

2018 APNIC Member Survey

Presentation to APNIC 46 Conference - Noumea





AGENDA

Methodology

Service Usage and Satisfaction

Operational Challenges

Governance

Questions

METHODOLOGY

- Face to face focus groups held in ten (10) economies, plus five (5) online focus groups
- Online survey questions based on outputs from focus groups
- Distributed in June 2018 and open for four (4) weeks)
- 1,241 completed responses received – an increase of 5% on the 2016 Survey
 - Sample size provides 95% confidence that results are within +/- 3% of presented figures

Regions



South Asia	29%
East Asia	27%
South East Asia	21%
Oceania	20%
Non-APNIC Regions	3%

Economies



LDEs	Developing	Developed
24%	54%	19%

Organisation Relationship



Members	Stakeholders
73%	27%



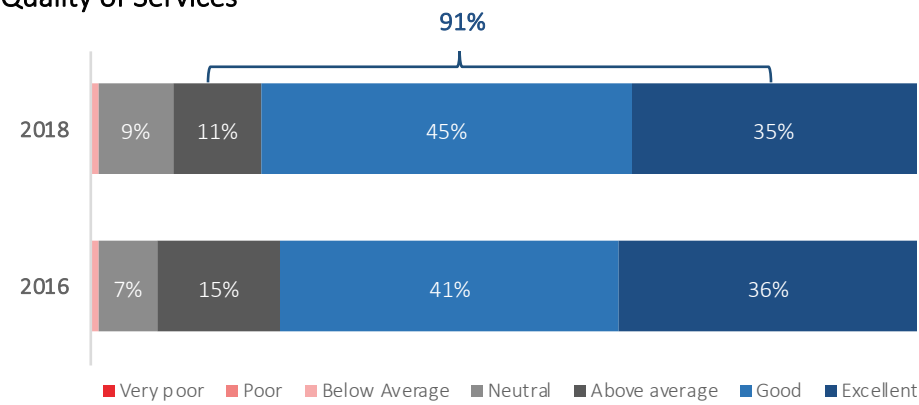
RESULTS

Usage and Satisfaction

OVERALL SATISFACTION

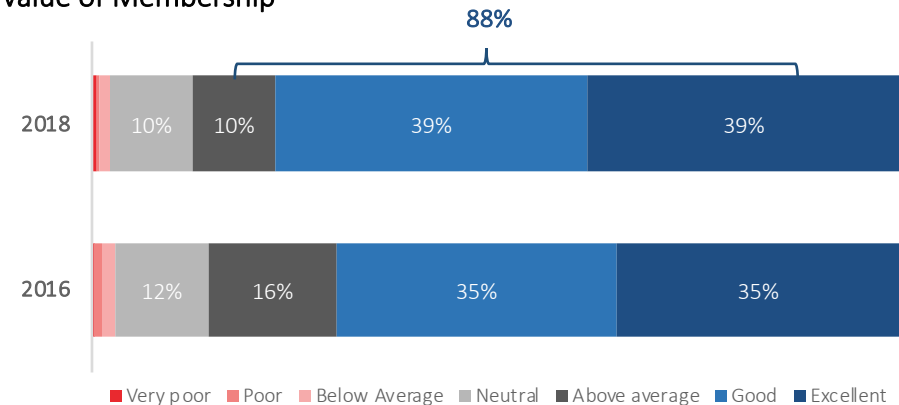
Q 8 –Thinking about APNIC overall, how would you rate: (Asked of Members)

Quality of Services



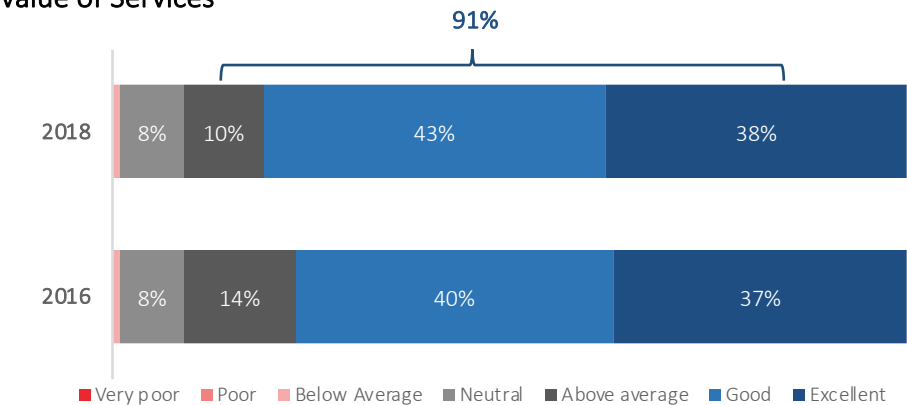
Q 8 –Thinking about APNIC overall, how would you rate: (Asked of Members)

Value of Membership



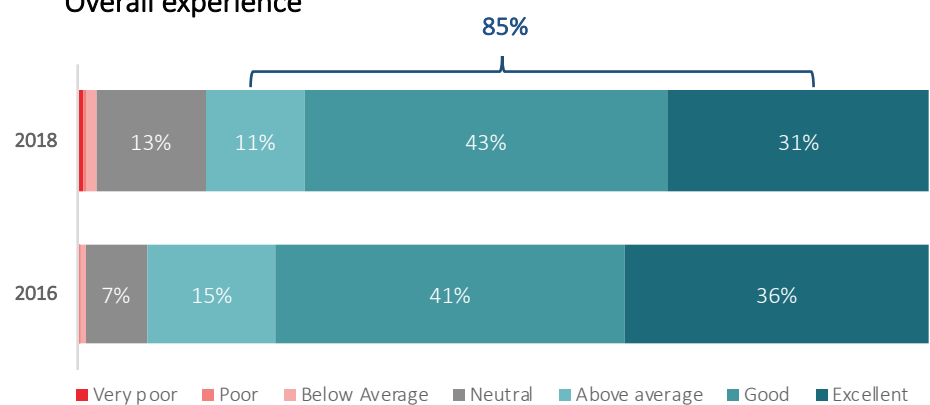
Q 8 –Thinking about APNIC overall, how would you rate: (Asked of Members)

Value of Services



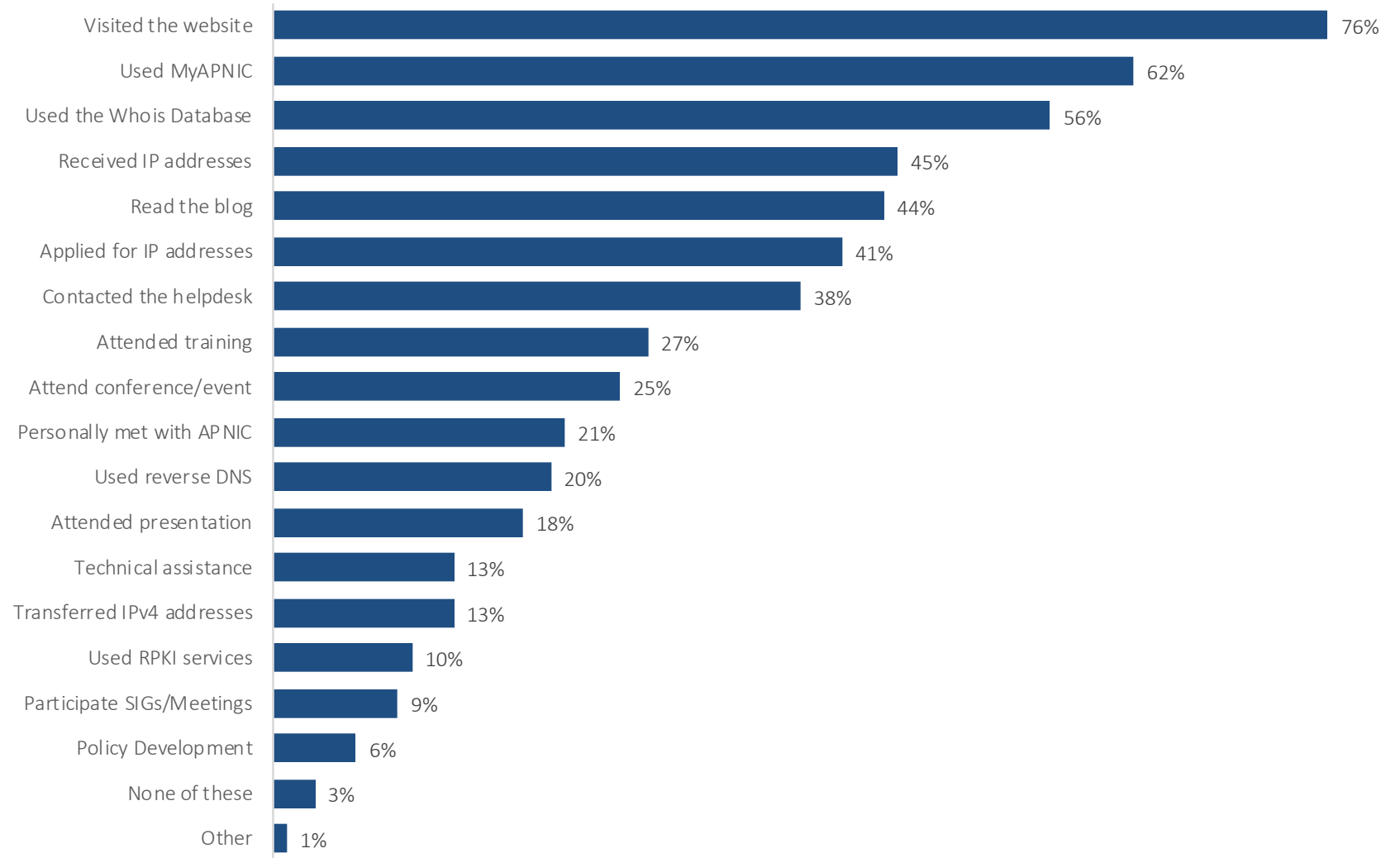
Q 9. Overall, how would you rate your experience dealing with APNIC? (Asked of Stakeholders)

Overall experience



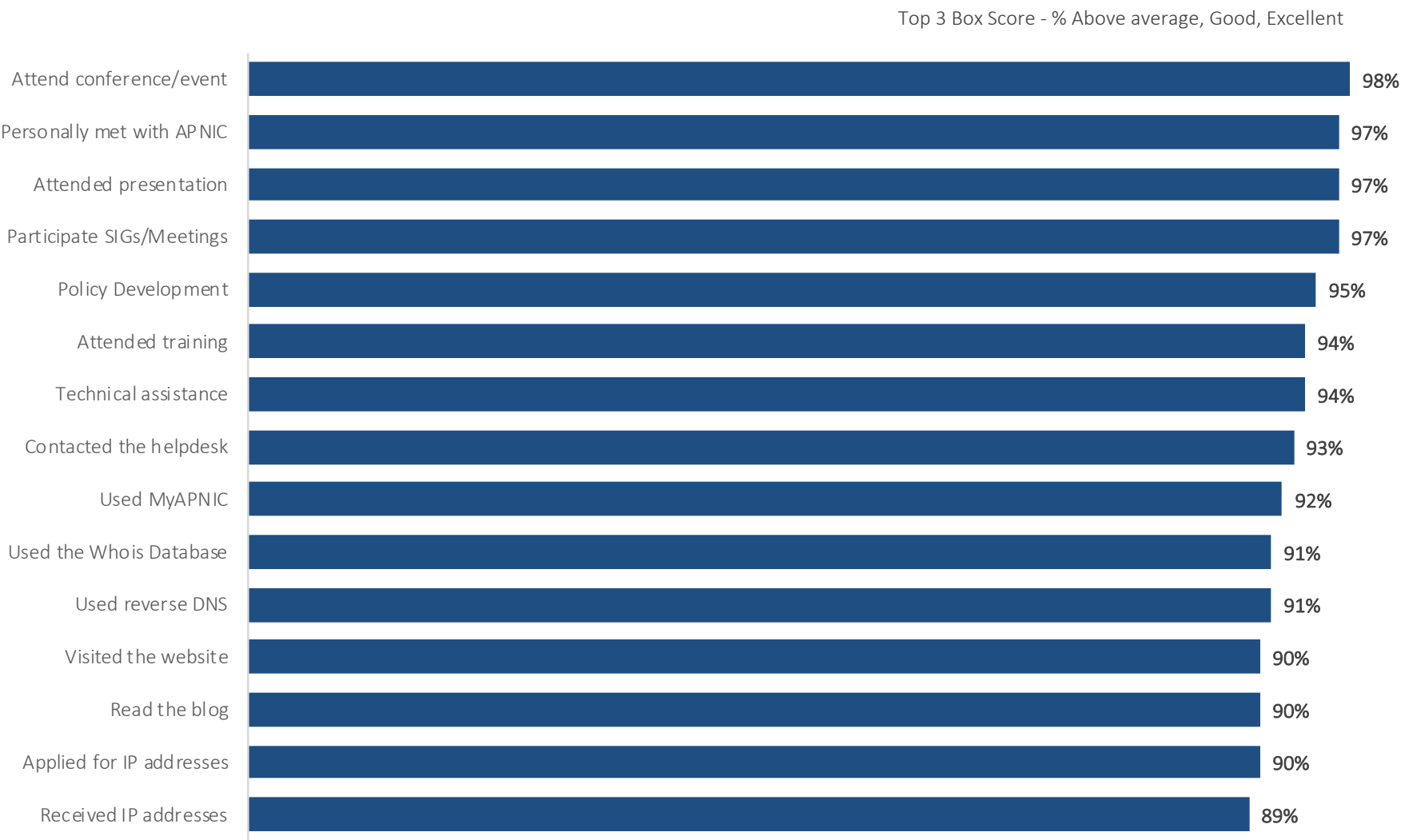
SERVICE USAGE

Q 5 - APNIC Services used by respondents over the last 2 years



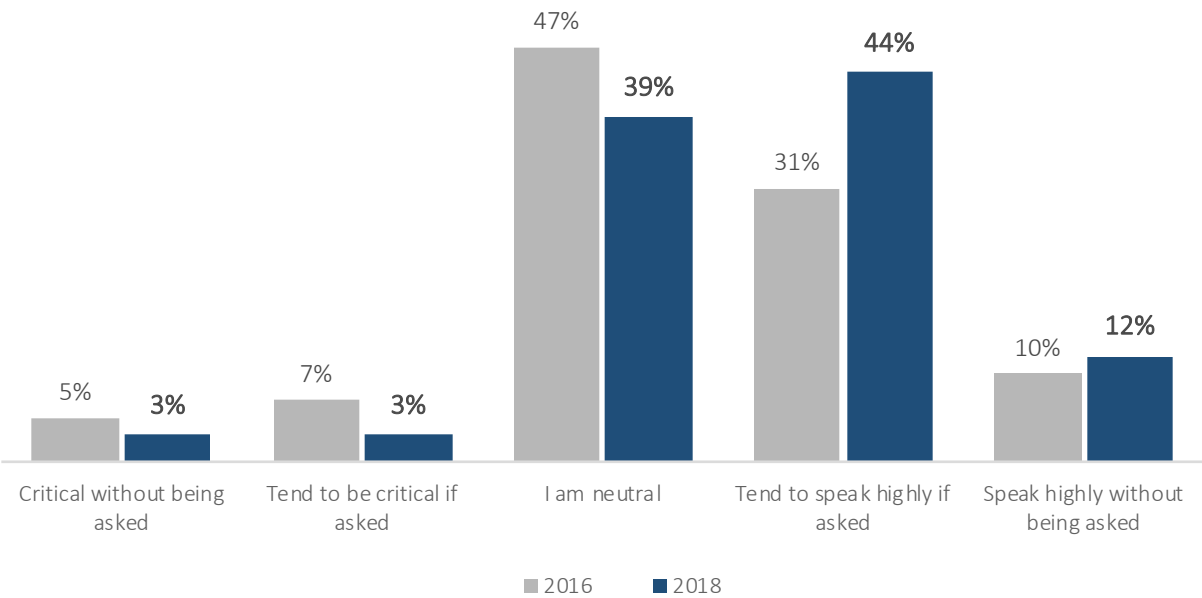
SERVICE SATISFACTION

Q 6 – Thinking about the APNIC services and activities you have used or undertaken, how would you rate your experience?



ENDORSEMENT

Q 38 – Which of these phrases best describes the way you speak about APNIC to others?



	Members	Stakeholders	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample Size	903	338	337	251	259	356	294	672	237
Critical without being asked	2%	5%	7%	0%	2%	2%	2%	4%	0%
Tend to be critical if asked	3%	2%	2%	2%	4%	2%	3%	3%	3%
I am neutral	36%	47%	50%	32%	48%	26%	27%	40%	49%
Tend to speak highly if asked	48%	32%	33%	49%	39%	53%	51%	40%	43%
Speak highly without being asked	12%	14%	9%	16%	7%	17%	18%	13%	5%
Mean Score	3.64	3.49	3.35	3.77	3.46	3.82	3.80	3.54	3.52

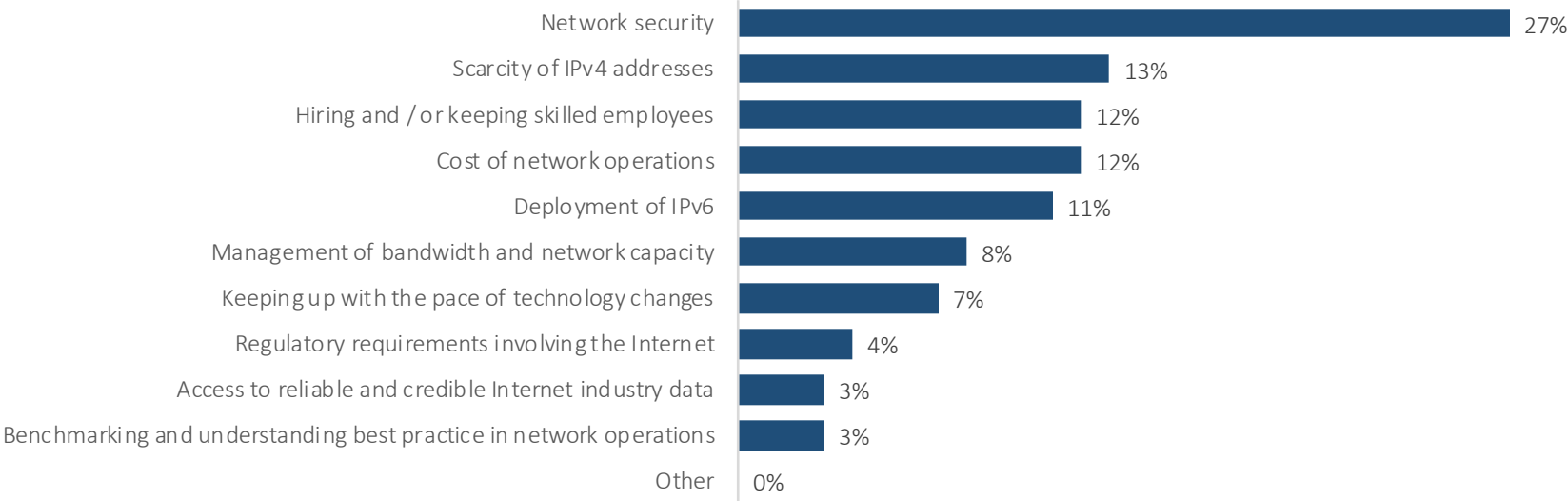


RESULTS

Operational Challenges

HIGHEST RATING CHALLENGES

Q9. Thinking about your Internet-related services, products or activities, what are the MAIN operational challenges facing your organisation?

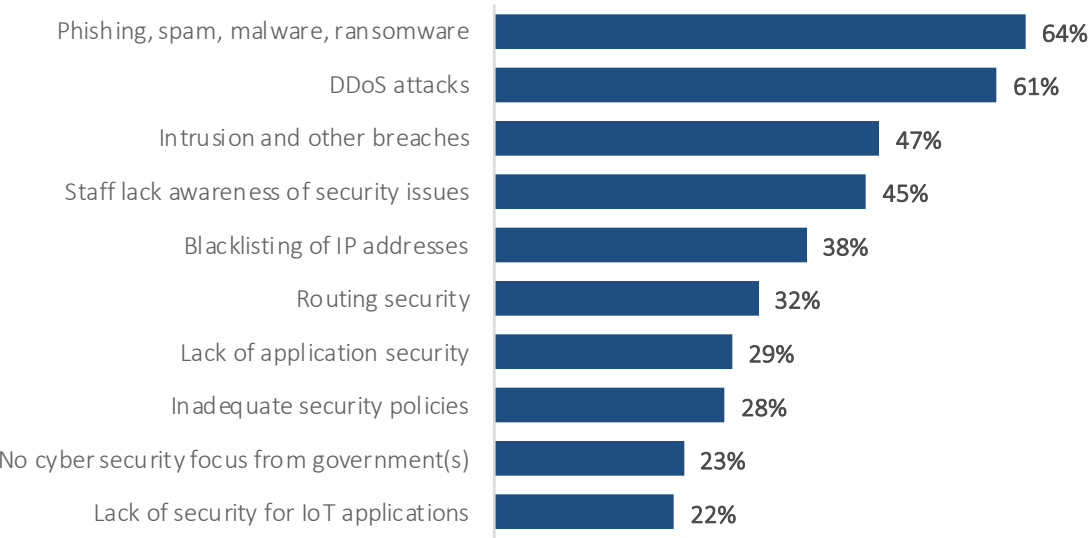


Consistent with focus group feedback, network security is the **number one** challenge facing the community in 2018

	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Network security	28%	34%	22%	26%	28%	25%	31%
Scarcity of IPv4 addresses	13%	9%	14%	14%	11%	13%	12%
Cost of network operations	10%	14%	17%	11%	13%	13%	11%
Hiring and / or keeping skilled employees	12%	12%	13%	10%	8%	11%	16%
Deployment of IPv6	9%	8%	8%	17%	16%	10%	7%
Management of bandwidth and network capacity	9%	9%	9%	8%	7%	9%	8%
Keeping up with the pace of technology changes	10%	5%	7%	6%	5%	9%	4%
Regulatory requirements involving the Internet	4%	6%	4%	3%	4%	4%	5%
Benchmarking and understanding best practice in network operations	4%	2%	3%	3%	3%	4%	3%
Access to reliable and credible Internet industry data	3%	1%	4%	3%	4%	2%	2%
Other	0%	1%	0%	0%	0%	0%	1%

NETWORK SECURITY

Q10. Thinking about network security, what are the MAIN challenges facing your organisation?



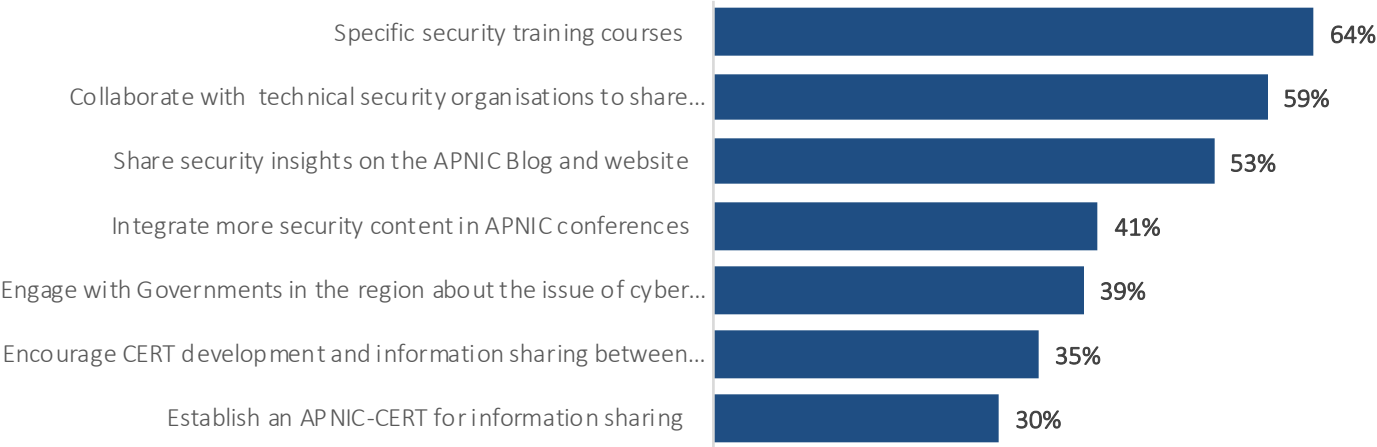
“Security is the greatest threat at all levels and is getting worse. How to tackle this is a big issue for the industry”

	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample size	337	251	259	356	294	672	237
Phishing, spam, malware, ransomware	58%	63%	74%	64%	66%	63%	65%
DDoS attacks	65%	45%	70%	61%	58%	64%	54%
Intrusion and other breaches	58%	55%	46%	30%	31%	51%	54%
Staff lack awareness of security issues	40%	50%	49%	46%	50%	44%	43%
Blacklisting of our IP addresses	30%	27%	47%	47%	49%	38%	24%
Routing security	36%	26%	29%	33%	32%	33%	27%
Lack of application security	23%	31%	29%	32%	35%	27%	27%
Inadequate security policies	25%	35%	22%	32%	39%	25%	25%
No cyber security focus from governments	14%	20%	21%	35%	41%	20%	8%
Lack of security for IoT applications	21%	23%	17%	24%	22%	21%	22%

Significantly higher / lower than total

NETWORK SECURITY – APNIC ASSISTANCE

Q11. How might APNIC best assist you or others with network security challenges?



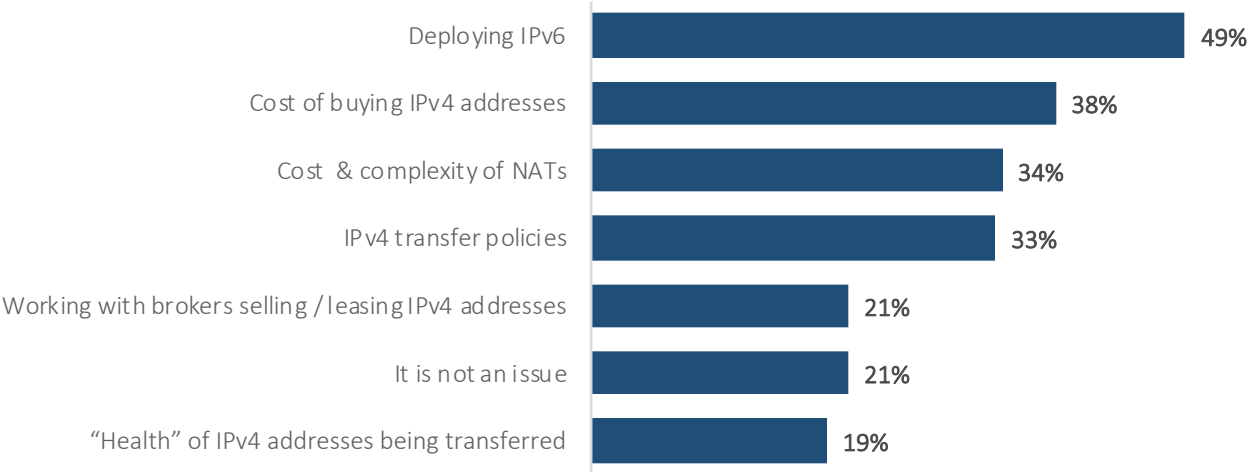
“I would like to have more training on network security and best practice to implement in the network to protect against the network attacked.”

“The need for collaboration is growing. This involves a proactive APNIC”

	Members	Stakeholders	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample size	884	328	330	243	257	347	290	656	231
Specific security training courses	64%	63%	59%	52%	75%	72%	73%	70%	42%
Collaborate with technical security organisations to share information and best practice	59%	59%	56%	61%	61%	60%	60%	60%	57%
Share security insights on the APNIC Blog and website	55%	49%	44%	50%	60%	59%	57%	53%	49%
Integrate more security content in APNIC conferences	42%	38%	42%	22%	45%	52%	56%	44%	17%
Engage with Governments about cyber security	37%	45%	35%	40%	33%	48%	47%	38%	35%
Information sharing between CERTs and the APNIC community	33%	39%	34%	37%	37%	30%	32%	36%	33%
Establish an APNIC-CERT for information sharing	30%	30%	28%	30%	31%	34%	34%	32%	24%

Significantly higher / lower than total

Q13. Thinking about the scarcity of IPv4 addresses, what are the MAIN challenges facing your organisation?



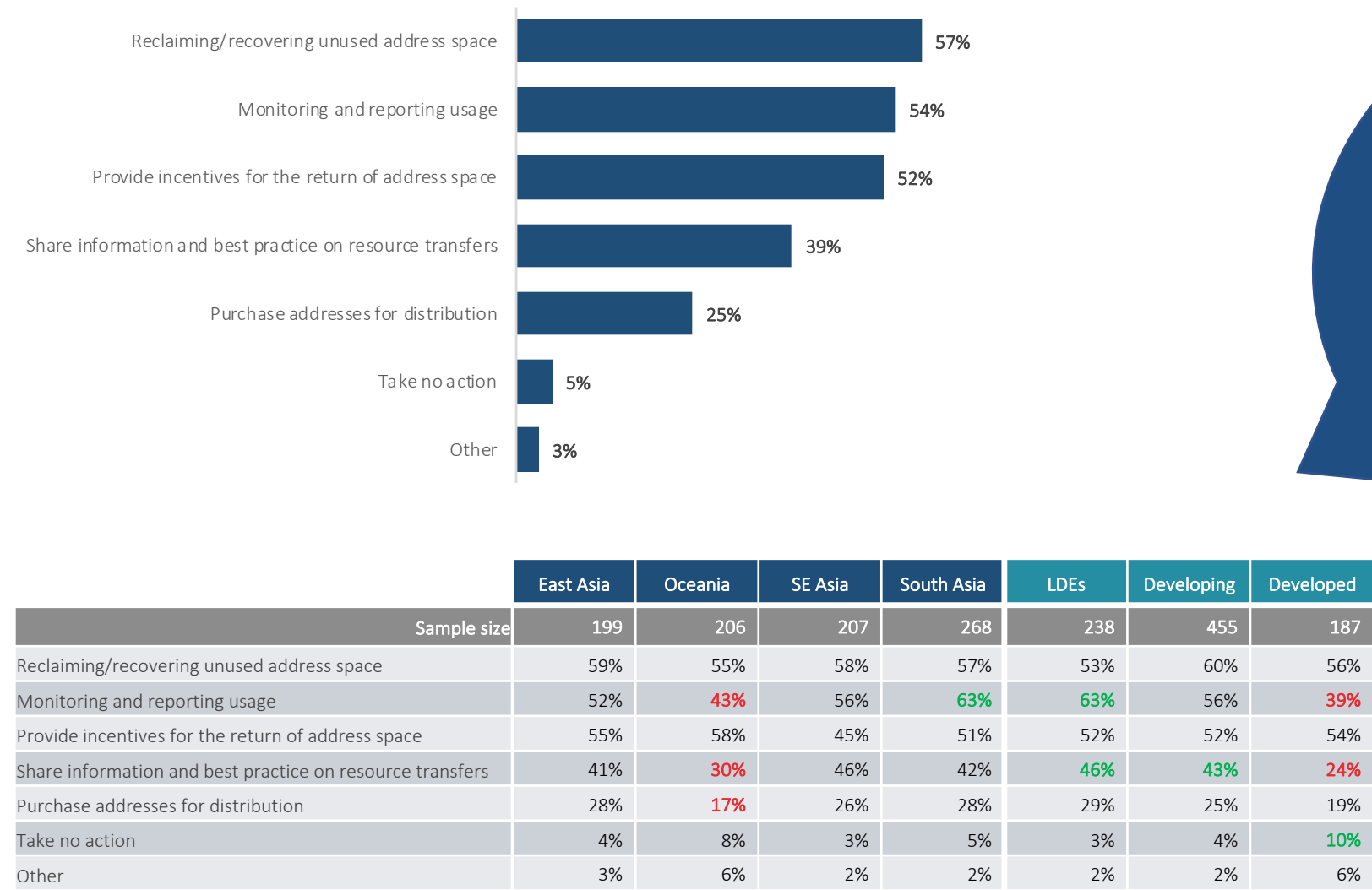
Deploying IPv6 is the main challenge occurring from the shortage of IPv4 addresses except in Developed economies where a lack of IPv4 is largely seen as “not an issue”.

	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample size	199	206	207	268	238	455	187
Deploying IPv6	54%	33%	55%	54%	55%	52%	35%
The cost of buying IPv4 addresses	44%	26%	42%	41%	40%	41%	29%
Cost and complexity of NATs	34%	22%	43%	37%	40%	36%	20%
IPv4 address transfer policies	40%	17%	38%	38%	41%	36%	18%
Working with brokers selling / leasing IPv4 addresses	22%	12%	24%	26%	29%	21%	12%
It is not an issue	13%	37%	17%	19%	19%	18%	33%
"Health" of addresses being transferred	28%	12%	26%	15%	15%	25%	11%

Significantly higher / lower than total

IPv4 SCARCITY – APNIC ASSISTANCE

Q14. Thinking about the scarcity of IPv4 addresses, which, if any, of the following IPv4 activities do you think APNIC should undertake?



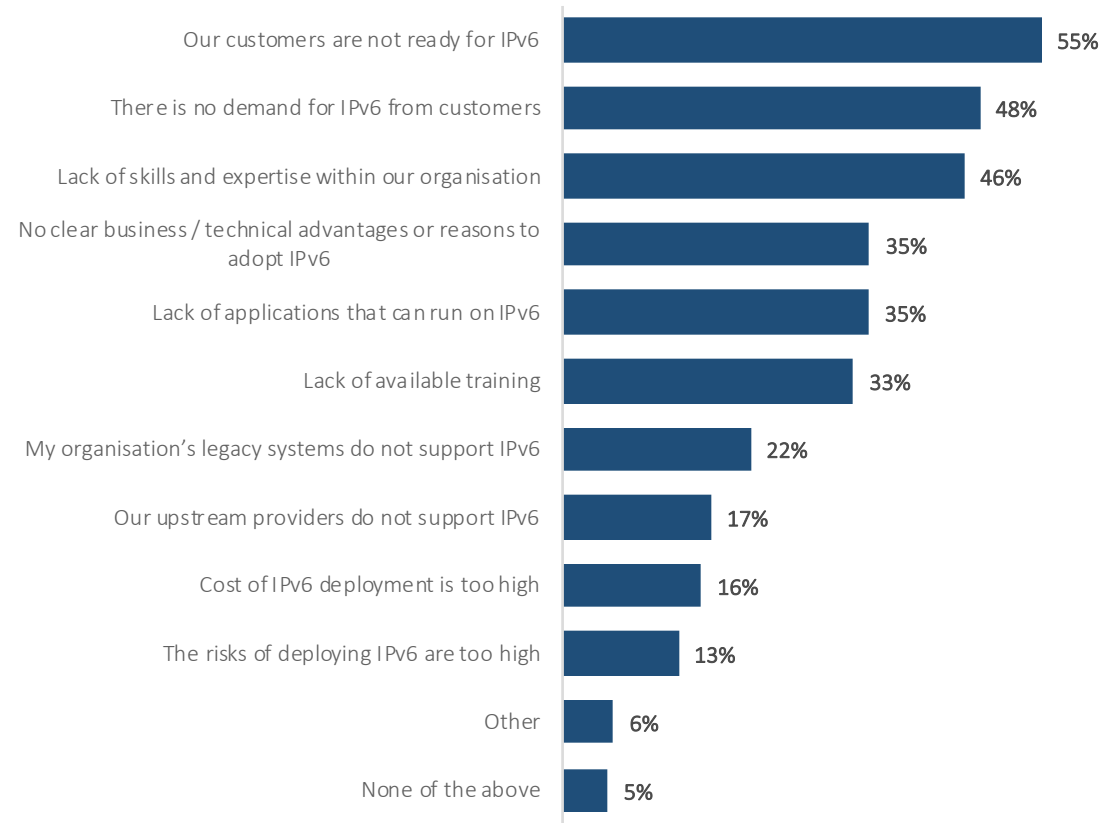
“There is so much wasted space out there being sat on - get it back and make it usable.”

“Checking on use from legacy allocations, e.g. in NZ a number of ISP's received multiple /16 address blocks which quite likely they shouldn't have - they should have been returned to the pool for re-allocation”

Significantly higher / lower than total

IPv6 DEPLOYMENT CHALLENGES

Q 17 – What are or were the MAIN challenges affecting your organisation’s deployment of IPv6?



	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample size	199	206	207	268	238	455	187
Our customers are not ready for IPv6	53%	41%	58%	66%	67%	57%	36%
There is no demand for IPv6 from customers	34%	54%	46%	56%	56%	43%	51%
Lack of skills and expertise within our organisation	40%	43%	53%	49%	59%	43%	39%
No clear advantages or reasons to adopt IPv6	37%	39%	38%	28%	31%	36%	39%
Lack of applications that can run on IPv6	41%	19%	40%	42%	38%	41%	20%
Lack of available training	29%	17%	37%	47%	49%	35%	12%
My organisation’s legacy systems do not support IPv6	23%	21%	24%	19%	18%	23%	22%
Our upstream providers do not support IPv6	20%	17%	13%	19%	21%	16%	15%
Cost of IPv6 deployment is too high	22%	11%	15%	16%	18%	16%	14%
The risks of deploying IPv6 are too high	12%	10%	18%	13%	14%	15%	10%
Other	6%	13%	4%	2%	2%	5%	12%
None of the above	6%	8%	3%	4%	3%	5%	8%

Significantly higher / lower than total

IPv6 DEPLOYMENT – APNIC ASSISTANCE

Q 18 – Which of the following APNIC activities do you believe are the most important to encouraging IPv6 adoption in the APNIC region?



“There are few engineers out there who understand IPv6, despite all the training ... This is a big problem”

“Actively promote upstream operators to deploy IPv6 networks. ... even if operators have deployed IPv6, operators' sales and technical personnel still do not know that IPv6 access can be provided.”

	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample size	199	206	207	268	238	455	187
Providing training in IPv6	51%	57%	65%	72%	71%	62%	53%
Sharing case studies and best current practices about IPv6	60%	56%	65%	63%	64%	64%	53%
Promoting IPv6 to hardware, software and/or content providers	59%	41%	51%	50%	49%	54%	43%
Knowledge sharing on IPv6 deployment experiences	50%	44%	50%	53%	54%	51%	40%
Promoting IPv6 to management / decision makers	44%	41%	47%	45%	46%	46%	36%
Promoting IPv6 to government organisations	46%	34%	42%	49%	54%	42%	32%
APNIC should take no action	1%	2%	3%	2%	2%	2%	2%
Other	1%	2%	1%	1%	2%	1%	2%

Significantly higher / lower than total

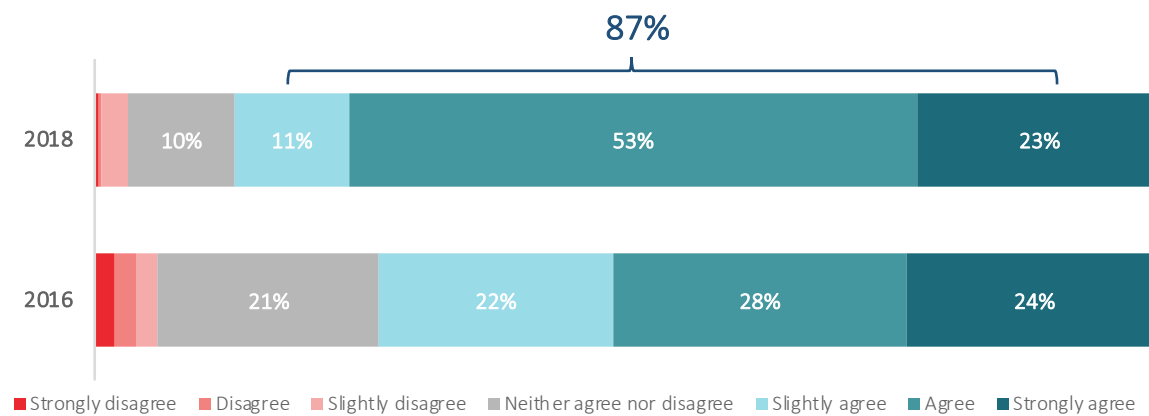


RESULTS

Governance

TRANSPARENCY

Q 35. APNIC is sufficiently open and transparent in its activities

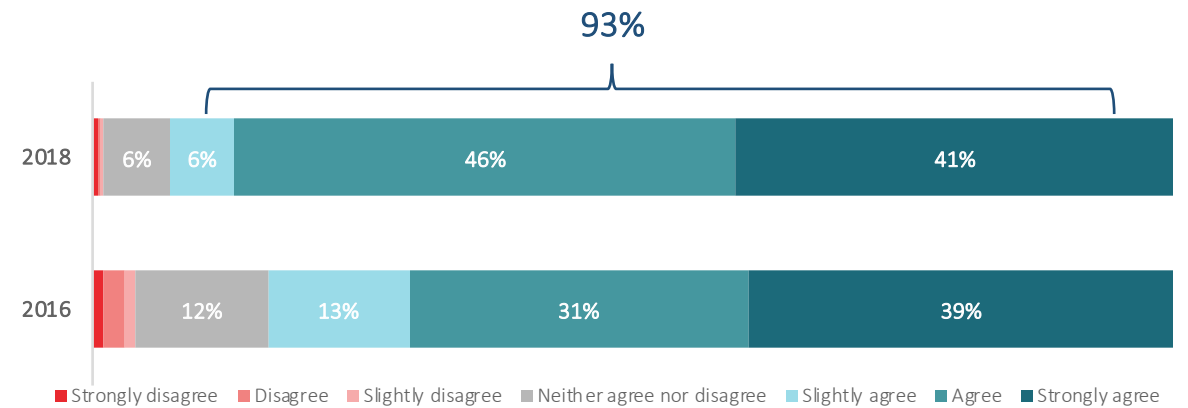


	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample Size	199	206	207	268	290	403	187
Top 3	83%	81%	87%	94%	94%	89%	74%

Significantly higher / lower than total

RESPECTED IN THE INTERNET COMMUNITY

Q 35. APNIC is respected in the Internet community



	East Asia	Oceania	SE Asia	South Asia	LDEs	Developing	Developed
Sample Size	199	206	207	268	290	403	187
Top 3	87%	93%	95%	97%	95%	94%	88%

Significantly higher / lower than total

An abstract graphic on the left side of the slide. It features a dark blue background with a white curved line separating it from the right side. A glowing wireframe structure, resembling a molecular or network model, is visible on the left, with a bright blue and white wavy line passing through it.

QUESTIONS?