KPMG

Asia Pacific Network Information

Centre (APNIC)

APNIC Member and Stakeholder Survey 2009

February 2009
This report contains 55 pages
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Contents

1 Executive summary

APNIC is responsible for representing 56 economies in the Asia-Pacific region. This survey is the fifth survey APNIC has conducted for Members and now incorporates Stakeholders views. The value of the 2009 Member and Stakeholders survey is noted through the overwhelming number of responses and the positive comments received. An independent review found APNIC had implemented the majority of findings from previous surveys, which again highlights the value of this survey for Members and Stakeholders.

The level of response to this survey has provided a wealth of detailed information on Member and Stakeholder views, priorities and level of IPv6 readiness. Both Members and Stakeholders were in agreement in their positive assessment of APNIC activities. Members and Stakeholders differed in their priorities on the allocation of future resources in the area of APNIC services but were in agreement for the priority in the APNIC technical area. IPv6 readiness questions resulted in mixed responses from respondents.

The approach for this analysis has been to provide the main aspects in the report and put the bulk of the information in the Appendices. It must be stressed that before passing over these files ALL INFORMATION RELATING TO INDIVIDUAL RESPONDENTS HAS BEEN DELETED.

This document reports on the APNIC survey which received 601 valid responses, almost double the previous survey. The Executive Summary covers the main results, analysis and conclusions of the survey only. The core of this report outlines in detail the survey development, process, results, analysis and conclusions. Further detail is contained in the Appendices of this report.

1.1 Summary and analysis of results

The different sections explore in more detail the responses made by Members and Stakeholders. Both Members and Stakeholders were in agreement in their positive assessment of APNIC activities. Members and Stakeholders differed in their priorities on the allocation of future resource. IPv6 readiness questions resulted in mixed responses from respondents.

Detailed analyses of the differences by organisation classification, economy, membership category, and by length of membership are contained in the Appendices.

An overview of the results provided by the respondents is outlined below and the specific question detail can be found in the body of the report and again in Appendix A.

1.1.1 Assessment of APNIC activities

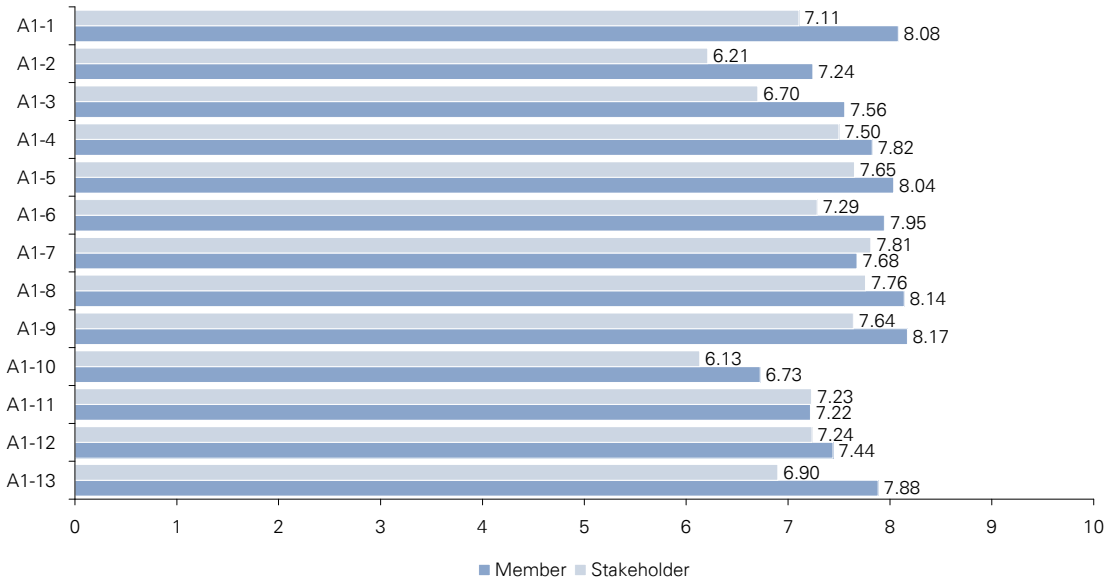
The means in this section ranged from 6.73 to 8.23 for Members and 6.13 to 7.86 for Stakeholders.

1.1.1.1 Services

Respondents were asked to rate the following series of questions relating to APNIC services and their functional abilities.

Summary of Questions – Services
A1-1. The overall services provided by APNIC are satisfactory
A1-2. The value members get from APNIC justifies the cost
A1-3. The processes and requirements to obtain IPv4, IPv6 or ASN resources are clear and straightforward
A1-4. APNIC resource allocation services (IPv4, IPv6 or ASN) are adequate in response time and relevance
A1-5. The APNIC helpdesk is easy to contact
A1-6. The APNIC helpdesk provides timely and appropriate responses to enquiries
A1-7. MyAPNIC operates at a high level of quality, usability and reliability
A1-8. APNIC whois database operates at a high level of quality, usability and reliability
A1-9. Reverse DNS services operate at a high level of quality, usability and reliability
A1-10. APNIC face-to-face training is readily available in my region
A1-11. APNIC training meets my expectations
A1-12. APNIC tutorials and workshops are set at the correct levels
A1-13. APNIC should establish an open funding mechanism to support training and education for organisations in need within the region

An overview of the mean scores for each question is displayed below:



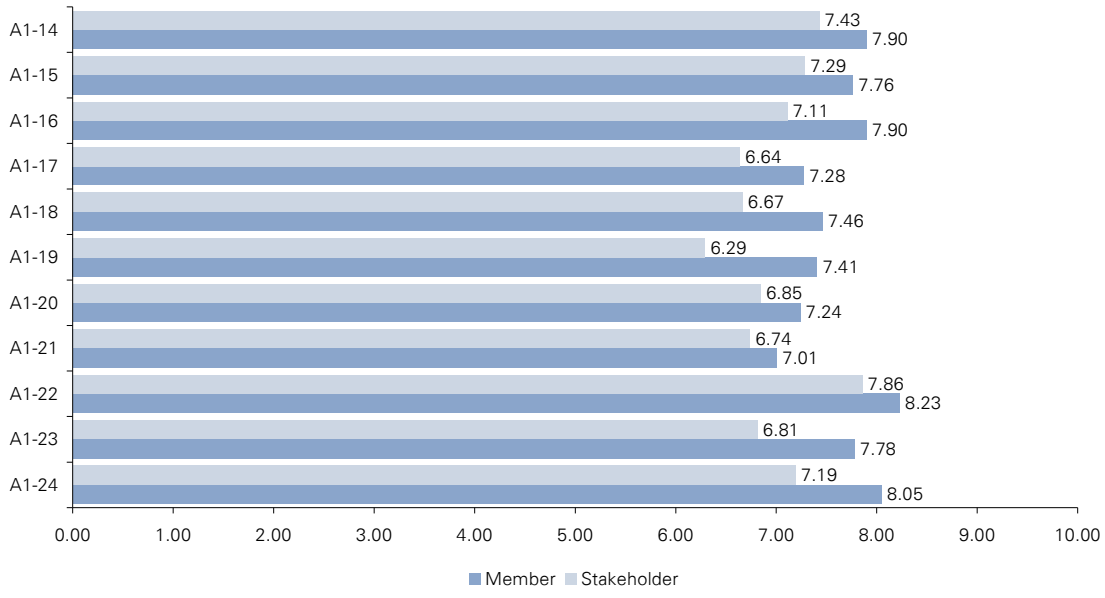
Members and Stakeholders recorded the lowest means in Training services question A1-10. The results indicated that Members and Stakeholders did not accept that face-to-face training was readily available in their region.

1.1.1.2 Communication

Respondents were asked to rate the following series of questions relating to APNIC's communication abilities.

Summary of Questions - Communications
A1-14. APNIC communicates useful and relevant information
A1-15. APNIC communicates in a way that meets my needs
A1-16. The APNIC website helps me understand the activities of APNIC
A1-17. The APNIC policy development process is easy to understand
A1-18. The APNIC policy development process is an effective way of developing resource management policy
A1-19. The current policy development process provides me with the tools to participate in the process
A1-20. The content and activities of APNIC meetings are at a level of importance and interest that I want to attend
A1-21. The remote participation options (video and audio streams, live session transcripts, chat rooms, and archived media) are easy to use
A1-22. APNIC should be involved with activities and events of operator groups, ISP associations, government and educational institutions in the region
A1-23. APNIC effectively represents the interests of Asia Pacific network operators in global forums
A1-24. APNIC should have higher level representation to liaise with governments and industry across the region

An overview of the mean scores for each question is displayed below:



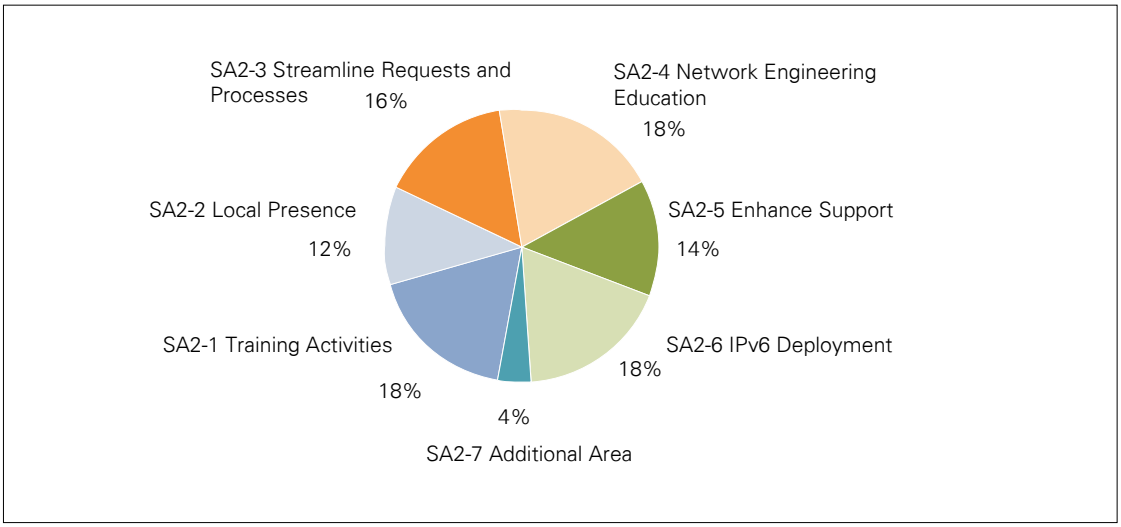
Members and Stakeholders recorded the highest mean score in question A1-22. The results indicated that Members and Stakeholders agreed on APNIC's involvement in regional activities.

1.1.2 APNIC future resource allocation

In this section, respondents were asked to prioritise their future needs by allocating a maximum of 100 points in each of three sub-sections. The following charts reveal how Members and Stakeholders allocated the 100 points as per section 5.2 in the Services and Technical sub-sections.

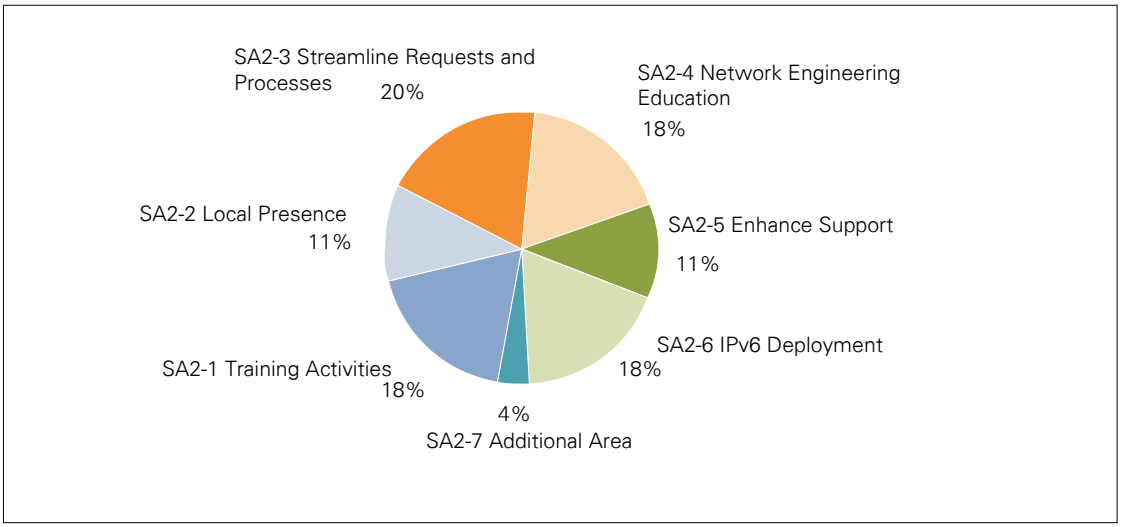
1.1.2.1 Services

Members



Members recorded 18% in the Services questions SA2.1, SA2.4, SA2.6. This indicated future resource allocation to: expand training activities in scope, geographical coverage and online options; support network engineering education in the Asia-Pacific region; support of IPv6 deployment as priorities.

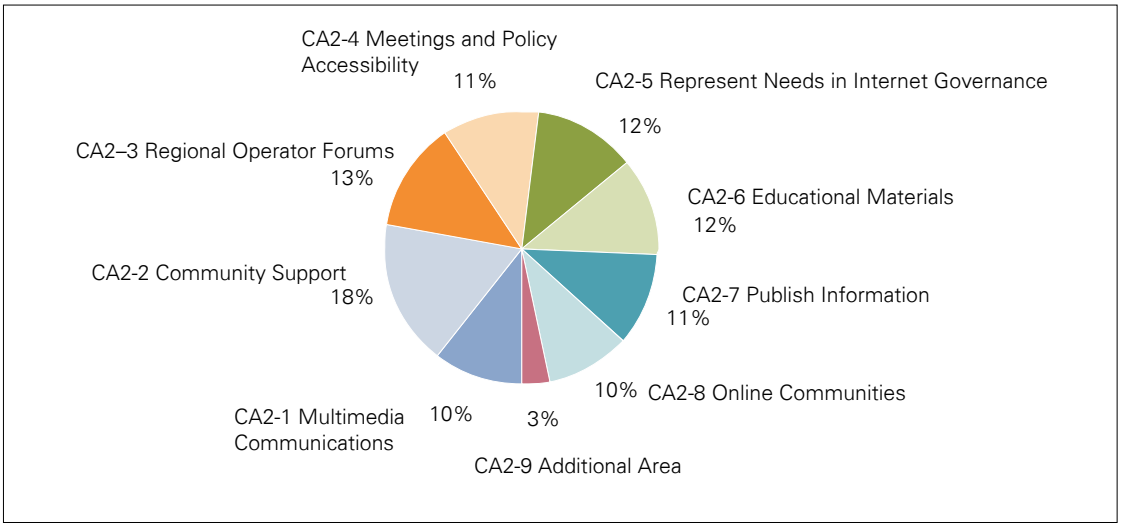
Stakeholders



Stakeholders recorded the highest percentage (20%) in Services question SA2-3. This signifies that Stakeholders consider allocating future resources to streamline resource requests and allocation processes as a priority.

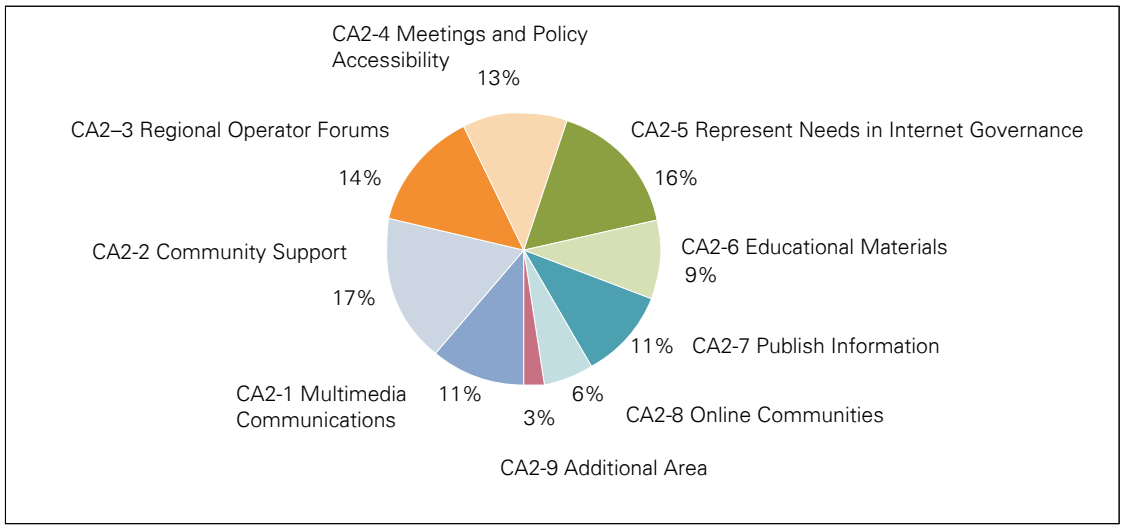
1.1.2.2 Communications

Members



Members recorded the highest percentage (18%) in the Communications questions CA2-2 indicating future resource allocation to increase the support of the community's efforts to adopt IPv6 is a priority.

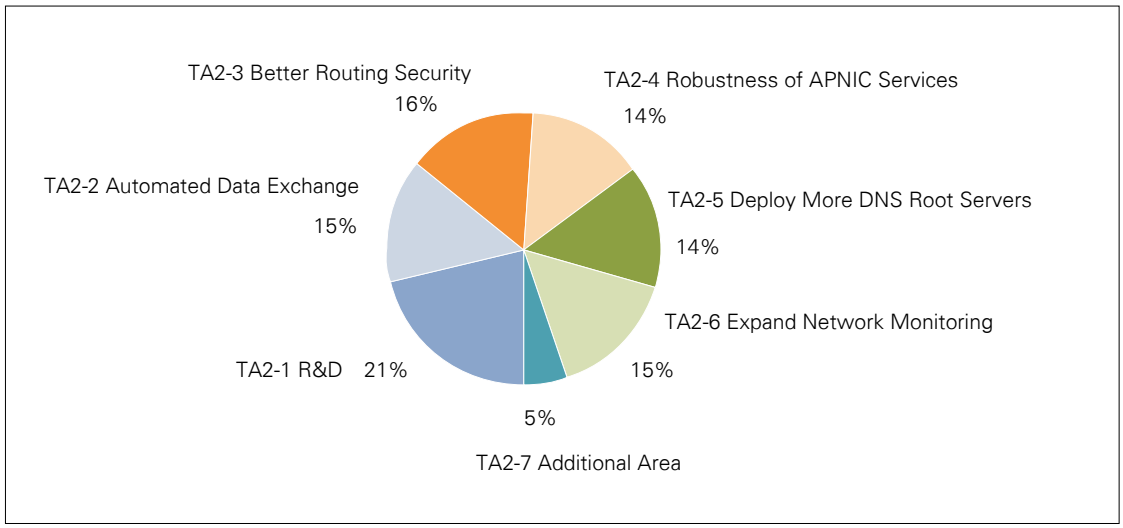
Stakeholders



Stakeholders also recorded the highest percentage (17%) in the Communications questions CA2-2 indicating future resource allocation to increase the support of the community's efforts to adopt IPv6 is a priority.

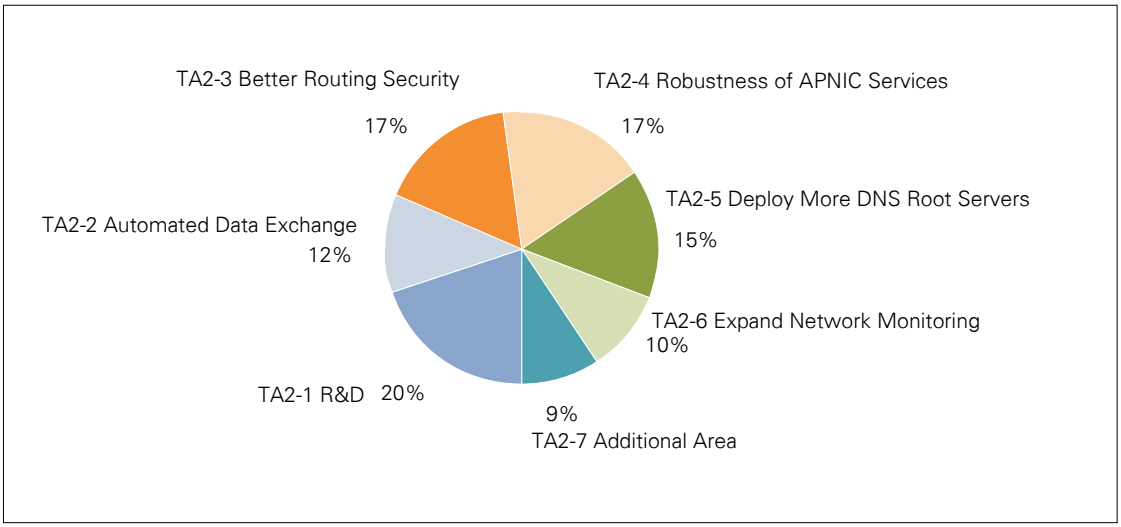
1.1.2.3 Technical

Members



Members recorded the highest percentage (21%) in the Technical question TA2-1 indicating future resource allocation to research and development activities are seen as a priority.

Stakeholders



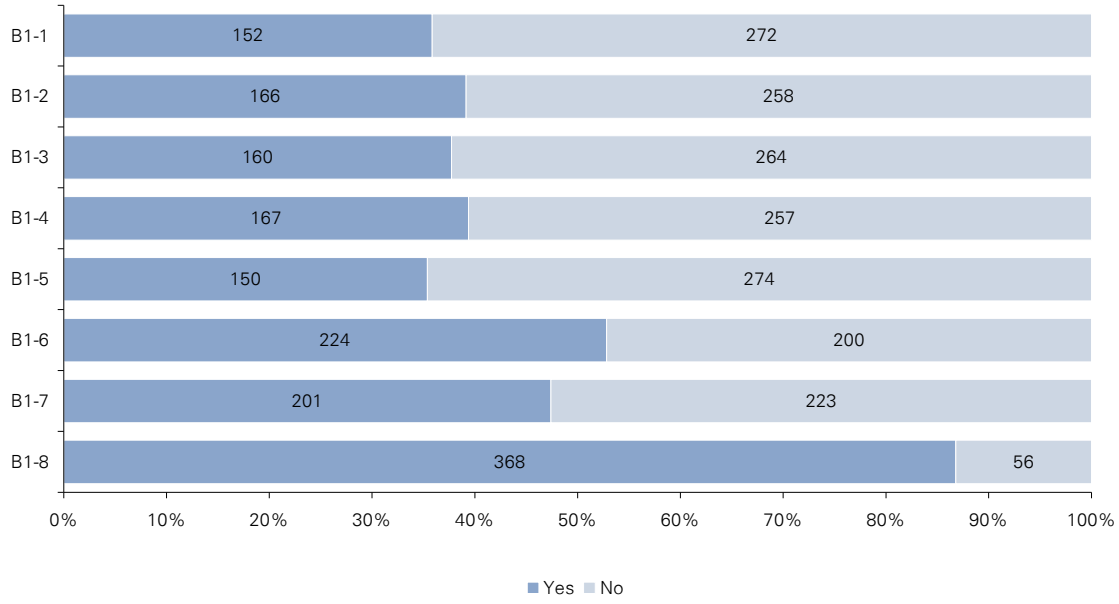
Stakeholders also recorded the highest percentage in (20%) score in the Technical question TA2-1 indicating future resource allocation to research and development activities are seen as a priority.

1.1.3 IPv6 readiness

1.1.3.1 Factual responses

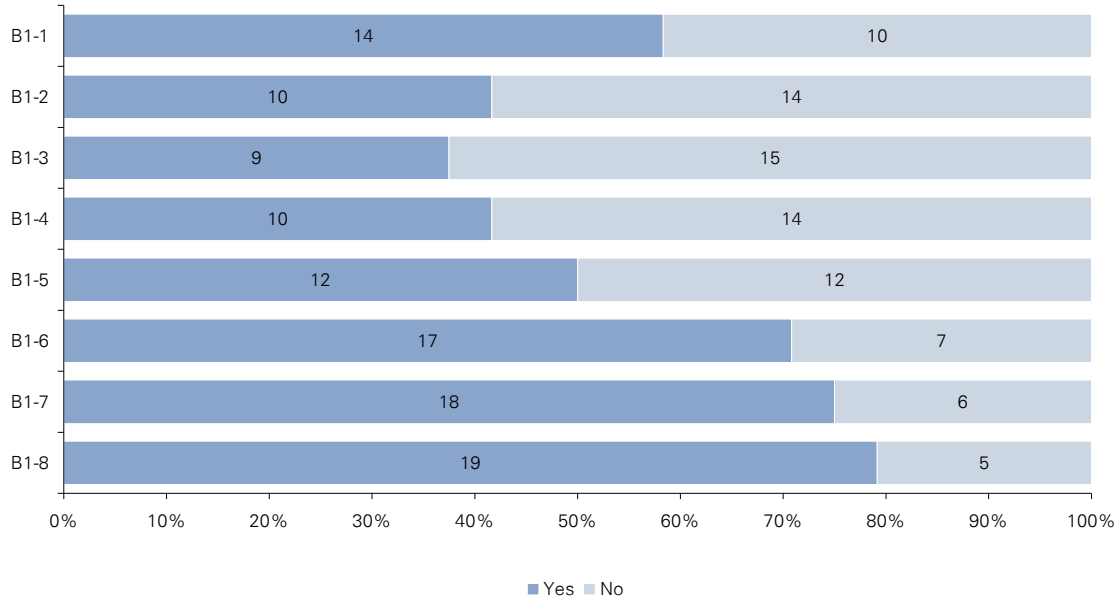
Factual responses relate to IPv6 readiness and were recorded on a yes / no basis. Respondents were allocated additional space to provide further clarification. The following graphs depict the questions for which Members and Stakeholders recorded the highest number of 'Yes' and 'No' responses indicative of the level of IPv6 readiness.

Comparison of Member responses



Members recorded the highest number of positive responses to question B1-8 indicating that the majority of respondents agree that it is important to have government support for IPv6 deployment. Members recorded the highest number of negative responses in question B1-5 indicating a large portion of Members have not received IPv6 addresses from an RIR, NIR or and ISP closely followed by B1-1 indicating a large portion of Members have not yet deployed or are not ready for immediate IPv6 deployment.

Comparison of Stakeholder responses



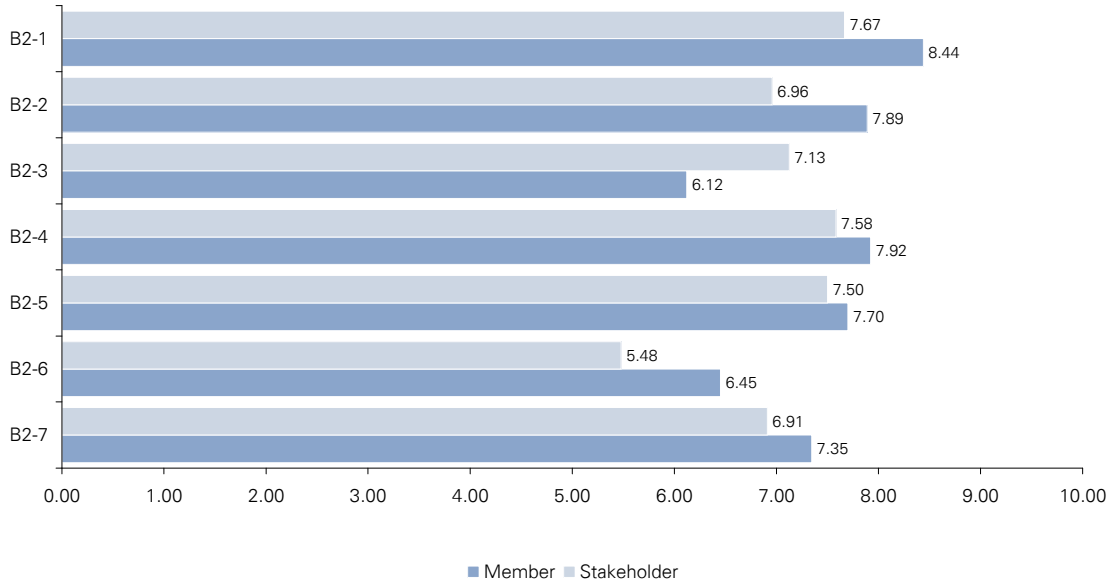
Stakeholders recorded the highest number of positive responses to question B1-8 indicating that the majority of respondents agree that it is important to have government support for IPv6 deployment. Conversely, Stakeholders recorded the lowest number of responses in B1-4 indicating future resources had not yet been allocated to IPv6 deployment.

1.1.3.2 Propositions

Respondents were asked to measure their alignment with the following series of questions relating to potential actions.

Summary of Questions - Propositions
B2-1. APNIC should have a bigger role in promoting IPv6 deployment within the AP region
B2-2. APNIC should permit transfers of IPv4 address space BEFORE the IANA pool is exhausted
B2-3. APNIC should permit transfers of IPv4 address space WHEN the IANA pool is exhausted
B2-4. APNIC should recover unused IPv4 address space for regional redistribution
B2-5. All RIRs should recover unused IPv4 address space for global redistribution
B2-6. The current internet resource management systems are adequate to ensure effective global transition to IPv6
B2-7. Governments should require IPv6 compliance within entities under their control

The means in this section ranged from 6.12 to 8.44 for Members and 5.48 to 7.67 for Stakeholders. The questions containing the highest and lowest means for both Members and Stakeholders are outlined in the following charts:



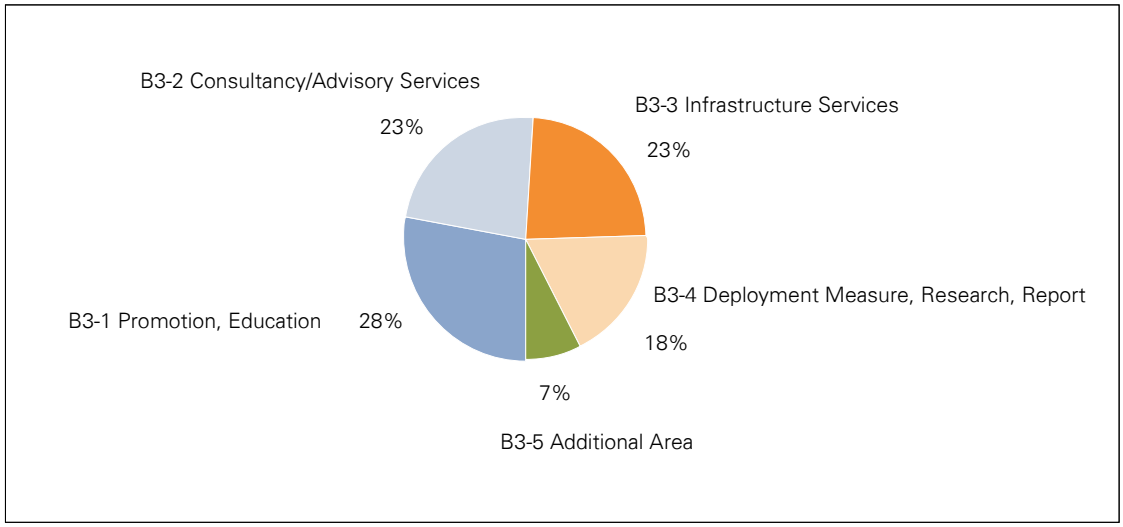
1.1.3.3 IPv6 activities

In this section, respondents were asked to prioritise their future needs by allocating a maximum of 100 points across five questions. At the end of the sub-section, respondents could nominate additional areas for resource allocation.

Summary of Questions - IPv6
B3-1. IPv6 promotion, education and/or training
B3-2. Expert consultancy/advisory services on IPv6 deployment
B3-3. IPv6 infrastructure services (IXP, rootservers, IRR etc.)
B3-4. Measure, research and report on IPv6 deployment
B3-5. Additional area for resource allocation

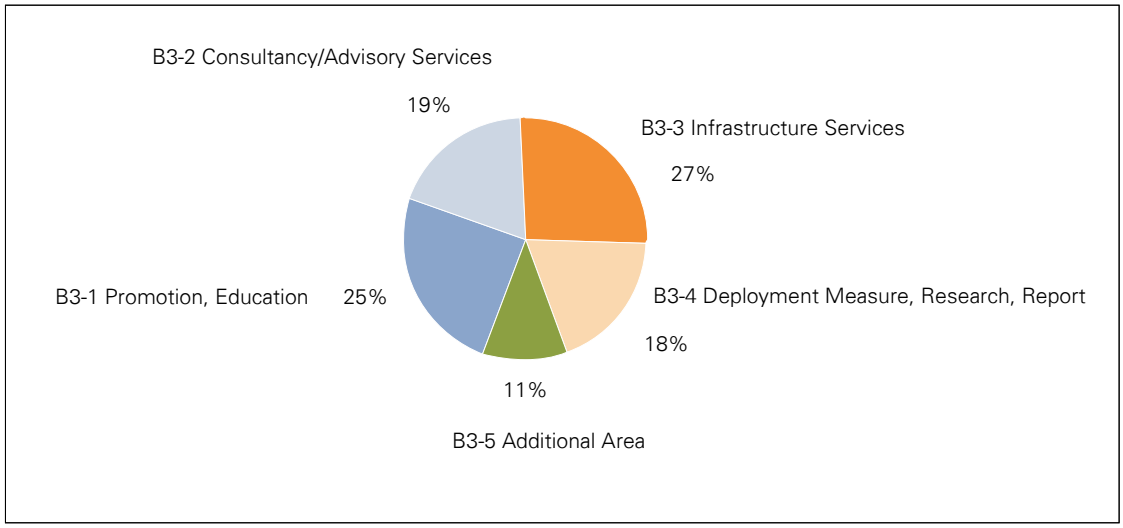
The following charts reveal how Members and Stakeholders allocated the 100 points for IPv6 activities as per section 5.3.3.

Members



Members recorded the highest percentage for question B3-1 indicating future resource allocation to IPv6 promotion, education and / or training as a priority.

Stakeholders



Stakeholders recorded the highest percentage in question B3-3 indicating IPv6 infrastructure services as a priority.

1.2 Conclusions

APNIC can consider the results of this survey to be positive considering the number of response nearly doubled last survey – the highest number of responses in the history of the APNIC survey.

A brief overview of the results is provided in the following table:

Summary of conclusions	
Assessment of APNIC activities	
	Assessment of APNIC activities provided positive results with no mean scores recorded below 6.13. Comments from Members and Stakeholders were generally positive or constructive.
APNIC future resource allocation	
Services	Members indicated that expanding training activities in scope, geographical coverage and online options; support network engineering education in the Asia-Pacific region; support of IPv6 deployment were priorities. Stakeholders regarded streamlining resource requests and allocation processes to be priorities.
Communication	Members highlighted to increase the support of the community's efforts to adopt IPv6 as a priority for future resource allocation.
Technical	Member and Stakeholder priorities were aligned in this area; both groups highlighted the research and development area as a priority.
IPv6 Readiness	
	IPv6 readiness provided varied results from Members and Stakeholders.
Factual responses	Results showed Members and Stakeholder recorded the highest level of agreement with the importance of government support in IPv6 allocation. Members indicated that the majority had not yet received IPv6 address space from an RIR, NIR or ISP. The majority of Stakeholders indicated that their respective organisations had not budgeted for future resource allocation for IPv6 deployment.
Propositions	Propositions responses were positive from Members and Stakeholders and no mean scores were recorded below 5.48.
IPv6 activities	Respondents agreed over IPv6 activities resource allocation. Members and Stakeholders were in agreement on prioritising IPv6 promotion education and / or training, expert consultancy / advisory services on IPv6 deployment and IPv6 infrastructure services for future resource allocation.

2 Introduction

2.1 Background

APNIC is a not for profit organisation which seeks to operate in a manner aimed to meet the needs of its members. It has an open and bottom up process for adopting changes in its policy. Members meetings are held twice yearly at different Asia-Pacific locations and encourage active discussion and input from members in a very wide range of topics.

APNIC has conducted four previous member surveys to encourage members to provide their views on the services they received, to suggest improvements and to offer suggestions as to the future development and direction of the organisation.

2.2 Warranty and disclaimer

Inherent limitations

This report has been prepared as outlined in the Methodology Section. The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by, APNIC's members and relevant stakeholders consulted as part of the process.

KPMG have indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

The findings in this report have been formed on the above basis.

Third party reliance

This report is solely for the purpose set out in the Methodology Section and for APNIC's information, and is not to be used for any other purpose or distributed to any other party without KPMG's prior written consent.

This report has been prepared at the request of APNIC in accordance with the terms of KPMG's engagement letter dated 18 August 2008. Other than our responsibility to APNIC, neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.

3 Methodology

3.1 The survey instrument

The survey used contained three major parts, APNIC services, APNIC future resource allocation and IPv6 readiness. A copy of the survey invitation and accompanying instructions and is contained in Appendix 1.

3.1.1 Focus groups

The initial approach was to conduct a series of focus groups with Members. The aim of these groups was to identify the issues which Members considered to be important to them in the current and future services provided by APNIC.

Focus groups were held in New Delhi, Manila, Tokyo, Beijing, Hong Kong, Singapore and Sydney. The aim was to provide a cross-section that reflected the differences in economy size and geographic spread within the AP region. The opportunity was also taken during these visits to discuss the forthcoming survey and related issues with other key players such as government and internet industry bodies.

The group and other discussions were extremely useful. There was general agreement as to the more important topics. Two points in particular stood out. Firstly, the general view that the major issue to be addressed was the current importance of the planning and implementation strategies for IPv6. Secondly, the view that each economy was different in its needs, priorities and circumstances. While interested in the planning of others, each group saw the paramount need to be the need for collaborative planning within their economy, between government, the internet industry, academia, commerce and other interested parties. There were wide variations in the degree and current extent of such planning. Pro-active government support was seen as a valuable part of the transition process.

In addition to these visits input was sought from a cross-section of other Members throughout the region.

3.1.2 Development

The consultants developed the survey instrument based on the findings of the Focus Groups, with input from the APNIC secretariat.

In view of the importance attached to the issue if IPv6 by all those involved with the Internet, it was decided that, in addition to Members, a wider range of views would be sought. The survey was therefore entitled “Members and Stakeholders”. Any interested party was therefore encouraged to respond.

The survey has three sections. Section One invites respondents to rate existing APNIC services on a scale 1-10. Section 2 invites respondents to rank their priorities for ongoing APNIC

resource allocation. Section 3 seeks input from respondents on their planning and preparation for IPv6.

The survey as presented to respondents is set out in Appendix 1.

3.1.3 Communication

A very comprehensive promotional program was launched by APNIC staff to encourage participation. This was very successful in that the response level was almost twice that of the previous survey. It should be stressed that APNIC staff have no access to any respondent data that would allow APNIC staff to identify an individual respondent.

To encourage participation APNIC offered to provide three prizes to be balloted for by participants.

3.1.4 Confidentiality

While individuals were asked to provide their names, email and organisation this was purely to identify valid entries and to allow KPMG to raise any queries in regard to individual responses. Respondents can be assured that this information will remain confidential to KPMG.

4 Response range and sources

There were 604 responses received, of these responses 601 were valid. 564 Members and 37 Stakeholders completed the surveys. This response level roughly doubles the number of responses received in the 2007 APNIC Member Survey. It is probable that three of the factors promoting this high level of completion were:

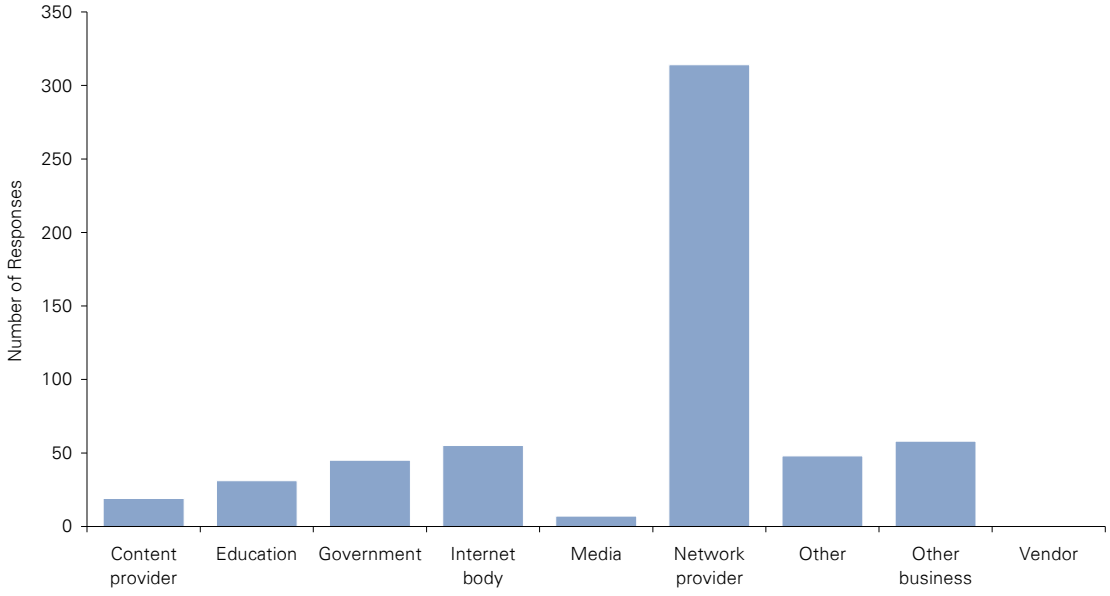
1. The ease of online responding using an online survey tool;

2. The offer of three prizes for completing the survey; and

3. The genuine interest by Members and their positive approach to APNIC evidenced in the survey responses.

The following charts outline the organisational classification, the economy, the membership category and the number of years of APNIC membership of the 601 survey respondents.

4.1 Organisation classification



The organisation classification with the highest number of responses from members was 'Network Provider'. The highest number of responses from Stakeholders was in the category 'Internet Body'.

4.2 Country / economy

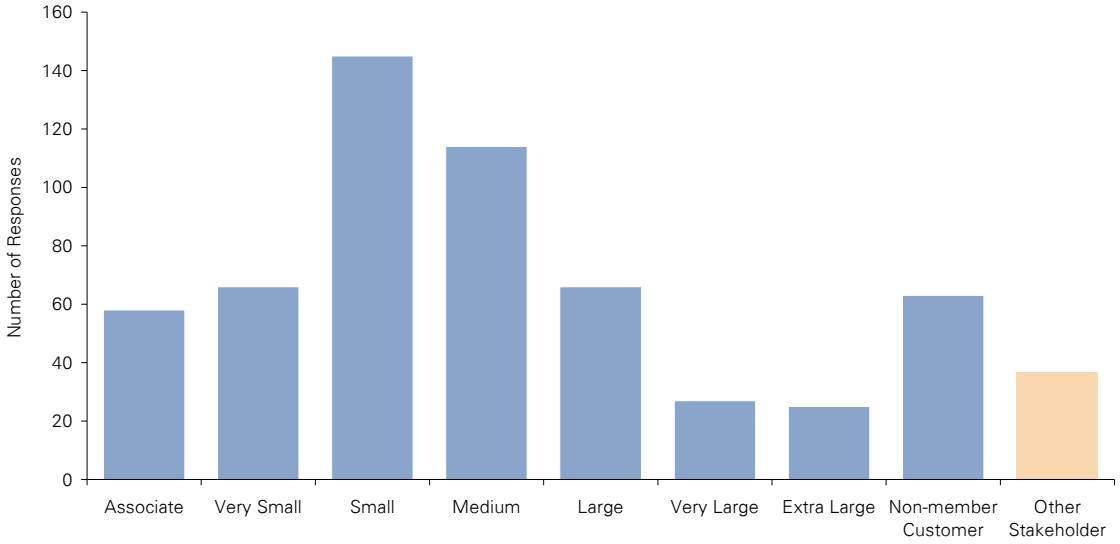
The 601 responses were provided by respondents from 44 economies predominantly located within the Asia-Pacific region. Australia (22.3%) accounted for the greatest number of respondents, followed by India (10.7%).

ISO Code	Country/Economy	Number of Responses	Proportion of Responses[1]
af	Afghanistan	1	11.1%
ap[2]	Asia-Pacific Economies	6	8.1%
au	Australia	134	26.3%
at	Austria	1	N/A
bd	Bangladesh	25	32.5%
be	Belgium	1	N/A
bt	Bhutan	1	25.0%
bn	Brunei Darussalam	1	33,3%
kh	Cambodia	7	24.1%
ca	Canada	1	N/A
cn*	China	20	80.0%
ck	Cook Islands	1	100.0%
fj	Fiji	6	54.5%
fr	France	1	N/A
gu	Guam	2	28.6%
hk	Hong Kong	27	17.9%
in	India	64	26.2%
id*	Indonesia	47	146.9%
jp*	Japan	25	39.1%
jo	Jordan	1	N/A
kr	Korea, Republic Of	2	40.0%
la	Lao People's Democratic Republic	1	20.0%
lu	Luxembourg	1	50.0%
my	Malaysia	22	35.5%
mv	Maldives	3	75.0%
mx	Mexico	1	N/A
mn	Mongolia	12	50.0%
np	Nepal	5	33.3%
nc	New Caledonia	2	33.3%
nz	New Zealand	36	29.8%
pk	Pakistan	16	28.6%
pg	Papua New Guinea	2	28.6%
ph	Philippines	40	43.0%
ro	Romania	1	N/A
sg	Singapore	18	20.7%
lk	Sri Lanka	12	85.7%
se	Sweden	1	N/A
ch	Switzerland	1	N/A
tw*	Taiwan	17	63.0%
th	Thailand	27	38.0%
to	Tonga	1	50.0%
us	United States	1	N/A
um	United States Minor Outlying Islands	1	N/A
vn*	Vietnam	6	300.0%
	Total	**601**	

[1] This is simply a ratio of responses against APNIC members in these countries.
[2] ap stands for Asia Pacific Economies, which does not have an ISO Code.
* Highlights existence of NIR.

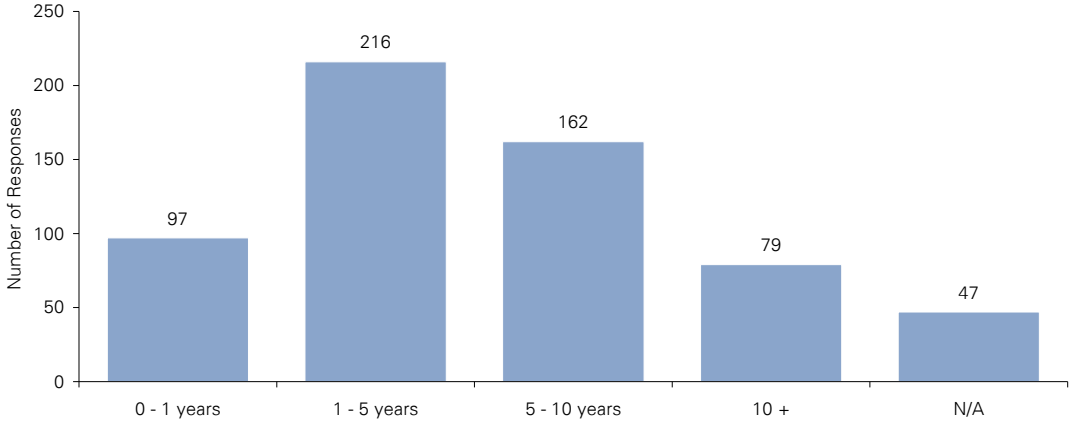
4.3 Membership category

The membership category with the most frequent number of responses was 'Small' accounting for 24.1% of respondents followed by 'Medium' (19% of respondents). Throughout the survey, respondents have been divided into two categories: Members (blue) and Stakeholders (pink) based on their response to this question[3].



4.4 Membership length

Respondents with a membership length of 1 – 5 years accounted for 35.9% of respondents.



[3] Members and Stakeholders have been categorised based on their response to question labelled I-4 Your Membership Category in the survey. Stakeholders have been classified as respondents identifying themselves as 'Other Stakeholder'. Respondents in all other categories have been classified as Members.

5 Survey responses

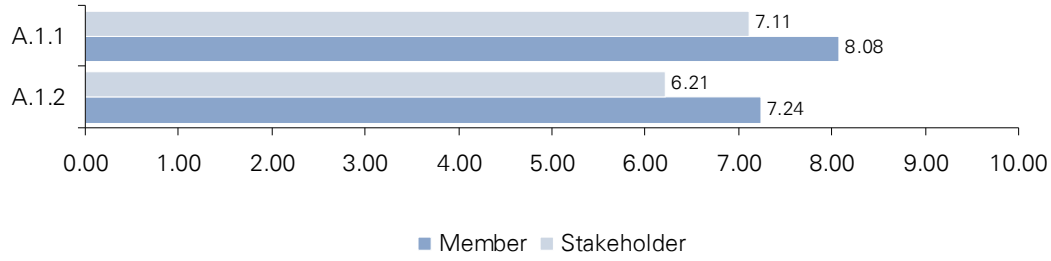
The following analysis presents a summary of the survey results, including some comments, by individual questions. Once more, respondents have been divided into two groups, Members and Stakeholders according to their response to question I-4 Membership Category. The analysis is divided into three sections: 5.1 Assessment of APNIC activities; 5.2 APNIC future resources; and 5.3 IPv6 readiness. Each section contains individual sub-sections as categorised in the survey.

The results for Section 5.1 are outlined on a scale of 1 to 10 and on a scale of 1 to 100 for Section 5.2. Results for Section 5.3 were collected on three different scales: a Yes / No basis; 1 to 10; and 1 to 100 and have been outlined accordingly. Where applicable, a summary of comments made is presented after relevant questions. Further charts comparing the means across relevant questions can be found at the end of each sub-section. In the survey, where a respondent indicated "N/A" no score was recorded in the analysis. This analysis also notes the topics under which the groups of questions were listed on the survey form. It should be noted that the comment appraisal should be seen only as a very brief summary. All comments received for each issue / question are contained in Appendix 2.

5.1 Assessment of APNIC activities

For most questions, a maximum score of 10 and minimum score of one was recorded indicating a range of nine for the majority of questions. Question A1-1 recorded a maximum score of 10 and a minimum score of two was recorded signifying a range of eight.

5.1.1 Services summary



A relatively higher mean score was noted in question A1-1 from Members and Stakeholders. This indicated that Members and Stakeholders have a stronger level of agreement that services provided by APNIC are satisfactory.

A1-1. The overall services provided by APNIC are satisfactory			
	Mean	Standard Deviation	Number of Responses
Members	8.08	1.61	515
Stakeholders	7.11	1.59	28

Comments summary:

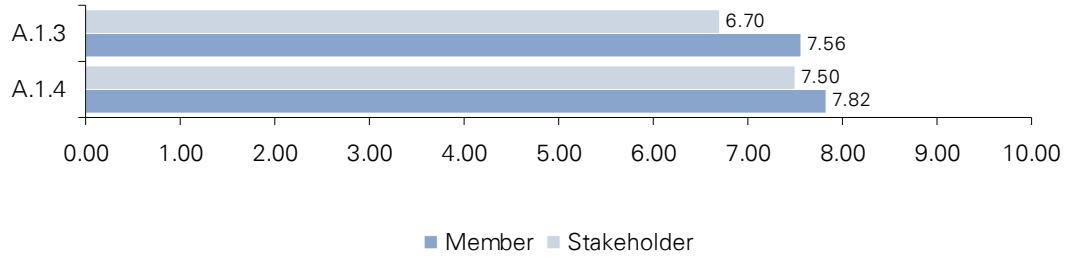
Member comments were generally positive and highlighted the overall service provided by APNIC as very satisfactory. A small number of respondents noted that response times from the helpdesk were quite slow, however a marked improvement had been acknowledged by participants. Individual respondents identified particular problems that they had experienced and constructively suggested solutions.

A1-2. The value members get from APNIC justifies the cost			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.24	1.99	499
Stakeholders	6.21	2.64	19

Comments summary:

Member comments ranged from justified costs, well below expectations and unknown. The justification of costs varied between countries and size of the organisation. Individual respondents indicated solutions such as a discount to poorer countries and non-profit organisations. Some smaller organisations regarded costs as a problem. One Stakeholder commented that the costs should be 'related strictly to the resources required to assign and maintain an IP allocation to the member.'

5.1.2 Resource services summary



The differences between Member and Stakeholder mean scores were marginal indicating both Members and Stakeholders have a high level of agreement over resource services.

A1-3. The processes and requirements to obtain IPv4, IPv6 or ASN resources are clear and straightforward			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.56	1.86	508
Stakeholders	6.70	2.60	27

Comments summary:

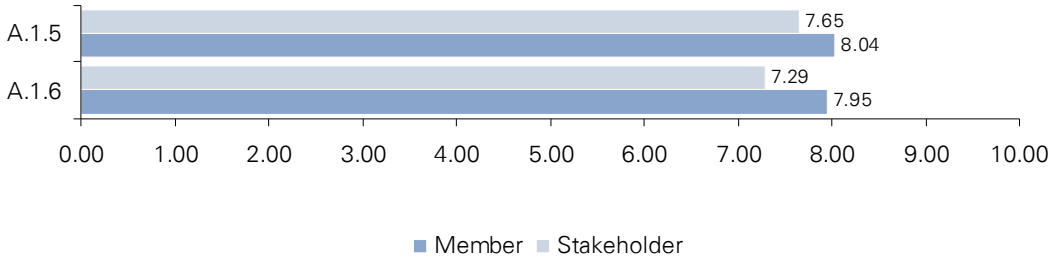
Member comments were equally split between respondents regarding clarity and straightforwardness of processes and requirements. Individual respondents noted the technical and legal manner used in documentation and required more 'user-friendly' wording. Members also noted support staff as helpful in providing additional information. Minimal Stakeholder comments indicated that the processes and requirements were unclear or 'too hard'.

A1-4. APNIC resource allocation services (IPv4, IPv6 or ASN) are adequate in response time and relevance			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.82	1.65	502
Stakeholders	7.50	1.65	22

Comments summary:

Some members indicated longer wait times for larger requests however, the comments were generally positive. The limited Stakeholder responses were positive.

5.1.3 Member services summary



The differences between Members and Stakeholder mean scores was marginal indicating both Members and Stakeholders have a high level of agreement over member services.

A1-5. The APNIC helpdesk is easy to contact			
	Mean	**Standard Deviation**	**Number of Responses**
Members	8.04	1.72	492
Stakeholders	7.65	2.17	23

Comments summary:

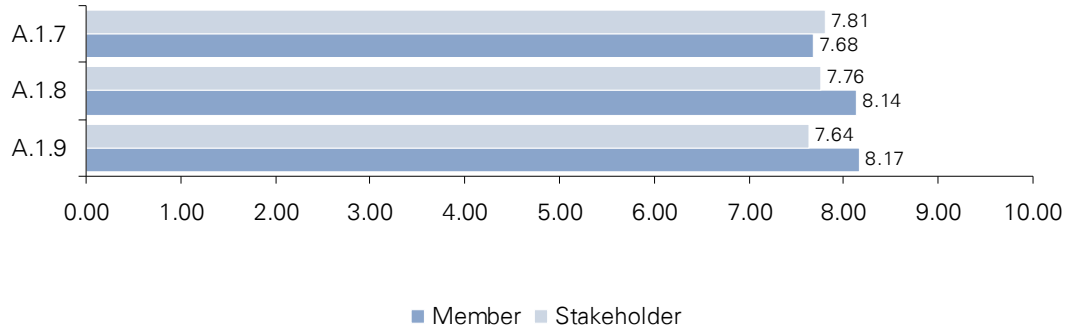
Members view the helpdesk as satisfactory and a favourable response to the online chat tool was noted. Individual respondents commented that the response time was not fast enough and many respondents indicated they would like a 24-hour service. The only Stakeholder comment indicated that they had not used this service.

A1-6. The APNIC helpdesk provides timely and appropriate responses to enquiries			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.95	1.75	491
Stakeholders	7.29	2.19	21

Comments summary:

Member comments were divided between timely and untimely. Respondents noting untimely responses indicated a response time of the same business day as appropriate. Two respondents commented that they received no response on one occasion. The only Stakeholder response indicated that they had no experience with the helpdesk.

5.1.4 Online services summary



Members and Stakeholders had a strong level of agreement over the online services provided by APNIC.

A1-7. MyAPNIC operates at a high level of quality, usability and reliability			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.68	1.85	486
Stakeholders	7.81	1.80	16

Comments summary:

Members indicated MyAPNIC was slow and difficult to navigate; others noted issues with security certificates. Other Members indicated a more positive experience. Stakeholder comments indicated that they had never used MyAPNIC, however those that had used the service offered solutions to their concerns.

A1-8. APNIC whois database operates at a high level of quality, usability and reliability			
	Mean	**Standard Deviation**	**Number of Responses**
Members	8.14	1.58	509
Stakeholders	7.76	2.45	25

Comments summary:

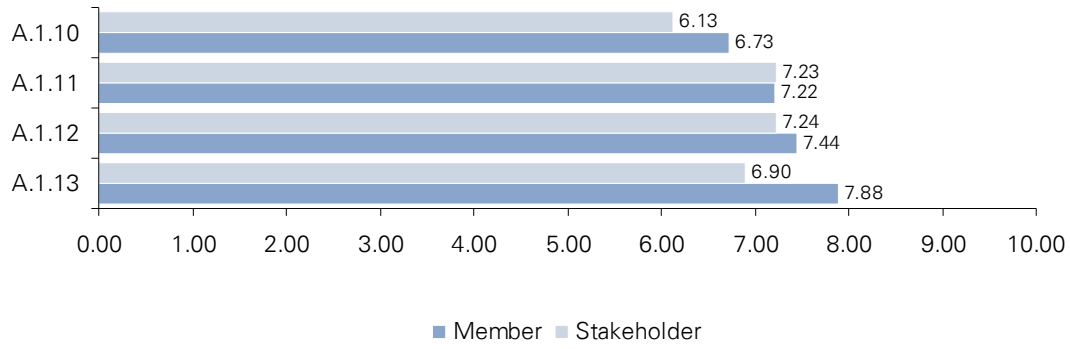
Members view this very positively. Some concerns were raised about out of date data and issues on deleting old users from the list. Similarly, Stakeholder comments were mostly positive and those with concerns offered suggested improvements.

A1-9. Reverse DNS services operate at a high level of quality, usability and reliability			
	Mean	**Standard Deviation**	**Number of Responses**
Members	8.17	1.60	494
Stakeholders	7.64	2.53	25

Comments summary:

Comments were generally positive however, Members indicated that the services could be improved by including more useful tools like ‘bulk updates’ as it is timely to update reverse DNS. Stakeholders agree, adding ‘there needs to be a better way of automating interaction with DNS’.

5.1.5 Training services summary



Members and Stakeholders recorded the lowest means in Training services question A1-10. The results indicated that Members and Stakeholders did not accept that face-to-face training was readily available in their region.

A1-10. APNIC face-to-face training is readily available in my region			
	Mean	**Standard Deviation**	**Number of Responses**
Members	6.73	2.40	414
Stakeholders	6.13	2.77	15

Comments summary:

Responses from both Members and Stakeholders indicated that more training sessions were needed in more regions and more places need to be available at current training sessions.

A1-11. APNIC training meets my expectations			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.22	2.08	365
Stakeholders	7.23	2.28	13

Comments summary:

Attendees of training sessions have indicated positive experiences however; some respondents have indicated no knowledge of training available. Individual Members have indicated that they would like more / advanced training. No Stakeholder comments were received.

A1-12. APNIC tutorials and workshops are set at the correct levels			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.44	1.75	376
Stakeholders	7.24	2.22	17

Comments summary:

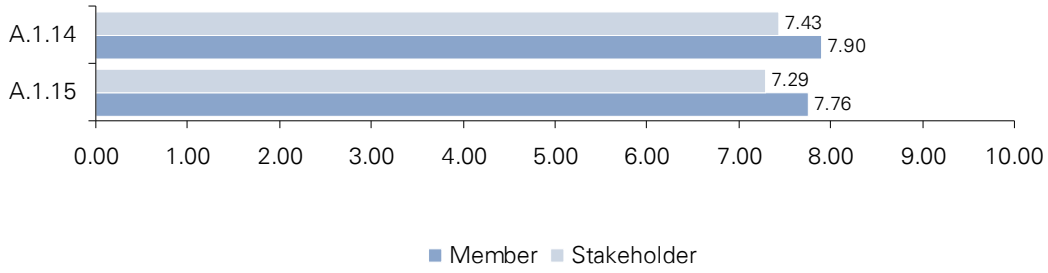
This was viewed as positive. Respondents indicated a need for more advanced training. One Stakeholder indicated that there was too much training about how to use APNIC services.

A1-13. APNIC should establish an open funding mechanism to support training and education for organisations in need within the region			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.88	1.95	460
Stakeholders	6.90	2.75	20

Comments summary:

Member and Stakeholder responses were generally positive however many respondents seek further information on how the project would be funded.

5.1.6 Communications summary



A1-14. APNIC communicates useful and relevant information			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.90	1.66	495
Stakeholders	7.43	2.13	28

Comments summary:

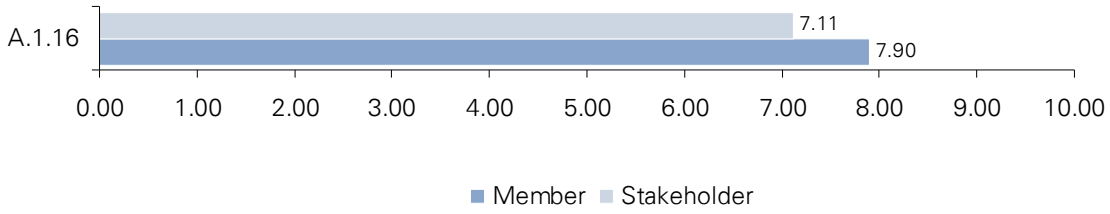
A limited number of comments provided a generally positive response. A few respondents including both Members and Stakeholders indicated irrelevant communications.

A1-15. APNIC communicates in a way that meets my needs			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.76	1.76	496
Stakeholders	7.29	2.48	28

Comments summary:

Members generally regarded the communication as satisfactory. One Stakeholder indicated that this was not always the case.

5.1.7 Website summary



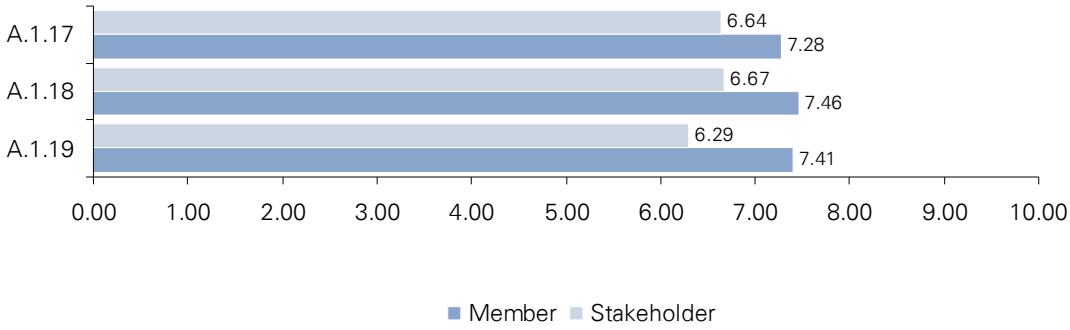
Members recorded a marginally higher mean score however, Members and Stakeholders have a high level of agreement over web site services.

A1-16. The APNIC website helps me understand the activities of APNIC			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.90	1.63	500
Stakeholders	7.11	2.10	27

Comments summary:

Comments were split between positive and room for improvement. Members had positive responses including 'the website has it all'. Stakeholders commented that the website needs to be more 'user friendly'.

5.1.8 Policy summary



Members recorded a higher mean score that indicated a higher level of agreement for policy services. Stakeholders had a satisfactory level of agreement over policy services.

A1-17. The APNIC policy development process is easy to understand			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.28	1.78	480
Stakeholders	6.64	2.25	25

Comments summary:

Member responses were generally positive with only two respondents indicating that they experienced difficulties in understanding the process. Similarly, minimal Stakeholder comments were positive.

A1-18. The APNIC policy development process is an effective way of developing resource management policy			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.46	1.69	467
Stakeholders	6.67	2.28	24

Comments summary:

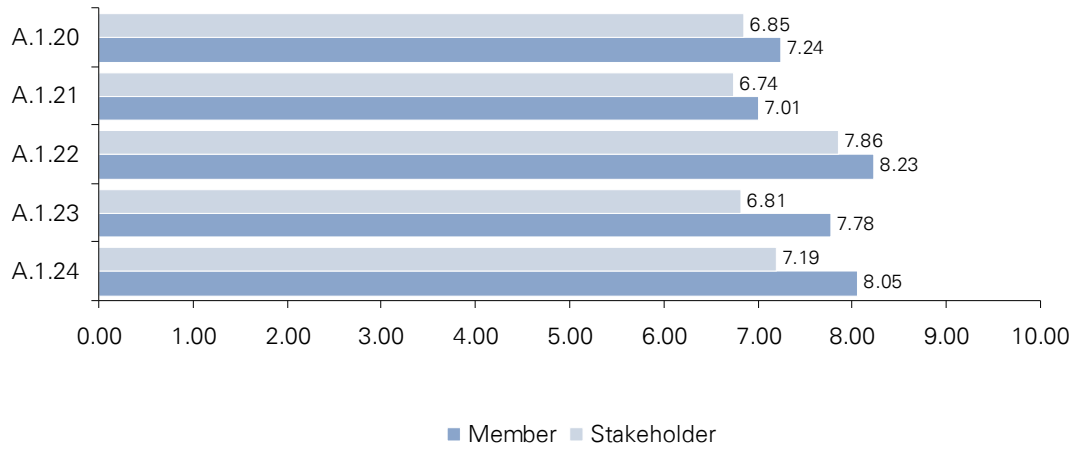
Responses varied between positive and negative. Individual respondents indicated that they had not been involved in the process and one questioned how representative the process is for the region when most participants do not speak out. Stakeholder responses were generally positive.

A1-19. The current policy development process provides me with the tools to participate in the process			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.41	1.73	462
Stakeholders	6.29	2.61	24

Comments summary:

Respondents were equally split between positive and negative. Of the individual responses, one Member indicated that participation was not acknowledged, whilst other Members suggested improvements to MyAPNIC and Whois. Minimal responses from Stakeholders indicated that tools were not available to them.

5.1.9 Meetings and community summary



Members and Stakeholders recorded the highest mean score in this question. The results indicated that Members and Stakeholders agreed on APNIC's involvement in regional activities.

A1-20. The content and activities of APNIC meetings are at a level of importance and interest that I want to attend			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.24	1.98	450
Stakeholders	6.85	2.43	26

Comments summary:

Results from Members were generally positive for wanting to attend however many respondents raised issues with the location of the meetings and the costs involved with being able to attend. One Stakeholder indicated the need for only one meeting per year whilst another indicated topics were too far behind the times.

A1-21. The remote participation options (video and audio streams, live session transcripts, chat rooms, and archived media) are easy to use			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.01	1.95	379
Stakeholders	6.74	2.40	23

Comments summary:

Many respondents both Members and Stakeholders indicated they had never heard or used this service. Individual respondents commented that the service interfered with local networks and that they could not use the service due to their company's security policy.

A1-22. APNIC should be involved with activities and events of operator groups, ISP associations, government and educational institutions in the region			
	Mean	**Standard Deviation**	**Number of Responses**
Members	8.23	1.68	486
Stakeholders	7.86	2.49	28

Comments summary:

Respondents recorded very positive comments. Some Members queried how APNIC would help, whilst others said APNIC should lead rather than be involved. Stakeholders were also in agreement as to APNIC involvement.

A1-23. APNIC effectively represents the interests of Asia-Pacific network operators in global forums			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.78	1.76	468
Stakeholders	6.81	2.50	27

Comments summary:

Responses were generally positive. Individual respondents raised the issue of APNIC not being able to represent the interest of network providers. One Member commented that '...APNIC cannot represent any network operators.' Stakeholder comments were generally positive.

A1-24. APNIC should have higher level representation to liaise with governments and industry across the region			
	Mean	**Standard Deviation**	**Number of Responses**
Members	8.05	1.75	473
Stakeholders	7.19	2.53	26

Comments summary:

Most respondents indicated a need to liaise with governments; one Member commented 'Governments need leadership from APNIC.' One Stakeholder noted this as being a 'double

edged sword' as there may be some advantages but resources may be diverted from core work and may attract unwanted pressures and interests.

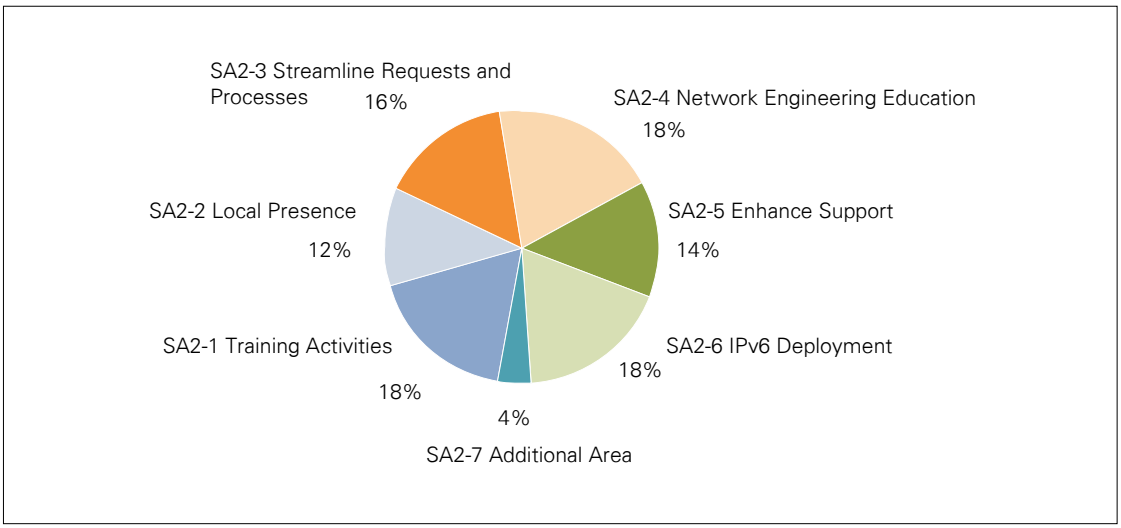
5.2 APNIC future resource allocation

In this section, Members were asked to prioritise their future needs by allocating a maximum of 100 points in each of three sub-sections. The sub-sections: Services; Communications; and Technical respectively contained six, eight and six specific questions relating to the sub-section. At the end of each sub-section, there was an option for an additional area for resource allocation nominated by the respondent and a section for comments.

There were minimal comments received concerning APNIC's future resource allocation. Respondents appear to have concentrated on allocating points to support their views on future resource allocation.

5.2.1 Services

5.2.1.1 Members

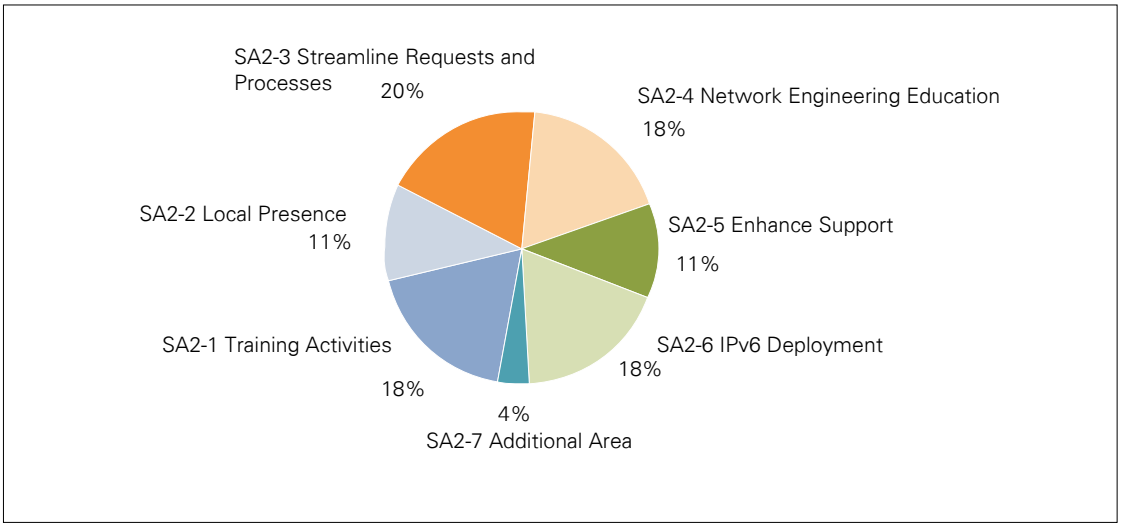


Members recorded 18% in the Services questions SA2-1, SA2-4, SA2-6. This indicated future resource allocation to: expand training activities in scope, geographical coverage and online options; support network engineering education in the Asia-Pacific region; support of IPv6 deployment as priorities. The low percentage recorded in SA2-7 indicates a low number of responses were received for additional service areas to be considered for future resource allocation.

Summary of Services question - Members				
	Mean	Standard Deviation	Max	Min
SA2-1	18.30	10.49	80	0
SA2-2	12.08	11.09	100	0
SA2-3	16.29	11.59	100	0
SA2-4	20.29	9.63	50	0
SA2-5	14.33	8.88	60	0
SA2-6	18.60	11.56	80	0
SA2-7	4.22	9.04	100	0

Additional Resources: Respondents indicated a need to expand through Asia-Pacific in countries such as Thailand and Indonesia and allocate more resources to IPv4 exhaustion issues. Training was also highlighted for additional resources. Whilst the data indicates 100 points was allocated to additional resources, no suggestion was highlighted.

5.2.1.2 Stakeholders



Stakeholders recorded the highest percentage (20%) in Services question SA2-3. This signifies that Stakeholders consider allocating future resources to streamline resource requests and allocation processes as a priority. The low percentage recorded in SA2-7 indicates a low number of responses were received for additional service areas to be considered for future resource allocation.

Summary of Services question - Stakeholders				
	Mean	Standard Deviation	Max	Min
SA2-1	19.50	11.44	50	0
SA2-2	11.86	11.03	30	0
SA2-3	20.42	12.45	50	1
SA2-4	18.87	14.07	60	0
SA2-5	12.05	7.42	30	0
SA2-6	19.00	10.89	40	0
SA2-7	4.00	5.42	15	0

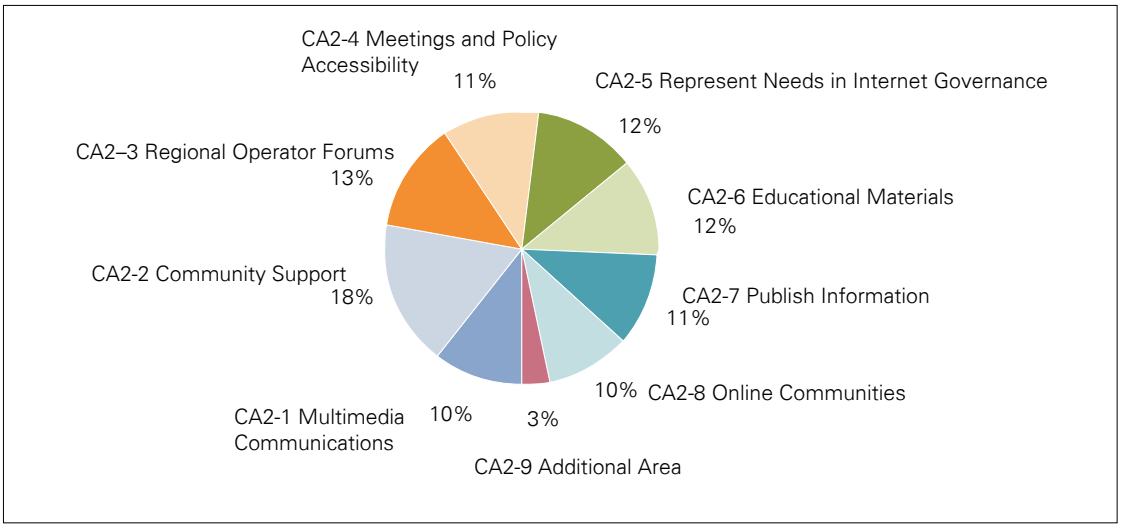
Additional Resources: A Stakeholder indicated a need to expand throughout the Asia-Pacific.

Comments summary:

Member comments on service areas for future resource allocation ranged from developing training software and materials to indicating APNIC should focus on requests and allocations only. Issues raised included expanding and improving current services and removing 'knowledge barriers'. Stakeholders indicated education and training as a barrier and IPv6 deployment.

5.2.2 Communication

5.2.2.1 Members

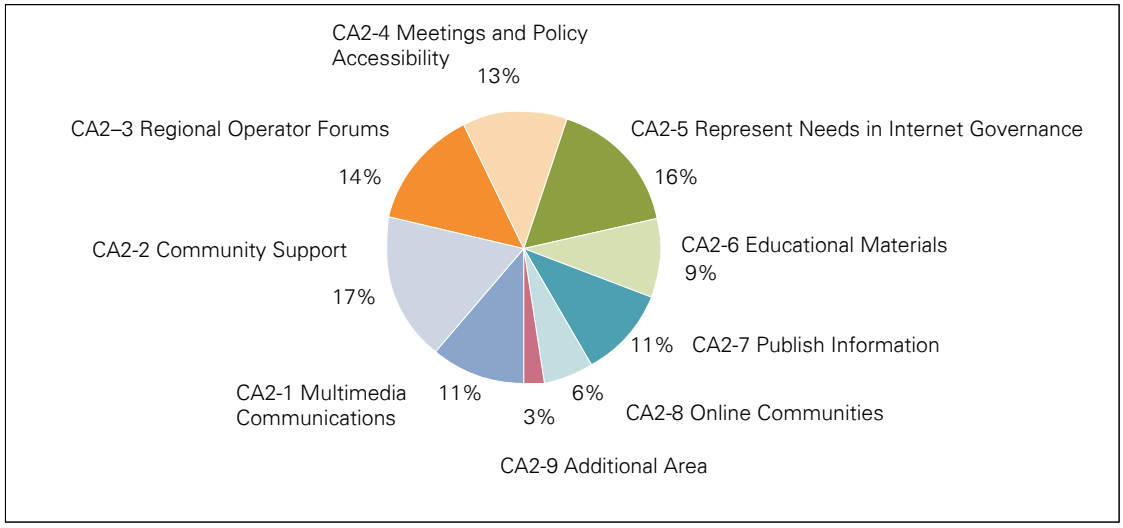


Members recorded the highest percentage (18%) in the Communications questions CA2-2 indicating future resource allocation to increase the support of the community's efforts to adopt IPv6 is a priority. The low percentage recorded in CA2-9 indicates a low number of responses were received for additional communications areas to be considered for future resource allocation.

Communications Summary - Members				
	Mean	Standard Deviation	Max	Min
CA2-1	10.97	7.17	50	0
CA2-2	18.01	12.15	100	0
CA2-3	13.75	8.00	100	0
CA2-4	11.61	6.90	50	0
CA2-5	12.89	7.19	50	0
CA2-6	12.23	8.10	95	0
CA2-7	11.37	6.95	50	0
CA2-8	10.40	6.25	45	0
CA2-9	3.41	8.04	100	0

Additional Resources: A limited number of responses were received on communications. Individual responses included emailing the weekly or monthly publication and having more language translations. Whilst the data indicates 100 points was allocated to additional resources no suggestion was highlighted.

5.2.2.2 Stakeholders



Stakeholders also recorded the highest percentage (17%) in the Communications questions CA2-2 indicating future resource allocation to increase the support of the community's efforts to adopt IPv6 is a priority. The low percentage recorded in CA2-9 indicates a low number of responses were received for additional communications areas to be considered for future resource allocation.

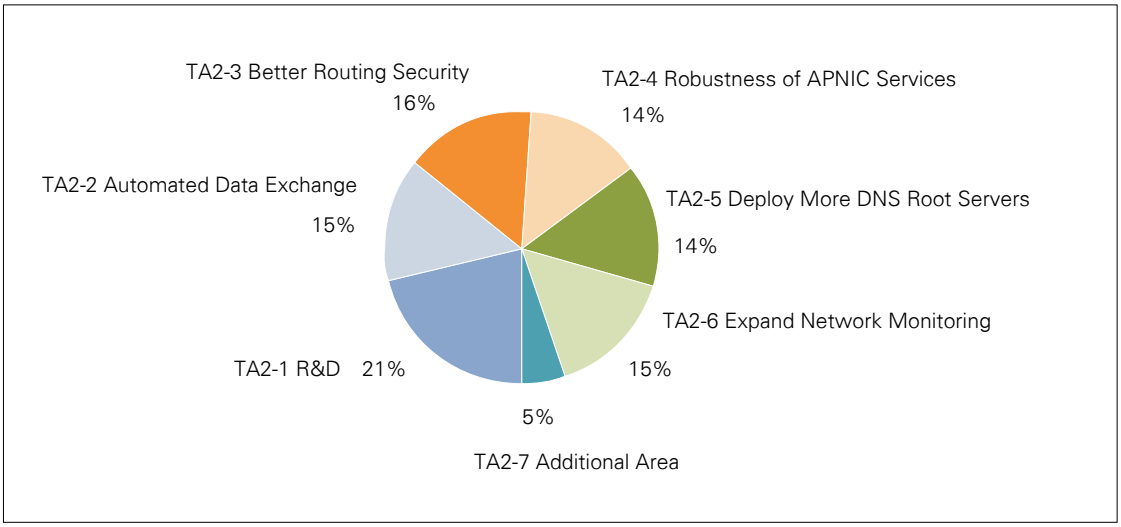
Communications Summary - Stakeholders				
	Mean	Standard Deviation	Max	Min
CA2-1	11.87	13.92	50	0
CA2-2	19.09	11.61	50	0
CA2-3	15.13	9.54	50	0
CA2-4	13.52	11.61	50	0
CA2-5	17.96	10.34	40	0
CA2-6	9.81	5.54	20	0
CA2-7	11.77	8.71	30	0
CA2-8	6.14	6.52	20	0
CA2-9	2.73	4.30	11	0

Additional Resources: A Stakeholder suggested communication in the Asia-Pacific region is verbal / personal.

Comments summary: A limited number of responses were received on communications. Individual responses included emailing the weekly or monthly publication and having more language translations.

5.2.3 Technical

5.2.3.1 Members

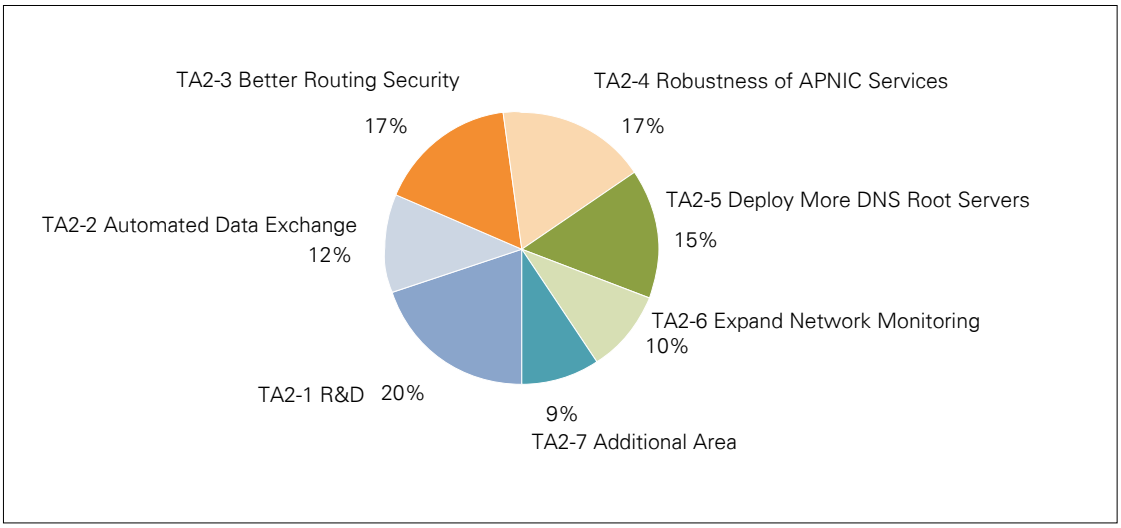


Members recorded the highest percentage (21%) in the Technical question TA2-1 indicating future resource allocation to research and development activities are seen as a priority. The low percentage recorded in TA2-7 indicates a low number of responses were received for additional technical areas to be considered for future resource allocation.

Technical Summary - Members				
	Mean	Standard Deviation	Max	Min
TA2-1	22.10	11.17	100	0
TA2-2	15.42	8.33	80	0
TA2-3	16.26	8.07	70	0
TA2-4	14.33	8.36	85	0
TA2-5	15.09	8.22	50	0
TA2-6	15.92	7.30	50	0
TA2-7	5.62	9.79	100	0

Additional Resources: Respondents indicated resources should be allocated to IPv6 implementation, Indonesia, DNS security reporting and developing partnership bodies to enhance shared infrastructure. Whilst the data indicates 100 points was allocated to additional resources no suggestion was highlighted.

5.2.3.2 Stakeholders



Stakeholders also recorded the highest percentage in (20%) score in the Technical question TA2-1 indicating future resource allocation to research and development activities are seen as a priority. The low mean score recorded in TA2-7 indicates a low number of responses were received for additional technical areas to be considered for future resource allocation.

Technical Summary - Stakeholders				
	Mean	Standard Deviation	Max	Min
TA2-1	21.57	10.79	40	0
TA2-2	12.82	9.17	30	0
TA2-3	18.09	10.02	40	0
TA2-4	19.04	10.48	50	10
TA2-5	16.67	14.57	50	0
TA2-6	10.57	7.53	30	0
TA2-7	10.33	20.03	70	0

Comments summary:

A limited number of responses indicated each technical area was equally important and that technical service resources are satisfactory allocated.

Additional Resources: Respondents indicated resources should be allocated to job opportunity expansion for technicians in developing countries and bots / security.

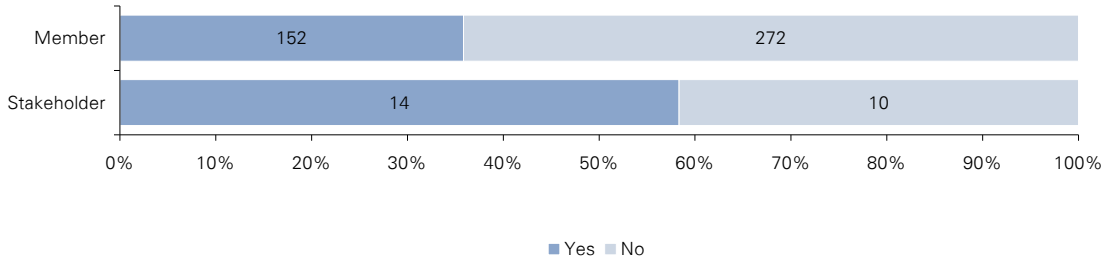
5.3 IPv6 readiness

The third part of the survey relates to IPv6 readiness and is divided into three sub-sections: Factual questions; Propositions; and IPv6 activities. The first section is recorded on a yes / no basis, the second section is on a scale of 1 to 10, and the third section is on a scale of 1 to 100. Of the comments received there is a trend of people requiring further training and more assistance with IPv6 deployment. The full list of comments made is outlined in Appendix 2.

5.3.1 Factual questions

The results outlined below contain the number of responses recorded for each question and provide a brief summary of the comments made.

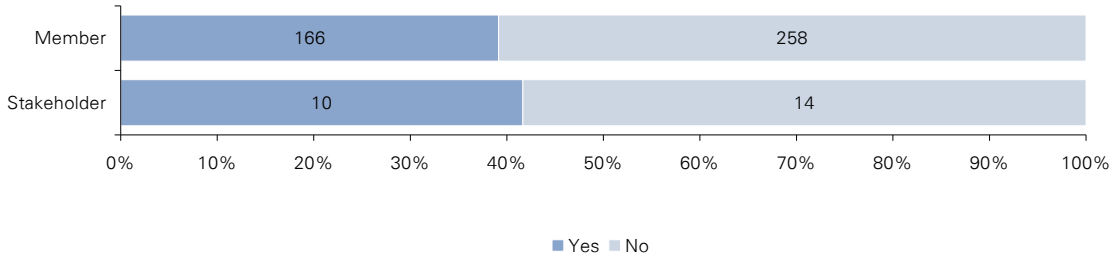
B1-1 Have you deployed or are you ready for immediate IPv6 deployment?



Comments summary:

Unlike the survey responses, Member comments indicated that they were still planning whilst more indicated that they had deployed. Members who have not yet deployed IPv6 indicated that they were still upgrading infrastructure, experienced economical issues or did not have the demand. Similarly, limited Stakeholder comments revealed that IPv6 has been deployed already or is ready to be deployed or that there is currently no demand.

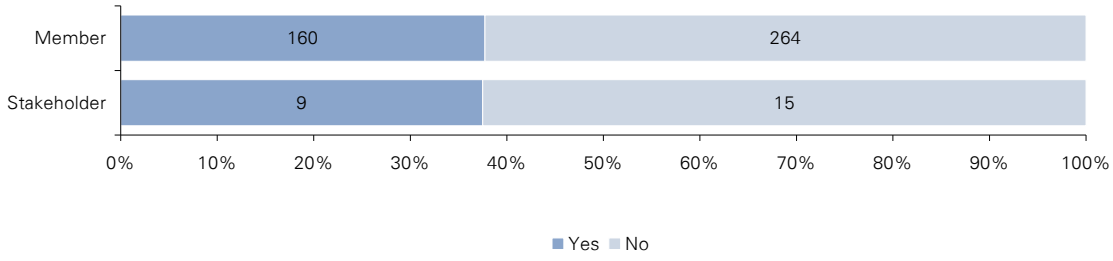
B1-2 Does your organisation have a formal plan to deal with the deployment of IPv6?



Comments summary:

Members indicated that they were in the planning stage or an informal plan was in place. Individual respondents indicated that it was hard to get the business to take IPv6 seriously. Of the limited Stakeholder responses, one Stakeholder indicated that their plan involved a number of upgrades while another Stakeholder indicated that a plan was unnecessary.

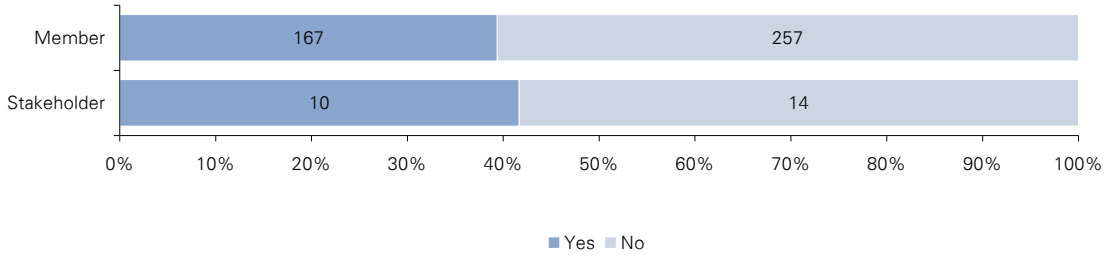
B1-3 Has your organisation budgeted for the future resource allocation for IPv6 deployment?



Comments summary:

Members indicated that they did not have a specific budget however, most are making sure that hardware and software purchases are IPv6 compliant. Similar responses were received from Stakeholders.

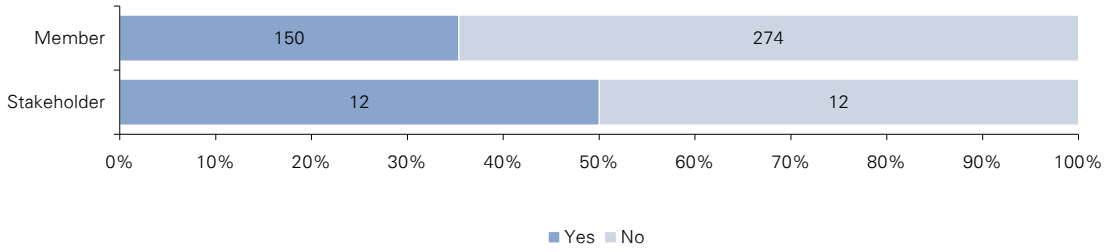
B1-4 Has your organisation allocated resources (human or financial) for IPv6 deployment?



Comments summary:

Members indicated that limited resources have been specifically allocated to IPv6 deployment. Similarly, Stakeholders recorded non-specific or no allocation of resources for IPv6 deployment.

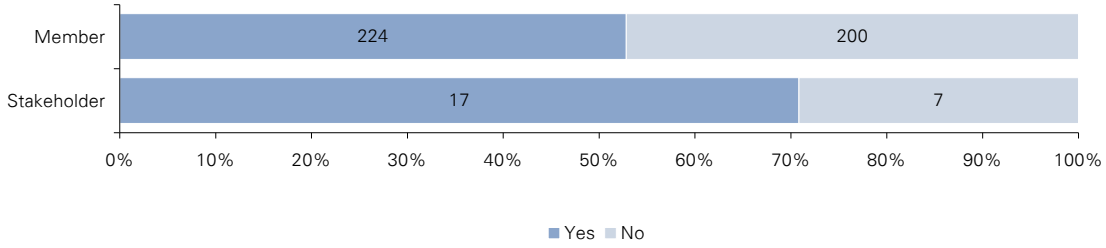
B1-5 Has your organisation received IPv6 addresses from an RIR, NIR or ISP?



Comments summary:

Unlike the survey responses, Member comments indicated that they had received IPv6 addresses, or were in the application process. Stakeholders indicated IPv6 is readily available and some IPv6 addresses have already been purchased.

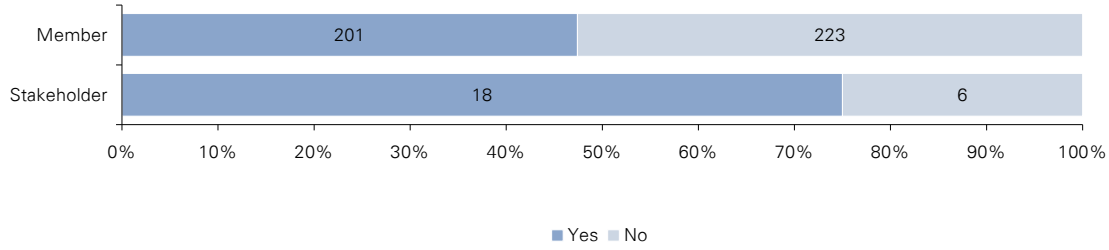
B1-6 Do you have the knowledge and expertise required to move to IPv6?



Comments summary:

Members indicated that they had some knowledge and expertise. Individual respondents indicated that they would like to acquire more knowledge and attend more training. Stakeholders recorded no comments.

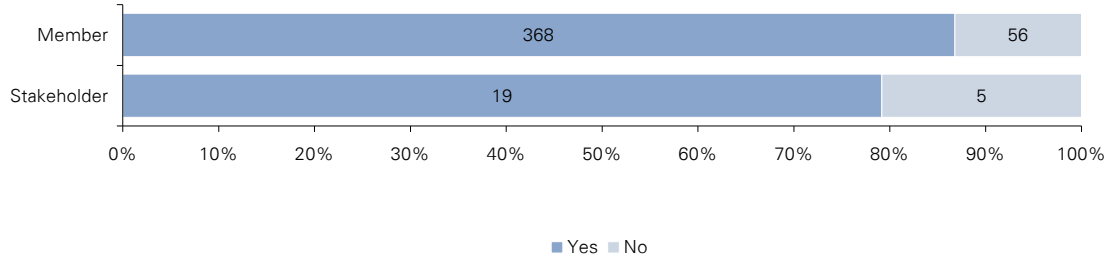
B1-7 Are IPv6-related information and training services easily available to you?



Comments summary:

Members recorded mixed responses with individual respondents indicating resources were available but they were unsure of which courses to take and courses were expensive so not all engineers have access to it. One Stakeholder indicated that this was not the case.

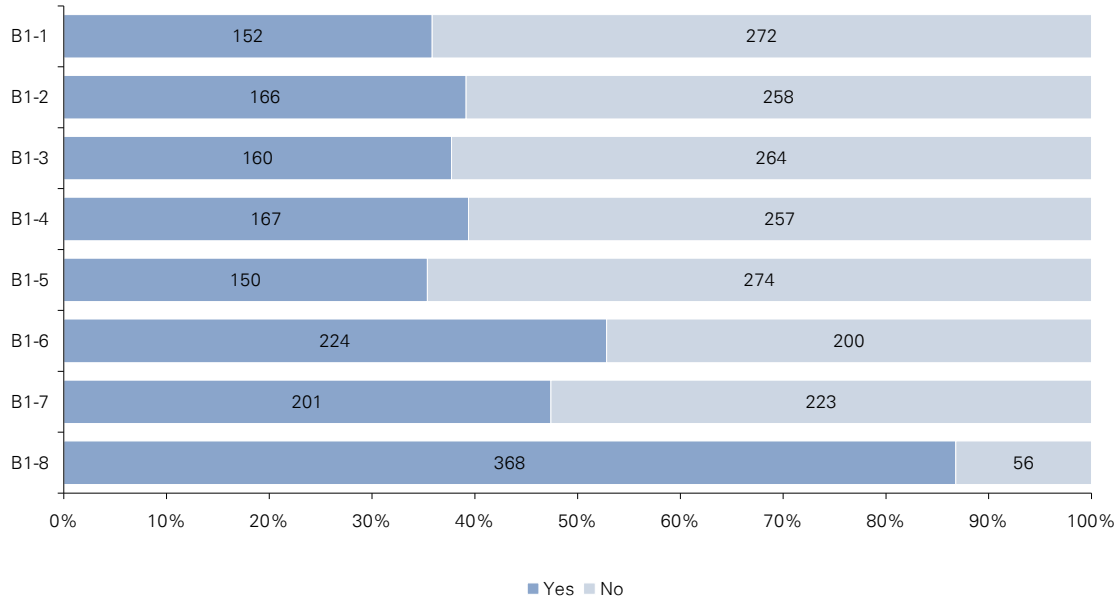
B1-8 Do you believe that it is important to have government support for IPv6 deployment?



Comments summary:

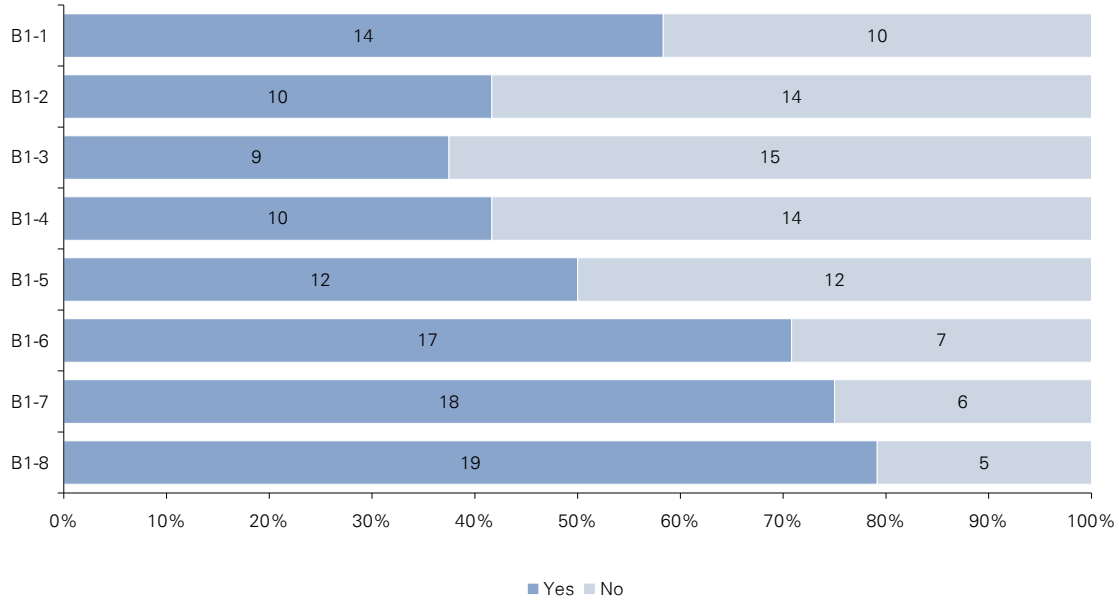
Member respondents indicated a need for government support in the deployment of IPv6. Only one respondent indicated no need for government support and commented that the internet was for 'technicians only.' Stakeholders agreed government support is needed however; one response indicated this was not the case in all countries.

5.3.1.1 Comparison of Member responses



Members recorded the highest number of positive responses to question B1-8 indicating that the majority of respondents agree that it is important to have government support for IPv6 deployment. Members recorded the highest number of negative responses in question B1-5 indicating a large portion of Members have not received IPv6 addresses from an RIR, NIR or and ISP closely followed by B1-1 indicating a large portion of Members have not yet deployed or are not ready for immediate IPv6 deployment.

5.3.1.2 Comparison of Stakeholder responses



Stakeholders recorded the highest number of positive responses to question B1-8 indicating that the majority of respondents agree that it is important to have government support for IPv6 deployment. Conversely, Stakeholders recorded the lowest number of responses in B1-4 indicating future resources had not yet been allocated to IPv6 deployment.

5.3.2 Propositions

B2-1. APNIC should have a bigger role in promoting IPv6 deployment within the AP region			
	Mean	Standard Deviation	Number of Responses
Members	8.44	1.72	418
Stakeholders	7.67	1.69	24

Comments summary:

Member responses indicated that APNIC should have a bigger role in promoting IPv6 deployment. Stakeholder responses indicated the same result. Comments from Members and Stakeholders both agreed that APNIC should not be the only body responsible.

B2-2. APNIC should permit transfers of IPv4 address space BEFORE the IANA pool is exhausted			
	Mean	Standard Deviation	Number of Responses
Members	7.89	2.19	408
Stakeholders	6.96	3.00	24

Comments summary:

Members reported conflicting comments with some saying allowing transfers prolongs the exercise and others saying transfers allow more time to adjust. Stakeholders are also unsure however, they have raised concerns and proposed solutions to the issues raised.

B2-3. APNIC should permit transfers of IPv4 address space WHEN the IANA pool is exhausted			
	Mean	Standard Deviation	Number of Responses
Members	6.12	2.87	403
Stakeholders	7.13	2.77	24

Comments summary:

Member comments indicated that APNIC should permit transfers before the IANA pool is exhausted. Stakeholder responses differed. One Stakeholder commented that permits should be surrendered to APNIC for reallocation.

B2-4. APNIC should recover unused IPv4 address space for regional redistribution			
	Mean	Standard Deviation	Number of Responses
Members	7.92	2.04	418
Stakeholders	7.58	2.43	24

Comments summary:

Members and Stakeholder questioned the definition of unused IPv4 addresses and mixed responses were received. Responses ranged from strong agreement to 'a waste of time and money'. Issues of how to recover were raised and solutions proposed.

B2-5. All RIRs should recover unused IPv4 address space for global redistribution			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.70	2.20	413
Stakeholders	7.50	2.64	24

Comments summary:

Member responses varied between the process being too resource intensive to only recovering oversubscriptions and dormant allocations. Stakeholders agreed strongly but again both Members and Stakeholders raised concerns with the definition of 'unused'.

B2-6. The current internet resource management systems are adequate to ensure effective global transition to IPv6			
	Mean	**Standard Deviation**	**Number of Responses**
Members	6.45	2.14	396
Stakeholders	5.48	2.19	23

Comments summary:

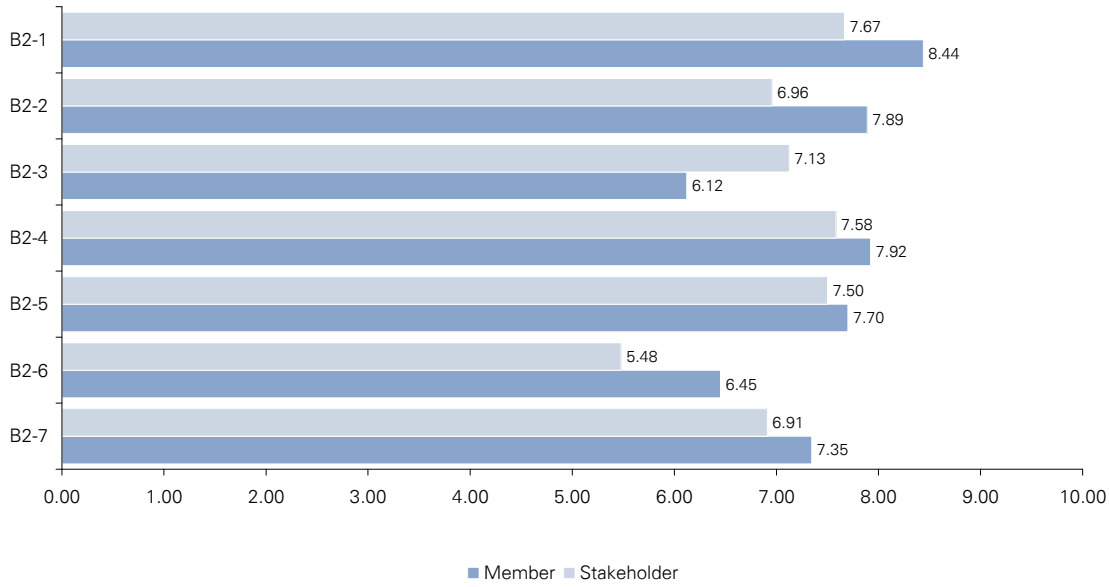
Member responses indicated Members were unsure or disagreed with the adequacy of current systems. Individual responses showed that Members think the management systems are adequate however not sufficient to manage IPv6 allocation. Stakeholder responses varied with some comments indicating that resource management systems were adequate whilst others noted areas for improvement.

B2-7. Governments should require IPv6 compliance within entities under their control			
	Mean	**Standard Deviation**	**Number of Responses**
Members	7.35	2.35	413
Stakeholders	6.91	2.97	23

Comments summary:

Member comments were equally split over the need for government intervention. Some Members commented that the level of intervention by government should be minimal and that market forces should drive the adoption of technology. Other Members agreed '100%'. Stakeholders' opinions ranged from unnecessary to necessary.

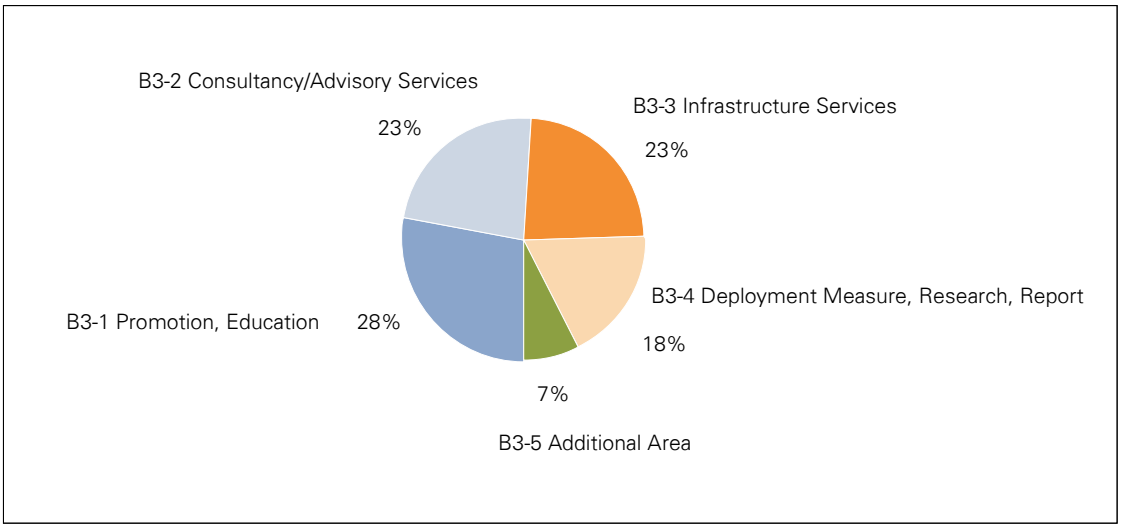
5.3.2.1 *Comparison of means for propositions*



Members recorded the lowest mean in question B2-3 indicating there was less agreement amongst Members over APNIC permitting transfers of IPv4 address space when the IANA pool was exhausted. Stakeholders recorded the lowest average in question B2-6 indicating that the level of agreement amongst Stakeholders was lower over the adequacy of internet resource management systems ability to ensure effective transition to IPv6.

5.3.3 IPv6 activities

Members

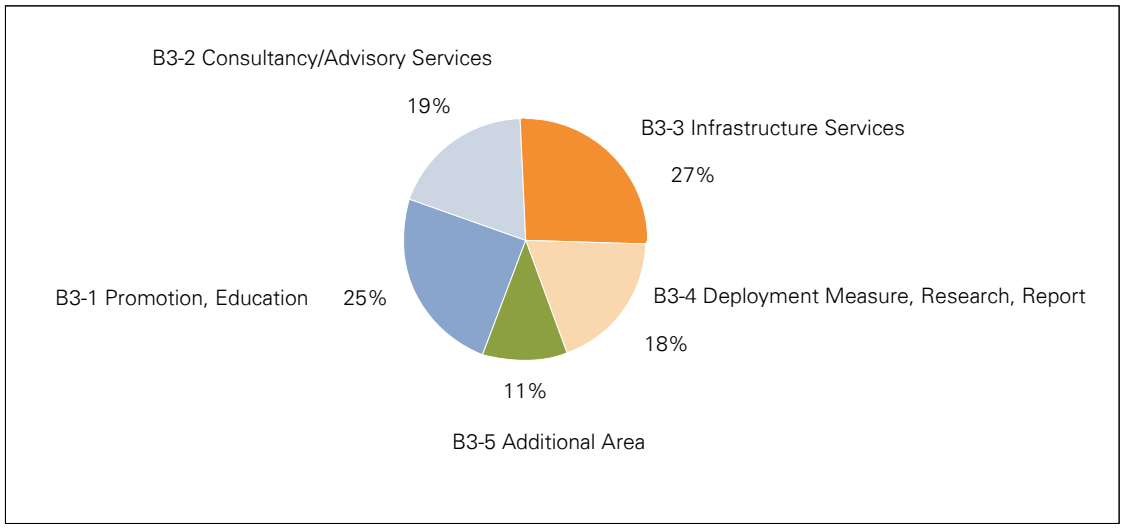


Members recorded the highest percentage for question B3-1 indicating future resource allocation to IPv6 promotion, education and / or training as a priority. The low percentage recorded in B3-5 indicates a low number of responses were received for additional IPv6 activities to be considered for future resource allocation.

IPv6 activities summary - Members				
	Mean	Standard Deviation	Max	Min
B3-1	29.43	11.23	70	0
B3-2	24.11	9.41	90	0
B3-3	24.38	9.45	100	5
B3-4	18.89	8.21	55	0
B3-5	7.78	11.01	75	0

Additional Resources: Additional areas for resources indicated by Members included information and training services, aligning IPv6 services with IPv4 – including certification and providing IPv6 test sites.

Stakeholders



Stakeholders recorded the highest percentage in question B3-3 indicating IPv6 infrastructures services as a priority. The low percentage recorded in B3-5 indicates a low number of responses were received for additional IPv6 activities to be considered for future resource allocation.

IPv6 activities summary - Stakeholders				
	Mean	Standard Deviation	Max	Min
B3-1	26.57	13.58	50	0
B3-2	20.50	11.26	50	0
B3-3	28.96	18.69	70	0
B3-4	19.58	10.52	50	8
B3-5	12.38	16.95	60	0

Additional Resources: Stakeholder comments included increasing public involvement, reusing and transferring IPv4 address space and making APNIC's online services robust.

Comments summary:

Members indicated that all areas of resource allocation were equally important, individual comments included 'awareness and understanding of the protocol needs to be made available' and 'someone will need to pay for the change from IPv4 to IPv6.'

6 Analysis and conclusions

6.1 Analysis

The level of response to this survey has provided a wealth of detailed information on Member and Stakeholder views, priorities and level of IPv6 readiness. Both Members and Stakeholders were in agreement in their positive assessment of APNIC activities. Members and Stakeholders differed in their priorities on the allocation of future resources in the area of APNIC services but were in agreement for the priority in the APNIC technical area. IPv6 readiness questions resulted in mixed responses from respondents.

The approach for this analysis has been to provide the main aspects in the report and put the bulk of the information in the Appendices. It must be stressed that before passing over these files ALL INFORMATION RELATING TO INDIVIDUAL RESPONDENTS HAS BEEN DELETED.

6.1.1 Assessment of APNIC activities

The means in this section ranged from 6.73 to 8.23 for Members and 6.13 to 7.86 for Stakeholders. The questions containing the highest and lowest means for both Members and Stakeholders are outlined below:

A1-22. APNIC should be involved with activities and events of operator groups, ISP associations, government and educational institutions in the region			
	Mean	Standard Deviation	Number of Responses
Members	8.23	1.68	486
Stakeholders	7.86	2.49	28

Members and Stakeholders recorded the highest mean score in this question. The results indicated that Members and Stakeholders agreed on APNIC's involvement in regional activities.

A1-10. APNIC face-to-face training is readily available in my region			
	Mean	Standard Deviation	Number of Responses
Members	6.73	2.40	414
Stakeholders	6.13	2.77	15

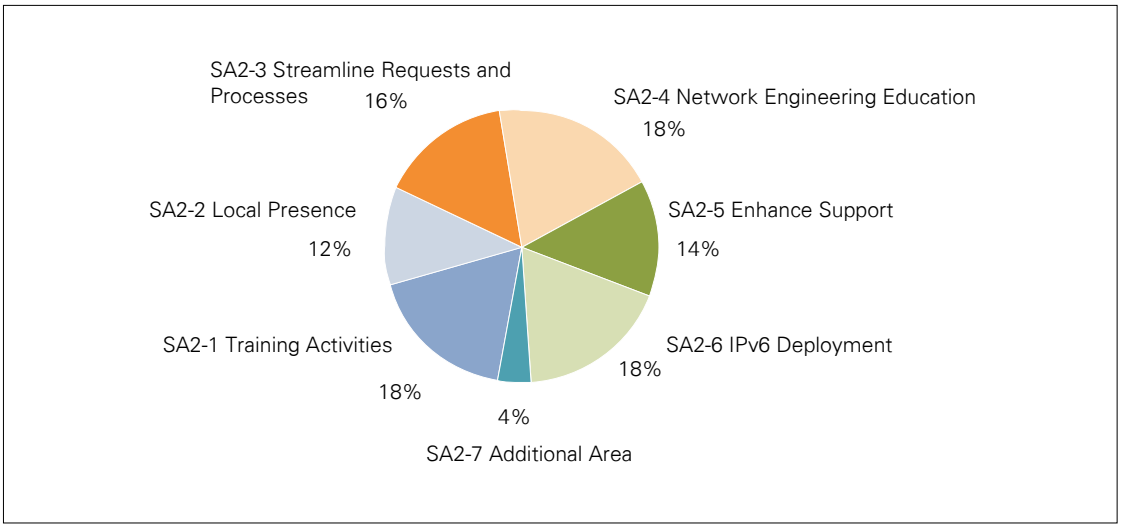
Members and Stakeholders returned the lowest mean score regarding APNIC face-to-face training. Member and Stakeholder results indicated varied availability of face-to-face training across economies.

6.1.2 APNIC future resource allocation

In this section, respondents were asked to prioritise their future needs by allocating a maximum of 100 points in each of three sub-sections.

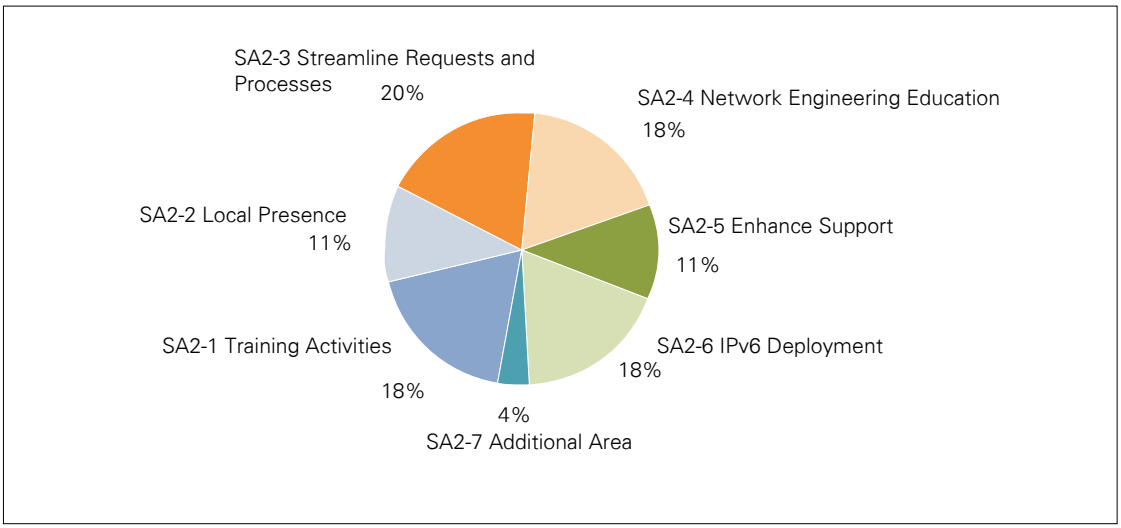
6.1.2.1 Services

Members:



Members recorded 18% in the Services questions SA2-1, SA2-4, SA2-6. This indicated future resource allocation to: expand training activities in scope, geographical coverage and online options; support network engineering education in the Asia-Pacific region; support of IPv6 deployment as priorities.

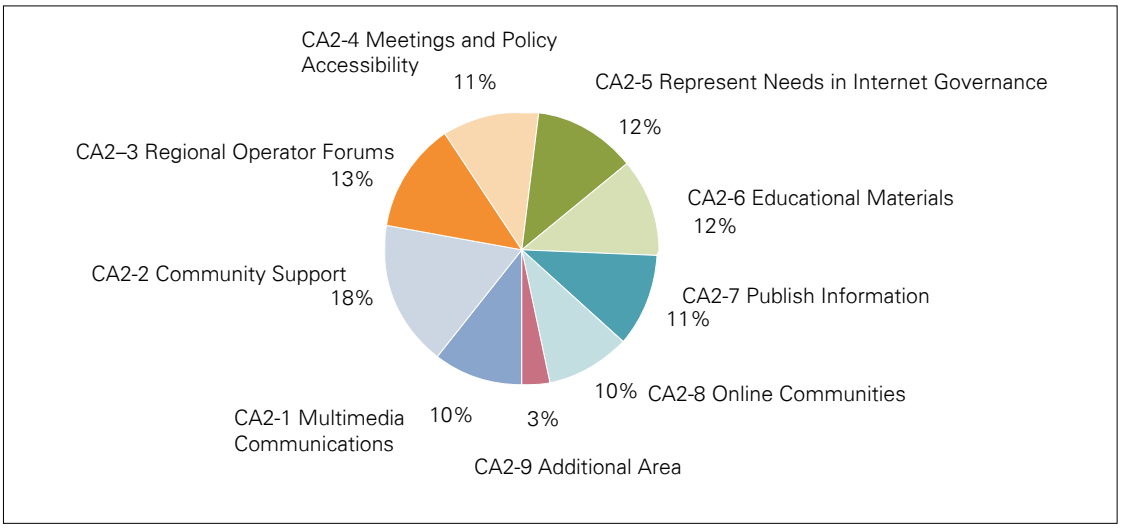
Stakeholders:



Stakeholders recorded the highest percentage (20%) in Services question SA2-3. This signifies that Stakeholders consider allocating future resources to streamline resource requests and allocation processes as a priority.

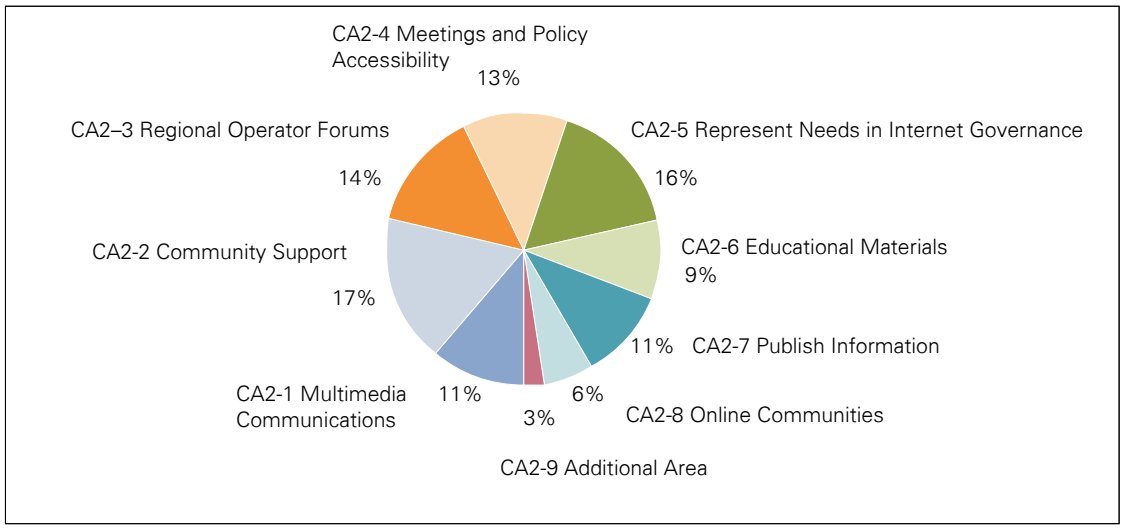
6.1.2.2 Communication

Members:



Members recorded the highest percentage (18%) in the Communications questions CA2-2 indicating future resource allocation to increase the support of the community's efforts to adopt IPv6 is a priority.

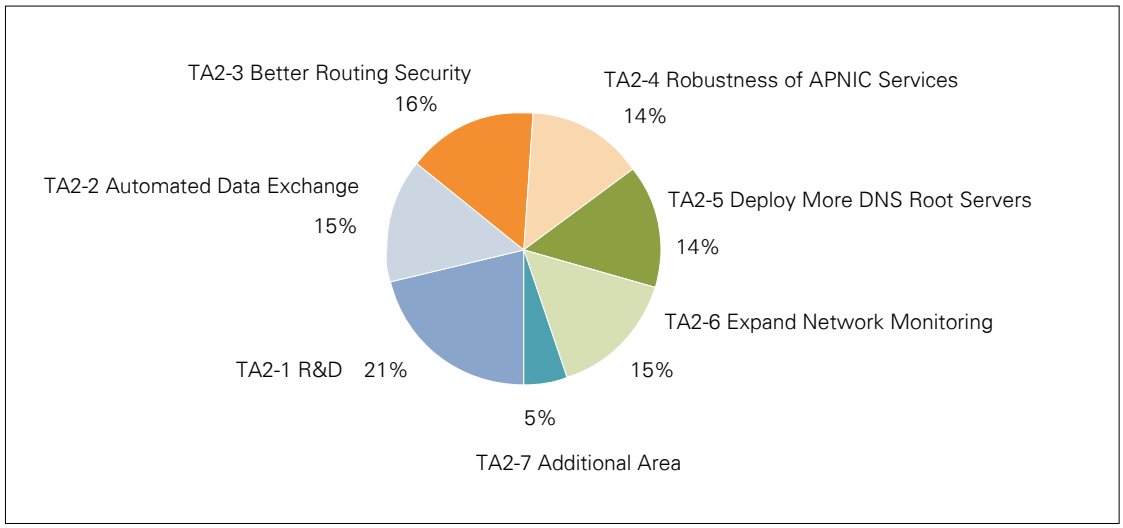
Stakeholders:



Stakeholders also recorded the highest percentage (17%) in the Communications questions CA2-2 indicating future resource allocation to increase the support of the community's efforts to adopt IPv6 is a priority.

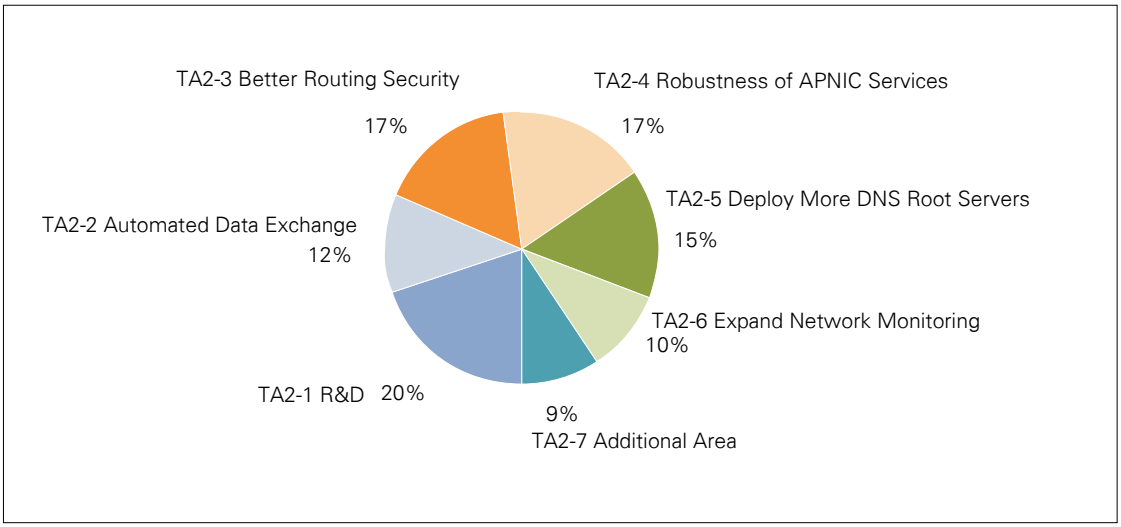
6.1.2.3 Technical

Members:



Members recorded the highest percentage (21%) in the Technical question TA2-1 indicating future resource allocation to research and development activities are seen as a priority.

Stakeholders:



Stakeholders also recorded the highest percentage in (20%) score in the Technical question TA2-1 indicating future resource allocation to research and development activities are seen as a priority.

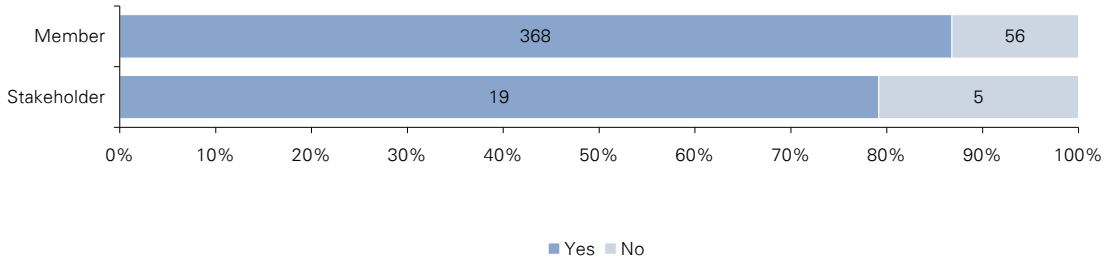
6.1.3 IPv6 readiness

6.1.3.1 Factual responses

Factual responses relate to IPv6 readiness and were recorded on a yes / no basis. Respondents were allocated additional space to provide further clarification. The following graphs depict the questions for which Members and Stakeholders recorded the highest number of 'Yes' and 'No' responses indicative of the level of IPv6 readiness.

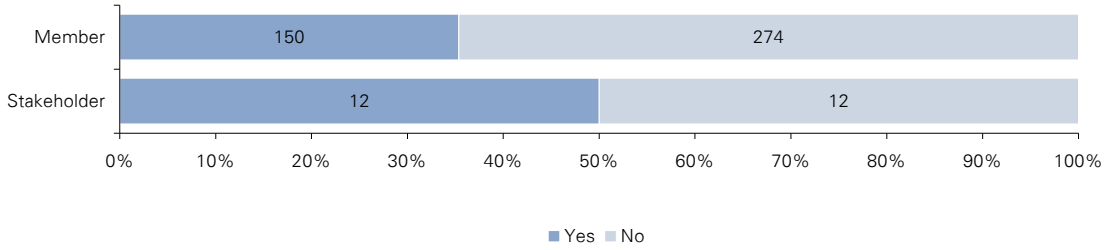
The highest number of 'Yes' responses for both Members and Stakeholders were recorded in question B1-8. The majority of Members and Stakeholders were in agreement with the importance of government support in IPv6 deployment. Both groups recorded the highest number of 'yes' answers to this question.

B1-8 Do you believe that it is important to have government support for IPv6 deployment?



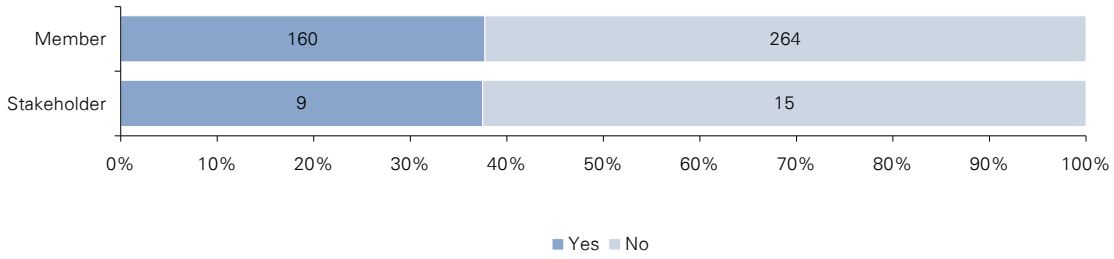
Members recorded the highest number of 'No' responses to question B1-5 indicating that the majority of Members have not yet received IPv6 addresses from an RIR, NIR or ISP.

B1-5 Has your organisation received IPv6 addresses from an RIR, NIR or ISP?



Stakeholders recorded the highest number of 'No' responses to question B1-3 indicating that there respective organisations have not budgeted future resources for IPv6 deployment.

B1-3 Has your organisation budgeted for the future resource allocation for IPv6 deployment?



6.1.3.2 Propositions

The means in this section ranged from 6.12 to 8.44 for Members and 5.48 to 7.67 for Stakeholders. The questions containing the highest and lowest means for both Members and Stakeholders are outlined below:

B2-1. APNIC should have a bigger role in promoting IPv6 deployment within the AP region			
	Mean	Standard Deviation	Number of Responses
Members	8.44	1.72	418
Stakeholders	7.67	1.69	24

Members and Stakeholders recorded the highest mean score in question B2-1. These results indicated Members and Stakeholders agreed strongly that APNIC should have a bigger role in promoting IPv6 deployment within the Asia-Pacific region.

B2-3. APNIC should permit transfers of IPv4 address space WHEN the IANA pool is exhausted			
	Mean	Standard Deviation	Number of Responses
Members	6.12	2.87	403
Stakeholders	7.13	2.77	24

Members recorded the lowest mean score in question B2-3. Members recorded a lower level of agreement over APNIC permitting IPv4 address space transfers when the IANA pool is exhausted.

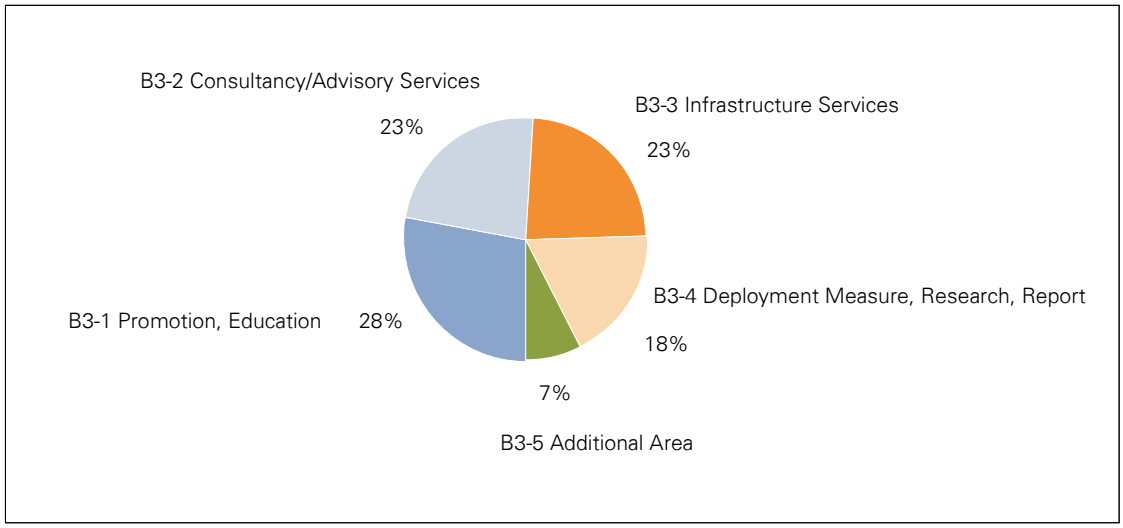
B2-6. The current internet resource management systems are adequate to ensure effective global transition to IPv6			
	Mean	Standard Deviation	Number of Responses
Members	6.45	2.14	396
Stakeholders	5.48	2.19	23

Stakeholders recorded the lowest mean score in question B2-6. This score indicated that Stakeholder opinions are not as aligned on the adequacy of current resource management systems to ensure effective global transition to IPv6.

6.1.3.3 IPv6 activities

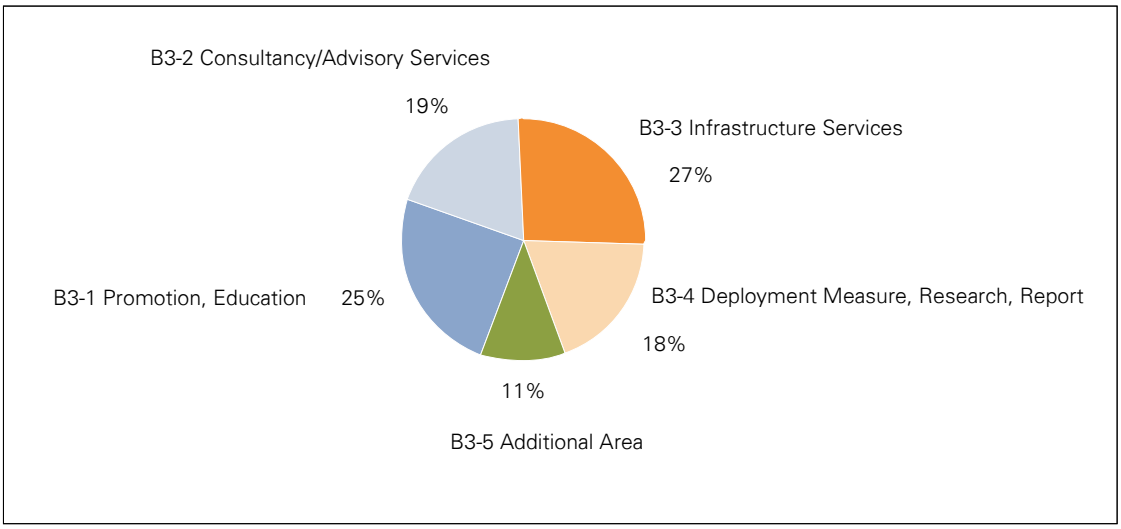
In this section, respondents were asked to prioritise their future needs by allocating a maximum of 100 points across five questions. At the end of each sub-section, respondents could nominate additional areas for resource allocation.

Members:



Members recorded the highest mean score for question B3-1 indicating future resource allocation to IPv6 promotion, education and / or training as a priority.

Stakeholders:



Stakeholders recorded the highest percentage in question B3-3 indicating IPv6 infrastructures services as a priority.

Additional Resources: Additional areas for resources indicated by Members included information and training services, aligning IPv6 services with IPv4 – including certification and providing IPv6 test sites.

6.2 Conclusions

APNIC can consider the results of this survey to be very satisfactory considering the number of response nearly doubled last survey – the highest number of responses in the history of the APNIC survey.

A brief overview of the results is provided in the following table:

Summary of conclusions	
Assessment of APNIC activities	
	Assessment of APNIC activities provided positive results with no mean scores recorded below 6.13. Comments from Members and Stakeholders were generally positive or constructive.
APNIC future resource allocation	
Services	Members indicated that expand training activities in scope, geographical coverage and online options; support network engineering education in the Asia-Pacific region; support of IPv6 deployment were priorities. Stakeholders regarded streamlining resource requests and allocation processes a priority.
Communication	Members highlighted to increase the support of the community's efforts to adopt IPv6 as a priority for future resource allocation.
Technical	Member and Stakeholder priorities were aligned in this area; both groups highlighted the research and development area as a priority.
IPv6 Readiness	
Factual responses	IPv6 readiness provided varied results from Members and Stakeholders. Results showed Members and Stakeholder recorded the highest level of agreement with the importance of government support in IPv6 allocation. Members indicated that the majority had not yet received IPv6 address space from an RIR, NIR or ISP. The majority of Stakeholders indicated that their respective organisations had not budgeted for future resource allocation for IPv6 deployment.
Propositions	Propositions responses were positive from Members and Stakeholders and no mean scores were recorded below 5.48.
IPv6 activities	Respondents agreed over IPv6 activities resource allocation. Members and Stakeholders were in agreement on prioritising IPv6 promotion education and / or training, expert consultancy / advisory services on IPv6 deployment and IPv6 infrastructure services for future resource allocation.