
Analytical tools and measurement services	46%
The RIPE Database	43%
RIPE Policy Development Process (PDP)	26%
None of the above	3%
Other (please specify)	3%
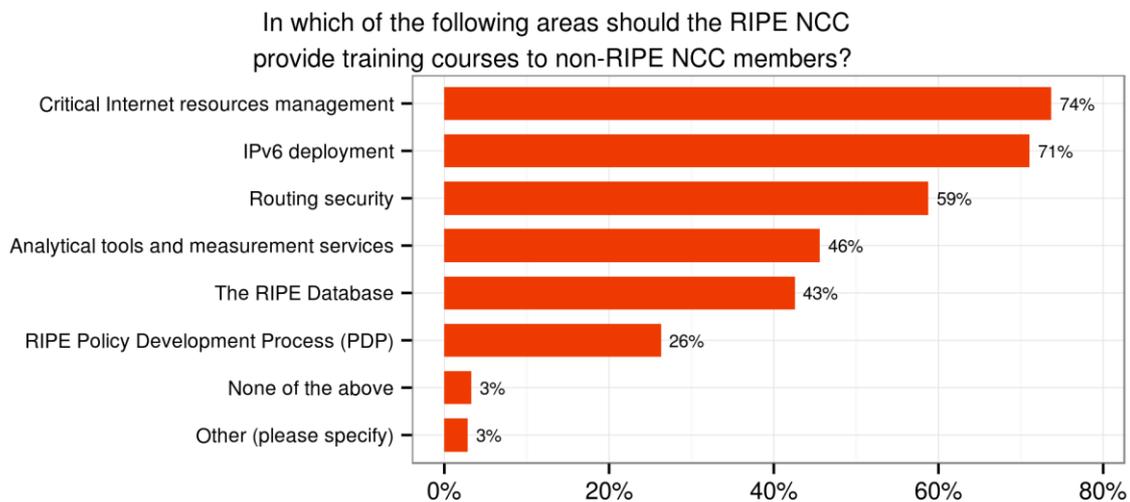
N=456 (Other interested parties only)

Several respondents indicated that the RIPE NCC should provide more training on a more regular basis and should attempt to cover more new and different locations throughout the service region. It was said that training should also be conducted in the local language where possible, and otherwise trainers should speak in very simple
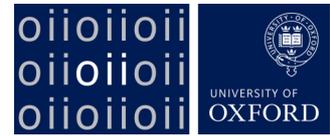
English. Other respondents suggested that the RIPE NCC should move more towards e-learning, webinars and produce more step-by-step videos for all to share.

Member and Other Interested Party Responses

8. IPv6 Deployment

Similar to results found in the 2011 survey, the majority of respondents indicated that their organisation had a formal plan and trained staff for IPv6 deployment but did not have a transition budget.

Does your organisation have a formal plan for IPv6 deployment?
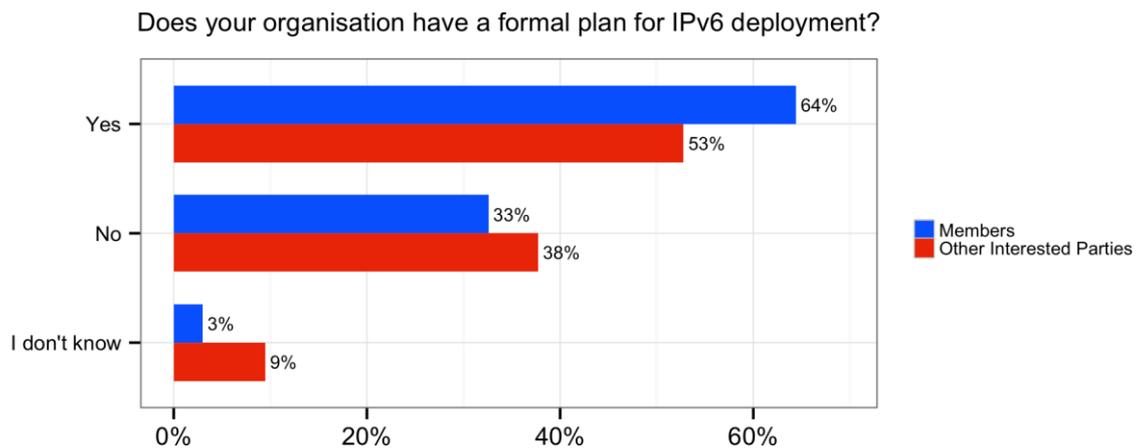
N=2264; Members=1832; Other interested parties=432

Does your organisation have an IPv6 transition budget?
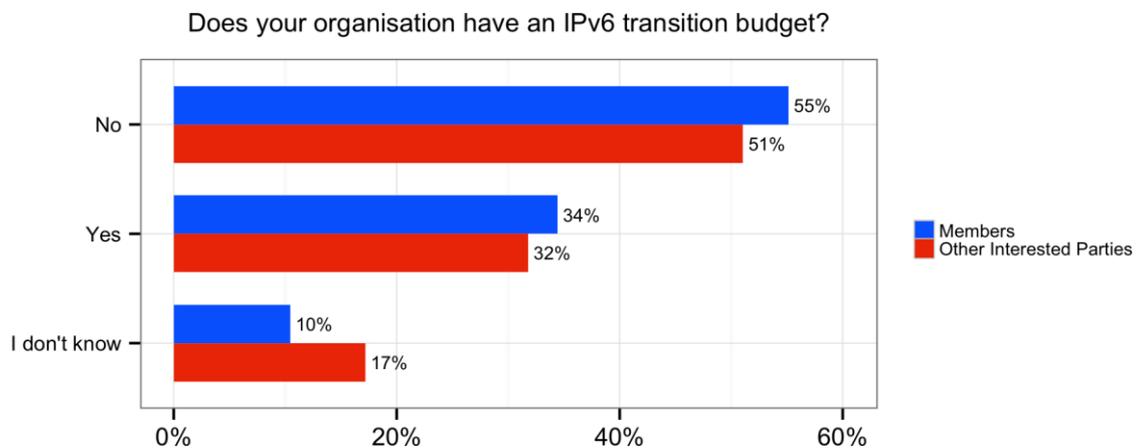
N=2261; Members=1830; Other interested parties=431

Some two-thirds of the respondents felt that there was no market demand for IPv6 while about half indicated that there was a lack of technical knowledge. A little over a third of the respondents felt that organisations have difficulties convincing decision-makers and management, and many organisations simply have enough IPv4 addresses. About a quarter of the respondents felt that organisations' equipment does not support IPv6, suppliers do not support IPv6 and equipment is too costly.

A number of respondents suggested that the problem lies in the fact that their upstream providers do not provide IPv6 access, as well as other big companies and content

providers not supporting IPv6. Other respondents suggested that many end users' or customers' equipment does not support IPv6, or there is simply no demand for it from their customers. They also indicated that reliable IPv6-ready equipment is still too costly for them and that their management is not convinced it is necessary, especially for the expenses they would incur.

A number of respondents indicated that they simply had no time, or did not find it a high priority at the moment, while others indicated that they were afraid of the potential risks that may be due to a lack of understanding and knowledge of IPv6 deployment.

In your opinion what prevents organisations from deploying IPv6?
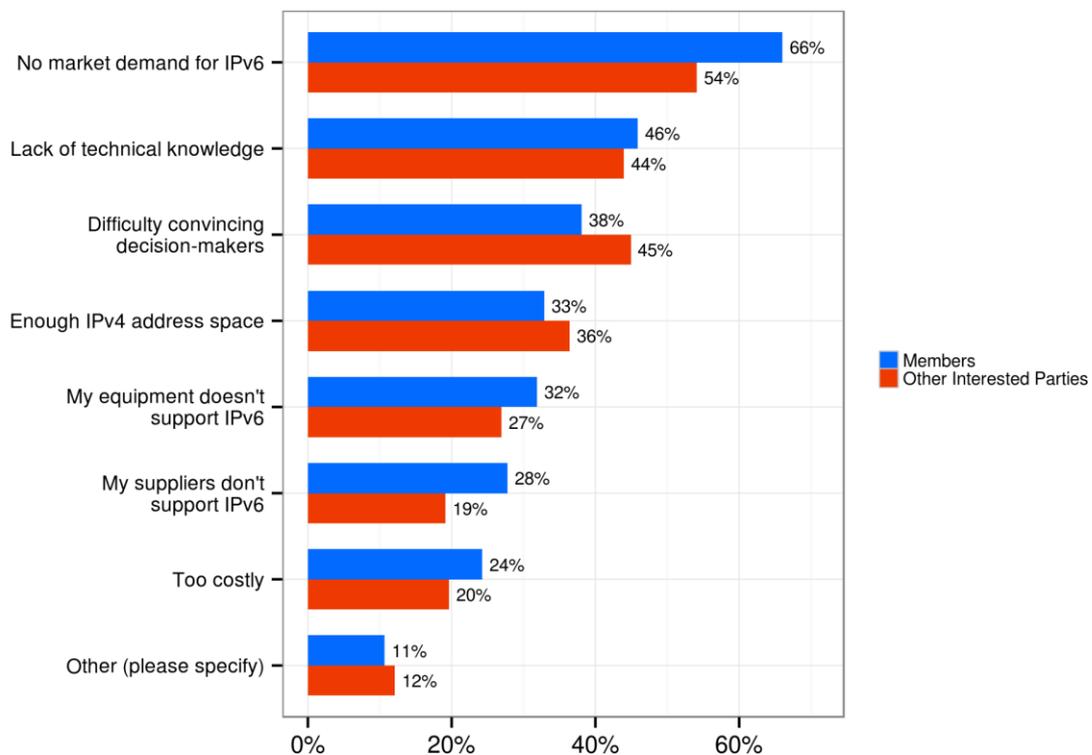
N=2231; Members=1808; Other interested parties=423

In your opinion what prevents organisations from deploying IPv6?
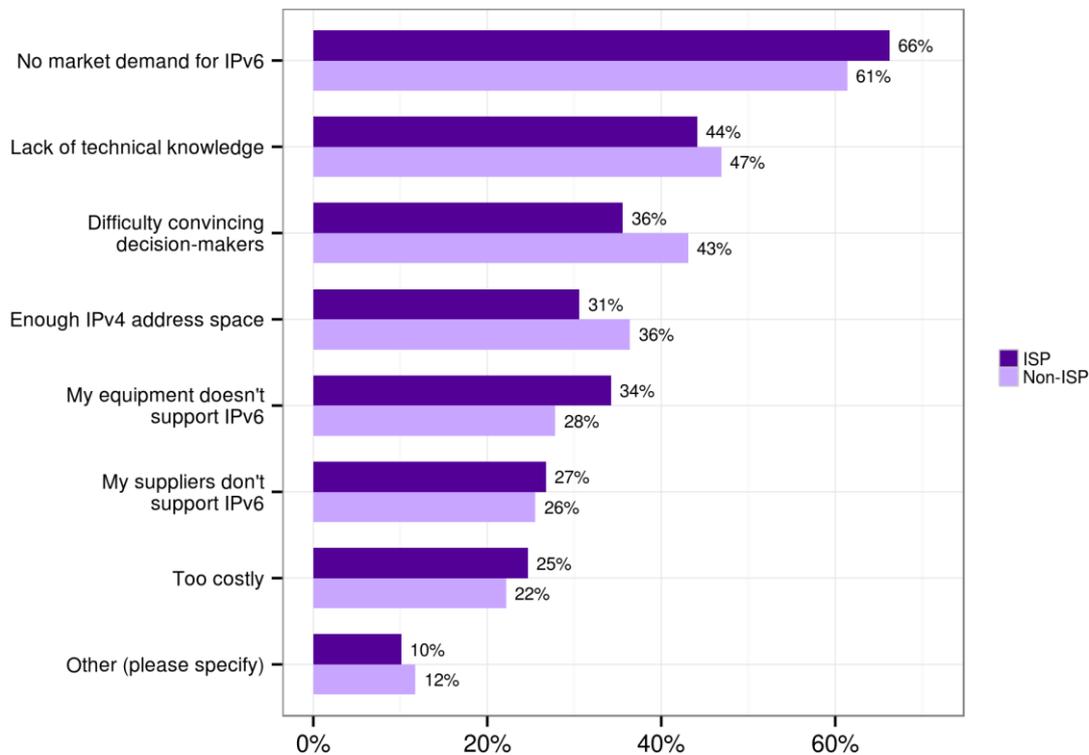
N=2231; ISPs=1099; Non-ISPs=1132

It is important to highlight that, although the survey omitted to ask the question, numerous respondents pointed out that they had already deployed IPv6 or were currently in the process of doing so.

While a number of respondents felt that IPv6 deployment efforts were not a task for the RIPE NCC, a high number of respondents suggest increasing awareness through education/training and e-learning/webinars, as well as producing and publishing full deployment and transition documentation and real world implementations or publishing success stories of ISPs that have deployed IPv6.

A number of respondents suggested that the RIPE NCC needed to assist in convincing decision-makers via business cases, as well as clearly highlighting the advantages of IPv6, making IPv6 address requests much easier, or possibly stopping the handing out IPv4 addresses and not allowing IPv4 transfers to take place.

Some respondents suggested convincing groups such as Internet service providers, content providers and vendors to support IPv6, while others suggested that governments should give incentives to industry to take up IPv6.

There were suggestions that the awareness needs to occur at the end user level, and there were requests for the RIPE NCC to provide more measurements and statistics about take-up that could be circulated to the media.

Please rate your agreement with the following from 1 to 7
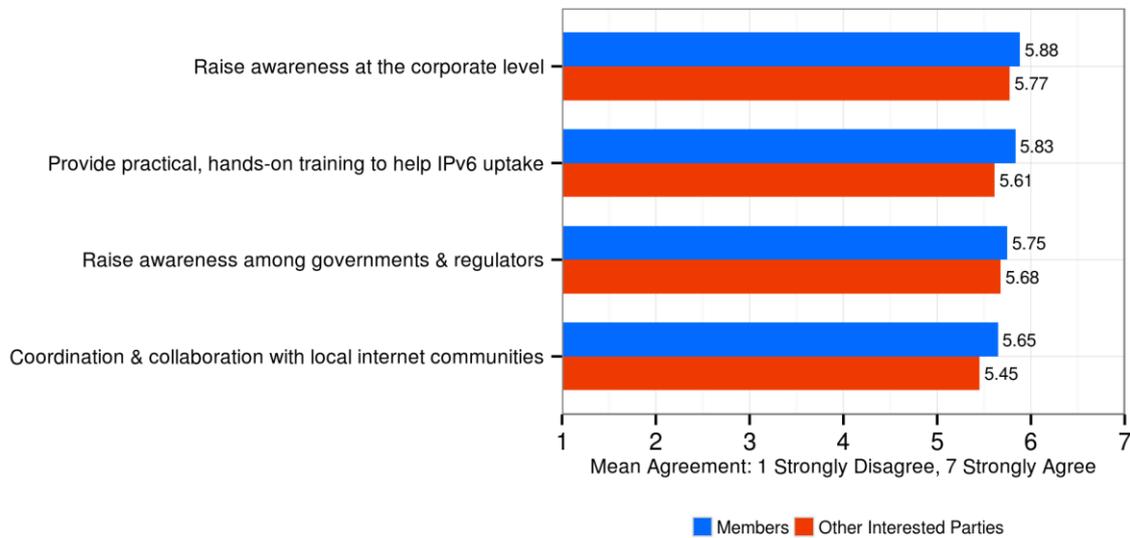

N=2192 (Members and other interested parties)

Please rate your agreement with the following from 1 to 7
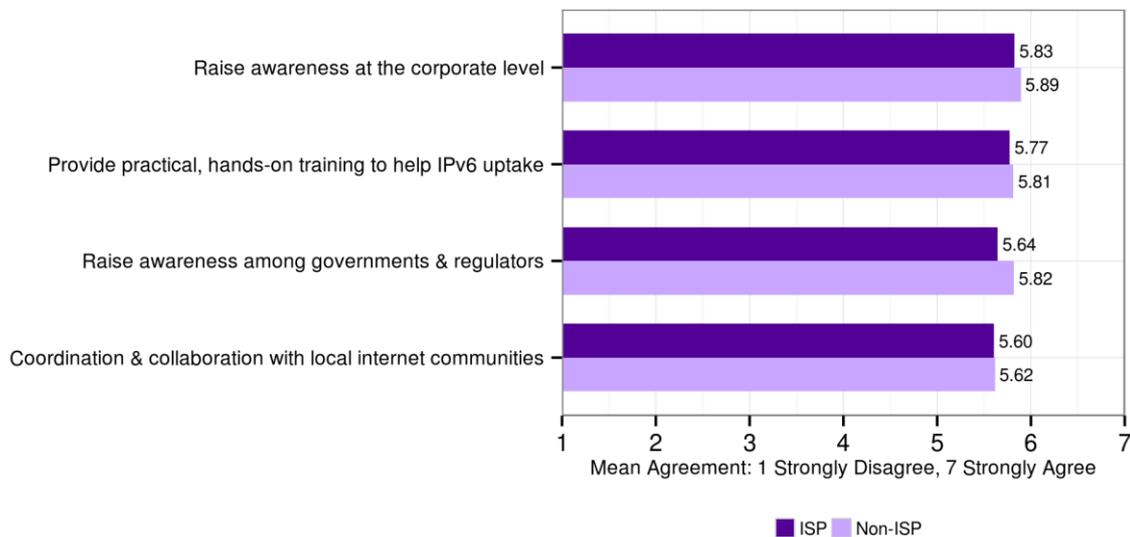
N=2192; ISPs=1074; Non-ISPs=1118

9. RIPE NCC Tools and Measurements

Respondents indicated that they had used a variety of RIPE NCC tools in the past. The three most frequently used tools were RIPEstat, Routing Information Service (RIS) and RIPE Atlas among both members and other interested parties.

Which of the following RIPE NCC analytical tools have you used?

Tool	Members	Other Interested Parties
RIPEstat	49%	37%
Routing Information Service (RIS)	48%	39%
RIPE Atlas	48%	40%
None of the above	25%	30%
DNS Monitoring (DNSMON)	19%	25%
Test Traffic Measurement	12%	14%
Other (please specify)	1%	2%
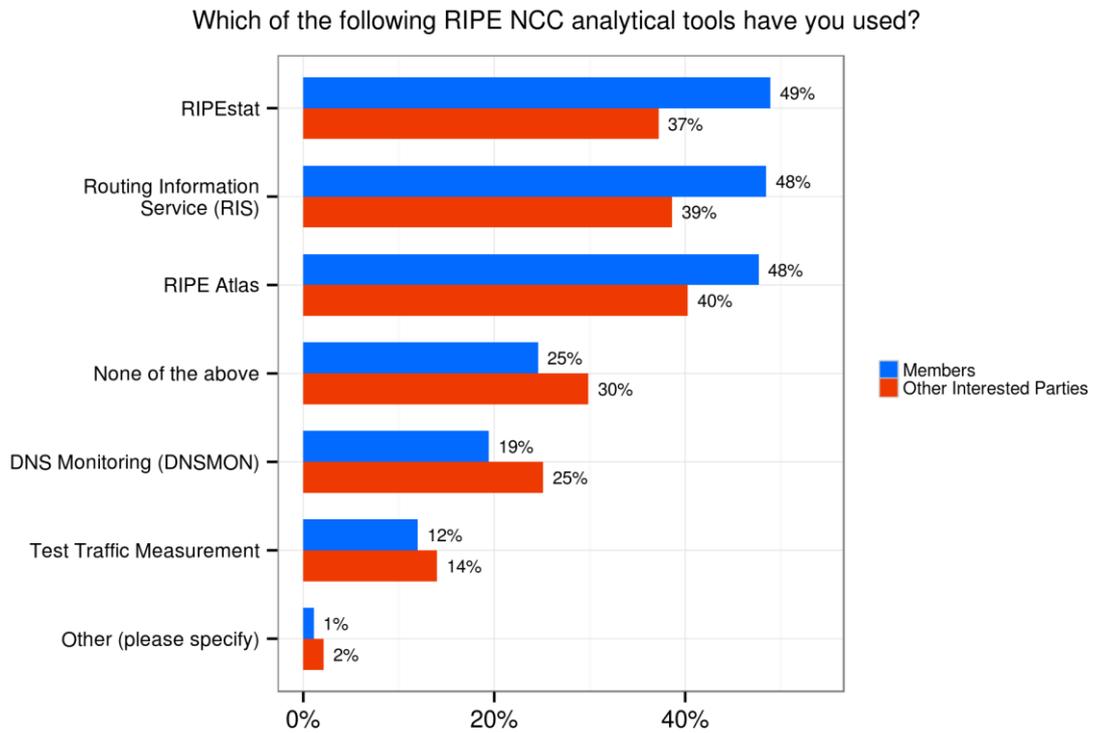
N=2257; Members=1835; Other interested parties=422

Satisfaction levels in regards to the tools were also fairly similar for both groups and in general were relatively good (mean ranged between 5.06 to 5.52, n=1863).

Please rate your satisfaction level with the following from 1 to 7
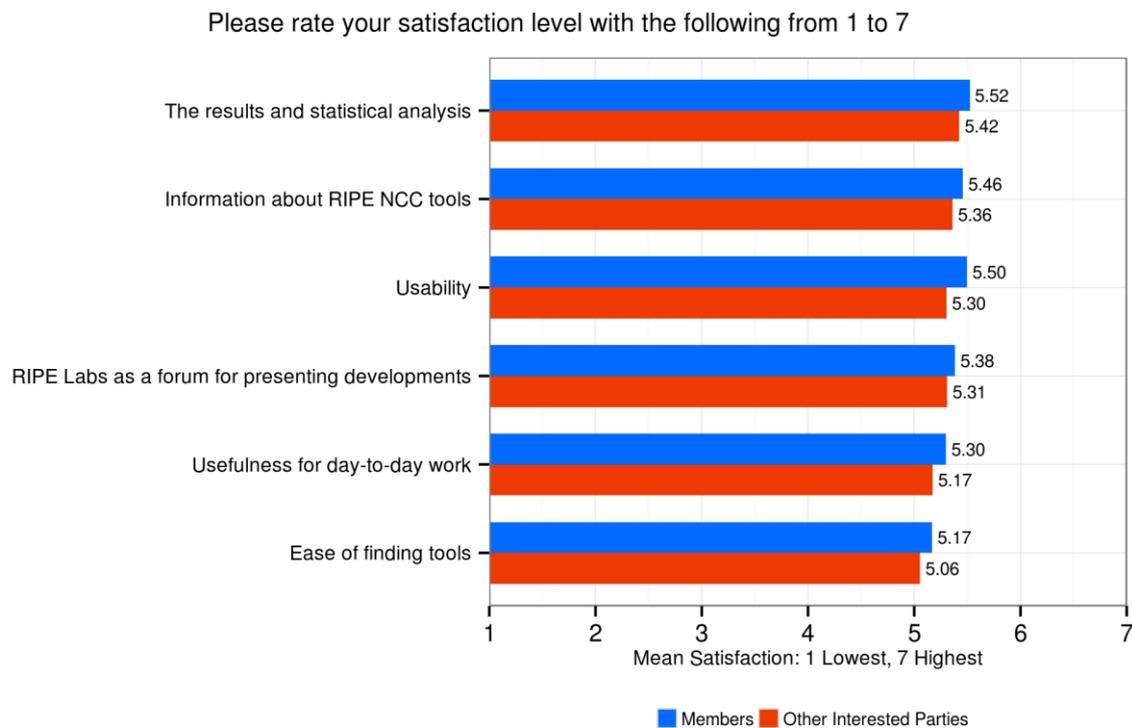
N=1863 (Members and other interested parties)

Many respondents indicated that the tools were not easy to find on the website; that they were not aware of most of these tools; and that they need to better understand what these tools are for and how to use them. Some suggested providing training for the use of these tools while others simply asked to make them more user-friendly. A number of respondents suggested publishing real world use cases of these tools and others indicated that these tools should be translated into local languages for wider usage. There were also requests to improve performance (speed); allow access to the raw data; create more APIs and make them open source; and integrate email alerts into tools where applicable.

Some respondents felt that these tools were not needed and that the RIPE NCC should stick to its core activity of registration services.

Respondents' areas of interests in RIPE Labs was very similar to areas identified in the 2011 survey. More than fifty percent of both members and other interested parties who responded indicated that IPv6 deployment, routing, measurements and statistics were of interest to them. More than 50 percent of member respondents also indicated that operator tools were also of interest to them. Others suggested more academic research projects should be published and asked for a multilingual interface.

Which of the following subject areas on RIPE Labs are of interest to you?
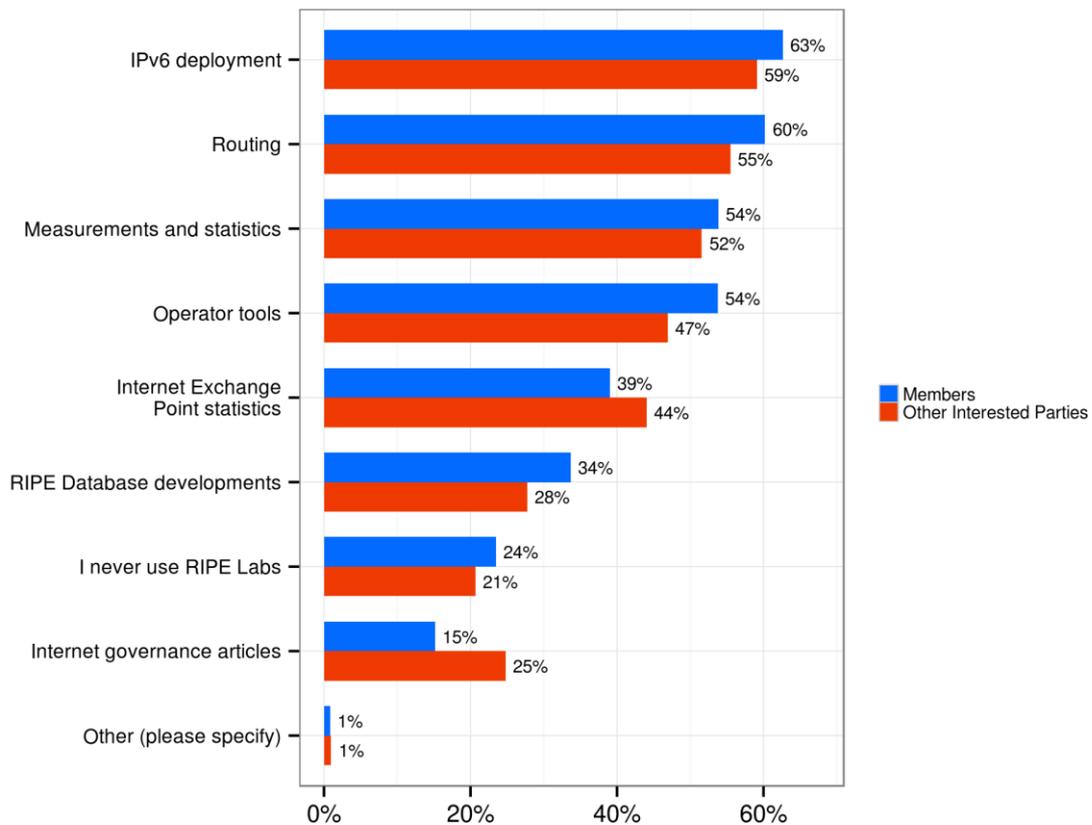
N=2206; Members=1795; Other interested parties=411

10. RIPE NCC Communications

Respondents were generally satisfied with the RIPE NCC's communication (means ranged from 5.11 to 5.63, n=2148).

Which of the following methods that the RIPE NCC currently provides do you use to receive information?

Method	Members	Other Interested Parties
Email	79%	61%
RIPE NCC website	65%	55%
RIPE NCC mailing lists	59%	36%
RIPE Labs	23%	25%
RIPE Meetings	22%	23%
RIPE NCC Annual Report	23%	8%
RIPE NCC Member Update	19%	3%
Twitter	13%	26%
Regional Meetings	13%	19%
Facebook	9%	18%
RIPE NCC Activity Plan and Budget	11%	4%
General Meetings	9%	5%
LinkedIn	7%	14%
Other (please specify)	1%	3%

N=2178; Members=1797; Other interested parties=381

While email and mailing lists were the most popular methods of receiving information from the RIPE NCC, the website was also a very popular. RIPE Labs, RIPE Meetings and the Annual Report all had more than 20% of the respondents indicating that these were sources of information about the RIPE NCC that they used. Of the social media options, Twitter was the most popular, followed by Facebook and LinkedIn. Other

respondents indicated that they gained information about the RIPE NCC via IRC chat channels and trainings/webinars.

Some suggested using such means as Skype, IRC, Google+ and making more use of the LIR Portal as the main communication tool with members. It was suggested that the RIPE NCC should introduce and explain all of the communication mechanisms that they employ, especially as there are many new members that are not aware of them all.

With regards to email communication, some felt there were too many emails about incidental issues. Other suggested that the emails could be kept very short with links to additional information on the website.

In an attempt to reach a wider audience, some respondents suggested increasing the amount of supported languages for all communications while others suggested using much simpler English. Additionally, there were suggestions to have offices in more countries around the region and to facilitate more regional meetings.

Should the RIPE NCC invest member funds in communicating in languages other than English?

	Members	Other Interested Parties
No	52%	49%
Yes	35%	31%
I don't know	12%	19%
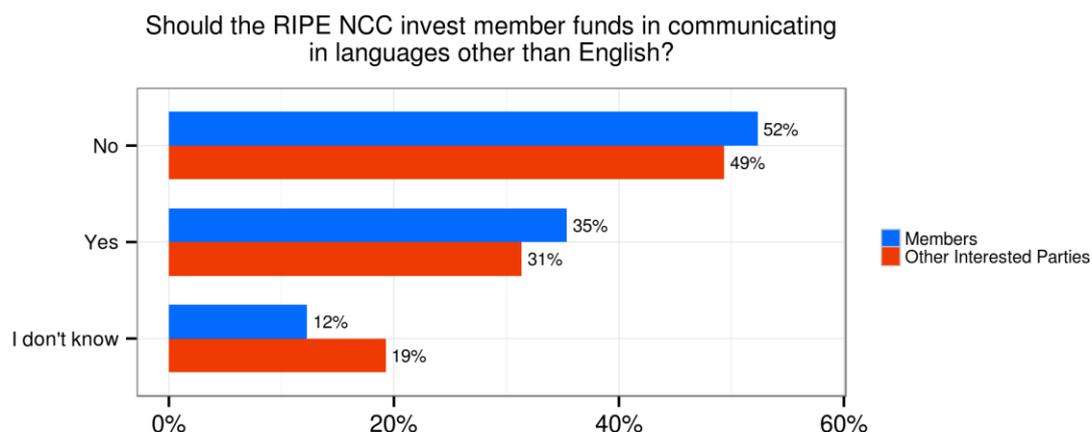
N=2172; Members=1783; Other interested parties=389

Some respondents indicated that English is the de facto language of the Internet and it's too hard to choose which language(s) to add. Others felt that the costs would be too great and that one might lose the message in translation.

A number of respondents felt that it was a good idea but that the RIPE NCC should only translate a small amount of the web content (e.g., introductory FAQs, corporate governance pages). Others suggested that even if it's not official translations, a RIPE NCC staff member that can explain things (phone, email or in person) in a local language would be beneficial and appreciated.

Many of the respondents indicated that the navigation needed to be improved, as well as the website usability and structure. They felt it is too complicated and too cluttered;

there are too many links and sub-menus; and the search function needs to be improved, as does the sitemap.

Others suggested that all RIPE NCC tools should be found on one page. Several people commented that the website needs to be faster and it was suggested that slowness is possibly due to too many scripts running in the background.

A number of respondents suggested multi-lingual support on the website while others suggested using simpler English with fewer acronyms.

11. RIPE Meetings

The majority of respondents (members and other interested parties) indicated that they had not attended a RIPE Meeting in the past three years. However, respondents were generally satisfied with the remote participation options and the distribution of RIPE Meeting locations around the RIPE NCC service region (means ranged from 5.19 to 5.53, n=1753).

Please rate your satisfaction level with the following from 1 to 7
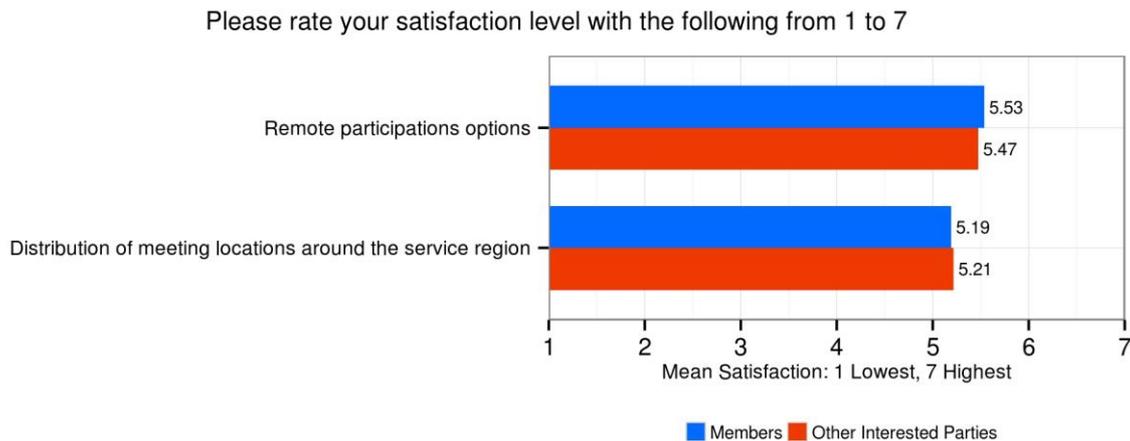
N=1753 (Members and other interested parties)

A number of respondents suggested that the RIPE NCC could further help facilitate networking opportunities between attendees. Some respondents suggested a more specialised programme, while others asked for more hands-on training sessions.

A number of respondents suggested that there should be three RIPE Meetings per year but that these meetings should be held over fewer days. Other suggestions included: the meeting fee should be lowered; provide translations/interpreters; and send more RIPE NCC staff to the meetings.

A high number of respondents requested that the RIPE NCC should publish information that could help explain the benefits and value of RIPE Meetings to their management. It was suggested that personal invitations that people could show to management would also help this effort. A number of respondents suggested introducing a fellowship program.

12. RIPE Policy Development Process (PDP)

Levels of satisfaction with the RIPE Policy Development Process (PDP) were generally satisfactory among RIPE NCC members but slightly inferior among other interested parties. Areas that were of less satisfaction among both groups were the communication of developments in the PDP, as well as the ease in in understanding the PDP.

Please rate your satisfaction level with the following from 1 to 7
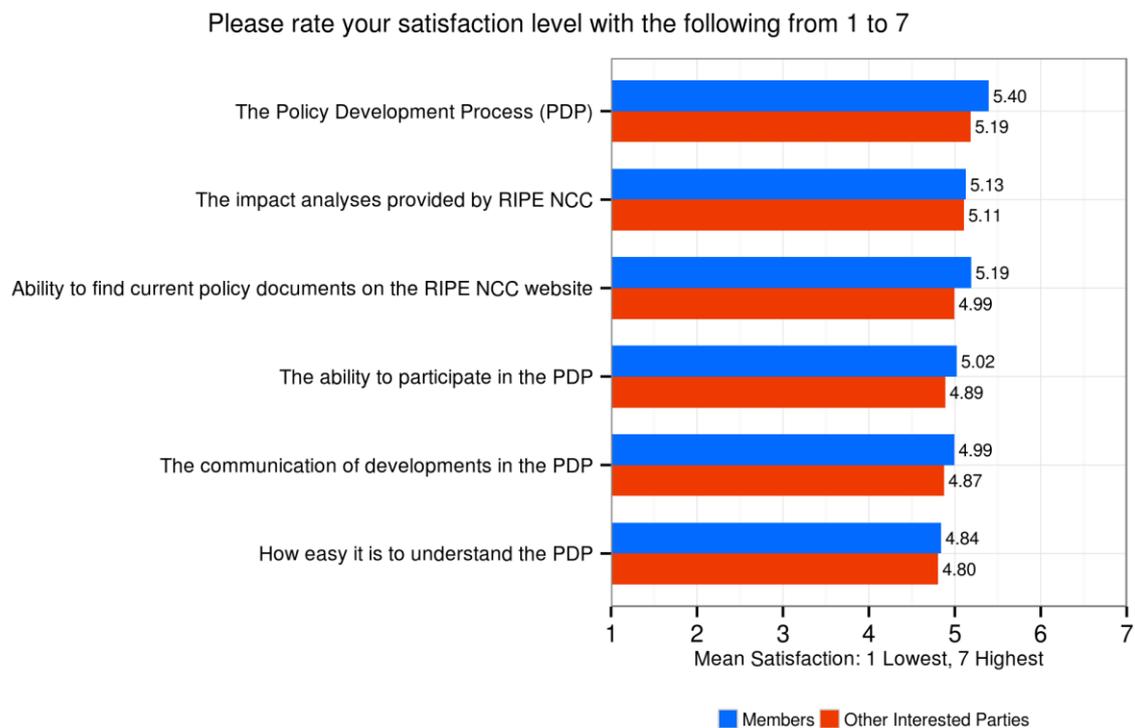
N=1523 (Members and other interested parties)

A number of respondents indicated that some sort of web-based tool could be used to help develop policy. Others suggested that both Twitter and Facebook could be used to entice discussion. Others suggested that online forums could be a good place to discuss policy proposals and that some sort of online voting/polling/survey tools could be utilised.

Some said that many newcomers need the process explained to them, as it is quite complicated to follow. Others stated that the PDP is dominated by a small group of people, and fewer and fewer people are getting involved.

13. RIPE Database

Members and other interested parties were both generally satisfied with elements of the RIPE Database (means range from 5.30 to 5.88, n=2063), members being slightly more satisfied.

Please rate your satisfaction level with the following from 1 to 7
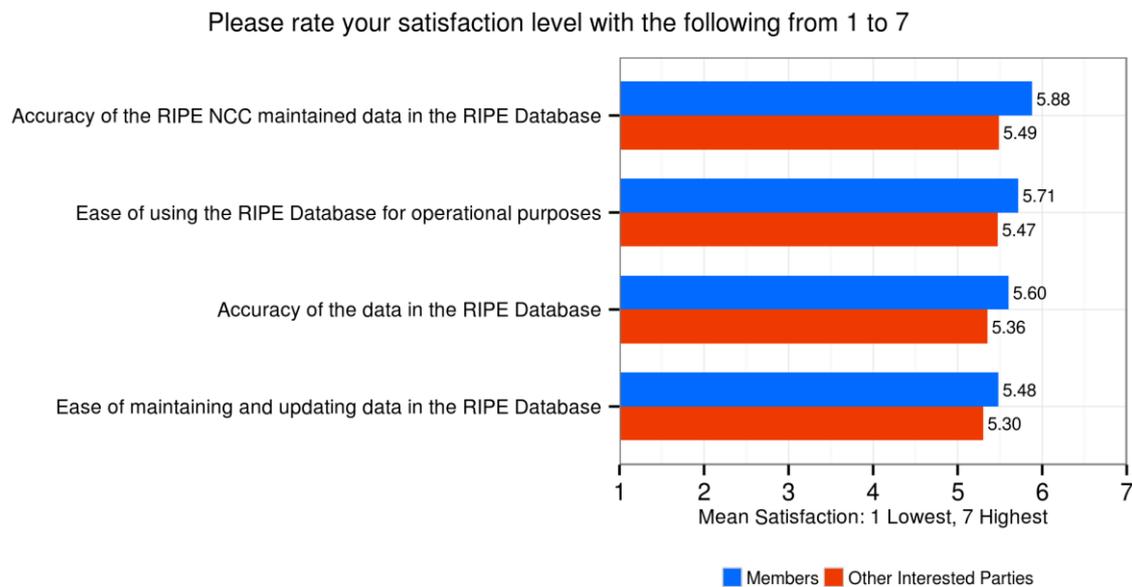
N=2063 (Members and other interested parties)

A considerable number of respondents indicated that the RIPE Database was difficult for newcomers to understand and update. There were numerous suggestions to develop a more user-friendly interface; provide more tutorials, how-to documents, syntax error explanations and FAQs; have more in-depth error messages when submitting via mail; and provide more wizards and help tips on the form.

As far as feature requests were concerned, several respondents requested the ability to modify multiple objects at the same time and to allow for bulk updates and/or the ability to synchronise from their own servers.

Other suggestions included having one common format at all RIRs and possible collaboration with peeringdb.com; improving operational practice of software changes to the RIPE Database; providing an option to hide some information from the public; having better support for non-standard characters in the RIPE Database; and developing graphical search results and automated periodic update reminders.

14. Network Security

The main network or information security concerns for both members and other interested parties alike were DDoS (distributed denial of service) attacks, botnets and Internet cloud security. A higher percentage of members were concerned about DDoS attacks and botnets than other interested parties. Other interested parties were usually more concerned about network or information security items.

What are the main network or information security concerns in your region/industry?
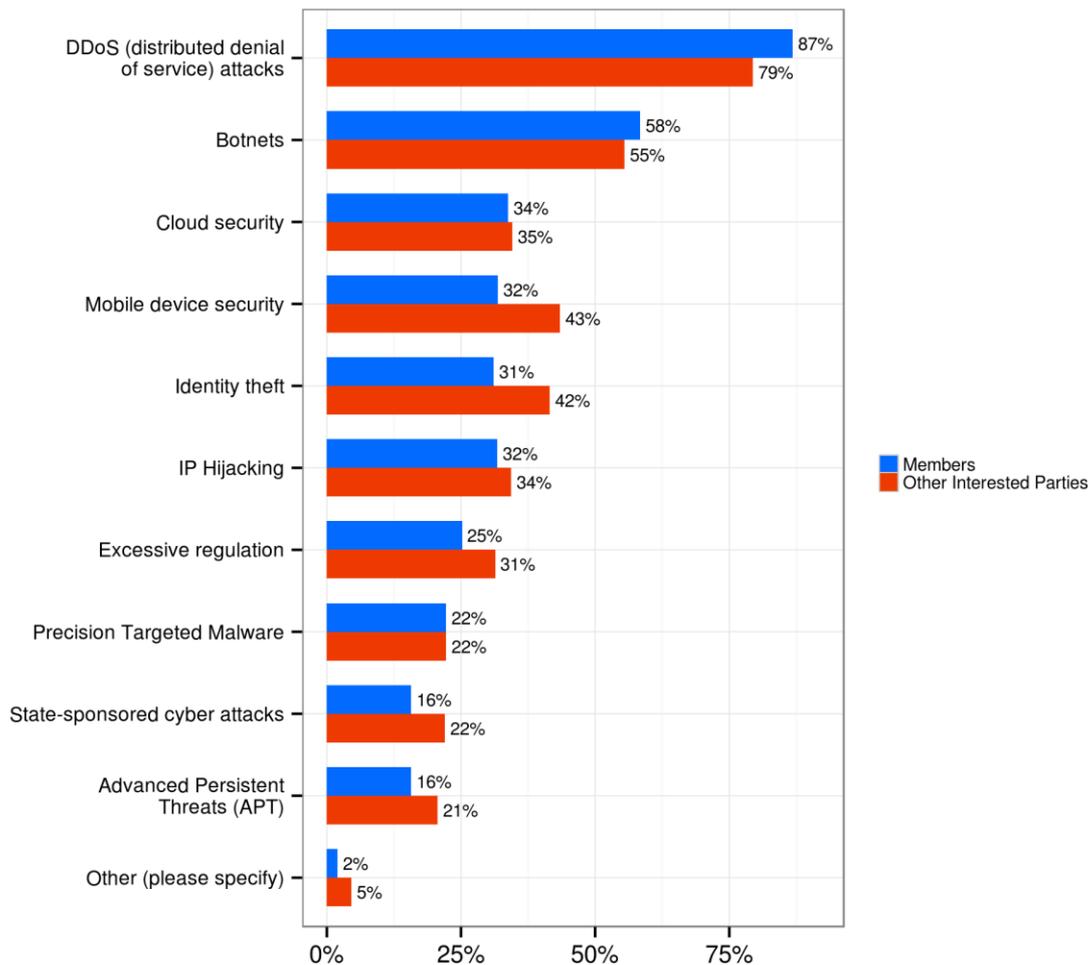
N=2124; Members=1751; Other interested parties=373

Many respondents indicated that the RIPE NCC should promote the use of their tools to the Internet security industry, as well as increasing engagement with the Internet security industry in general and playing a role in coordinating the case of a large-scale network security incident (CERT/CSIRT). About a third of the respondents suggested further development of Resource Certification (RPKI).

Which of the following actions should the RIPE NCC take to help with Internet security concerns?
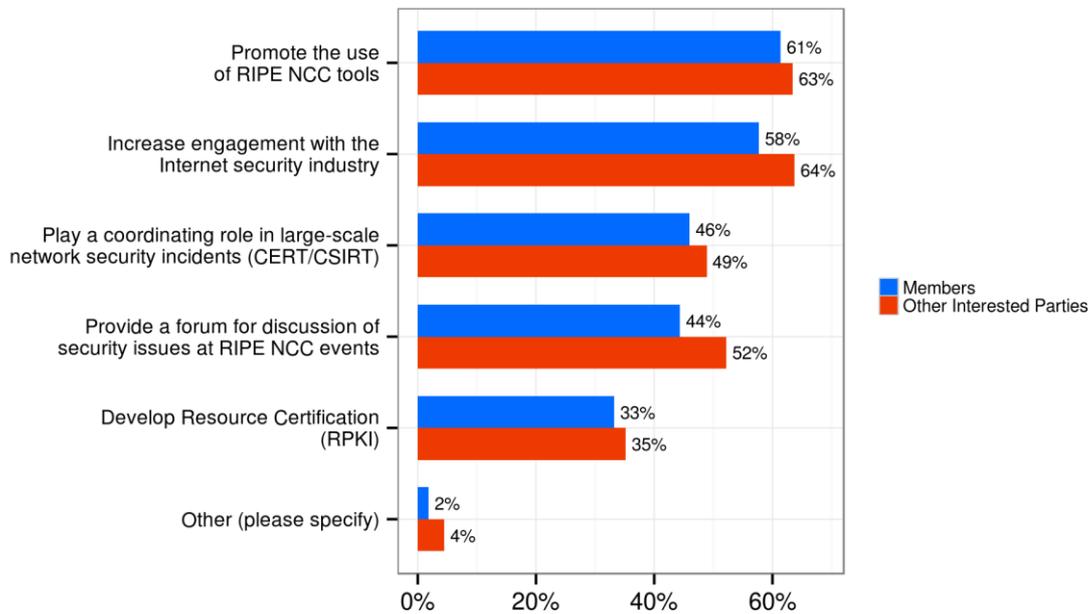
N=2005; Members=1647; Other interested parties=358

E. Regional Analysis

Overview

The majority of respondents who participated in the 2013 RIPE NCC survey were from Western Europe (57 percent). The second largest group of respondents were from Russia and Central Asia (16 percent). There were relatively the same proportion of respondents from South East Europe (8 percent), Eastern Europe (8 percent) and the Middle East (7 percent). Five percent of respondents were from other regions.

The regional distribution of respondents corresponds closely with the distribution of RIPE NCC members throughout the service region. For all regions, the number of respondents is greatly increased from the 2011 survey.

Note: Details of regional classification are given in Appendix 1.

Which region does your organisation belong to?

Region	Percentage
Western Europe	57%
Russia and Central Asia	16%
South East Europe	8%
Eastern Europe	8%
Middle East	7%
Other	5%
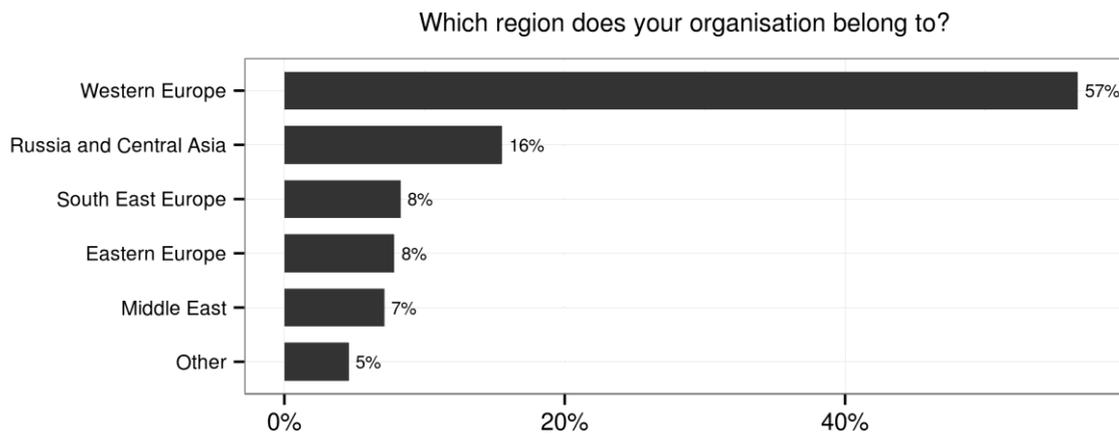
N=3631 (Members and other interested parties)

Satisfaction with Membership Processes

Respondents from all regions seemed generally satisfied with RIPE NCC services. Means varied between 5.77 (Middle East and Western Europe) to 6.05 (South East Europe) with N=2673.

Please rate your overall satisfaction level with the following from 1 to 7
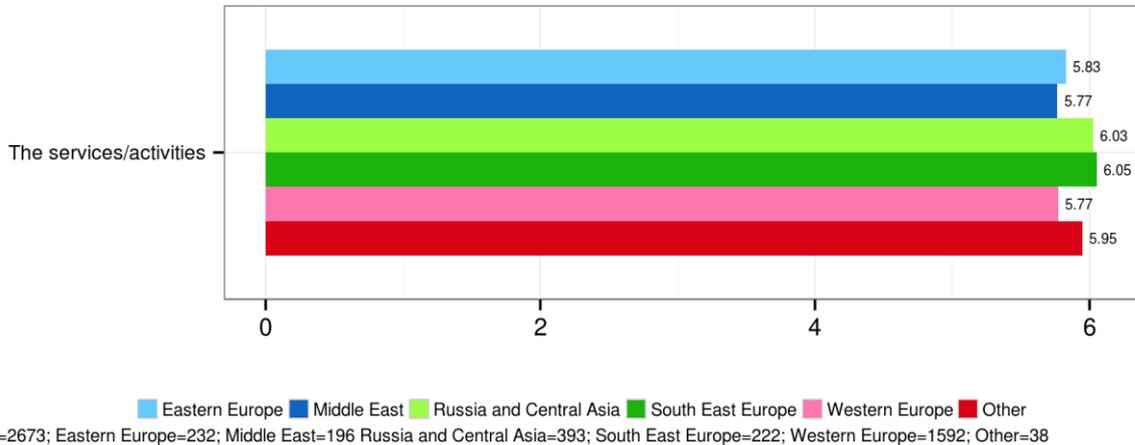
Satisfaction with the RIPE NCC's membership process, and support given throughout this process, were also fairly consistent and satisfactory throughout regions. Means ranged from 5.66 (Western Europe) to 6.35 (South East Europe) with N=761 for both items. Satisfaction was generally slightly higher in South East Europe while being slightly lower in Western Europe.

Please rate your satisfaction level with the following from 1 to 7
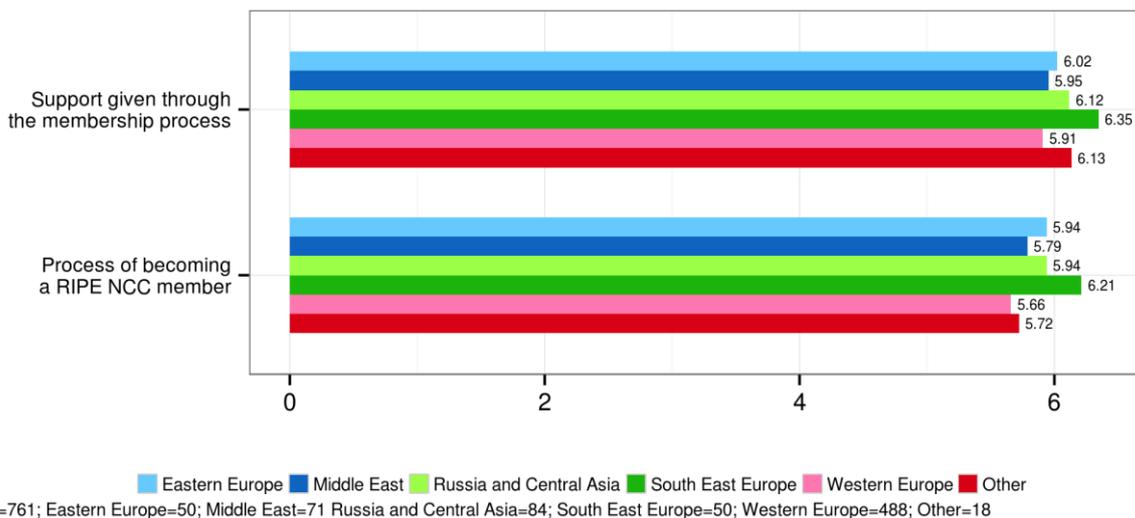
The RIPE NCC seems to be heading in the right direction as roughly a third of respondents indicated that their overall experience in dealing with the RIPE NCC had improved in the last two years. Members in the Middle East and South East Europe particularly noted improvements in this area.
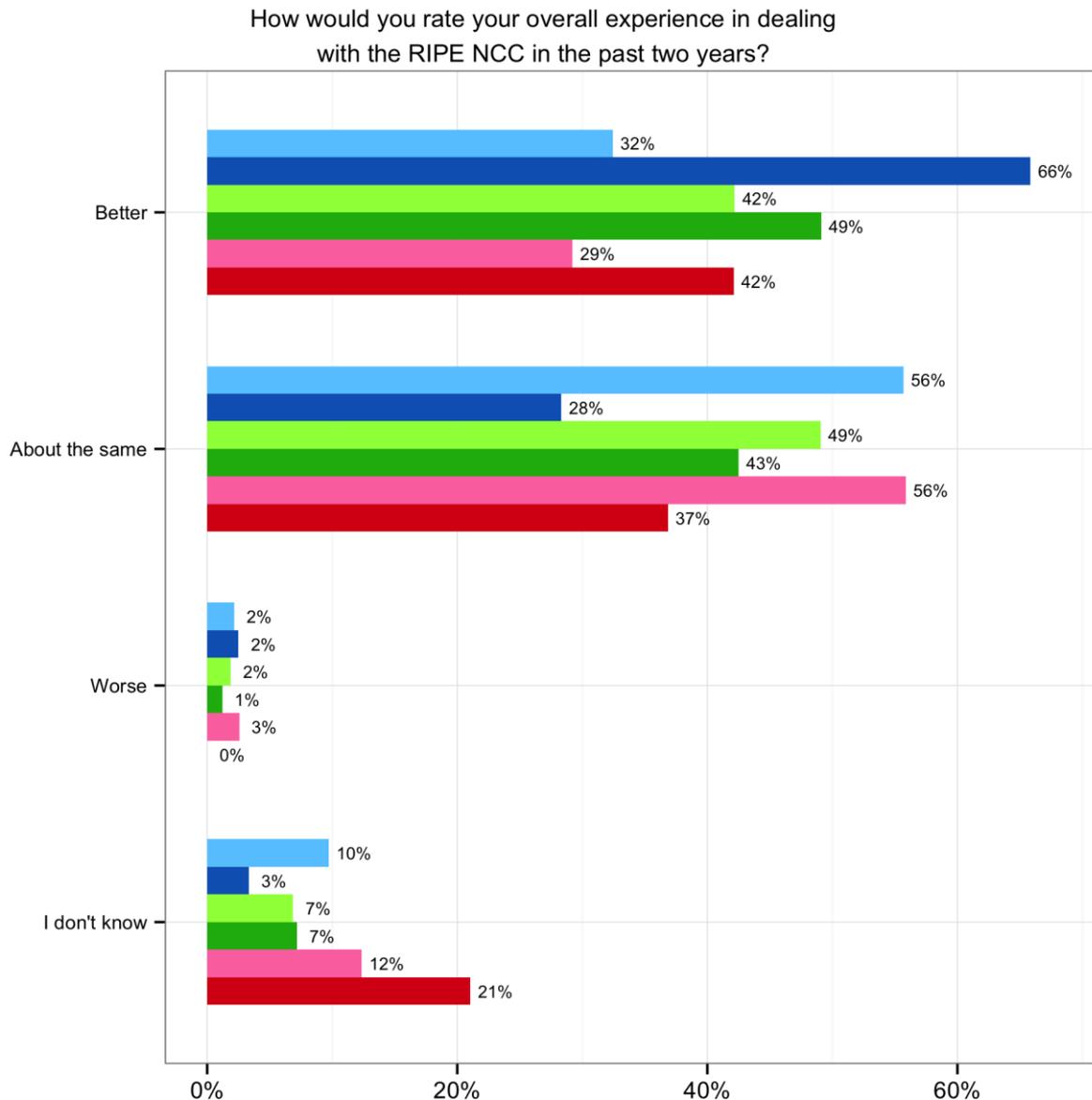
How would you rate your overall experience in dealing with the RIPE NCC in the past two years?

Eastern Europe — Middle East — Russia and Central Asia — South East Europe — Western Europe — Other
N=1903; Eastern Europe=185; Middle East=120 Russia and Central Asia=320; South East Europe=167; Western Europe=1092; Other=19

Awareness of various RIPE NCC tools was generally consistent throughout regions. For example, while awareness of tools such as the RIPE Database was relatively high in all regions, it was also generally low in all regions for Resource Certification (RPKI). It was noted that awareness of the RIPE NCC's otherwise 'better known' tools was generally lower in the Middle East compared with other regions.

Please rate your awareness level for the following services from 1 to 7
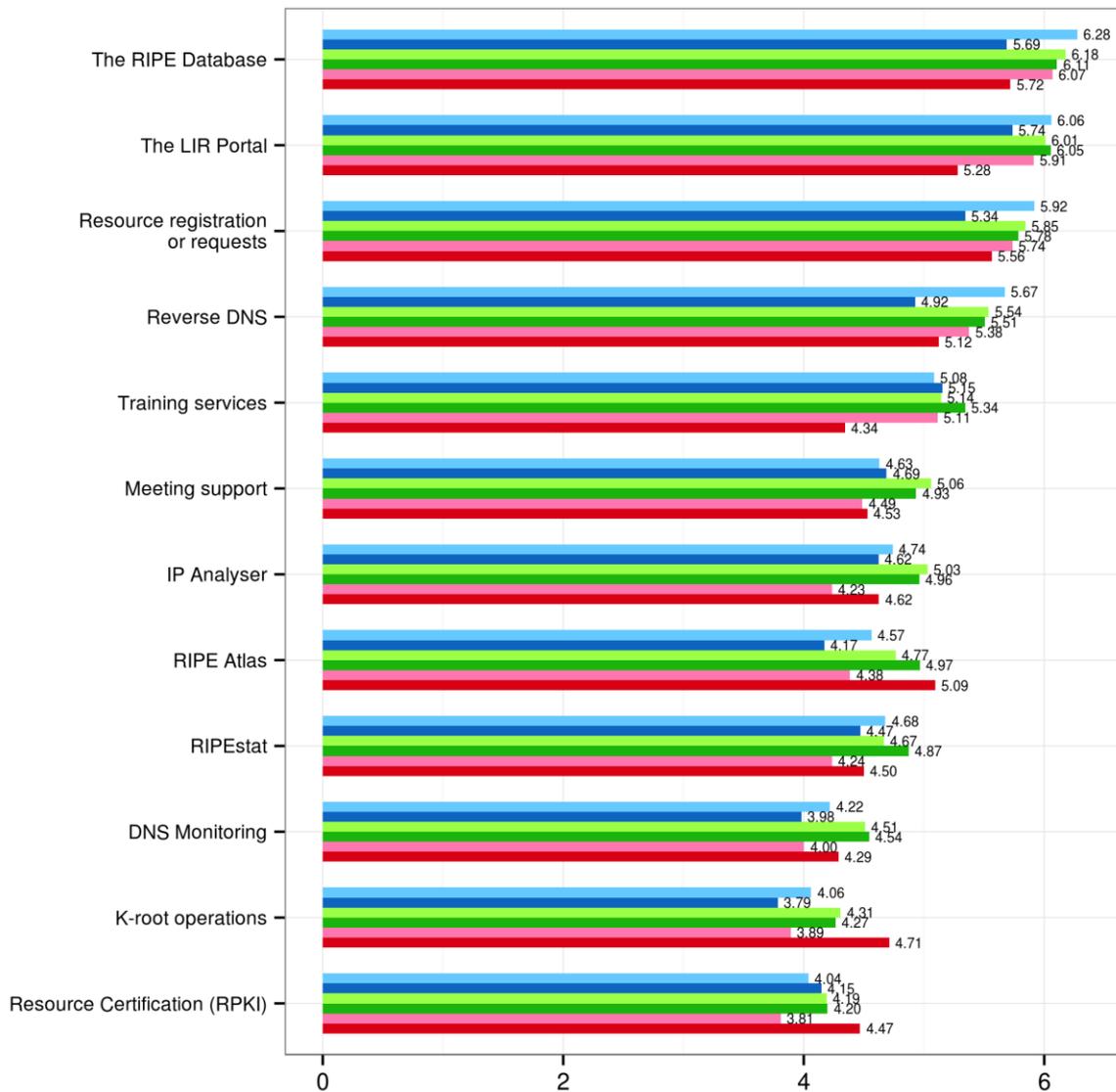
Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=2219; Eastern Europe=185; Middle East=165 Russia and Central Asia=324; South East Europe=188; Western Europe=1325; Other=32

Please rate your satisfaction level with the following from 1 to 7

The RIPE Database
- 6.31
- 6.06
- 6.29
- 6.01
- 6.21
- 5.54

Reverse DNS
- 6.13
- 5.81
- 6.10
- 6.10
- 5.86
- 5.90

The LIR Portal
- 6.13
- 6.00
- 6.23
- 6.22
- 5.90
- 5.24

Training services
- 5.81
- 5.85
- 6.11
- 5.96
- 5.81
- 5.83

Meeting support
- 5.58
- 5.68
- 6.08
- 5.91
- 5.69
- 6.00

Resource registration or requests
- 5.99
- 5.65
- 6.06
- 5.95
- 5.82
- 5.43

RIPEstat
- 6.02
- 5.62
- 5.86
- 5.99
- 5.58
- 5.82

RIPE Atlas
- 5.83
- 5.42
- 5.89
- 5.84
- 5.54
- 6.20

IP Analyser
- 5.92
- 5.66
- 5.94
- 5.87
- 5.59
- 5.53

K-root operations
- 5.79
- 5.26
- 5.83
- 5.64
- 5.64
- 6.00

DNS Monitoring
- 5.63
- 5.45
- 5.80
- 5.74
- 5.40
- 5.38

Resource Certification (RPKI)
- 5.27
- 5.44
- 5.53
- 5.62
- 5.12
- 5.46

Eastern Europe | Middle East | Russia and Central Asia | South East Europe | Western Europe | Other
N=2165; Eastern Europe=180; Middle East=157 Russia and Central Asia=319; South East Europe=184; Western Europe=1299; Other=26

Those from the Middle East seemed less satisfied than others with reverse DNS, RIPE Atlas and K-root operations. However, their awareness of these tools was also lower. Both the Middle East and those from "Other" service regions were less satisfied with "resource registration or requests", while respondents from Western Europe seemed slightly less satisfied with Resource Certification (RPKI). Overall, levels of satisfaction were good.

The RIPE Database, resource registration or requests, the LIR Portal and reverse DNS were deemed highly important by respondents in all regions (mean>6.0). Respondents

from the Middle East also accorded more importance to training services and IP Analyser. They, along with respondents from South East Europe, also gave higher importance to meeting support than respondents from other regions.

Please rate the importance level of the following services and activities from 1 to 7

Eastern Europe █ Middle East █ Russia and Central Asia █ South East Europe █ Western Europe █ Other
N=2173; Eastern Europe=183; Middle East=157 Russia and Central Asia=316; South East Europe=183; Western Europe=1306; Other=28
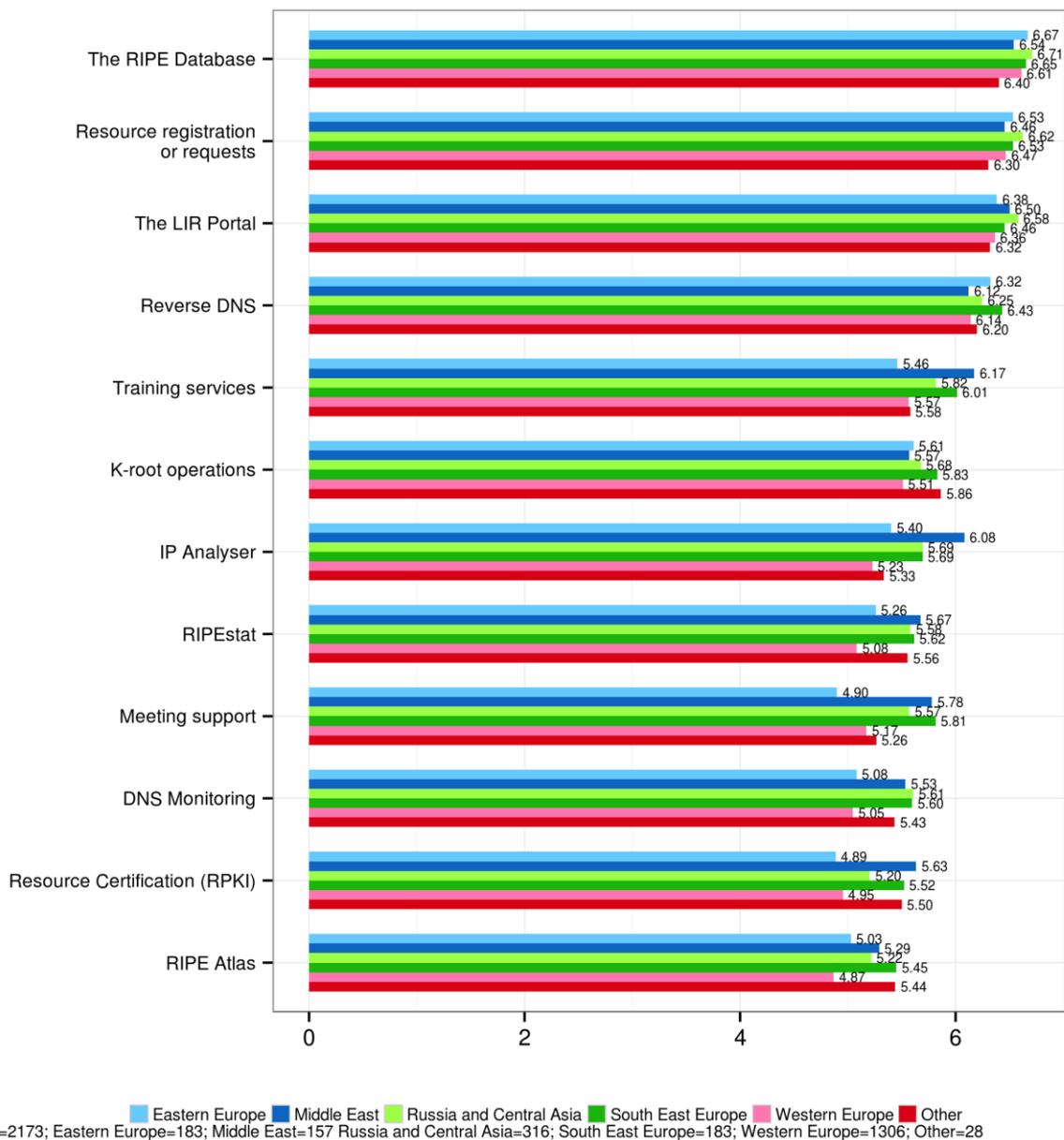
While respondents from Western and Eastern Europe rated the importance of tools such as the RIPE Database, resource registration or requests and the LIR Portal similarly to those from other regions, they gave less importance to RPKI and RIPE Atlas.

Note that respondents from the Middle East and South East Europe tend to agree more on the same items, while respondents from Western and Eastern Europe tend to resemble each other.

Corporate Governance

Satisfaction with the RIPE NCC's corporate governance structure did not vary too much between regions and was perceived as relatively satisfactory (mean=5.35 to 6.00, n=1591).

Please rate your satisfaction level with the following from 1 to 7
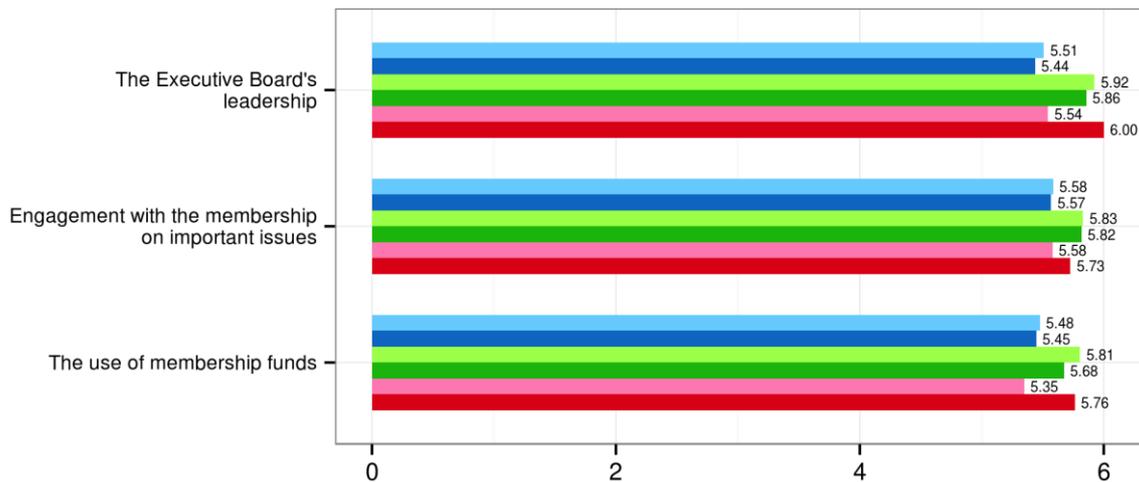
Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=1591; Eastern Europe=131; Middle East=130 Russia and Central Asia=213; South East Europe=133; Western Europe=961; Other=23

While respondents from Russia and Central Asia appeared to be slightly more satisfied than others with various items related to the organisation's corporate governance, respondents from the Middle East tended to be slightly less satisfied.

Do you vote on General Meeting resolutions and/or in RIPE NCC Executive Board elections?

Those from South East Europe seemed to vote the least, proportionally, followed by those from Eastern Europe.

Registry and Resource Distribution

Overall, respondents throughout all regions generally appeared satisfied with the RIPE NCC's registry and resource distribution. Respondents from the Middle East seemed slightly less satisfied than others, but levels of satisfaction were still good.


Please rate your satisfaction level with the following from 1 to 7
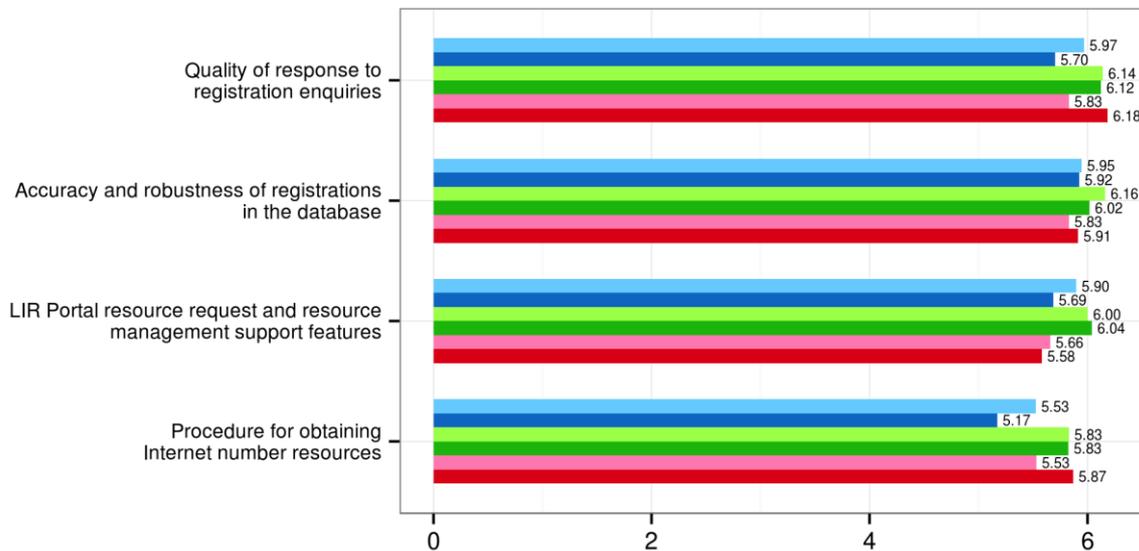
Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=1995; Eastern Europe=172; Middle East=146 Russia and Central Asia=288; South East Europe=169; Western Europe=1195; Other=25

Internet Governance and External Relations

Respondents from Eastern Europe placed less importance on Internet governance and external relations than the others. Those from other countries and the Middle East, however, seemed to accord more importance to this area.

Please rate the importance level of the following from 1 to 7
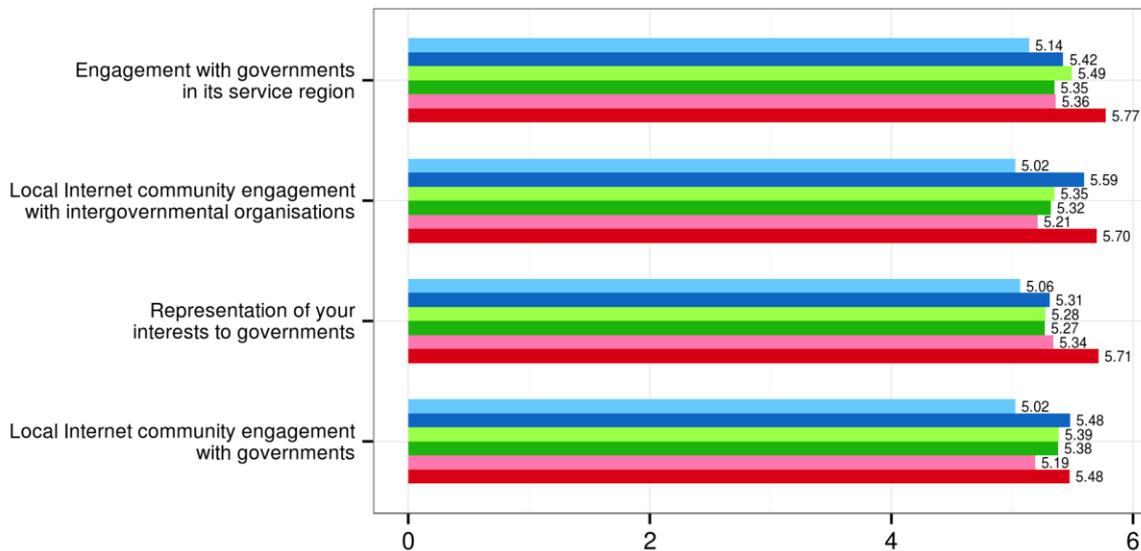
Engagement with governments in its service region
- 5.14
- 5.42
- 5.49
- 5.35
- 5.36
- 5.77

Local Internet community engagement with intergovernmental organisations
- 5.02
- 5.59
- 5.35
- 5.32
- 5.21
- 5.70

Representation of your interests to governments
- 5.06
- 5.31
- 5.28
- 5.27
- 5.34
- 5.71

Local Internet community engagement with governments
- 5.02
- 5.48
- 5.39
- 5.38
- 5.19
- 5.48

Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other

N=1517; Eastern Europe=131; Middle East=103 Russia and Central Asia=203; South East Europe=130; Western Europe=927; Other=23

Training and Education

Levels of satisfaction with the RIPE NCC's onsite training courses, levels of technical training and training documentation were very high throughout all regions (mean ranging from 6.11 to 7, n=780).

Please rate your satisfaction level with the following from 1 to 7
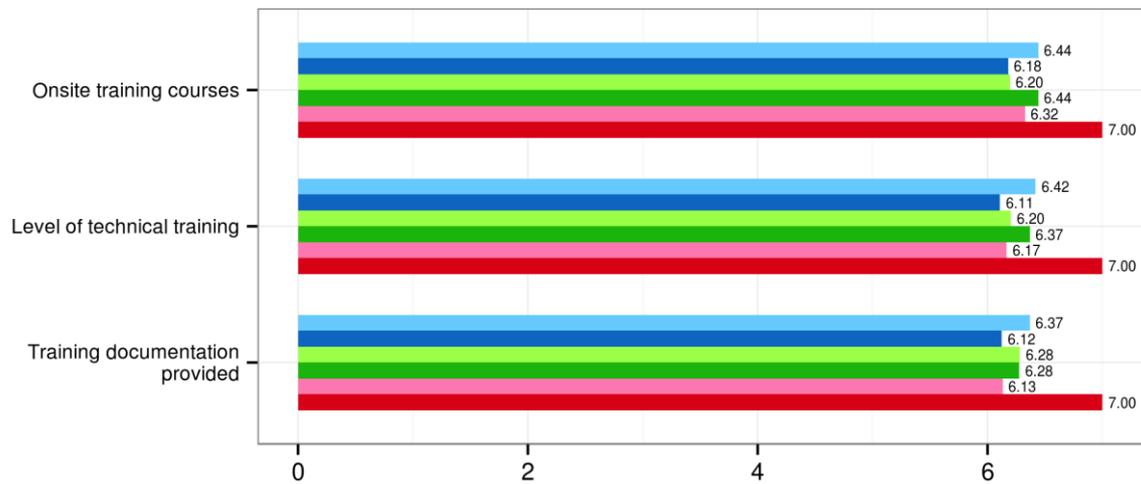
N=780; Eastern Europe=68; Middle East=56 Russia and Central Asia=90; South East Europe=77; Western Europe=485; Other=4

Opinions on giving certain preferences to regions for training is quite divided. More respondents indicated "don't know" rather than "no" in all regions except for in Western Europe. Roughly a third of responses in all regions (except for in the Middle East) replied that they did not know. While a lower percentage of respondents in Eastern and Western Europe thought the RIPE NCC should give more preference to training in developing countries, an overwhelming majority of respondents from the Middle East replied "yes" (73 percent); over 50 percent from South East Europe also responded positively.

Should the RIPE NCC give more preference to training in developing countries than in developed countries?

Legend: Eastern Europe | Middle East | Russia and Central Asia | South East Europe | Western Europe | Other

N=1870; Eastern Europe=167; Middle East=128 Russia and Central Asia=262; South East Europe=162; Western Europe=1123; Other=28
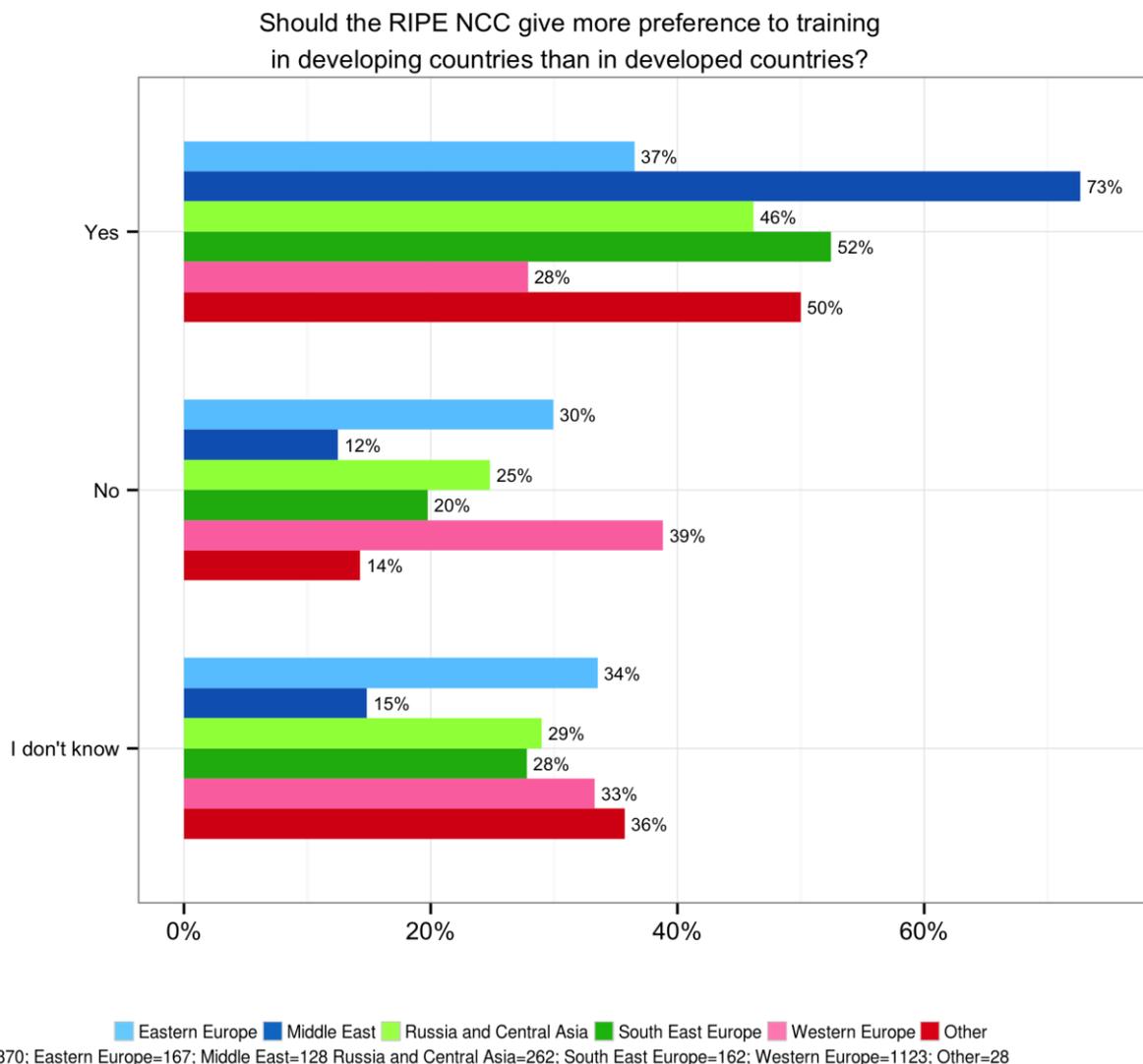
Respondents were also relatively divided about the RIPE NCC investing in converting training courses and documentation into languages other than English. While more respondents in Western Europe, South East Europe and the Middle East disagreed than agreed with this, a large proportion (61 percent) of respondents from Russia and Central Asia said that the RIPE NCC should translate its training and documentation.

Respondents from Eastern Europe were rather divided on the topic (49 percent said no; 43 percent said yes).

Should the RIPE NCC invest in converting training courses and documentation into languages other than English?

N=1880; Eastern Europe=168; Middle East=129 Russia and Central Asia=261; South East Europe=162; Western Europe=1132; Other=28
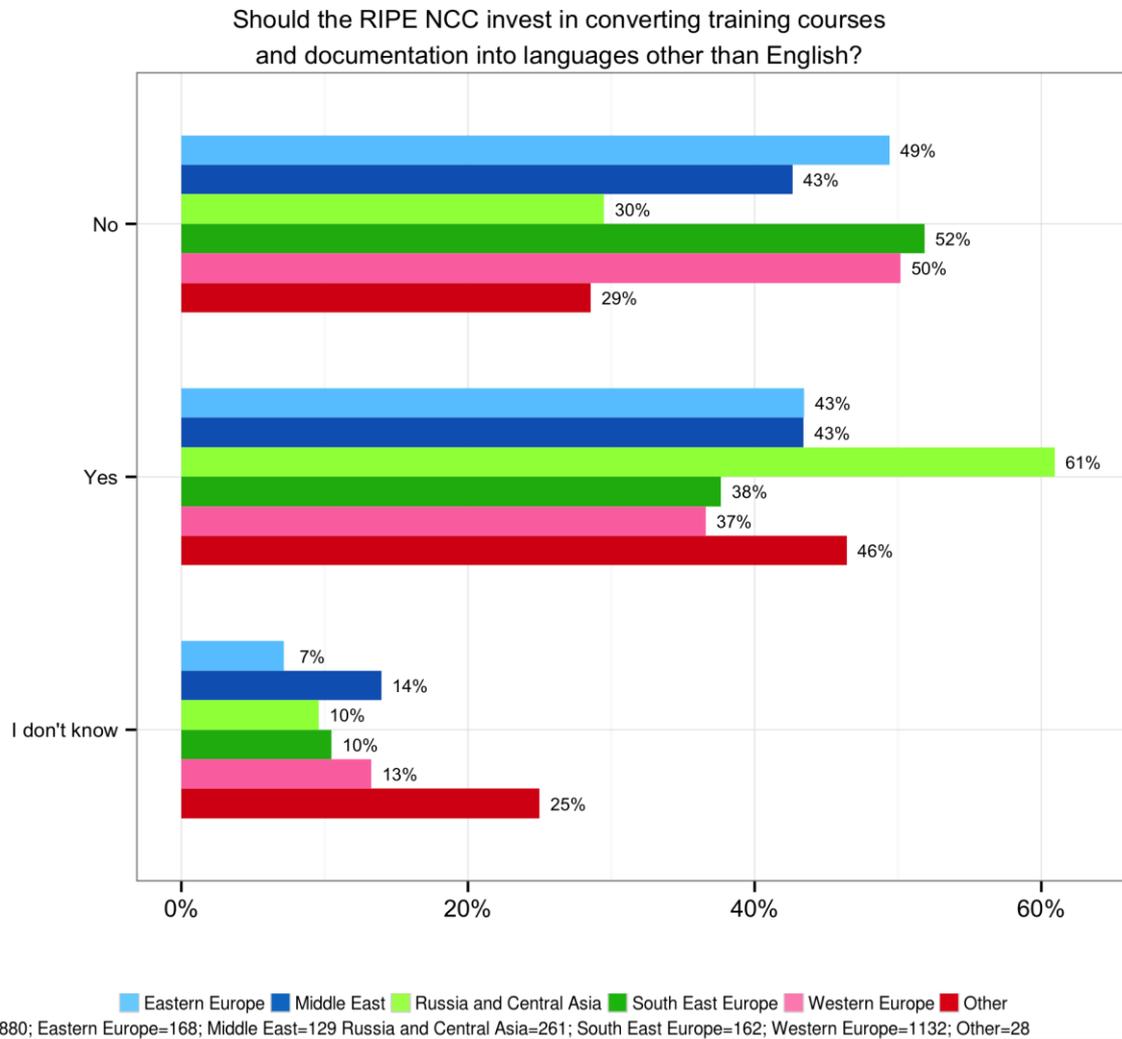
IPv6 Deployment

The Middle East stands out from other regions in terms of IPv6 deployment. The majority of respondents overall indicated that their organisation had a formal plan for IPv6; however, among respondents from the Middle East, 46 percent said they had a plan for deployment compared to 49 percent who said they did not. However, the question does not take into account those who have already fully deployed IPv6.

Does your organisation have a formal plan for IPv6 deployment?

Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=2264; Eastern Europe=180; Middle East=159 Russia and Central Asia=327; South East Europe=204; Western Europe=1289; Other=105
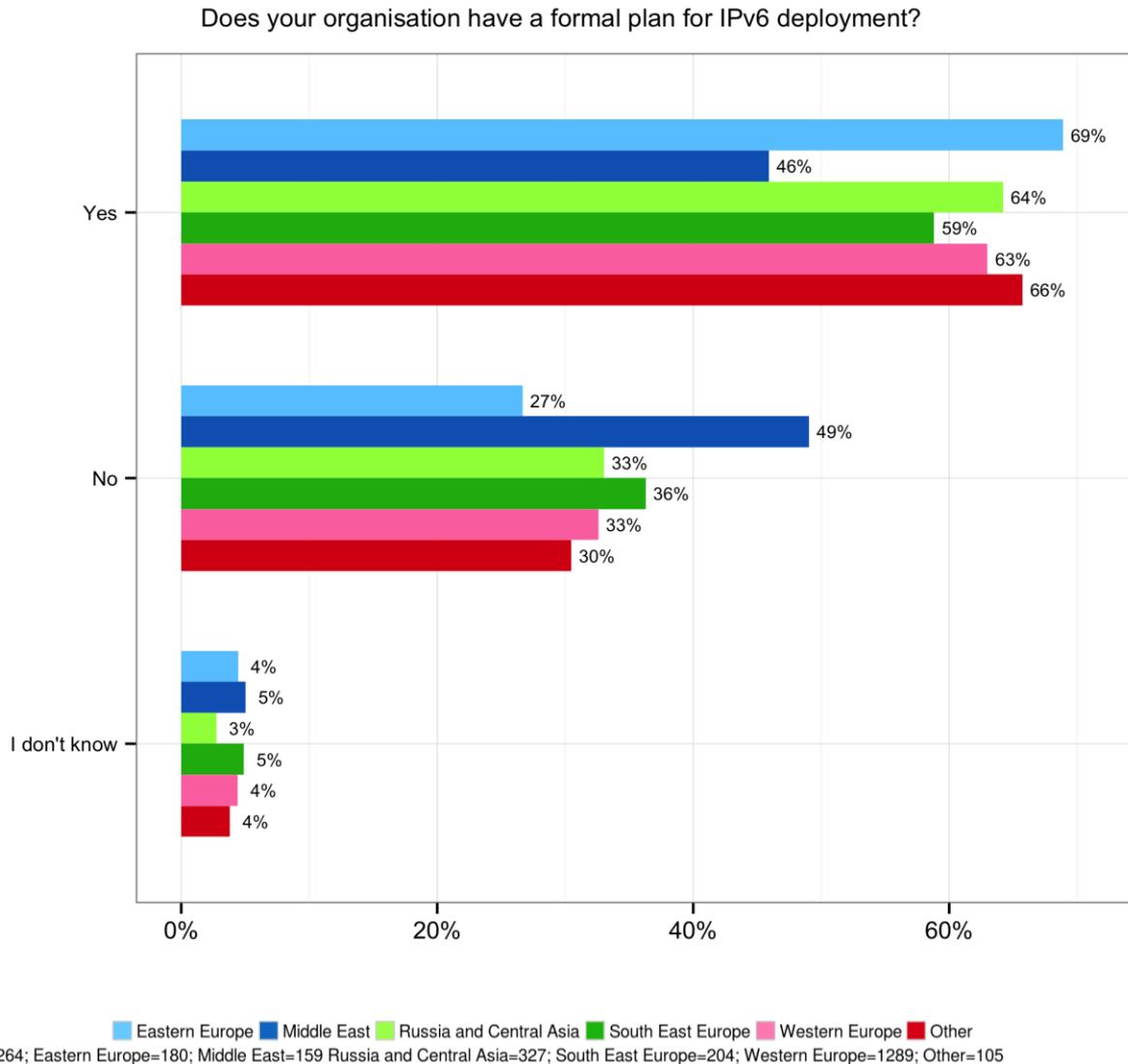
Despite this, a fair percentage of respondents (38 percent) in the Middle East indicated that their organisation had a transition budget to deploy IPv6. A higher percentage of respondents from Western Europe and Russia and Central Asia indicated that their organisation did not have an IPv6 transition budget, while those from "Other" service regions had the highest percentage of organisations that did.
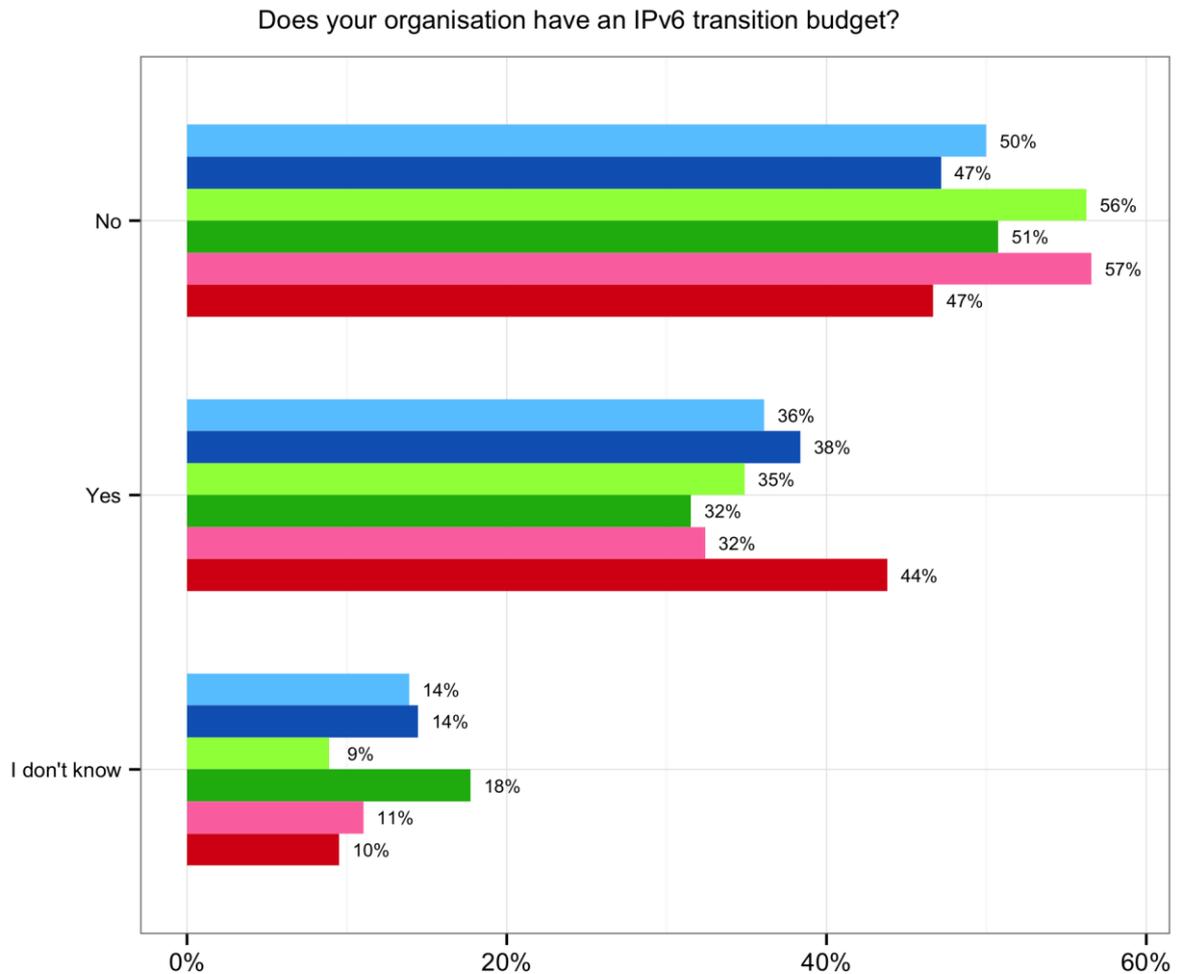
Does your organisation have an IPv6 transition budget?

Eastern Europe ▪ Middle East ▪ Russia and Central Asia ▪ South East Europe ▪ Western Europe ▪ Other
N=2261; Eastern Europe=180; Middle East=159 Russia and Central Asia=327; South East Europe=203; Western Europe=1287; OIP=105

More than 50 percent of respondents in each region said that their organisation had trained staff for IPv6 deployment. IPv6-trained staff was highest in Eastern Europe (70 percent answered yes) and lowest in the Middle East (only 51 percent answered yes).

Does your organisation have staff trained for IPv6 deployment?
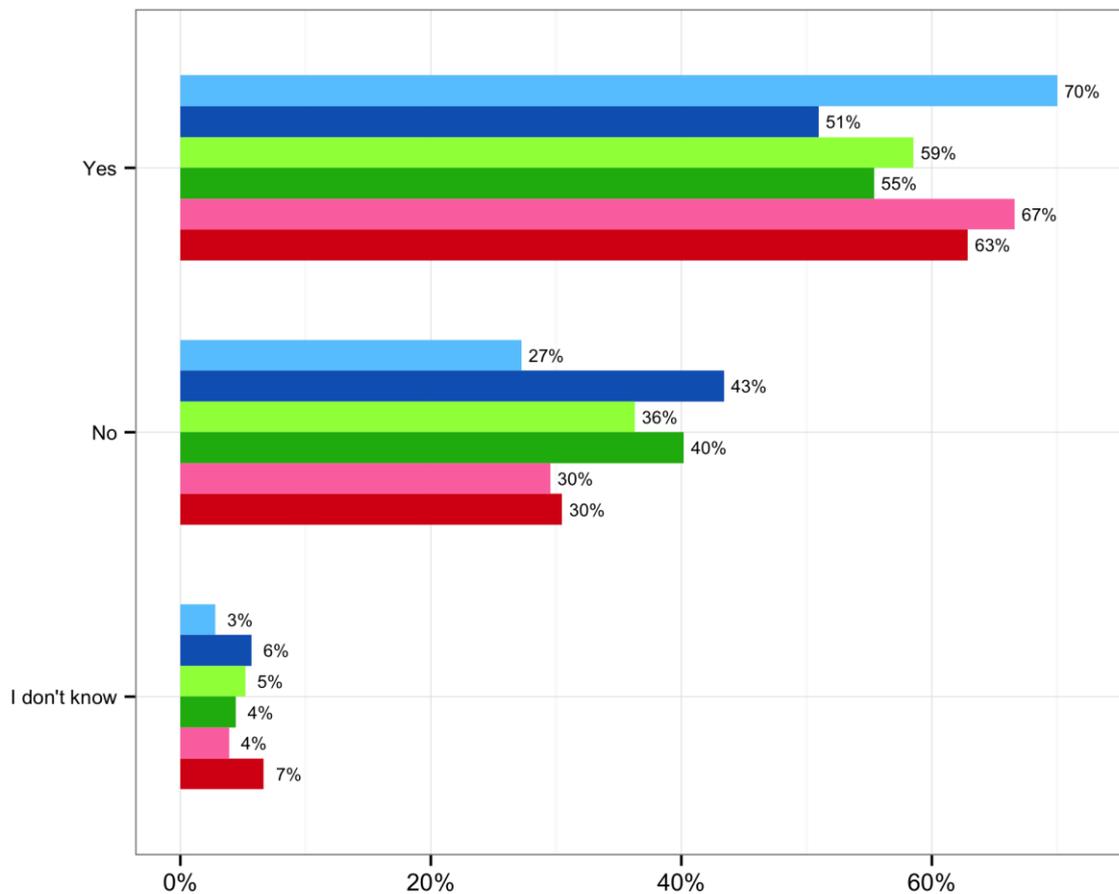
Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=2266; Eastern Europe=180; Middle East=159 Russia and Central Asia=328; South East Europe=204; Western Europe=1290; Other=105

RIPE NCC Tools and Measurements

The satisfaction levels for all questions relating to measurements and analysis scored over 4.8 out of 7 in all regions, with South East Europe giving the highest ratings.

Please rate your satisfaction level with the following from 1 to 7
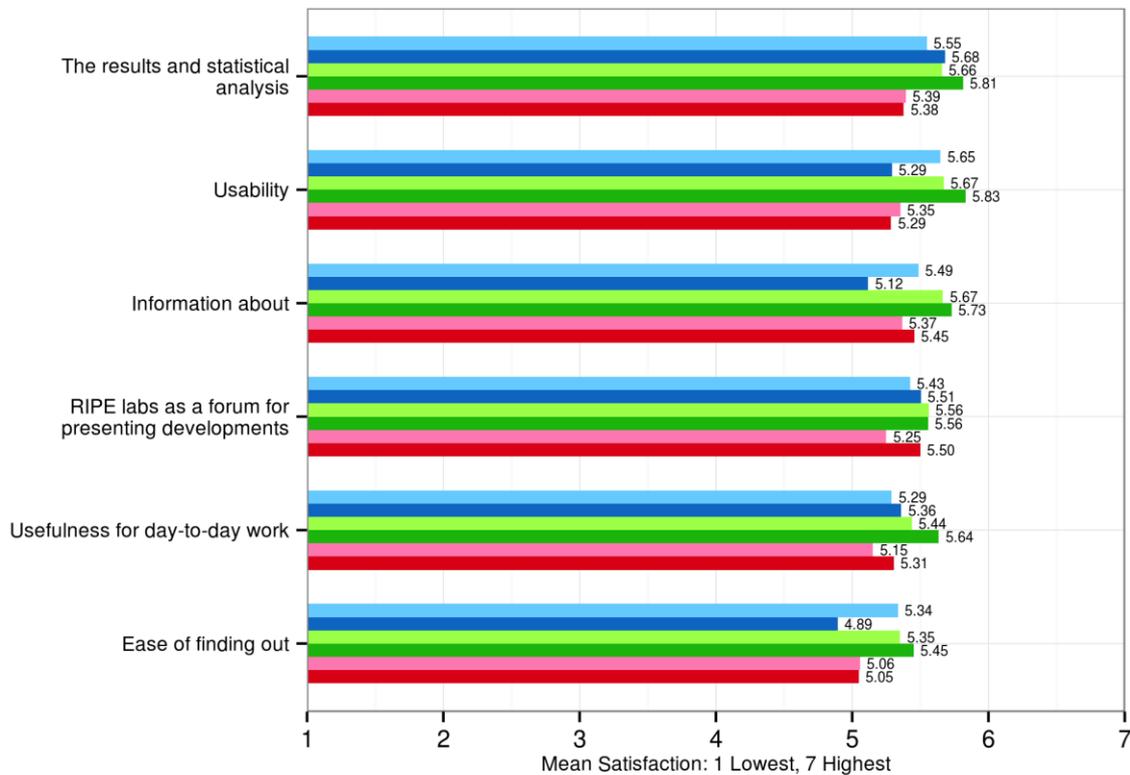
Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=1863; Eastern Europe=147; Middle East=126 Russia and Central Asia=273; South East Europe=170; Western Europe=1064; Other=83

Communications

In the communications area, satisfaction levels across all regions were reasonably close to the overall scores.

Please rate your satisfaction level with the following from 1 to 7
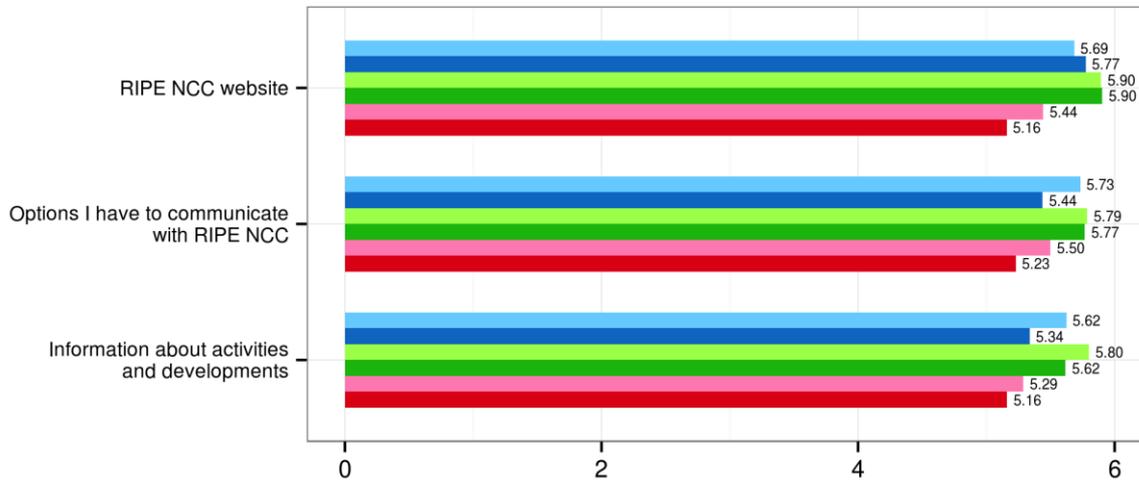
Eastern Europe | Middle East | Russia and Central Asia | South East Europe | Western Europe | Other
N=2148; Eastern Europe=168; Middle East=158 Russia and Central Asia=308; South East Europe=197; Western Europe=1234; Other=83

The most notable deviations among regions were in relation to the question on communicating in languages other than English. For Russia and Central Asia, 56% of respondents said this would be a good idea compared to 32% who said no. Only 29% and 27% of respondents said this would be a good idea in Western Europe and South East Europe, respectively.
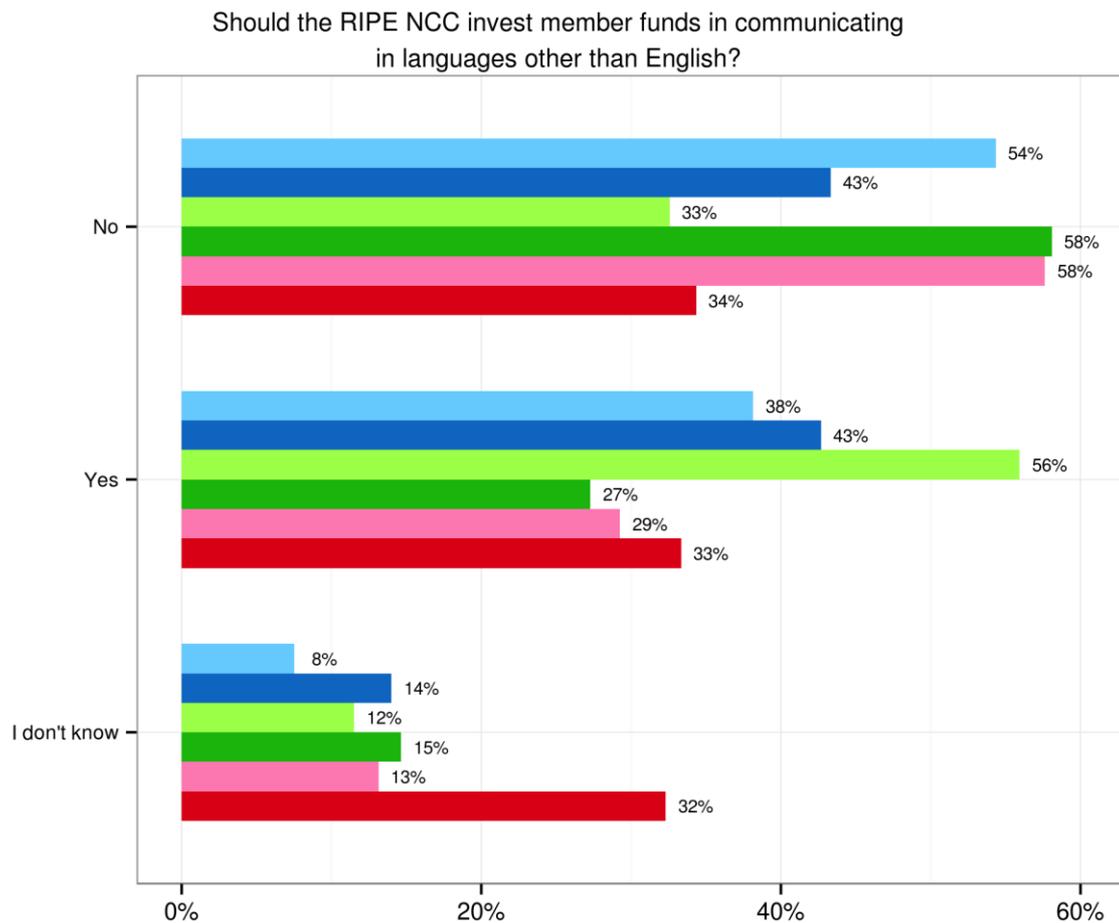
Should the RIPE NCC invest member funds in communicating in languages other than English?

No
- Eastern Europe: 54%
- Middle East: 43%
- Russia and Central Asia: 33%
- South East Europe: 58%
- Western Europe: 58%
- Other: 34%

Yes
- Eastern Europe: 38%
- Middle East: 43%
- Russia and Central Asia: 56%
- South East Europe: 27%
- Western Europe: 29%
- Other: 33%

I don't know
- Eastern Europe: 8%
- Middle East: 14%
- Russia and Central Asia: 12%
- South East Europe: 15%
- Western Europe: 13%
- Other: 32%

Eastern Europe | Middle East | Russia and Central Asia | South East Europe | Western Europe | Other
N=2172; Eastern Europe=173; Middle East=157 Russia and Central Asia=304; South East Europe=198; Western Europe=1241; Other=99

RIPE Meetings

Physical attendance at RIPE Meetings was low for most regions, ranging from 66% of respondents in South East Europe to 85% of respondents in Eastern Europe. The lowest satisfaction with the distribution of RIPE Meetings was in the Middle East, which was the only region to give a rating below 5 out of 7 for this question

Have you physically attended a RIPE Meeting in the past three years?
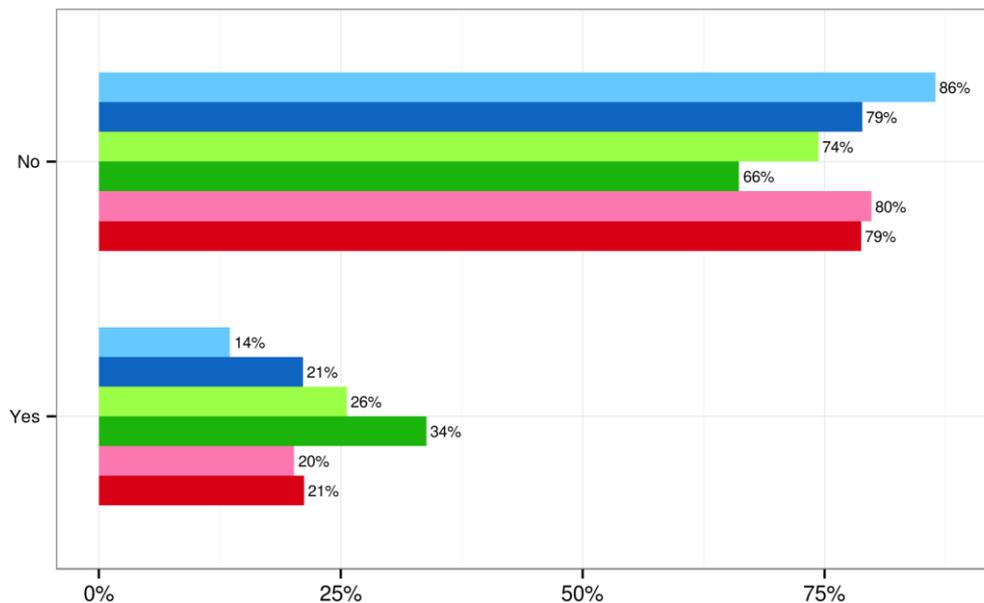
Eastern Europe Middle East Russia and Central Asia South East Europe Western Europe Other
N=2208; Eastern Europe=177; Middle East=161 Russia and Central Asia=312; South East Europe=201; Western Europe=1258; Other=99


Please rate your satisfaction level with the following from 1 to 7
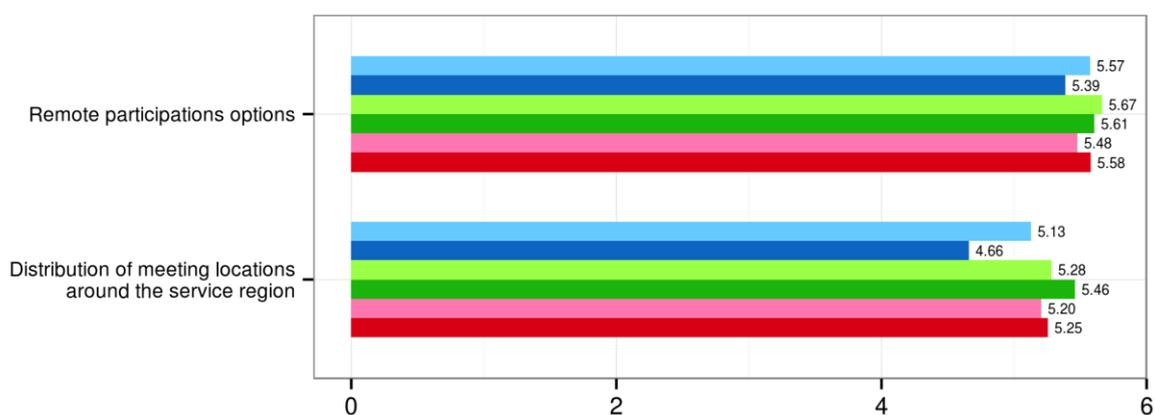
Eastern Europe Middle East Russia and Central Asia South East Europe Western Europe Other
N=1753; Eastern Europe=130; Middle East=129 Russia and Central Asia=242; South East Europe=172; Western Europe=1001; Other=79

The RIPE Policy Development Process (PDP)

The ratings for all questions relating to the PDP were remarkably similar across all regions.

Please rate your satisfaction level with the following from 1 to 7
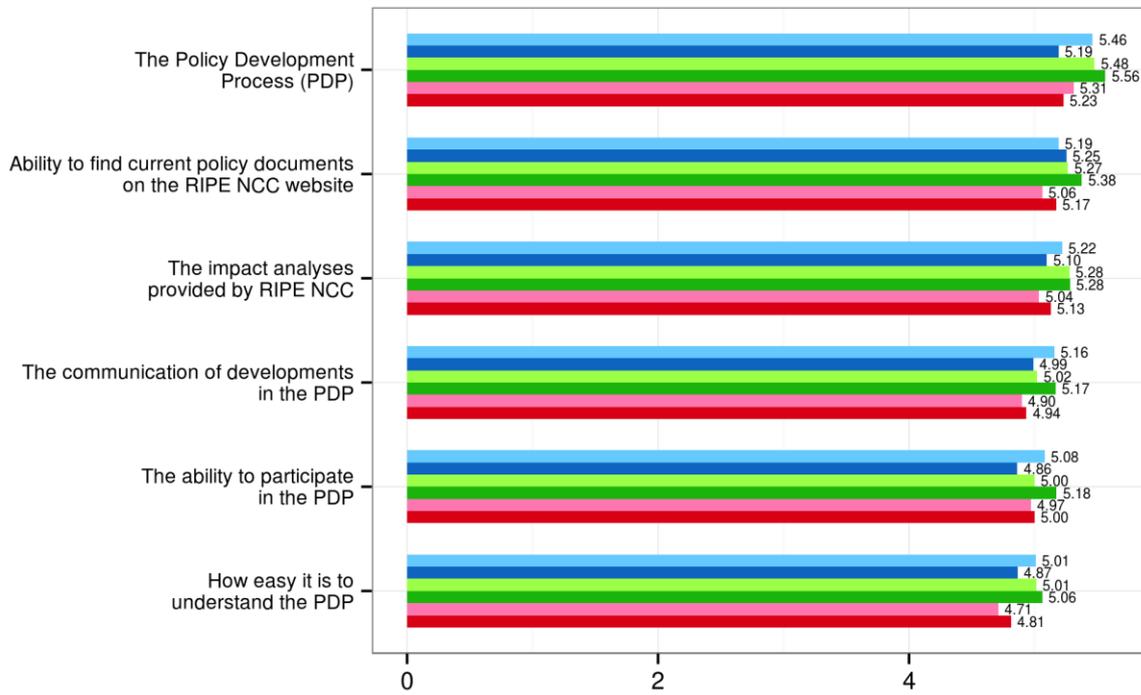
Eastern Europe Middle East Russia and Central Asia South East Europe Western Europe Other
N=1523; Eastern Europe=123; Middle East=117 Russia and Central Asia=231; South East Europe=150; Western Europe=833; Other=69

The RIPE Database

The satisfaction ratings for the RIPE Database were between 5.4 and 6.2 for all regions. This is one area where those outside the RIPE NCC service region gave lower satisfaction ratings that for those areas inside the service region.

Please rate your satisfaction level with the following from 1 to 7
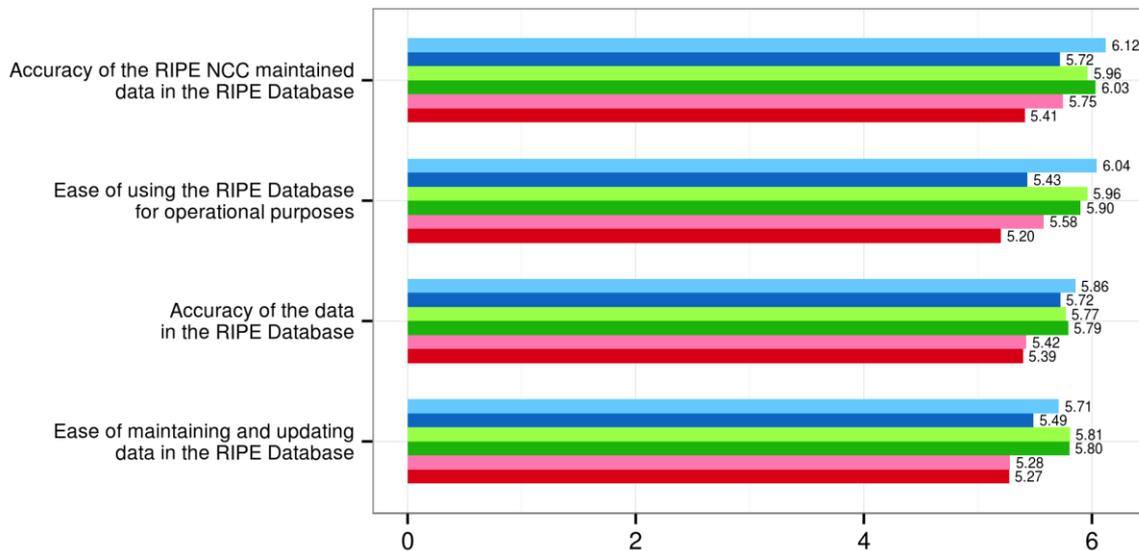
Eastern Europe ■ Middle East ■ Russia and Central Asia ■ South East Europe ■ Western Europe ■ Other
N=2063; Eastern Europe=165; Middle East=140 Russia and Central Asia=294; South East Europe=190; Western Europe=1199; Other=75

Network Security

Among the areas in the RIPE NCC service region, requests for the RIPE NCC to be more involved would appear to be highest in the Middle East region. Seventy-three percent of Middle East respondents felt the RIPE NCC had a coordination role to play during large-scale network security attacks, while over 50% suggested that there should be a forum for discussing security at RIPE NCC events.

Which of the following actions should the RIPE NCC take to help with Internet security concerns?
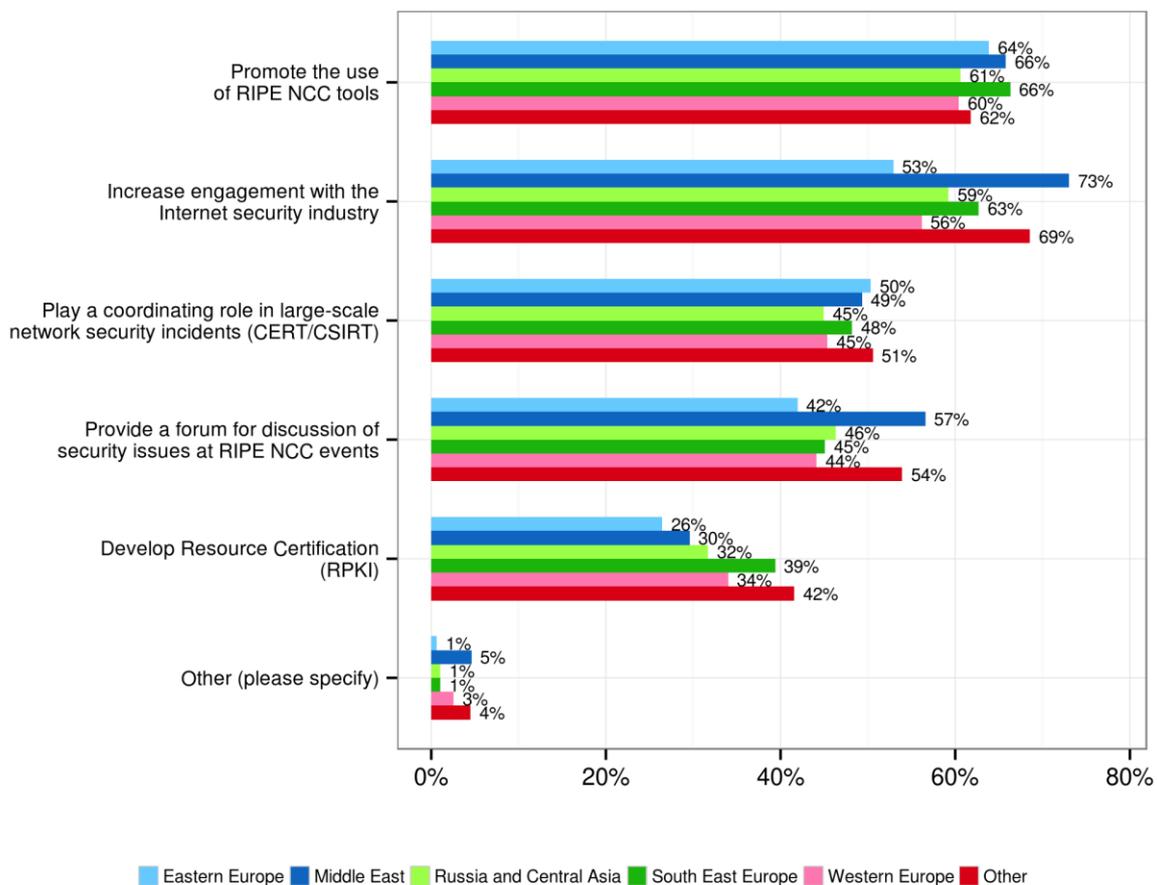
N=2005; Eastern Europe=155; Middle East=152 Russia and Central Asia=287; South East Europe=193; Western Europe=1129; Other=89