

APNIC EC Meeting Minutes

Face-to-Face meeting, Nairobi, Kenya

Saturday, 3 June 2017, 10:15 – 18:25 (UTC+3)

Meeting Start: 10:15 (UTC+3), Saturday, 3 June 2017

Present

Gaurab Raj Upadhaya
Izumi Okutani
Jessica Shen
Kam Sze Yeung
Kenny Huang
Paul Wilson
Rajesh Chharia (by Webex)
Roopinder Singh Perhar

Connie Chan (minutes)
Craig Ng
Richard Brown

Apologies

Nil

Agenda

1. Opening of meeting and declaration of quorum
2. Agenda bashing
3. Declaration of interests
4. Review of minutes of last meeting and record of circular resolutions passed since the last meeting
5. Matters arising from the last meeting
6. Chair update
7. WH&S update
8. APNIC 48 location
9. APNIC policy endorsement
10. APNIC Foundation update
11. Financial reports
12. Secretariat report
13. Service Partner model
14. APNIC Survey update
15. Risk Register
16. Any other business (AOB)
17. Next EC meeting

Minutes

1. Opening of meeting and declaration of quorum

The Chair of the Executive Council welcomed all attendees. The Chair declared the meeting open at 10:15 (UTC+3) on Saturday, 3 June 2017, and noted that a quorum was present.

2. Agenda bashing

The Chair called for comments on the agenda.

The following agenda items were raised for discussion under AOB:

- Whois accuracy and LEA engagement
- Remote participation
- Length of APNIC conference
- APRICOT engagement

3. Declaration of interests

The Chair asked the EC members to review the Register of Interests (attached), and declare any potential conflicts of interests, and for any such declaration to be recorded in the minutes.

Izumi Okutani declared that she is a member of the Internationalization of JANOG (JANOG i18n), a member of the Secretariat of Internet Governance Conference Japan (IGCJ), and a member of the Multistakeholder Steering Group of APriGF.

Action item 2017-05: The Secretariat to update the Register of Interests.

4. Review of minutes of last meeting and record of circular resolutions passed since the last meeting

The following circular resolutions (which require the agreement of all EC members who are entitled to vote on the resolution) were passed by the EC during the period between the last EC meeting and this meeting, and are recorded in these minutes for completeness.

2017-09: The EC resolved to adopt the minutes of the EC meeting of 27 February 17 and 2 March 17.

5. Matters arising from the last meeting

The following matters were completed:

Action 2017-01: The Secretariat to further develop the new model for EC's consideration at the EC meeting during APNIC 44.

Action 2017-02: The Secretariat to gather information and evaluate the two potential host cities for APNIC 48.

Action 2017-03: Duncan Macintosh to prepare the documents and information for the due diligence on the individuals.

Action 2017-04: Craig Ng to amend the draft AOC between APNIC and the APNIC Foundation.

There were no outstanding actions from the previous meetings.

6. Chair update

The Chair updated on key developments and highlights since the last EC meeting.

The Chair appointed Izumi Okutani to serve as the APNIC EC Observer to the NRO EC.

The Chair also gave an update on the EC travel expenses by activity code. He reminded the EC to review the list of conferences and make any changes or corrections to the travel matrix.

7. WH&S update

Roopinder Perhar spoke to the health and safety report. The EC noted the findings of the health and safety report.

8. APNIC 48 location

The DG spoke to the proposed location options for APNIC 48 in 2019. The EC discussed the two proposed locations, and directed the secretariat to proceed with preparatory work for the meeting in 2019. An announcement will be made to the community during APNIC 44 in Taichung.

[Confidential information redacted]

9. APNIC policy endorsement

The EC reviewed the policy proposals that received consensus at APNIC 43 (attached).

Resolution 2017-11: The EC resolved to endorse the adoption of policy proposal prop-117-v003: Returned IPv4 address management and Final /8 exhaustion.

Motion proposed by Kenny Huang; seconded by Roopinder Perhar. Passed unanimously.

10. APNIC Foundation update

Duncan Macintosh joined the meeting remotely for this agenda item, and spoke to the due diligence process document for the Foundation Board.

The EC discussed and agreed on several names for the potential board members of the APNIC Foundation.

[Confidential information redacted]

Action 2017-06: Duncan Macintosh to proceed to contact the potential board members of the APNIC Foundation and invite them to serve on the Board.

Action 2017-07: Craig Ng to prepare a proposal in relation to the issue of appointing an APNIC EC member to the APNIC Foundation Board.

11. Financial reports

Richard Brown spoke to the April financial report for 2017 (attached).

The EC considered the Monthly Financial Report and the Investment Fund Management Report for April 2017 (attached). The EC noted that APNIC is solvent and able to meet all current debts.

The April financial reports highlight that membership revenues will be below budget by the end of the year. Revenue is tracking at 2% under budget and expenses are tracking at 8% under budget forecast.

At the end of April 2017, APNIC had a total of 6,182 Members serving 54 economies.

The EC noted the increased number of membership closures due to non-contactable and discontinued businesses.

The EC noted the growing demand for resources transfers and an increased potential for conflicts over address space. The EC considered the matter of whether to levy a fee on transfers of IPv4 resources resulting from mergers, acquisitions or takeovers.

The EC also noted that the income from the investment portfolio is tracking lower than anticipated in the budget. The EC has asked the Secretariat to follow up with Credit Suisse on this issue.

Action 2017-08: Craig Ng to prepare a circular resolution to remove the current exemption for transfer fees, for transfers of IPv4 resources resulting from mergers, acquisitions or takeovers.

Action 2017-09: Craig Ng to give legal consideration on refunds in relation to account closures.

Action: 2017-10: Richard Brown to follow up with Credit Suisse on the investment returns.

12. Secretariat report

The DG spoke to the APNIC secretariat report (attached).

There was a brief discussion about fraud reporting. The EC noted and discussed the issue of fraudulent activities, the importance of taking necessary steps against fraud, and the ongoing engagement with law enforcement.

13. Service Partner model

The DG spoke to the new Service Partner model presentation.

The EC discussed the proposed model at length. The EC directed the Secretariat to continue developing the financial model and identify a list of potential economies and candidates for further discussion at APNIC 44.

Action: 2017-11: The Secretariat to continue fine-tuning the Service Partner model and report back to the EC at APNIC 44.

[Confidential information redacted]

14. APNIC Survey update

The DG spoke to the Survey Frequency presentation (attached).

Richard Brown spoke to the APNIC Survey planning for 2018 (attached).

The EC discussed the survey frequency at length, and they agreed to proceed with the 2018 Survey as proposed.

The EC also considered the timeline and overall process for the 2018 Survey. It was agreed that a question on the survey frequency be added to the next survey.

Action: 2017-12: The Secretariat to finalize the Survey timeline for further discussion at APNIC 44.

15. Risk Register

The EC reviewed the status of the APNIC Risk Register. The EC agreed to the suggested changes. No further comments were raised.

16. Any other business

The Chair called for any other business.

a. Whois accuracy/LEA engagement

The EC discussed the issues the LEA community had brought forward in other RIR regions in recent months.

b. Remote participation

The EC discussed the issues on the CONFER system during the last Policy SIG in Ho Chi Minh City, and welcomed the strengthening of the authentication and login credentials in CONFER.

It was suggested that the Secretariat publish the standard operating procedures for remote participation.

c. Length of APNIC conference

There was a brief discussion on the length of the APNIC conferences.

d. APRICOT engagement

The DG noted that the APIA Board recently rebranded the APIA Special Committee as APRICOT in recognition of the primary activity of APIA.

The DG also noted that APNIC is working on a detailed MoU with APRICOT.

The EC proposed a joint board meeting with the APRICOT Board at the upcoming APNIC Meeting in Taichung.

17. Next EC Meeting

The next EC meeting will be held in Taichung, Taiwan on 11 September 2017.

Meeting adjourned at 18:25 (UTC+3), Saturday, 3 June 2017.

Attachments:

- A. Register of interest**
- B. [Confidential information redacted]**
- C. APNIC policy endorsement**
- D. [Confidential information redacted]**
- E. April 2017 financial report presentation and report**
- F. April 2017 investment report**
- G. Secretariat report and presentation**
- H. [Confidential information redacted]**
- I. APNIC Survey frequency presentation**
- J. APNIC Survey planning presentation**
- K. [Confidential information redacted]**

Agenda Item 3

Declaration of Interests

APNIC EC Register of Interests

Declaration of interests of EC members

This register records the interests of EC members, which may conflict with the EC members' duties to APNIC. This register is accurate as at 27 April 2017.

Gaurab Raj Upadhaya declared that he currently holds the following positions:

- Employee of Limelight Networks as Director, Network Strategy and Interconnect
- Director of the Nepal Research and Education Network (NREN)
- Chairman of Nepal Internet Exchange (NPIX)
- Member of the APRICOT Program Committee

Izumi Okutani declared that she currently holds the following positions:

- Employee of JPNIC as Policy Liaison

Jessica Shen declared that she currently holds the following positions:

- Employee of CNNIC as Director of IP Operation, under the Ministry of the Cyberspace Administration of China

Kam Sze Yeung declared that he currently holds the following positions:

- Member of the HKNOG Program Committee
- Employee of Akamai Technologies, Inc

Kenny Huang declared that he currently holds the following positions:

- Member of IP Committee of TWNIC
- Board of Director, ISOC Taiwan Chapter
- Member of the Advisory Council of DotAsia Organization
- Director of Mind Extension Inc.

Rajesh Chharia declared that he currently holds the following positions:

- President of the Internet Service Providers Association of India (ISPAI)
- Director of the National Internet Exchange of India (NIXI)
- CEO of CJ Online Pvt. Ltd
- Director of Chandra Industrial Company Private Limited
- Director of Soulmicron Techserve LLP

Roopinder Perhar declared that he currently holds the following positions:

- Employee of Netplus Broadband Services Pvt Ltd
- Member of the Internet Service Providers Association of India (ISPAI)

Paul Wilson declared no conflict of interests.

Agenda Item 9

APNIC Policy endorsement

Request for EC Policy Proposal Endorsement

prop-117: Returned IPv4 address management and Final /8 exhaustion

Proposal text: [prop-117-v003](#)

Synopsis

APNIC currently makes delegations from two IPv4 pools. These are the 103/8 (Final /8) pool and the non-103/8 IPv4 Recovered pool. With current policy, all returned address space, including 103/8 blocks, are merged into the IPv4 Recovered pool.

This proposal simplifies the address pool management by making the following changes to the current policy:

- Recovered 103/8 space will be placed in the 103/8 (Final /8) pool.
- Recovered non-103/8 space will be placed in the IPv4 Recovered pool.

Current status

This policy change was first proposed before APNIC 43, and parts of the proposal reached consensus at the Open Policy Meeting at APNIC 43. Those parts reaching consensus were then published as version 3, which reached consensus at the APNIC 43 Annual General Meeting.

Consensus was maintained during the 4-week comment period with no objections raised to the proposed change. The APNIC Policy SIG Chairs have now formally asked the APNIC EC to endorse the proposal for implementation.

For details of the proposal's progress through the PDP please see:
<https://www.apnic.net/policy/proposals/prop-117>

Implementation

The APNIC Secretariat will need to make minor software changes to internal systems for handling address pool management.

There will be some changes to the policy document, which requires a one month Editorial Draft review process.

Implementation can take place within 3-month after EC endorsement. A schedule for implementation will be announced to the Policy SIG Mailing list.

Agenda Item 11

Financial reports

Financial Performance

Year to date April 2017

Financial Highlights YTD April 2017

- Equity Position > 5% to date in 2017 ✓
- Revenue tracking \$128k below budget ✗
- Expenses tracking \$551k below budget ✓
- Cash Flow - \$510K to date in 2017 -
- Activity expenditure in line with budget estimates ✓
- Membership Growth < than budget assumption ✗

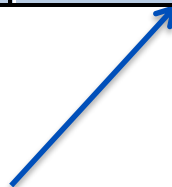
Statement of Financial Position

	30/04/17	Year End 2016	Variance	% Variance
ASSETS				
Total Current Assets	8,996,728	8,847,266	149,462	2%
Total Non-Current Assets	29,704,014	29,174,292	529,722	2%
Total ASSETS	38,700,742	38,021,558	679,184	2%
LIABILITIES				
Total Current Liabilities	11,037,305	11,760,872	(723,567)	(6%)
Non-Current Liabilities	645,608	613,180	32,428	5%
Total LIABILITIES	11,682,913	12,374,052	(691,139)	(6%)
Equity	27,017,829	25,647,506	1,370,323	5%

All amounts in AUD – Australian Dollars

Financial Stability Measure

	30/04/2017	2016	2015	2014
Total Equity	\$27,017,829	\$25,647,507	\$23,319,460	\$21,388,497
% Equity covered by Cash/ Cash Equivalents	105.4%	110.6%	121.6%	109.1%
Forecast/ Actual Daily Operating Expenses	\$56,711	\$49,430	\$46,077	\$42,558
Number of Months of expenses covered by Equity	15.62	17.01	16.64	16.52

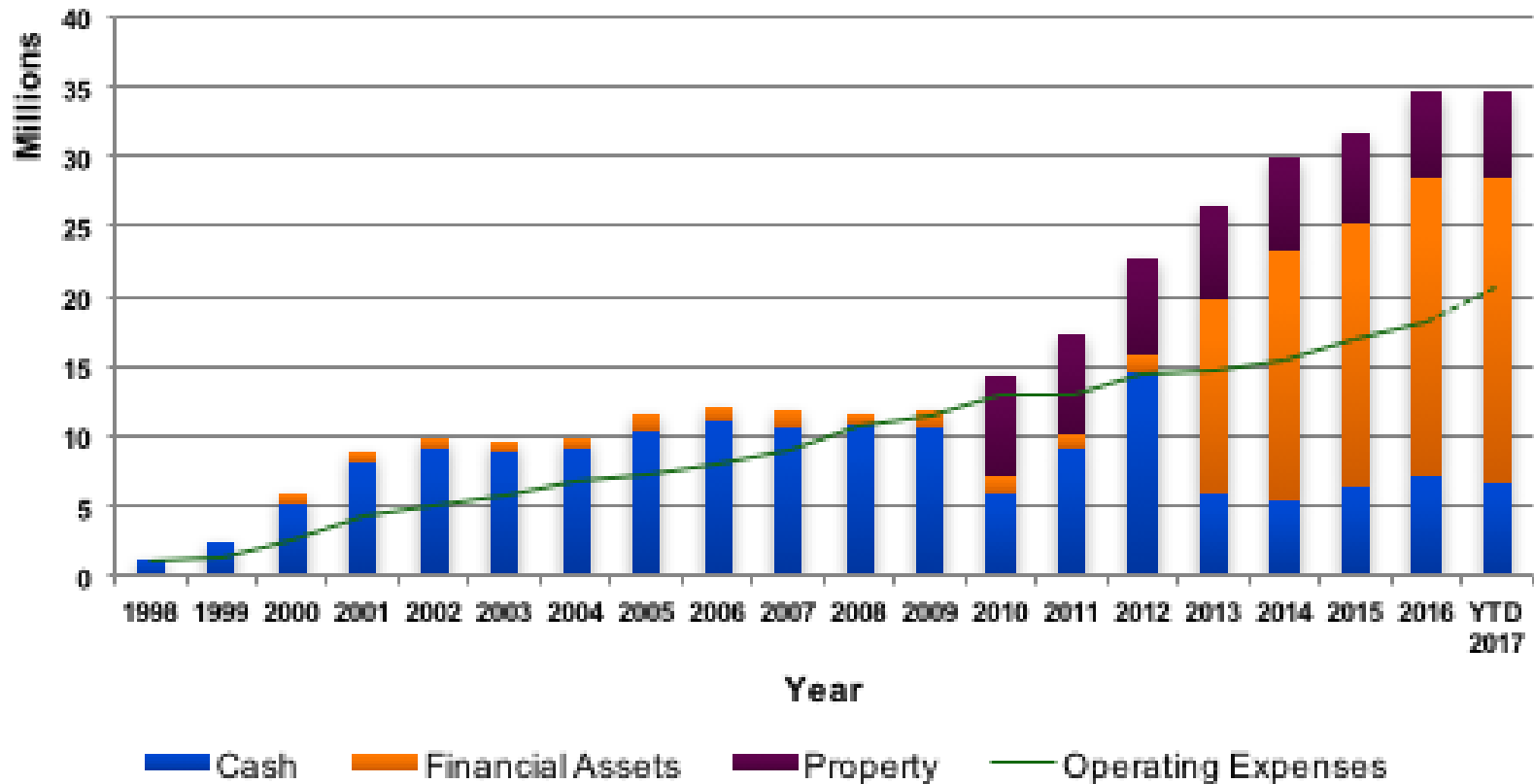


Target of 18 Months

- Based on Budget expenses
- Expected to improve over the year

All amounts in AUD – Australian Dollars

APNIC Capital Reserve



All amounts in AUD – Australian Dollars

Statement of Financial Position

Net Equity position increased by 5% (\$1,370k) in 2017

- Current Assets increased by 2% \$150k
 - Decrease in cash \$510k
 - Membership renewals effect on receivables \$498k
 - Expenses incurred for NRO to be recovered \$122k
 - Prepayment of deferred expenses and taxes \$56k
- Non-Current Assets increased by 2% \$530k
 - Property Plant & Equipment Depreciation -\$110k
 - Investment portfolio increased by \$640k

All amounts in AUD – Australian Dollars

Statement of Financial Position

- Current Liabilities decreased by 6% \$723k
 - Invoice Prepayments down by \$925k
 - Payables increased by \$186k
- Non-Current Liabilities increased by 5% \$32k
 - Long Service Leave Provisions increase by \$32k

All amounts in AUD – Australian Dollars

Operating Surplus

AUD	YTD Actual Apr 2017	YTD Actual Apr 2016	Variance %	YTD Budget Apr 2017	Budget Variance \$	Budget Variance %
TOTAL REVENUE	6,877,562	6,575,341	5%	7,005,823	-128,261	-2%
TOTAL EXPENSES	6,000,879	5,485,455	9%	6,551,565	-550,686	-8%
OPERATING SURPLUS/(DEFICIT)	876,682	1,089,885	-20%	454,258	422,424	93%

All amounts in AUD – Australian Dollars

Statement of Income - Revenue

AUD	YTD Actual Apr 2017	YTD Actual Apr 2016	Variance %	YTD Budget Apr 2017	Budget Variance \$	Budget Variance %
Investment income	231,719	242,249	-4%	278,890	-47,171	-17%
Membership fees	6,345,834	5,972,109	6%	6,380,961	-35,127	-1%
Non-members fees	86,813	79,206	10%	82,056	4,757	6%
Reactivation fees	10,500	16,000	-34%	11,668	-1,168	-10%
Sign-Up fees	136,750	167,500	-18%	162,252	-25,502	-16%
Transfer fees	24,400	48,850	-50%	41,996	-17,596	-42%
Sundry income	41,546	49,426	-16%	48,000	-6,454	-13%
TOTAL REVENUE	6,877,562	6,575,341	5%	7,005,823	-128,261	-2%

All amounts in AUD – Australian Dollars

Statement of Income - Revenue

Revenue tracking \$128k(2%) below budget

- Membership Fees \$35k below budget
 - Membership growth continues below budget estimates
 - April YTD new member growth of 295 vs. 360 budget
 - » Impacting on Sign-Up fees \$26k below budget
 - 7 Reactivations,
 - 114 closures
- Transfers below budget by \$18k
- Investment income \$47k below budget
 - At this stage this variance related to the timing on investment distributions

Membership Tracking

Membership	Total Dec-16	New YTD Apr-17	Reactivate YTD Apr-17	(Closed) YTD Apr-17	Size Change YTD Apr-17	Total YTD Apr-17	% Total
Extra Large	22	0	0	0	0	22	0%
Very Large	43	0	0	0	-1	42	1%
Large	138	2	0	-2	0	138	2%
Medium	449	2	0	-7	11	455	7%
Small	2,643	107	0	-47	53	2,756	45%
Very Small	2,590	175	7	-50	-63	2,659	43%
Associate	109	9	0	-8	0	110	2%
TOTAL	5,994	295	7	-114	0	6,182	100%

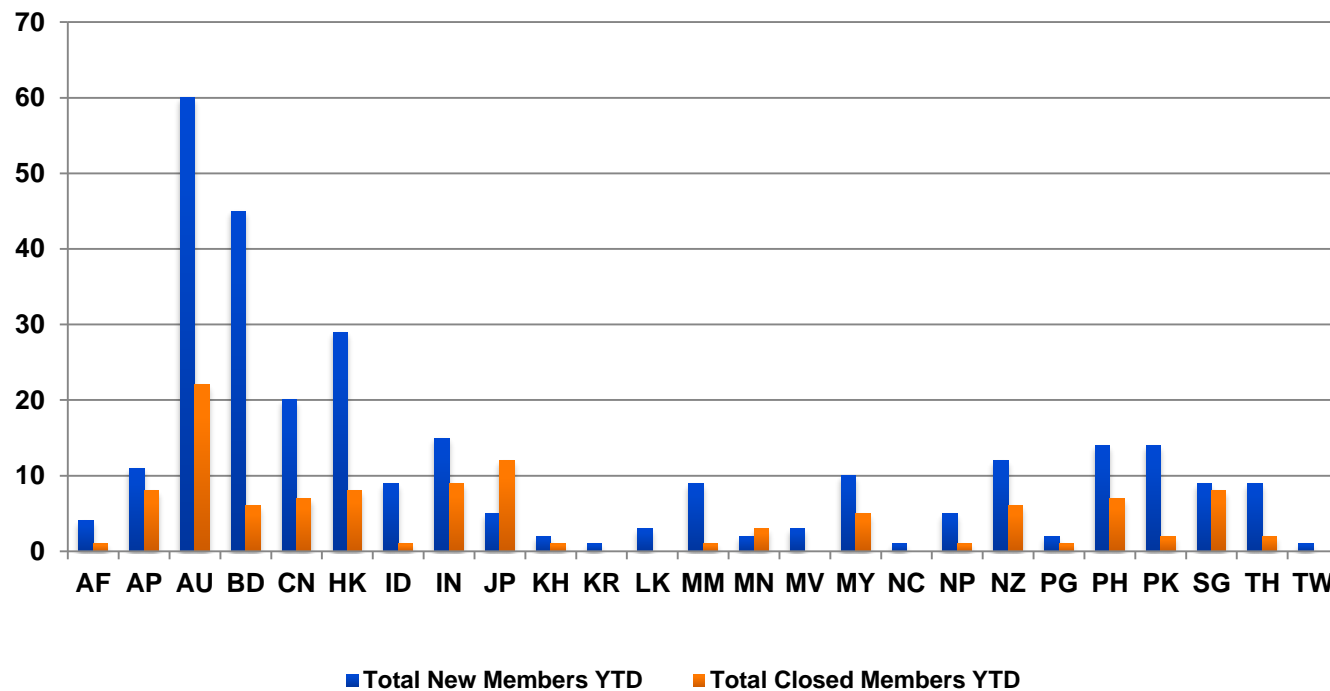
Membership Tracking – Closures by Economy

Economy	Breach of Agreement	Discontinue / Business Not Operating	Merger/ Acquisition	Non Payment/ Non Contactable	Transfer to NIR	Transfer to Other Accounts	Transfer to Other RIR	Grand Total	IPv4 Resources Reclaimed (/24's)
AF				1				1	1
AP		4	1	3				8	34
AU		4	6	9		3		22	41
BD		1	3	2				6	24
CN		2	3		1	1		7	0
HK	2	2		3		2	1	10	23
ID				1				1	4
IN			1	6	2			9	45
JP		4	2	3	1	2		12	32
KH						1		1	0
MM				1				1	8
MN				3				3	3
MY		1	3	1				5	5
NP		1						1	8
NZ		2	4					6	4
PG				1				1	0
PH		1	3	3				7	7
PK	1		1	1				3	8
SG		2	3	3				8	25
TH				1		1		2	4
Grand Total	3	24	30	42	4	10	1	114	276

Membership Tracking – Closures by Year Joined

Year Joined	Breach of Agreement	Discontinue / Business Not Operating	Merger/ Acquisition	Non Payment/ Non Contactable	Transfer to NIR	Transfer to Other Accounts	Transfer to Other RIR	Grand Total
2001			1		1			2
2003			1	1				2
2005						1		1
2007			1	1				2
2008		1	2	3				6
2009		1		2				3
2010		1	1	3				5
2011		1	3	3				7
2012		2	2	4				8
2013	2	3	6	7	1	3	1	23
2014		3		3		2		8
2015		7	11	10	2	4		34
2016	1	5	2	5				13
Grand Total	3	24	30	42	4	10	1	114

Membership Growth



Statement of Income - Expenses

AUD	YTD Actual Apr 2017	YTD Actual Apr 2016	Variance %	YTD Budget Apr 2017	Budget Variance \$	Budget Variance %
Bank charges	52,645	46,670	13%	59,000	-6,355	-11%
Communication expenses	186,803	158,212	18%	198,300	-11,497	-6%
Computer expenses	199,386	186,241	7%	244,892	-45,506	-19%
Contribution to APNIC Foundation	212,905	0	0%	240,092	-27,187	0%
Depreciation expense	273,332	257,690	6%	274,020	-688	0%
Doubtful debt expenses	38,212	-35,372	-208%	8,332	29,880	359%
ICANN contract fee	90,000	87,332	3%	90,000	0	0%
Insurance expense	59,794	47,988	25%	49,832	9,962	20%
Meeting and training expenses	80,556	91,152	-12%	120,024	-39,468	-33%
Membership fees	20,616	15,648	32%	18,068	2,548	14%
Office operating expenses	101,146	110,986	-9%	112,636	-11,490	-10%
Postage & delivery	14,653	15,282	-4%	23,664	-9,011	-38%
Printing & photocopy	8,925	11,148	-20%	16,000	-7,075	-44%
Professional fees	361,833	395,207	-8%	585,576	-223,743	-38%
Recruitment expense	138,730	45,441	205%	40,000	98,730	247%
Salaries and personnel expenses	3,341,988	3,321,059	1%	3,546,721	-204,733	-6%
Sponsorship and Publicity expenses	69,428	81,095	-14%	126,024	-56,596	-45%
Staff training/ Conference expenses	39,612	47,586	-17%	53,692	-14,080	-26%
Translation expenses	1,193	386	209%	7,500	-6,307	-84%
Travel expenses	709,121	601,703	18%	737,192	-28,071	-4%
TOTAL EXPENSES	6,000,879	5,485,455	9%	6,551,565	-550,686	-8%

All amounts in AUD – Australian Dollars

Statement of Income - Expenses

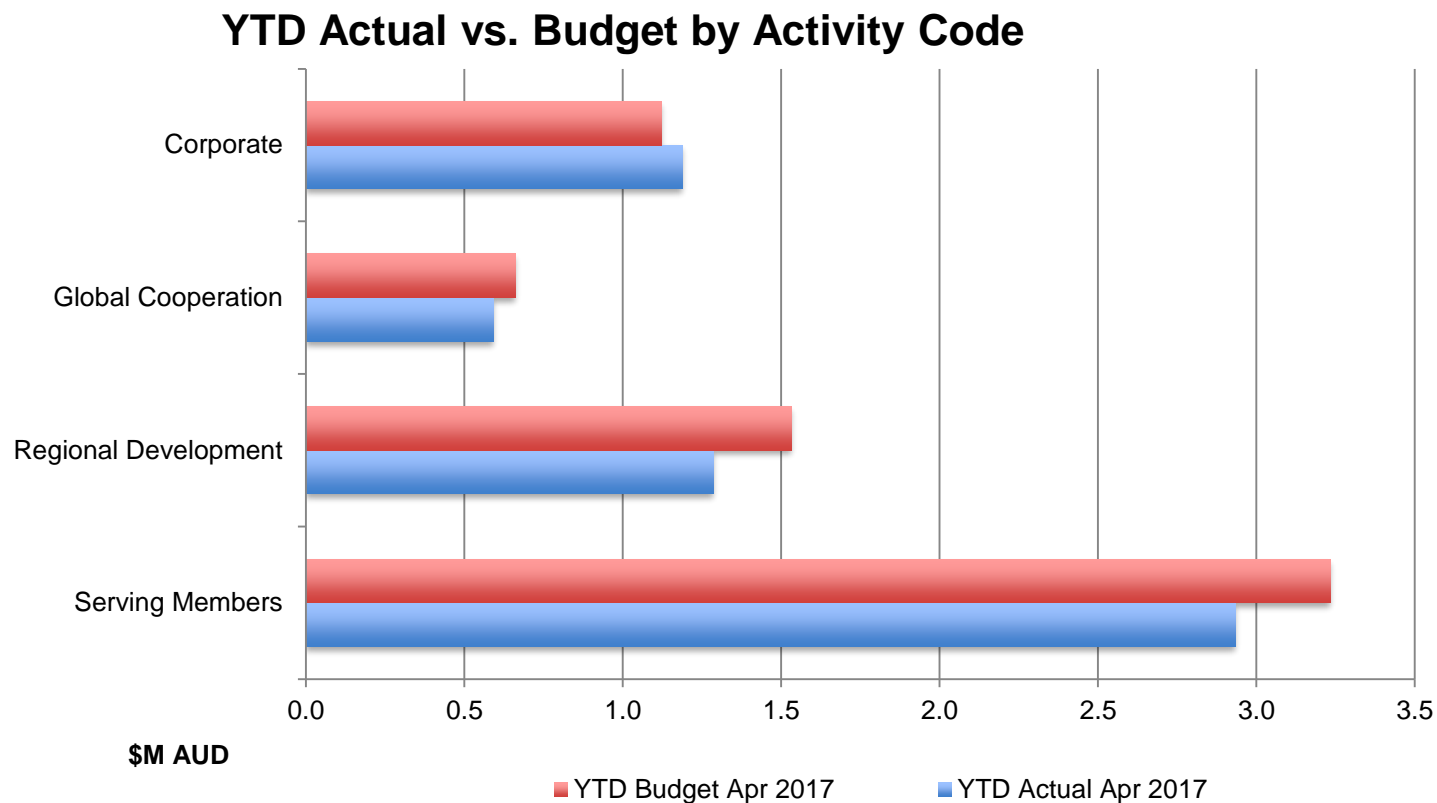
Expenses tracking \$551k(8%) below budget

- **Salary & Personnel Expenses** – below budget by \$205k
 - FTE recruitment to meet budget plan slower than forecast
 - Transition to the APNIC Foundation implemented April 2017
 - Timing of leave
- **Professional Fees** below Budget by \$224k
 - Major variances relate to allowance for Technical Training, Local Trainers and curriculum development activities in the Development area.

Cash Flows YTD April 2017

Accounts	YTD Apr 2017
Operating Activities	
Net Income	876,682
Adjustments to Profit/(Loss)	
Accounts Receivable	-497,975
Other Current Asset	-161,067
Accounts Payable	-153,103
Sales Tax Payable	4,310
Other Current Liabilities	-574,774
Total Adjustments to Profit/(Loss)	-1,382,609
Total Operating Activities	-505,926
Investing Activities	
Fixed Asset	110,378
Other Asset	-640,100
Total Investing Activities	-529,722
Financing Activities	
Long Term Liabilities	32,428
Other Equity	493,640
Total Financing Activities	526,068
Net Change in Cash for Period	-509,580
Cash at Beginning of Period	7,207,928
Cash at End of Period	6,698,347

Expenses by Activity



Expenses by Activity

EXPENSES (AUD)	YTD Actual Apr 2017	YTD Budget Apr 2017	Variance \$	Variance %
Facilities	205,500	201,408	4,092	2%
Finance & Administration	474,939	460,886	14,053	3%
Human Resource Management	355,052	288,165	66,887	23%
Legal & Governance	152,583	172,887	-20,304	-12%
Total - Corporate	1,188,074	1,123,346	64,728	6%
Global Research	172,445	139,823	32,622	23%
Global Technical Community	342,974	431,853	-88,879	-21%
Inter-governmental Outreach	76,492	89,877	-13,385	-15%
Total - Global Cooperation	591,911	661,553	-69,642	-11%
APNIC Conferences	423,594	407,240	16,354	4%
APNIC Foundation	214,337	240,092	-25,755	-11%
Community Engagement	361,784	526,398	-164,614	-31%
Regional Technical Development	286,905	358,806	-71,901	-20%
Total - Regional Development	1,286,620	1,532,536	-245,916	-16%
Registration Services	504,626	482,191	22,435	5%
Customer Service	1,121,983	1,231,395	-109,412	-9%
Member Training	337,472	498,003	-160,531	-32%
Technical Infrastructure	970,193	1,022,541	-52,348	-5%
Total - Serving Members	2,934,274	3,234,130	-299,856	-9%
Total - Expenses	6,000,879	6,551,565	-550,686	-8%

Capital Expenditure

CAPITAL (AUD)	YTD Actual Apr 2017	YTD Actual Apr 2016	Variance %	YTD Budget Apr 2017	Budget Variance \$	Annual Budget \$
Equipment & Software	141,182	392,410	-64%	419,716	-278,534	1,259,118
Office Furniture & Fittings	23,148	4,174	455%	11,168	11,980	33,500
Total - Capital Expenditure	164,330	396,584	-59%	430,884	-266,554	1,292,618

Questions?

Monthly Financial Report

(in AUD)

April 2017

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1 Executive Summary

The April financial statements highlight an underachievement in revenue and underspent on expenses. Based on current membership trends, Membership revenues will be below budget by the end of the year. Investment income is still expected to be in line with budget estimates. Expenses continue to be well below budget at the end of April, but will align more closely with the budget as the year progresses.

Revenues:

- **Membership fees** and **Sign-Up fees** continue to track below budget, with membership growth lower than estimated, and account closures higher;
- **Investment income** is below budget, a result of the timing of distributions from the fund. The APNIC investment portfolio posted a strong return of +1.25% in April driven by a strong rally European equity markets. The portfolio has achieved +2.59% for the year to date and +5.7% since the fund commenced.

Expenses:

- **Salaries and personnel expenses** continue to track below budget as budgeted positions are filled at a slower rate than planned. Changes to reflect the transition to the APNIC Foundation were also implemented later than budgeted.
- **Contributions to the APNIC Foundation** are below budget reflecting the delayed transition of resources to the new Foundation accounts;
- **Professional fees** and **Sponsorship expenses** are tracking below budget but will align more closely as the year progresses. The major variances relate to the timing of development related activities yet to be incurred.
- **Recruitment Expenses** are high compared to budget, reflected the recruitment to fill vacant and budgeted roles are mostly completed now.

Capital Expenditure is tracking below budget, but the procurement of equipment is expected to align with budget estimates as the year progresses and planned activities are completed. There is an increase in expenditure related to the office facilities as the office environment is reconfigured to accommodate changes in staffing levels and to improve the working environment.

The growth of new members is tracking below the budget estimates. This is compounded by a higher than budgeted account closures resulting in overall net **Membership growth** being below budget.

2 Statement of Financial Position

	30/04/2017	Year-End 2016	% Change from 31/12/2016
CURRENT ASSETS			
Cash/ Term deposits	6,698,347	7,207,928	-7%
Receivables	1,552,410	970,493	60%
Others	745,971	668,846	12%
TOTAL CURRENT ASSETS	8,996,728	8,847,266	2%
NON-CURRENT ASSETS			
Other financial assets	21,789,545	21,149,445	3%
Property, plant and equipment	7,764,866	7,875,245	-1%
Deferred tax assets/ liabilities	149,602	149,602	0%
TOTAL NON-CURRENT ASSETS	29,704,014	29,174,292	2%
TOTAL ASSETS	38,700,742	38,021,558	2%
CURRENT LIABILITIES			
Payables	1,307,687	1,121,453	17%
Provisions	1,253,718	1,238,585	1%
Unearned revenue	8,475,901	9,400,834	-10%
TOTAL CURRENT LIABILITIES	11,037,305	11,760,872	-6%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	298,186	298,186	0%
Total Provisions	347,421	314,180	10%
TOTAL NON-CURRENT LIABILITIES	645,608	613,180	5%
TOTAL LIABILITIES	11,682,913	12,374,052	-6%
NET ASSETS	27,017,829	25,647,507	5%
EQUITY			
Share capital	1	1	0%
Reserves other financial assets investment	1,144,784	651,145	76%
Retained earnings	24,996,361	22,729,998	10%
Net Income	876,682	2,266,363	-61%
TOTAL EQUITY	27,017,829	25,647,507	5%

Table 1. Statement of Financial Position

3 Statement of Income

AUD	YTD Actual Apr 2017	YTD Actual Apr 2016	Variance %	YTD Budget Apr 2017	Budget Variance \$	Budget Variance %
Investment income	231,719	242,249	-4%	278,890	-47,171	-17%
Membership fees	6,345,834	5,972,109	6%	6,380,961	-35,127	-1%
Non-members fees	86,813	79,206	10%	82,056	4,757	6%
Reactivation fees	10,500	16,000	-34%	11,668	-1,168	-10%
Sign-Up fees	136,750	167,500	-18%	162,252	-25,502	-16%
Transfer fees	24,400	48,850	-50%	41,996	-17,596	-42%
Sundry income	41,546	49,426	-16%	48,000	-6,454	-13%
TOTAL REVENUE	6,877,562	6,575,341	5%	7,005,823	-128,261	-2%
Bank charges	52,645	46,670	13%	59,000	-6,355	-11%
Communication expenses	186,803	158,212	18%	198,300	-11,497	-6%
Computer expenses	199,386	186,241	7%	244,892	-45,506	-19%
Contribution to APNIC Foundation	212,905	0	0%	240,092	-27,187	0%
Depreciation expense	273,332	257,690	6%	274,020	-688	-0%
Doubtful debt expenses	38,212	-35,372	-208%	8,332	29,880	359%
ICANN contract fee	90,000	87,332	3%	90,000	0	0%
Insurance expense	59,794	47,988	25%	49,832	9,962	20%
Meeting and training expenses	80,556	91,152	-12%	120,024	-39,468	-33%
Membership fees	20,616	15,648	32%	18,068	2,548	14%
Office operating expenses	101,146	110,986	-9%	112,636	-11,490	-10%
Postage & delivery	14,653	15,282	-4%	23,664	-9,011	-38%
Printing & photocopy	8,925	11,148	-20%	16,000	-7,075	-44%
Professional fees	361,833	395,207	-8%	585,576	-223,743	-38%
Recruitment expense	138,730	45,441	205%	40,000	98,730	247%
Salaries and personnel expenses	3,341,988	3,321,059	1%	3,546,721	-204,733	-6%
Sponsorship and Publicity expenses	69,428	81,095	-14%	126,024	-56,596	-45%
Staff training/ Conference expenses	39,612	47,586	-17%	53,692	-14,080	-26%
Translation expenses	1,193	386	209%	7,500	-6,307	-84%
Travel expenses	709,121	601,703	18%	737,192	-28,071	-4%
TOTAL EXPENSES	6,000,879	5,485,455	9%	6,551,565	-550,686	-8%
OPERATING SURPLUS/(DEFICIT)	876,682	1,089,885	-20%	454,258	422,424	93%

Table 2. Statement of Income

4 Capital Expenditure

CAPITAL (AUD)	YTD Actual Apr 2017	YTD Actual Apr 2016	Variance %	YTD Budget Apr 2017	Budget Variance \$	Annual Budget \$
Equipment & Software	141,182	392,410	-64%	419,716	-278,534	1,259,118
Office Furniture & Fittings	23,148	4,174	455%	11,168	11,980	33,500
Total - Capital Expenditure	164,330	396,584	-59%	430,884	-266,554	1,292,618

Table 3. Capital Expenditure by Category

5 Activity Reporting

5.1 Expenses by Activity Code

EXPENSES (AUD)	YTD Actual Apr 2017	YTD Budget Apr 2017	Variance \$	Variance %
Facilities	205,500	201,408	4,092	2%
Finance & Administration	474,939	460,886	14,053	3%
Human Resource Management	355,052	288,165	66,887	23%
Legal & Governance	152,583	172,887	-20,304	-12%
Total - Corporate	1,188,074	1,123,346	64,728	6%
Global Research	172,445	139,823	32,622	23%
Global Technical Community	342,974	431,853	-88,879	-21%
Inter-governmental Outreach	76,492	89,877	-13,385	-15%
Total - Global Cooperation	591,911	661,553	-69,642	-11%
APNIC Conferences	423,594	407,240	16,354	4%
APNIC Foundation	214,337	240,092	-25,755	-11%
Community Engagement	361,784	526,398	-164,614	-31%
Regional Technical Development	286,905	358,806	-71,901	-20%
Total - Regional Development	1,286,620	1,532,536	-245,916	-16%
Registration Services	504,626	482,191	22,435	5%
Customer Service	1,121,983	1,231,395	-109,412	-9%
Member Training	337,472	498,003	-160,531	-32%
Technical Infrastructure	970,193	1,022,541	-52,348	-5%
Total - Serving Members	2,934,274	3,234,130	-299,856	-9%
Total - Expenses	6,000,879	6,551,565	-550,686	-8%

Table 4. Expense by Activity Code

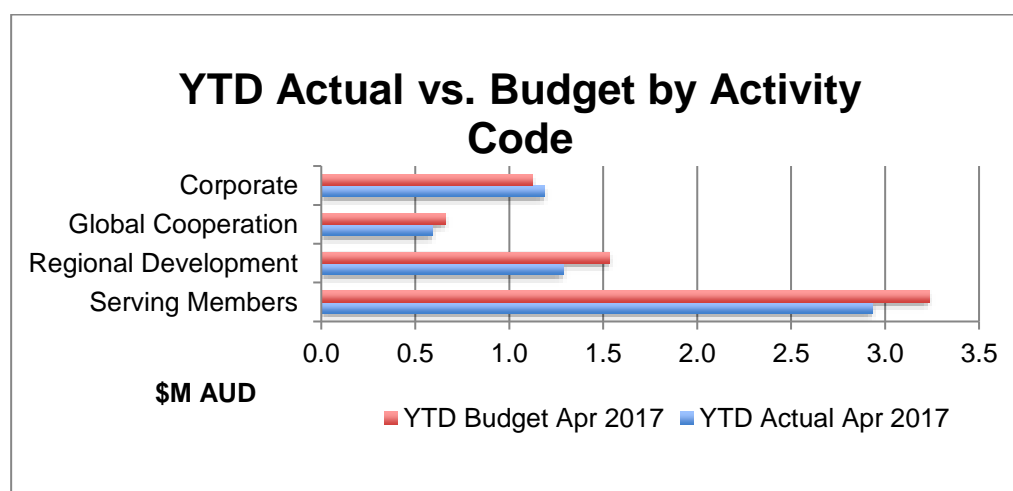


Figure 1. YTD Actual vs. Budget by Activity

5.2 Capital Expenditure by Activity Code

CAPITAL (AUD)	YTD Actual Apr 2017	YTD Budget Apr 2017	Variance \$	Variance %
Facilities	23,148	11,168	11,980	107%
Finance & Administration	2,995	4,168	-1,173	-28%
Human Resource Management	3,038	1,168	1,870	160%
Total - Corporate	29,181	16,504	12,677	77%
Global Research	3,557	10,000	-6,443	-64%
Global Technical Community	730	0	730	0%
Total - Global Cooperation	4,287	10,000	-5,713	-57%
APNIC Conferences	3,478	7,668	-4,190	-55%
Regional Technical Development	16,556	91,668	-75,112	-82%
Total - Regional Development	20,034	99,336	-79,302	-80%
Registration Services	6,245	0	6,245	0%
Customer Service	12,040	77,668	-65,628	-84%
Member Training	11,574	37,332	-25,758	-69%
Technical Infrastructure	80,971	190,044	-109,073	-57%
Total - Serving Members	110,829	305,044	-194,215	-64%
Total - Capital Expenditure	164,330	430,884	-266,554	-62%

Table 5. Capital Expenditure by Activity Code

6 APNIC Reserve

6.1 Cash Flow Statement

Accounts	YTD Apr 2017
Operating Activities	
Net Income	876,682
Adjustments to Profit/(Loss)	
Accounts Receivable	-497,975
Other Current Asset	-161,067
Accounts Payable	-153,103
Sales Tax Payable	4,310
Other Current Liabilities	-574,774
Total Adjustments to Profit/(Loss)	-1,382,609
Total Operating Activities	-505,926
Investing Activities	
Fixed Asset	110,378
Other Asset	-640,100
Total Investing Activities	-529,722
Financing Activities	
Long Term Liabilities	32,428
Other Equity	493,640
Total Financing Activities	526,068
Net Change in Cash for Period	-509,580
Cash at Beginning of Period	7,207,928
Cash at End of Period	6,698,347

Table 6. Cash Flow Statement

6.2 Capital Reserve

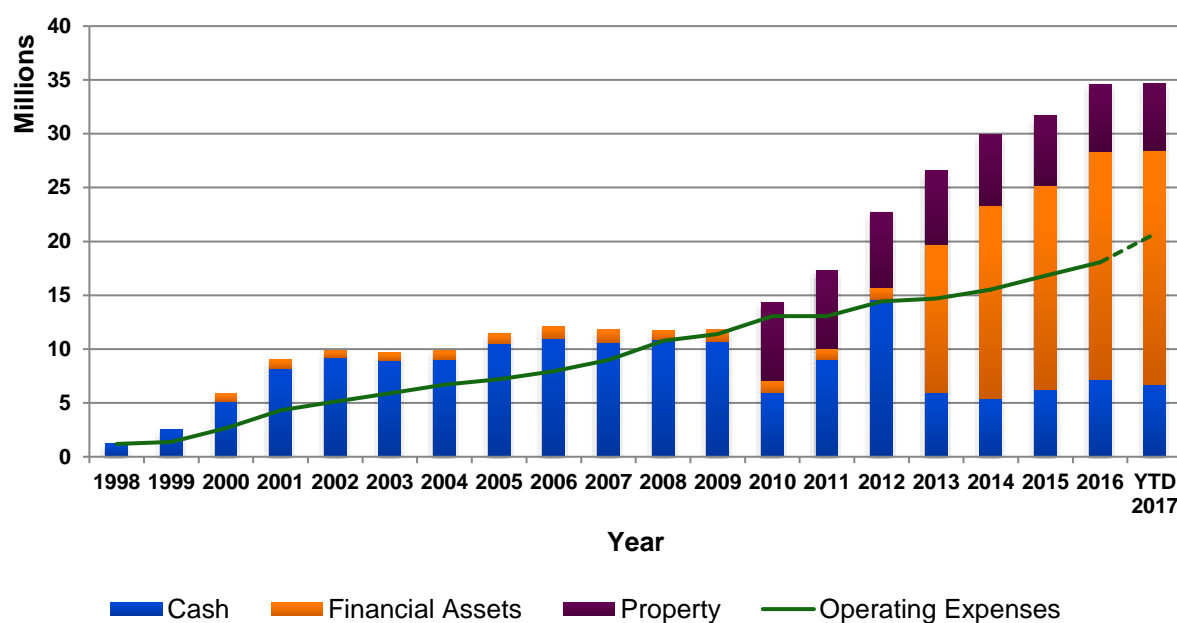


Figure 2. APNIC Reserves

6.3 APNIC's Equity and Reserves

By comparing the Total Equity (including retained earnings and unrealised capital gains) to the Daily Operating Costs, the number of month's coverage of operational expenses is set out below:

	30/04/2017	2016	2015	2014
Total Equity	\$27,017,829	\$25,647,507	\$23,319,460	\$21,388,497
% Equity covered by Cash/ Cash Equivalents	105.4%	110.6%	121.6%	109.1%
Forecast/ Actual Daily Operating Expenses	\$56,711	\$49,430	\$46,077	\$42,558
Number of Months of expenses covered by Equity	15.62	17.01	16.64	16.52

Table 7. Equity and Reserves

7 Membership

7.1 Membership by Category

Membership	Total Dec-16	New YTD Apr-17	Reactivate YTD Apr-17	(Closed) YTD Apr-17	Size Change YTD Apr-17	Total YTD Apr-17	% Total
Extra Large	22	0	0	0	0	22	0%
Very Large	43	0	0	0	-1	42	1%
Large	138	2	0	-2	0	138	2%
Medium	449	2	0	-7	11	455	7%
Small	2,643	107	0	-47	53	2,756	45%
Very Small	2,590	175	7	-50	-63	2,659	43%
Associate	109	9	0	-8	0	110	2%
TOTAL	5,994	295	7	-114	0	6,182	100%

Table 8. Membership by Category

7.2 Membership Growth

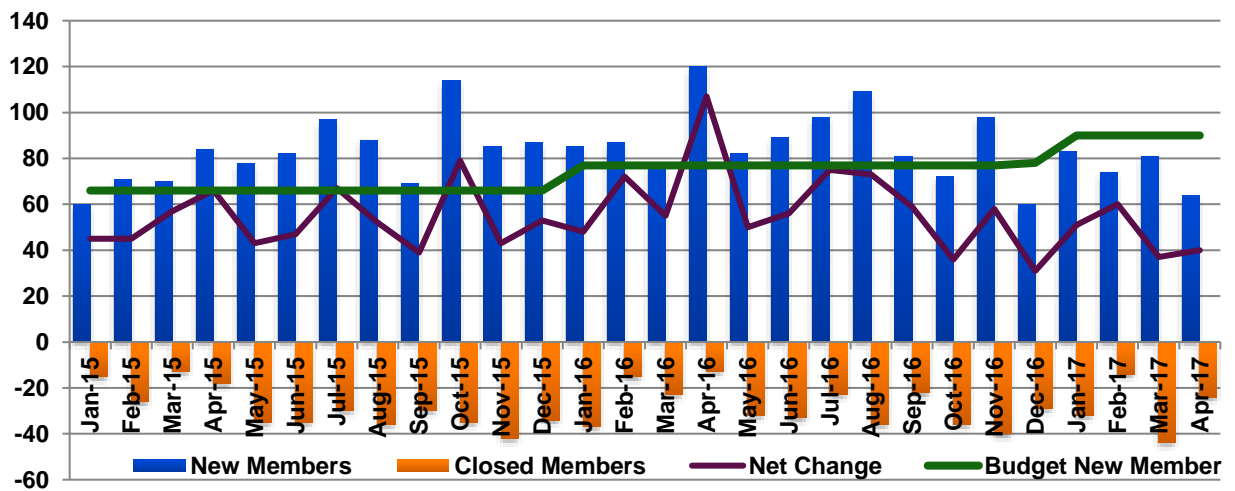


Figure 3. Membership Growth Analysis

7.3 Year-to-Date Membership Movement by Economy

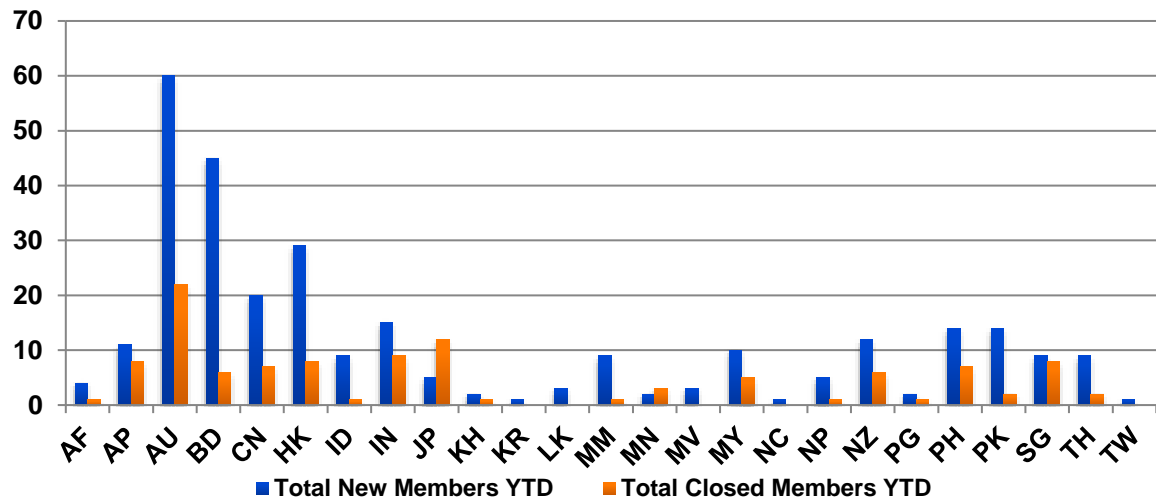


Figure 4. New and Closed Members Analysis

7.4 Membership Closures by Economy

Economy	Breach of Agreement	Discontinue / Business Not Operating	Merger/ Acquisition	Non Payment/ Non Contactable	Transfer to NIR	Transfer to Other Accounts	Transfer to Other RIR	Grand Total	IPv4 Resources Reclaimed (/24's)
AF				1				1	1
AP		4	1	3				8	34
AU		4	6	9		3		22	41
BD		1	3	2				6	24
CN		2	3		1	1		7	0
HK	2	2		3		2	1	10	23
ID				1				1	4
IN			1	6	2			9	45
JP		4	2	3	1	2		12	32
KH						1		1	0
MM				1				1	8
MN				3				3	3
MY		1	3	1				5	5
NP		1						1	8
NZ		2	4					6	4
PG				1				1	0
PH		1	3	3				7	7
PK	1		1	1				3	8
SG		2	3	3				8	25
TH				1		1		2	4
Grand Total	3	24	30	42	4	10	1	114	276

Table 9. Membership Closure by Economy

7.5 Membership Closures by Year Joined

Year Joined	Breach of Agreement	Discontinue / Business Not Operating	Merger/ Acquisition	Non Payment/ Non Contactable	Transfer to NIR	Transfer to Other Accounts	Transfer to Other RIR	Grand Total
2001			1		1			2
2003			1	1				2
2005						1		1
2007			1	1				2
2008		1	2	3				6
2009		1		2				3
2010		1	1	3				5
2011		1	3	3				7
2012		2	2	4				8
2013	2	3	6	7	1	3	1	23
2014		3		3		2		8
2015		7	11	10	2	4		34
2016	1	5	2	5				13
Grand Total	3	24	30	42	4	10	1	114

Table 10. Membership Closure by Year Joined

APNIC PTY LTD
PO BOX 3646
SOUTH BRISBANE, QLD 4101
AUSTRALIA

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Private Banking

Investment Report 1.4.2017 – 30.4.2017

APNIC PTY LTD

Portfolio Group: 3000039

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Private Banking

Investment Report 1.4.2017 – 30.4.2017

Portfolio Group 3000039
In the Name of APNIC PTY LTD
Produced on 29.4.2017
Reporting Currency AUD
Relationship Manager Patrick Armitage
Phone +61 2 8205 4451

APNIC PTY LTD
PO BOX 3646
SOUTH BRISBANE, QLD 4101
AUSTRALIA

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Scope of Analysis
 as of 30.4.2017

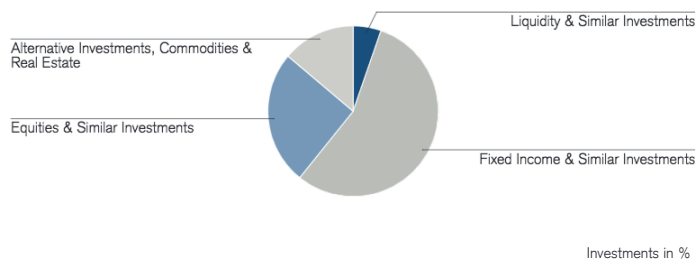
Components	Portfolio	Asset Value in AUD	Discretionary Mandate	Opened	Closed
Portfolio Group: 3000039					
Investment related Positions					
AUD Portfolio	3000039-10	0		16.08.2013	
AUD Portfolio	3000039-70	21,725,682	Yes	16.08.2013	
Total Investments		21,725,682			
Total Wealth		21,725,682			

1. Overview

1.1. Asset Allocation

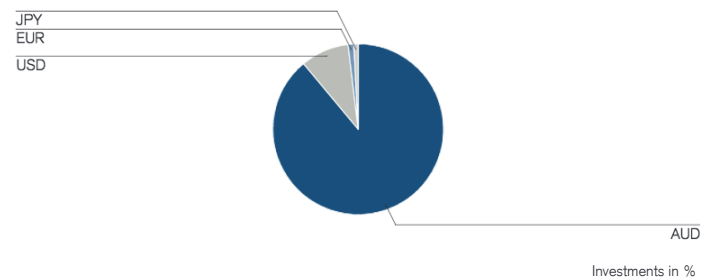
Asset Allocation by Asset Category Period 1.4.2017 - 30.4.2017

	Beginning of Period in AUD	Change	End of Period in AUD	End of Period Proportion
■ Liquidity & Similar Investments	1,061,776	92,695	1,154,471	5.31%
■ Fixed Income & Similar Investments	11,970,393	80,261	12,050,654	55.47%
■ Equities & Similar Investments	5,470,886	45,283	5,516,169	25.39%
■ Alternative Investments, Commodities & Real Estate	2,978,445	25,943	3,004,388	13.83%
Total Investments	21,481,500		21,725,682	100.00%



Asset Allocation by Currency Period 1.4.2017 - 30.4.2017

	Beginning of Period in AUD	Change	End of Period in AUD	End of Period Proportion
■ AUD - Australian Dollar	19,153,035	170,339	19,323,374	88.94%
■ USD - US Dollar	1,940,887	48,201	1,989,089	9.16%
■ EUR - Euro	220,619	17,866	238,485	1.10%
■ JPY - Japan Yen	166,959	7,776	174,735	0.80%
Total Investments	21,481,500		21,725,682	100.00%



1.2. Income and Activity

Income Summary

Period 1.4.2017 - 30.4.2017

	Current Period in AUD	Year to Date in AUD
Cash Dividend	56,259	109,392
Coupon Received/Paid	0	0
Interest Earned/Paid	1,186	4,999
Net Income	57,446	114,391

Activity Summary

Period 1.4.2017 - 30.4.2017

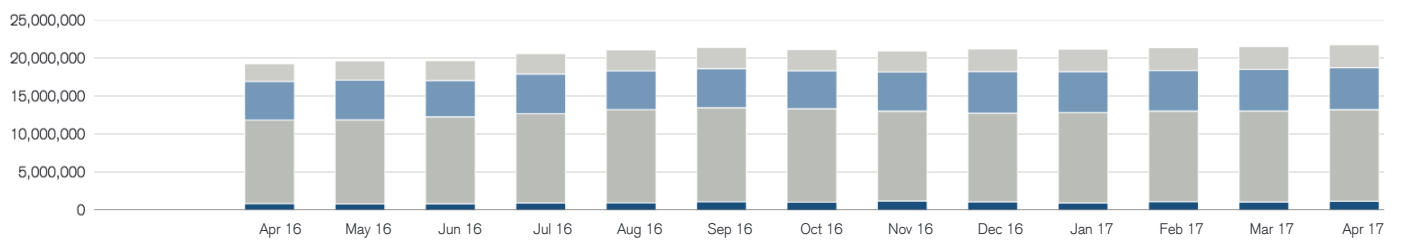
	Current Period in AUD	Year to Date in AUD
Asset Inflows	14	14
Asset Outflows	-14	-14
Total Asset Flows	0	0

2. Analyses

2.1. Asset Allocation

Asset Allocation by Asset Category Details Period 1.4.2016 - 30.4.2017

	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17
■ Liquidity & Similar Investments	855,502	810,646	827,295	923,201	959,539	1,097,489	1,041,025	1,193,659	1,083,348	924,369	1,103,824	1,061,778	1,154,471
■ Fixed Income & Similar Investments	10,994,114	11,047,253	11,441,707	11,758,795	12,260,398	12,360,692	12,287,472	11,820,987	11,661,989	11,893,746	11,916,535	11,970,435	12,050,654
■ Equities & Similar Investments	5,077,419	5,241,443	4,775,282	5,214,932	5,093,919	5,142,445	4,990,106	5,154,856	5,479,011	5,383,277	5,339,190	5,470,886	5,516,169
■ Alternative Investments, Commodities & Real Estate	2,302,148	2,512,059	2,587,753	2,660,006	2,737,858	2,773,717	2,766,126	2,738,576	2,947,526	2,945,534	2,981,185	2,982,062	3,004,388
Total Ending Market Value in AUD	19,229,183	19,611,400	19,632,036	20,556,935	21,051,714	21,374,343	21,084,730	20,908,078	21,171,875	21,146,926	21,340,734	21,485,161	21,725,682



Investments in AUD

3. Positions

3.1. Investment Related Positions as of 30.4.2017

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Liquidity & Similar Investments							
Accounts							
AUD	214,836.94	Current Account -20300003970945 AUD Portfolio: 3000039-70	1.0000		214,837		
					0.99%		
EUR	180.93	Current Account -20300003970056 AUD Portfolio: 3000039-70	1.0000 1.4066 EUR/AUD		263	9	3.36%
						9	3.36%
USD	58,490.21	Current Account -20300003970780 AUD Portfolio: 3000039-70	1.0000 0.7551 AUD/USD		78,249	789	1.02%
					0.36%	789	1.02%
Total Accounts					293,349		
					1.35%		
Call & Time Deposits							
AUD	861,000	1.72% Deposit - Fixed Term (MM1711701082) 27.04.2017 - 12.05.2017 Total interest at maturity: AUD 608.60 AUD Portfolio: 3000039-70	1.0000		861,122		
					122		
					3.96%		
Total Call & Time Deposits					861,122		
					3.96%		
Total Liquidity & Similar Investments					1,154,471		
					5.31%		

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Fixed Income & Similar Investments							
Fixed Income & Similar Investments AUD							
AUD	3,446,596.31	UNITS BLACKROCK INDEXED AUSTRALIAN BOND FUND AUD Portfolio: 3000039-70	AU60BGL01066 2244170	1.0282	1.0368 BID 27.04.2017	3,573,328 16.45%	29,699 29,699 0.84%
AUD	203,201.6996	UNITS BENTHAM WHOLESALE SYNDICATED LOAN FUND AUD Portfolio: 3000039-70	AU60CSA00468 3242662	1.0152	1.0249 BID 26.04.2017	208,261 0.96%	1,965 1,965 0.95%
AUD	596.579	UNITS PIMCO GLOBAL CREDIT FUND AUD Portfolio: 3000039-70	AU60ETL01145 3432906	1,002.0954	992.5309 NAV 27.04.2017	592,123 2.73%	-5,706 -5,706 -0.95%
AUD	1,523.002	UNITS PIMCO AUSTRALIAN BOND FUND CLASS -A- AUD Portfolio: 3000039-70	AU60ETL01152 3432899	1,111.9702	1,110.4011 NAV 27.04.2017	1,691,143 7.78%	-2,390 -2,390 -0.14%
AUD	2,296,916.418	UNITS LEGG MASON WESTERN ASSET AUSTRALIAN BOND TRUST CLASS -A- AUD Portfolio: 3000039-70	AU60SSB01221 2248336	1.2077	1.2240 BID 24.04.2017	2,811,426 12.94%	37,327 37,327 1.35%
AUD	2,827,697.43	UNITS VANGUARD AUSTRALIAN FIXED INTEREST INDEX FUND AUD Portfolio: 3000039-70	AU60VAN00014 1653500	1.1304	1.1226 NAV 27.04.2017	3,174,373 14.61%	-22,086 -22,086 -0.69%
Total Fixed Income & Similar Investments					12,050,654 55.47%		

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Equities & Similar Investments							
Equities & Similar Investments AUD							
AUD	2,818	REGISTERED SHS AGL ENERGY LTD AUD Portfolio: 3000039-70	AU000000AGL7 2449486 AGL.AX	21.8038	26.7600 CLO 28.04.2017	75,410 13,967 0.35%	22.73% 22.73%
AUD	2,347	REGISTERED SHS AMCOR LTD AUD Portfolio: 3000039-70	AU000000AMC4 640267 AMC.AX	14.1711	15.7100 CLO 28.04.2017	36,871 3,612 0.17%	10.86% 10.86%
AUD	5,597	REGISTERED SHS AUSTRALIA & NEW ZEALAND BANKING GROUP LTD AUD Portfolio: 3000039-70	AU000000ANZ3 640139 ANZ.AX	30.3431	32.7600 CLO 28.04.2017	183,358 13,527 0.84%	7.97% 7.97%
AUD	810	STAPLED SECURITY APA GROUP AUD Portfolio: 3000039-70	AU000000APA1 1083439 APA.AX	6.5414	9.1600 CLO 28.04.2017	7,420 2,121 0.03%	40.03% 40.03%
AUD	6,175	REGISTERED SHS BHP BILLITON LTD AUD Portfolio: 3000039-70	AU000000BHP4 640390 BHP.AX	27.9425	23.7200 CLO 28.04.2017	146,471 -26,074 0.67%	-15.11% -15.11%
AUD	4,214 -989	REGISTERED SHS BORAL LTD of which is pending settlement AUD Portfolio: 3000039-70	AU000000BLD2 1050991 BLD.AX	5.8191	6.1600 CLO 28.04.2017	25,958 1,437 0.12%	5.86% 5.86%
AUD	1,304	SHS BLUESCOPE STEEL LTD AUD Portfolio: 3000039-70	AU000000BSL0 1424021 BSL.AX	12.8590	11.7000 CLO 28.04.2017	15,257 -1,511 0.07%	-9.01% -9.01%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	377 REGISTERED SHS BRAMBLES LTD AUD Portfolio: 3000039-70	AU000000BXB1 2373150 BXB.AX	9.3002	10.3400 CLO 28.04.2017	3,898 0.02%	392 392	11.18% 11.18%
AUD	2,975 REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA AUD Portfolio: 3000039-70	AU000000CBA7 646758 CBA.AX	77.0972	87.4000 CLO 28.04.2017	260,015 1.20%	30,651 30,651	13.36% 13.36%
AUD	886 REGISTERED SHS CSL LTD AUD Portfolio: 3000039-70	AU000000CSL8 241548 CSL.AX	77.1463	132.5500 CLO 28.04.2017	117,439 0.54%	49,088 49,088	71.82% 71.82%
AUD	633 REGISTERED SHS CALTEX AUSTRALIA LTD AUD Portfolio: 3000039-70	AU000000CTX1 640410 CTX.AX	33.0548	29.8700 CLO 28.04.2017	18,908 0.09%	-2,016 -2,016	-9.63% -9.63%
AUD	7,709 SHS FAIRFAX MEDIA LTD AUD Portfolio: 3000039-70	AU000000FXJ5 649930 FXJ.AX	1.0627	1.0600 CLO 28.04.2017	8,172 0.04%	-21 -21	-0.25% -0.25%
AUD	7,379 STAPLED SECURITY GOODMAN GROUP AUD Portfolio: 3000039-70	AU000000GMG2 18079202 GMG.AX	6.8560	8.1100 CLO 28.04.2017	59,844 0.28%	9,253 9,253	18.29% 18.29%
AUD	851 CHESS UNITS OF FOREIGN SECURITIES JAMES HARDIE INDUSTRIES PLC AUD Portfolio: 3000039-70	AU000000JHX1 1303670 JHX.AX	20.5229	22.6700 CLO 28.04.2017	19,292 0.09%	1,827 1,827	10.46% 10.46%
AUD	1,330 SHS MAGELLAN FINANCIAL GROUP LTD AUD Portfolio: 3000039-70	AU000000MFG4 2807450 MFG.AX	24.4770	23.5800 CLO 28.04.2017	31,361 0.14%	-1,193 -1,193	-3.66% -3.66%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD 142,207	STAPLED SECURITY MIRVAC GROUP AUD Portfolio: 3000039-70	AU000000MGR9 821911 MGR.AX	1.8010	2.2700 CLO 28.04.2017	322,810 1.49%	66,690 66,690	26.04% 26.04%
AUD 1,041	REGISTERED SHS MACQUARIE GROUP LTD AUD Portfolio: 3000039-70	AU000000MQG1 3422370 MQG.AX	57.2762	93.0000 CLO 28.04.2017	96,813 0.45%	37,188 37,188	62.37% 62.37%
AUD 5,155	REGISTERED SHS NATIONAL AUSTRALIA BANK LTD AUD Portfolio: 3000039-70	AU000000NAB4 641643 NAB.AX	31.3788	34.0000 CLO 28.04.2017	175,270 0.81%	13,512 13,512	8.35% 8.35%
AUD 540	REGISTERED SHS NEWCREST MINING LTD AUD Portfolio: 3000039-70	AU000000NCM7 650853 NCM.AX	24.5387	21.1600 CLO 28.04.2017	11,426 0.05%	-1,825 -1,825	-13.77% -13.77%
AUD 10,641	REGISTERED SHS ORORA LTD AUD Portfolio: 3000039-70	AU000000ORA8 22750502 ORA.AX	2.3282	3.0100 CLO 28.04.2017	32,029 0.15%	7,255 7,255	29.28% 29.28%
AUD 1,190	REGISTERED SHS ORIGIN ENERGY LTD AUD Portfolio: 3000039-70	AU000000ORG5 1051439 ORG.AX	6.8053	7.1800 CLO 28.04.2017	8,544 0.04%	446 446	5.51% 5.51%
AUD 246,002	STAPLED SECURITY PROPERTYLINK GROUP AUD Portfolio: 3000039-70	AU000000PLG5 33393604 PLG.AX	0.8233	0.8000 CLO 28.04.2017	196,802 0.91%	-5,724 -5,724	-2.83% -2.83%
AUD 437	REGISTERED SHS QBE INSURANCE GROUP LTD AUD Portfolio: 3000039-70	AU000000QBE9 641857 QBE.AX	12.4050	12.8700 CLO 28.04.2017	5,624 0.03%	203 203	3.75% 3.75%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD 569 96	SHS REA GROUP LTD of which is pending settlement AUD Portfolio: 3000039-70	AU000000REA9 1023132 REA.AX	60.5922	61.4900 CLO 28.04.2017	34,988 0.16%	511 511	1.48% 1.48%
AUD 167	REGISTERED SHS RAMSAY HEALTH CARE LTD AUD Portfolio: 3000039-70	AU000000RHC8 646740 RHC.AX	44.6935	71.7000 CLO 28.04.2017	11,974 0.06%	4,510 4,510	60.43% 60.43%
AUD 1,363	REGISTERED SHS RIO TINTO LTD AUD Portfolio: 3000039-70	AU000000RIO1 603520 RIO.AX	60.9710	60.4400 CLO 28.04.2017	82,380 0.38%	-724 -724	-0.87% -0.87%
AUD 76,323	STAPLED SECURITY SCENTRE GROUP AUD Portfolio: 3000039-70	AU000000SCG8 23931192 SCG.AX	3.6180	4.3100 CLO 28.04.2017	328,952 1.51%	52,817 52,817	19.13% 19.13%
AUD 4,969	STAPLED SECURITY STOCKLAND AUD Portfolio: 3000039-70	AU000000SGP0 642077 SGP.AX	4.5725	4.8500 CLO 28.04.2017	24,100 0.11%	1,379 1,379	6.07% 6.07%
AUD 24,471	UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000SLF1 1377855 SLF.AX	11.0068	13.1000 CLO 28.04.2017	320,570 1.48%	51,224 51,224	19.02% 19.02%
AUD 6,516	UNITS SPDR S&P/ASX 200 FUND ETF AUSTRALIAN EQUITY EXCHANGE TRADED FUNDS AUD Portfolio: 3000039-70	AU000000STW9 1285707 STW.AX	51.3770	55.6100 CLO 28.04.2017	362,355 1.67%	27,582 27,582	8.24% 8.24%
AUD 2,871	SHS SUNCORP GROUP LTD AUD Portfolio: 3000039-70	AU000000SUN6 588679 SUN.AX	12.7903	13.8000 CLO 28.04.2017	39,620 0.18%	2,899 2,899	7.89% 7.89%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD 7,638	STAPLED SECURITY TRANSURBAN GROUP AUD Portfolio: 3000039-70	AU000000TCL6 444655 TCL.AX	10.1797	12.2000 CLO 28.04.2017	93,184 0.43%	15,431 15,431	19.85% 19.85%
AUD 9,963	REGISTERED SHS TELSTRA CORPORATION LTD AUD Portfolio: 3000039-70	AU000000TLS2 720464 TLS.AX	5.1133	4.2200 CLO 28.04.2017	42,044 0.19%	-8,900 -8,900	-17.47% -17.47%
AUD 5,946	REGISTERED SHS WESTPAC BANKING CORP AUD Portfolio: 3000039-70	AU000000WBC1 642372 WBC.AX	32.5337	35.0600 CLO 28.04.2017	208,467 0.96%	15,021 15,021	7.77% 7.77%
AUD 669	REGISTERED SHS WESFARMERS LTD AUD Portfolio: 3000039-70	AU000000WES1 642397 WES.AX	44.6135	43.0000 CLO 28.04.2017	28,767 0.13%	-1,079 -1,079	-3.62% -3.62%
AUD 2,164	REGISTERED SHS WOOLWORTHS LTD AUD Portfolio: 3000039-70	AU000000WOW2 81350 WOW.AX	29.0818	26.8800 CLO 28.04.2017	58,168 0.27%	-4,765 -4,765	-7.57% -7.57%
AUD 561	REGISTERED SHS WOODSIDE PETROLEUM LTD AUD Portfolio: 3000039-70	AU000000WPL2 642429 WPL.AX	40.3070	32.1800 CLO 28.04.2017	18,053 0.08%	-4,559 -4,559	-20.16% -20.16%
AUD 33,464.65040	UNITS ABERDEEN EMERGING OPPORTUNITIES FUND AUD Portfolio: 3000039-70	AU60ETL00329 2220820	2.1370	2.4225 NAV 27.04.2017	81,068 0.37%	9,556 9,556	13.36% 13.36%
AUD 25,262.9844	UNITS IRONBARK KARARA AUSTRALIAN SMALL COMPANIES FUND CLASS -A- AUD Portfolio: 3000039-70	AU60PAT00021 2879000	2.9615	3.3063 BID 27.04.2017	83,527 0.38%	8,711 8,711	11.64% 11.64%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	3,427 REGISTERED SHS OIL SEARCH LTD AUD Portfolio: 3000039-70	PG0008579883 809900 OSH.AX	7.8272	7.2200 CLO 28.04.2017	24,743 0.11%	-2,081 -2,081	-7.76% -7.76%
Total Equities & Similar Investments AUD					3,701,951 17.04%		
Equities & Similar Investments EUR							
EUR	1,220 SHS EUR ISHARES II PLC - ISHARES MSCI EUROPE UCITS ETF EUR (DIST) AUD Portfolio: 3000039-70	IE00B1YZSC51 3246398 IQQY.DE	20.7244 1.5167 EUR/AUD	24.3000 OFF 28.04.2017	43,100 0.20%	4,751 6,342 -1,591	12.39% 17.25% -4.86%
EUR	8,295 ACCUM.PTG.SHs WELLINGTON MANAGEMENT FUNDS (IRELAND) PLC - WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR AUD Portfolio: 3000039-70	IE00B9DPD161 20938626	13.5086 1.4590 EUR/AUD	16.1800 NAV 27.04.2017	195,122 0.90%	31,630 32,216 -586	19.35% 19.78% -0.43%
Total Equities & Similar Investments EUR					238,222 1.10%		
Equities & Similar Investments JPY							
JPY	732 UNITS NIKKEI 225 EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	JP3027650005 1264151 1321.T	17,106.7773 88.8849 AUD/JPY	19,830.0000 CLO 28.04.2017	174,735 0.80%	33,854 23,996 9,858	24.03% 15.92% 8.11%
Total Equities & Similar Investments JPY					174,735 0.80%		
Equities & Similar Investments USD							
USD	228 ACCUM.PTG.SHs ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD AUD Portfolio: 3000039-70	IE00B53SZB19 10737617 CSNDX.S	185.1428 0.9196 AUD/USD	308.1500 CLO 28.04.2017	93,992 0.43%	48,091 37,520 10,571	104.77% 66.44% 38.33%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
USD	317 SHS -IP- RAM (LUX) SYSTEMATIC FUNDS SICAV - EMERGING MARKETS EQUITIES CAPITALISATION AUD Portfolio: 3000039-70	LU0704154458 14219625	149.4364 0.7594 AUD/USD	168.4600 NAV 27.04.2017	71,442 0.33%	9,059 8,068 991	14.52% 12.73% 1.79%
USD	10,508 SHS DEUTSCHE X-TRACKERS MSCI EUROPE HEDGED EQUITY ETF AUD Portfolio: 3000039-70	US2330518539 22178054 DBEU.P	26.9572 0.7697 AUD/USD	27.5100 CLO 28.04.2017	386,728 1.78%	18,707 7,771 10,936	5.08% 2.05% 3.03%
USD	580 SHS ISHARES GLOBAL HEALTHCARE ETF AUD Portfolio: 3000039-70	US4642873255 1352444 IXJ.P	95.1959 0.8872 AUD/USD	104.8300 CLO 28.04.2017	81,341 0.37%	19,111 7,475 11,635	30.71% 10.12% 20.59%
USD	1,670 TRUST UNITS SPDR S&P 500 ETF TRUST AUD Portfolio: 3000039-70	US78462F1030 45088 SPY.P	193.0166 0.8577 AUD/USD	238.0800 CLO 28.04.2017	531,905 2.45%	156,080 100,678 55,402	41.53% 23.35% 18.18%
USD	3,738 SHS FINANCIAL SELECT SECTOR SPDR FUND AUD Portfolio: 3000039-70	US81369Y6059 986018 XLF.P	23.4371 0.7516 AUD/USD	23.5300 CLO 28.04.2017	117,667 0.54%	1,107 465 642	0.95% 0.40% 0.55%
USD	2,190 SHS VANGUARD FTSE EMERGING MARKETS ETF AUD Portfolio: 3000039-70	US9220428588 2093958 VWO.P	37.7585 0.7596 AUD/USD	40.3400 CLO 28.04.2017	118,188 0.54%	9,334 7,563 1,771	8.57% 6.84% 1.74%
Total Equities & Similar Investments USD					1,401,263 6.45%		
Total Equities & Similar Investments					5,516,169 25.39%		

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Alternative Investments, Commodities & Real Estate							
Hedge Funds							
AUD	444,928.77	UNITS GMO SYSTEMATIC GLOBAL MACRO TRUST CLASS -B- AUD Portfolio: 3000039-70	AU60GMO00067 3375604	1.0075	1.0684 NAV 26.04.2017	475,362 27,098 2.19%	6.05% 6.05%
AUD	312,604.78	UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESale AUD Portfolio: 3000039-70	AU60MAL00181 3379478	1.2404	1.3726 BID 27.04.2017	429,094 41,329 1.98%	10.66% 10.66%
AUD	232,606	RED.PTG.SH.S -A1- AHL (CAYMAN) SPC AUD CLASS A EVOLUTION SEGREGATED PORTFOLIO AUD Portfolio: 3000039-70	KYG012291145 22393979	1.1382	1.5893 NAV 31.03.2017	369,681 104,927 1.70%	39.63% 39.63%
AUD	322,646.221	RED.PTG.SH.S -A- AHL DIMENSION (CAYMAN) LIMITED AUD AUD Portfolio: 3000039-70	KYG0132G1652 30773689	1.0001	0.9925 NAV 31.03.2017	320,226 -2,448 1.47%	-0.76% -0.76%
Total Hedge Funds					1,594,363 7.34%		
Commodities & Precious Metals							
AUD	2,822	ETC SECURITY ETFs METAL SECURITIES AUSTRALIA LTD 2003-WITHOUT FIXED MATURITY ON GOLD COMMODITY AUD Portfolio: 3000039-70	AU00000GOLD7 1583458 GOLD.AX	144.2376	161.1800 CLO 28.04.2017	454,850 47,812 2.09%	11.75% 11.75%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
USD	472 UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN AUD Portfolio: 3000039-70	CH0031794263 3179426 TCMCI.S	1,028.7611 0.8536 AUD/USD	807.0000 CLO 28.04.2017	509,577 2.35%	-59,247 -140,030 80,784	-10.42% -21.56% 11.14%
Total Commodities & Precious Metals					964,427 4.44%		
Other Alternative Investments							
AUD	4,105 PTG.SHS LEGG MASON GLOBAL FUNDS PLC - LEGG MASON WESTERN ASSET MACRO OPPORTUNITIES BOND FUND PREMIER CLASS DISTRIBUTING (S) HEDGED AUD AUD Portfolio: 3000039-70	IE00BYQZZ17 28828240	100.9462	108.5500 NAV 27.04.2017	445,598 2.05%	31,214 31,214	7.53% 7.53%
Total Other Alternative Investments					445,598 2.05%		
Total Alternative Investments, Commodities & Real Estate					3,004,388 13.83%		
Total Investments					21,725,682 100.00%		
of which Accrued Interest					122		

4. Appendix

4.1. Explanations

Accrued Interest

Accrued interest is not displayed for financial instruments with variable interest rate or frequency within the same interest period, except for Floating Rate Notes. For FINER Revexus, the accrued interest displayed is based on the deposit currency for reference purpose only. Entitlement to the accrued interest depends on the product features. All accrued interests are displayed in the reporting currency of the portfolio and are calculated recognizing trades end of day. The FX conversion rates (reflected below) are used to convert the amount from original currency to reporting currency. The accrued interest payable/receivable is displayed as the net amount on Current Account balances. As a result of the foregoing and other factors, the accrued interest is only an estimate and may not reflect the actual interest accrued, if any.

Activity Summary

The asset inflows and outflows include client-instructed transactions as well as non-investment related transactions such as loans which do not contribute to the performance of client's account. Such asset inflows and outflows do not include fees and taxes.

Analyses

Values displayed for the respective month labels are as of month-end dates. If the report end period is not a month-end, the report period end month label will show the values as of the report period end date.

Asset Classification

If an instrument is classified as 'not classifiable', the instrument is pending its proper classification. As soon this is available in the system, the instrument will reflect the correct classification.

Cost Valuation Exchange Rates

For the Positions section, the cost valuation exchange rate displayed is always the instrument currency against the portfolio currency.

For the Transactions section, the cost valuation exchange rate displayed is always between the instrument currency and reporting currency. For execution of FX purchase/sale transactions, the transaction valuation is based on the end of day exchange rate on the value date and the cost valuation is based on the FX contract rate.

Duration

Modified duration is a change in the price of a bond arising from a change in market yields. Modified duration is expressed as an approximate percentage. The investment report displays the Modified Duration method for all Fixed Income instruments.

Income Summary

Coupon received and coupon paid, as well as interest earned and interest paid, does not include accrued or unpaid coupon or interest.

Year to date figures include the addition of the monthly figures inclusive of any backdated income processing/ adjustments.

Figures shown can be gross or net depending on the specific country and market practice. Non-Investment related Income is included in the Income Summary.

Market Value

The values stated as begin of period are asset values as of the last reported statement period. The values stated as beginning/ ending market values are asset values that are inclusive of most updated market prices and backdated transactions.

Non-Investment Related Positions

Non-Investment Related Positions are displayed in the Scope of Analysis and in the Non-Investment Related Positions section. However, they are not included in any other analyses.

Profit/ Loss Calculation

Realized and unrealized profit and loss are calculated by comparing the market or transaction value with the average cost value. For every trade date the system computes the average cost, first processing investments before disinvestments. Transaction costs are included in both realized and unrealized profit/loss calculation.

Unrealized profit/ loss displayed in the Positions section are calculated as of the reporting date. FX conversion rates used in the computation of the unrealized profit/loss is the derived rate based on the average price as of the individual transaction date.

Rating

Rating refers to the rating of an investment product and is either based on information available to the Bank or is obtained from sources believed to be reliable by the Bank as of the investment report date.

Yield

The investment report displays Yield for all Fixed Income instruments and is displayed per market price.

Abbreviations

BID = Bid Price
CLO = Closing Price
NAV = Net Asset Value
OFF = Official Price

Rounding logic

Values in this investment report are calculated with exact numbers, however when presenting the data, values are rounded and therefore minor rounding differences might occur.

Large Numbers

The figures are consolidated and shown in denominations of thousands, millions and billions where applicable. If a value is too long to be displayed in the report itself, e.g. 1,526,555,333.26 the figure is consolidated and displayed as 1,526,555.33 in thousands in the report. If the value exceeds the column limit, a further division will take place and the phrase in millions/in billions will be displayed.

Conversion Rates as of 30.4.2017

AUD 1.0000 = JPY 83.0720

AUD 1.0000 = USD 0.7475

EUR 1.0000 = AUD 1.4538

Conversion rates that are used in the Investment Report are the foreign exchange rates of reporting currencies. If the base date of the investment report falls at the end of a month, rates are computed based on an indicative price at 1 PM Tokyo time on the final business day of the base month. If the base date of the investment report falls on a date other than the end of a month, rates are computed based on an indicative price at 6 PM Tokyo time of the date the report period ends.

FX conversion rate used in the computation of the unrealized Profit/ Loss is the derived rate based on the Average Price as of the individual transaction date.

The Bank may use either an onshore or offshore CNY rate for FX conversion to reporting currency depending on the asset. Please note that there may be a differential between the onshore and offshore rate. Please refer to your RM if you need further information on the FX conversion rate applied in relation to your CNY positions.

If you have any questions, please contact below.

Credit Suisse AG Tokyo Branch Operations TEL: 03-4550-5760

Credit Suisse Securities (Japan) Limited Operations TEL: 03-4550-7570

4.2. Legal Information

According to the Account Opening Terms and Conditions, this investment report shall be conclusive and binding if the Bank does not receive your objection in writing to any matters contained in this investment report within 14 days from the issue date.

Deposits with Credit Suisse are not subject to Division 2 of the Banking Act - Protection of Depositors.

If your account is booked with Credit Suisse AG, Sydney Branch or if your Relationship Manager (RM) or Investment Consultant is located in Australia, please refer to the Important Notice on Sales Disclosure to Investors for sales related information including information on monetary benefits received by the Bank where it distributes an investment product to you.

The Bank provides price indications for financial derivatives transactions, structured products and non-listed financial instruments based upon available market reference prices believed to be reliable. The Bank does not make any representation as to the accuracy or completeness of price indications for transactions nor the guarantee to buy/sell at the price indicated. The Bank does not accept liability for any loss arising from the client's use of, or reliance on, such price indications. The price indications of the initial purchase price may be different from the actual purchase price.

In the absence of reliable market reference prices, the Bank may assign a nominal value or make an appropriate comment on your investment report. As a result, the investment report may contain price indications or comments as the Bank sees appropriate in the prevailing circumstances. If you have any queries in this respect, please contact your Relationship Manager.

The Bank will, at the time of printing this investment report, use the last price indications available to it. Due to the time differences between the Asia Pacific region and markets in other regions, the price indications reflected in the Bank's investment report will not always reflect the price indications available on the last business day of the month in certain markets.

The Bank may use either an onshore or offshore CNY rate for FX conversion to reporting currency depending on the asset. Please note that there may be a differential between the onshore and offshore rate. Please refer to your RM if you need further information on the FX conversion rate applied in relation to your CNY positions.

The information in this investment report does not constitute legal or tax advice. You should consult your legal and/or tax experts if you need any such advice. The investment report does not take tax rules and regulations into consideration, and thus it cannot be used for tax reporting purposes.

This investment report is an electronically generated report and does not require a signature.

Agenda Item 12

Secretariat report

APNIC Secretariat Report May 2017

DRAFT

CONFIDENTIAL

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1 Introduction

This report is provided to the APNIC Executive Council for the quarterly face-to-face meeting in Nairobi, Kenya, on 3 June 2017.

The report contains a summary of activities for the last complete quarter (Q1 2017) and 'to date' for the current quarter (Q2 2017, up to 15 May).

2 Services Area

The APNIC Services Area is responsible for the delivery of key services, including:

- Membership administration and support
- Internet resources delegation and registration

This Services report includes activity highlights and KPIs that support APNIC's strategic directions.

2.1 Membership administration and support

2.1.1 Membership statistics

	Q1 2017	Q2 2017
New Members	235	100
Closed Members	94	34
Reactivated Members	6	0
Total Members	6,145	6,211

Table 1 – Membership growth (to date)

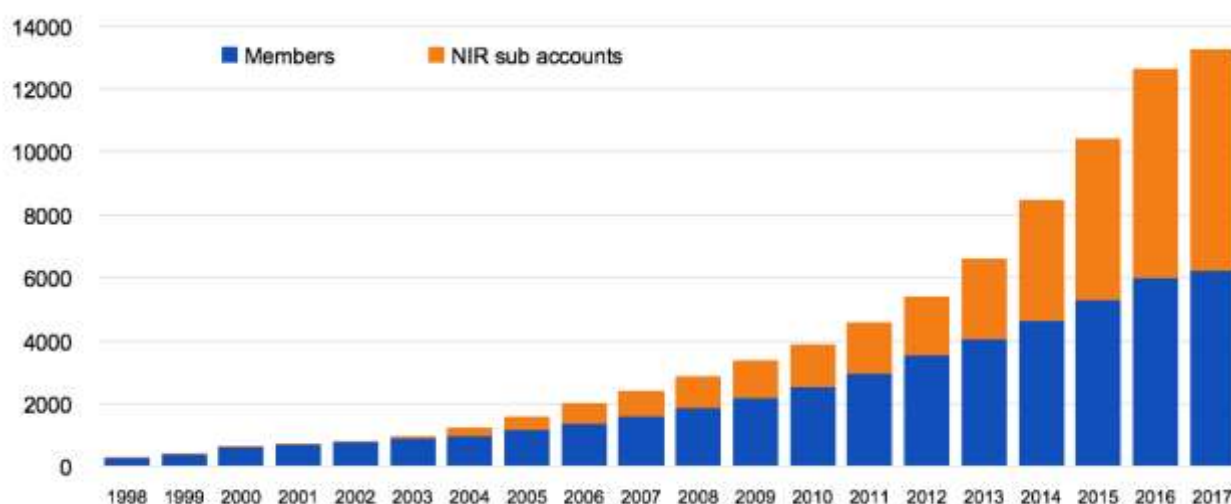


Figure 1 - Total membership (to date)

2.1.2 Membership industry type

The following table shows the distribution of APNIC accounts by industry type.

Industry Type	Number of Members
Academic/Educational/Research	418
Banking/Financial	446
Domain name registry/Registrar	46
Enterprise/Manufacturing/Retail	552
Government/Regulator/Municipality	291
Hardware vendor	56
Hosting/Data centre	1602
Industrial (construction, mining, oil)	127
Infrastructure (transport/hospital)	121
Internet exchange point (IXP)	56
Internet service provider (ISP)	1627
Media/Entertainment	210
Non-profit/NGO/Internet community	63
NREN/Research network	8
Software vendor	322
Telecommunications/Mobile operator	947
Other	49

Table 2 – Industry types

2.1.3 Instant Feedback

Through Instant Feedback, Members are invited to answer a very short survey after a service interaction. Table 3 below shows the feedback received for the following services:

- New Member application
- Helpdesk email support
- Membership administration
- Online chat

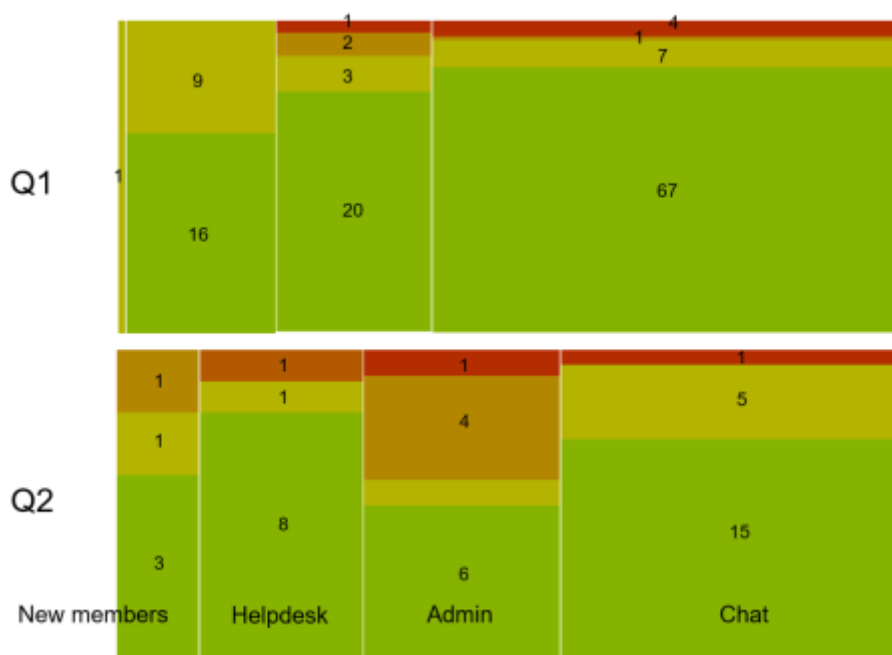


Figure 2 – Q1 to Q2 2017 Instant feedback ratings (to date)






				
Poor	Below average	Average	Above average	Excellent

Table 3 – Instant feedback ratings

- Two admin tickets received poor feedback:
 - A new Member submitted an incorrect form and we assisted them with submitting the correct form.
 - One new membership application was rejected as the Member could not provide the requested information. The Member reapplied with the requested information and their application was approved.
- Five chat requests received poor feedback:
 - In four cases, the requester left the chat before service was provided.
 - One Member required additional assistance, which was provided separately via email.
- Some positive feedback received from Members:
 - “Superb support >even kids can understand DNS. We are grateful to him for his excellent support. Once again thanks for the great support by the team as well..”
 - “I liked it how fast the ticket was worked on, from elsewhere I'm used to waiting for days for a reply”.
 - “Process for IP Transfer was very smooth and conduct by APNIC Staff was very professional and also very efficient.”

- “APNIC staffs are well experienced to explain the issue.”

2.1.4 EC submission – Status: Resolved

APNIC Member account [NODERUN-PK] lodged a complaint to the EC regarding how APNIC processed their inter-RIR transfer request on 21 April 2017.

Subject: Illiterate Behavior of IP Analyst
From: Sapna Ahmad <irfanidum@gmail.com>
Date: 21/4/17, 6:12 pm
To: "Ec@apnic.net" <Ec@apnic.net>

Hello,
 We had a request in place for an inter-rir transfer. On asking for further documentation we supplied a simple contract that both parties had signed. We are a functional ISP in Pakistan and have been APNIC member since end of 2015. Analyst Tom Do claimed that the contract is fake without even asking for justification. We even provided justification on it but he said that he will still continue with the decision when we assured that we can prove that the documentation is legit and valid. We had our website relicited to <http://node.net.pk> 3 months ago. Please look into Ticket ID 3099533. This type of behavior is extremely illiterate and I request APNIC to consider reversing the decision as we are an active ISP. I will be waiting from a response from the EC.

Kind Regards
 Farid Ahmad

This Member provided a fabricated agreement in their original IPv4 transfer request and admitted, subsequently, that they created such a document for APNIC. Based on the conflicting information and the fabricated document provided, the APNIC Services team determined that this Member provided false documentation to mislead APNIC. Their account was then terminated.

This Member contacted Member Services to cancel their transfer request after lodging the complaint to the EC. In addition, they provided an original copy of the transfer agreement to APNIC, which they did not disclose during the transfer evaluation. In consultation with APNIC’s legal counsel, the APNIC Services team recently restored their membership account, after receiving confirmation from the recipient party that this Member did sign the original copy of the transfer agreement.

2.1.5 Fraud report

APNIC started sharing suspicious IPv4 transfer requests and fraud attempts starting from APNIC 42 and have been logging cases of fraud identified.

	Q1 2017	Q2 2017
Total number of fraud attempts	12	6
	5 x Identity theft 1 x Fabricated document 6 x Fabricated needs	3 x Identity theft 2 x Fabricated documents 1 x Fabricated needs

Table 4 – Fraud attempts (to date)

2.2 Internet resources delegation and registration

2.2.1 IPv4, IPv6, and ASN delegations

The following table shows the number of delegations for each resource type in Q1 2017 and up to 15 May 2017 for Q2.

Resource	Q1 2017	Q2* 2017
IPv4 (103 /8)	567	288
IPv4 (recycled space)	86	21
IPv6	328	163
AS numbers	336	101

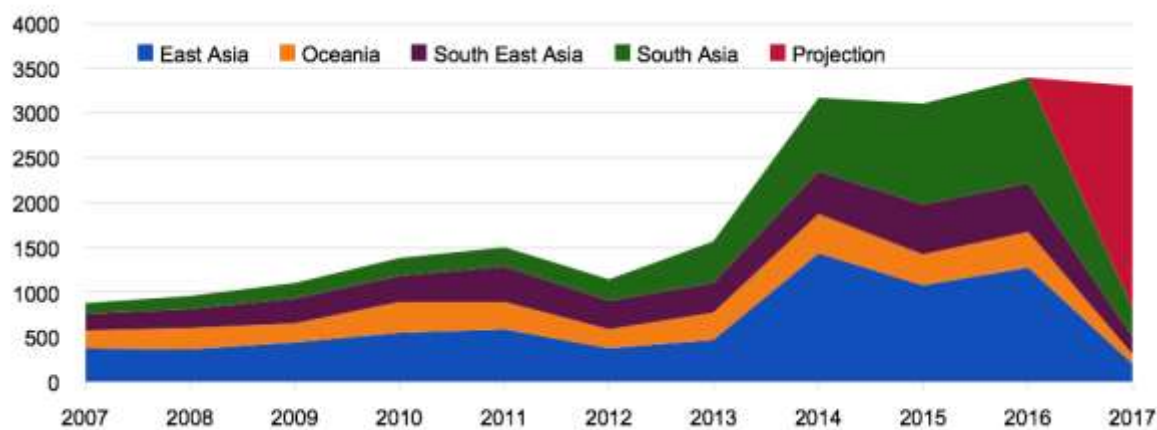


Table 5 - Resource delegations (to date)

Figure 3 - IPv4 delegations (to date)

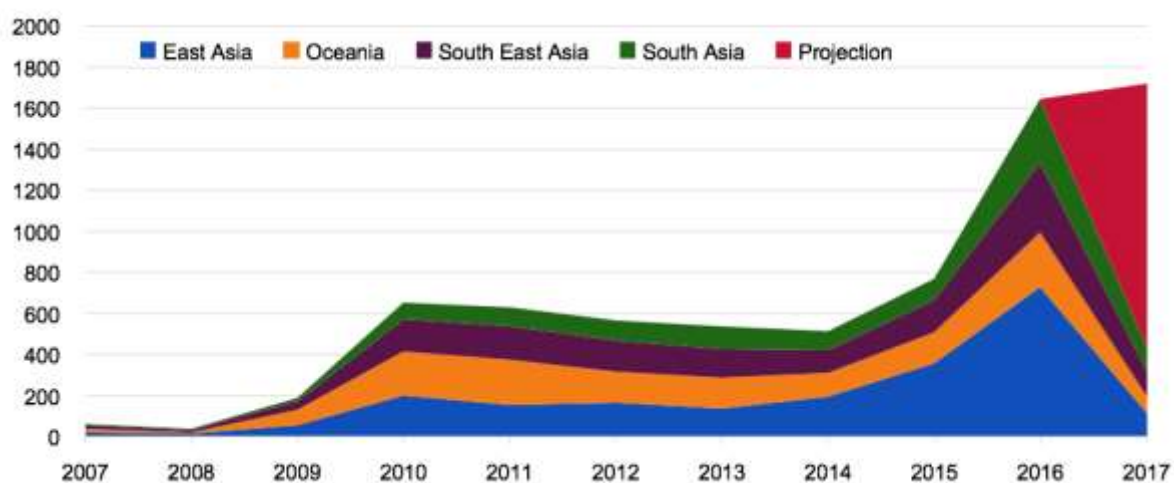
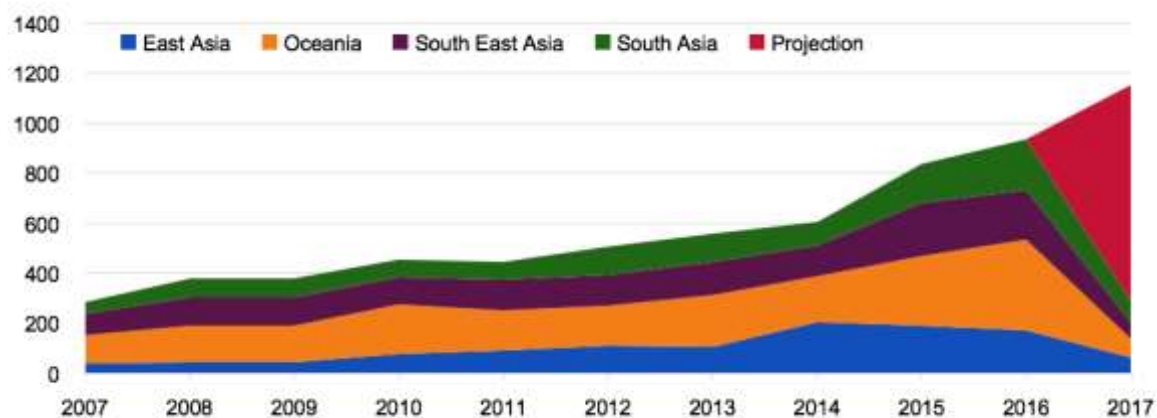


Figure 4 - IPv6 delegations (to date)

Figure 5 - Annual ASN delegations (to date)



2.2.2 Available IPv4 addresses (103/8)

APNIC is currently delegating IPv4 addresses from its last /8 (103/8) and also from the 'recycled' pool. With justification, every Member is entitled to receive a maximum of a /22 from each of these pools.

Resource	Q1 2017	Q2 2017
Delegations (/24)	2,087	970
Remaining	40.01%	38.66%

Table 6 - Available IPv4 address space (to date)

At the current consumption rate of around 1% of a /8 per month, we expect to continue to allocate from the final /8 in the next 3 years.

2.2.3 Waiting list for IPv4 recycled addresses

Since 9 June 2016, requests for recycled IPv4 addresses have been put on the waiting list. Each week, terminated address space is returned into the recycled pool and requests on the waiting list are fulfilled accordingly.

As of 15 May 2017, there are 286 entries on the waiting list, for a total of 1,075 x /24 IPv4 blocks, an increase of 237 x /24 from February 2017.

2.2.4 Member resource type holding

APNIC started tracking the proportion of Members holding specific resource types from Q3 2016. The percentage of APNIC Members holding IPv6 addresses has reached 52.65% in Q2 2017.

Resource type	Q1 2017	Q2 2017
IPv4 (103/8)	67.74%	68.33%
IPv4 recycled space	25.87%	25.53%
IPv6	51.98%	52.65%

Table 7 - Member resource type holding (to date)

2.2.5 IPv4 Transfers and Returns

IPv4 transfers are classified as 'Mergers/acquisitions' or 'market transfers'. Market transfers may occur within the APNIC region, or to or from other RIR regions. Currently, ARIN and RIPE are the only regions that have compatible inter-RIR transfer policies.

Transfer type	Q1 2017 requests	Q1 2017 addresses	Q2 2017 requests	Q2 2017 addresses
Mergers/acquisitions	40	174,080	12	215,040
Market transfers	54	682,752	31	290,048
- Intra RIR	44	603,904	27	150,784
- Inter RIR	10	78,848	4	139,264
Returns				

Table 8 - IPv4 transfers and returns (to date)

As of 15 May 2017, the total of IPv4 addresses transferred between APNIC and the other RIRs are set out below:

Inter RIR transfer	Total address to date
ARIN to APNIC	8,999,936
RIPE to APNIC	139,264
APNIC to ARIN	40,960
APNIC to RIPE	121,344

Table 9 – Inter-RIR transfers (to date)

Services staff are tracking the number of transfers of the 'last /8' address blocks, and are reporting these during APNIC meetings.

	Q1 2017	Q2 2017
Market transfers	27	21
Mergers/acquisitions	22	5

Table 10 - Transfers of 103/8 space (to date)

2.2.6 Resource certification (RPKI)

The following table shows the total percentage of APNIC IP addresses under RPKI ROAs, out of the total IP addresses delegated by APNIC.

Resources	Q1 2017	Q2 2017
IPv4	1.04%	1.80%
IPv6	0.33%	0.34%

Table 11 – ROA coverage (to date)

3 Communications & Events

3.1 Communications

3.1.1 APNIC Blog

	Q1 2017	Q2 2017
Views	73,451	60,044
Posts	83	38

Table 12 - APNIC Blog activity level (to date)

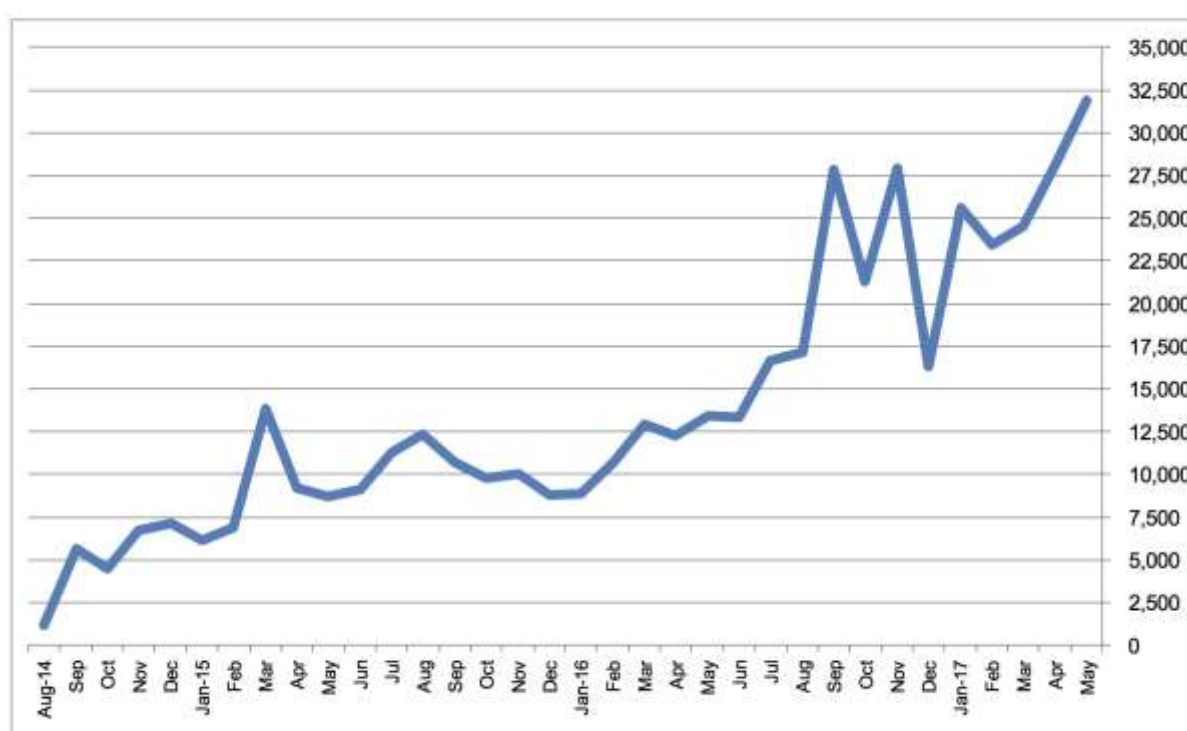


Figure 6 - Monthly APNIC Blog views (to date)

- APNIC Blog readership continued its strong growth in Q1 and Q2 2017. Average monthly views in Q1 were 24,484 and in Q2 to date, the monthly average is 30,022.
- 2017's total views to date (133,495) are 129% higher than the same period a year ago (2016: 58,222) and the 2017 monthly average of 26,699 is 22% higher than the final quarter of 2016 (21,831).
- There have been 53 Guest Posts in 2017 to date. One of the aims of the blog is to be a forum for community articles and discussion, and the proportion of Guest Posts has steadily risen. In 2017, 44% of posts have been Guest Posts; this number was 23% in 2016.

- Significant content during the period included Geoff Huston' s pieces on TCP control flow algorithms and satellite technology, and community guest posts on IPv4 transfers and submarine cables.
- The blog had its 1,000th post on 6 April.

3.1.2 Social Media

	Q1 2017	Q2 2017
Facebook		
Organic Reach	139,012	97,680
Likes	26,247	26,207
Twitter		
Followers	7,170	7,317
RT/Likes/Mentions	2,244	778
YouTube		
Views	12,839	2,804
Minutes	93,600	15,336
Slideshare		
Views	36,860	18,826
LinkedIn		
Reach	45,559	18,578
Followers	2,347	2,377

Table 13 - APNIC Social Media activity 2017 (to date)

3.1.3 Website

- APNIC' s new IPv6 pages were completed in Q1. The pages now feature a cleaner look, simpler layout and language, and updated resources and statistics:
<https://www.apnic.net/ipv6>

3.1.4 DNSSEC KSK Rollover

- ICANN plans to rollover the DNSSEC Root Zone KSK (Key Signing Key) in October 2017. APNIC is supporting ICANN' s efforts to raise awareness among network operators performing DNSSEC validation.
- During Q2, a communication plan was launched, including:
 - Identification of ' higher risk' network operators using APNIC Labs data.
 - Initial awareness emails sent to identified network operators.
 - Creation of resources web page: (www.apnic.net/keyroll).
 - Translation of ICANN materials has begun (with the support of NIRs).
 - Publishing a Guest Post from ICANN' s Matt Larson on the APNIC Blog.
 - Social media outreach including a Facebook Live video with ISC' s Eddy Winstead.
 - Sharing plans and materials with ICANN, NRO CCG, and sharing Labs research data with other RIRs for their use.

3.2 Events

3.2.1 APRICOT 2017

- APRICOT 2017 was successfully held in Ho Chi Minh City, Viet Nam, from 20 February to 2 March 2017.

Conference Statistics	
Total number of on-site delegates:	654
Economies represented:	56
APNIC Member organizations represented:	178
Remote Participants – Adobe Connect:	58
Remote Participants – YouTube:	1,537 views; 18,271 minutes views
Twitter #apricot2017 Posts:	1,220 (Twitter) by 407 unique users
Total people reached:	3,108,061

Table 14 – APRICOT 2017 conference statistics

- The event generated more than 27 pieces of media coverage across local print, online and television media, and regional online tech publications. APNIC hosted journalists from ZDNet and Bloomberg at the event.

3.2.2 APNIC 44

- APNIC 44 will be held in Taichung, Taiwan, from 7 to 14 September 2017. The Splendour Hotel Taichung has been confirmed for both the workshops and conference.
- Cisco's Anand Oswal has been confirmed as the first keynote speaker, with additional speakers to be confirmed in Q2/3 as submissions are received.
- Event website created and registration now open: <https://conference.apnic.net/44/>

3.2.3 Future conferences

- APRICOT 2018 will be held in Kathmandu, Nepal. The usual dates have moved forward by 1 day, to avoid clashing with a major holiday, Holi, on 1 March 2018. The new dates are 19 to 28 February 2018.
- Additional details of potential APNIC 48 locations (Sept 2019) have been provided to the EC for the coming meeting. The chosen location will be announced at APNIC 44.

4 Technical Area

4.1 Software

4.1.1 Core registry

Work continues on separation of the core registry into front-end clients and an event-sourcing-based back-end service.

- Numerous queries are still being performed against the database directly, rather than via the backend service. Further integration work to address these is required before event sourcing can be enabled.
- The event sourcing conversion will be integrated and enabled by Q2 2017.

4.1.2 MyAPNIC/ARMS development

Work continues to improve MyAPNIC and ARMS. The following features/improvements have been deployed or are currently in the process of being deployed:

- Bounced emails (ARMS) have been deployed. This feature notifies the contacts for an account when an email to another contact for that account has bounced, requesting that they update the relevant email address.
- Legacy RPKI ROA interface deprecation is scheduled for release by the end of May, simplifying the route management interface in MyAPNIC.
- Numerous bug fixes were implemented to MyAPNIC and ARMS.

4.1.3 WHOIS development

The WHOIS master server is currently being upgraded to version 4.

- Code updates are complete. Integration testing and preproduction deployment is in progress, with a production release scheduled for the end of May.
- The 'Organisation objects rules' feature was split into a separate project with a completion date of end-June 2017.

4.1.4 Single Sign-on

During 2017 APNIC is deploying single sign-on to allow common authentication across all sites and services.

- Evaluated and selected Keycloak for Identity Management.
- Basic integration with existing LDAP server and MyAPNIC complete (login, password change, TOTP setup, and theming). Work on certificate enrolment, certificate authentication, user administration, and user registration is in progress.
- The integration of this feature across all relevant APNIC sites and services is being planned.

4.1.5 Public APIs

This work provides an automated interface to MyAPNIC and other core services through public APIs.

- A draft specification was presented at APNIC 43.

- If there is no further Member and NIR feedback, implementation will begin in Q3, with deployment by the end of Q4.

4.1.6 Web interface to mailing lists

This work provides a more user-friendly web-based interface to APNIC's mailing lists, using the existing RIPE Forum software (<https://www.ripe.net/participate/mail/forum/>).

- Preparation is in progress and is scheduled to be completed by the end of June.
- Work on the mailing list search set up is in progress.

4.1.7 RDAP improvements

The current RDAP service does not perform as well as the port 43 whois service. The whois service's approach, involving the pre-generation of query responses, will be used for non-historical queries as well to address this problem.

- Initial work is in progress, adapting the whois service to work for non-historical queries.
- A separate RDAP redirection service specific to INRs is also being developed, since the functionality in the current RDAP implementation is not easily separable.

4.2 Infrastructure Services

4.2.1 Network and systems architecture

- Network Transmission upgrade by using CWDM (Coarse Wavelength Division Multiplexing) provides additional bandwidth and communication channels between data centres and the office.
 - Link between the office and Interactive data centre was completed successfully.
 - Remaining links between the office and NextDC and NextDC and Interactive data centres are scheduled to be completed by June.
- Secondary VPN (Cisco AnyConnect VPN)
 - Second-factor authentication added, including CRL checking of revoked certificates. Network ACL's updated to include consultant/contractor information.
 - Monitoring added to include key metrics and network reachability alerts.
 - Planned deployment at end of May.
- Office migration to RFC1918 address space
 - Lab testing and final design is currently in progress.
 - Migration of LAN and Wifi to be completed by the end of Q2.
- Network monitoring improvements
 - Requirements specification completed.
 - Proof of concept testing completed; vendor solution evaluation is currently being done.
- Network switching and routing rearchitecture

- Layer 2 improvement methods such as vPC (Virtual Port Channels) and MST (Multiple Spanning-Tree) protocol have been tested successfully in a lab environment.
- Some Layer 3 methods, e.g, HSRP (Hot Standby Router Protocol), IPv4 and IPv6 ACL (Access Control List) are being tested.
- Data centre rack rearrangements to accommodate new hardware and cable management is a work in progress.
- A detailed design and migration plan is in progress and is scheduled to be completed by the end of Q2.
- Ongoing network improvements
 - Layer 2 improvements, IOS upgrades, and decommissioning of retired VPNs.
 - Collecting netflow data from HK and JP routers to assist in diagnosing possible DDoS attacks and other issues.

4.2.2 Systems and services

- Email migration to Office365
 - Successfully completed the Office365 migration, providing improved email client, web client and server functionality, reduced maintenance, and email archiving.
- Wiki upgrade
 - Completed the upgrade of the internal wiki and added a theme to improve viewing on mobile devices.
- Whois updates
 - The whois test service was upgraded to the latest application code running on CentOS7.
 - Work on upgrading the whois query nodes is currently in progress and is scheduled to be completed by the end of May.
- Archiving improvements
 - Archive server network connections were upgraded to 10G.
 - A new archive server has been deployed and all identified archive data is being collected by the new server.
 - Validation of archive data is currently a work in progress, ensuring all data is recoverable and correct.
- Remote sites
 - The US site was decommissioned.
 - Testing of the anycast DNS service using a cloud provider is in progress.

4.3 Web and Systems

4.3.1 Internet Directory

- Work as part of the next release includes:

- Backend data issues have been fixed.
- Data ingestion time has been reduced from five days to two hours.
- Completion of monthly and daily 'drill down' features.
- Front-end development (improved styling) is in progress.

4.3.2 CMS and website

- Updates to the CMS continues, ensuring it is up to date, with security patches applied.
- The local development environment has been containerized, which significantly speeds up the build/test/deploy cycle. This is currently being tested in the production environment.
- The web team has started daily stand-ups, using the newly adopted Kanban approach.

4.3.3 Improving online experience

- APNIC is integrating its APNIC's online services to create a single point of access and improved experience for users of APNIC's services. The multiyear project, which encompasses various projects across departments is in the planning phase, with work focused on defining the current user experience.
- Single Sign-on (SSO), as part of this project, is being developed with the Software team:
 - The web team is currently working on the 'look and feel' and overall flow of all systems under the SSO scheme.
 - The Software team aims to deliver a prototype by end of June.

4.3.4 CRM

- Phase 1 (Contact Management) is in trial. The primary users have been trained. Additional users have been identified and are being trained. Feedback from phase 1 users have been logged and prioritized and is being implemented.
- Based on this feedback, phase 2 of the CRM project is being planned.
- The current focus is in getting more staff to use the system to capture their interactions with new and existing contact/organisation.

4.3.5 Other

- Ongoing software maintenance of the Fellowship system.
- Ongoing development of Web Style guide.

4.4 Information Analysis and visualization

4.4.1 'Whowas'

Whowas allows the retrieval of historical whois records.

- The historical service API is now operating in a production environment.
- An early release user interface is available: <https://www.apnic.net/whowas/>

- Standardization of an RDAP extension for history is progressing with the ECG, and will enter the IETF process this year.

IDN and EAI support on APNIC systems:

- We assisted the ICANN Universal Acceptance (UA) Steering Group, with an APNIC UA case study: <https://uasg.tech/documents>

4.5 Information Service and Security

4.5.1 Public services operational metrics

Public service	2016 Average annual query rates (queries per second)	2017 YTD Average query rates (queries per second)
Whois	463	439
RDAP	2	4
rDNS	21000	20510
RPKI	18	16
FTP	29	2
MyAPNIC	1.5	1.5

Table 15 – Operational metrics

4.5.2 Information Security Management System (ISMS)

- The initial ISMS release was communicated to all staff and published on the wiki (completed in March).
- The current policies are under review. We identified and merged similar policies between the QMS (Quality Management System) and the SMS. The ISMS Statement of Applicability will be prepared after the policy reviews.
- Ongoing internal and third-party evaluation will be followed by an audit during Q3. The first internal audit is scheduled for June.

4.5.3 Network security project

- As part of the ongoing network security improvements, the requirement for a stateful Firewall, which provides an Intrusion Prevention System, was identified.
- Four vendor evaluations were completed, and a proposal is under development.

4.5.4 Security incident report summary

The following list summarizes the security incidents that APNIC has experienced since the previous Secretariat Report. An incident report is available for more detailed information.

Date	Incident type	Systems/Services affected	Remediation	Future improvement/prevention
14 April 2017	www.apnic.net hosting service compromised and site redirected to malware site	www.apnic.net	Hosting service reverted site to backup copy	Migrate the www.apnic.net website back to APNIC infrastructure
16 March 2017	DDoS against DNS servers ns3.apnic.net and sec4.apnic.net	Reverse DNS from ns3.apnic.net and secondary DNS service from sec4.apnic.net	Upstream transit	Improve communications with upstream provider to ensure they only drop traffic for the duration of the attack

Table 16 – Security incident report summary

5 APNIC Labs

5.1 Presentations

To date, Geoff Huston has delivered 15 presentations at various events:

- Why Dane? (PTC'17, NZNOG 2017 and NANOG 60)
- The State of IPv6 (PTC'17)
- Forensic Tracing in the Internet: an update (Europol workshop)
- An Introduction to the IoT (HKNOG 4.0)
- BGP in 2016 (APRICOT 2017 and IETF 98)
- ECDSA (APRICOT 2017)
- Network Forensics in 2017 (APRICOT 2017)
- The Death of Transit (APRICOT 2017)
- Explaining the Root Service (ICANN 58)
- IP Address report (APRICOT 2017 and ARIN 39)

5.2 Articles

Geoff has authored the following 13 articles during this period:

- Scoring the DNS Root Server System, Pt 2 – A Sixth Star?
- Leaving it to the Last Second
- Lets Encrypt with DANE
- Postscript to the Leap Second
- BGP in 2016
- Addressing 2016
- NANOG 69 Report
- The Root of the DNS
- The Gilded Internet
- IETF 98 Report
- ARIN 39 Report
- UP!
- BBR, the new kid on the TCP block

5.3 Research

Current research activities include:

- KSK rollover, packet size and the impact on users
- IPv6 and large MTU settings (commissioned by Comcast)

- Measuring the extent of latent QUIC capability
- Defining a new set of Ad-based measurements on the failover time from IPv6 to IPv4
- DNS related research with ICANN (contract extended to 2018)
- Some part of the researches were supported by Joao Damas

6 Strategic Engagement

6.1 External Relations

6.1.1 Select ER highlights

- All APNIC external engagements are reported in the APNIC Blog and are often followed by additional blogposts about these events. All 'Event Wraps' are available at: <https://blog.apnic.net/category/events/>
- A visualization of 2017 ER activities and planning can be found in section 5.4.3 below.

6.1.1.1 NOG engagements

Since January 2017, APNIC staff participated in:

- [NZNOG in New Zealand](#)
- [SANOG 29 in Pakistan](#)
- [NANOG 69 in the USA](#)
- [HKNOG 4.0 in Hong Kong](#)
- [MMNOG in Myanmar](#)
- [PHNOG in the Philippines](#)
- BDNOG in Bangladesh (event wrap forthcoming)

APNIC provided sponsorship support for NZNOG, SANOG, HKNOG, MMNOG, and PHNOG.

Paul spoke at MMNOG, Myanmar, about the importance of local NOGs within the APNIC community, and how important it is for NOGs to connect to each other and at APNIC and APRICOT conferences.

6.1.1.2 IPv6

- At PTC'17, APNIC worked with ARIN to organize the 'IPv6 is Live! Real World Success Stories', including two case studies from the APNIC region — Telekom Malaysia and Telstra in Australia.
- APNIC worked with the ITU Asia-Pacific Regional Office (for the fourth year) to deliver an Infrastructure and IPv6 Security Workshop in Bangkok, for 35 participants from 11 economies. Philip Smith, consulting for APNIC and Fakrul Alam, delivered the training.
- Following a successful IPv6 engagement at PHNOG, PLDT reached out to APNIC for Technical Assistance on IPv6 deployment.

6.1.1.3 Inter-governmental outreach

- APNIC worked with LACNIC to participate in APEC TEL 55 in Mexico City and delivered a presentation titled 'Update on IPv6 deployment across the APEC region'. This was the second collaboration with LACNIC on APEC TEL meetings in Latin America.

- The ITU will have the World Telecommunications Development Conference (WTDC) in October. WTDC will agree on plans for the ITU to engage in IPv6 and cybersecurity related activities in the Asia Pacific. Regional preparations are underway for the WTDC and APNIC has participated in both: the APT preparatory process as an affiliate member (a second preparatory meeting happened in Port Moresby in February); and an ITU Regional Development Forum and preparatory meeting in Bali in March.
- APNIC participated at the 10th APT Policy and Regulation Forum for the Pacific and a workshop for ICANN-GAC members of the Pacific. During this meeting, Paul Wilson talked about CERT development in the Pacific, following the successful recent launch of Tonga CERT.
- APNIC participated as an invited guest of the Ministerial Program of the GSMA Mobile World Congress, attending sessions and engaging with governments, regulators and mobile operators to speak about IPv6, IoT, and fast-growing networks.

6.1.1.4 Internet governance

- APNIC participated remotely in IPv6 and cybersecurity related sessions at the Afghanistan Internet Governance Forum in March and at the Afghanistan School of Internet Governance (AFSIG 2017) in April.
- APNIC, in collaboration with DotAsia, ICANN and ISOC, established the Asia Pacific Alliance for Schools & Academies (APASA) to help manage funding and support requests for the increasing number of Internet governance training initiatives (SIGs etc) in the region.
- The ASO Independent Review is due to be completed in July. The review kicked-off during APRICOT 2017 in Ho Chi Minh City with interviews held by ITEMS, the firm that was selected by the NRO EC and ICANN to perform the review. It continued during ICANN 58 in Copenhagen, Denmark, in March and is due to be completed after interviews in each of the RIRs and at ICANN 59 in Johannesburg, South Africa, in July.
- The IANA Numbering Services Review Committee, an element of the IANA Stewardship Transition plan, was convened during ICANN 58 in Copenhagen, and includes representatives of the five RIR communities.

6.1.1.5 Security outreach

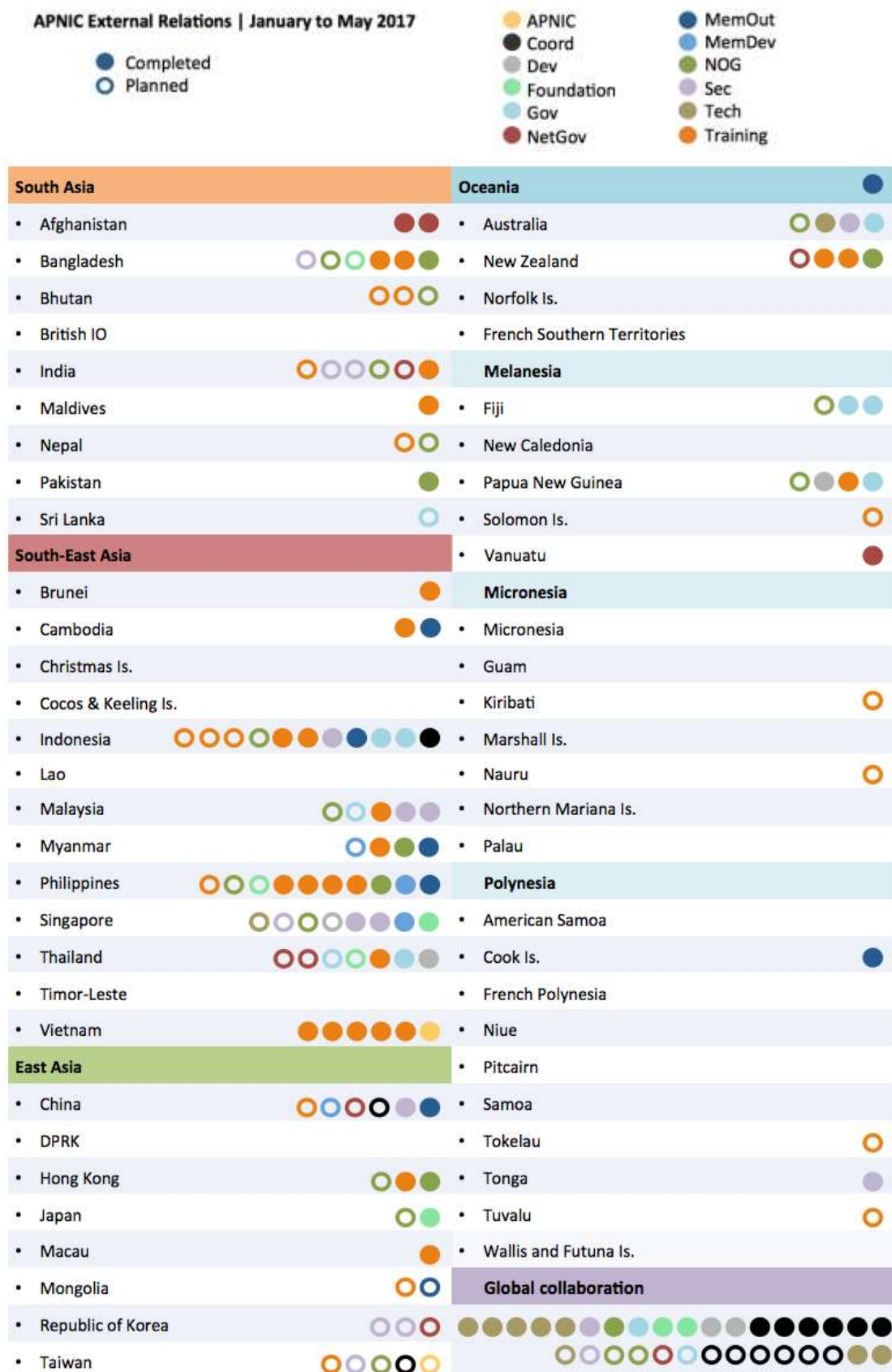
Please refer to section 6.4.1 for APNIC's security outreach activities.

6.1.2 APNIC External Engagements – January to 15 May 2017

Completed & Planned External Engagements 2016-2017		
Subregion	2016	2017
S Asia	35	0 (22)
SE Asia	58	2 (34)
E Asia	23	0 (21)
Oceania	39	6 (19)
Global	34	3 (25)
Total	189	11 (121)

Completed & Planned External Engagements 2016-2017		
Category	2016	2017
● APNIC	5	1 (2)
● Coordination	19	7 (15)
● Development	17	4 (5)
● Foundation	n/a	4 (7)
● Government	13	8 (12)
● Internet Governance	10	3 (10)
● Member Outreach	9	7 (8)
● Membership Development	8	2 (4)
● NOG	16	7 (23)
● Security	27	9 (17)
● Technical	8	8 (10)
● Training	57	25 (41)
Total	189	85 (154)

6.1.3 Infographic: APNIC External Engagements January to 15 May 2017



7 Development Area

7.1 Policy SIG

Election

A Chair and Co-Chair election had the following results:

- Chair - Sumon Ahmed Sabir
- Co-Chairs (One-year term) - Ching-Heng Ku and Bertrand Cherrier

Proposals

The SIG considered three policy proposals; One proposal reached consensus and is awaiting endorsement from the APNIC EC:

- prop-117 - Returned IPv4 address management and Final /8 exhaustion
 - Recovered 103/8 space will be placed in the 103/8 (Final /8) pool
 - Recovered non-103/8 space will be placed in the IPv4 Recovered pool

The other policy proposals did not reach consensus and were returned to the mailing list for further discussion:

- prop-116 - Prohibit to transfer IPv4 addresses in the final /8 block
- prop-118 - No need policy in APNIC region

The Policy SIG also included a Joint SIG meeting to discuss a proposal to change the SIG Guidelines.

Confer

The Policy SIG Chair decided to stop using the Confer system following a complaint by a SIG participant, and discovery of invalid accounts (such as b@qq.com) that seemed to be distorting the results.

APNIC staff is documenting options for changes to Confer, for presentation to the Policy SIG, which will consider whether to continue using the tool.

7.1.1 NIR SIG

- The APNIC 43 NIR SIG had presentations from all NIRs: CNNIC, IRINN, KRNIC, TWNIC, JPNIC, IDNIC, and VNNIC.
- At APNIC 44, the NIR SIG will hold an election for Co-Chairs after both seats become vacant in September 2017.

7.1.2 Cooperation SIG

- The APNIC 43 Cooperation SIG meeting elected the Chair and Co-Chair to serve another term.
- The Co-Chair agreed to a one-year term to provide for staggered elections.
- There were six informational presentations and a good turnout, supporting continuance of the SIG.

7.2 Training

7.2.1 Key Metrics

Q1 2017	Face-to-Face	eLearning
Courses	15	33
Locations	10 cities in 10 economies	Online
Participants	402	264
YouTube channel	29,361 views + 398 subscribers	

Table 17 – Training in 2017 (Q1)

Q2 2017	Face-to-Face	eLearning	Academy
Courses	6	12	1
Locations	6 cities in 6 economies	Online	Registration: 1,213
Participants	199	87	Enrolled: 1,013
YouTube channel	10,317 views + 114 subscribers		Certified: 189

Table 18 – Training in 2017 (Q2 to date)

7.2.2 Highlights

Resource Plan Q1

- The APNIC Academy was successfully launched with the ‘Introduction to Cybersecurity’ course. There was an overwhelming response from the the community, in particular, noting the quality of the output.
- The online Training Resource Plan wiki page was launched in 2017: <https://wiki.apnictraining.net/>
 - This platform includes the training materials used in each session and detailed session plans for individual training events.
- A new webclass, ‘Introduction to SDN’ was launched.
- Tashi Phuntsho, Senior Training Officer, joined the team.

Resource Plan Q2 (to 15 May)

- A new Community Trainer from the Philippines was recruited. There are currently 10 Community Trainers.
- New tutorial on ‘Multihoming benefit with portable address’ was developed. This tutorial can be useful during regular Member development events.
- eLearning class on MPLS L3 VPN started.
- Anosh Khan, the new eLearning developer, has joined the team to develop online materials.

Event Plan Q1 2017

- Visited and delivered a three-day technical training course in Maldives for the first time.

Event Plan Q2 2017 (to 15 May)

- Visited and delivered a three-day technical training course in Macau for the first time.

7.3 Technical Assistance (TA)

7.3.1 TA Summary

Q1 2017	Dedicated TA Session	TA Demo at Conference	Email & Skype TA
Number of Activities	1	1	2
Locations	Port Moresby, PNG	HCMC, Viet Nam	Port Moresby, PNG
Topics	PNG IXP set up	Routing registry; RPKI	Added two new Members to PNG IXP

Table 19 – TA in 2017 (Q1)

Q2 2017	Dedicated TA Session	TA Demo at Conference	Email & Skype TA
Number of Activities	1	0	3
Locations	Manila, Philippines	n/a	Port Moresby, PNG
Topics	IPv6 deployment planning session for PLTD	n/a	Added three new Members to PNG IXP

Table 20 – TA in 2017 (Q2 to date)

7.3.2 Highlights

- The TA team helped to set up the test case IXP for PNG.
- Assisted PNG IXP to set up their traffic graph (MRTG)
- Worked with all five IXP members to configure their peering router to connect to the IXP.
- Helped on the PNG IXP network design to prepare for Google and Akamai CDNs.
- The team conducted a three-day IPv6 deployment training and one-day IPv6 deployment TA session for PLDT, a large transit provider in the Philippines.

TA resource plan Q1 and Q2 2017

- Built a complete set of internal resources for the IXP set up and IPv6 deployment TA. These resources can be reused for similar TA sessions in other locations, with necessary customization provided for individual Members.

7.4 Security Outreach

- In February, APNIC hosted the two Tonga National CERT team members for a two-day in-house training and one-day working visit to the CERT Australia office in Brisbane.
- At APRICOT 2017, APNIC worked with FIRST, APCERT and VNCERT to organize a one-day FIRST Technical Colloquium (FIRST-TC). A meeting with the APCERT Steering Committee was also held to discuss plans for 2017 and 2018.
- APNIC participated remotely on the cybersecurity panel at the Afghanistan Internet Governance Forum in March 2017. APNIC also delivered a session remotely on 'Introduction to Cybersecurity' at the Afghanistan School of Internet Governance (AFSIG 2017) in April 2017.
- At the end of March, the APNIC Academy's 'Introduction to Cybersecurity' course was launched. Various partners were contacted to promote the new course. A Facebook live session was also organized by the Communications team.
- APNIC presented at the Financial Information Security Analysis Center (FS-ISAC) APAC Summit in Singapore in (3-4 April 2017) .
- A workshop was held in April on 'Introduction to Cybersecurity & Honeypots' at the University Malaysia Sabah (AS132874). In addition, a security talk for university staff and students was delivered at the International Islamic University Malaysia (AS45344).
- APNIC Foundation applied to the Australian Department of Foreign Affairs and Trade's Cybersecurity Capacity Building fund to help support and expand APNIC's incident response capacity-building efforts in the Pacific. This project brings an opportunity for APNIC to support a community-led approach to CERTs in the Pacific.

7.5 Community Development

7.5.1 NOGs

- APNIC provided our fellowship management system to SANOG, APRICOT, APriGF, and APIGA.
- APNIC is also planning to or has sponsored the following NOG events:
 - HKNOG 4.0
 - bdNOG 6
 - IDNOG 2017
 - SGNOG 2017
 - npNOG 2017
 - NZNOG 2017
 - MMNOG 2017

- phNOG 2017
- SANOG 30

7.5.2 Organizational sponsorships and support

APNIC has sponsored or supported:

- Networking, Systems and Security Conference (NSysS 2017), Dhaka, Bangladesh
- Sri Lanka Cert CC 2017
- BKNIX Peering Forum
- APRALO – Partial fellowship support for the Chair and Co-Chair to attend APRICOT 2017

APNIC also provides annual membership contributions to the APT, PTC, ISOC and PeeringDB.

7.5.3 Fellowships

APNIC will provide fellowships to APNIC 44 for working professionals and youth, and 'Returning' fellowships for selected past recipients.

APNIC will provide a level 1 basic Linux Administration training workshop to APNIC 44 youth fellows, following feedback received from the youth fellows at APNIC 42.

APNIC will contribute AUD 10,000 each to the APriGF 2017 and PacIGF 2017 fellowship program.

7.5.4 Regional Infrastructure

- Root servers
 - Coordinated with Netnod and Sri Lanka Telecom to replace the failed I root server in Colombo.
 - APNIC is assisting Verisign in deployment of J root servers in Nepal, India and Australia, and two in Singapore.
 - APNIC will deploy a root server node in the PNG IXP in collaboration with NICTA.
- IXPs
 - Provided support to the APIX meeting at APNIC 43 and assisted the APIX Steering Committee elections.
 - Provided support to the development of APIX' s Peering Asia Logo.
 - Sponsored an open peering event working group lunch at APNIC 43.
 - Successfully launched the Islamabad and PNG IXes with support from APNIC and ISOC.
 - Discussions are underway to set up IXes in Kabul and the Maldives.
- Internet measurements:
 - RIPE Atlas Anchors were deployed in Mongolia, Nepal, Indonesia, Australia, and Vietnam.

Atlas probes are distributed at every training workshop. To date, in total, we have distributed 250+ probes in the Asia Pacific region.

7.6 The APNIC Development Program

7.6.1 APNIC Foundation

- Funding for the Foundation's first major project was confirmed. AUD 200,000 has been granted under the Australian Department of Foreign Affairs and Trade's (DFAT) Cyber Cooperation Program to Build Cyber Capacity in the Indo-Pacific for an APNIC project entitled 'Raising Cyber Security Capability and Awareness: A secure and resilient Internet infrastructure for development in the Pacific'. The project will start in July. Two other project proposals for funding were unsuccessful.
- With the Foundation now fully operational, the following staff have been seconded on a full-time basis from APNIC to the Foundation: Duncan Macintosh as CEO and Executive Director; Sylvia Cadena as Head of Programs. Replacing Duncan as Development Director is Che-Hoo Cheng.
- An Affirmation of Commitment (AOC) was signed between APNIC and the Foundation to document their support, engagement, and cooperation with each other.
- A Foundation BoF was held at APRICOT 2017 to share information on the Foundation's activities with the community. It was the second Foundation BoF held at an APNIC conference.
- With Sylvia's secondment, the ISIF Asia program was incorporated into the APNIC Foundation.
- The nomination process for the Foundation Board continues with candidates being identified.
- Funding discussions also continued with the ITU, DFAT, JICA, and IDRC.
- The new Cross-Community Working Group (CCWG) on gTLD Auction proceeds continued its work with APNIC representative, Sylvia Cadena, taking part.

7.6.1.1 Foundation next steps

- Charitable registration and Board processes continue.
- Continuing fund raising and proposal development.

7.6.2 The APNIC Development Program

7.6.2.1 Funding support

- A JICA-funded project supporting the development of online training materials for CERTs was completed. The release of the materials marked the launch of the new online APNIC Academy. More than 1,000 people registered for the training in the first two months of the Academy
- The annual ITU IPv6 Infrastructure Security Workshop was held in Bangkok attended by 34 participants from 13 economies.

7.6.3 ISIF Asia

7.6.3.1 Status of IDRC and Sida funding

- The current IDRC grant has been extended until 31 December 2017. The Technical and Financial Progress reports were submitted to IDRC in January 2017 and were approved. Final reports are due in January 2018.
- A new IDRC grant to support the ISIF Asia 2018 grants and awards is under negotiation with the final details yet to be confirmed. The original amount discussed was reduced due to IDRC budget cuts.
- The Technical and Financial Progress reports were submitted to Internet Society in January 2017 and were approved. Final reports are due in November 2017.

7.6.3.2 Grants implementation

- Technical and Financial reports from the 2016 grant recipients are coming in for the AUD 441,000 in grants awarded during 2016 to 10 grants in 9 economies.
- The Call for 2017 grants and awards will be launched in June 2017 along with the new ISIF Asia website. The funding pool for 2017 from APNIC of AUD 160,000 will be distributed among three categories: Cybersecurity, Internet for Development, and Network Operations Research.

8 Business Area

8.1 Activity-based costing

All financial expenses are allocated to the defined activity codes set out in the 2017 budget submission.

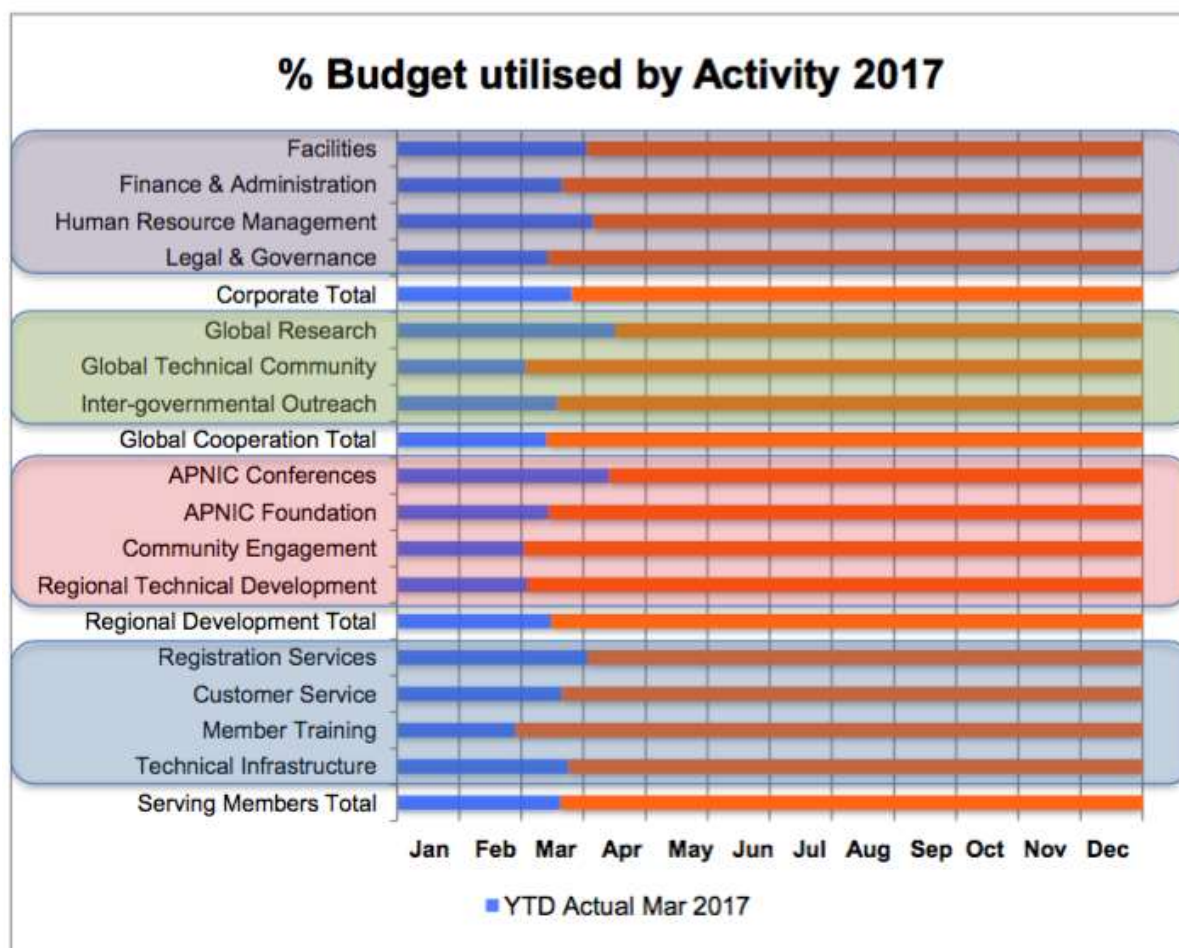


Figure 7 – Activity Reporting 2017

8.2 APNIC Survey

- The Survey team has undertaken a review of the findings of the 2016 APNIC Survey conducted by Anne Lord and Survey Matters. A comprehensive framework and project plan have been developed for the next APNIC survey.

8.3 Facilities review

- The Secretariat undertook a review of the APNIC office facilities to help determine how the layout might be best amended to accommodate changing requirements. As a result of this the following changes are underway:
 - Increase in workstation numbers by reconfiguring existing layout.

- Change of furniture in common areas, meeting rooms, general office, and outdoor areas to facilitate more informal collaborative workspaces.
- Reconfiguration of new small private rooms and screen installation in small meeting rooms.

8.4 ISO9001 Annual Audit

- Preparation for the annual external review of the quality management system to retain accreditation to ISO9001 is underway with a program of internal audit undertaken in the first quarter.

8.5 Business Continuity Planning

- Business Continuity Plan activities continue, with quarterly scenario testing undertaken by the core BCP team. Brisbane experienced an extreme rainfall event in April, and whilst the event was monitored closely by the team, the BCP was not instigated.

8.6 APNIC Foundation

- The implementation of the APNIC Foundation requires a stand alone reporting system to manage the Foundation's financial and administrative activities. APNIC was able to source a free version of the Netsuite ERP through their CSR program; this is currently being implemented and will be active from June 2018.

8.7 Insurance Program

- Annual insurance policies have been placed and includes building and property; public liability; cyber, information technology products and services; management liability; and employee income protection. All insurance is now managed through a single broker.
- APNIC Foundation activities are included in APNIC's insurance program.

8.8 Member Feedback

- The Finance team's interactions with Members are the subject of a pilot commenced in April requesting feedback from Members. This activity aligns closely with the current tools used by the Services area.

8.9 Finance Statistics to date

Number of	Apr-17	Avg/Mnth	YTD	2016	2015
Phones Calls (Outward)	268	263	1050	3500	
RTs Received (Total)	2086	1887	7546	21396	23275
E-Bill Queue	1268	1250	4999	15331	19603
Finance Queue	149	116	463	1328	1332
Accounts Payable Queue	77	91	364	1261	841
Bounce Queue	416	202	809	1415	1496
Inward Payment Queue	176	175	699	2061	3
Accounts Receivable					
APNIC Member Count			6182	5994	5268
New Members	62	74	296	1030	940
New Non-members	0	1	5	18	24
Receipts Processed	581	597	2387	7514	6645
Invoices issued	687	626	2505	7537	7271
Credit notes issued	39	36	145	529	575
Accounts Closed (Mem and Non-Mem)	23	30	121	322	358
Closure Notice sent	107	79	316	945	900
Reactivation Members	0	3	12	45	51
Reactivation fee waived	0	0	1	8	6
Refund Members (Duplicate and Over-payment)	8	6	23	68	46
Accounts Payable					
Asset Created	11	32	127	189	156
Asset Disposal	2	3	11	127	147
PO created by Finance	49	31	122	213	209
PO Billed	148	153	611	1947	1980
Supplier <u>EFT</u> Payment	65	71	283	891	946
Nexonia Reimbursement Payments	33	31	124	386	388
Credit Card Payment	312	313	1251	3377	3050
Journals processed	85	76	305	888	1005
Cash Advance Request	4	3	10	18	28
Vendor Request	7	9	34	141	431

Figure 8 – Finance statistics (to date)

9 Human Resources (Confidential)

[Confidential material redacted]

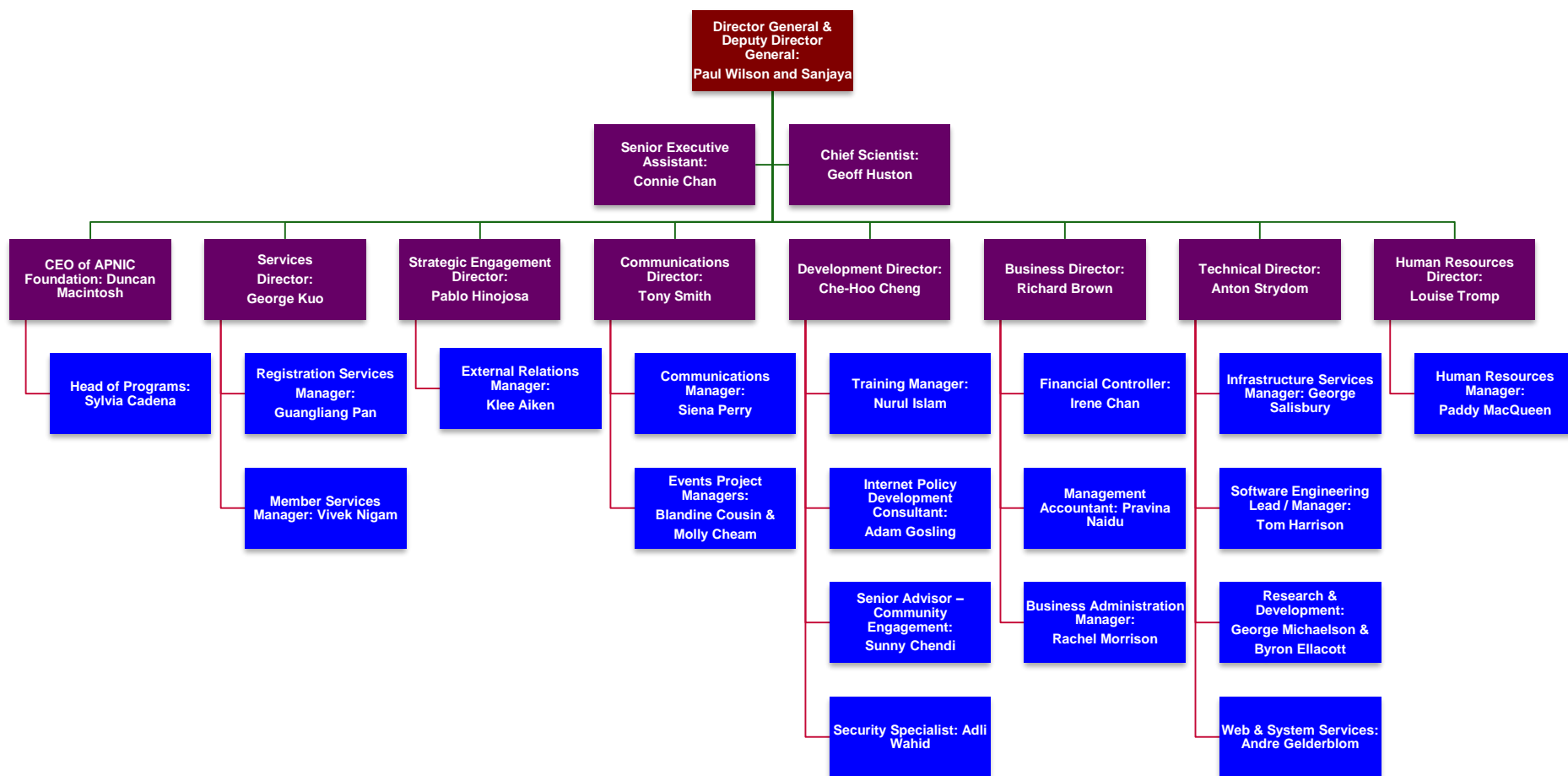
Secretariat Report

APNIC EC meeting

3 June 2017

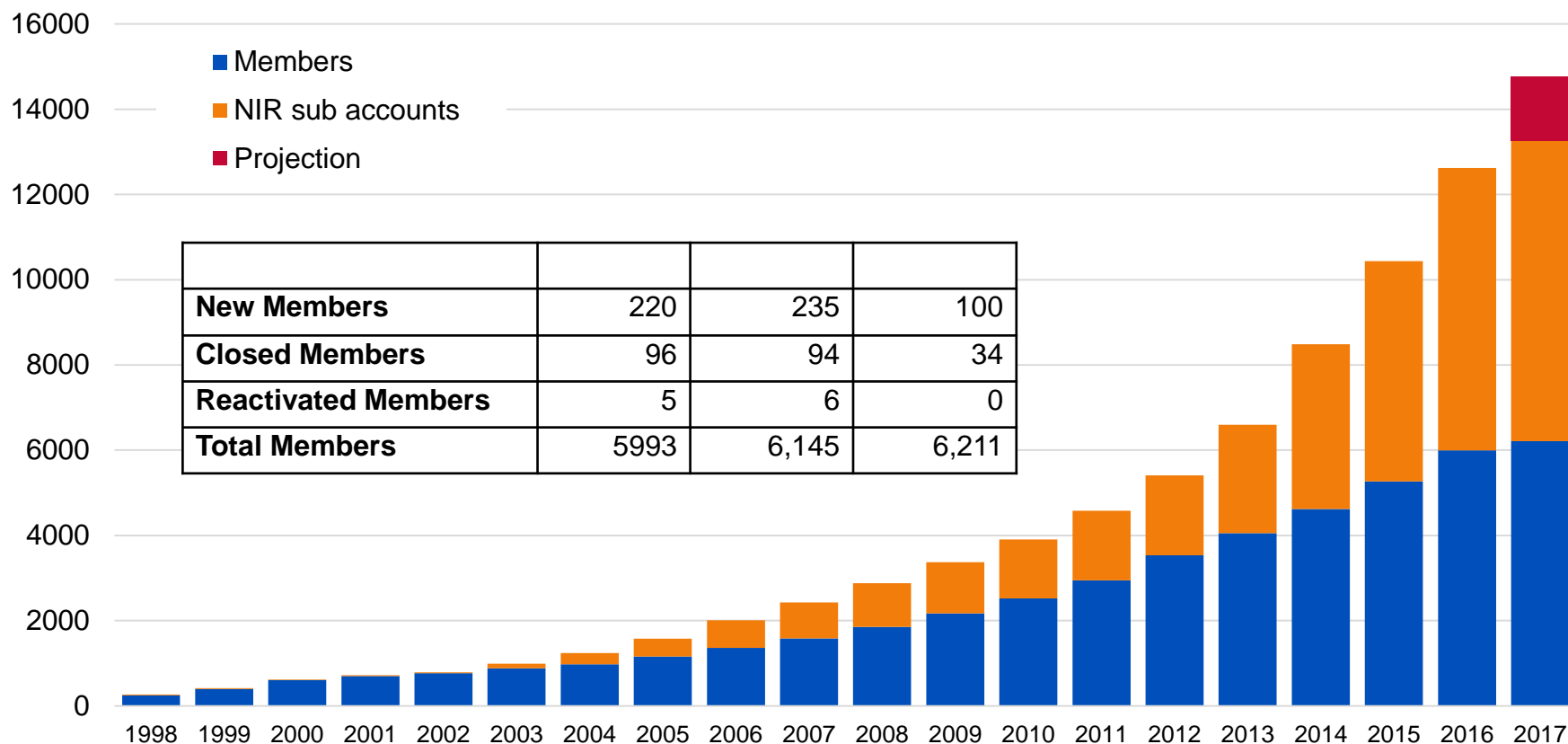
[Stats figures are as of 15 May unless otherwise mentioned]

Organisation Chart - May 2017



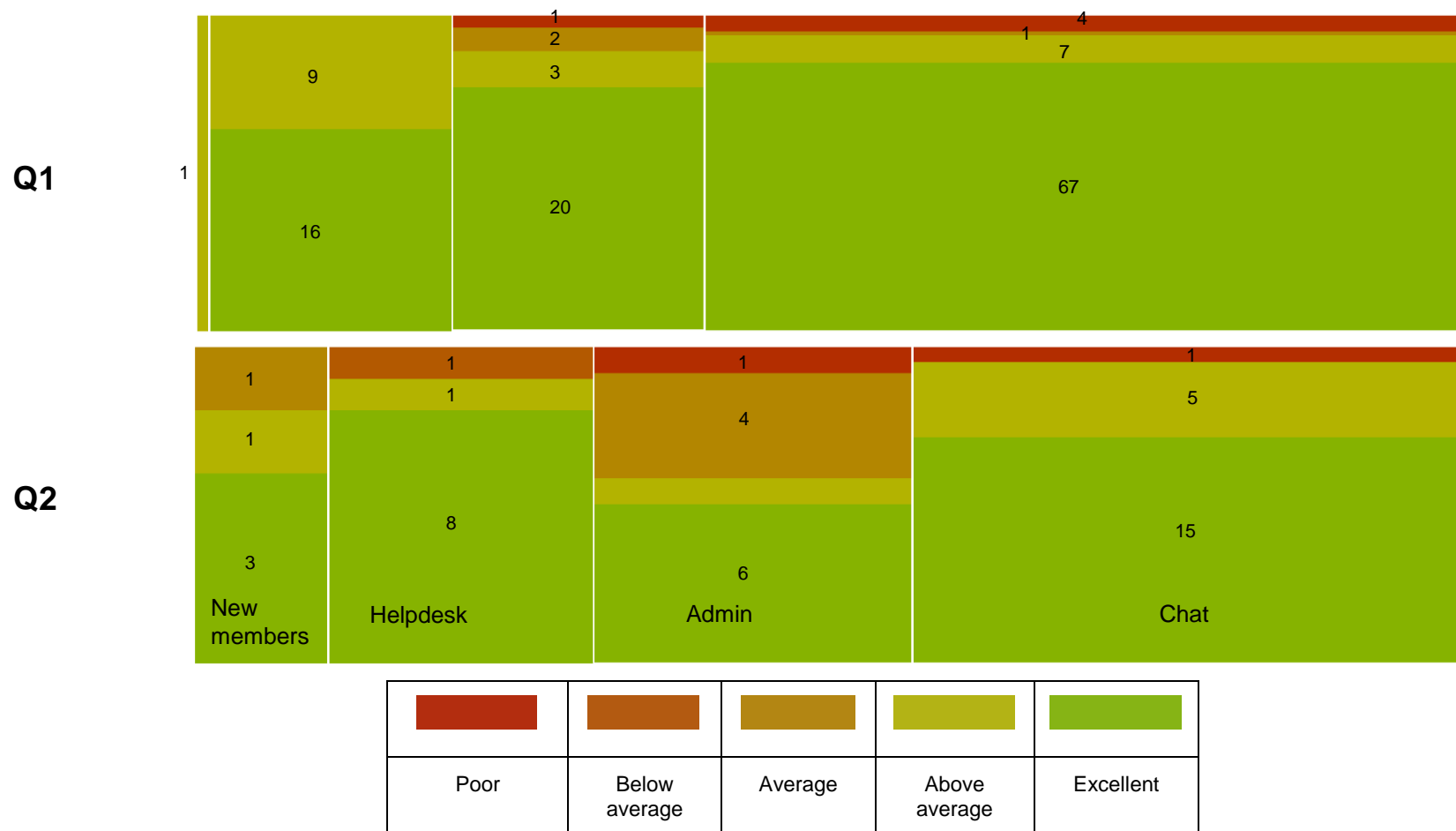
Services Area

Membership growth



New Members	220	235	100
Closed Members	96	94	34
Reactivated Members	5	6	0
Total Members	5993	6,145	6,211

Instant feedback



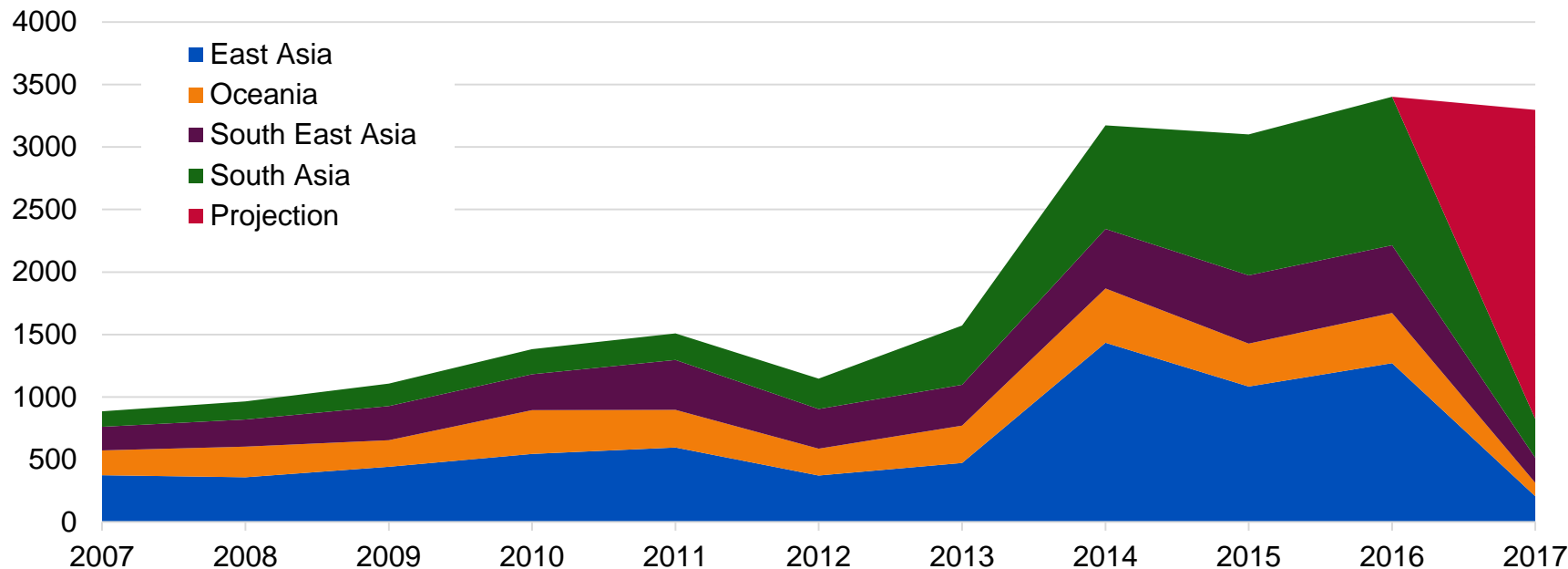
Negative feedback

- Two admin tickets received poor feedback:
 - A new Member submitted an incorrect form and we assisted them with submitting the correct form.
 - One new membership application was rejected as the Member could not provide the requested information. The Member reapplied with the requested information and their application was approved.
- Five chat requests received poor feedback:
 - In four cases, the requester left the chat before service was provided.
 - One Member required additional assistance, which was provided separately via email.

Positive feedback

- “Superb support >even kids can understand DNS. We are grateful to him for his excellent support. Once again thanks for the great support by the team as well..”
- “I liked it how fast the ticket was worked on, from elsewhere I'm used to waiting for days for a reply”.
- “Process for IP Transfer was very smooth and conduct by APNIC Staff was very professional and also very efficient.”
- “APNIC staffs are well experienced to explain the issue.”

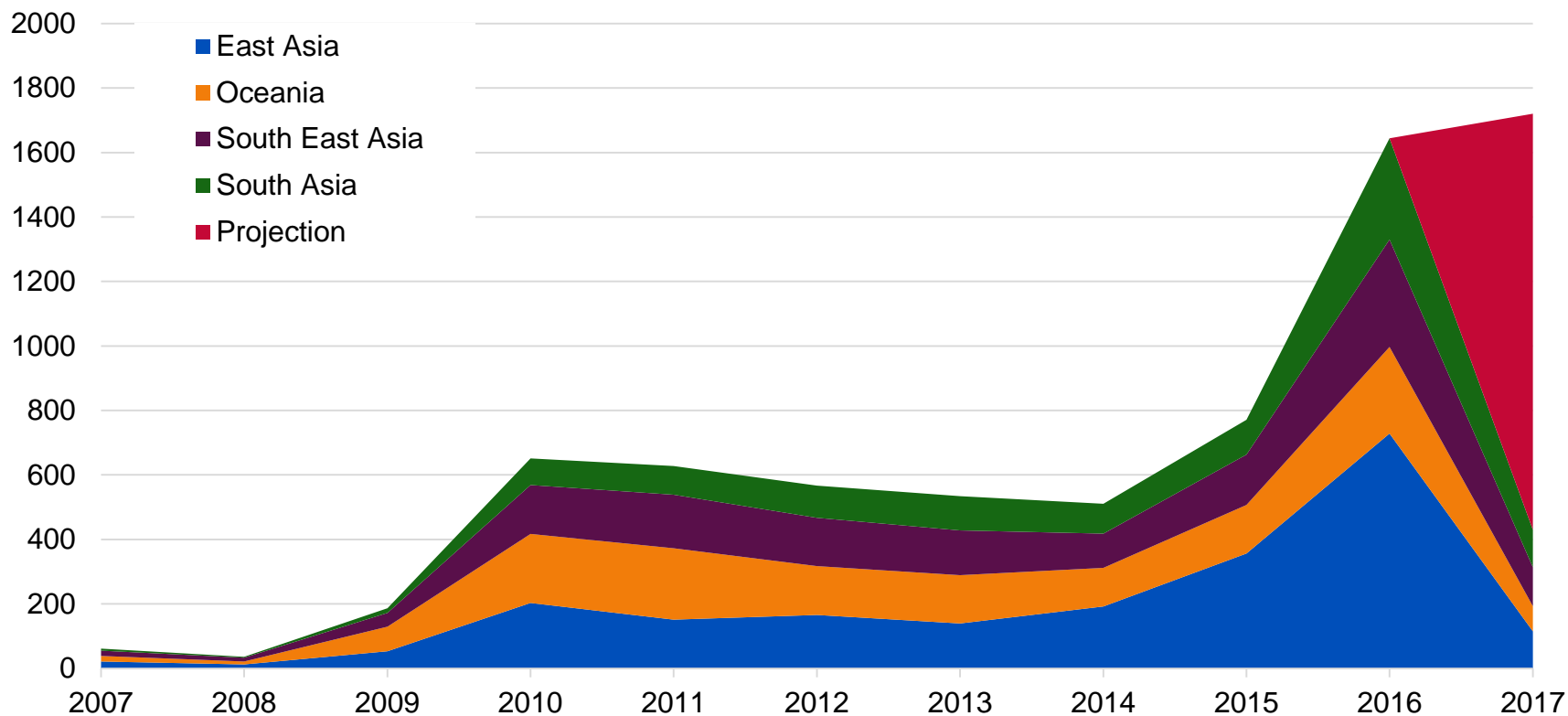
IPv4 delegations



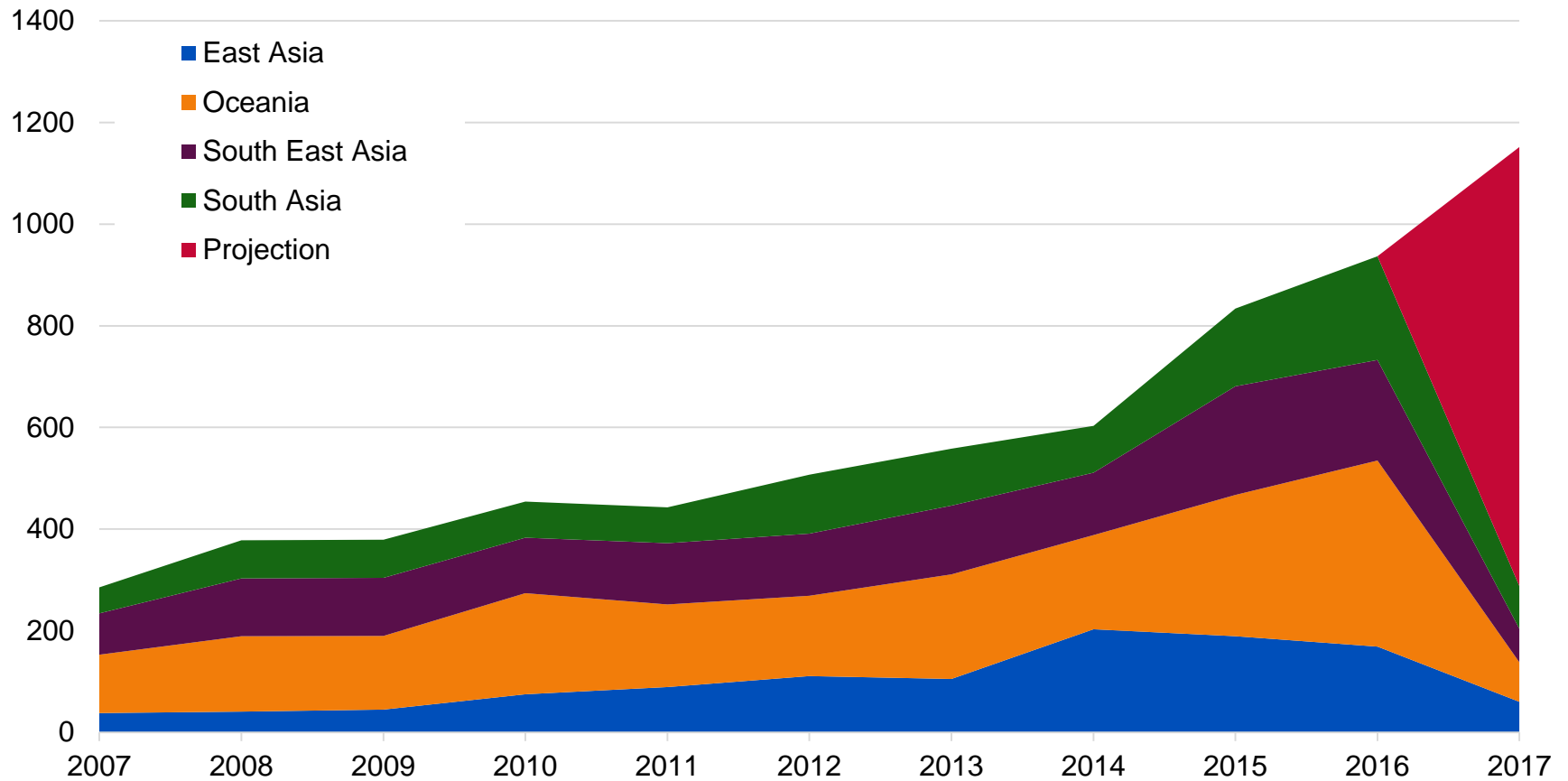
Resource	Q4 2016	Q1 2017	Q2 2017
IPv4 (103 /8)	532	567	288
IPv4 (recycled space)	0	86	21
IPv6	482	328	163
AS numbers	496	336	101

Resource	Q4 2016	Q1 2017	Q2 2017
Delegations (/24)	1595	2,087	970
Remaining	42.79%	40.01%	38.66%

IPv6 delegations



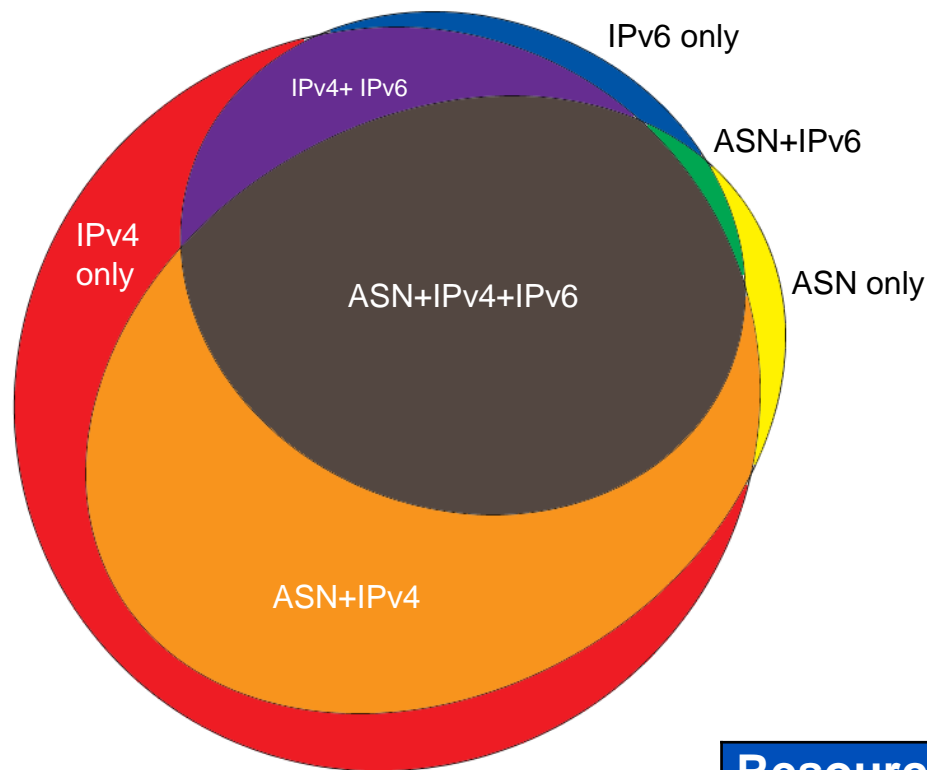
ASN delegations



IPv4 recycled waiting list

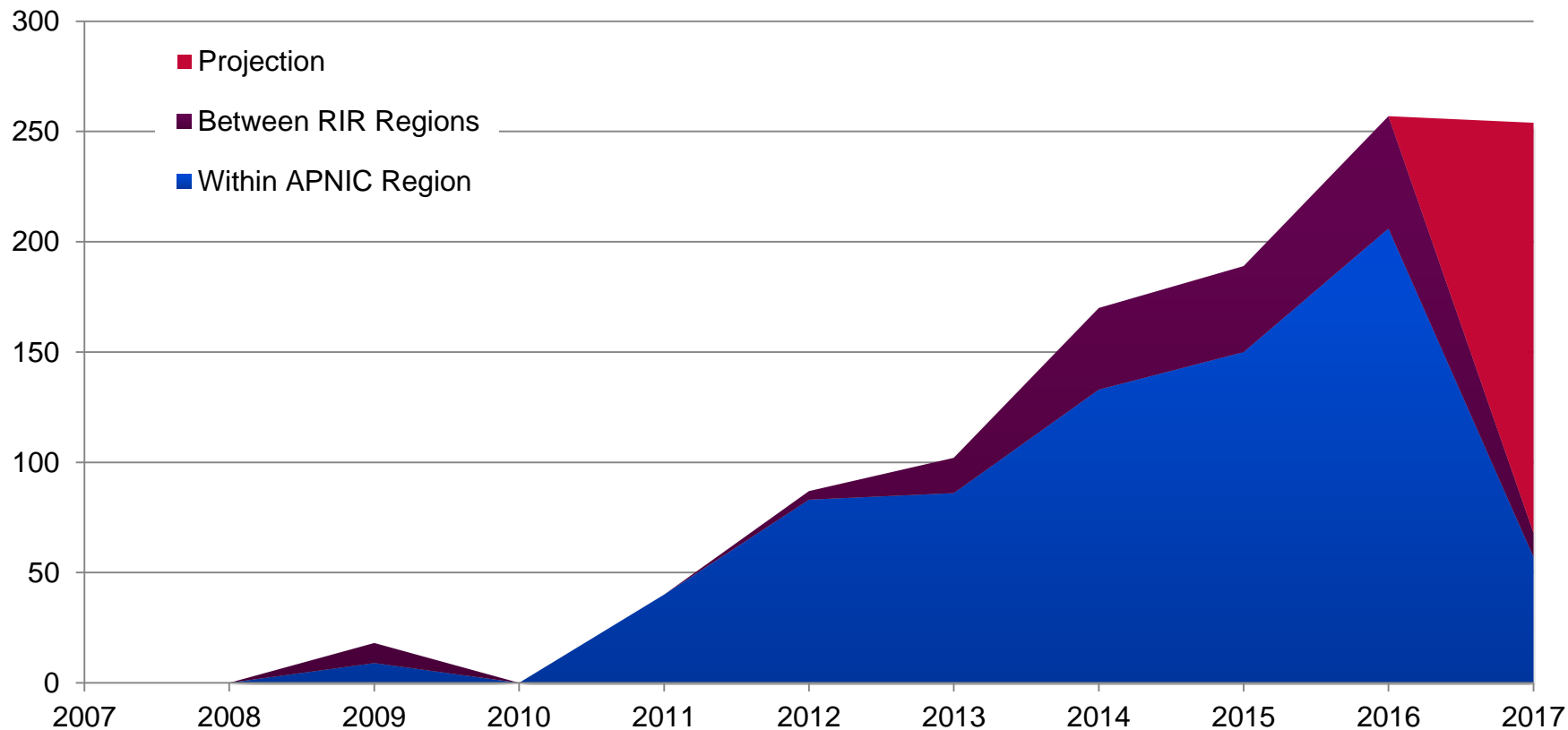
- Since 9 June 2016, unfulfilled requests for recycled IPv4 addresses have been put on the waiting list. Each week, terminated address space is returned into the recycled pool and requests on the waiting list are fulfilled accordingly.
- 15 May 2017 waiting list status
 - 286 entries
 - 1,075 x /24 IPv4 blocks

Resource holding

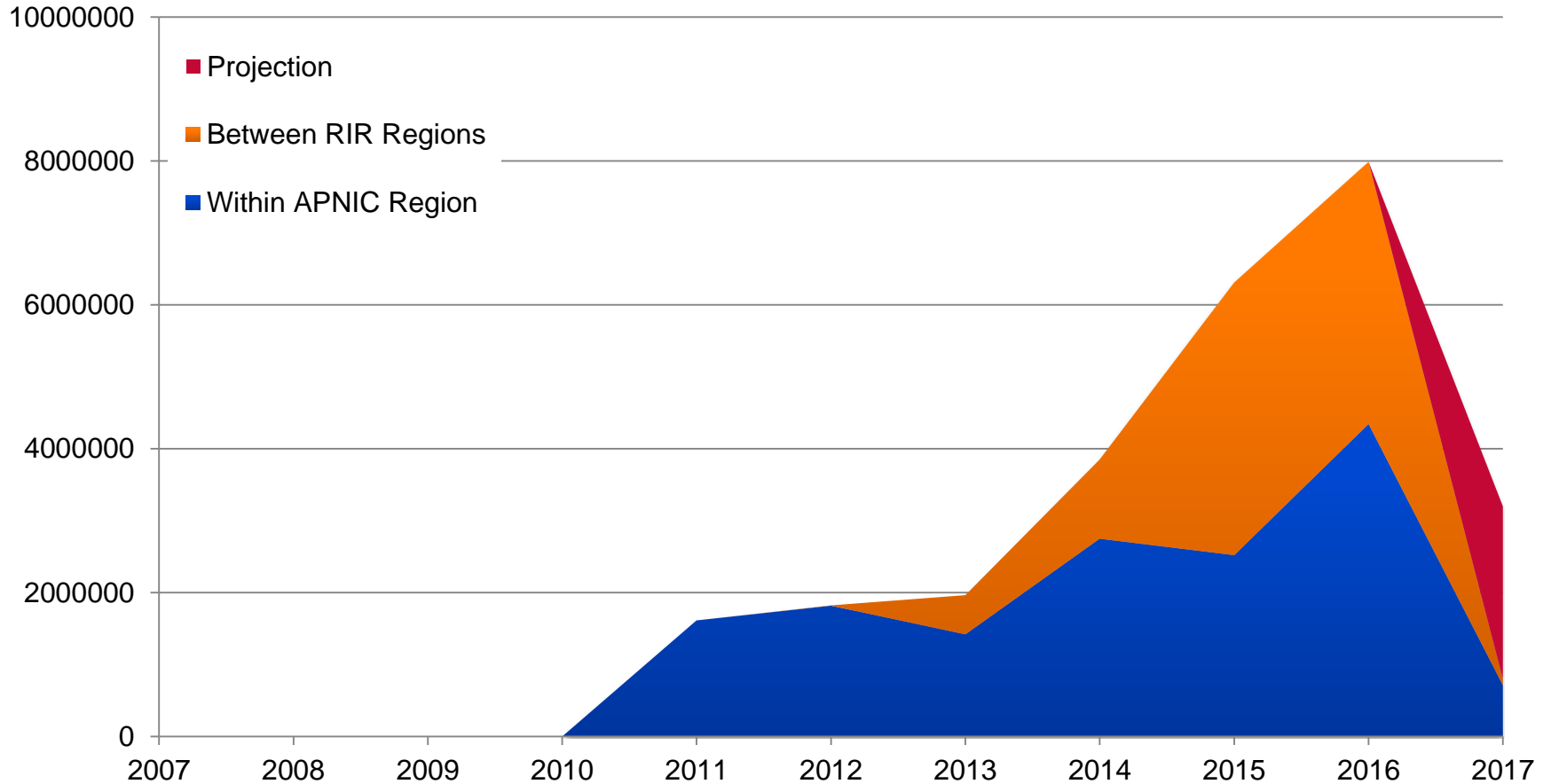


Resource type	Q1 2017	Q2 2017
IPv4 (103/8)	67.74%	68.33%
IPv4 recycled space	25.87%	25.53%
IPv6	51.98%	52.65%

IPv4 transfers



Total IPv4 transferred



Transfers

Transfer type	Q4 2016 requests	Q4 2016 addresses	Q1 2017 requests	Q1 2017 addresses	Q2 2017 requests	Q2 2017 addresses
Mergers/acquisitions	34	2190,848	40	174,080	12	215,040
Market transfers	76	1457,664	54	682,752	31	290,048
- Intra RIR	59	786,944	44	603,904	27	150,784
- Inter RIR	17	670,720	10	78,848	4	139,264

Inter RIR transfer	Total address to date
ARIN to APNIC	8,999,936
RIPE to APNIC	139,264
APNIC to ARIN	40,960
APNIC to RIPE	121,344

	Q4 2016	Q1 2017	Q2 2017
Market transfers	36	27	21
Mergers/acquisitions	28	22	5

RPKI

- Total percentage of IP addresses under ROA out of the total IP addresses delegated by APNIC.

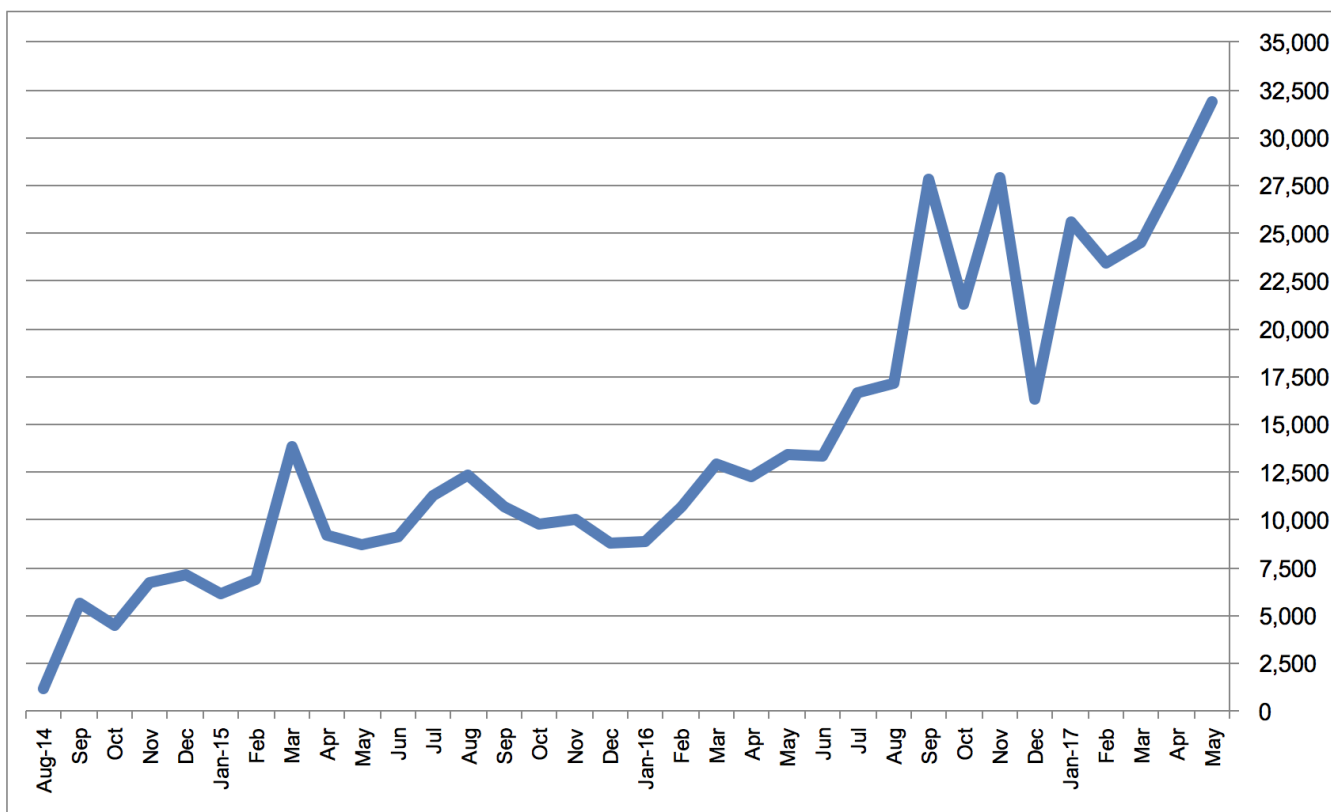


Resources	Q4 2016	Q1 2017	Q2 2017
IPv4	0.91%	1.04%	1.80%
IPv6	0.29%	0.33%	0.34%

Communications Area

Blog

	2016 Q4	Q1 2017	Q2 2017
Views	65,494	73,451	60,044
Posts	104	83	38



Blog

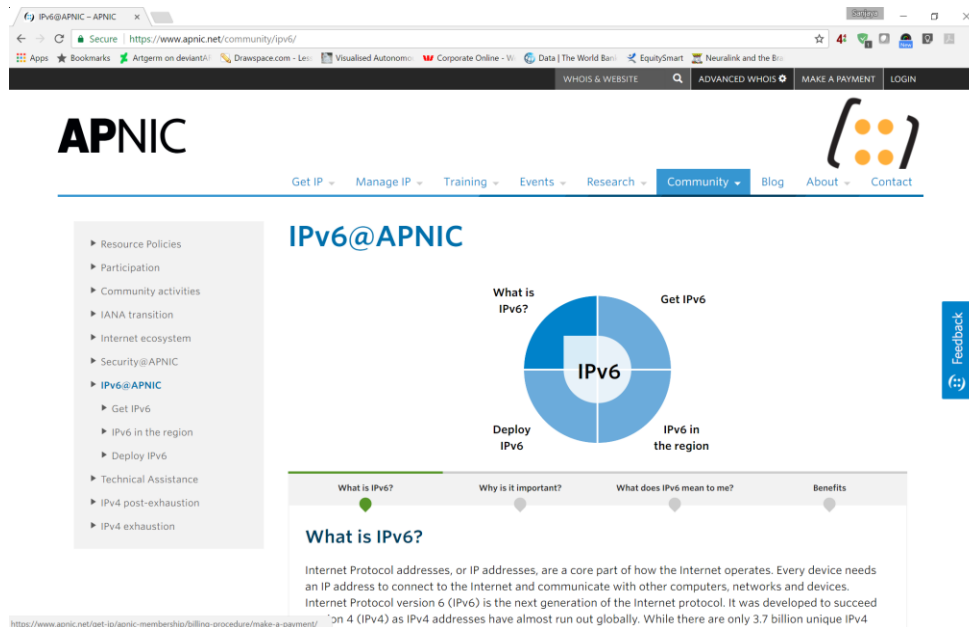
- 53 Guest Posts in 2017 to date
 - 2016: 23%
 - 2017: 44%
- Significant content during the period:
 - Geoff Huston's pieces on TCP control flow algorithms and satellite technology
 - Community guest posts on IPv4 transfers and submarine cables
- Reached a milestone on 6 April with the publishing of its 1,000th post!

Social media

	2016 Q4	Q1 2017	Q2 2017
Facebook			
Organic Reach	172,895	139,012	97,680
Likes	25,874	26,247	26,207
Twitter			
Followers	6,819	7,170	7,317
RT/Likes/Mentions	1,541	2,244	778
YouTube			
Views	9,064	12,839	2,804
Minutes	49,501	93,600	15,336
Slideshare			
Views	35,471	36,860	18,826
LinkedIn			
Reach	45,947	45,559	18,578
Followers	1,884	2,347	2,377

Website

- CMS (wordpress) upgrade and relocation
- New IPv6 pages completed in Q1
 - <https://www.apnic.net/ipv6>



KSK rollover awareness

- ICANN plans to rollover the DNSSEC Root Zone KSK (Key Signing Key) in October 2017.
- Raising awareness among network operators
- Identification of 'higher risk' network operators using APNIC Labs data
 - Shared with other RIRs for their use
 - Initial awareness emails sent to identified network operators.
- Creation of resources web page: (www.apnic.net/keyroll)
- Translation of ICANN materials started (with the support of NIRs).
- Guest Post from ICANN' s Matt Larson on the APNIC Blog.
- Facebook Live video with ISC's Eddy Winstead.

APRICOT 2017

- Ho Chi Minh City, Viet Nam, from 20 February to 2 March 2017.
- More than 27 pieces of media coverage across local print, online and television media, and regional online tech publications. ZDNet and Bloomberg journalist hosted at the event.

Conference Statistics	
Total number of on-site delegates:	654
Economies represented:	56
APNIC Member organizations represented:	178
Remote Participants – Adobe Connect:	58
Remote Participants – YouTube:	1,537 views; 18,271 minutes views
Twitter #apricot2017 Posts:	1,220 (Twitter) by 407 unique users
Total people reached:	3,108,061

APNIC 44 preparation

- Date: 7 to 14 September 2017
- Venue: The Splendour Hotel Taichung (both workshops and conference)
- Keynote speakers
 - Anand Oswal (Cisco) on his experience in implementing 'IPv6 only' building
 - Additional speakers to be confirmed in Q2/3
- Website created and registration now open:
<https://conference.apnic.net/44/>

Future conferences

- APRICOT 2018 Kathmandu (APNIC 45)
 - Date: 19-28 February (Moved 1 day forward to avoid a public holiday on 1 March)
- APNIC 46
 - Noumea, New Caledonia
- APNIC 48 (September 2019)
 - Additional info on potential locations prepared for EC discussion at Nairobi meeting
 - Location to be announced at APNIC 44

Technical Area

Public services metrics

Public service	2016	2017
	Average annual query rates (queries per second)	YTD Average query rates (queries per second)
Whois	463	439
RDAP	2	4
rDNS	21,000	20,510
RPKI	18	16
FTP	29	2
MyAPNIC	1.5	1.5

Core registry improvements

- Separation into front-end clients and an event-sourcing-based registry back-end service
 - Numerous instances found during tests where queries were still being performed against the database directly, rather than via the backend service. This needs to be addressed before event sourcing can be enabled.
 - The event sourcing conversion continues, and will be integrated and enabled by Q2 2017.

MyAPNIC/ARMS improvements

- Features/improvements deployed or currently being deployed:
 - Bounced emails (ARMS) deployed
 - Notifies the contacts for an account when an email to another contact for that account has bounced, requesting that they update the relevant email address.
 - Legacy RPKI ROA interface deprecation in progress for release by the end of May
 - Simplifies the interface for route management in MyAPNIC
 - Numerous bug fixes implemented

Whois development

- WHOIS master server upgrade to version 4
 - Code updates completed
 - Integration testing and preproduction deployment in progress
 - Release scheduled for the end of May
- Organisation object
 - to be completed by end June

Single sign-on

- Single sign-on to allow common authentication across all sites and services will start deployment this year
 - Evaluated and selected **Keycloak** for Identity Management.
 - Integration with existing LDAP server and MyAPNIC completed (login, password change, second factor authentication, and styling)
 - In progress:
 - Certificate enrolment
 - Certificate authentication
 - User administration
 - User registration

Public API

- To provide an automated interface to MyAPNIC and other core services through public APIs.
 - A draft specification was presented at APRICOT 2017
 - If no further Member and NIR feedback, implementation will begin in Q3, with deployment by the end of Q4.

Web interface to mailing lists

- To provide a more user-friendly interface to APNIC's mailing lists, allows viewing and posting via a web browser
 - Adapt and deploy the existing RIPE Forum software
<https://www.ripe.net/participate/mail/forum/>
 - Pre-deployment preparation in progress and is scheduled to be completed by the end of June.
 - Work on the mailing list search set up is in progress.

RDAP improvements

- To make RDAP service perform as fast as the port 43 Whois service, using the WhoWas service's approach, i.e. through pre-generation of query responses.
 - Initial work is in progress, adapting the WhoWas service to work for non-historical queries.
 - A separate RDAP redirection service specific to INRs is also being developed, since the functionality in the current RDAP implementation is not easily separable.

Network improvements

- Network Transmission upgrade by using CWDM (Coarse Wavelength Division Multiplexing) provides additional bandwidth and communication channels between data centres and the office.
 - Office - Interactive completed
 - Office - NextDC and NextDC - Interactive to be completed by June
- Secondary VPN (Cisco AnyConnect VPN)
 - Second-factor authentication added, including CRL checking of revoked certificates. ACL updated to include consultant/contractor
 - Monitoring added to include key metrics and network reachability alerts
 - Planned deployment at end of May

Network improvements

- Office migration to RFC1918 (private) address space
 - Lab testing and final design is currently in progress
 - Migration of LAN and Wifi to be completed by the end of Q2
- Network monitoring improvements
 - Requirements specification completed
 - Proof of concept testing completed
 - Vendor evaluation in progress

Network improvements

- Network switching and routing re-architect
 - Layer 2 improvement methods such as vPC (Virtual Port Channels) and MST (Multiple Spanning-Tree) protocol have been tested successfully in a lab environment
 - Some Layer 3 methods e.g. HSRP (Hot Standby Router Protocol), IPv4 and IPv6 ACL (Access Control List) are being tested
 - Data centre rack rearrangements to fit new hardware and cable management in progress
 - A detailed design and migration plan to be completed by end of Q2
- Ongoing network improvements include:
 - Layer 2 improvements, IOS upgrades, and decommissioning of retired VPNs.
- Collecting netflow data from HK and JP routers to assist in diagnosing possible DDoS attacks and other issues

Systems & services improvements

- Email migration to Office365:
 - Successfully completed the Office365 migration project. Office 365 provides improved email client, web client and server functionality, reduced maintenance, and the ability to archive all emails
- Wiki upgrade:
 - Completed the upgrade of the internal wiki and added a theme to improve viewing on mobile devices
- Whois updates:
 - The Whois test service upgraded to the latest code running on CentOS7
 - Work on upgrading the Whois query nodes to be completed by the end of May

Systems & services improvements

- Archiving improvements:
 - Archive server network connections were upgraded to 10G
 - A new server deployed and all identified archive data is collected by the new server
 - Validation of archive data in progress, ensuring all data is recoverable and correct
- Remote sites:
 - The US site was decommissioned
- Testing of the anycast DNS service using a cloud provider is in progress

Internet Directory

- Work as part of the next release include:
 - Backend data issues have been fixed.
 - Data ingestion time has been reduced from five days to two hours.
 - Completion of monthly and daily 'drill down' features.
 - Front-end development (improved styling) is in progress.
- <http://stats.apnic.net>

CMS and website

- Updates to the CMS (Wordpress) continues, ensuring it is up to date, with security patches applied
- The web team has implemented daily stand-ups, using the newly adopted Kanban approach.
- The local development environment has successfully been containerized, which significantly speeds up the build/test/deploy cycle. Currently being tested in the production environment.

Improved online experience

- The Improved Online Experience initiative, which encompasses various projects across departments, is in the planning phase, with work focused on measuring the current customer experience when using APNIC's systems
- As part of this project, Single Sign-on (SSO) is being developed with the software team:
 - The web team is currently working on the 'look and feel' and overall flow of all systems under the SSO scheme
 - The Software team aims to deliver a prototype by end of June

CRM

- Phase 1 (Contact Management) is underway. The primary users have been trained. Additional users have been identified and are currently being trained. Feedback from phase 1 users is being logged and prioritized and is being implemented.
- Based on this feedback, phase 2 of the CRM project is currently being defined.
- The current focus is in getting more staff to use the system to capture their interactions with new and existing contact/organisation.

Other Web improvements

- Fellowship system
 - Ongoing improvements are being made to the Fellowship system, refactoring the software to align with industry best practices.
- Web Style guide
 - A web style guide that will assist editors and developers in creating a consistent look and feel across is a work in progress.

Historical Whois (aka Whowas)

- Whowas allows the retrieval of historical Internet number resource registration information.
 - The historical service API system is now operating in a production environment.
 - An early release user interface for exploring the history of registration data is available: <https://www.apnic.net/whowas/>
 - Standardization of an RDAP extension for history is progressing through discussions with the ECG, and will enter the IETF process this year.

IDN & EAI support on APNIC systems

- As part of the ICANN Universal Acceptance (UA) Steering Group's effort to publish UA case studies of organizations across the world, APNIC assisted in creating such a case study as it relates to APNIC: <https://uasg.tech/documents>

Measurements for presentations

- To assist the APNIC External Relations team members in delivering high-quality information and statistics to the APNIC community, a platform for producing presentation materials has been established. The platform:
 - Consumes APNIC research data and published statistics.
 - Produces presentation materials aiming at consistency, both of information and formatting.
- The platform is used routinely to support staff who are delivering presentations at various events

Information Security Management System (ISMS)

- The initial ISMS release was communicated to all staff and published on the wiki (March).
- The current policies are under review. Similar policies between the QMS (Quality Management System) and the ISMS were identified and merged. The ISMS Statement of Applicability will be prepared after the policy reviews.
- Ongoing internal and third-party evaluation will be followed by an audit during Q3. The first internal audit is scheduled for June.

Network security

- As part of the ongoing network security improvements, the requirement for a stateful Firewall, which provides an Intrusion Prevention System, was identified.
- Four vendor evaluations were completed against the requirements, with all the results, conclusions and recommendations noted in a business case.
- The business case approval and purchasing cycle will follow.

Security incidents

- Security incidents experienced during this period. An incident report is available for more detailed information.

Date:	14/04/2017
Incident type:	www.apnic.net hosting service compromised and site redirected to malware site.
Systems/Services affected:	www.apnic.net
Remediation :	Hosting service reverted site to backup copy.

Date:	16/03/2017
Incident type:	DDoS against DNS servers ns3.apnic.net and sec4.apnic.net
Systems/Services affected:	Reverse DNS from ns3.apnic.net, and secondary DNS service from sec4.apnic.net
Remediation:	Upstream transit provider dropped DDoS traffic.

APNIC Labs

Presentations

- Geoff delivered 15 presentations at various events during this period:
 - Why Dane? (PTC'17, NZNOG 2017 and NANOG 60)
 - The State of IPv6 (PTC'17)
 - Forensic Tracing in the Internet: an update (Europol workshop)
 - An Introduction to the IoT (HKNOG 4.0)
 - BGP in 2016 (APRICOT 2017 and IETF 98)
 - ECDSA (APRICOT 2017)
 - Network Forensics in 2017 (APRICOT 2017)
 - The Death of Transit (APRICOT 2017)
 - Explaining the Root Service (ICANN 58)
 - IP Address report (APRICOT 2017 and ARIN 39)

Articles

- Geoff wrote 13 reports/articles during this period
 - Scoring the DNS Root Server System, Pt 2 – A Sixth Star?
 - Leaving it to the Last Second
 - Lets Encrypt with DANE
 - Postscript to the Leap Second
 - BGP in 2016
 - Addressing 2016
 - NANOG 69 Report
 - The Root of the DNS
 - The Gilded Internet
 - IETF 98 Report
 - ARIN 39 Report
 - UP!
 - BBR, the new kid on the TCP block

Research

- KSK rollover, packet size and the impact on users
- IPv6 and large MTU settings (commissioned by Comcast)
- Measuring the extent of latent QUIC capability
- Defining a new set of Ad-based measurements on the failover time from IPv6 to IPv4
- DNS related research with ICANN (contract extended to 2018)

Development Area

Policy proposals

- Three policy proposals and a Joint SIG meeting to consider a proposal to change the SIG Guidelines at APRICOT 2017
- Reached consensus and is waiting for EC endorsement:
 - prop-117 - Returned IPv4 address management and Final /8 exhaustion
 - Recovered 103/8 space will be placed in the 103/8 (Final /8) pool
 - Recovered non-103/8 space will be placed in the IPv4 Recovered pool
- Did not reach consensus and returned to mailing list:
 - prop-116 - Prohibit to transfer IPv4 addresses in the final /8 block
 - prop-118 - No need policy in APNIC region

Other policy matters

- A Chair and Co-Chair election had the following results:
 - Chair - Sumon Ahmed Sabir
 - Co-Chairs (One-year term) - Ching-Heng Ku and Bertrand Cherrier
- Chair decided to stop using *Confer* following a complaint by a SIG participant
 - Investigation revealed a large number (14) of dubious accounts (such as [b@qq.com](#)) that seemed to be distorting the results.
- Chairs to decide if they would like to continue using the tool if we implement:
 - A more secure account creation
 - An improved administrator interface for better control by the Chairs

Other SIGs

- NIR SIG
 - All 7 NIRs presented updates at APRICOT 2017
 - Will hold an election for Co-Chairs at APNIC 44 after both seats become vacant in September 2017
- Cooperation SIG
 - Elected the Chair and Co-Chair to serve another term at APRICOT 2017. The Co-Chair agreed to a one-year term to provide for staggered elections
 - Six informational presentations and a good room turnout
 - Mailing list subscriptions and activities continue to be low

Training

Q1 2017	Face-to-Face	eLearning
Courses	15	33
Locations	10 cities in 10 economies	Online
Participants	402	264
YouTube channel	29,361 views + 398 subscribers	

Q2 2017	Face-to-Face	eLearning	Academy
Courses	6	12	1
Locations	6 cities in 6 economies	Online	Registration: 1,213
Participants	199	87	Enrolled: 1,013
YouTube channel	10,317 views + 114 subscribers	Certified: 189	

Training Q1 highlights

- APNIC Academy was launched
 - ‘Introduction to Cybersecurity’ (developed with JICA funding) as the first course.
 - Great response, noting the quality of the output.
- Training Resource Plan wiki page was launched
 - <https://wiki.apnictraining.net/>
 - A repository of training material used in each session and detailed agenda of individual training events.
- A new webclass, ‘Introduction to SDN’ was launched.
- Delivered a three-day technical training course in Maldives for the first time.
- Tashi Phuntsho (from Bhutan) joined the team as a Senior Training Officer.

Training Q2 highlights

- A new Community Trainer from the Philippines (Bani Lara/ASTI) was recruited
 - We now have 10 Community Trainers
- A new tutorial on 'Multihoming benefit with portable address' was developed
 - Useful for Member development events
- eLearning class on MPLS L3 VPN started
- Delivered a three-day technical training course in Macau for the first time
- Anosh Khan (NZ/Kashmir) joined the team as an eLearning developer

Technical Assistance

Q1 2017	Dedicated TA Session	TA Demo at Conference	Email & Skype TA
Number of Activities	1	1	2
Locations	Port Moresby, PNG	HCMC, Viet Nam	Port Moresby, PNG
Topics	PNG IXP set up	Routing registry; RPKI	Added two new Members to PNG IXP

Q2 2017	Dedicated TA Session	TA Demo at Conference	Email & Skype TA
Number of Activities	1	0	3
Locations	Manila, Philippines	n/a	Port Moresby, PNG
Topics	IPv6 deployment planning session for PLTD	n/a	Added three new Members to PNG IXP

Technical Assistance highlights

- PNG IXP
 - Set up the test case IXP.
 - Set up their traffic graph (MRTG).
 - Worked with all five IXP members to configure their peering router to connect to the IXP.
 - Helped design the network to host Google and Akamai CDNs.
- PLDT IPv6
 - Three-day IPv6 deployment training and one-day IPv6 deployment TA session for PLDT, the largest Telco in the Philippines.
- TA material development
 - Built a complete set of internal resources for IXP set up and IPv6 deployment TA to be used at similar engagements in other locations, with customization to fit individual cases.

Security outreach

- Hosted the two Tonga National CERT team members for a two-day in-house training
- Collaborated with FIRST, APCERT and VNCERT to organize a one-day FIRST Technical Colloquium (FIRST-TC) at APRICOT 2017.
- Presented at the Financial Information Security Analysis Center (FS-ISAC) APAC Summit in Singapore in (April)
- Malaysia security events (April)
 - Presented at a workshop on 'Introduction to Cybersecurity & Honeypots' at the University Malaysia, Sabah.
 - A security talk for university staff and students at the International Islamic University Malaysia.
- Remote participation at Afghanistan events

Community sponsorship

- Networking, Systems and Security Conference (NSysS 2017), Dhaka, Bangladesh
- APRALO – Partial funding support for the Chair and Co-Chair to attend APRICOT 2017
- Sri Lanka Cert CC 2017
- BKNIX Peering Forum
- NOGs (NZNOG, SANOG, HKNOG, MMNOG, and PHNOG)

Fellowship

- APRICOT 2017
 - 42 fellows from 11 economies selected
- APNIC 44
 - Planning for 'Returning Fellows' fellowships in the Asia Pacific region.
 - Planning for a Linux Administration basic training, following feedback from the youth fellows at APNIC 42.
- Planning to contribute AUD 10,000 each to the APriGF 2017 and PacIGF 2017 fellowship program with 50% funding for women and 50% for applicants from developing economies in the Asia Pacific.

Root server deployment

- Coordinated with Netnod and Sri Lanka Telecom to replace the failed I root server equipment in Colombo.
- With Verisign, deployment of a J root server underway, with one each in Nepal, India and Australia and two in Singapore.
- Planning to deploy a root server node in the PNG IXP.

IXP support

- Provided support to the APIX meeting at APRICOT 2017 and also managed the APIX Steering Committee elections.
- Provided support to the development of APIX's Peering Asia Logo.
- Sponsored an open peering event working group lunch at APRICOT 2017
- Successfully launched the Islamabad and PNG IX with support from APNIC and ISOC.
- Discussions are underway to set up an IX in Kabul and the Maldives.

Internet measurement

- Five Atlas anchors deployed
 - Mongolia, Nepal, Indonesia, Australia, and Vietnam.
- Around five probes are distributed at every training workshop.
 - 250+ probes have been distributed in the Asia Pacific region.

Strategic Engagement Area

NOGs

- NOGs attended:
 - NZNOG in New Zealand
 - SANOG 29 in Pakistan
 - NANOG 69 in the USA
 - HKNOG 4.0 in Hong Kong
 - MMNOG in Myanmar
 - PHNOG in the Philippines
 - BDNOG in Bangladesh (event wrap forthcoming)
- Paul spoke at MMNOG, Myanmar, about the importance of local NOG within the context of the APNIC community, and how important it is for NOGs to connect to each other and converge at APNIC and APRICOT conferences.

IPv6

- Collaborated with ARIN at PTC'17 to organize the 'IPv6 is Live! Real World Success Stories', a session that included two case studies from the APNIC region — Telekom Malaysia and Telstra in Australia.
- IPv6 Security Workshop in Bangkok for 35 participants from 11 economies across the region. The fourth year that APNIC has collaborated with the ITU, this time delivered by Philip Smith and Fakrul Alam.
- Following a successful engagement at PHNOG, PLDT reached requested a workshop and Technical Assistance on IPv6 deployment.

Inter-governmental

- In collaboration with LACNIC in APEC TEL 55 in Mexico City
 - Delivered a presentation titled 'Update on IPv6 deployment across the APEC region'
- In preparation of ITU's World Telecommunications Development Conference (WTDC) in October, we participated at:
 - The APT preparatory process in Port Moresby (February)
 - ITU Regional Development Forum and preparatory meeting in Bali (March)
- Attended 10th APT Policy and Regulation Forum for the Pacific and a workshop for ICANN-GAC members of the Pacific
- Ministerial Program of the GSMA Mobile World Congress, Barcelona
 - Sylvia attended sessions on IPv6, IoT, and fast-growing networks













Internet governance

- Remote participations at events in Afghanistan:
 - Afghanistan Internet Governance Forum (March)
 - Afghanistan School of Internet Governance (AFSIG 2017) (April)
- In collaboration with DotAsia, ICANN and ISOC
 - Asia Pacific Alliance for Schools & Academies (APASA)
- The ASO Independent Review is due to be completed in July.
 - Project kicked-off at APRICOT 2017
- The IANA Numbering Services Review Committee
 - APNIC represented by George K, Brajesh Jain, Tomohiro Fujisaki

ER engagement by subregion

Completed & Planned External Engagements 2016-2017		
Subregion	2016	2017
S Asia	35	0 (22)
SE Asia	58	2 (34)
E Asia	23	0 (21)
Oceania	39	6 (19)
Global	34	3 (25)
Total	189	11 (121)

ER engagement by type

Completed & Planned External Engagements 2016-2017		
Category	2016	2017
 APNIC	5	1 (2)
 Coordination	19	7 (15)
 Development	17	4 (5)
 Foundation	n/a	4 (7)
 Government	13	8 (12)
 Internet Governance	10	3 (10)
 Member Outreach	9	7 (8)
 Membership Development	8	2 (4)
 NOG	16	7 (23)
 Security	27	9 (17)
 Technical	8	8 (10)
 Training	57	25 (41)
Total	189	85 (154)

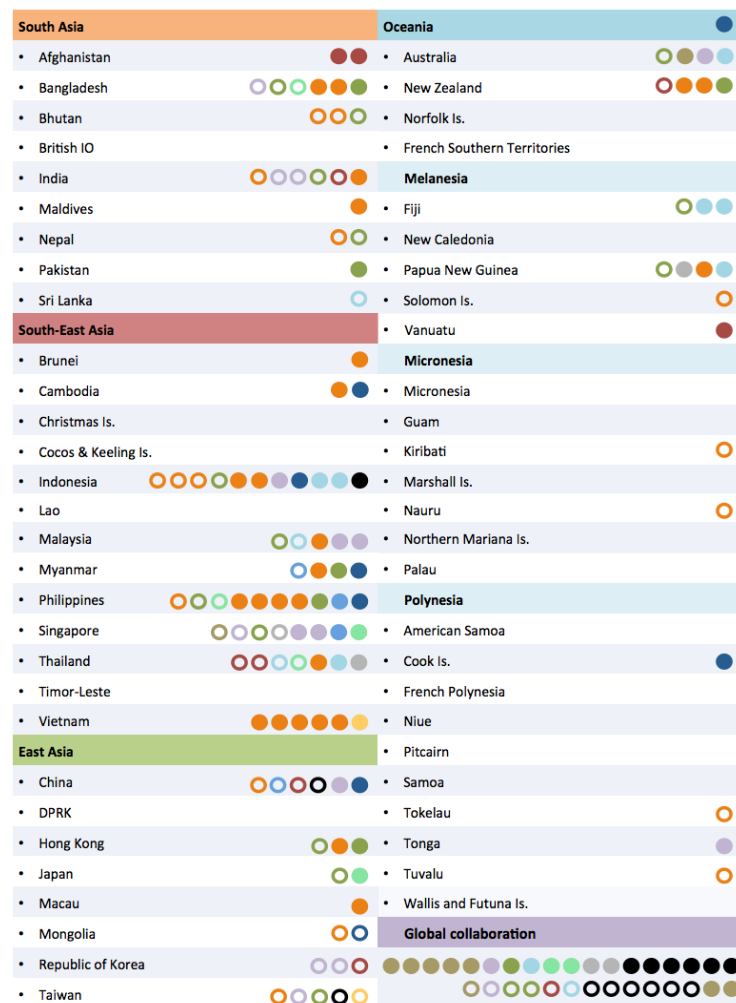
ER engagement by economy

APNIC External Relations | January to May 2017

● Completed
○ Planned

● APNIC
● Coord
● Dev
● Foundation
● Gov
● NetGov

● MemOut
● MemDev
● NOG
● Sec
● Tech
● Training



APNIC Foundation

APNIC Foundation

- First major project was confirmed. AUD 200,000 has been granted by DFAT for 'Raising Cyber Security Capability and Awareness: A secure and resilient Internet infrastructure for development in the Pacific'.
- Two other project proposals for funding were unsuccessful.
- Duncan and Sylvia seconded as CEO and Head of Programs respectively.
- An Affirmation of Commitment (AOC) was signed between APNIC and the Foundation to document their support, engagement, and cooperation with each other.

APNIC Foundation

- Foundation BoF was held at APRICOT 2017 to share information on the Foundation's activities with the community.
- ISIF Asia program was incorporated into the Foundation.
- The nomination process for the Foundation Board continues with candidates being identified.
- Funding discussions also continued with the ITU, DFAT, JICA, and IDRC.
- Sylvia to continue participation at ICANN's Cross-Community Working Group (CCWG) on gTLD Auction proceeds.

ISIF Asia

- **IDRC**

- The current grant has been extended until 31 December 2017
- The Technical and Financial Progress reports submitted to IDRC in January 2017 and were approved
- Final reports are due in January 2018
- A new grant to support the ISIF Asia 2018 grants and awards is under negotiation. The original amount discussed was reduced due to IDRC budget cuts

- **ISOC**

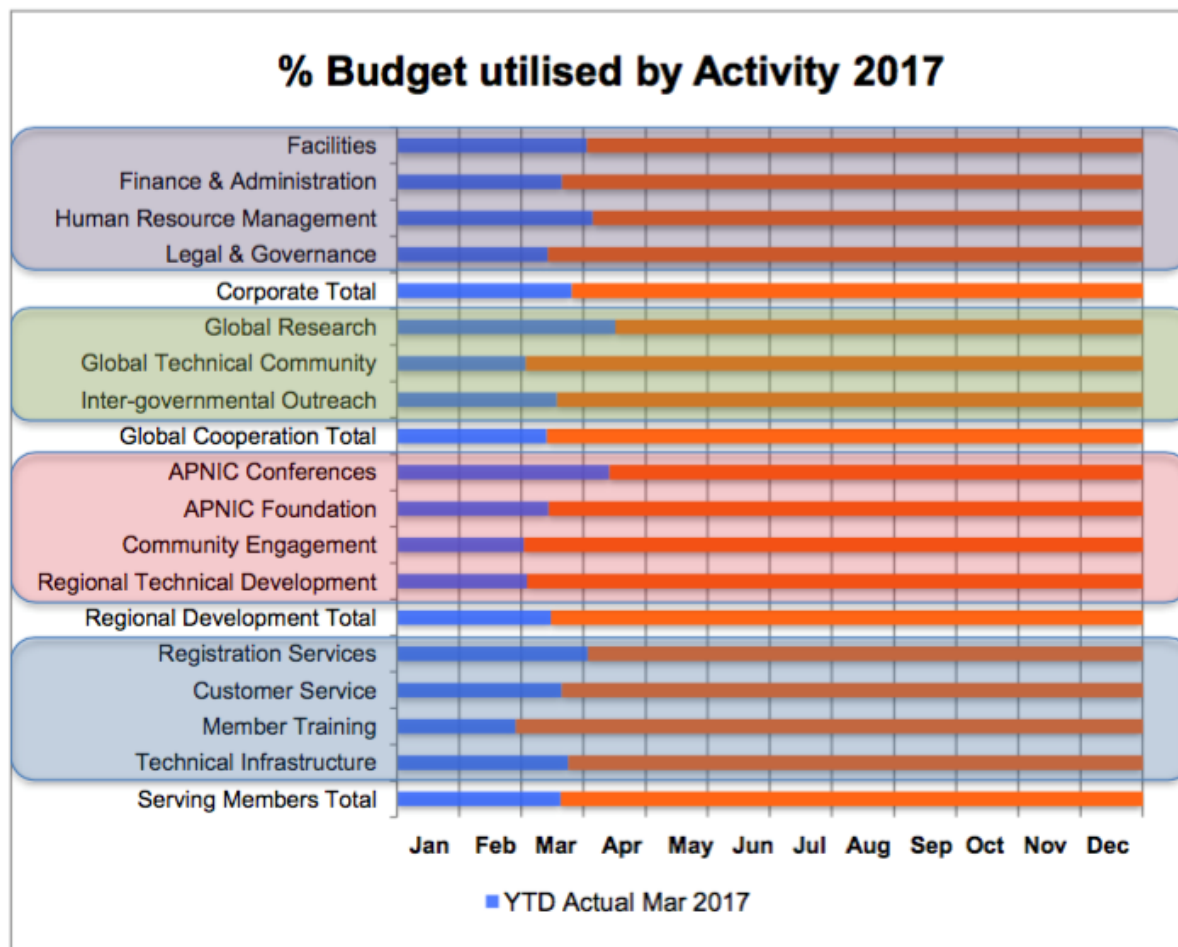
- The Technical and Financial Progress reports submitted to ISOC in January 2017 and were approved
- Final reports are due in November 2017

ISIF Asia

- Grants implementation
 - Technical and Financial reports from the 2016 grant recipients are coming in for the AUD 441,000 in grants awarded during 2016 to 10 grants in 9 economies.
 - The Call for 2017 grants and awards will be launched in June 2017 along with the new ISIF Asia website. The funding pool for 2017 from APNIC of AUD 160,000 will be distributed among three categories: Cybersecurity, Internet for Development, and Network Operations Research.

Business Area

Budget vs actual by activity code



APNIC Survey preparation

- The Survey team reviewed the findings of the 2016 APNIC Survey by Anne Lord and Survey Matters
- A comprehensive framework and project plan have been developed for the next APNIC survey

Office facilities

- Increase in workstation numbers by reconfiguring existing layout.
- Change of furniture in common areas, meeting rooms, general office, and outdoor areas to facilitate more informal collaborative workspaces.
- Reconfiguration of new small private rooms and screen installation in small meeting rooms.

Other Business Area activities

- Preparation of ISO9001 Surveillance Audit
- Business Continuity Planning scenario exercises
- Implementing NetSuite for the APNIC Foundation
- Consolidating Insurances through a single broker
 - Includes building and property; public liability; cyber, information technology products and services; management liability; and employee income protection.
 - APNIC Foundation activities are included in APNIC's insurance program.
- Implementing instant feedback in Finance team's interactions with Members

Finance phone calls & tickets

Number of	Mar-17	Avg/Mnth	YTD	2016	2015
Phones Calls (Outward)	336	261	782	3500	
RTs Received (Total)	2035	1820	5460	21396	23275
E-Bill Queue	1264	1244	3731	15331	19603
Finance Queue	128	105	314	1328	1332
Accounts Payable Queue	106	96	287	1261	841
Bounce Queue	161	131	393	1415	1496
Inward Payment Queue	164	174	523	2061	3

Finance AR

Accounts Receivable					
APNIC Member Count			6142	5994	5268
New Members	76	78	234	1030	940
New Non-members	2	2	5	18	24
Receipts Processed	639	602	1806	7514	6645
Invoices issued	588	606	1818	7537	7271
Credit notes issued	39	35	106	529	575
Accounts Closed (Mem and Non-Mem)	48	33	98	322	358
Closure Notice sent	60	70	209	945	900
Reactivation Members	3	4	12	45	51
Reactivation fee waived	0	0	1	8	6
Refund Members (Duplicate and Over-payment)	7	5	15	68	46

Finance AP

Accounts Payable					
Asset Created	72	39	116	189	156
Asset Disposal	7	3	9	127	147
PO created by Finance	27	24	73	213	209
PO Billed	164	152	457	1947	1980
Supplier <u>EFT</u> Payment	81	73	218	891	946
Nexonia Reimbursement Payments	48	30	91	386	388
Credit Card Payment	219	313	939	3377	3050
Journals processed	70	73	220	888	1005
Cash Advance Request	1	2	6	18	28
Vendor Request	11	9	27	141	431

Human Resources Area

[Confidential information redacted]

Thanks!

Agenda Item 14

APNIC Survey update

APNIC Survey

EC meeting

3 June 2017

APNIC Survey frequency

- In HCMC, EC discussed the possibility of changing the frequency of the APNIC Survey from a 2-year cycle to a 3-year cycle
 - For discussion again in Nairobi
- Meanwhile survey planning is in progress for 2018, but it will be delayed if EC decides to change frequency.

Survey frequency – Factors

- Secretariat presence
 - Regular opportunity for APNIC activities to be exposed to Members, in a structured, visible and predictable way
 - Without this, many members are not regularly exposed to APNIC or our activities
- EC presence
 - Remind Members that the APNIC EC is interested in their views.
 - Survey synchronised with APNIC EC terms, one survey occurs during every term
- Planning
 - Survey synchronised with 4-year planning and 2-year review cycles
 - Remind Members that survey guides plans and priorities

Survey frequency – Factors

- Environment
 - Changes over short timeframes: final exhaustion of IPv4 space; IPv6 at critical stage; APNIC Foundation; possible new NIR or Partner model; etc.
 - Important to closely track the sentiment of our members and make adjustments needed
- Convenience
 - Some members may prefer a less frequent survey, some may prefer more frequent interaction
 - We have no feedback yet, so it is hard to make any judgment

Survey frequency – Cost

- Direct cost per survey
 - 0.9 FTE required for each survey
 - \$156K direct costs for each survey
 - Average annual cost of 3-year survey is 33% lower than 2-year; if we assume same cost for each survey
- Annual saving
 - 0.15 FTE per year (0.3 FTE/year instead of 0.45 FTE/year)
 - \$26K per year (\$52K/year instead of \$78K/year)
 - Only if the 3-yearly survey costs the same as a 2-yearly survey
 - Not a big saving in relative terms

Recommendation

- Maintain the 2-year cycle, at least for the survey scheduled for 2018
- Use 2018 Survey to gather community views:
 - Is it important to you to have regular direct input into APNIC's planning and priorities?
 - Who in your organisation responds to the Survey?
 - What is your preferred frequency for the Survey?
- EC can follow the 2018 result for future surveys

APNIC Survey Update

Update to EC, June 2017

Planning for the next APNIC Survey

- Focus Groups
- Interviews
- Quantitative Survey
- Proposed Survey Timeline
- Project Governance

Focus Groups

The purpose of Focus Groups:

- to hear from members first-hand about their experiences with APNIC and to identify any issues or challenges they are facing and better understand where APNIC might be able to assist.
- to understand member's perspectives in their own words, so that we can structure the subsequent quantitative on-line survey to measure the extent to which those attitudes and opinions uncovered in the focus groups are held across the whole member-base.
- qualitative research ensures that the questions in the online survey are based on direct feedback, and not reliant on APNIC and/or Survey Matters collective judgement on what members are thinking or how they perceive the services, which may be incorrect.

Focus Groups cont'd

Number of focus groups

- Typically, 10-12 focus groups is sufficient to deliver an accurate indication of the areas of issues/interest
- Supplemented with online focus groups, targeted at geographically difficult economies and/or locations where English is widely understood. Survey Matters recommend 5 – 6 online focus groups are conducted.
- F2F versus Online ratio will depend on final agreed locations

Location selection

- Examine the locations visited in 2014 and 2016 by Region and Economy classification
- Determine percentage of member economies in each region
- Look at the online response percentages by economy and region
- Map the data to select our suggested locations, based on the outcomes of the above
- Manage exceptions where there are special reasons to visit a particular economy that may not have been included based on Survey Matters determination.

Focus Groups cont'd

Discussion Guide

- Developed to ensure the same general topics are discussed across different groups. This helps the moderator determine where there are common views about the same topic, where there are differences of opinion and why those differences may exist (e.g. because of economy type, region etc.).
- Draft discussion guide based on a review of previous survey results and the issues or trends identified by APNIC staff and Executive Council over the past 12 months
- To be “road-tested” with selected members to determine how easily it is understood across different locations, where language can be simplified and where translations are required
- The discussion guide is also used to provide attendees with information about the topics to be discussed, so they are well prepared prior to attending the focus group session.

Focus Groups cont'd

Focus group attendee selection

Once the locations of the focus groups have been approved, attendees need to be selected. For the selection process, Survey Matters recommend:

- Comparing the member list for each location with online survey responses from 2016 to determine those who may be interested in attending
- APNIC communicates with members in the selected locations about the upcoming focus groups, and invites expressions of interest in attending. This provides a pool of willing attendees to select from.
- Targeted selection, based on organisation size and type to ensure that attendees knowledge of APNIC and its activities is sufficient to be able to participate in the discussion.
- Survey Matters conducts a random selection of participants, taking into consideration the above points.

Interviews

Individual Interviews

Engage with non-member stakeholders who are representatives of APNIC's important stakeholder groups (rather than APNIC members):

- Develop criteria and method for selection of key stakeholders based on different stakeholder groups (NOGs, Government etc.)
- Determine number of interviews to be completed
- Determine methodology (how they are conducted)
- Follow the same principles as the focus groups, i.e. a discussion guide is followed, and conversations are recorded for accurate transcription*

Quantitative Survey

The purpose of the online survey is to validate the findings from the focus groups and measure the extent to which those opinions and attitudes are shared amongst the full census of stakeholders.

Quantitative Survey cont'd

Recommended Approach

- Survey Matters programs the survey, using an anonymous link for registration
- When the online survey opens, APNIC distributes this link as per previous survey waves
- Participants click on the link and are asked to provide certain details, such as name, email address and location
- As soon as the registration is completed by the respondent, the survey software generates a unique link to the survey, and sends it to the email address specified in the registration
- Participants complete the survey as normal
- The survey software will detect duplicate email addresses during registration, and only one response from each email address is possible.

Quantitative Survey cont'd

Recommended Approach

- For the online survey, Survey Matters recommend the same process as in 2016 in respect to preparation, planning, questionnaire design, analysis and reporting.
- In the 2016 online survey, a small minority of respondents completed the survey multiple times and therefore a more rigorous approach to survey distribution needs to be designed to overcome this issue.

Quantitative Survey cont'd

Recommended Approach

- Survey Matters has also implemented additional steps into the data cleansing procedures to ensure the removal of invalid responses prior to analysis.
- A small risk remains that multiple responses may be submitted, however using this approach will greatly diminish the ability of one respondent to provide more than one response.

Proposed survey timeline

Survey Timeline	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Develop and Agree Issue List																		
Announcement at APNIC Meeting - Taichung																		
Focus Groups Preparation and Planning																		
Hold Focus Groups and Individual Interviews																		
Announcement at APRICOT Meeting - Kathmandu																		
Survey Development																		
Implement communications campaign for quantitative survey																		
Survey conducted																		
Consolidate and report on survey results																		
Report to APNIC AMM - Noumea																		
Communicate survey results																		
Incorporate findings into organizational strategic planning																		

Project Governance

Role	Responsibility
Strategic Direction Director General, Paul Wilson	Strategic direction of engagement strategy Final sign off on Focus Group methodology, questions and locations and Survey methodology and questions
Strategic and Operational Direction Deputy Director General, Sanjaya	Strategic direction of engagement strategy Second in charge delegated authority for DG responsibilities
Project Manager Business Director, Richard Brown	Project Management Cross functional leadership and direction, executive Reporting inc DG/EC briefings and direction Financial decisions; budget management, quality, engagement of external survey provider/s
Project Management Support and Logistics Business Admin Manager, Rachel Morrison	Project Management support inc schedule maintenance Quality, internal messaging, administration and logistics support inc gifts, travel, meeting venues
External Communications Communications Director, Tony Smith	Communications strategy development and implementation External messaging inc letters, website, advertising, translation coordination, survey communication execution
Member Interactions Member Services Director, George Kuo	Advice on communication approach with Members Member interactions, invitation process for Members participation in FG
External Stakeholders Strategic Engagement Director, Pablo Hinojosa	Advice on communication approach with external stakeholders External stakeholder interactions, invitation process for stakeholder participation in FG
Process Adviser and FG Facilitator Anne Lord, Consultant	Guidance to overall survey process Assist with high level survey project management schedule Facilitate face to face Focus Groups and conduct individual interviews Prepare FG and individual interview report and communication outcomes internally Conduct internal review of 2018 Survey delivery
External Survey Provider Survey Matters	Develop Survey Methodology Conduct Online Focus Groups Develop, deliver and report on Quantitative Survey