

Asia Pacific Network Information Centre (APNIC)

APNIC Survey 2012

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## 1. Introduction

### Overview

As a member-driven organisation, APNIC conducts a biennial survey to better serve its Members and Stakeholders by gathering feedback regarding its performance as well as to provide feedback on issues important to its community. Feedback is taken seriously by the Executive Council (EC) and by the Secretariat. It is used by the EC in strategic planning to decide services to offer or improve, positions to adopt and issues to pursue.

The objectives of the Survey are:

- To identify members' concerns in regard to existing services, as well as future needs as viewed by Members and Stakeholders,
- To reach the highest number of respondents to the online survey, and
- To maintain anonymity of all respondents.

The latest survey was held during 2012, and the Singapore Internet Research Centre (SiRC), a research institute focusing on various Internet-related issues in the Asia Pacific region, was commissioned for this survey.

The following items were covered in the 2012 survey: APNIC General Services; Registry and Administration Services; APNIC Outreach, Training and Conferences; IPv6 Support, APNIC Public Information and Internet Governance. Appendix I has the full survey questions.

The questions were developed with inputs from a series of consultations in the form of focus group discussions in the following cities: Sydney (Australia), Dhaka (Bangladesh), Phnom Penh (Cambodia), Hong Kong SAR, Guangzhou, and Beijing (China), Kolkata, Mumbai, and Delhi (India), Tokyo (Japan), Kathmandu (Nepal), Manila (the Philippines), Singapore, Seoul (South Korea) and Hanoi (Vietnam). These discussion groups raised issues some of which were included in the survey. It should be noted that because participants were not selected for representativeness, their findings cannot be generalised. In this report, some responses from the discussion groups are used in the analysis.

The survey, conducted from May 7 to June 8, 2012 was completed with a total of 1,333 valid responses. This is an increase of 67.9% over the 794 valid responses in the previous survey. Of the valid responses, 980 (73.5%) were from members and 353 (26.5%) were from stakeholders. Of the stakeholders, 328 were from 42 out of the 56 economies served by APNIC, and 25 were from outside of Asia-Pacific.

## 2. Method

The full details of this section can be found in Appendix II.

## 3. Summary of Results

### 3.1 Analysis of survey response

The survey questions were divided into three sections (A, B and C) according to the categories of the survey respondents: “Account Holder” for those who are APNIC member and non-member customers, “Stakeholders Asia-Pacific” for non-account holders in the Asia-Pacific and “Stakeholders–Worldwide” for non-account holders from non-Asia-Pacific economies. It should be noted that the open nature of the survey means that those from economies outside the Asia Pacific may also participate. These respondents were included in the analysis although at about 2%, their influence would be minimal.

In this survey, the participatory economies were defined as *Developed*, *Developing* and *Least Developed Economies* in accordance to the classification by the United Nations<sup>1</sup> and grouped accordingly in Table 1. It should be noted that the UN classification may be dated as Hong Kong, Singapore and South Korea are listed in the Developing category while Christmas Island, because it is a part of Australia, is classified as Developed. In this report, the UN position is adopted for consistency of definition.

Table 1 also shows the numbers and proportions of respondents; the largest number of respondents was (986 or 74%) was from Developing Economies, understandably as China, India and Indonesia are included in the group. The LDEs continue to form the smallest group of respondents at 136 (10.2%). While there was an increase of 50 respondents from the previous year or 58%, this was less than the overall increase in respondents of 68%.

Table 1: Classification of Economies

Developed Economies	Australia including Christmas Island, Germany, Japan, Netherland, New Zealand, Russian Federation, Sweden, Switzerland, United Kingdom, and United States
Responses	211 (15.8% of total responses)
Developing Economies	Asia Pacific Regional, American Samoa, Barbados, Cameroon, China, Cook Islands, Fiji, French Polynesia, Guam, Hong Kong, Israel, India,

<sup>1</sup> The UN classification is available at this url: <http://unstats.un.org/unsd/methods/m49/m49regin.htm>.

	Indonesia, Malaysia, Maldives, Mongolia, Nauru, New Caledonia, Niue, Oman, Pakistan, Papua New Guinea, the Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, United Arab Emirates and Vietnam
Responses	986 (74% of total responses)
Least Developed Economies (LDEs)	Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Samoa, Solomon Islands, Timor-Leste, Tuvalu and Vanuatu
Responses	136 (10.2% of total responses)

In the report, the results for each question is presented with the self-explanatory heading of the section and then followed by a diagram showing the question and the average score on the right side of each bar to the question. For many of the questions, the respondents were asked to evaluate certain aspects of APNIC services in the scale of 1 to 7, 1 being Strongly Disagree or Low Priority to 7 being Strongly Agree or High Priority, depending on the question. The survey also provided multiple-choice and free-response questions to accommodate views that may not be captured in scale.

### 3.2 Survey Findings

The following analysis presents a summary of the statistical and open-ended survey results.

The results for all sections are mainly outlined in a combination of three different scales: a scale of 1 to 7 with 1 being Strongly Disagree and 7 being Very Strongly Agree; multiple choices; and a Yes/No. In the survey, where a respondent omitted any question or indicated “N/A”, no score was recorded in the analysis.

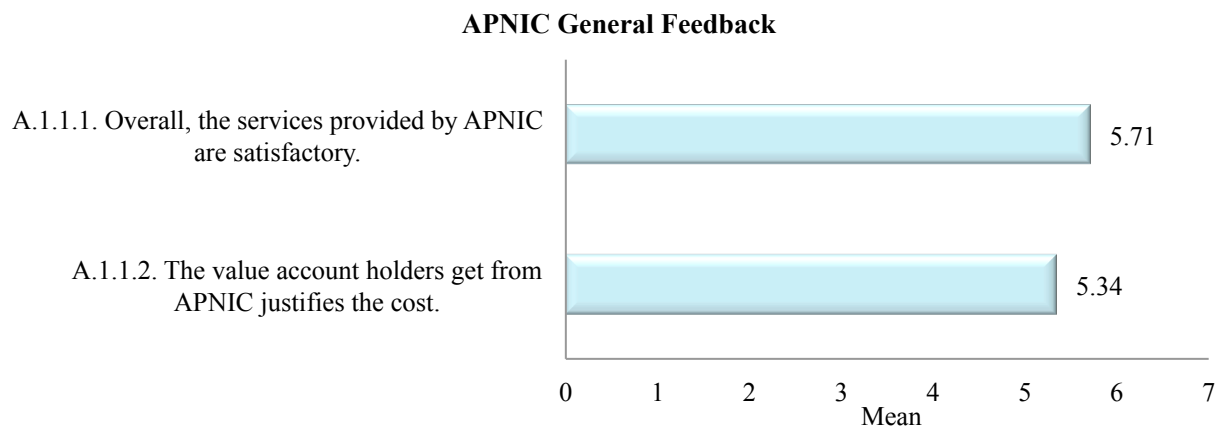
All comments from the open-ended questions are contained in the body of this report and in Appendix II. Average scores comparing between the Developed, Developing and LDEs in the below section are recorded in Appendix III.

#### 3.2.1 Section A: For APNIC Account Holders only

Section A of the survey was intended for APNIC Account Holders only and they were asked for comments in several areas of APNIC’s services, registry and administration services, and corporate governance.

##### 3.2.1.1 General Feedback

The survey found that overall, Members were satisfied with APNIC’s various services.



The above chart shows that APNIC Account Holders were generally satisfied with the services provided by APNIC, rating them 5.71 out of 7, reflecting high satisfaction. Respondents from the Least Developed Economies [Bangladesh (45.1%), Nepal (20.6%) and Cambodia (11.8%)] were among the respondents who were most satisfied with the services (average score of 6.14) followed by Developed Economies (5.74) and then the Developing Economies (5.64).

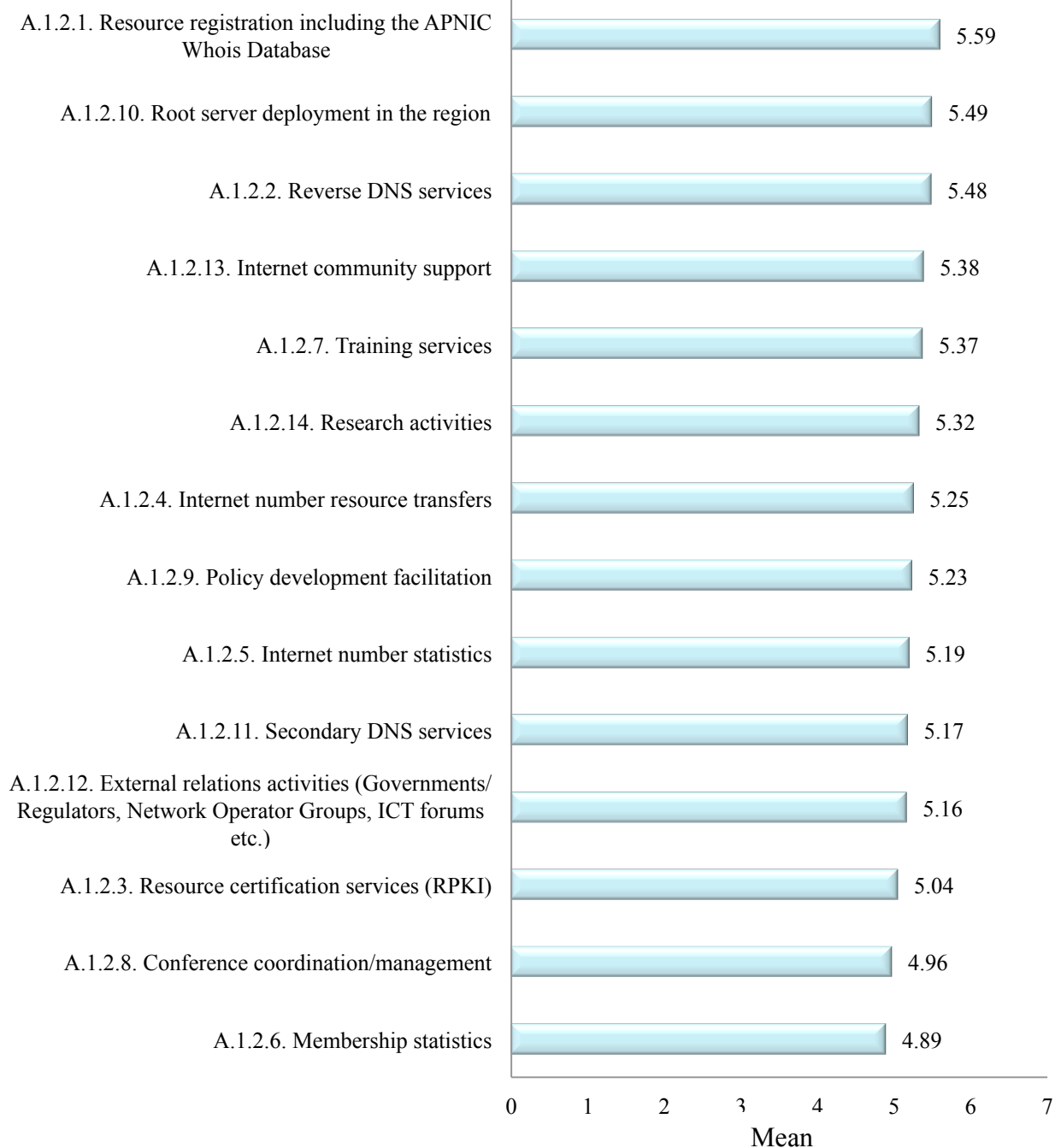
The satisfaction regarding APNIC’s work and governance was generally high among the focus group discussion participants. Most respondents were favourably inclined towards APNIC, commenting that it was a transparent and well-run organisation.

Account Holders from the Least Developed Economies [Bangladesh (44%), Nepal (20.2%) and Bhutan and Cambodia (11.9%) of the LDEs (with an average score of 5.57] were also satisfied with the value they got from APNIC for the cost incurred. Average scores for Developed and Developing Economies were 5.03 and 5.36 respectively.

**Comparison with 2010**

There appears to be a slight increase in the level of satisfaction in this survey over the previous. The satisfaction level in 2010 was 8.09 on a 10-point scale vs 8.16 this year when translated from 5.71 on a 7-point scale. More than 70% of respondents reported high satisfaction this year vs 64% in the previous survey.

**Priority for Future APNIC Planning**



On the whole, respondents from the LDEs placed higher priority in resource registration including the APNIC Whois Database, root server deployment in the region and reverse DNS service compared with respondents from the Developing and Developed Economies. Account Holders from the Developed Economies rated a relatively lower average score for APNIC’s resource certification services (RPKI), membership statistics and conference coordination/management.



Respondents raised the issue of the transition to IPv6 for other services that APNIC could offer. Some other desired services raised by the respondents included:

- general IPv6 information sharing
- technical support and training for the transition from IPv4
- IP address management methods after the transition

Many, particularly those from the Developing Economies (such as India and China) emphasized the importance of broader training opportunities through workshops, online/webinar trainings, regional trainings and conferences. Some suggested global traffic analysis and DNS hosting service management for better web security. More active online helpdesk function, by allowing chat helpdesk option and weekend operation, was suggested as well during the survey and focus group discussions. A few also mentioned cloud-computing services.

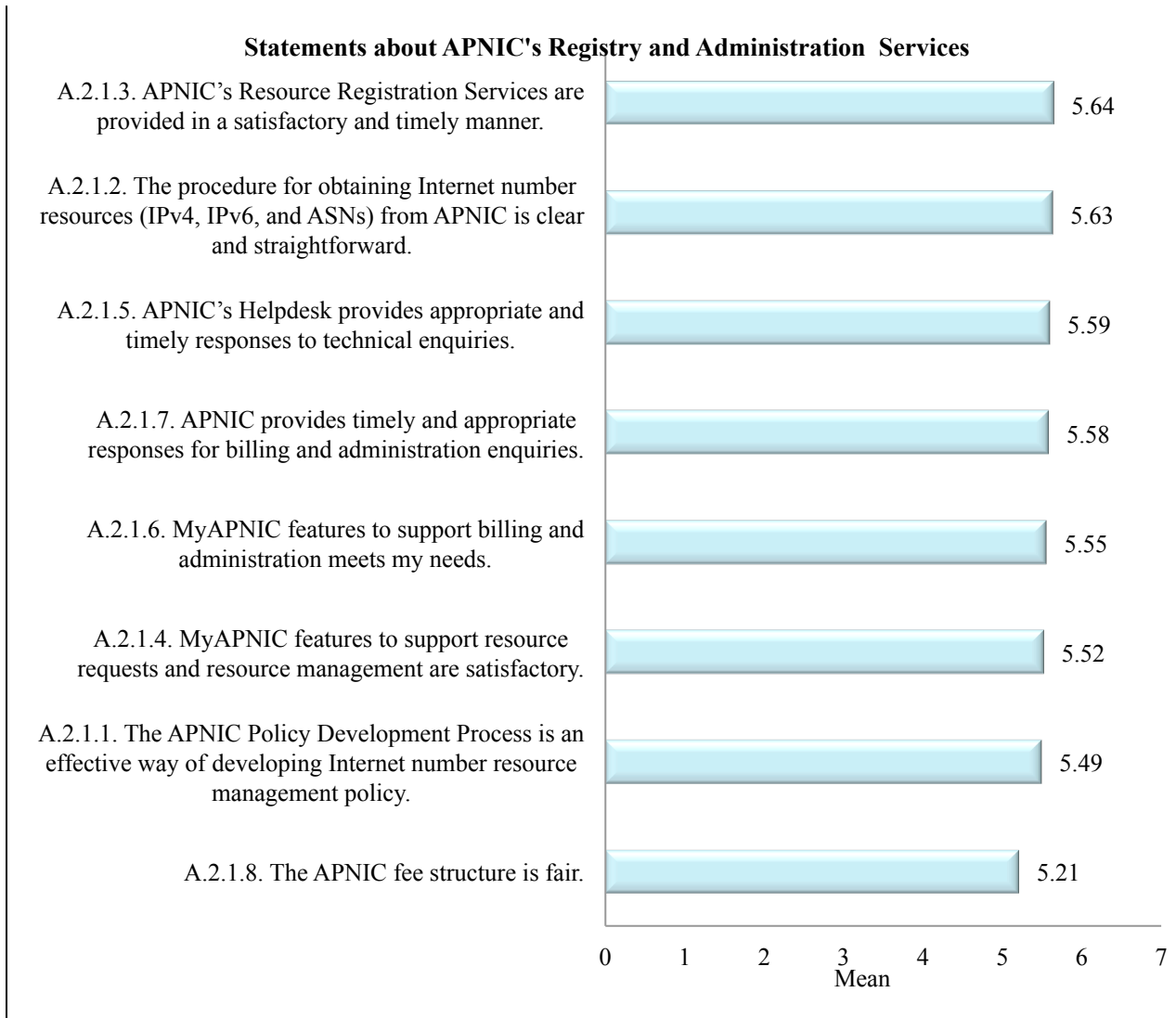
Other suggestions included localisation of services and trainings in a form of branches (respondents from India and Pakistan and focus group discussion participants), training of e-governance to the government officials, public routing registry and hosting, and funding opportunities for training and IPv6 dissemination.

In addition, focus group discussion participants suggested that APNIC publicise its services more as even among major ISPs, it is thought that its only role is handing out IP addresses.

When asked if there were any services that the respondents felt APNIC should discontinue or revise, 70% of respondents said that there is not anything that should be discontinued or revised.

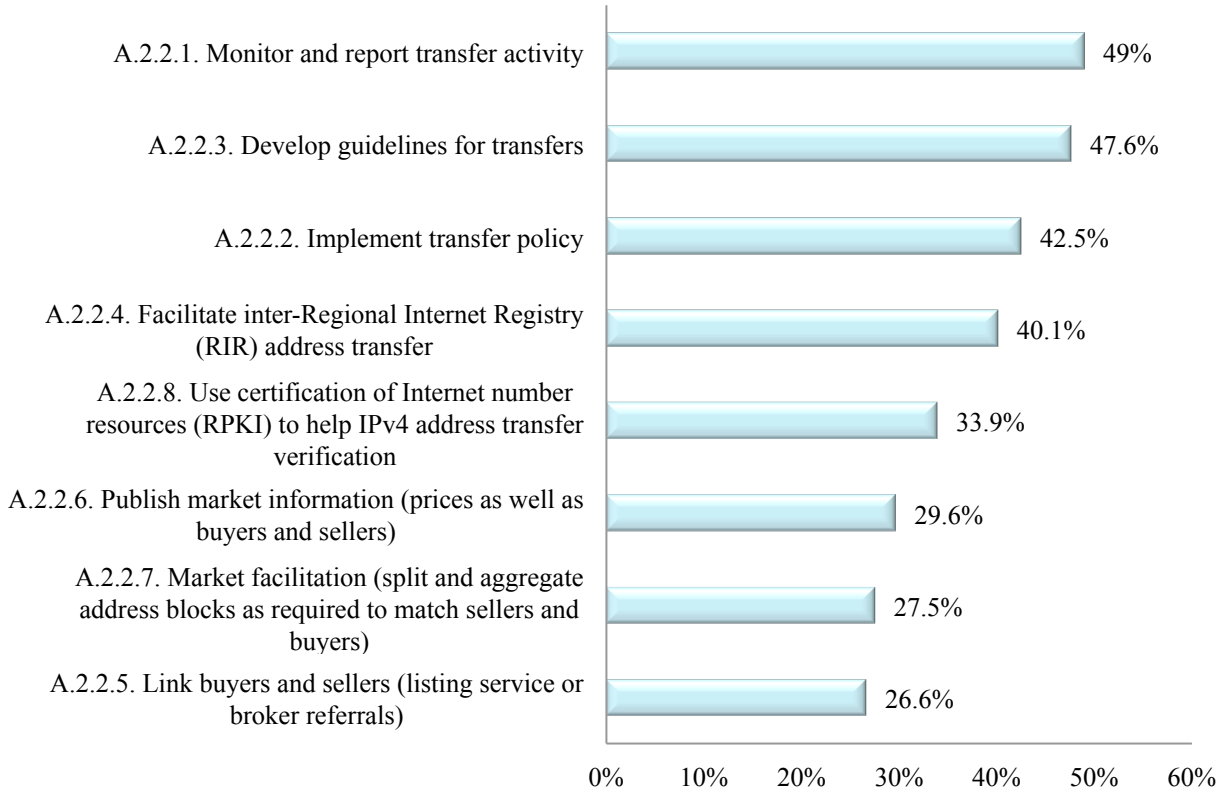
### 3.2.1.2 Registry and Administration Services

Another core objective of APNIC is to distribute and register Internet Numbers according to policies developed by the Asia Pacific community. APNIC receives fees to provide this service, and the current fee schedule is based on the Internet number resource holdings of each account holder.



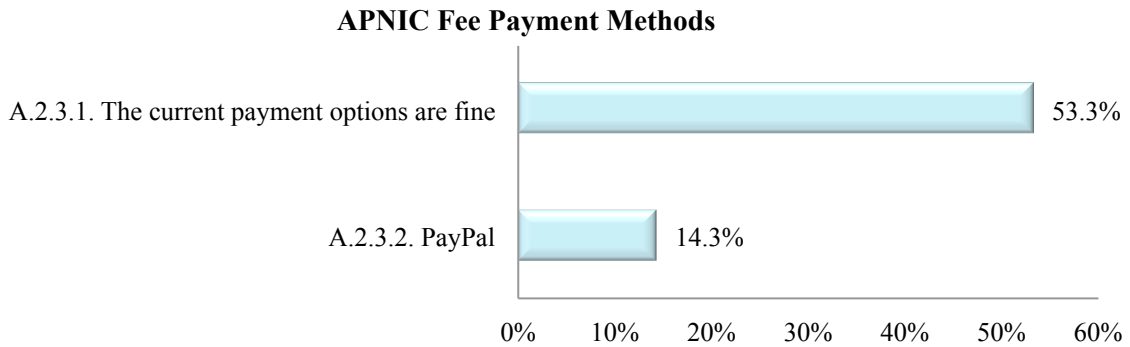
All statements received high ratings, scoring over 5. Clarity of procedure (A.2.1.2) and timeliness of resource registration services (A.2.1.3) had the highest satisfaction scores. Satisfaction with APNIC fee structure's fairness was rated relatively lower compared with other statements. Respondents from the Developed Economies recorded a lower average score of 4.80 for this question, with the highest average score of 5.38, being from the LDEs [Bangladesh (41.3%) and Nepal (17.3%)], indicating some dissatisfaction with the subsidy to the LDEs. There was no indication in any focus group discussion of dissatisfaction with the subsidy.

### Roles of APNIC in Facilitating IP Transfer



APNIC policies now allow IPv4 address transfers and the organisation could play various roles in facilitating the address transfers. Among the eight options the survey provided, about half (49%) of the respondents, mainly from the Developing Economies [China 44.8% and India 24.1%], said that APNIC should monitor and report transfer activity. This was followed by the opinion that the organisation should play a role of developing guidelines for transfer (47.6%), which was rated the highest in the previous survey; those from the Developing Economies [China 42.2% and India 24.1%) ] were most in favour of this role.

Many respondents also said that it was necessary for APNIC to play regulatory and mediating roles in pricing to avoid abuse. Some also mentioned the importance of educating people of the implication of address transfer.



More than half (53.3%) of the respondents, mainly from the Developing Economies such as China (45.9%), India (24.9%) and Indonesia (6%) were satisfied with the current payment options offered by APNIC. There was relatively less demand for PayPal option, while only 14.3% of the respondents considered it necessary to have this option and they were mainly from the Developing Economies such as China (52.2%), Indonesia (13%) and India (11.6%).

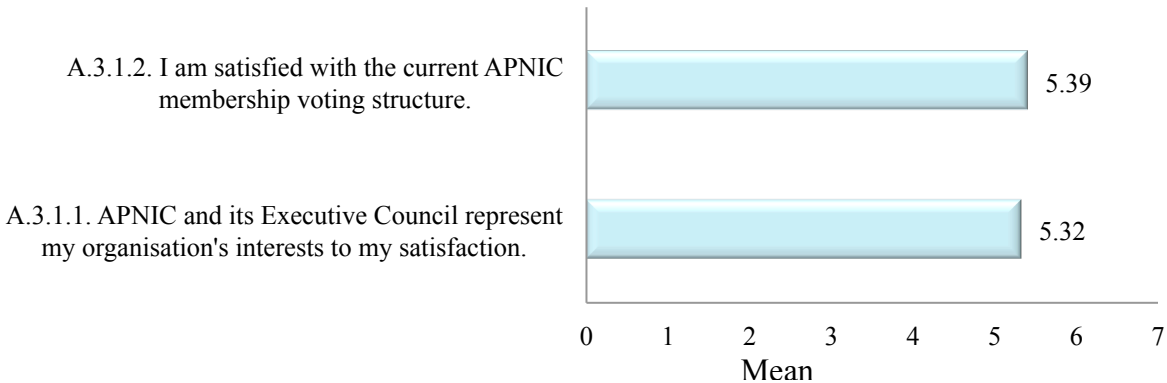
In the open-ended response section, the other one-third (33%) of the respondents suggested other potential methods, including: Alipay (in China), BPay, Union Pay, Western Union, and online payment/transfer option other than PayPal. Also some suggested state bank payment option, partial payment option (because of credit card limits) and local currency billing.

As with other services, the satisfaction level for the registry and administration fees was high. Some respondents said that the services should be more user-friendly and faster. Others also mentioned that the policy on membership fees should be reviewed with the IPv6 deployment or provide special discount rate for not-for-profit organisations. One respondent from New Zealand suggested the availability of a guide to minimise the confusion of first-time users in requesting resources.

### 3.2.1.3 Corporate Governance

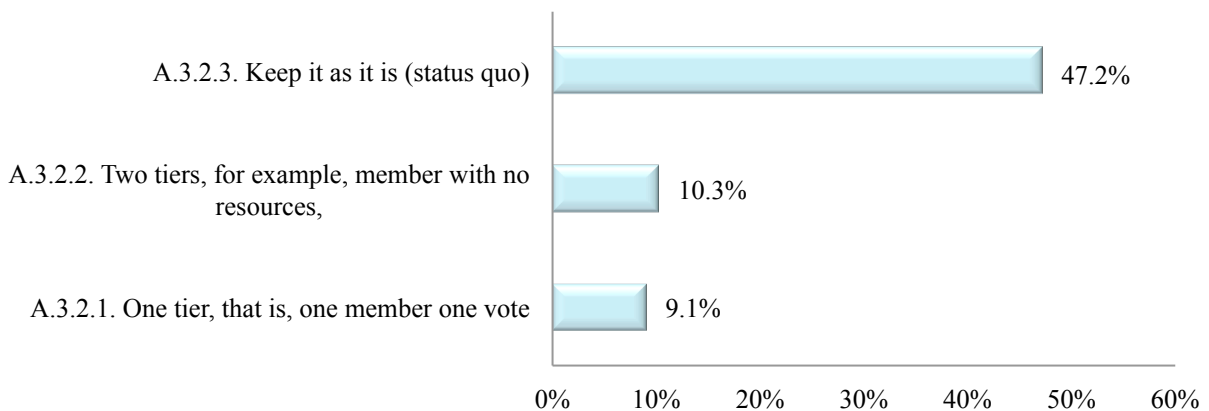
As a membership organisation, APNIC requires address holders to execute a membership agreement with APNIC. Address holders may vote on motions at APNIC Member Meetings. The APNIC membership voting system is a multi-tier structure where each tier has a different number of votes. The current structure uses seven discrete tiers of 1, 2, 4, 8, 16, 32 and 64 votes. A Member’s address holdings determine its membership tier.

**Statement on Corporate Governance**



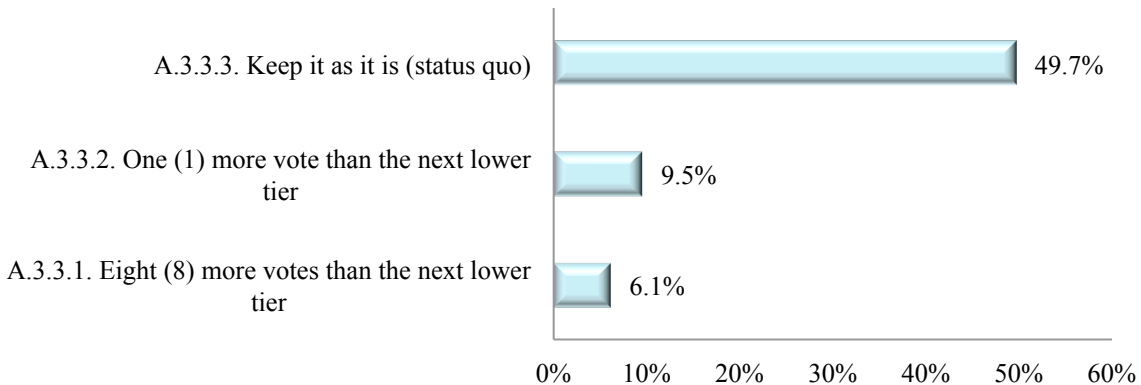
Respondents, particularly from LDEs [Bangladesh 46.7%, Nepal 18.7% and Bhutan 13.3%], were satisfied with APNIC and its Executive Council representing their organisation’s interests. Respondents said they were content with the current APNIC membership voting structure.

**Membership Tiers**



Most respondents (47.2%) wanted APNIC to keep the membership tiers at the status quo. Only 10.3% and 9.1% of the respondents wanted two tiers and one tier respectively. One suggestion derived from the focus group discussions was the possibility of APNIC to have a loyalty programme to reward members. That is, fees should be lower for those who have been members longer.

**Votes For Each Membership Tier**



Similarly, nearly half (49.7%) of the respondents said that there should be no change in the current membership tier system, particularly among respondents from the Developing Economies with China being prominent among the group (62.5%). In the open-ended question, out of the 15 responses, 7 from the Developing Economies (India and Singapore) said that one member should hold one vote, regardless of tier. Others suggested that members of higher tiers should have more votes (2 to 4) and that members with resources should have 1 vote and that those without should have none. Another suggested having a separate voting scheme for NIRs.

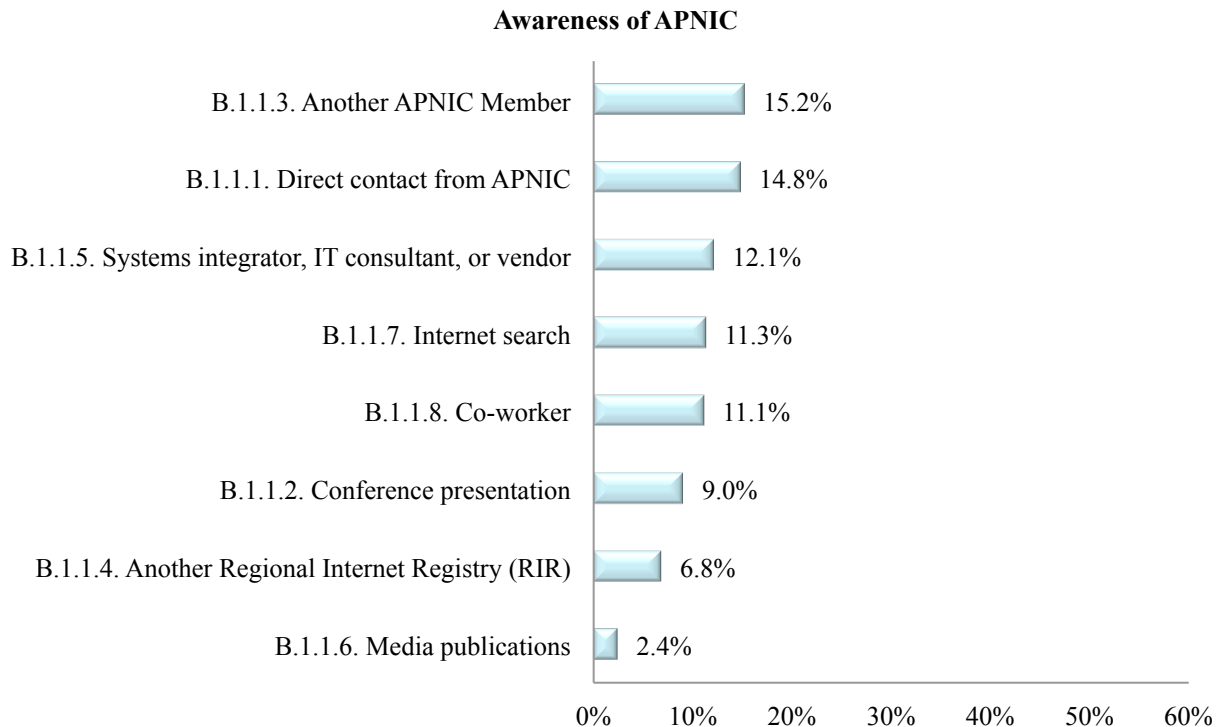
In the open-ended comments, some said out that the existing arrangement disadvantages economies with NIRs as they have fewer votes while “bigger players” have greater decision power with more votes. To avoid domination by the larger players, one respondent suggested having some seats reserved for appointed independents.

### 3.2.2 Section B: For all APNIC Account Holders and Stakeholders (Asia-Pacific)

Section B was open to all APNIC Account Holders and Stakeholders from the 56 economies in the Asia Pacific region that are served by APNIC. In this section, respondents were invited to rate APNIC’s outreach, training, conferences and IPv6 support.

#### 3.2.2.1 APNIC’s Outreach

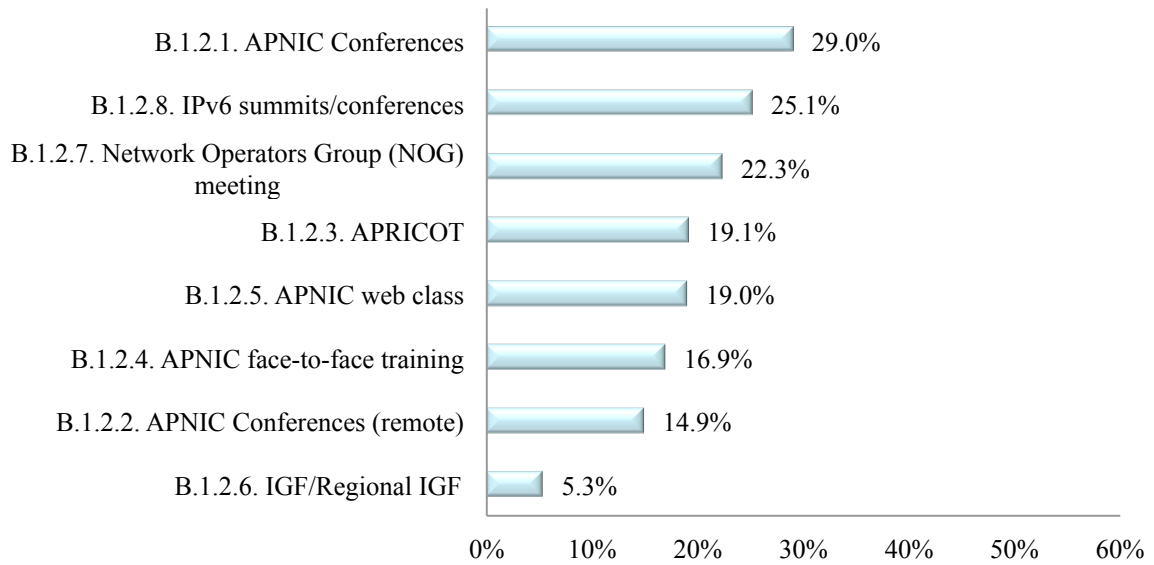
APNIC exists within a global community on Internet stakeholders whose cooperation and collaboration are critical to the success of the organisation and of the Internet itself. APNIC focuses on outreach and representation to ensure the region’s participation in various communications forums and high standing within the global community. Hence, it was important for the organisation to understand and include the views and recommendations of Asia-Pacific Stakeholders as well as APNIC Account Holders.



Generally, most Account Holders and Stakeholders first became aware of APNIC through another APNIC member (15.2%) and direct contact from APNIC (14.8%).

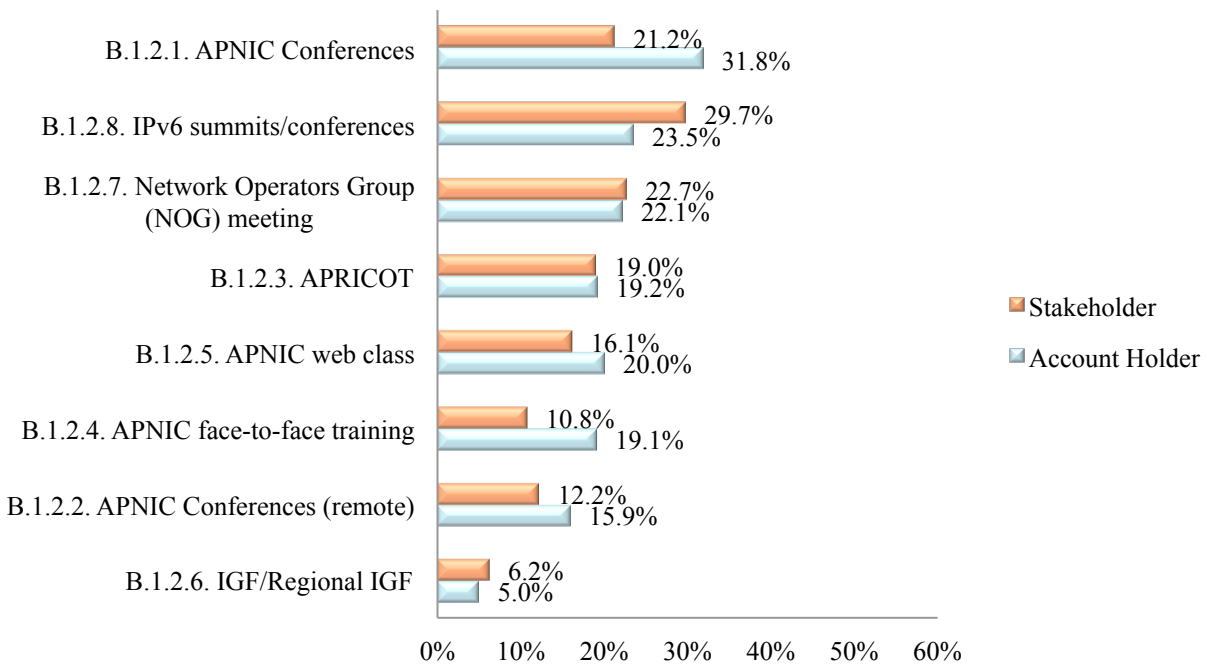
While Account Holders first became aware of APNIC through direct contact from APNIC, Stakeholders get to know APNIC mainly through another APNIC member that they know. Media publications seem to have had little effect in creating APNIC awareness.

**Interactions with APNIC**



About 3 out of 10 respondents had their interactions with APNIC mainly at APNIC conferences and IPv6 summit/conferences. Very few of them interacted with APNIC at the IGF/Regional IGF events.

**Interactions with APNIC**

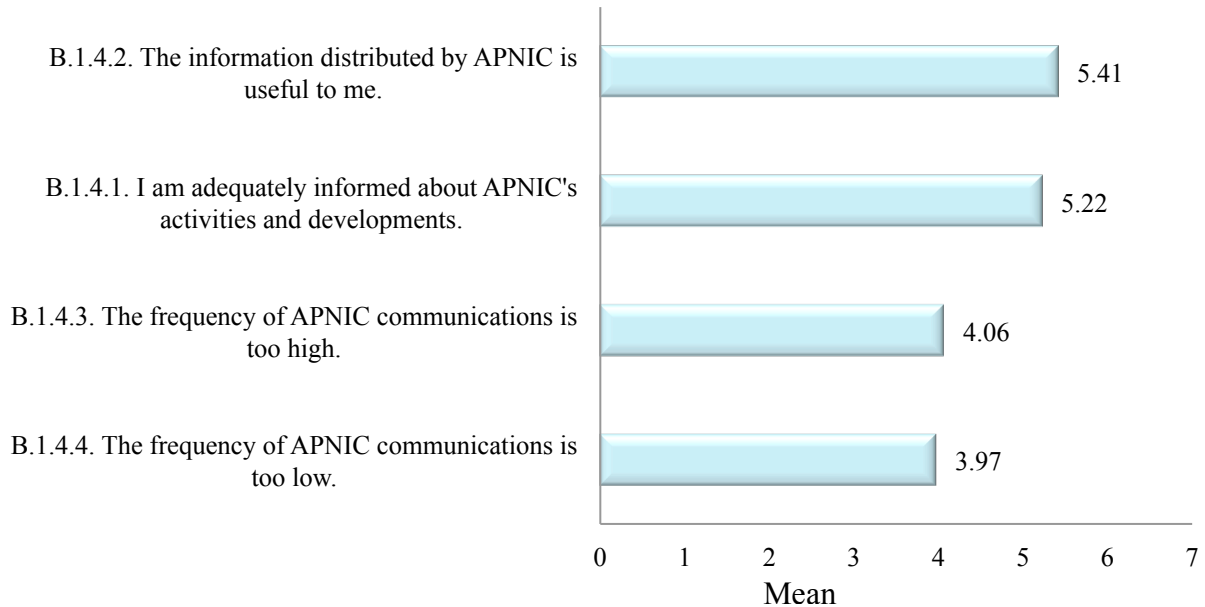




Account Holders’ interaction with APNIC span across all activities but mainly during the APNIC conferences (31.8%). Stakeholders (29.7%) interacted with APNIC mainly during the IPv6 summits and conferences and NOG meetings.

Apart from those events named in survey, respondents also attended ICANN Summit, APT Policy and Regulatory Forum, SANOG, INET Meeting, IGF, Cisco Live, CommunicAsia, CERNET Annual Conference and User Conference, IP JII Events, and NREN Conferences.

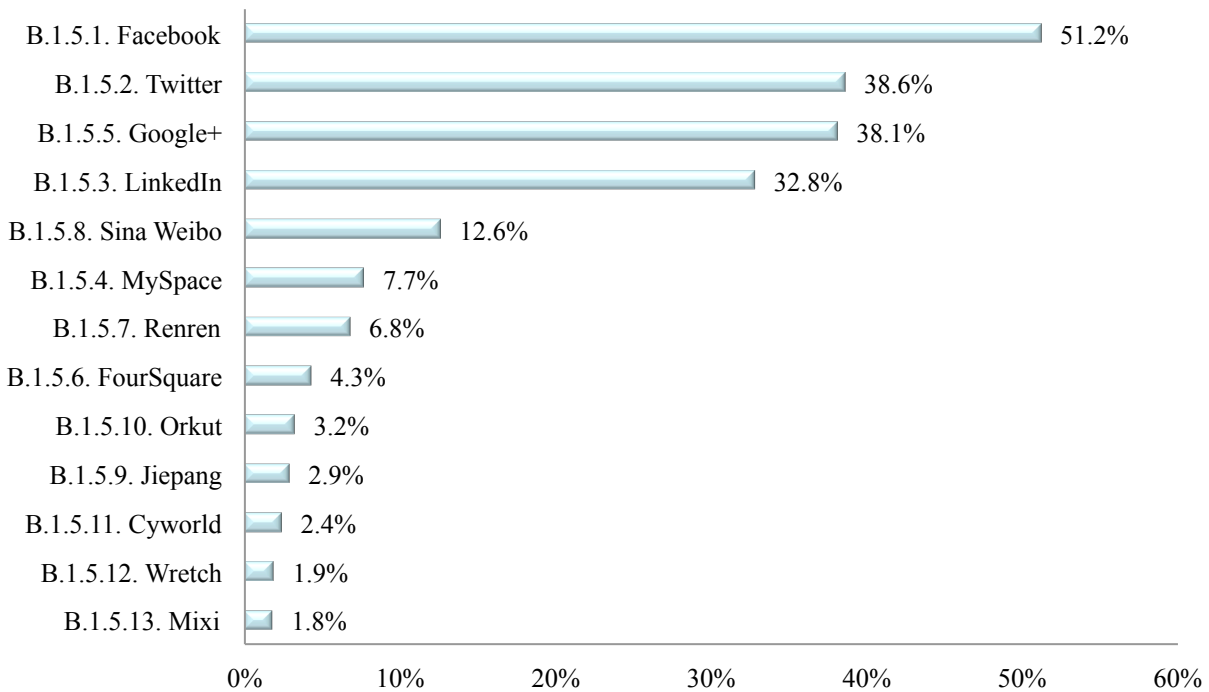
**APNIC's Communication and Information**



Respondents, particularly Account Holders, strongly agreed that APNIC inform them of its activities and developments regularly. They also said that information distributed by APNIC was useful.

Opinions on the frequency of APNIC’s communication, whether they were too high or too low, were split. Respondents said that the frequency of APNIC communication was both too high and too low. This may be due to the way the questions were phrased.

### Social Media for Community Engagement



Social media are an essential part of the contemporary Internet environment. So APNIC decided to ask account holders and stakeholders their views on the potential use of social media. As may be expected, more than half of the respondents (51.2%) recommended Facebook for community engagement. Twitter (38.6%) and Google+ (38.1%) were next in line followed by other less popular platforms. Mixi and Wretch were the least preferred social media to be used for APNIC’s social media outreach. Other social media mentioned were Youku, baidu, QQ, detik.com, msn, and Youtube, some of which might not strictly be considered social media.

Of the top four social media rated by the survey participants, Stakeholders seemed to be the major users of these instruments as compared to the Account Holders.

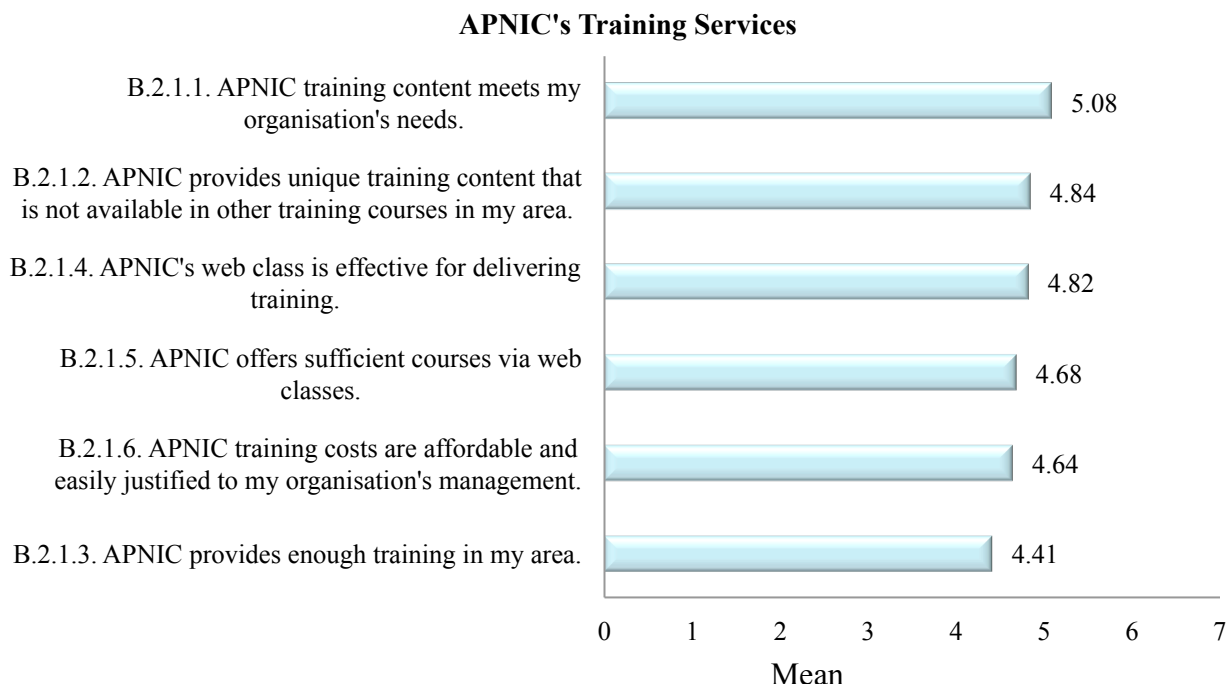
Other means of communication that the respondents would like APNIC to use include email/ mailing list, YouTube, Skype/teleconference, podcast and webinar, social media such as Google+, weibo, msn and QQ, written materials such as magazines (printed and online) and blogs.

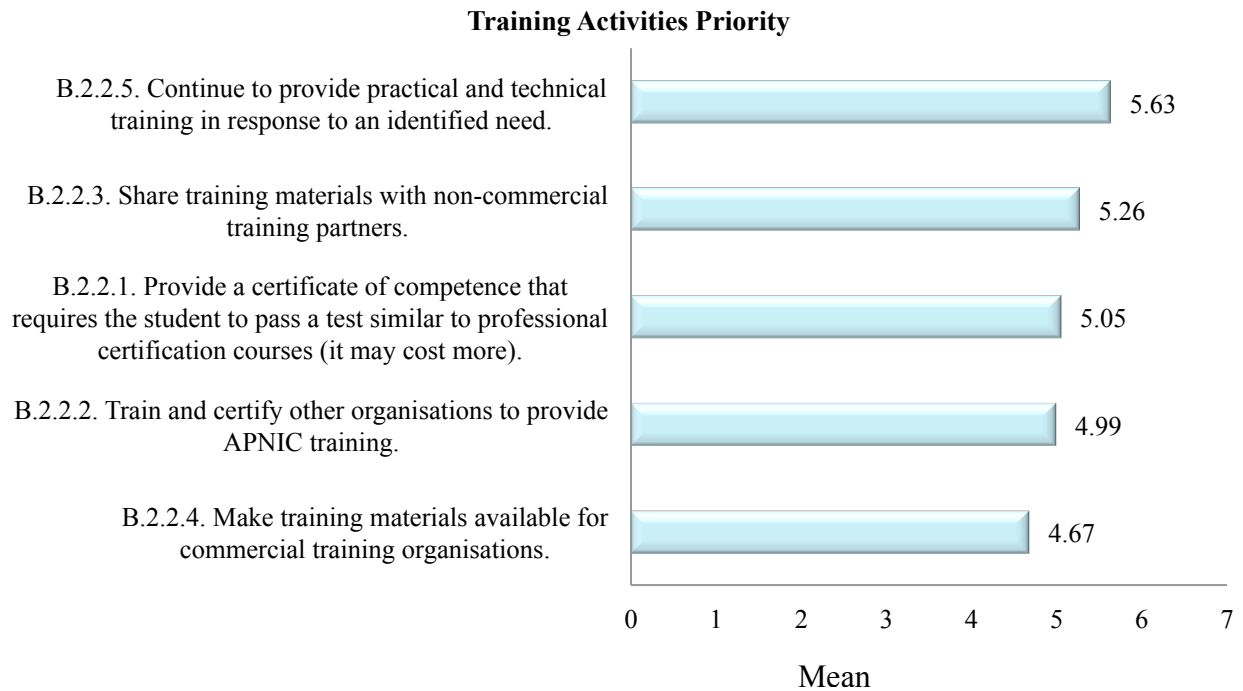
Generally, the respondents were satisfied with the current outreach methods. There were many suggestions for more training and outreach to educational institutions (universities in particular) and the public. There was a suggestion on reaching out to government officials and ministries of developing economies to foster a better ICT environment.

### 3.2.2.2 APNIC Training

APNIC provides training and practical workshops on Internet number resource management and Internet operations. APNIC’s training programmes have met with general satisfaction, with most ratings above 4, but lower than other services (such as registry and administrative services), which were mostly rated above 5.

In general, Account Holders were more satisfied compared with Stakeholders. Respondents from the LDEs were more satisfied than those from Developing Economies who were in turn more satisfied than those from Developed Economies. Respondents from China (35.1%) in particular were happy with APNIC’s training.





Many respondents, especially Account Holders from LDEs, said that the highest priority in APNIC’s training and practical workshops was provision of practical and technical training in response to an identified need. Making training materials available for commercial training organisations was considered less of a priority.

There was little difference in the scores between Account Holders and Stakeholders on how APNIC should prioritize training activities.

When prompted about training courses that APNIC should offer, many respondents suggested courses on IPv6 deployment and design as well as Internet security. Some also suggested courses on IP policies, cloud computing, BGP and resiliency.

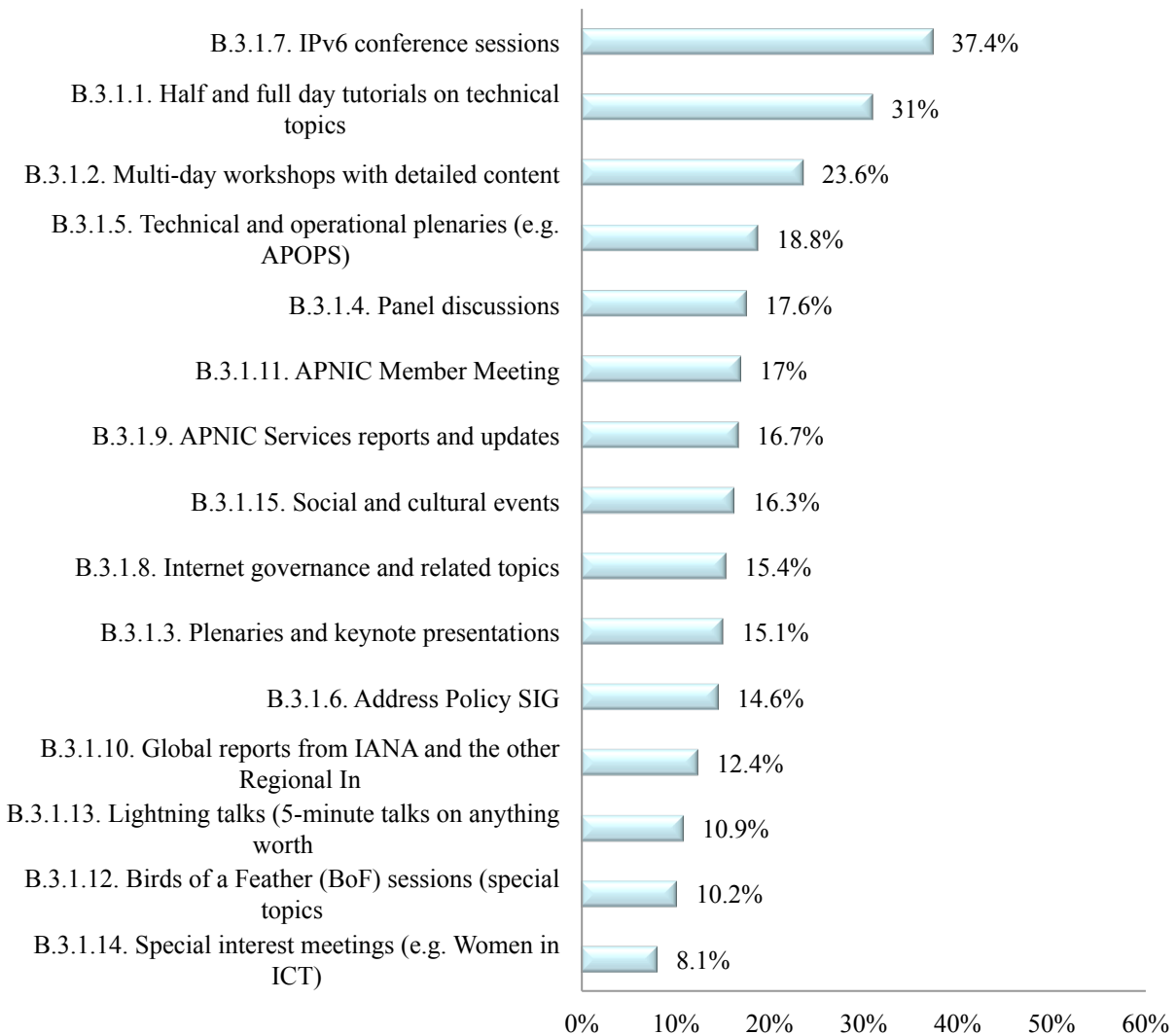
Many also said that more resource sharing and higher interactive nature (such as webinar and Q&A) would be helpful. More regularity and better pricing (lower or free) were popular suggestions as well. Given the diversity in Asia, many respondents also noted the need to cater to diverse population by offering materials in multiple languages, for people of non-technical backgrounds, and in different time zones. Respondents suggested IPv6 migration strategies, designs and challenge, networking, web security, BGP, multicast IP address management, cloud computing, Internet resource management, DNS and more technical training as possible online training content that APNIC could offer. There were requests for more regional trainings from many of the Developing Economies and LDEs visited, namely: Bangladesh, China, India, Indonesia, Nepal and the Philippines.

Many respondents complimented APNIC for its training and encouraged it to keep up the good work.

### 3.2.2.3 APNIC Conferences

APNIC holds two conferences each year. The first is held in conjunction with APRICOT (Asia Pacific Regional Internet Conference on Operational Technologies), and the second is a standalone conference.

**APNIC Conference - Interesting and Useful Sessions**



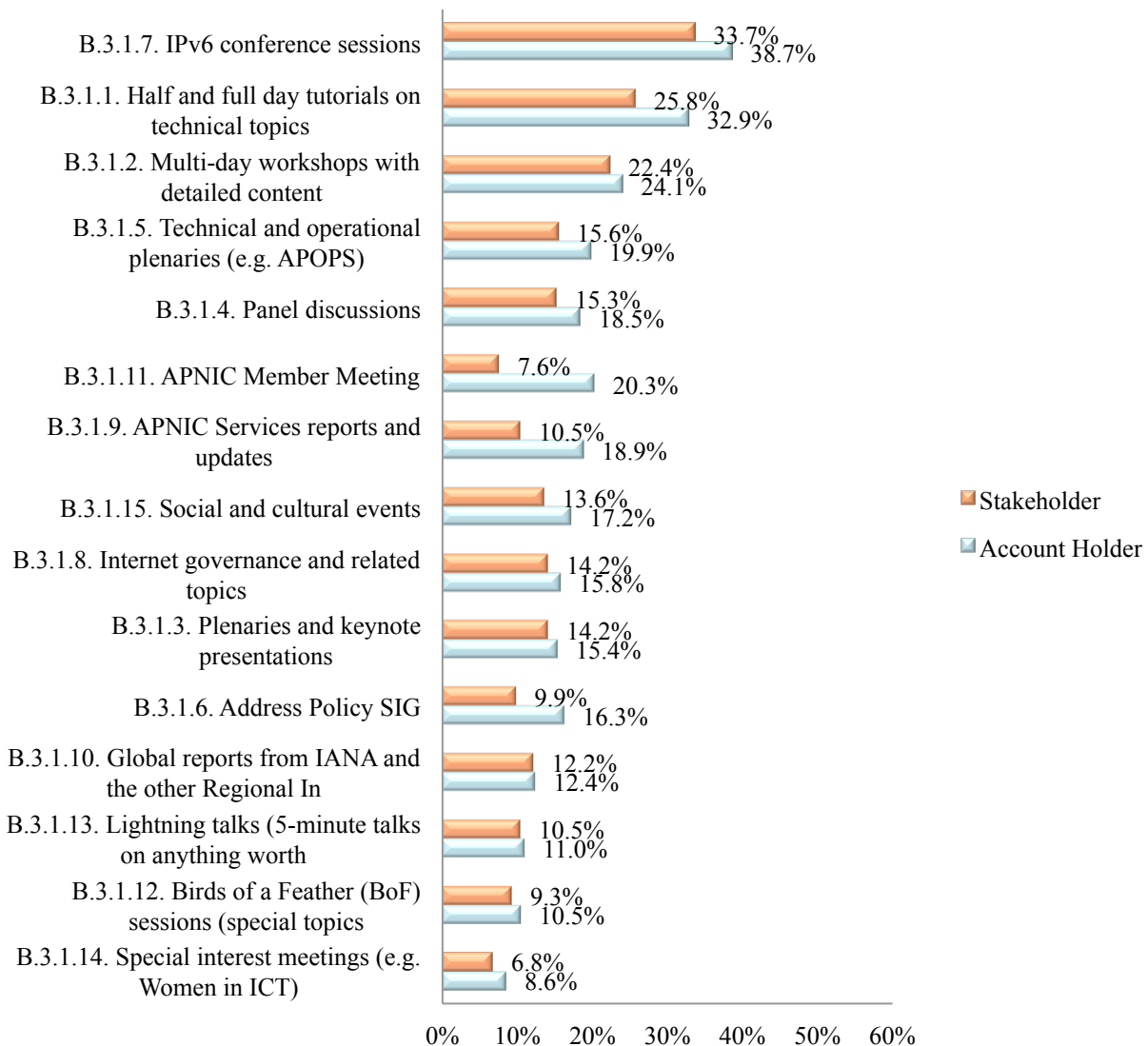
Overall, respondents seemed to be more interested in technical topics. Respondents, especially the Account Holders from the Developing Economies who had attended an APNIC conference rated the sessions on IPv6 the most interesting and useful.

Both Account Holders and Stakeholders expressed similar opinions on the sessions offered in APNIC Conferences. As might be expected, Account Holders expressed more enthusiasm overall. Both parties found informational/educational sessions such as IPv6 conference sessions,

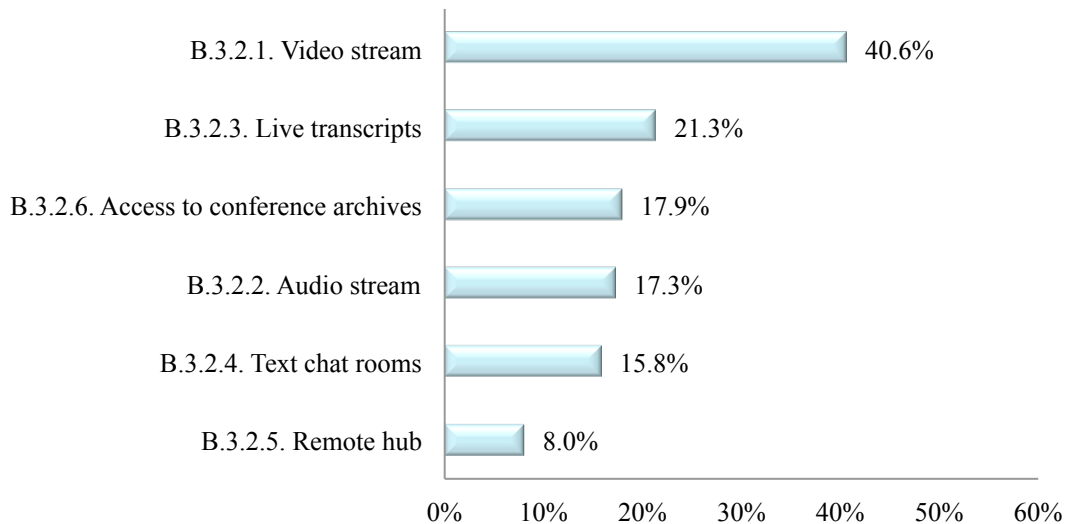
tutorials, workshops and technical and operational plenaries (B.3.1.7, B.3.1.1., B.3.1.2, and B.3.1.5) interesting and useful.

And quite naturally, Account Holders showed much higher appreciation of sessions directly targeted at APNIC members (such as B.3.1.11 Member Meeting, B.3.1.9 Service reports and updates and B.3.1.6 Address policy Special Interest Group) than Stakeholders (non-members). Stakeholders showed similar level of appreciation with APNIC Account Holders towards internet governance and related topics (B.3.1.8) plenaries and keynote presentations (B.3.1.3).

**APNIC Conference - Interesting and Useful Sessions - Comparison of Account Holders' and Stakeholders' Views**



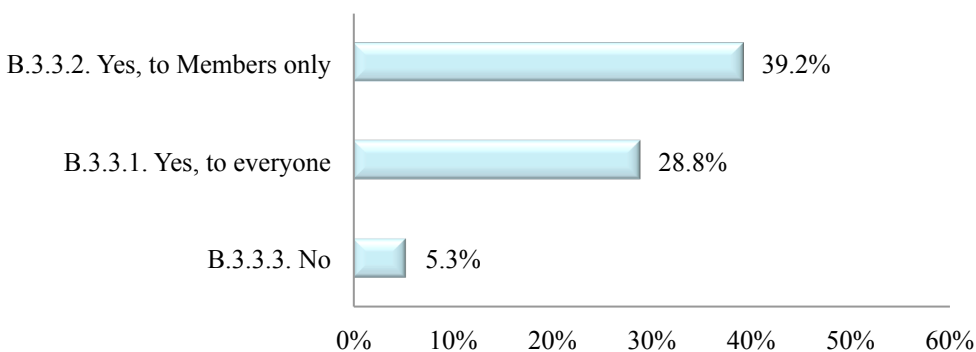
**Useful Remote Participation Facilities**



Almost half (40.6%) of the respondents who have attended an APNIC conference rated video streaming as the most useful tool in facilitating remote participation, as opposed to other media provided. Remote hub was the least preferred.

Stakeholders thought that video streaming and the ability to access to conference archives would be useful remote participation facilities to them. During their remote access to APNIC conferences, both parties appreciated live transcriptions services provided.

**APNIC Conference at No Cost**



There was divergence on whether APNIC should charge a fee for its conferences. Most respondents who answered this question wanted APNIC conferences to be free of charge. Only a small fraction of the respondents, mainly from the Developed and Developing Economies (total of 5.3%) said APNIC conferences should be fee-paying.

Of those who said APNIC conferences should be free the biggest group was Account Holders from Developing Economies who preferred member privilege in terms of conference fees (i.e.

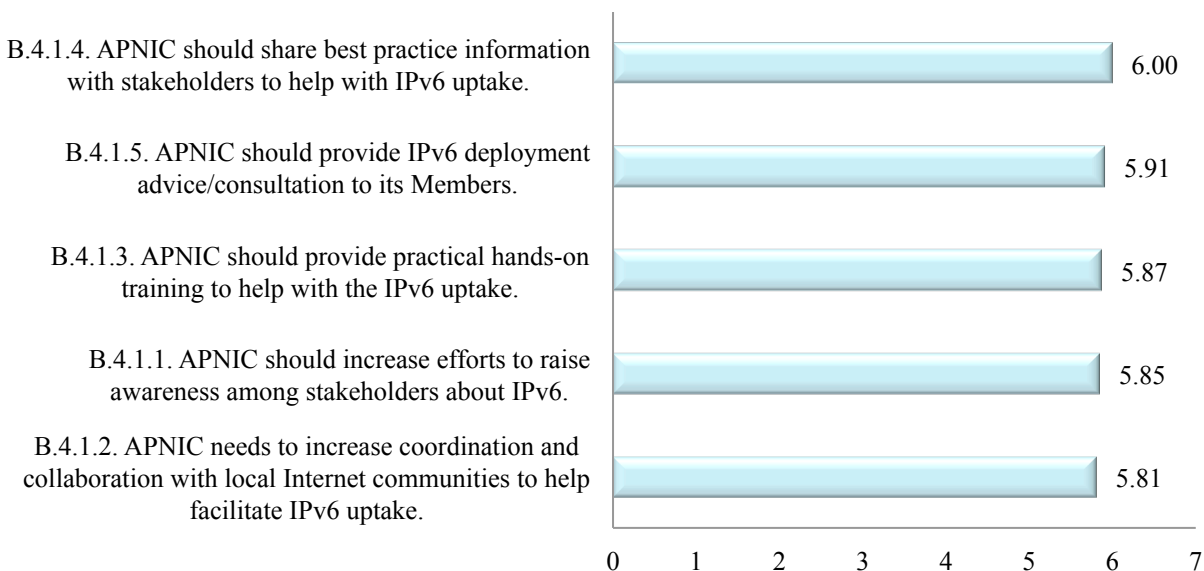
the conference to be free for members only). Only 23.5% of the Account Holders said that APNIC conferences should be free to everyone. A respondent from New Zealand observed that the travel cost to APNIC conference may already be a burden to some and thus, the lowering of conference fee or making it free may not be that helpful.

Some respondents, particularly from the Developing Economies wanted lower pricing as well as making the conferences available online for those who cannot afford to attend. Other suggestions were for smaller regional conferences and for more fellowships, including travel, to support needy members. A few respondents suggested more opportunities for networking with participants from other economies. One suggested that APNIC invite LDEs more and also to communicate with NGOs on public policy issues on the Internet address management.

### 3.2.2.4 IPv6 Support

With the exhaustion of IPv4 address space, IPv6 deployment has become urgent to ensure growth of the Internet, particularly to reach those who currently have no or limited access and to accommodate new devices that use the Internet.

**APNIC's Involvement in IPv6 Deployment**

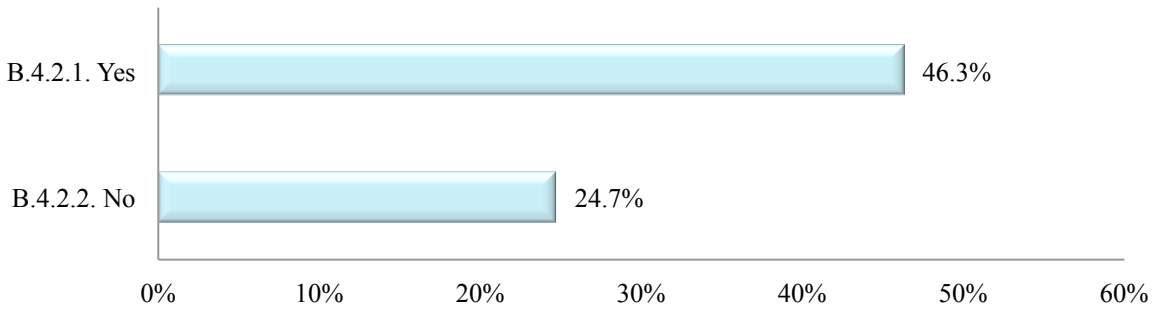


Respondents wanted APNIC to be more involved in IPv6 deployment. Focus groups said that the non-deployment of IPv6 by equipment vendors and popular websites was a problem, particularly with the Developing (especially the Philippines) and LDEs.

Account Holders and Stakeholders recorded similar levels of agreement to all questions. Account Holders from the LDEs, however, were more incline to agree that APNIC should share best practices information with stakeholders to help with IPv6 uptake.



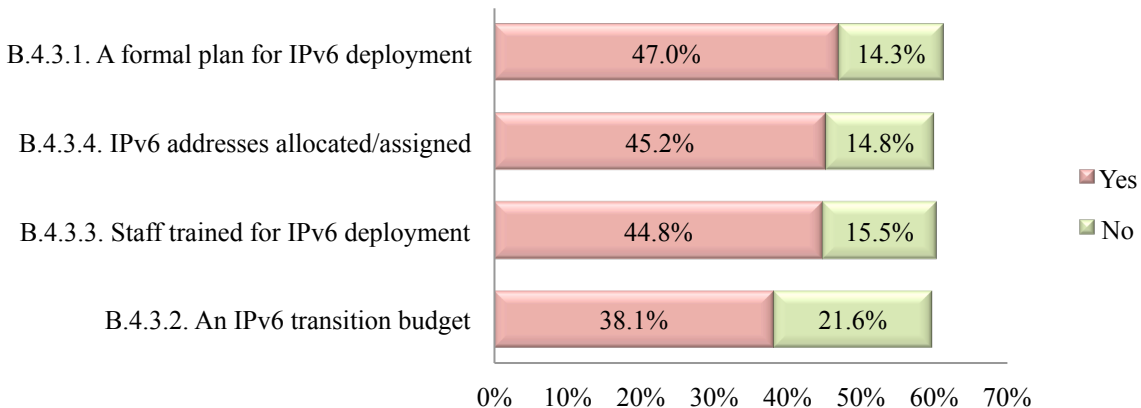
**CEO and Senior Management Awareness of the Risks in Not Adopting IPv6**



During the focus group discussions, it was commonly heard that IPv6 had not been deployed in many cities where the interviews were held because even if deployed, demand is next to non-existent: Many of the sites and customer premises equipment (CPE) are not fully v6 compliant and to some extent, the users do not want to upgrade equipment from v4 to v6. In addition, dual stacking with v4 is still needed even if IPv6 was implemented.

About half of the respondents, particularly Account Holders from the Developing Economies and of organisations having more than 2,500 employees, said that the CEO and Senior Management of their organisations were aware of the risks in not adopting IPv6. Those who said that their CEO and Senior Management were not aware of the risks (particularly Stakeholders from Developing Economies), said that it was necessary to put more effort into raising awareness for the risks of not deploying IPv6 through providing training, compelling reasons and business cases to more effectively involve the leaders and decision makers of companies and organisations. Alerting senior management to the importance of the transition was key for better IPv6 deployment. Budget for training and deployment, and time to deploy were raised as critical issues, especially by smaller companies and Developing Economies' respondents.

**IPv6 Plan Within the Next Year**



Many respondents, especially Account Holders of Developing Economies whose organisations had not deployed IPv6, said they expected their organisation to have a formal plan for staff training for deployment.

However, it should be noted that 17.6% of Stakeholders' organisations from the Developing Economies do not have any formal plan for IPv6 deployment. Even they did, there was not always a budget to support the transition to v6.

Respondents were keen on having more interactive (both face-to-face and online) and free training, workshop and conferences, both for technical professionals and for general public by APNIC to help with the IPv6 uptake. Some respondents suggested more localised (i.e. economy-specific) training sessions. A few respondents suggested provision of guideline for IPv6 transition. Others suggested targeting specific ISPs to make transitions.

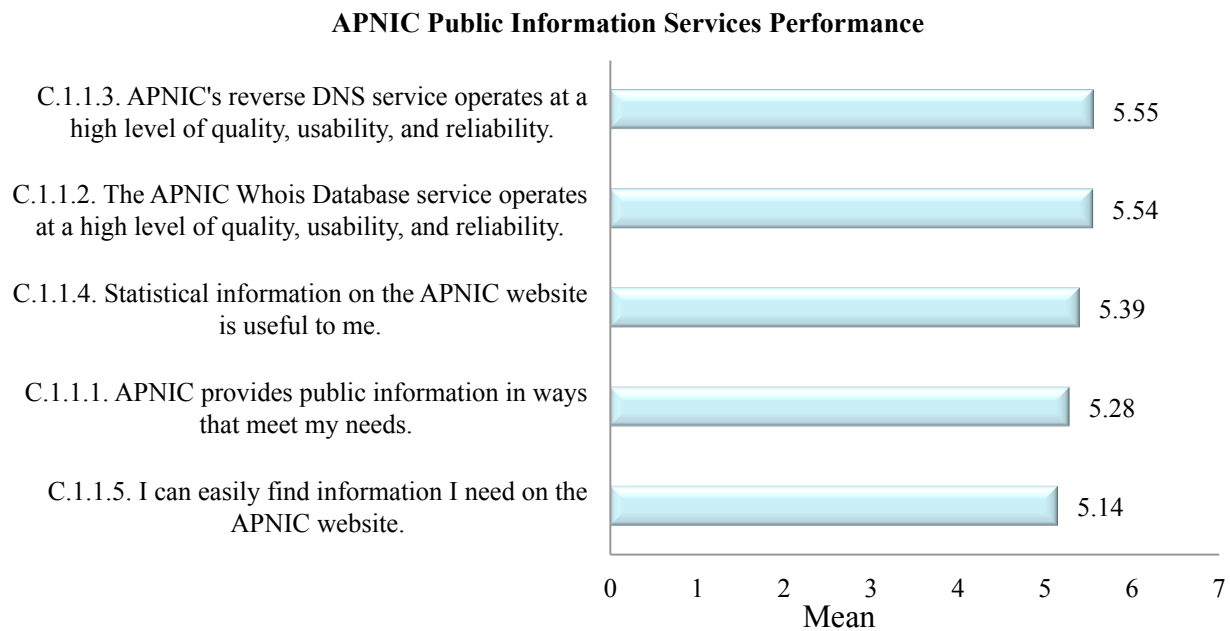
Generally, respondents emphasized the need for more training and awareness-raising for wider deployment. Some respondents suggested having resource persons/consultants specifically for IPv6 deployment purpose, one for each economy and even TV commercials for wider awareness. The respondents from smaller organisations and Developing Economies generally requested methods for simpler deployment and potentially collaborating with government stakeholders. A small number of respondents and focus group participants said that the IPv6 training that APNIC had provided was very basic and needed to be “geared up.”

### 3.2.3 Section C: For all APNIC Account Holders and Stakeholders (Asia-Pacific and Worldwide)

Section C was open to all APNIC Account Holders and Stakeholders from both Asia Pacific and Worldwide. In this section, respondents were invited to rate APNIC’s public information services and Internet governance.

#### 3.2.3.1 APNIC Public Information Services

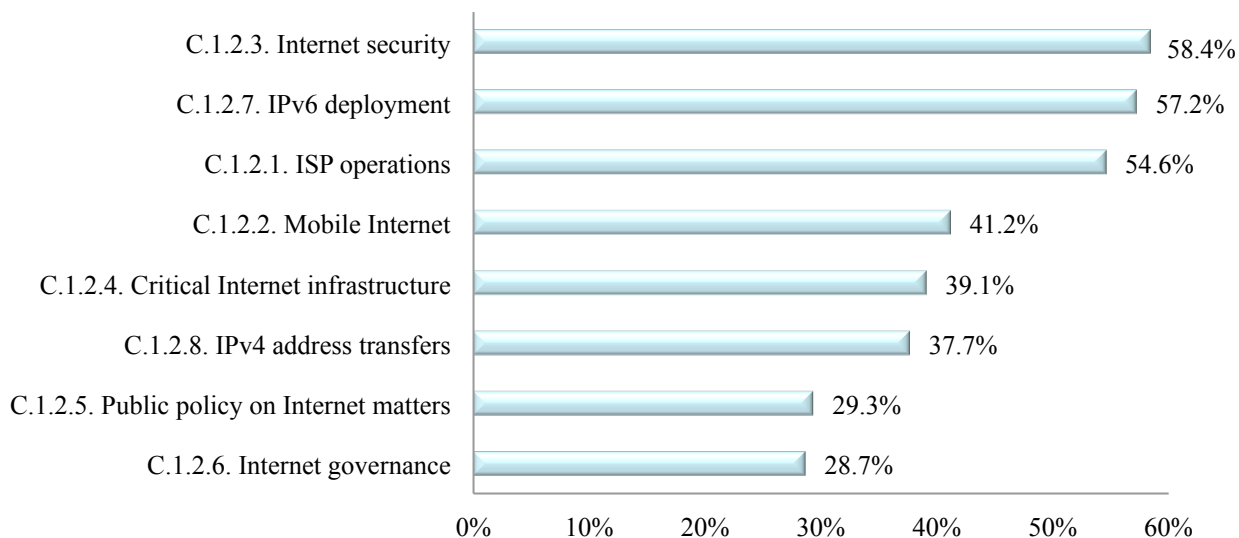
As a network information centre, APNIC provides Internet number registry, operational, research and statistical information to the general public. The following questions were asked to assess the organisation’s performance.



Satisfaction with APNIC public information services was high. Marginally lower rating was given to the ease to find information on the APNIC website (C.1.1.5); the highest rating was on APNIC’s reverse DNS service functionality (C.1.1.3).

The differences between APNIC Account Holders and Stakeholders scores were marginal, except for C.1.1.5 and C1.1.1, which indicate that both APNIC Members and Stakeholders had a high level of agreement over APNIC Public Information Services. Stakeholders tended to have had a slightly more difficult experience in navigating the APNIC website for information, perhaps because of unfamiliarity arising from less frequent use.

**Areas of Interest in Public Information Services**



Respondents were asked to choose as many areas of interest in public information services from eight options listed above in the survey. Three areas stand out: Internet security, IPv6 deployment and ISP operations. Internet policy and governance ranked lowest. The divide probably reflects the higher interest in tangible and pressing day-to-day technical work as opposed to the longer term policy and governance matters.

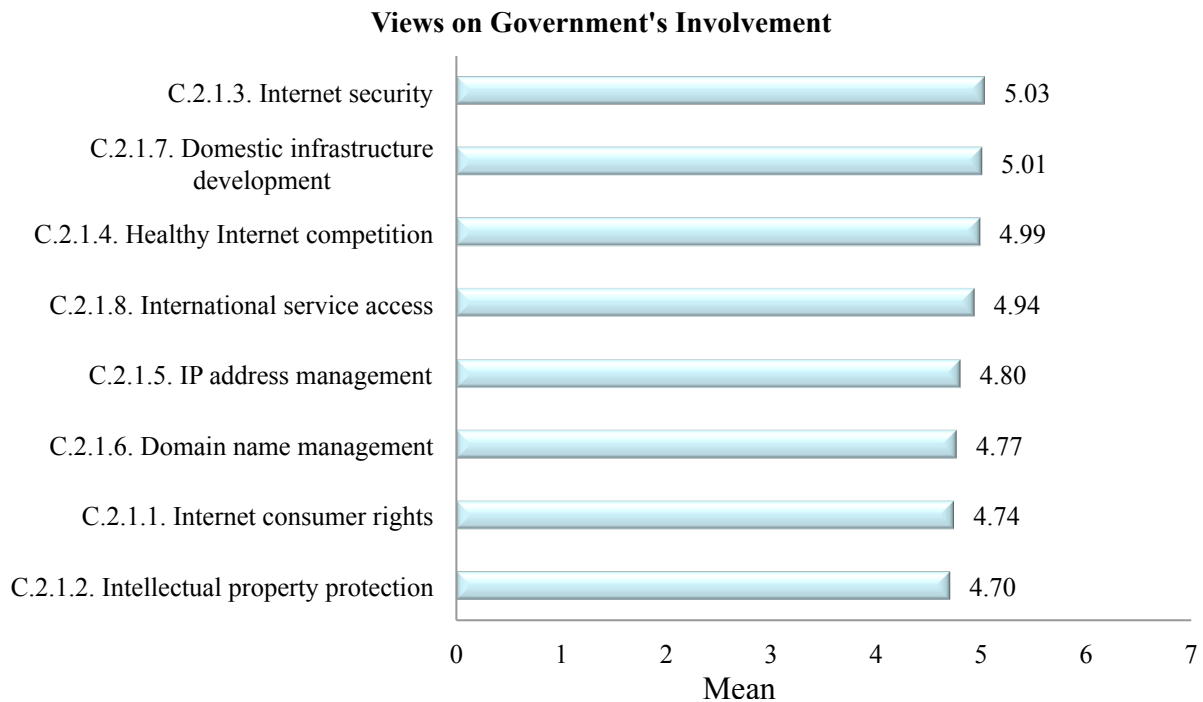
In the open-ended response section, respondents cited the following areas to be of interest in public information services: deployment training, case studies on the common errors during migration to IPv6, IP and DNS blacklisting services, new technology standards such as LISP, MPLS operations and deployment, easy-search information about ASN, IP blacklisting, DNS pointers, and transfer histories. Some respondents were open to having personal contact information available perhaps through “search by name” function in the APNIC Whois Database. There were also suggestions for IRR Database and training to build IRR System.

In addition, many were keen to know the IPv6 implementation and deployment statistics. In addition, several respondents mentioned that Whois database usage statistics would be helpful to trace the IP to whom and where they are allocated. Some also raised the issue of information available to the public in simple language.

One Korean respondent recommended that RIRs, including APNIC, develop an objective index to measure IPv6 deployment globally. In security, an Indian respondent said that APNIC should facilitate measures to ensure that any security or unlawful content issues were addressed quickly by all economies. The respondent said: “There has to be conscious effort that no user of [any] economy disturbs [the] network of other economies.”

### 3.2.3.2 Internet Governance

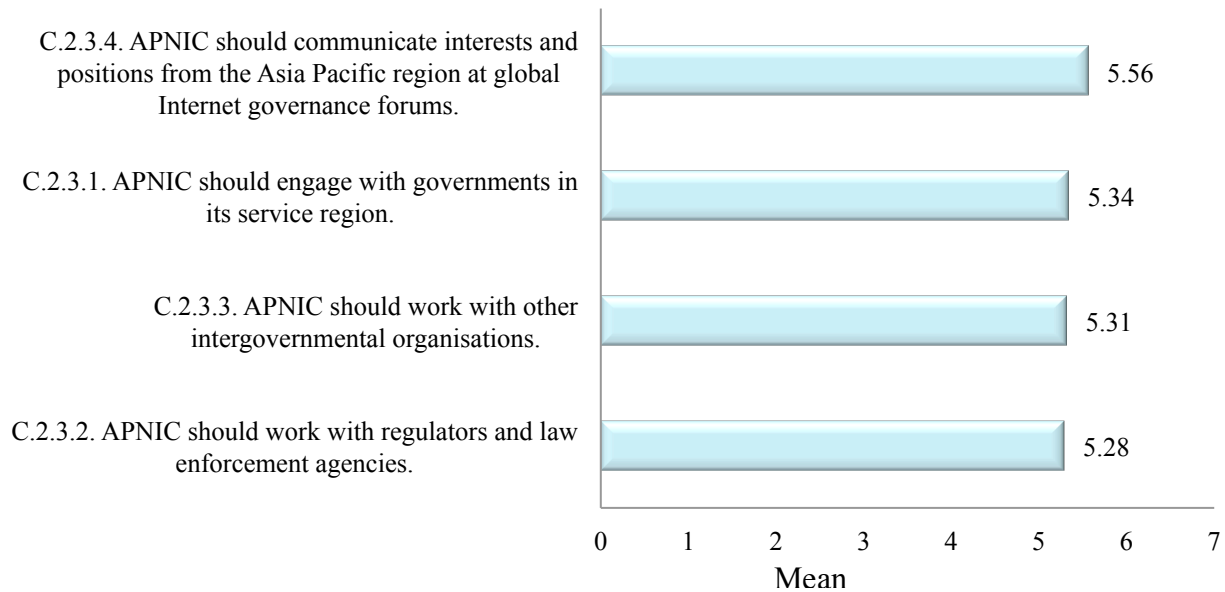
The Internet has been identified by governments as a strategic asset that directly impacts on many social and economic issues. Many governments are engaged in Internet-related regulation and policy, utilising a variety of approaches. In response, APNIC actively provides information and advice, and promotes the multi-stakeholder, bottom-up system of Internet governance, which has been essential to the Internet’s success.



In this question on respondents’ views towards government’s involvement on Internet matters, a 1 signifies “too much regulation”, 4 “about right” and 7 “needs more involvement”. Overall, there was not much difference in the views of Account Holders or Stakeholders about the level of government involvement in the issues listed above. Infrastructure development and Internet security ranked top most, with Account Holders from the LDEs most often holding that view.

In the open-ended section, some commented that their government was “too regulatory” and said that they believe that Internet should be more open. Others said that they need a better way for Internet governance from the government’s position, although not necessarily advocating for stringent regulations. A few said the high taxes that their governments imposed were unfair.

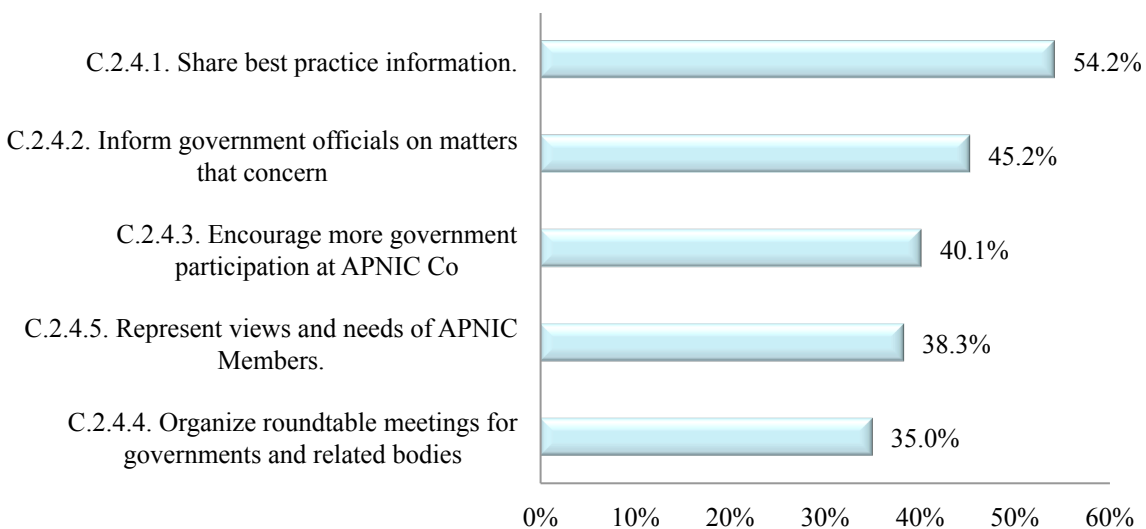
**APNIC's Engagement with Governments and Authorities**



APNIC is largely seen as engaging the government and authorities in Internet matters.

Account Holders from the LDEs wanted APNIC to be more proactively engaged with governments and authorities, particularly communicating interests and positions from the Asia Pacific region at the global Internet governance forums (as shown in the response for the item C.2.3.4). This was in line with the findings from the focus group discussions where most respondents said they would like to see more participation by APNIC in Internet governance.

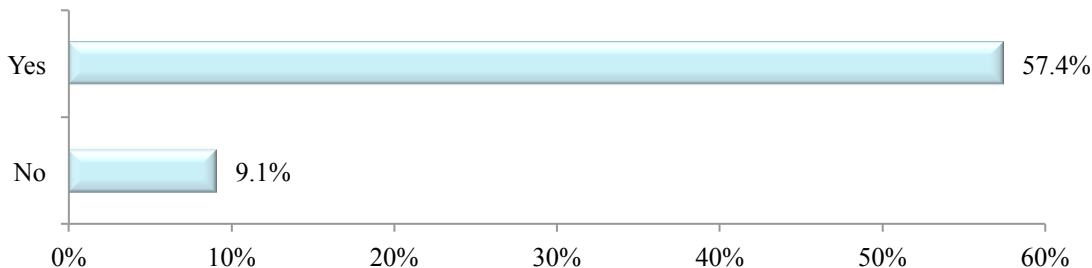
**How APNIC Should Engage with Governments**



Respondents wanted APNIC to focus on sharing best practices information with governments and to inform the government officials on matters that concern Internet number resource management.

In the open-ended section, various ideas were suggested: collaboration on guidelines and policies, engaging governments in the matter of growth of Internet/broadband, directly listening to the governments’ concerns and respond to their needs, and addressing regulators and law enforcement agencies in particular as opposed to government officials in general.

**The APNIC Government Working Group has proposed that a Public Policy Advisory Committee should be formed to provide APNIC with advice on such matters**

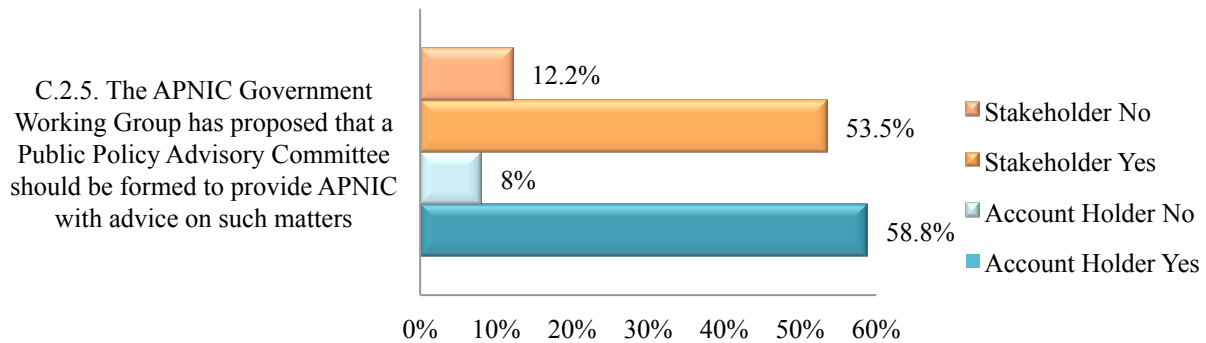


A sizable portion of respondents agreed that a Public Policy Advisory Committee should be formed, with 58.5% of Account Holders and 53.5% of Stakeholders, especially from Developing Economies, supportive of the idea.

Of the 886 out of 1,333 respondents who answered this question, 57.4% said “Yes” and 9.1% said “No”; the remaining 33.5% skipped the question. Among those who thought that such an advisory committee should be formed, 58.8% were Account Holders (550 or 71.9% of respondents were from the Developing economies) and 53.5% were SH (82 or 67.8% of respondents) were also from Developing economies.

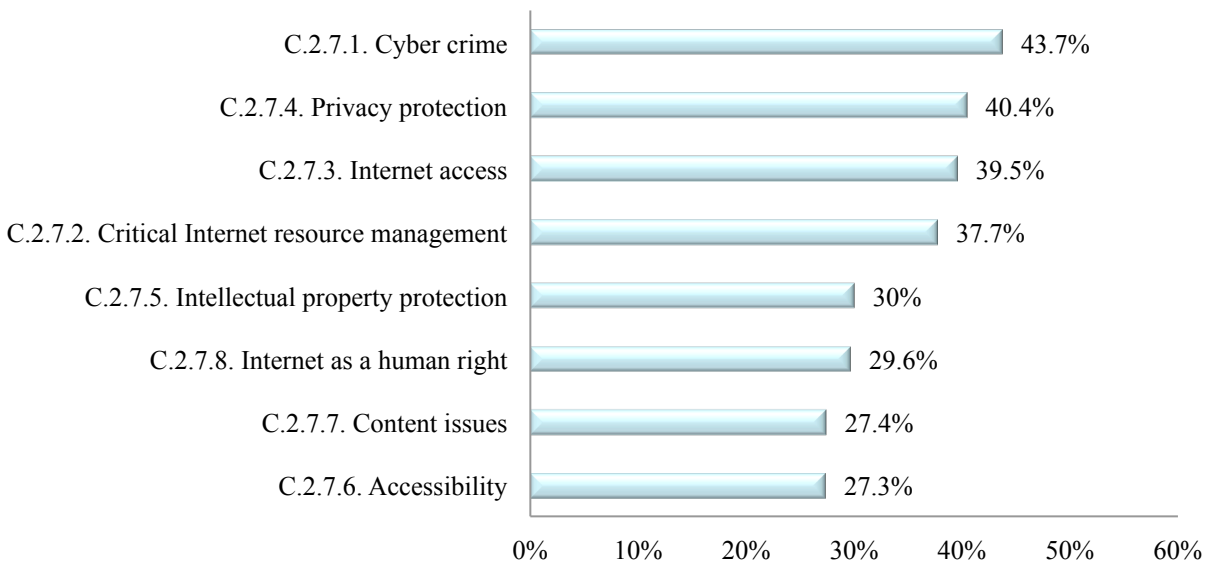
Further analysis found only 13 respondents who identified themselves as policy makers and government staff. Of these 13, two skipped the question, two said “No” and nine answered “Yes.”

### Formation of a Public Policy Advisory Committee



Respondents suggested that members in such a committee should include representatives from governments/government agencies, APNIC members, Industry experts, technical experts, ISPs, RIRs, community leaders, and NGOs.

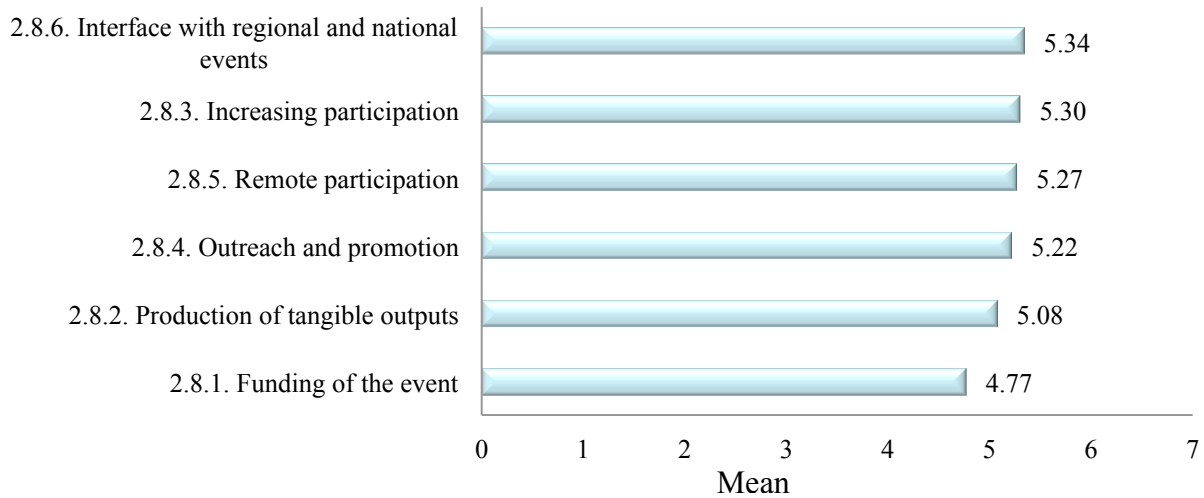
### Internet Issues Should Be Addressed within IGF



Among the issues on Internet governance, respondents ranked cyber crime issues markedly higher (43.7%), followed by privacy protection (40.4%) and Internet access (39.5%).



**Priority Regarding The Management of The IGF**



Respondents accorded as the highest priority for APNIC interfacing with regional and national events. Respondents, particularly Stakeholders from the Developed Economies, placed less priority for APNIC to fund the event.

Some of the responses touched upon freedom of speech aspects as different governments have different levels of regulation. While some said that there should be less government intervention and more freedom within online space, others said that it was necessary to regulate some Internet behaviours while not infringing the interests of others. Respondents also said that APNIC needed to participate actively in addressing concerns on Internet governance capacity building in developing economies (especially among ISPs, civil societies and government organisations), Internet security, lawful interception and IP address space management.

## 4. Key Issues Identified

The findings from the survey provide insight into APNIC Members and Stakeholders views of how APNIC can improve their existing services. The results give in-depth information as well as suggestions on very specific technical and administrative issues that will be of immense use to streamlining APNIC's functions. The following are key issues and their recommendations derived from the survey:

### 4.1 Training

More technical training such as IPv6, DNSSEC and Routing course were highly desired by the survey respondents.

The need for training is greatest in Developing and LDEs, where training needs exist at different levels and on a wide spectrum of issues. Some of the training could be useful for government officials, for example in understanding the mechanics of the Internet so that laws may be better promulgated. Some of the training elements are of a technical nature for the private sector in the Developing Economies to run an Internet business. And as has been indicated, some of the training should be of a policy nature both for operators and government officials. In these circumstances, a good local trainer would be the best person for those sessions. The extent of training needs in the region would indicate that training in general should be increasingly localised. Also local trainers should help to bring down costs.

Although most respondents were satisfied with the training provided, agreeing that it was relevant to their organisations, the costs of APNIC training was of concern to some. Similar findings surfaced in the previous survey. LDEs value the training to such an extent that some among them are prepared to pay for the training. The current financing model for training calls for subsidies for the participants, the question of the financial sustainability of the training should be studied.

### 4.2 IPv6

There are knowledge gaps that may be filled by APNIC in training, for employees of APNIC Members as well as government officials. Some of the training should simply be at the level of awareness-raising.

IPv4 transition to IPv6 poses many issues and challenges that for which Account Holders and Stakeholders believe APNIC was best positioned to address. The development of policies and guidelines is a priority area. APNIC could develop more policies and guidelines to aid Members in the transition process. Respondents are most comfortable with APNIC acting as a referee rather than a player in the IP address market.

IPv6 deployment will likely be a problematic issue for the near future because there is a sizeable pool of organisations that are either have no formal plan for deployment, or an unrealistic plan or

they may not have properly allocated a budget for the job. Support and training for IPv6 deployment grow increasingly critical, and APNIC is being asked to assist in many ways.

### **4.3 Internet Governance**

Account Holders and Stakeholders seemed to feel the necessity of greater involvement of governments regarding Internet governance, particularly on Internet security, although not necessarily advocating for stringent regulations. APNIC should play the liaison role in engaging the government and authorities in ensuring good Internet governance. While engaging with governments, APNIC should focus on sharing best practices information with them and to inform the government officials on matters that concern Internet number resource management. APNIC could collaborate with governments on guidelines and policies formulation and engaging them in the matter of growth of Internet/broadband. Respondents also felt the need to involve regulators and law enforcement agencies, not only government officials in general.

A few mentioned the high tax rates that their governments imposed as unfair.

### **4.4 Focus Groups**

An interesting development emerged at the meeting in Vietnam. All the ISPs and network administrators interacted not with APNIC but with VNNIC. This raises the question of how APNIC would interact with NIRs and members in the future in order for the future survey respondents to get to know APNIC better.

It is suggested that future focus group meetings should have NIRs as a separate group to meet and discuss.

## **5. Conclusion**

Overall, the 2012 survey found that Account Holders were satisfied with how APNIC is run in the level and quality of services offered and in its governance structure. There was the continual call for more frequent and lower-price meetings and trainings.

The transition to IPv6 emerged as a significant issue. A clear message from respondents was that APNIC should step up efforts regarding IPv6 deployment and training. APNIC's visibility in IGF meetings was also urged. There was a high concern over Internet infrastructure roll-out and security, and the role of government was seen as increasingly important; government relations were also seen as growing in importance accordingly.