APNIC EC Meeting Minutes

Face-to-Face meeting, Brisbane, Australia

Thursday, 7 December 2017, 10:45 – 18:05 (UTC +10) Friday, 8 December 2017, 9:25 – 13:00 (UTC +10) Saturday, 9 December 2017, 9:30 – 12:55 (UTC +10)

Meeting start: 10:45 (UTC +10), Thursday, 7 December 2017

Present

Gaurab Raj Upadhaya, Chair Izumi Okutani, Jessica Shen Kam Sze Yeung Kenny Huang, Treasurer Paul Wilson, Director General Rajesh Chharia, Secretary Roopinder Singh Perhar

Connie Chan, Senior Executive Assistant (minutes) Craig Ng, General Counsel Richard Brown, Business Director Sanjaya, Deputy Director General

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. Investment update
- 8. WH&S update
- 9. Financial report
- 10. Revenue and fee discussion
- 11. Secretariat report
- 12. Service Partner update
- 13. Joint board meeting with LACNIC Board
- 14. APNIC Foundation update
- 15. NRO Number Council appointment
- 16. IANA Numbering Services Review Committee
- 17. Strategic plan review
- 18. Risk Register review
- 19. Approval of 2018 Budget and Activity Plan
- 20. Any other business (AOB)
- 21. Next EC meeting

Minutes

1. Opening of meeting and declaration of quorum

The Chair of the Executive Council welcomed all attendees to the meeting. The Chair declared the meeting open at 10:45 (UTC +10) on Thursday, 7 December 2017 and noted that a quorum was present.

2. Agenda bashing

The Chair called for comments on the agenda. There were no changes to the agenda.

3. Declaration of interests

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

Izumi Okutani announced that she will be leaving JPNIC in December, and will start her position as Programme Manager of Business Taskforce at the Institute for Global Environmental Strategies (IGES) in January 2018.

Kams Yeung noted that he is on the Working Group of Peering Asia, organizing Peering Asia 2.0.

Rajesh Chharia noted that he is a founding member of INNOG, and that he is no longer a director of Soulmicron Techserve LLP.

Action item 2017-17: 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.

Resolution 2017-20: The EC resolved to adopt the minutes of the EC meeting of 11 September and 14 September 2017.

Resolution 2017-21: The EC resolved to endorse the adoption of policy proposal prop-116: Prohibit to transfer IPv4 addresses in the final /8 block.

Resolution 2017-22: The EC resolved to endorse the adoption of policy proposal prop-121: Updating Initial IPv6 allocation policy.

Resolution 2017-23: The EC resolved to endorse the adoption of policy proposal prop-122: Updating Subsequent IPv6 allocation policy.

5. Matters arising from the last meeting

The following matters were completed:

Action item 2017-13: The Secretariat to update the Register of Interests.

The following matters from the previous meetings will be covered in the agenda:

Action item 2017-14: Richard Brown to draft a new risk to the Risk Register. (See agenda item 19)

Action item 2017-15: The DG to contact LACNIC, and arrange for a suitable date for the proposed joint board meeting. (See agenda item 14)

Action item 2017-16: The EC directed Duncan Macintosh to conduct the due diligence on the two other candidates, and to report to the EC with a report on the five potential candidates, for EC's consideration at the next EC meeting in December. (See agenda item 15)

6. Chair update

The Chair provided an update on the EC travel expenses by activity code. He reminded the EC to update the travel planner. He reminded the EC that it was important to have representation at the RIR meetings and regional events.

The Chair confirmed that the next EC meeting will be held in Kathmandu. He also noted that the EC needs to reconsider the date for the proposed joint board meeting with LACNIC which will be discussed under agenda item 13.

The Chair reminded the EC that expense claims should be submitted as soon as possible after travels to ensure processing before the end of the financial year.

The Chair reported that the annual performance review of the Director General has been completed. He has discussed with Louise Tromp, Director of HR, about automating the review process for better efficiency.

The Chair noted that some concerns were raised in relation to the errors made by members in submitting proxy forms, which led to proxy forms being rejected during previous elections. He has requested the Secretariat to review and improve the proxy process. Craig Ng, APNIC General Counsel, explained the proposed improvements to the proxy system, by prepopulating the proxy forms, and introducing a serial number to proxy forms to ensure authenticity of forms submitted to APNIC. The EC agreed to this proposal, which will be implemented at the next EC Election in Kathmandu. The DG also noted that all the Member contacts will be informed after the proxy forms have been sent to their Corporate Contacts.

7. Investment update

Patrick Armitage from Credit Suisse joined the meeting in person for this agenda item, and Andrew McCawley from Credit Suisse joined the meeting via remote participation.

Andrew McCawley spoke to the investment update presentation (attached), and updated the EC on the macro environment and markets, the portfolio and performance review, asset allocation and market outlook. He informed the EC that APNIC's investment portfolio has performed strongly above benchmark on both before and after fee basis, outperforming the

benchmark over all assessed periods. Overall, the total fund was valued at AUD 22,713,873 at the end of October. He further noted that November was a strong month in terms of performance, representing a growth of 6.3% for the year to November.

There was also a discussion on the investment portfolio objectives and asset allocation. Andrew McCawley explained the current asset allocation, and raised the issue of potentially reviewing the risk tolerance of APNIC. The EC asked for more detailed information for consideration to review APNIC's risk appetite and identify potential changes to the investment policy regarding risk exposure categories.

8. WH&S update

Louise Tromp joined the meeting for this agenda item.

Roopinder Perhar spoke to the Health and Safety presentation. He reminded the EC that they have obligations to ensure the business complies with its WH&S obligations under Queensland's work health and safety laws. He reported that the WH&S issues were well-managed, and corrective actions have been undertaken and documented. He further reported that all matters were resolved to his satisfaction.

9. Financial report

Richard Brown spoke to the October financial report presentation (attached).

The October financial reports highlight that membership revenues will be below budget by the end of the year. Revenue is tracking at 3% under budget and expenses are tracking at 2% under budget forecast.

At the end of October 2017, APNIC had a total of 6,443 Members serving 54 economies.

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

The EC noted that financial stability is important for the long-term sustainability of APNIC. They noted that the daily operating expenses have been increasing at a faster rate than its revenues over the last few years. They discussed the financial stability measure and suggested further discussion during the budget discussion under agenda item 19.

10. Revenue and fee discussion

Richard Brown spoke to the revenue and fee presentation.

The EC reviewed the current fee calculation formula and fee schedule, and considered some possible adjustment of fee structure. This item will be reconsidered at the next EC meeting.

An EC member raised at the last EC meeting that APNIC should consider adjusting all membership fees for CPI each year. Richard Brown presented the pros and cons of this proposal, and the effect of the CPI increase. The EC considered this proposal, and suggested to keep the CPI issue in abeyance, pending future needs and discussion.

[Confidential information redacted]

The EC discussed issues in relation to the refund of fees, and were in favour of a proposal to issue a clarification to the refund policy, where refunds or credits are only provided where resources are returned to APNIC. In cases of mergers or transfers, the registration of such mergers or transfers can only take place after the full membership fee has been paid.

11. Secretariat report

The APNIC Executive team joined the meeting for this agenda item.

The DG spoke to the highlights of the Secretariat Report presentation (attached).

The EC discussed several items in the Secretariat Report. The EC indicated that it would be useful for the Secretariat to research implications of the policy proposals so that it can determine the range of potential consequences, and anticipate any issues that may come up.

The EC noted that the content of the last APNIC Services session was very good, and indicated their support for providing more information on the value of attending APNIC conferences, and looking at ways to increase attendance.

The DG then spoke to the HR report.

12. Service Partner update

Sanjaya spoke to the Service Partner update presentation.

The EC discussed the issues at length in relation to the trial of the Service Partner model.

The DG highlighted the importance of finding the right partner. If there is no other obvious partner in the economy selected, it would be much better to look at other suitable organizations in other economies.

The EC expressed support for this approach, and is flexible about the economies. The EC also suggested the Secretariat prepare a FAQ that can be shared with potential Service Partners.

13. Joint board meeting with LACNIC Board

The Chair reminded the EC that it had been planned that the joint board meeting would be held at the upcoming LACNIC meeting in Panama in April, but that it had, regrettably, not been possible. The proposed timing is too early for holding the second EC meeting. He asked the DG to contact Oscar Robles and arrange for a suitable date for the proposed joint Board meeting.

Meeting adjourned at 18:05 (UTC +10), Thursday, 7 December 2017.

Meeting resumed at 9:25 (UTC+10), Friday, 8 December 2017.

14. APNIC Foundation update

Duncan Macintosh joined the meeting for this agenda item, and spoke to the Foundation update presentation (attached).

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

[Confidential information redacted]

Action item 2017-18: The EC directed Duncan Macintosh to investigate additional potential candidates and conduct further due diligence on one candidate. A further decision can be made by a circular resolution or video conference.

15. NRO Number Council appointment

The EC discussed and considered five candidates for the NRO Number Council.

Resolution 2017-25: The EC resolved to appoint Henri Kasyfi Soemartono to the NRO Number Council/ASO Address Council for a one-year term from 1 January 2018 to 31 December 2018.

Motion proposed by Roopinder Perhar; seconded by Rajesh Chharia. Passed unanimously.

Action item 2017-19: The DG to contact Henri Kasyfi Soemartono to confirm this willingness to accept the appointment.

16. IANA Numbering Services Review Committee

The EC discussed the pros and cons of appointing the community-elected NRO Number Council representatives as its representatives to the Review Committee.

The EC considered and agreed to conduct a new IANA Review Committee selection process for the APNIC region in order to bring more independent individuals into the activities of the IANA's Public Technical Identifiers (PTI). The APNIC community will elect one community representative, and the APNIC EC will appoint one community representative to the Review Committee. The election will be held at the standalone APNIC conference in September. The election will take the same format as the election for the Chair of Policy SIG. Voting will take place by a count of show of hands.

Resolution 2017-26: The EC resolved to adopt a new process for selecting APNIC's representatives to the IANA Numbering Services Review Committee. From 2019 onwards, the Review Committee will comprise one member elected by the APNIC community; and one member appointed by the EC. Each appointment will be for a two-year term, starting 1 January 2019. The election will be held in the Policy SIG, at the September APNIC conference in the year before the commencement of the term.

Motion proposed by Gaurab Raj Upadhaya; seconded by Rajesh Chharia. Passed unanimously.

For transition into the new process, the EC agreed to appoint two new members to the Review Committee for 2018.

Resolution 2017-27: The EC resolved to appoint Simon Sohel Baroi and Bertrand Cherrier as APNIC's representatives to the IANA Numbering Services Review Committee, for a one-year term commencing 1 January 2018.

Motion proposed by Kams Yeung; seconded by Rajesh Chharia. Passed unanimously.

Action item 2017-20: The DG to contact Simon Sohel Baroi and Bertrand Cherrier to confirm their willingness to accept the appointment.

The EC also agreed to continue the appointment of George Kuo as the APNIC staff member for the IANA Review Committee.

17. Strategic Plan review

Sanjaya spoke to the Strategic plan review presentation, and the EC reviewed the five strategic directions for 2016-2019, outlining what have been put in place, and what are being worked on for 2018.

The EC discussed whether or not appropriate changes will need to be made to the current plan. The EC agreed that the strategic directions will remain unchanged.

The EC also suggested using a dashboard to illustrate how much progress has been made towards various goals.

18. Risk Register review

The EC reviewed the risk register and agreed to the suggested changes. The EC discussed the approach to risk management, and agreed to continue to discuss and further develop revisions proposed to the current risk register.

Action item 2017-21: The Secretariat to update the Risk Register.

Meeting adjourned at 13:00 (UTC +10), Friday, 8 December 2017.

Meeting resumed at 9:30 (UTC+10), Saturday, 9 December 2017.

19. Approval of 2018 Budget and Activity Plan

Richard Brown spoke to the proposed Budget and Activity Plan for 2018 (attached).

The EC discussed the proposed budget and activity plan at length, especially on growth rate of revenues and expenses. The EC asked the Secretariat to track the rate of increase in revenue to the rate of increase in expense to ensure appropriate revenue and expense levels and overall financial sustainability.

Resolution 2017-28: The EC resolved to approve and adopt the 2018 Budget (as attached) that provides authority to the Director General for a total operational expenditure of AUD 21,917,453 and a total capital expenditure of AUD 1,013,800 for 2018.

Motion proposed by Kenny Huang; seconded by Rajesh Chharia. Passed unanimously.

20. Any other business

The Chair called for any other business.

a. Joint board meeting with the LACNIC Board

It is suggested that the joint board meeting with LACNIC be held in Montevideo in December next year.

Action item 2017-22: The DG will contact LACNIC and confirm a date for the proposed joint board meeting in Montevideo.

b. Transfers

The DG spoke to the presentation.

The EC discussed the goal of the APNIC transfer policy and procedures, and suggested the Secretariat to update the guideline document with this principle to help the community to better understand the policy.

The EC clarified that in its view, the goal of the APNIC transfer policy is to distribute IPv4 addresses from those who no longer need the addresses, to organizations that need the addresses but cannot obtain them from the free pool. Resources may not be transferred out of the APNIC region while they remain in use.

c. ASO Review

Izumi Okutani gave an update on the status of the ASO Review Working Group for the APNIC community.

It is noted that the mailing list has been established for the APNIC community. The next step is for the APNIC's Working Group Chair to make an announcement of the mailing list as soon as possible, and then schedule a webinar towards APNIC 45 in Kathmandu.

It is also noted that the NRO EC is planning to make a call for comments towards the end of January 2018.

d. Voting

There was a discussion about proxy and electronic voting during APNIC elections.

The EC requested the Secretariat to investigate the current available technology for alternative electronic voting systems, and make recommendations to the EC.

Action item 2017-23: The Secretariat to investigate and make recommendations concerning alternative electronic voting systems.

21. Next EC meeting

The next EC meeting will be held in Kathmandu, on 25 February 2018.

Meeting closed at 12:55 (UTC +10), Saturday, 9 December 2017.

Attachments:

- A. Register of interest
- B. [Confidential information redacted]
- C. Investment update presentation
- D. October 2017 financial report and presentation
- E. October 2017 investment report
- F. [Confidential information redacted]
- G. Secretariat report highlights and report
- H. [Confidential information redacted]
- I. [Confidential information redacted]
- J. APNIC Foundation update presentation
- K. [Confidential information redacted]
- L. [Confidential information redacted]
- M. 2018 budget and activity plan
- N. [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 1 Oct 2017.

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

- Employee of Limelight Networks as Director, Network Strategy and Interconnection
- Director of the Nepal Research and Education Network (NREN)
- Chairman of Nepal Internet Exchange (NPIX)
- Member of the APRICOT Program Committee
- APRICOT 2018 Organizing Committee

Izumi Okutani declared that she currently holds the following positions:

- Employee of JPNIC as Policy Liaison
- Member of the Internationalization of JANOG (JANOG i18n)
- Member of the Secretariat of Internet Governance Conference Japan (IGCJ)
- Member of the Multistakeholder Steering Group of APrIGE

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 7 Investment update





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Portfolio Management Premium Mandate Portfolio Review

APNIC Pty Ltd

December 2017

Key Highlights – Market Commentary

Quarter Ending 30/09/2017 and October

- Australian shares rose 0.68% during the September quarter. A strong global earnings season and generally positive economic data also saw the MSCI World Index ex-Australia rise 2.70% in AUD, with the US (+2.31%) and Europe (+4.00%) performing strongly. Bond yields rose, which saw the Bloomberg AUD Bond index finishing down -0.07% for the period. Commodities were up 0.39%, mainly driven by strength in the oil price. Gold proved to be resilient rising by 1.14% for the period. October saw continued strength in markets with Australian equities up 4.01%, international equities up 4.28% and AUD bonds up 1.09%.
- The Australian economy produced data generally weaker than expected. Retail sales and business confidence were relatively weak, offset by strong employment data seeing unemployment fall to 5.5%. The Reserve Bank of Australia (RBA) held rates firm again, with little in the way of new commentary on the economy, but noted weakness in wages growth.
- The US market has had a positive return every month this year. The US has never had a year where every month was positive. These returns reflect a strong economy yet to produce inflation. Data in the US continued to be positive with consumer confidence, as measured by the Conference Board Index printing at 119.8, the ISM Manufacturing PMI rising again to 60.8 (highest since 2004), and durable goods at 1.7%. However, inflation continues to be stubbornly weak at 1.4%, showing little indication of reversing.
- The European economy continues to improve. Industrial Production was a standout, rising 3.2% (prior month revised up to 2.8% from 2.6%) and the Eurozone Manufacturing PMI rose to 58.2 from 57.4. The unemployment rate fell to 7.5%, inflation held steady at 1.5% and the ZEW survey of analyst expectations was marginally higher at 31.7 vs 29.3.
- Overall growth remains stable in China but some indicators were a little weaker than expected. The August Caixin Composite PMI printed at 52.4, industrial production came in at 6.6% (prior 6.0%) and retail sales were up 10.3%. GDP growth was 6.8% YoY.

Performance Statistics

Quarter Ending 30/09/2017 and October Period End

Portfolio Value Period End: AUD 22,713,873

	Portfolio*	Benchmark	Outperformance
3Q17 to end September	1.02%	0.63%	+0.39%
October	1.94%	1.78%	+0.16%
CYTD to end October	5.23%	4.48%	+0.75%
One Year to end October	5.86%	5.83%	+0.03%
3 Years p.a. to end October	5.43%	4.98%	+0.45%
Since Inception p.a to end October	5.79%	5.41%	+0.38%

^{*} Performance before fees and franking credits

- Asset allocation was generally a positive contributor to outperformance due to the overweight exposure to equities earlier in the September quarter. Being overweight European equities added to performance given they returned 4.00%. Stock selection in Australian equities was a small positive contributor to performance. Stocks performing particularly well were BHP (+13.01%), Orora (+10.49%) and Rio Tinto (+7.33%). Stocks not doing as well were Bluescope Steel -16.58% and Telstra -15.23%, respectively with the Telstra position adding to relative performance given an underweight position
- Bond asset allocation was neutral throughout the period, but detracted from absolute performance returning -0.07%. Bond yields rose in response to overseas events as the ECB indicated an end to quantitative easing. Also, the Fed became more forthright on the need for rate rises.
- Commodities rose 0.39% in AUD. The price of oil was stronger as OPEC constrained production. This was offset somewhat by weakness in iron ore and copper.
- Q2 top performing funds in AUD included the AHL Evolution Fund (+3.28%), the iShares MSCI Europe ETF (+4.06%) and the Wellington European Equity Fund (+2.90%). Funds which did not perform as well over the quarter included the Blackrock Indexed Bond Fund (-0.11%), and the Pimco Australian Bond Fund (-0.08%).

Asset Allocation

As at 31/10/2017

Current Asset Allocation

- The portfolio finished the period overweight equities and close to neutral bonds.
- The Global Investment Committee is maintaining an overall neutral position in bonds and equities. The global economy is growing well with generally positive data points. However, US equities are overvalued which sees us underweight. The Eurozone is best positioned to meet or even beat earnings growth expectations in 2017 as macroeconomic momentum is at a multi-year high. The portfolio is overweight Europe. We remain cautious as political risks are prevalent with the Trump "reflation trade" unwinding whilst the upcoming Italian election adds to the continued Eurozone uncertainty.
- The portfolio is positioned near neutral Australian equities as valuations are reasonable but growth outside of mining stocks is difficult to find. The largest stocks are under pressure for different reasons. The banks are under regulatory pressure with loan growth low. The housing market is slowing and wages growth low impacting consumer discretionary stocks. Telstra cannot grow earnings in the face of the NBN rollout.
- The bond position is close to neutral. Long term inflationary pressures do appear to be building globally, less so in Australia. Central banks, including the ECB and Fed, have become hawkish with rate rises and tapering to come, hence equities are currently favoured over bonds in the longer term.

Benchmark Asset Allocation

3.6% 5.0% 20.8% 20.0% ■ Cash Cash ■ Fixed Income ■ Fixed Income 8.7% 8.0% Australian Equities Australian Equities ■ International Equities International Equities 12.9% 55.0% ■ Alternative Investments Alternative Investments 12.0%

54.0%

Outlook

- The Australian equities market is finally playing catch up with the rest of the world. Earnings aren't expanding, although profit expectations for the miners will move up if commodity prices stay at elevated levels. On a PE ratio of 16.2x the local market is cheap relative to the rest of the world and relative to bond yields, but expensive relative to history.
- US and European equities have strong momentum reflecting their respective economies. The US Q3 reporting season was above expectations, with positive revenue trends, particularly in technology and industrial stocks exposed to overseas markets, however we do see that valuations are stretched in the US, but less so in Europe.
- The Global Investment Committee has increased equities to overweight in November which is being reflected in the portfolios. Fixed income remains neutral versus the SAA. PMI's continue to suggest further economic upside particularly as inflation is well contained. Within equities we favour Europe and Japan within the equities allocation, while US is underweight.

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Agenda Item 9 Financial reports

Monthly Financial Report (in AUD)

October 2017





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1 Executive Summary

The latest APNIC Income Statement projects annual revenues at the end of 2017 to be \$546k (3%) below budget, the impact of this shortfall will be partially offset with expenses forecast to be \$365k (2%) below budget. The overall Operating Surplus for 2017 is projected at \$742k compared to the budget of \$923k.

Revenues:

- Membership fees and Sign-Up fees continue below budget due to lower membership growth than expected, 704 to the end of October compared to the budget of 900. Average fees for new members in 2017 are \$1,430, compared to the budget estimate of \$1,720, much of this variance is driven by the fact that over 20.0% of new members come from LDC's so far in 2017, compared to the budget estimate of 10%.
- Investment income: The APNIC portfolio rose again in October, as international markets were stronger during the month. Australian equities rose 4.01% for October, while global equities advanced, driven by supportive economic data and optimism around US tax policy. AUD bonds were higher as yields fell with weak inflation. The APNIC investment portfolio posted a strong return of 2.05% for October underpinned by advances in Australian and global equities. For 2017 the portfolio has achieved +4.91% to date against the benchmark of +4.46%, but overall the projected income from investments will end the year below budget by \$244k reflecting lower than forecast earnings.

Expenses:

- Contributions to the APNIC Foundation (from APNIC) continue below budget, also reflecting the delayed transition to the new Foundation arrangements.
- ICANN contract fees will be below budget due to the favourable AUD/USD exchange rate.
- **Insurance expenses** are forecast to end the year above budget, most of this variance is the adoption of the Cyber Security policy.
- Professional fees are tracking below budget at the end of 2017, the major variations relate
 to savings from Root Server Management, planned Curriculum Development and Technical
 assistance activities.
- Salaries and personnel expenses forecast will be aligning closely with the budget by end of 2017.

Capital Expenditure on equipment and software continues to track below budget with some increased activity in Q3 and Q4 as planned. The 2017 budget included provisions for a wide range of capital investments including Root Server Installations that may or may not be implemented depending on justified needs. An increase in expenditure to accommodate increased staffing and configuration changes will result in an overspend against budget for this office furniture and fittings.

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2 Statement of Financial Position

	31/10/2017	Year End 2016	% Change
CURRENT ASSETS			
Cash/ Term deposits	8,565,781	7,207,928	19%
Receivables	920,042	970,493	-5%
Others	785,441	668,846	17%
TOTAL CURRENT ASSETS	10,271,263	8,847,266	16%
NON-CURRENT ASSETS			
Other financial assets	22,689,473	21,149,445	7%
Property, plant and equipment	7,764,098	7,875,245	-1%
Deferred tax assets/ liabilities	149,602	149,602	0%
TOTAL NON-CURRENT ASSETS	30,603,173	29,174,292	5%
TOTAL ASSETS	40,874,437	38,021,558	8%
CURRENT LIABILITIES			
Payables	1,079,885	1,121,453	-4%
Provisions	1,438,604	1,238,585	16%
Unearned revenue	9,821,659	9,400,834	4%
TOTAL CURRENT LIABILITES	12,340,148	11,760,872	5%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	298,186	298,186	0%
Total Provisions	297,285	314,993	-6%
TOTAL NON-CURRENT LIABILITIES	595,471	613,180	-3%
TOTAL LIABILITIES	12,935,620	12,374,052	5%
NET ASSETS	27,938,817	25,647,507	9%
EQUITY			
	1	1	0%
Share capital Reserves other financial assets investment			
	1,219,998	651,145	10%
Retained earnings Net Income	24,996,361	22,729,998	-24%
TOTAL EQUITY	1,722,457 27,938,817	2,266,363 25,647,507	9%

Table 1. Statement of Financial Position

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3 Statement of Income

	YTD Actual	YTD Actual	Variance %	Budget	Forecast	Budget
	Oct 2017	Oct 2016	variance %	2017	2017	Variance %
Investment income	706,223	828,738	-15%	1,021,893	777,607	-24%
Membership fees	16,029,538	15,219,713	5%	19,551,336	19,307,002	-1%
Non-members fees	219,498	201,583	9%	246,170	263,398	7%
Reactivation fees	20,700	31,700	-35%	35,000	23,030	-34%
Sign-Up fees	314,750	405,000	-22%	486,750	373,870	-23%
Transfer fees	99,869	110,045	-9%	125,991	120,870	-4%
Sundry income	198,912	180,165	10%	155,000	210,859	36%
TOTAL REVENUE	17,589,490	16,976,944	4%	21,622,140	21,076,636	-3%
Bank service fees	149,855	137,975	9%	177,000	180,355	2%
Communication expenses	473,000	437,512	8%	594,905	578,155	-3%
Computer expenses	547,480	461,760	19%	734,651	680,901	-7%
Contribution to APNIC Foundation	512,634	0	0%	720,281	632,544	-12%
Depreciation expense	673,810	653,372	3%	821,978	809,158	-2%
Doubtful debt expenses	7,493	15,849	-53%	25,000	25,000	0%
ICANN contract fee	209,794	206,948	1%	270,000	244,656	-9%
Insurance expense	144,744	107,544	35%	148,000	178,914	21%
Meeting and training expenses	365,199	318,421	15%	452,250	402,989	-11%
Membership fees	44,957	40,312	12%	54,210	53,581	-1%
Office operating expenses	269,198	264,257	2%	337,900	324,578	-4%
Postage & delivery	37,068	37,935	-2%	51,000	39,720	-22%
Printing & photocopy	24,511	32,387	-24%	48,000	28,511	-41%
Professional fees	1,047,675	1,114,252	-6%	1,783,720	1,618,705	-9%
Recruitment expense	118,411	85,729	38%	120,000	138,411	15%
Salaries and personnel expenses	8,922,277	8,309,644	7%	11,218,142	11,266,199	0%
Sponsorship and Publicity expenses	451,896	306,464	47%	746,730	738,636	-1%
Staff training/ Conference expenses	119,348	123,593	-3%	161,070	158,688	-1%
Translation expenses	8,700	9,974	-13%	22,500	11,450	-49%
Travel expenses	1,738,981	1,680,792	3%	2,212,000	2,223,001	0%
TOTAL EXPENSES	15,867,032	14,344,720	10%	20,699,337	20,334,154	-2%
OPERATING SURPLUS/(DEFICIT)	1,722,457	2,632,224	-35%	922,803	742,482	-20%

Table 2. Statement of Income

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4 Capital Expenditure

CAPITAL (AUD)	YTD Actual Oct 2017	YTD Actual Oct 2016	Variance %	Budget 2017	Forecast 2017	Budget Variance %
Equipment & Software	460,892	610,208	-24%	1,259,118	800,000	-36%
Office Furniture & Fittings	105,927	10,016	958%	33,500	115,000	243%
Total - Capital Expenditure	566,819	620,223	-9%	1,292,618	915,000	-29%

Table 3. Capital Expenditure by Category

Issue date: November 2017 Page 6 of 13

5 Activity Reporting

5.1 Expenses by Activity Code

EXPENSES (AUD)	YTD Actual Oct 2017	YTD Budget Oct 2017	Variance \$	Variance %
Facilities	501,512	503,647	-2,135	0%
Finance & Administration	1,159,717	1,160,799	-1,082	0%
Human Resource Management	751,504	720,698	30,806	4%
Legal & Governance	411,326	432,269	-20,943	-5%
Total - Corporate	2,824,059	2,817,413	6,646	0%
Global Research	428,061	349,662	78,399	22%
Global Technical Community	836,822	1,080,009	-243,187	-23%
Inter-governmental Outreach	174,784	224,801	-50,017	-22%
Total - Global Cooperation	1,439,667	1,654,472	-214,805	-13%
APNIC Conferences	1,154,606	1,103,880	50,726	5%
APNIC Foundation	563,879	600,230	-36,351	-6%
Community Engagement	1,058,664	1,316,664	-258,000	-20%
Regional Technical Development	971,057	1,057,544	-86,487	-8%
Total - Regional Development	3,748,207	4,078,318	-330,111	-8%
Customer Service	2,974,487	3,080,107	-105,620	-3%
Member Training	1,095,500	1,245,592	-150,092	-12%
Registration Services	1,253,502	1,206,252	47,250	4%
Technical Infrastructure	2,531,611	2,557,506	-25,895	-1%
Total - Serving Members	7,855,099	8,089,457	-234,358	-3%
Total - Expenses	15,867,032	16,639,660	-772,628	-5%

Table 4. Expense by Activity Code

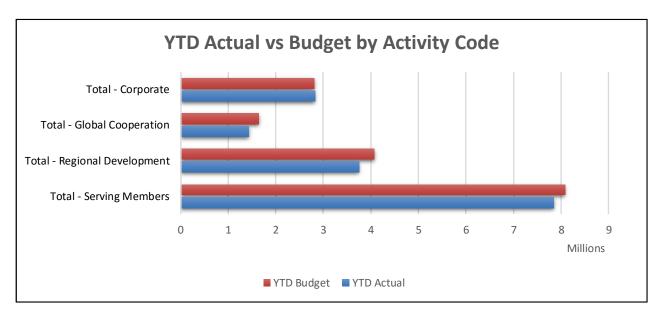


Figure 1. YTD Actual vs. Budget by Activity

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5.2 Capital Expenditure by Activity Code

CAPITAL EXPENSES (AUD)	YTD Actual Oct 2017	YTD Budget Oct 2017	Variance \$	Variance %
Facilities	109,073	27,920	81,153	291%
Finance & Administration	12,385	10,420	1,965	19%
Human Resource Management	3,038	2,920	118	4%
Legal & Governance	0	0	0	0%
Total - Corporate	124,496	41,260	83,236	202%
Global Research	20,119	25,000	-4,881	-20%
Global Technical Community	730	0	730	0%
Inter-governmental Outreach	0	0	0	0%
Total - Global Cooperation	20,848	25,000	-4,152	-17%
APNIC Conferences	3,478	19,170	-15,692	-82%
APNIC Foundation	0	0	0	0%
Community Engagement	0	0	0	0%
Regional Technical Development	28,387	229,170	-200,783	-88%
Total - Regional Development	31,864	248,340	-216,476	-87%
Customer Service	101,621	194,170	-92,549	-48%
Member Training	50,735	93,330	-42,595	-46%
Registration Services	6,245	0	6,245	0%
Technical Infrastructure	231,009	475,110	-244,101	-51%
Total - Serving Members	389,610	762,610	-373,000	-49%
Total - Capital Expenses	566,819	1,077,210	-510,391	-47%

Table 5. Capital Expenditure by Activity Code

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6 APNIC Reserve

6.1 Cash Flow Statement

Accounts	YTD Oct 2017
Operating Activities	
Net Income	1,722,457
Adjustments to Profit/(Loss)	
Accounts Receivable	24,906
Other Current Asset	-91,049
Accounts Payable	-84,927
Sales Tax Payable	-5,243
Other Current Liability	669,446
Total Adjustments to Profit/(Loss)	513,133
Total Operating Activities	2,235,590
Investing Activities	
Fixed Asset	111,147
Other Asset	-1,540,028
Total Investing Activities	-1,428,881
Financing Activities	
Long Term Liability	-17,708
Equity	568,853
Total Financing Activities	551,145
Net Change in Cash for Period	1,357,853
Cash at Beginning of Period	7,207,928
Cash at End of Period	8,565,781

Table 6. Cash Flow Statement

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6.2 Capital Reserve

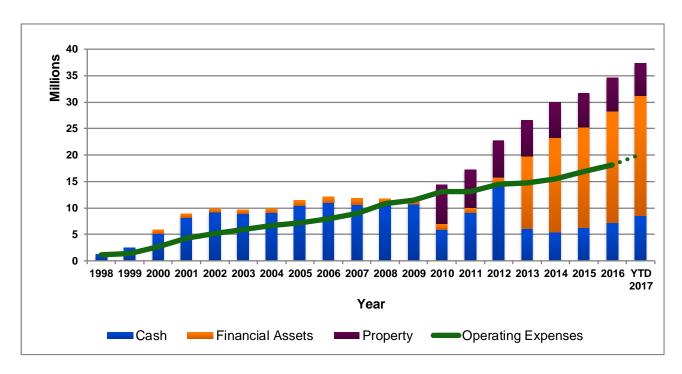


Figure 2. APNIC Reserves

6.3 APNIC's Equity and Reserves

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

	YTD 2017	2016	2015	2014
Total Equity	\$27,938,817	\$25,647,507	\$23,319,460	\$21,388,497
% Equity covered by Cash/ Cash Equivalents	111.9%	110.6%	121.6%	109.1%
Forecast/ Actual Daily Operating Expenses	\$55,710	49,430	\$46,077	\$42,558
Number of Months of expenses covered by Equity	16.49	17.01	16.64	16.52

Table 7. Equity and Reserves

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7 Membership

7.1 Membership by Category

Membership	Total	YTD New	YTD Reactivate	YTD (Closed)	YTD Size Change	Total	% Total
	Dec 2016	Oct 2017	Oct 2017	Oct 2017	Oct 2017	Oct 2017	
Extra Large	22	0	0	0	0	22	0%
Very Large	43	0	0	0	-1	42	1%
Large	138	2	0	-3	1	138	2%
Medium	449	5	0	-11	24	467	7%
Small	2,643	199	6	-132	188	2,904	44%
Very Small	2,590	471	4	-99	-221	2,745	43%
Associate	109	27	0	-20	9	125	2%
TOTAL	5,994	704	10	-265	0	6,443	100%

Table 8. Membership by Category

7.2 Membership Growth

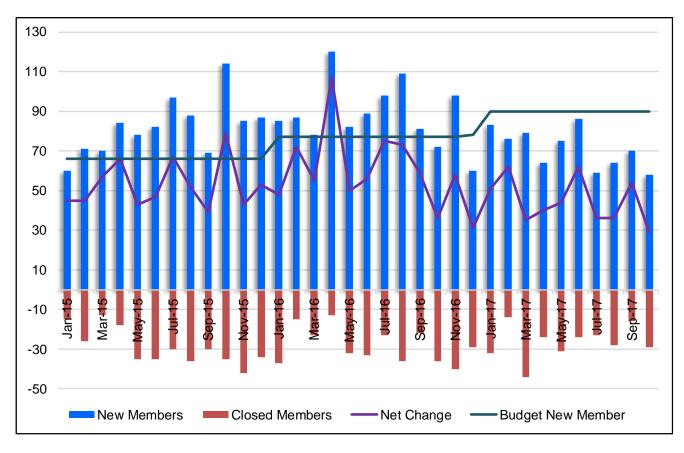


Figure 3. Membership Growth Analysis

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7.3 Year-to-Date Membership Movement by Economy

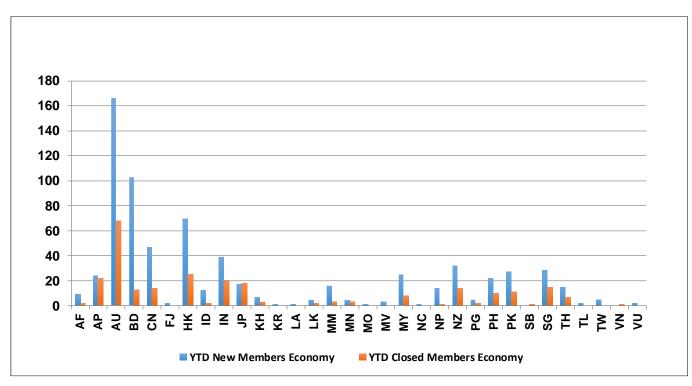


Figure 4. New and Closed Members Analysis

7.4 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
1999						1		1
2000				1				1
2001		1	1		1			3
2002			1		2			3
2003			1	1		1		3
2004			1			1		2
2005		1	2			2		5
2006		1						1
2007			3	3				6
2008	1	2	2	4		1		10
2009		3	1	3				7
2010		1	3	5		1		10
2011		3	3	5	1	6		18
2012		4	4	9		3		20
2013	2	5	8	11	1	11	1	39
2014		5	3	9		8		25
2015		13	11	18	2	12		56
2016	3	14	6	28		4		55
Grand Total	6	53	50	97	7	51	1	265

Table 9. Membership Closure by Year Joined

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7.5 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)	IPV6 Resources Reclaimed (/48's)	ASN Reclaimed
AF				2				2	3		2
AP		6	1	14		1		22	115	852002	16
AU	1	16	16	22		13		68	117	1048581	25
BD		4	3	6				13	48	458752	9
CN		4	3	2	2	3		14	16	393218	3
HK	2	4		12		6	1	25	76	262148	16
ID				1	1			2	4	1	1
IN	1	4	3	7	3	2		20	55	786432	13
JP		4	2	5	1	6		18	52		1
KH		1				2		3		131073	4
LK		1				1		2	4	131072	1
MM				3				3	12	65538	3
MN				3				3	3		3
MY		2	4	2				8	9	1	3
NP		1						1	8	65536	1
NZ		2	7	1		4		14	11	196608	2
PG				2				2	2	65536	
PH		1	3	5		1		10	33	65536	9
PK	2		4	1		4		11	16	655361	3
SB						1		1			
SG		3	4	5		3		15	35	262149	7
TH				4		3		7	24	65538	4
VN						1		1			
Grand Total	6	53	50	97	7	51	1	265	643	5505082	126

Table 10. Membership Closure by Economy

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Financial Performance

Year to date October 2017

Issue Date: November 2017

Revision: 01





Financial Highlights YTD October 2017

- Equity Position > 9% to date in 2017 √
 - Forecast Surplus of \$742k for 2017 (budget = \$923k)
- Revenue tracking \$465k below budget X
 - Forecast \$546k below for 2017
- Expenses tracking \$773k below budget ✓
 - Forecast \$365k below for 2017
- Cash Flow + \$1,358K to date in 2017 ✓
- Activity expenditure aligns with budget allocations
- Membership Growth < than budget assumption X



Statement of Financial Position

	31/10/2017	Year End 2016	% Change
CURRENT ASSETS			
Cash/ Term deposits	8,565,781	7,207,928	19%
Receivables	920,042	970,493	-5%
Others	785,441	668,846	17%
TOTAL CURRENT ASSETS	10,271,263	8,847,266	16%
NON-CURRENT ASSETS			
Other financial assets	22,689,473	21,149,445	7%
Property, plant and equipment	7,764,098	7,875,245	-1%
Deferred tax assets/ liabilities	149,602	149,602	0%
TOTAL NON-CURRENT ASSETS	30,603,173	29,174,292	5%
TOTAL ASSETS	40,874,437	38,021,558	8%
CURRENT LIABILITIES			
Payables	1,079,885	1,121,453	-4%
Provisions	1,438,604	1,238,585	16%
Unearned revenue	9,821,659	9,400,834	4%
TOTAL CURRENT LIABILITES	12,340,148	11,760,872	5%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	298,186	298,186	0%
Total Provisions	297,285	314,993	-6%
TOTAL NON-CURRENT LIABILITIES	595,471	613,180	-3%
TOTAL LIABILITIES	12,935,620	12,374,052	5%
NET ASSETS	27,938,817	25,647,507	9%
EQUITY			
Share capital	1	1	0%
Reserves other financial assets investment	1,219,998	651,145	87%
Retained earnings	24,996,361	22,729,998	10%
Net Income	1,722,457	2,266,363	-24%
TOTAL EQUITY	27,938,817	25,647,507	9%

All amounts in AUD - Australian Dollars





Financial Stability Measure

	YTD 2017	2016	2015	2014
Total Equity	\$27,938,817	\$25,647,507	\$23,319,460	\$21,388,497
% Equity covered by Cash/ Cash Equivalents	111.9%	110.6%	121.6%	109.1%
Forecast/ Actual Daily Operating Expenses	\$55,710	49,430	\$46,077	\$42,558
Number of Months of expenses covered by Equity	16.49	17.01	16.64	16.52



Target of 18 Months

All amounts in AUD - Australian Dollars



APNIC Investment Fund

Market Value as of 31st October 2017

	Market Value
APNIC Portfolio	A\$22,713,873

Performances as of 31st October 2017*

APNIC Portfolio					
	Portfolio	Benchmark	Outperformance		
Month	2.05%	1.78%	0.27%		
3 Months	2.71%	2.35%	0.36%		
Year To Date	4.91%	4.46%	0.45%		
2 Years pa	3.89%	4.42%	-0.53%		
Since Inception pa	5.28%	5.57%	-0.29%		

Statement of Financial Position

Net Equity position increased by 9% (\$2,291k) in 2017

- Current Assets increased by 16% \$1,424k
 - Increase in cash \$1,358k
- Non-Current Assets increased by 5% \$1,429k
 - Investment portfolio increased by \$1,540k
 - Property Plant & Equipment Depreciation -\$111k

Statement of Financial Position

- Current Liabilities increased by 5% \$579k
 - Unearned membership fees up by \$421k
 - Leave Provisions increased by \$200k
 - Payables decreased by \$42k
 - Prepaid Sponsorship down by \$37k
- Non-Current Liabilities decreased by 3% \$18k
 - Long Service leave Provisions decrease by \$18k

Operating Surplus

REVENUE and EXPENSES (AUD)	YTD Actual Oct 2017	YTD Actual Oct 2016	Variance %	Budget 2017	Forecast 2017	Budget Variance %
Total Revenue	17,589,490	16,976,944	4%	21,622,140	21,076,636	-3%
Total Expenses	15,867,032	14,344,720	11%	20,699,337	20,334,154	-2%
OPERATING SURPLUS/(DEFICIT)	1,722,457	2,632,224	-35%	922,803	742,482	-20%





Statement of Income - Revenue

REVENUE (AUD)	YTD Actual Oct 2017	YTD Actual Oct 2016	Variance %	Budget 2017	Forecast 2017	Budget Variance %
Investment income	706,223	828,738	-15%	1,021,893	777,607	-24%
Membership fees	16,029,538	15,219,713	5%	19,551,336	19,307,002	-1%
Non-members fees	219,498	201,583	9%	246,170	263,398	7%
Reactivation fees	20,700	31,700	-35%	35,000	23,030	-34%
Sign-Up fees	314,750	405,000	-22%	486,750	373,870	-23%
Transfer fees	99,869	110,045	-9%	125,991	120,870	-4%
Sundry income	198,912	180,165	10%	155,000	210,859	36%
TOTAL REVENUE	17,589,490	16,976,944	4%	21,622,140	21,076,636	-3%



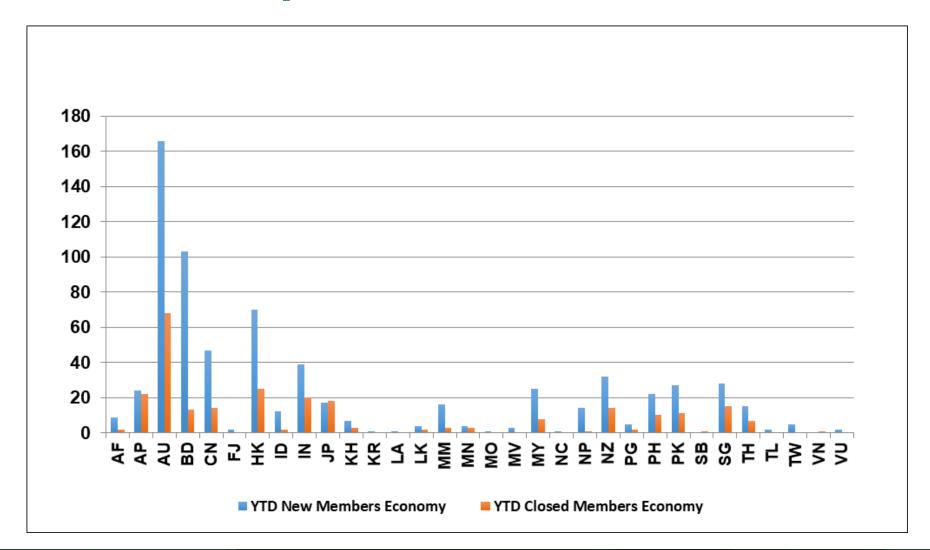


Statement of Income - Revenue

Revenue tracking \$465k (3%) below budget

- Membership Fees \$183k below budget
 - Membership growth continues below budget estimates
 - Oct YTD new member growth of 704 vs. 900 budget
 - Impacting on Sign-Up fees \$91k below budget
 - 10 reactivations
 - 265 closures
- Transfers below budget by \$5k
- Investment income \$247k below budget

Membership Growth



Statement of Income - Expenses

EXPENSES (AUD)	YTD Actual Oct 2017	YTD Actual Oct 2016	Variance %	Budget 2017	Forecast 2017	Budget Variance %
Bank service fees	149,855	137,975	9%	177,000	180,355	2%
Communication expenses	473,000	437,512	8%	594,905	578,155	-3%
Computer expenses	547,480	461,760	19%	734,651	680,901	-7%
Contribution to APNIC Foundation	512,634	0	0%	720,281	632,544	-12%
Depreciation expense	673,810	653,372	3%	821,978	809,158	-2%
Doubtful debt expenses	7,493	15,849	-53%	25,000	25,000	0%
ICANN contract fee	209,794	206,948	1%	270,000	244,656	-9%
Insurance expense	144,744	107,544	35%	148,000	178,914	21%
Meeting and training expenses	365,199	318,421	15%	452,250	402,989	-11%
Membership fees	44,957	40,312	12%	54,210	53,581	-1%
Office operating expenses	269,198	264,257	2%	337,900	324,578	-4%
Postage & delivery	37,068	37,935	-2%	51,000	39,720	-22%
Printing & photocopy	24,511	32,387	-24%	48,000	28,511	-41%
Professional fees	1,047,675	1,114,252	-6%	1,783,720	1,618,705	-9%
Recruitment expense	118,411	85,729	38%	120,000	138,411	15%
Salaries and personnel expenses	8,922,277	8,309,644	7%	11,218,142	11,266,199	0%
Sponsorship and Publicity expenses	451,896	306,464	47%	746,730	738,636	-1%
Staff training/ Conference expenses	119,348	123,593	-3%	161,070	158,688	-1%
Translation expenses	8,700	9,974	-13%	22,500	11,450	-49%
Travel expenses	1,738,981	1,680,792	3%	2,212,000	2,223,001	0%
TOTAL EXPENSES	15,867,032	14,344,720	10%	20,699,337	20,334,154	-2%



Statement of Income - Expenses

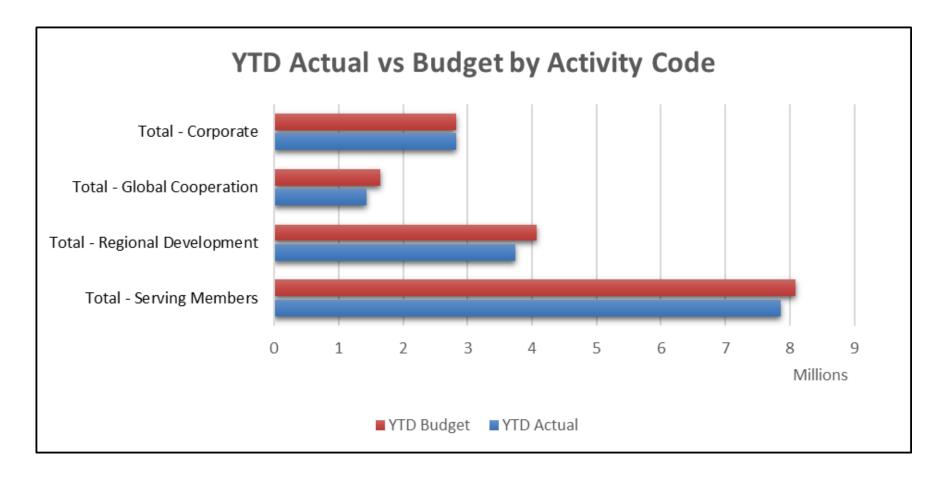
Expenses tracking \$773k (4.6%) below budget

- Professional Fees below budget by \$405k
 - Major variances relate to allowance for Technical Training, Local Trainers, Curriculum development and root server deployment activities in the Development area
- Travel Expenses below budget by \$104k
- Contribution to APNIC Foundation is below budget by \$88k, reflecting the delay in transition of APNIC staff
- Salary & Wages Expenses above budget by \$48k
 - Transition to the APNIC Foundation implemented April 2017
 - Timing of leave
 - Expected to align closely with budget at the end of 2017

Cash Flows YTD October 2017

Accounts	YTD Oct 2017
Operating Activities	
Net Income	1,722,457
Adjustments to Profit/(Loss)	
Accounts Receivable	24,906
Other Current Asset	-91,049
Accounts Payable	-84,927
Sales Tax Payable	-5,243
Other Current Liability	669,446
Total Adjustments to Profit/(Loss)	513,133
Total Operating Activities	2,235,590
Investing Activities	
Fixed Asset	111,147
Other Asset	-1,540,028
Total Investing Activities	-1,428,881
Financing Activities	
Long Term Liability	-17,708
Equity	568,853
Total Financing Activities	551,145
Net Change in Cash for Period	1,357,853
Cash at Beginning of Period	7,207,928
Cash at End of Period	8,565,781

Expenses by Activity



Expenses by Activity

EXPENSES (AUD)	YTD Actual Oct 2017	YTD Budget Oct 2017	Variance \$	Variance %
Facilities	501,512	503,647	-2,135	0%
Finance & Administration	1,159,717	1,160,799	-1,082	0%
Human Resource Management	751,504	720,698	30,806	4%
Legal & Governance	411,326	432,269	-20,943	-5%
Total - Corporate	2,824,059	2,817,413	6,646	0%
Global Research	428,061	349,662	78,399	22%
Global Technical Community	836,822	1,080,009	-243,187	-23%
Inter-governmental Outreach	174,784	224,801	-50,017	-22%
Total - Global Cooperation	1,439,667	1,654,472	-214,805	-13%
A PNIC Conferences	1,154,606	1,103,880	50,726	5%
A PNIC Foundation	563,879	600,230	-36,351	-6%
Community Engagement	1,058,664	1,316,664	-258,000	-20%
Regional Technical Development	971,057	1,057,544	-86,487	-8%
Total - Regional Development	3,748,207	4,078,318	-330,111	-8%
Customer Service	2,974,487	3,080,107	-105,620	-3%
Member Training	1,095,500	1,245,592	-150,092	-12%
Registration Services	1,253,502	1,206,252	47,250	4%
Technical Infrastructure	2,531,611	2,557,506	-25,895	-1%
Total - Serving Members	7,855,099	8,089,457	-234,358	-3%
Total - Expenses	15,867,032	16,639,660	-772,628	-5%



Capital Expenditure

CAPITAL (AUD)	YTD Actual	YTD Actual	Variance	Budget	Forecast	Budget	
CAPITAL (AUD)	Oct 2017	Oct 2016	%	2017	2017	Variance %	
Equipment & Software	460,892	610,208	-24%	1,259,118	800,000	-36%	
Office Furniture & Fittings	105,927	10,016	958%	33,500	115,000	243%	
Total - Capital Expenditure	566,819	620,223	-9%	1,292,618	915,000	-29%	

Questions?



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





Private Banking

Investment Report 1.10.2017 - 31.10.2017

APNIC PTY LTD

Portfolio Group: 3000039





Private Banking

Investment Report 1.10.2017 - 31.10.2017

Portfolio Group

3000039

In the Name of

APNIC PTY LTD

Produced on

Reporting Currency

1.11.2017 AUD

Relationship Manager

Patrick Armitage +61 2 8205 4451

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1/18



Scope of Analysis as of 31.10.2017

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	22,667,563	Yes	16.08.2013	
Total Investments		22,667,563			
Total Wealth		22,667,563			



1. Overview

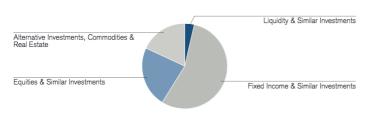
1.1. Asset Allocation

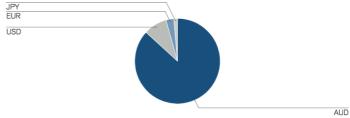
Asset Allocation by Asset Category Period 1.10.2017 - 31.10.2017

	Beginning of Period in AUD	Change	End of Period in AUD	End of Period Proportion
Liquidity & Similar Investments	734,786	85,676	820,463	3.62%
Fixed Income & Similar Investments	12,471,938	44,991	12,516,929	55.22%
Equities & Similar Investments	5,032,171	194,988	5,227,158	23.06%
Alternative Investments, Commodities & Real Estate	4,018,876	84,136	4,103,012	18.10%
Total Investments	22,257,771		22,667,563	100.00%

Asset Allocation by Currency Period 1.10.2017 - 31.10.2017

	Beginning of Period in AUD	Change	End of Period in AUD	End of Period Proportion
AUD - Australian Dollar	19,502,832	181,016	19,683,848	86.84%
USD - US Dollar	1,915,874	83,244	1,999,117	8.82%
EUR - Euro	657,738	19,118	676,856	2.99%
JPY - Japan Yen	181,328	126,413	307,741	1.36%
Total Investments	22,257,771		22,667,563	100.00%





Investments in %

1. Overview / 1.1. Asset Allocation 3/18

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Investments in %



1.2. Income and Activity

Income Summary Period 1.10.2017 - 31.10.2017

	Current Period	Year to Date
	in AUD	in AUD
Cash Dividend	23,212	489,717
Coupon Received/ Paid	0	0
Interest Earned/ Paid	745	11,999
Net Income	23,957	501,716

Activity Summary Period 1.10.2017 - 31.10.2017

	Current Period in AUD	Year to Date in AUD
Asset Inflows	0	1,000,014
Asset Outflows	0	-500,014
Total Asset Flows	0	500.000

1. Overview / 1.2. Income and Activity 4/18

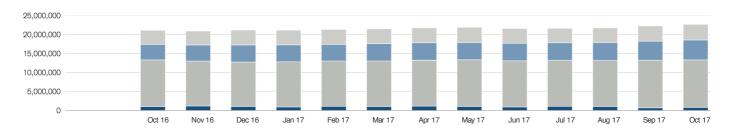


2. Analyses

2.1. Asset Allocation

Asset Allocation by Asset Category Details Period 1.10.2016 - 31.10.2017

	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17
Liquidity & Similar Investments	1,041,025	1,193,659	1,083,348	924,369	1,103,824	1,061,778	1,156,810	1,095,500	933,842	1,109,504	1,065,492	734,789	820,463
Fixed Income & Similar Investments	12,287,472	11,820,987	11,661,989	11,893,746	11,916,535	11,970,435	12,067,303	12,265,359	12,150,916	12,089,594	12,112,350	12,472,912	12,516,929
Equities & Similar Investments	4,076,349	4,247,282	4,520,055	4,464,359	4,386,071	4,543,476	4,583,373	4,524,428	4,575,992	4,595,796	4,693,703	5,033,772	5,227,158
Alternative Investments, Commodities& Real Estate	3,679,883	3,646,150	3,906,483	3,864,451	3,934,304	3,909,472	3,948,688	3,995,157	3,908,311	3,823,328	3,870,515	4,015,435	4,103,012
Total Ending Market Value in AUD	21.084.730	20.908.078	21.171.875	21.146.926	21.340.734	21.485.161	21.756.175	21.880.444	21.569.061	21.618.222	21.742.060	22.256.908	22.667.563



Investments in AUD

2. Analyses / 2.1. Asset Allocation 5/18



3. Positions

3.1. Investment Related Positions as of 31.10.2017

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 Account	& Similar Investr	nents						
ACCOUNT	5							
AUD	288,870.25	Current Account -20300003970945 AUD Portfolio: 3000039-70		1.0000		288,870		
						1.27%		
USD	408,082.36	Current Account -20300003970780 AUD Portfolio: 3000039-70		1.0000 0.7702 AUD/ USD		531,593	1,740	0.33%
						2.35%	1,740	0.33%
Total Lic	uidity & Similar In	vestments				820,463		
						3.62%		
	come & Similar In							
Fixed In	come & Similar In	vestments AUD						
AUD	3,571,075.72	UNITS BLACKROCK INDEXED AUSTRALIAN	AU60BGL01056	1.0280	1.0285 BID	3,672,969	2,071	0.06%
		BOND FUND	2244170		26.10.2017		2,071	0.06%
		AUD Portfolio: 3000039-70				16.20%		
AUD	216,172.495	UNITS BENTHAM WHOLESALE SYNDICATED	AU60CSA00468	1.0154	1.0305 BID	222,766	3,269	1.49%
		LOAN FUND	3242662		27.10.2017		3,269	1.49%
		AUD Portfolio: 3000039-70				0.98%		
AUD	621.542	UNITS PIMCO GLOBAL CREDIT FUND	AU60ETL01145	1,001.7498	993.7824 NAV	617,678	-4,952	-0.80%
		AUD Portfolio: 3000039-70	3432906		30.10.2017		-4,952	-0.80%
						2.72%		
AUD	1,590.796		AU60ETL01152	1,112.2183	1,122.5985 NAV	1,785,825	16,513	0.93%
		CLASS -A-	3432899		30.10.2017		16,513	0.93%
		AUD Portfolio: 3000039-70				7.88%		

3. Positions / 3.1. Investment Related Positions 6/18



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	2,382,275.818	UNITS LEGG MASON WESTERN ASSET AUSTRALIAN BOND TRUST CLASS -A- AUD Portfolio: 3000039-70	AU60SSB01221 2248336	1.2074	1.2205 BID 26.10.2017	2,907,591	31,293 31,293	1.09% 1.09%
		AOD FORTOILO. 3000039-70				12.03 /6		
AUD	2,955,182.66	UNITS VANGUARD AUSTRALIAN FIXED INTEREST INDEX FUND	AU60VAN00014 1653500	1.1301	1.1201 NAV 30.10.2017	3,310,100	-29,456	-0.88%
		AUD Portfolio: 3000039-70	1653500		30.10.2017	14.60%	-29,456	-0.88%
Total Fi	xed Income & Sim	ilar Investments				12,516,929 55.22%		
	s & Similar Investn s & Similar Investn							
AUD	1,577	REGISTERED SHS AGL ENERGY LTD AUD Portfolio: 3000039-70	AU000000AGL7 2449486	21.8038	25.2700 CLO 31.10.2017	39,851	5,466 5,466	15.90% 15.90%
			AGL.AX			0.18%		
AUD	1,973	REGISTERED SHS AMCOR LTD AUD Portfolio: 3000039-70	AU000000AMC4 640267	14.1711	15.8400 CLO 31.10.2017	31,252	3,293 3,293	11.78% 11.78%
		AOD I GRIGIIO. 3000003-70	AMC.AX		31.10.2017	0.14%	0,230	11.7076
AUD	4,510	REGISTERED SHS AUSTRALIA & NEW	AU000000ANZ3	30.3074	29.9200 CLO	134,939	-1,747	-1.28%
		ZEALAND BANKING GROUP LTD AUD Portfolio: 3000039-70	640139 ANZ.AX		31.10.2017	0.60%	-1,747	-1.28%
AUD	6,306	REGISTERED SHS BHP BILLITON LTD	AU000000BHP4	27.8606	26.5400 CLO	167,361	-8,328	-4.74%
		AUD Portfolio: 3000039-70	640390 BHP.AX		31.10.2017	0.74%	-8,328	-4.74%
AUD	2.395	REGISTERED SHS BORAL LTD	AU000000BLD2	5.8191	7.1500 CLO	17,124	3,188	22.87%
	_,	AUD Portfolio: 3000039-70	1050991 BLD.AX		31.10.2017	0.08%	3,188	22.87%
			DLD.AX			0.06 /6		

3. Positions / 3.1. Investment Pelated Positions 71.18



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	9.4600 CLO 31.10.2017	3,566 0.02%	60 60	1.72% 1.72%
AUD	2,111	REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA AUD Portfolio: 3000039-70	AU000000CBA7 646758 CBA.AX	77.0972	77.6300 CLO 31.10.2017	163,877 0.72%	1,125 1,125	0.69% 0.69%
AUD	1,975	REGISTERED SHS COMPUTERSHARE LTD AUD Portfolio: 3000039-70	AU000000CPU5 241285 CPU.AX	14.7987	15.5800 CLO 31.10.2017	30,771 0.14%	1,543 1,543	5.28% 5.28%
AUD	1,220	REGISTERED SHS CSL LTD AUD Portfolio: 3000039-70	AU000000CSL8 241548 CSL.AX	92.0372	138.9300 CLO 31.10.2017	169,495 0.75%	57,209 57,209	50.95% 50.95%
AUD	321	REGISTERED SHS CALTEX AUSTRALIA LTD AUD Portfolio: 3000039-70	AU000000CTX1 640410 CTX.AX	33.0667	34.2600 CLO 31.10.2017	10,997 0.05%	383 383	3.61% 3.61%
AUD	8,668	REGISTERED SHS EVOLUTION MINING LTD AUD Portfolio: 3000039-70	AU000000EVN4 14241033 EVN.AX	2.4387	2.3600 CLO 31.10.2017	20,456 0.09%	-683 -683	-3.23% -3.23%
AUD	10,864	REGISTERED SHS FAIRFAX MEDIA LTD AUD Portfolio: 3000039-70	AU000000FXJ5 649930 FXJ.AX	1.0762	1.1000 CLO 31.10.2017	11,950 0.05%	259 259	2.22% 2.22%
AUD	2,851	UNITS ISHARES CORE \$&P/ ASX 200 ETF EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000IOZ4 12101500 IOZ.AX	23.7323	24.2500 CLO 31.10.2017	69,137 0.31%	1,476 1,476	2.18% 2.18%

3. Positions / 3.1. Investment Related Positions 8/18



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	317	CHESS UNITS OF FOREIGN SECURITIES	AU000000JHX1	20.5229	19.8900 CLO	6,305	-201	-3.08%
		JAMES HARDIE INDUSTRIES PLC AUD Portfolio: 3000039-70	1303670 JHX.AX		31.10.2017	0.03%	-201	-3.08%
AUD	733	REGISTERED SHS MAGELLAN FINANCIAL	AU000000MFG4	24.7816	24.2700 CLO	17,790	-375	-2.06%
		GROUP LTD AUD Portfolio: 3000039-70	2807450 MFG.AX		31.10.2017	0.08%	-375	-2.06%
AUD	1,072	REGISTERED SHS MACQUARIE GROUP LTD	AU000000MQG1	63.9378	98.3500 CLO	105,431	36,890	53.82%
		AUD Portfolio: 3000039-70	3422370 MQG.AX		31.10.2017	0.47%	36,890	53.82%
AUD	4,972	REGISTERED SHS NATIONAL AUSTRALIA BANK LTD	AU000000NAB4 641643	31.3540	32.6600 CLO 31.10.2017	162,386	6,493 6,493	4.17% 4.17%
		AUD Portfolio: 3000039-70	NAB.AX		31.10.2017	0.72%	6,493	4.17%
AUD	540	REGISTERED SHS NEWCREST MINING LTD AUD Portfolio: 3000039-70	AU000000NCM7 650853	24.5387	22.4100 CLO 31.10.2017	12,101	-1,150 -1,150	-8.67% -8.67%
		AOD FOITIOIIO. 3000039-70	NCM.AX		31.10.2017	0.05%	-1,150	-0.07%
AUD	13,637	REGISTERED SHS ORORA LTD	AU000000CRA8	2.9236	3.4000 CLO	46,366	6,497	16.29%
		AUD Portfolio: 3000039-70	22750502 ORA.AX		31.10.2017	0.20%	6,497	16.29%
AUD	1,190	REGISTERED SHS ORIGIN ENERGY LTD	AU000000ORG5	6.8053	7.9400 CLO	9,449	1,350	16.67%
		AUD Portfolio: 3000039-70	1051439 ORG.AX		31.10.2017	0.04%	1,350	16.67%
AUD	656	REGISTERED SHS REA GROUP LTD	AU000000REA9	61.1165	72.2800 CLO	47,416	7,323	18.27%
		AUD Portfolio: 3000039-70	1023132 REA.AX		31.10.2017	0.21%	7,323	18.27%

3. Positions / 3.1. Investment Related Positions 9/18



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	1,232	REGISTERED SHS RIO TINTO LTD AUD Portfolio: 3000039-70	AU000000RIO1 603520 RIO.AX	61.3059	69.4500 CLO 31.10.2017	85,562 0.38%	10,034 10,034	13.28% 13.28%
AUD	2,131	CHESS DEPOSITARY INTERESTS RESMED INC ON A RATIO OF 10 CDIS PER ORD.SH AUD Portfolio: 3000039-70	AU000000PIMD6 1058638 PIMD.AX	9.4680	10.8300 CLO 31.10.2017	23,079 0.10%	2,902 2,902	14.39% 14.39%
AUD	33,018	UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000SLF1 1377855 SLF.AX	11.4847	12.5900 CLO 31.10.2017	415,697 1.83%	36,494 36,494	9.62% 9.62%
AUD	9,780	UNITS SPDR S&P/ASX 200 FUND ETF AUSTRALIAN EQUITY EXCHANGE TRADED FUNDS AUD Portfolio: 3000039-70	AU000000STW9 1285707 STW.AX	52.5639	55.2300 CLO 31.10.2017	540,149 2.38%	26,074 26,074	5.07% 5.07%
AUD	5,358	REGISTERED SHS SUNCORP GROUP LTD AUD Portfolio: 3000039-70	AU000000SUN6 588679 SUN.AX	13.6846	13.5800 CLO 31.10.2017	72,762 0.32%	-561 -561	-0.76% -0.76%
AUD	8,737	STAPLED SECURITY TRANSURBAN GROUP AUD Portfolio: 3000039-70	AU000000TCL6 444655 TCL.AX	10.4282	12.1300 CLO 31.10.2017	105,980 0.47%	14,869 14,869	16.32% 16.32%
AUD	9,963	REGISTERED SHS TELSTRA CORPORATION LTD AUD Portfolio: 3000039-70	AU000000TLS2 720464 TLS.AX	5.1133	3.5400 CLO 31.10.2017	35,269 0.16%	-15,675 -15,675	-30.77% -30.77%
AUD	5,460	REGISTERED SHS WESTPAC BANKING CORP AUD Portfolio: 3000039-70	AU000000WBC1 642372 WBC.AX	32.5337	32.9900 CLO 31.10.2017	180,125 0.79%	2,491 2,491	1.40% 1.40%

3. Positions / 3.1. Investment Felated Positions 10/18



Number/ N	lominal	Description	ldentification 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/I Unreal. in % Instr. in % FX in %
AUD	768	REGISTERED SHS WESFARMERS LTD AUD Portfolio: 3000039-70	AU000000WES1 642397 WES.AX	44.2669	41.8000 CLO 31.10.2017	32,102 0.14%	-1,895 -1,895	-5.57% -5.57%
AUD	2,164	REGISTERED SHS WOOLWORTHS LTD AUD Portfolio: 3000039-70	AU000000WOW2 81350 WOW.AX	29.0818	25.8800 CLO 31.10.2017	56,004 0.25%	-6,929 -6,929	-11.01% -11.01%
AUD	561	REGISTERED SHS WOODSIDE PETROLEUM LTD AUD Portfolio: 3000039-70	AU000000WPL2 642429 WPL.AX	40.3070	30.7300 CLO 31.10.2017	17,240 0.08%	-5,373 -5,373	-23.76% -23.76%
AUD	43,628	UNITS ELEY GRIFFITHS GROUP SMALL COMPANIES FUND AUD Portfolio: 3000039-70	AU60EGG00011 3222428	2.0995	2.2251 BID 30.10.2017	97,077 0.43%	5,480 5,480	5.98% 5.98%
AUD	33,464.65040	UNITS ABERDEEN EMERGING OPPORTUNITIES FUND AUD Portfolio: 3000039-70	AU60ETL00329 2220820	2.1370	2.4965 NAV 30.10.2017	83,545 0.37%	12,032 12,032	16.83% 16.83%
AUD	20,074.6672	UNITS IRONBARK KARARA AUSTRALIAN SMALL COMPANIES FUND CLASS -A- AUD Portfolio: 3000039-70	AU60PAT00021 2879000	2.9721	3.5222 BID 30.10.2017	70,707 0.31%	11,044 11,044	18.51% 18.51%
AUD	1,728	REGISTERED SHS OIL SEARCH LTD AUD Portfolio: 3000039-70	PG0008579883 809900 OSH.AX	7.8272	7.3800 CLO 31.10.2017	12,753 0.06%	-773 -773	-5.71% -5.71%
AUD	223,156.17	SUBSCRIPTION VALUE OF UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE AUD Portfolio: 3000039-70		1.0000	1.0000 MID 25.08.2016	223,156 0.98%		
Total Equi	ities & Similar In	vestments AUD				3,329,227 14.69%		

3. Positions / 3.1. Investment Pelated Positions 11/18



Number/ Nomir	nal	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 & Sin	nilar Investn	nents EUR						
EUR	12,245	SHS EUR ISHARES II PLC - ISHARES MSCI EUROPE UCITS ETF EUR (DIST) AUD Pottfolio: 3000039-70	IE00B1YZSC51 3246398 IQQY.DE	23.6815 1.4867 EUR/ AUD	24.6200 OFF 30.10.2017	456,971 2.02%	25,866 17,420 8,446	6.00% 3.96% 2.04%
		AOD FOITIOIIO. 3000039-70	IQQ1.DE			2.02%	0,440	2.04%
EUR	8,647	ACCUM.PTG.SHS WELLINGTON MANAGEMENT FUNDS (IRELAND) PLC -	IE00B9DPD161 20938626	13.6140 1.4606 EUR/ AUD	16.7760 NAV 30.10.2017	219,885	47,944 41,444	27.88% 23.23%
		WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR AUD Portfolio: 3000039-70				0.97%	6,500	4.66%
Total Equities	& Similar In	ivestments EUR				676,856 2.99%		
Equities & Sin	nilar Investn	nents JPY						
JPY	1,184	UNITS NIKKEI 225 EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	JP3027650005 1264151	18,676.7551 88.3391 AUD/JPY	22,580.0000 CLO 31.10.2017	307,741	57,418 53,197	22.94%
			1321.T			1.36%	4,221	2.04%
Total Equities	& Similar In	ivestments JPY				307,741 1.36%		
Equities & Sin	milar Investn	nents USD						
USD	234	ACCUM.PTG.SHS ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD	IE00B53SZB19 10737617	188.8481 0.9141 AUD/USD	345.6800 CLO 31.10.2017	105,371	57,028 47,806	117.97% 83.05%
		AUD Portfolio: 3000039-70	CSNDX.S			0.46%	9,223	34.92%
USD	190	SHS -IP- RAM (LUX) SYSTEMATIC FUNDS SICAV - EMERGING MARKETS EQUITIES	LU0704154458 14219625	149.4364 0.7594 AUD/ USD	186.6000 NAV 30.10.2017	46,185	8,794 9,198	23.52% 24.87%
		CAPITALISATION AUD Portfolio: 3000039-70				0.20%	-404	-1.35%

3. Positions / 3.1. Investment Felated Positions 12/18



	lominal	Description	ldentification 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	580	SHS ISHARES GLOBAL HEALTHCARE ETF	US4642873255	95.1959	110.8600 CLO	83,759	21,529	34.60%
		AUD Portfolio: 3000039-70	1352444	0.8872 AUD/ USD	31.10.2017		11,835	16.45%
			IXJ.P			0.37%	9,694	18.14%
USD	1,590	TRUST UNITS SPDR S&P 500 ETF TRUST	US78462F1030	194.2484	257.1500 CLO	532,617	171,774	47.60%
		AUD Portfolio: 3000039-70	45088	0.8559 AUD/USD	31.10.2017		130,284	32.38%
			SPY.P			2.35%	41,490	15.22%
USD	2,501	SHS VANGUARD FTSE EMERGING MARKETS	US9220428588	41.2138	44.6300 CLO	145,402	13,405	10.16%
		ETF	2093958	0.7809 AUD/USD	31.10.2017		11,130	8.29%
		AUD Portfolio: 3000039-70	WO.P			0.64%	2,275	1.87%
	itios & Similar In	vestments USD				913,334		
Total Equi	ities & Oiiiiiai iii							
Total Equi	ities & Oliffilai III					4.03%		
	ities & Similar In	vestments				5,227,158 23.06%		
Total Equi	ities & Similar In	vestments Commodities & Real Estate				5,227,158		
Total Equi	ities & Similar In e Investments, C	Commodities & Real Estate UNITS GMO SYSTEMATIC GLOBAL MACRO	AU60GMO00067	1.0083	1.0414 NAV	5,227,158	15,315	3.28%
Total Equi	ities & Similar In e Investments, C	Commodities & Real Estate	AU60GMC00067 3375604	1.0083	1.0414 NAV 27.10.2017	5,227,158 23.06%	15,315 15,315	3.28% 3.28%
Alternative Hedge Fu	e Investments, Conds 462,530.637	Commodities & Real Estate UNITS GMO SYSTEMATIC GLOBAL MACRO TRUST CLASS -B- AUD Portfolio: 3000039-70	3375604		27.10.2017	5,227,158 23.06% 481,679 2.12%	15,315	3.28%
Total Equi	ities & Similar In e Investments, C	Commodities & Real Estate UNITS GMO SYSTEMATIC GLOBAL MACRO TRUST CLASS -B- AUD Portfolio: 3000039-70 UNITS BLACKROCK GLOBAL ALLOCATION	3375604 AU60MAL00181	1.0083	27.10.2017 1.2694 BID	5,227,158 23.06% 481,679	15,315 9,201	3.28% 2.28%
Total Equi	e Investments, Conds 462,530.637	Commodities & Real Estate UNITS GMO SYSTEMATIC GLOBAL MACRO TRUST CLASS -B- AUD Portfolio: 3000039-70	3375604		27.10.2017	5,227,158 23.06% 481,679 2.12%	15,315	3.28%
Total Equi Alternative Hedge Fu AUD	ities & Similar In e Investments, 0 nds 462,530.637 324,858.41	UNITS GMO SYSTEMATIC GLOBAL MACRO TRUST CLASS-B- AUD Portfolio: 3000039-70 UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE AUD Portfolio: 3000039-70	3375604 AU60MAL00181 3379478	1.2410	27.10.2017 1.2694 BID 27.10.2017	5,227,158 23.06% 481,679 2.12% 412,366 1.82%	9,201 9,201	3.28% 2.28% 2.28%
Alternative Hedge Fu	ities & Similar In e Investments, 0 nds 462,530.637 324,858.41	Commodities & Real Estate UNITS GMO SYSTEMATIC GLOBAL MACRO TRUST CLASS -B- AUD Portfolio: 3000039-70 UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE	3375604 AU60MAL00181		27.10.2017 1.2694 BID	5,227,158 23.06% 481,679 2.12% 412,366	15,315 9,201	3.28% 2.28%

3. Positions / 3.1. Investment Felated Positions 13/18



Number/	Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Pate	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/ I Unreal. in % Instr. in % FX in %
AUD	322,646.221	RED.PTG.SHS -A- AHL DIMENSION (CAYMAN) LIMITED AUD AUD Portfolio: 3000039-70	KYG0132G1652 30773689	1.0001	1.0171 NAV 30.09.2017	328,163 1.45%	5,490 5,490	1.70% 1.70%
Total Hed	dge Funds					1,621,151 7.15%		
Commod	lities & Precious	Metals						
AUD	2,951	ETC SECURITY ETFS METAL SECURITIES AUSTRALIA LTD 2003-WITHOUT FIXED MATURITY ON GOLD COMMODITY AUD Portfolio: 3000039-70	AU00000GOLD7 1583458 GOLD.AX	144.8335	157.5000 CLO 31.10.2017	464,783 2.05%	37,379 37,379	8.75% 8.75%
USD	489	UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN AUD Portfolio: 3000039-70	CH0031794263 3179426 TCMCI.S	1,022.4397 0.8523 AUD/ USD	870.0000 CLO 31.10.2017	554,191 2.44%	-32,404 -97,104 64,700	-5.52% -14.91% 9.39%
Total Cor	nmodities & Pred	cious Metals				1,018,973 4,50%		
Real Esta	ate					4.30%		
AUD	7,983	STAPLED SECURITY GOODMAN GROUP AUD Portfolio: 3000039-70	AU000000GMG2 18079202 GMG.AX	6.9786	8.3600 CLO 31.10.2017	66,738 0.29%	11,028 11,028	19.79% 19.79%
AUD	138,601	STAPLED SECURITY MIRVAC GROUP AUD Portfolio: 3000039-70	AU000000MGR9 821911 MGR.AX	1.8177	2.4100 CLO 31.10.2017	334,028 1.47%	82,088 82,088	32.58% 32.58%
AUD	251,290	STAPLED SECURITY PROPERTYLINK GROUP AUD Portfolio: 3000039-70	AU000000PLG5 33393604 PLG.AX	0.8264	1.0000 CLO 31.10.2017	251,290	43,616 43,616	21.00% 21.00%

3. Positions / 3.1. Investment Pelated Positions 14/18



Number/ Nomina	al	Description	ldentification 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	74,374	STAPLED SECURITY SCENTRE GROUP AUD Portfolio: 3000039-70	AU000000SCG8 23931192 SCG.AX	3.6316	4.0200 CLO 31.10.2017	298,983 1.32%	28,888 28,888	10.70% 10.70%
AUD	4,969	STAPLED SECURITY STOCKLAND AUD Portfolio: 3000039-70	AU000000SGP0 642077 SGP.AX	4.5725	4.5200 CLO 31.10.2017	22,460	-261 -261	-1.15% -1.15%
Total Real Estat	te					973,500 4,29%		
Other Alternativ	ve Investm	ents				11.20 /0		
AUD	4,291	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	IE00BYYQZZ17 28828240	101.6481	114.0500 NAV 30.10.2017	489,389 2.16%	53,216 53,216	12.20% 12.20%
Total Other Alternative Investments						489,389 2.16%		
Total Alternative Investments, Commodities & Real Estate						4,103,012 18.10%		
Total Investments						22,667,563 100.00%		
of which Accru	ed Interest	t			0			

3. Positions / 3.1. Investment Pelated Positions 15/18



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

4. Appendix / 4.1. Explanations 16/18





Yield

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

Abbreviations

BID = Bid Price CLO = Closing Price MID = Average 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 31.10.2017 AUD 1.0000 = JPY 86.8741 AUD 1.0000 = USD 0.7677 EUR 1.0000 = AUD 1.5158

4. Appendix / 4.1. Explanations 17/18





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 (FIM) 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.

4. Appendix / 4.2. Legal Information 18/18

Agenda Item 11 Secretariat report

Secretariat report

Highlights

December 2017





Service metrics

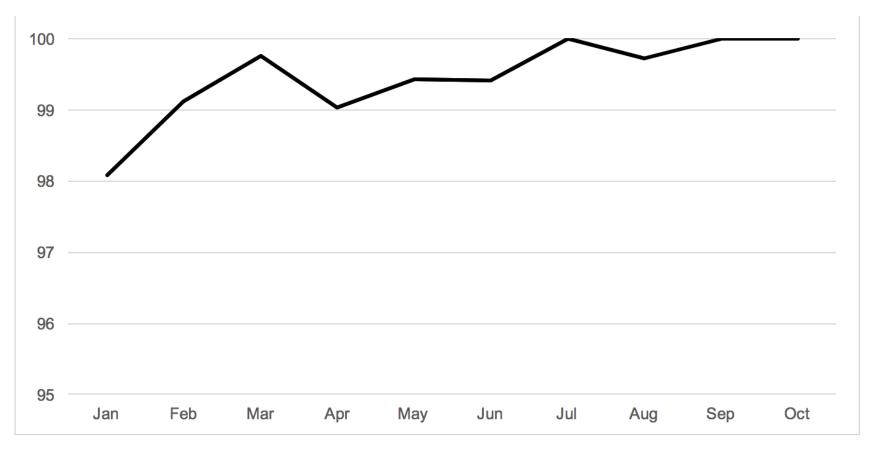


Figure 1 - Services requests SLA

Service metrics

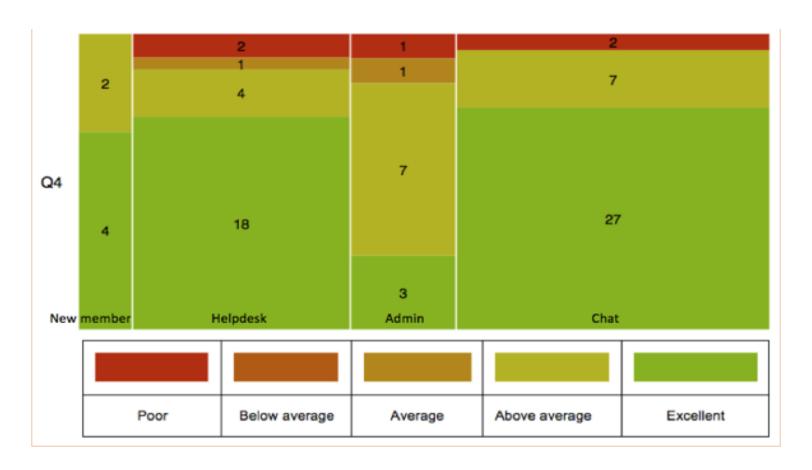


Figure 2 – Services satisfaction ratings

Membership growth

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
New Members	235	221	196	104
Closed Members	94	78	68	43
Reactivated Members	6	2	2	4
Total Members	6,145	6,288	6,437	6,480

Table 1 - Membership growth

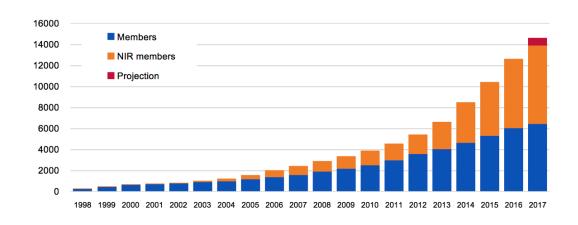
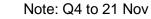


Figure 3 - Total membership





Membership profile

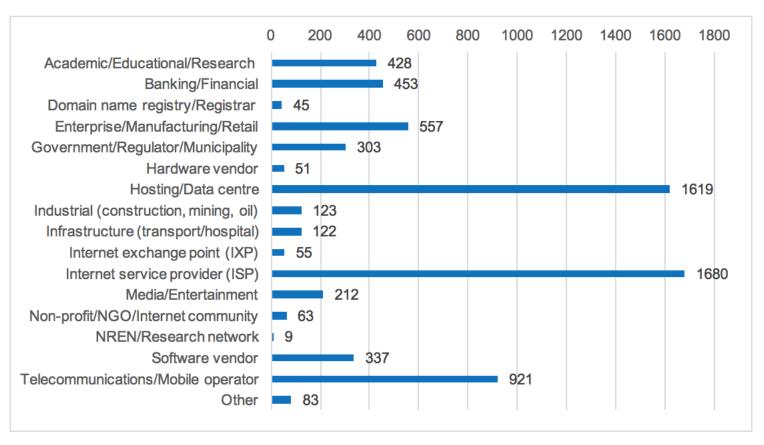


Figure 4 – Industry types





Delegations

Resource	Q1 2017	Q2 2017	Q3 2017	Q4 2017
IPv4 (103 /8)	567	566	501	233
IPv4 (recycled space)	86	61	32	11
IPv6	328	376	311	157
ASNs	336	353	238	200

Table 5 - Resource delegations

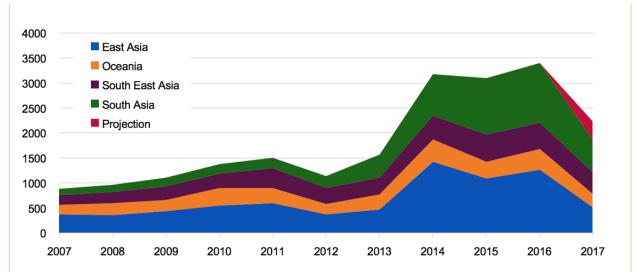


Figure 5 - IPv4 delegations



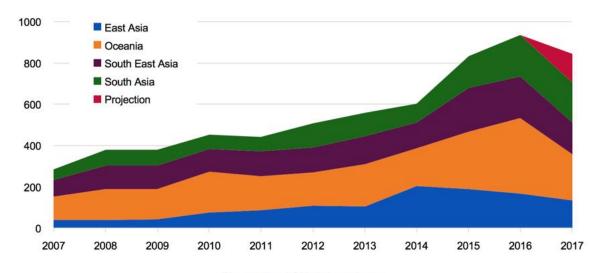


Figure 7 - ASN delegations

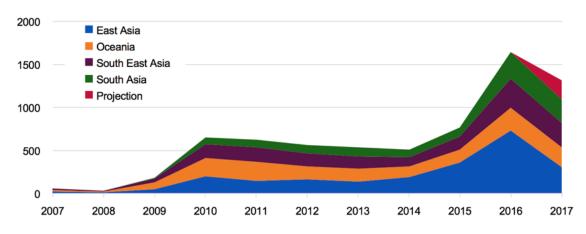


Figure 6 - IPv6 delegations



Transfers

Transfer type	Q1 2017 Requests	24s	Q2 2017 Requests	/24s	Q3 2017 Requests	/24s	Q4 2017 Requests	/24
Mergers/ acquisitions	40	680	27	901	34	736	35	15,303
Market transfers	54	2,667	75	4,293	76	4,652	39	3,503
Intra-RIR	44	2,359	61	2,461	50	1,293	23	1,811
• Inter-RIR	10	308	14	1,832	26	3,359	16	1,692

Table 7 - IPv4 transfers and returns

As of 21 November 2017, the total of IPv4 addresses transferred between APNIC and other RIRs are as below.

Inter-RIR transfers	Requests	/24s
ARIN to APNIC	184	39,972
RIPE to APNIC	13	1,798
APNIC to ARIN	18	428
APNIC to RIPE	10	475

Table 8 - Inter-RIR transfers



103/8 status

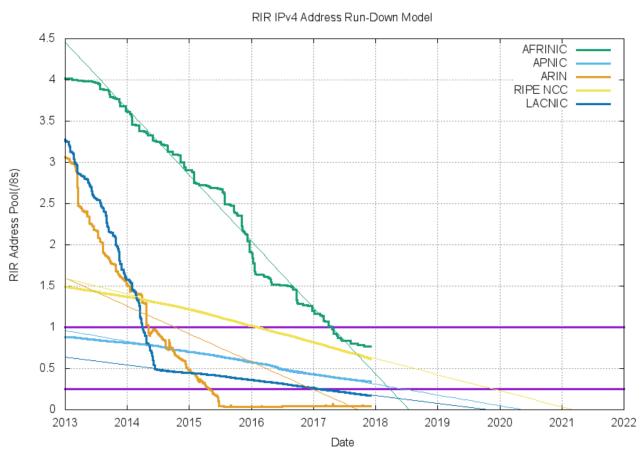
Resource	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Delegations (/24)	2,087	1,925	1,541	679
Remaining	40.01%	37.41%	35.21%	34.25%

Table 4 - Available IPv4 address space

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Market transfers	18	14	33	6
Mergers/acquisitions	22	13	12	13

Table 9 - Transfers of 103/8 space

IPv4 remaining



Projection of consumption of Remaining RIR Address Pools

KSK rollover

Communications

- A <u>45-minute information session</u> held at APNIC 44 with Geoff Huston and ICANN's Ed Lewis.
- Three KSK information emails sent to identified network operators (from APNIC Labs data) and the wider membership.
- Publication of a blog post from Geoff Huston explaining the reasons for the keyroll postponement.
- Updates to the KSK Rollover resources web page.

Labs

- Resolvers
- User Impacts
- Identification of vulnerable ASNs



APNIC 44

3.2.1 APNIC 44

 APNIC 44 was successfully held in Taichung, Taiwan, from 7 to 14 September 2017, at the Splendor Hotel.

Conference Statistics	
Total number of on-site delegates	383
Economies represented	43
APNIC Member organizations represented	128
Remote Participants – Adobe Connect	186
Remote Participants – YouTube	697 views; 6,432 minutes views
#apricot2017 tweets	459
Total people reached	465,263

Table 13 - APNIC 44 conference statistics

The post conference survey attracted 81 responses, a delegate response rate of 21%. Delegates rated the conference experience positively, 54% being very satisfied and 42% satisfied with APNIC 44. Ninety-six percent rated the quality of conference speakers positively, with the remaining 4% neutral.

Security incidents

4.5.5 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: 12/10/2017

Incident type: APNIC whois maintainer and IRT password attributes (including

hashed password values) were inadvertently included in

downloadable whois data

Systems/Services affected: Whois service

Remediation: The error was fixed to prevent further inclusion of password hashes

in the whois downloads on 13 October, and as a precaution, worked with resource holders to reset all maintainer and IRT passwords in

the subsequent days.

Future improvement/prevention plan: A detailed post mortem was conducted by the Software and IS

teams, clearly identifying the root cause, with a list of improvements created mainly around improved inter-team and review processes.

Community trainers

Are you APNIC's next Community Trainer?

If you are keen to volunteer to share your knowledge and serve the community as a Community Trainer, please contact the APNIC training team.



Whois org objects

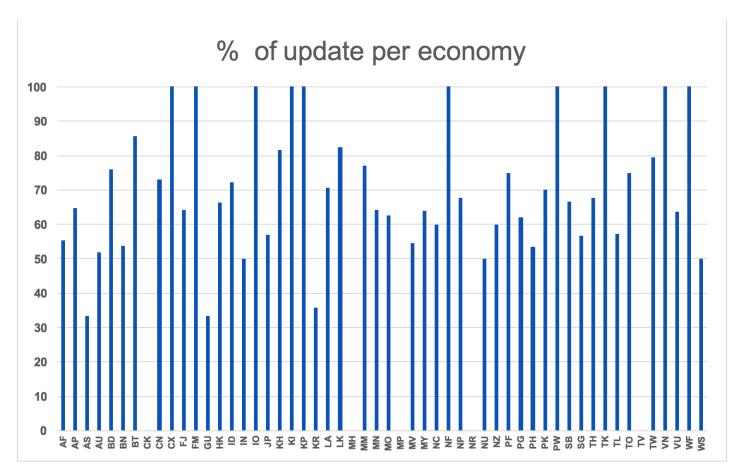


Figure 8 - Organization details update



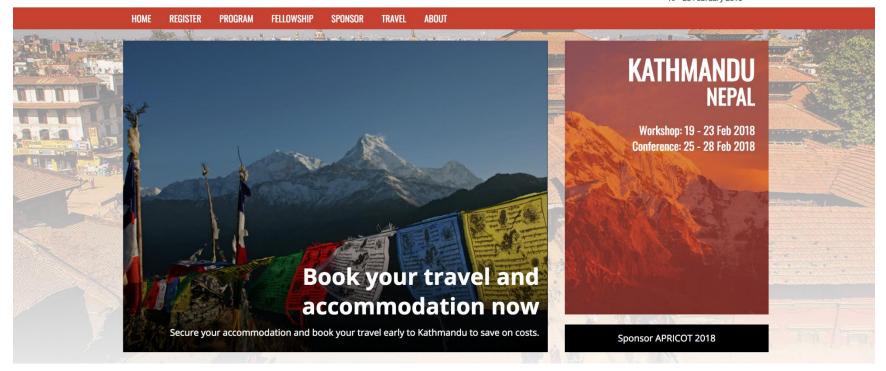
New member onboarding

APNIC New Member Application Form ASN Applicant Organization Confirmation Name: * Applicant Your name **Contact Details** Position: * Clear form and restart Your job position title **Privacy Collection Statement** Email: * APNIC is collecting personal Your email address information from you in order to process your application for APNIC Confirm Email: * membership. Without this information, APNIC may not be able to process Your email address your application. I am the Corporate Contact: What's this? APNIC may publish your organisation name, phone number and Abuse Yes \bigcirc No Contact email address in the public APNIC Whois database. The billing contact is the same as the Corporate Contact: APNIC has a privacy policy that contains information about: Where did you hear about APNIC? * · How you may complain about a breach of the Australian Privacy Principles by APNIC, and how APNIC will deal with such a complaint; How you may access and seek the correction of the personal information held by APNIC Next about you.



APRICOT MoU







Q ADVANCED WHOIS ♥ MAKE A PAYMENT LOGIN

APNIC



Manage IP -

Training -

Events -

Research -Community -

Blog

About -

Your IP address: 2001:dd8:8:101:203:119:97:5



GET IP ADDRESSES



TRANSFER IP ADDRESSES



GO IPv6



PARTICIPATE



WHAT IS APNIC?

APNIC is the Regional Internet Registry administering IP addresses for the Asia Pacific









https://2018 apricot net/program/call-for-papers/

APNIC



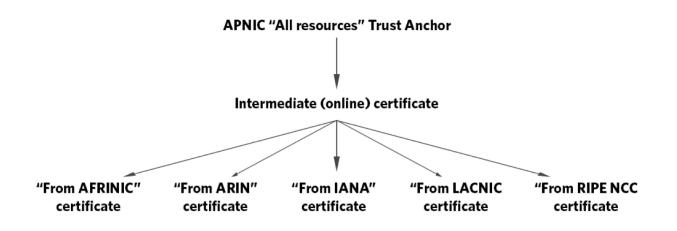
MyAPNIC Login
Username/Email Address
Password
Logon
Forgot your login information? Don't have access to MyAPNIC?

RPKI

4.1.1 0/0 transition

This is a cross-RIR collaboration to address concerns around transient validation errors having serious effects on relying parties. It also simplifies the operation and management of the system.

The transition from the five Trust Anchors to a single Trust Anchor (TA) has been completed: the new intermediate CA signed under the new TA was issued, and the current five online CAs have now been signed under the new intermediate CA.



The other TA's resources have been reduced to AS0, to indicate they have no longer been in use, and will be removed in January 2018.



Internal IPv6 deployment

Successes and challenges of IPv6 transition technologies at APNIC

By Brenda Buwu on 9 Aug 2017

Category: Tech matters

Tags: Dual Stack, IPv4, IPv6, NATs, Wi-Fi



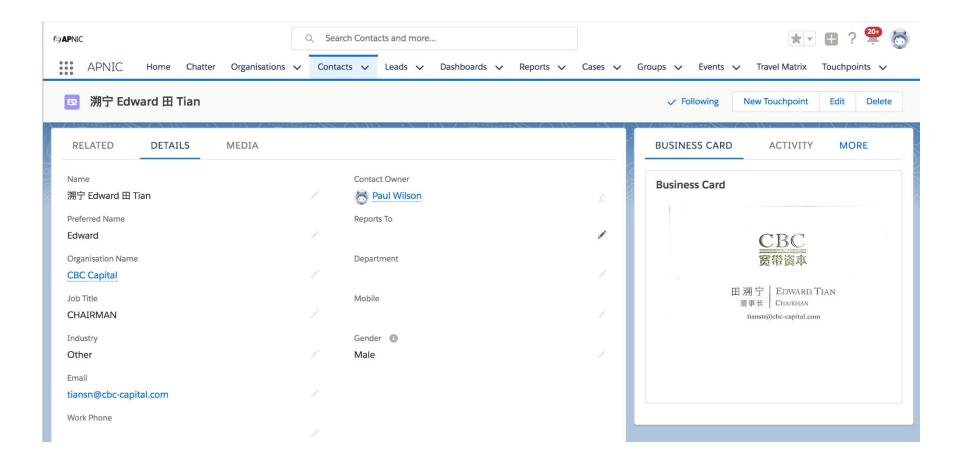
◀ Blog home



Last month, LinkedIn announced that it had reached a major milestone in its transition from IPv4 to IPv6, with more than 50% of LinkedIn pages accessed over IPv6 via mobile devices in the US.



CRM



Technical outreach

Date	Event	Location	Туре	Topic
25 Aug	VNNIC OPM	VN	Tech talk	Whowas: a resource history service at APNIC IPv6 trends and IPv4 transfers
7-14 Sep	APNIC 44	TW	Tech talk	Global IRR and RPKI Problem Statement
7-14 Sep	APNIC 44	TW	Tech talk	Transition to a Single RPKI Trust Anchor
7-14 Sep	APNIC 44	TW	Tech talk	Lightning Talks: - IPv6 transition at APNIC - APNIC 44 conference network
7-14 Sep	APNIC 44	TW	Workshop	Network Security workshop
19-21 Sep	HKNOG	НК	Workshop	DNSSEC workshop
Oct	MYNOG	MY	Tech talk + workshop	MPLS workshop - RPKI update
Nov	IDNIC OPM	ID	Workshop	Network Security workshop

Table 15 - Technical outreach



APNIC Labs outreach

- 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)
- The State of IP Addresses (ARIN 39)
- An introduction to Internet of Stupid Things (RIPE 74)
- Scoring the root server system (OARC 26)

- Who's asking? (OARC 26)
- The Death of Transit and Beyond (ENOG 13, Euro Peering Forum 12)
- Implementing and Deploying IPv6 and DNSSEC in the Network from End User's Point of View (by Joao Damas, LACNIC 27)
- More Specifics in BGP (IEPG Meeting, IETF 99)
- Some Thoughts on the Internet of Things (SGNOG 5, AUSNOG, RIPE 75)
- Re-Engineering the Root of the DNS (APNIC 44)
- In Defence of NATs (APNIC 44)
- How Labs Measures (APNIC 44)
- Measuring the KSK Roll (APNIC 44)
- Some Thoughts on the Internet of Things (Video presentation to TOP-IX Meeting)

- IPv6 issues with Fragmentation (SSAC Workshop)
- DNS and IPv6 Fragmentation (DNS OARC 26)
- IPv6 Extension Headers (NANOG 71, Netnod Tech Day, RIPE 75)
- More Specifics in BGP (RIPE 75)
- A Signalling Mechanism for Trusted Keys in the DNS (ICANN 60, IEPG, IETF 100)
- IPv6 Fragmentation and Extension Headers (IPv6 Measurement Group, IETF 100)
- A Signalling Mechanism for Trusted Keys in the DNS (DNSOPS Working Group, IETF 100)
- Peering: Then and Now (ThaiNOG 2)
- Are we ready for an IPv6 only Network? (AINTEC 2017)





Cybersecurity outreach

- 20 regional security events, including 6 trainings
- FIRST Symposium at the APNIC 44
- LaoCERT: cybersecurity seminar and workshop
- Singapore International Cyber Week
- Third Country Training Program on Cybersecurity for ASEAN countries (Singapore).
- Asi@Connect: cybersecurity and incident response training alongside the <u>APAN 44</u> conference in China and with BTCIRT in Bhutan.
- INTERPOL: cybercrime training course for LEAs from across the Pacific



CERTs

Pacific communities to benefit from AUD 100,000 grant to APNIC Foundation

By Duncan Macintosh on 5
Jul 2017

Categories: Community, Development

Tags: APNIC Foundation, CERTs, Pacific, Security, grants









◀ Blog home



In a recent post, Paul Wilson wrote about the importance of Computer Emergency Response Teams (CERTs) and APNIC's support for the new Tonga CERT. Over the past several months the APNIC Foundation has been working to attract funding for support of more CERTs in the Pacific.

I'm pleased to report that the Australian Government has generously provided an initial AUD 100,000 grant to the APNIC Foundation to continue the development of national CERTs in the Pacific. This will extend APNIC's work in promoting Internet security in the region.

It's exciting news for the Internet in the Pacific. CERTs are recognised as a critical component of Internet security. Without a CERT to serve it, any community will be more vulnerable to security risks and have a much harder time mitigating those risks.

CERTs

Strong start for PNG CERT

By Adli Wahid on 21 Nov 2017

Categories: Community, Development

Tags: APNIC Foundation, CERTs, PNG, Security, capacity development







◀ Blog home



Computer Emergency Response Teams (CERTs) and Computer Security Incident Response Teams (CSIRTs) play an important role in Internet safety in the region.

Earlier this month, Papua New Guinea's (PNG) National Information and Communications Technology Authority (NICTA) organized a two-day workshop in Port Moresby focused on establishing a national CERT in PNG.

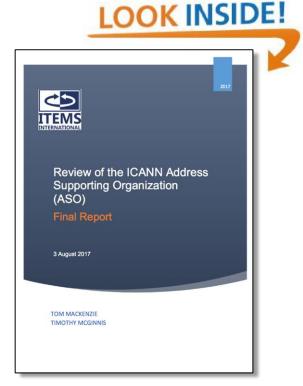
APNIC was invited by NICTA to be a part of this milestone, along with network operators, representatives from financial, law enforcement and academic institutions, and government agencies.

In his opening remarks, Mr Sam Basil, the Minister for Communications, Information Technology and Energy, highlighted





ASO Review



- 1. The ASO is one of the lesser-known Supporting Organizations within ICANN; yet it is one of the better-organized and efficient parts of the ICANN system.
- 2. There is considerable misunderstanding about scope and separate roles of the ASO-AC and the NRO-EC.
- 3. The ASO MoU has stood the test of time. However, certain aspects of the ASO MoU need to be updated.

PNG IXP

Event Wrap: PNG IXP Launch

By Bhadrika Magan on 7 Jun 2017

Categories: Community, Development

Tags: Event Wrap, IXPs, PNG, capacity development









◀ Blog home



APNIC participated at the official launch of PNG-IXP in Port Moresby on 17 May 2017. APNIC had previously provided technical assistance to support the creation of this neutral IXP (Internet Exchange Point).

Hosted by PNG's telecommunication regulator, the National Information and Communications Technology Authority (NICTA), the new IXP aims to reduce delay and operational costs associated with routing local traffic via international links, improving the quality of connectivity and service.

Fifteen providers have signed the IXP association charter, and five have connected and are providing traffic.

APNIC activities



Questions?





APNIC Secretariat Report

December 2017

DRAFT 0.1 CONFIDENTIAL

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1 Introduction

This report is provided to the APNIC Executive Council (EC) for the quarterly face-to-face meeting in Brisbane on 7 December 2017. It provides a summary of activities from Q1 2017 and 'to date' for the current quarter, Q4 2017, up to 21 November.

1.1 Executive Summary

Highlights:

- APNIC Service metrics continue to show high satisfaction and SLA results (2.1)
- Membership growth has slowed slightly during 2017, with 65 members/month in Q3 (2.2)
- Transaction volumes for delegation services have slowed during 2017, however transfer volumes have increased (2.4)
- Remaining IPv4 stock is currently projected to last until mid-2020, at current consumption (2.4.1).
- APNIC has been active in promoting awareness of the DNSSEC KSK rollover (3.1.4 and 5.3)
- APNIC 44 received very positive satisfaction results following the post-conference survey, and had 383 attendees, including 128 Member organizations (3.2)
- There was one security incident in this reporting period (4.5.5).
- APNIC now has a total of 11 Community Trainers (7.4.2.3).

Notable project activities and developments:

- Implementation of whois 'Organization' object (2.4.7)
- Improvements to 'Member on boarding' processes (3.1.6)
- Renegotiation of APNIC MoU with APIA/APRICOT (3.2.4)
- 'Last-modified' attribute, which changes the 'changed' attribute in whois implemented (4.1.4)
- Implementation of Single-Sign-On backend for authentication of access to APNIC services (4.1.7)
- Planning and announcement of transition to RPKI 0/0 trust anchor (4.1.1)
- APNIC office migration to private IPv4 addresses and IPv6-only WiFi network (4.2.1)
- Salesforce CRM is now in operational deployment (4.5.1)
- Eight international engagements by technical team members (4.6), 32 by APNIC Labs (5.1), 20 by Security staff (6.1.2.3)
- Increase of CERT activities in the Pacific with additional assistance under APNIC Foundation funding (6.1.1.3)
- Contributions to ASO Review, completed August 2017 (6.1.2.2)
- Technical assistance for PNG IXP (7.5.2)

2 Services Area

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

- Membership administration and support
- Internet resource delegation, transfer and registration

2.1 Services SLA and customer satisfaction

2.1.1 SLA for service requests

The APNIC Services Area aims for a maximum two-working day turnaround to respond to external requests such as new Member applications, Member resource requests, IPv4 transfers, membership, and helpdesk support. The following chart shows the percentage of compliance with this SLA in 2017.

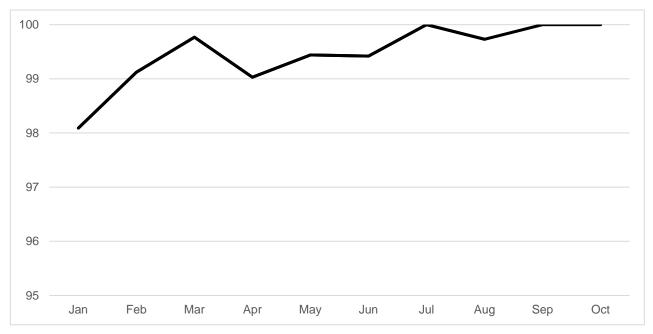


Figure 1 - Services requests SLA

2.1.2 Services satisfaction

An 'Instant Feedback' invitation is sent out after every service interaction. The figure below shows feedback received for the following services:

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

• The relative areas of 'patches' in the graph (and the number) represent the number of ratings of each type received.

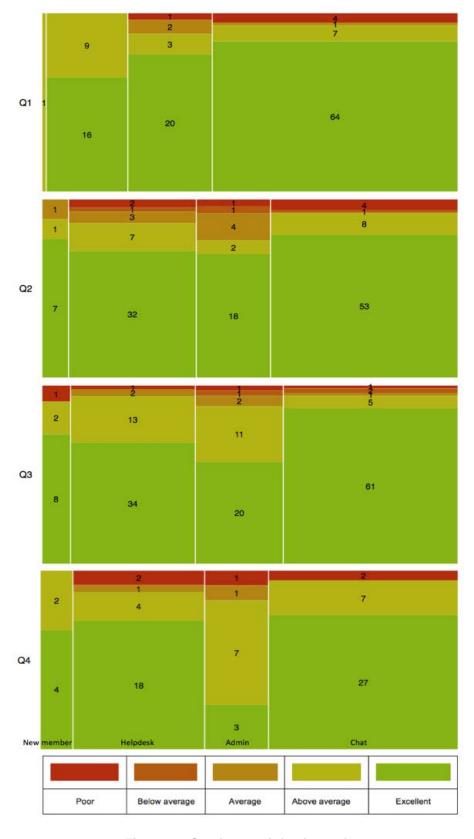


Figure 2 – Services satisfaction ratings

Services Area staff actively follow up on negative feedback received, to resolve outstanding issues and improve systems where possible.

2.2 Membership administration and support

2.2.1 Membership statistics

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
New Members	235	221	196	104
Closed Members	94	78	68	43
Reactivated Members	6	2	2	4
Total Members	6,145	6,288	6,437	6,480

Table 1 - Membership growth

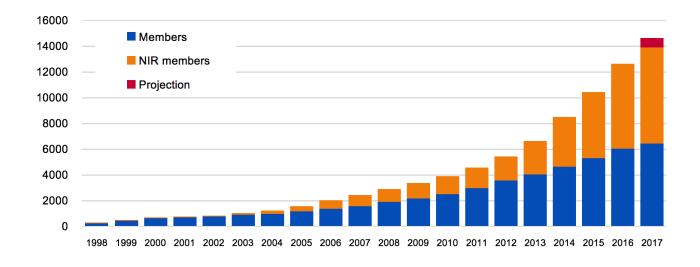


Figure 3 - Total membership

2.2.2 Membership industry type

Since implementing a set of standard 'industry type' values, agreed with RIPE NCC, all APNIC Members have now been classified accordingly. It is hoped to extend this to members of NIRs in future.

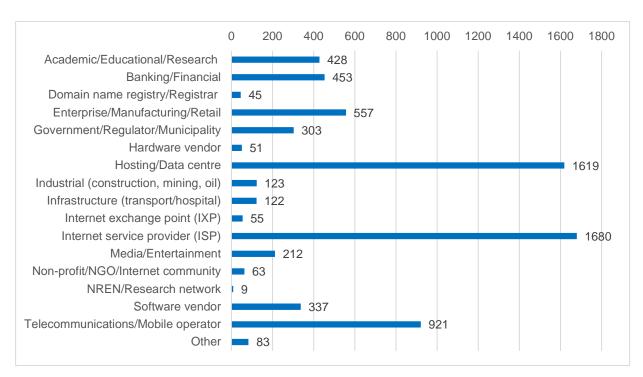


Figure 4 - Industry types

2.2.3 Fraud report

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

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Identity theft	5	4	0	0
Fabricated documents	1	2	0	0
Fabricated needs	6	3	2	1
Total fraud attempts	12	9	2	1

Table 2 - Fraud attempts

2.3 Member engagement

2.3.1 Member Gatherings

APNIC Member Gatherings provide an opportunity for APNIC staff to share information about APNIC activities, receive feedback, provide service support and build rapport with Members.

The duration of a Member Gathering is usually about two hours. Typically, it starts with a 'meet and greet' welcome reception and followed by a short presentation and Q & A session.

APNIC surveys Members for their topics of interests before a gathering is held to tailor the content to attendees.

To maximize the use of APNIC resources and Members' participation, Member Gatherings are usually held together with a local event such as a NOG meeting or training activities.

Date	Location	Number of attendees	Notes
21 April	Guangzhou, China	30	Post Macau training
31 May	Phnom Penh, Cambodia	16	With APNIC training
15 June	Ulaanbaatar, Mongolia	17	With APNIC training
18 June	Kathmandu, Nepal	17	With npNOG
28 July	Jakarta, Indonesia	26	With IDNOG

Table 3 - Member Gatherings

2.4 Internet resource services

2.4.1 Available IPv4 addresses (103/8)

APNIC is 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	Q3 2017	Q4 2017
Delegations (/24)	2,087	1,925	1,541	679
Remaining	40.01%	37.41%	35.21%	34.25%

Table 4 - Available IPv4 address space

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

2.4.2 IPv4, IPv6, and ASN delegations

The following table shows the number of delegations for each resource type.

Resource	Q1 2017	Q2 2017	Q3 2017	Q4 2017
IPv4 (103 /8)	567	566	501	233
IPv4 (recycled space)	86	61	32	11
IPv6	328	376	311	157
ASNs	336	353	238	200

Table 5 - Resource delegations

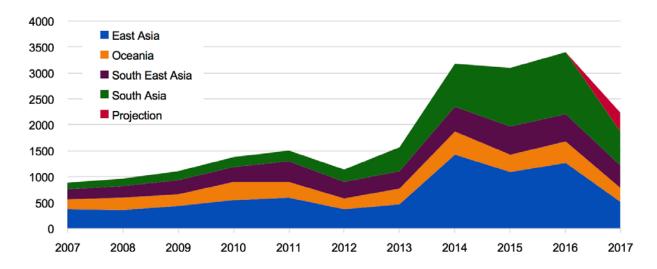


Figure 5 – IPv4 delegations

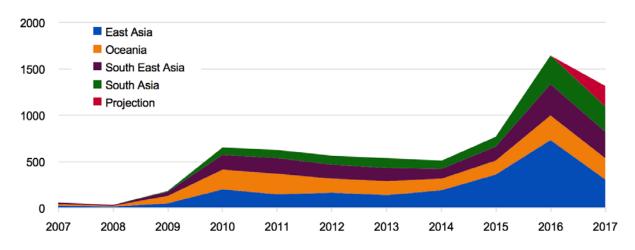


Figure 6 – IPv6 delegations

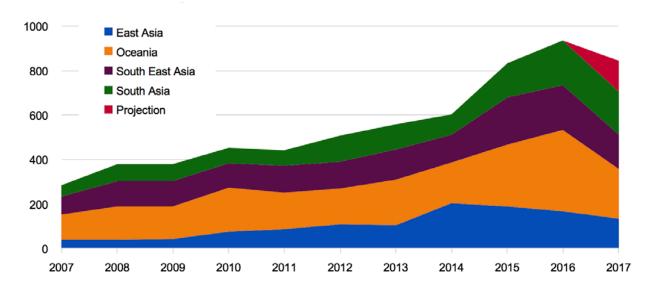


Figure 7 – ASN delegations

2.4.3 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 55.93% to date.

Resource type	Q1 2017	Q2 2017	Q3 2017	Q4 2017
IPv4 (103/8)	67.74%	68.90%	69.95%	70.70%
IPv4 recycled space	25.87%	25.52%	25.15%	24.93%
IPv6	51.98%	54.11%	55.50%	55.93%

Table 6 - Member resource type holdings

2.4.4 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 to the recycled pool and requests on the waiting list are fulfilled accordingly.

As of 21 November 2017, there are 367 entries on the waiting list, for a total of 1,387 x /24 IPv4 blocks.

2.4.5 IPv4 transfers and returns

Mergers/acquisitions and market transfers are two major IPv4 transfer activities. Permitted by APNIC policies, market transfers happen within the APNIC region, or to and from other RIR regions. Currently, ARIN and RIPE are the two regions that have the compatible IPv4 transfer policy.

Transfer type	Q1 2017		Q2 2017		Q3 2017		Q4 2017	
	Requests	24s	Requests	/24s	Requests	/24s	Requests	/24
Mergers/ acquisitions	40	680	27	901	34	736	35	15,303
Market transfers	54	2,667	75	4,293	76	4,652	39	3,503
• Intra-RIR	44	2,359	61	2,461	50	1,293	23	1,811
Inter-RIR	10	308	14	1,832	26	3,359	16	1,692

Table 7 - IPv4 transfers and returns

As of 21 November 2017, the total of IPv4 addresses transferred between APNIC and other RIRs are as below.

Inter-RIR transfers	Requests	/24s
ARIN to APNIC	184	39,972
RIPE to APNIC	13	1,798
APNIC to ARIN	18	428
APNIC to RIPE	10	475

Table 8 - Inter-RIR transfers

IPv4 transfers that involve the 'last /8' address blocks are tracked and may be reported in APNIC meetings. The following table shows the number of transfers.

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Market transfers	18	14	33	6
Mergers/acquisitions	22	13	12	13

Table 9 - Transfers of 103/8 space

2.4.6 Resource certification (RPKI)

The following table shows the percentage of IP addresses under ROAs out of the total IP addresses delegated by APNIC. Note the percentage for Q4 2016 was 0.91% (IPv4) and 0.29% (IPv6).

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
IPv4	1.04%	1.85%	1.79%	1.80%
IPv6	0.33%	0.36%	0.36%	0.37%

Table 10 - ROA coverage

2.4.7 Whois organization object implementation

The organization object is a newly created whois object type introduced as part of the recent whois software upgrade in June. This object contains contact information of the organizations that may hold Internet number resources. APNIC contacted all account holders in July to update their organization details.

As of 24 November, over 78% of APNIC Member accounts have updated their organization details. Organization objects were first inserted in the APNIC Whois Database on 9 August.

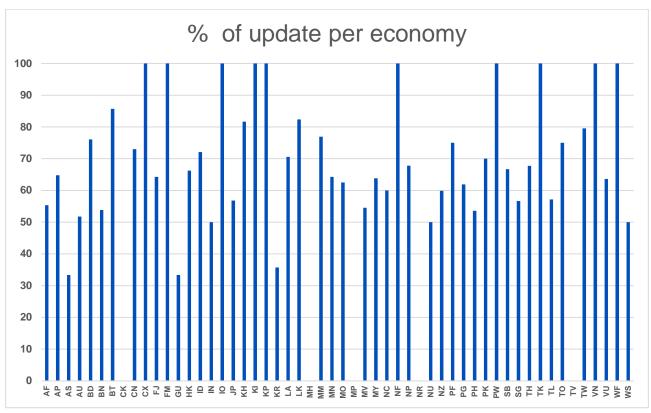


Figure 8 - Organization details update

3 Communications and Events

3.1 Communications

3.1.1 APNIC Blog

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Views	73,451	130,114	83,714	45,180
Posts	83	105	92	48

Table 11 - APNIC Blog activity level

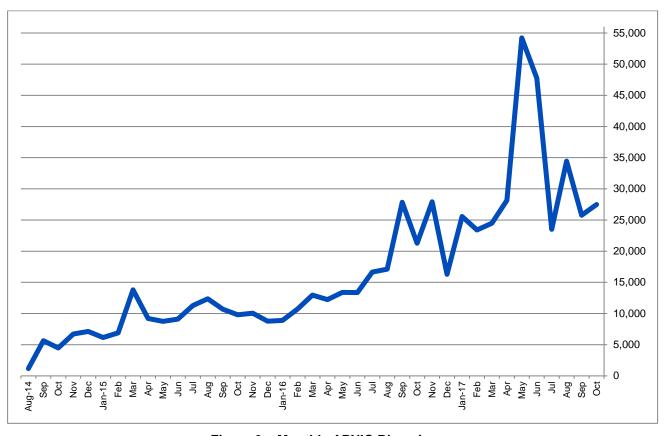


Figure 9 - Monthly APNIC Blog views

- APNIC Blog readership in Q3 2017 returned to 83,714 following the record Q2 spike. Average monthly views in Q2 were 27,905. In Q4 so far, the blog is maintaining similar readership levels, however, December is typically a slow month for the blog so final Q4 figures are expected to be lower than Q3.
- At the end of June 2017, the blog had surpassed 2016's total annual views. Total views to date for 2017 (332,459) are 82% higher than the same period a year ago (2016: 182,428) and the 2017 monthly average of 31,476 is 90% higher than 2016's (16,560).

- There have been 118 Guest Posts so far in 2017. The blog is a forum for community articles and discussion, and the proportion of Guest Posts has steadily risen. In 2017, 45% of posts have been Guest Posts; this number was 23% in 2016.
- Significant content during the period included Geoff Huston's piece on NATs, a guest post on network geolocation information, and a review of YouTube's performance over IPv6.

3.1.2 Social Media

	Q1 2017	Q2 2017	Q3 2017	Q4 2017
Facebook Reach Likes	139,012	176,382	126,829	118,613
	26,247	26,421	26,548	26,612
Twitter • Followers • RT/Likes/Mentions	7,170	7,521	7,866	8,003
	2,244	1,859	2,760	1,362
YouTube • Views • Minutes	12,839	5,910	9,284	3,382
	93,600	29,244	59,879	19,050
Slideshare • Views	36,860	39,615	36,719	17,921
LinkedIn Reach Followers	45,559	67,700	72,366	20,041
	2,347	2,468	2,638	2,723

Table 12 - APNIC Social Media activity

3.1.3 Whois maintainer/IRT object breach

Communication support was provided to the Technical and Services teams to help ensure APNIC
Members and stakeholders were aware of the whois maintainer/IRT object issue (password attributes
included in published whois data), understood the actions APNIC had taken, and any concerns were
addressed.

3.1.4 DNSSEC KSK Rollover

- APNIC continues to support ICANN's plans to rollover the DNSSEC Root Zone KSK (Key Signing Key) by raising awareness among operators performing DNSSEC validation. On 28 September 2017, ICANN announced the KSK rollover was to be postponed until 2018.
- During Q3/4, communication activities included:
 - A 45-minute information session held at APNIC 44 with Geoff Huston and ICANN's Ed Lewis.

- Three KSK information emails sent to identified network operators (from APNIC Labs data) and the wider membership.
- Publication of a blog post from Geoff Huston explaining the reasons for the keyroll postponement.
- Updates to the KSK Rollover resources web page.

3.1.5 Website content update – Community and Security pages

- All web pages in the Community section of the APNIC website were reviewed, and updated pages will go live in December.
- An entirely new Security section (which takes into account feedback from Members and the EC following the APNIC Survey) is also under construction for deployment in December.

3.1.6 Member on boarding improvement project

- A review of communications with new APNIC Members identified improvements to improve experience, better communicate membership benefits, and encourage participation in community activities (such as policy development).
- Progress to date includes:
 - An improved standard communication flow to new Members.
 - Development of new communications for the six-month period after resources are delegated.
 - Revamped welcome pages for new Members, updated FAQs, welcome video from Paul Wilson, and a training promotion video.
- Testing will be completed in Q4 to allow the improvements to go into production.

3.1.7 Personas project

A series of eight APNIC stakeholder 'personas' were developed for use in in marketing and communications, user experience improvement, and service development.

3.2 Events

3.2.1 APNIC 44

 APNIC 44 was successfully held in Taichung, Taiwan, from 7 to 14 September 2017, at the Splendor Hotel.

Conference Statistics	
Total number of on-site delegates	383
Economies represented	43
APNIC Member organizations represented	128
Remote Participants – Adobe Connect	186
Remote Participants - YouTube	697 views; 6,432 minutes views
#apricot2017 tweets	459
Total people reached	465,263

Table 13 - APNIC 44 conference statistics

The post conference survey attracted 81 responses, a delegate response rate of 21%. Delegates rated the conference experience positively, 54% being very satisfied and 42% satisfied with APNIC 44. Ninety-six percent rated the quality of conference speakers positively, with the remaining 4% neutral.

3.2.2 APRICOT 2018

- APRICOT 2018 will be held in Kathmandu, Nepal, from 19 to 28 February 2018, at the Yak and Yeti Hotel. Registrations for APRICOT 2018 currently stand at 242.
- APNIC will support several other events within the APRICOT program, including an ICANN GAC "Underserved regions" Workshop, a FIRST TC, and APIX and APStar meetings. APTLD 73 will be held at the nearby Hotel Annapurna Kathmandu before APRICOT begins.
- Program submissions are now open and keynotes are expected to be announced by the end of Q4.
- APNIC has proposed holding a Hackathon before the conference begins and further details will be announced to the community shortly.

3.2.3 Future conferences

- A site visit to Noumea for APNIC 46 was completed in November. Preparations for the event are underway and the website will be launched in Q1 2018.
- Chiang Mai, Thailand was announced during APNIC 44 as the location for APNIC 48. The THNIC Foundation and Thai ISP Association (TISPA) have agreed to host and co-host the event.
- APRICOT 2019 will be held in Daejeon, Republic of Korea. The draft dates are 19 February 2019 to 1 March 2019.

3.2.4 APRICOT summit MoU

A new MoU between APNIC and APRICOT was finalized and signed at APNIC 44.

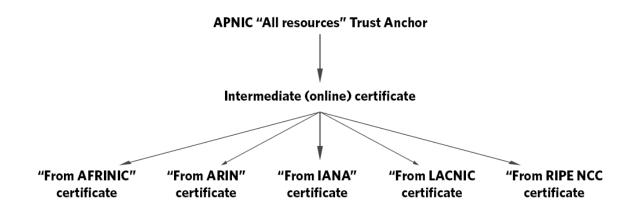
4 Technical Area

4.1 Software

4.1.1 0/0 transition

This is a cross-RIR collaboration to address concerns around transient validation errors having serious effects on relying parties. It also simplifies the operation and management of the system.

■ The transition from the five Trust Anchors to a single Trust Anchor (TA) has been completed: the new intermediate CA signed under the new TA was issued, and the current five online CAs have now been signed under the new intermediate CA.



The other TA's resources have been reduced to AS0, to indicate they have no longer been in use, and will be removed in January 2018.

4.1.2 RDAP improvements

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

- The current test and verification/QA plans were completed during the previous sprint.
- Work on the initial test install and deployment is ongoing. Once verification has been completed in the test environment, it will be moved to the rdap.apnic.net production environment.

4.1.3 MyAPNIC/ARMS development

The following features/improvements have been deployed or are currently being deployed:

- Reversal of account closures in ARMS
- Numerous bug fixes

4.1.4 Whois development

- Whois 'last-modified' attribute has been implemented, replacing the 'changed' attribute.
- Phase 2 is set to occur after the APRICOT 2018 meeting, where the use of the 'changed' attribute will no longer be accepted.
- IDNIC NRTM bi-directional mirroring is currently being tested following the completion of the initial setup.

4.1.5 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.

- Deployed in a test environment with partial functionality.
- Working with IS team on an integration issue; specifically, RIPE Forum requires mail to supply the message-id header, but the current email system does not assert this.

4.1.6 RPKI Repository Delta Protocol (RRDP)

- Publication server deployment has been completed, and is updated every 30 seconds based on the state of the rsync repository.
- Work continues on the changes required to support the delta protocol deployment publicly (for example, adding the delta protocol URL to be set for CA certificates, along with supporting database/module changes).

4.1.7 Single Sign-On (SSO)

SSO will provide common authentication across all sites and services.

- The webops team is reviewing the test internal and private production deployments and has made various minor requests. Deployments with these changes are now being prepared for the two environments.
- UAT by the Services team will begin at the end of November, with initial public deployment expected by the first week of December.
- The project is slightly delayed mainly to a technical issue that was found during the test (now resolved).

4.2 Infrastructure Services

4.2.1 Network

- IPv4 address space consolidation:
 - Planning of address space usage done.
 - Office WiFi infrastructure renumbered to private address space.
 - Creating new private address space networks in progress.
- Network monitoring improvements:
 - Majority of work has been completed.
 - Working on improving integration with Pagerduty for alerts in progress.
- Network switching and routing re-architecture:
 - Migrations to new core switches done.
 - Old core switches converted to edge switches.
 - VPC used between sites, and for site connections to the core switches where possible.
 - Jumbo frames enabled on storage networks.
 - OSPF migration in progress.
- ROA verification:
 - Planning and testing completed.
 - Working on resolving problem with running the validation server in Kubernetes.

4.2.2 Server infrastructure and services

- Whois updates:
 - Whois NRTM server upgraded.
 - Database replication changes between whois master, NRTM, and query nodes mostly complete;
 some further NRTM and database replication changes are in progress.
- Archiving improvements:
 - Improvements to reliability of archive jobs completed.
 - Evaluated cloud and on-premise backup storage options.
 - Ordered on-premise storage server for backup of the archive.
- DNS improvements:
 - Puppet management of catalogue zones implemented.
 - Continued migrating ccTLD zones .cy and .kw to new DNS cluster.
 - Ns1 and Sec1 servers upgraded and migrated to VMs.
- ISMS:
 - Finalized IS procedures.
 - Test audit completed.
 - Working on actions from audit.
- Staff network backup appliance:
 - Configured NAS system.
 - Tested with group of power users.
 - Working on rolling out to all staff.
- Other:
 - Completed 444 NOC tickets.
 - Implemented SSO authentication for BambooHR, Salesforce, and GetAbstract.
 - Office365 Sharepoint preparation and implementation work with the Business team.
 - Mailing list configuration reviews.
 - Planning and preparation of RPKI HSM key migration in progress.
 - blog.apnic.net migration to Kubernetes completed with Webops team.
 - Office DHCP, RADIUS, and OpenLDAP servers upgraded.

4.3 Web operations

4.3.1 Internet directory

Resumed work on this project as follows.

- Data ingestion reduced from more than 24 hours to less than an hour
- Data storage algorithm enhanced to allow for events across time queries such as transfers in and out this is 80% complete.
- New features added:
 - Drill down to day.

- Drill down to month.
- Work is in progress to allow graphs to be 'widgets' so they can be embedded into external apps.
- Query across multiple economies to allow for comparison.

4.3.2 Website and blog

- Web accessibility, test, and improvements have been done to APNIC website theme and content; ongoing assessment and improvement is now in place and scheduled for release with the new SSO headers.
- The blog has been migrated to new hardware and deployed onto the new Kubernetes environment; code and systems all upgraded to the latest versions.
- New style guide is under development based on Bootstrap 4.

4.3.3 Conferences

 Continued improvements are being made to the Conference Manager to allow for easier editing for administrators.

4.3.4 Other

- Fellowship system improvements allow for more flexibility by event organizers.
- APNIC Foundation website is now deployed into the Kubernetes environment.
- APNIC Academy code has been moved and is currently under test for deployment via Docker and Kubernetes.

4.4 Information analysis and visualization

4.4.1 Internal information service

- On-demand information services to assist ER staff is being delivered.
- Reports to assist managers in tracking service delivery is being deployed.
- Pilot deployment of services to cloud platforms is underway.
- Security breach analysis and log audit is underway.

4.4.2 Global collaboration

- ICANN contract work: IPv6 compliance report.
- ICANN RSSAC root DNSSEC key rollover assessment project.
- AFRINIC collaboration to discuss potential of blockchains for registry.

4.5 Information, Systems, Service, and Security

4.5.1 CRM

Significant progress has been made since the previous reporting period. The following features have been added.

- Release management process and environment setup.
- Home page redesign, SSO access, and downtime monitoring.
- Country code from ISO standards as single source of truth to eliminates errors.
- ER support:

- Business card import, lead and contact creation, and management with custom fields.
- A chatter feed and task management for team collaboration.
- Events and sub-events can be created and referenced to touchpoints.
- Restricted access to contractors to allow for external collaboration.

Travel support

- Streamlined the current manual process with a single source of truth to help reduce work and errors.
- Automated Staff Movements calendar and wiki updates. Also includes ICS subscriptions and web embedding to display calendar in public website.

4.5.2 Public services operational metrics

Public service	2016 average annual query rates (queries/second)	2017 average YTD query rates (queries/second)
Whois	463	470
RDAP	2	4.4
rDNS	21,000	17,400 ⁽¹⁾
RPKI	18	23
FTP	29	1.77 ⁽²⁾
MyAPNIC	1.5	0.18 ⁽³⁾

Table 14 - Public services operations metrics

- 1. ns4 was decommissioned at the end of May; ns1 and ns3 now have a lower percentage of total rDNS queries (now 2 of 6 as opposed to 3 of 7 servers), hence the drop.
- 2. The number in 2016 (29 qps) is skewed high due to an increase in traffic experienced in December 2016.
- Previous reported numbers encompassed all requests including system health checks, which
 are the majority of the queries. The current number excludes system health checks and is
 more representative of operational requests.

4.5.3 Information Security Management System (ISMS)

- First internal audit has been completed.
- It identified procedural gaps, and assigned additional roles and responsibilities to various positions where required.
- The ELT ISMS overview is scheduled for the end of November, to communicate roles and responsibilities and identify high risk items.
- A cross-area ISMS Risk workshop is scheduled for Q1 2018.
- Process owners are to review processes by the end of Q1 2018.

4.5.4 Network security (firewall) project

- Physical installation and setup completed.
- Currently working with Cisco to decide on best configuration for our use case.

4.5.5 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: 12/10/2017

Incident type: APNIC whois maintainer and IRT password attributes (including

hashed password values) were inadvertently included in

downloadable whois data

Systems/Services affected: Whois service

Remediation: The error was fixed to prevent further inclusion of password hashes

in the whois downloads on 13 October, and as a precaution, worked with resource holders to reset all maintainer and IRT passwords in

the subsequent days.

Future improvement/prevention plan: A detailed post mortem was conducted by the Software and IS

teams, clearly identifying the root cause, with a list of improvements created mainly around improved inter-team and review processes.

4.6 Technical outreach

Six staff members from the Tech team participated at the following events; assisting in four workshops and delivering five Tech Talks since the previous report.

Date	Event	Location	Туре	Topic
25 Aug	VNNIC OPM	VN	Tech talk	Whowas: a resource history service at APNIC IPv6 trends and IPv4 transfers
7-14 Sep	APNIC 44	TW	Tech talk	Global IRR and RPKI Problem Statement
7-14 Sep	APNIC 44	TW	Tech talk	Transition to a Single RPKI Trust Anchor
7-14 Sep	APNIC 44	TW	Tech talk	Lightning Talks: - IPv6 transition at APNIC - APNIC 44 conference network
7-14 Sep	APNIC 44	TW	Workshop	Network Security workshop
19-21 Sep	HKNOG	HK	Workshop	DNSSEC workshop
Oct	MYNOG	MY	Tech talk + workshop	MPLS workshop - RPKI update
Nov	IDNIC OPM	ID	Workshop	Network Security workshop

Table 15 - Technical outreach

5 APNIC Labs

5.1 Presentations

To date in 2017, Geoff Huston and Joao Damas have delivered 32 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)
- The State of IP Addresses (ARIN 39)
- An introduction to Internet of Stupid Things (RIPE 74)
- Scoring the root server system (OARC 26)
- Who's asking? (OARC 26)
- The Death of Transit and Beyond (ENOG 13, Euro Peering Forum 12)
- Implementing and Deploying IPv6 and DNSSEC in the Network from End User's Point of View (by Joao Damas, LACNIC 27)
- More Specifics in BGP (IEPG Meeting, IETF 99)
- Some Thoughts on the Internet of Things (SGNOG 5, AUSNOG, RIPE 75)
- Re-Engineering the Root of the DNS (APNIC 44)
- In Defence of NATs (APNIC 44)
- How Labs Measures (APNIC 44)
- Measuring the KSK Roll (APNIC 44)
- Some Thoughts on the Internet of Things (Video presentation to TOP-IX Meeting)
- IPv6 issues with Fragmentation (SSAC Workshop)
- DNS and IPv6 Fragmentation (DNS OARC 26)
- IPv6 Extension Headers (NANOG 71, Netnod Tech Day, RIPE 75)
- More Specifics in BGP (RIPE 75)
- A Signalling Mechanism for Trusted Keys in the DNS (ICANN 60, IEPG, IETF 100)
- IPv6 Fragmentation and Extension Headers (IPv6 Measurement Group, IETF 100)
- A Signalling Mechanism for Trusted Keys in the DNS (DNSOPS Working Group, IETF 100)
- Peering: Then and Now (ThaiNOG 2)
- Are we ready for an IPv6 only Network? (AINTEC 2017)

5.2 Articles

Geoff Huston has authored the following 27 articles during 2017:

- Scoring the DNS Root Server System, Pt 2 A Sixth Star?
- Leaving it to the Last Second
- Let's 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! (a review of satellite access technologies)
- BBR, the new kid on the TCP block
- RIPE 74 report
- OARC 26 report
- More Specifics in BGP
- IETF 99 Report (three separate articles)
- Dealing with IPv6 fragmentation in the DNS
- Dealing with IPv6 fragmentation in the DNS, Part 2
- Opinion: In defence of NATs
- Not rolling the KSK
- Thoughts on DNS-OARC 27
- How to: Raw sockets in IPv6
- Impressions from RIPE 75
- Google fixes Public DNS Service

5.3 Research

Current research activities include:

- KSK rollover investigations, including resolver characterization and user impact measurement
- IPv6, Extension Headers and IPv6 Fragmentation
- Measuring the extent of latent QUIC capability
- DNS related research with ICANN (contract extended to 2018)
- Investigation into the dynamic behaviour of BBR (Google's new TCP flow control algorithm)
- Ongoing activity with the ICANN SSAC and SSR2 Committees
- Investigation of DNSSEC and its role in NSEC caching

6 Strategic Engagement

6.1 External Relations

6.1.1 ER highlights

- All APNIC external engagements are reported in APNIC Blog 'event wraps' and sometimes followed by extended blog posts about these events.
- A visualization of 2017 ER activities and planning can be found in 6.1.3.1 below.

6.1.1.1 NOG engagements

Since August 2017, APNIC staff participated in seven NOG events in the region.

- VNNOG, held with VNIX and the VNNIC IP Members Meeting, in Viet Nam
- SGNOG 5 in Singapore
- AusNOG 2017 in Australia
- HKNOG 5.0 in Hong Kong
- NANOG 71, held alongside DNS-OARC and ARIN 40, in the United States
- The inaugural LKNOG in Sri Lanka
- MYNOG 6, held with the MYIX, in Malaysia

6.1.1.2 World Telecommunications Development Conference 2017

- APNIC staff participated in the 2017 <u>World Telecommunication Development Conference</u> (WTDC) as a member of the ITU-D sector.
- APNIC took active part in discussions relating to IPv6 deployment, which resulted in amendments to Resolution 63 that acknowledged our ongoing partnership with the ITU to deliver IPv6 capacity building.
- Cybersecurity and Digital Object Architecture were contentious topics that APNIC followed as well.
- Before WTDC, APNIC participated in the 4th Meeting of the APT Preparatory Group for WTDC-17 in Malaysia.

6.1.1.3 Pacific CERT project

- APNIC staff travelled to Papua New Guinea to follow up on discussions of a National CERT, and facilitate two days of multistakeholder consultations around the effort.
- During the APCERT meeting in India, APNIC met with representatives from Tonga, Vanuatu, and Samoa on their various CERT-related efforts.
- APNIC staff also conducted engagements with the wider community on incident response capacity development in Kiribati.

6.1.2 Other developments

6.1.2.1 Internet governance

Since August 2017, APNIC participated in 7 national Internet Governance events.

- Nepal IGF, TWIGF in Taiwan, IDIGF in Indonesia, and NetHui in New Zealand.
- At Nepal IGF, APNIC hosted a community engagement meeting to promote active participation at APRICOT 2018 to be hosted in Kathmandu.
- APNIC sponsored the Nepal IGF and IDIGF, and fellowships for NetHui.

- APNIC staff participated remotely at KRIGF, held in South Korea.
- APNIC staff also participated in two schools of Internet governance, the regional APIGA held in South Korea and inSIG in India.

6.1.2.2 ASO Review

- A <u>90-minute consultation session</u> was held during APNIC 44 in Taichung to discuss the <u>ASO Review</u>. The APNIC EC provided inputs for consideration, such as accepting all recommendations of the report and, with regard to its final Recommendation #18 involving public consultation with the five RIR communities, also suggested 'non-status-quo' options in order to clarify the roles between the ASO AC and the NRO EC.
- The APNIC EC also appointed two community members to work on alternatives for Recommendation #18 with the other RIRs.
- Other RIR meetings were held during this period of time, however they were inconclusive with regard to Recommendation #18.
- At ICANN 60 in Abu Dhabi, the NRO EC and ASO AC agreed to initiate public consultations involving the five RIR communities, to determine the future structure of the ASO.

6.1.2.3 Security outreach

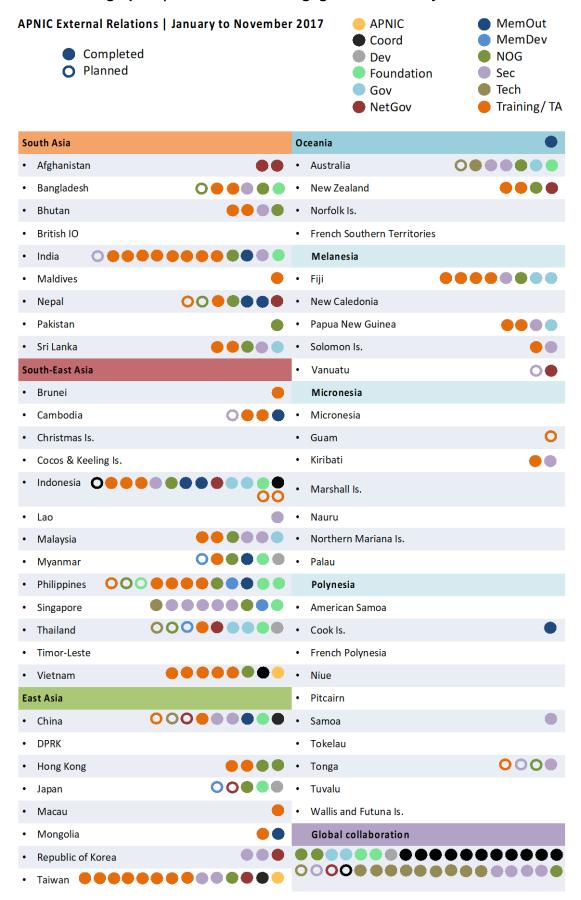
- Since April, APNIC has participated in 20 regional security events, including 6 training engagements, as well as partnering with FIRST to host a Symposium at the APNIC 44 meeting.
- APNIC worked with LaoCERT to host a cybersecurity seminar and workshop to bolster cybersecurity capacity across the community.
- APNIC engaged with regional policymakers and members of industry as well as the wider Singapore community on topics including IPv6 deployment, cybersecurity, and NOGs during the Singapore International Cyber Week. This engagement followed on APNIC's contribution to the Third Country Training Program on Cybersecurity for ASEAN countries hosted by Singapore.
- Working with Asi@Connect, APNIC staff delivered cybersecurity and incident response training alongside the <u>APAN 44</u> conference in China and with BTCIRT in Bhutan.
- In partnership with INTERPOL, APNIC contributed to a cybercrime training course for LEAs from across the Pacific

6.1.3 APNIC external engagements

Completed & Planned External Engagements 2016-2017			
Subregion	2016	2017	
S Asia	35	35 (38)	
SE Asia	58	60 (71)	
E Asia	23	33 (38)	
Oceania	39	31 (37)	
Global	34	32 (36)	
Total	189	191 (220)	

Completed & Planned External Engagements 2016-2017			
Category	2016	2017	
APNIC	5	2 (2)	
Coordination	19	15 (17)	
Development	17	4 (4)	
Foundation	n/a	13 (14)	
Government	13	12 (13)	
Internet Governance	10	9 (12)	
Member Outreach	9	11 (11)	
Membership Development	8	3 (5)	
NOG	16	22 (26)	
Security	27	31 (37)	
Technical	8	11 (15)	
Training	57	58 (64)	
Total	189	191 (220)	

6.1.3.1 Infographic | APNIC External Engagements January to November 2017



7 Development

7.1 Policy SIG

7.1.1 APNIC 43

Outcomes of APNIC 43 were reported in the previous Secretariat report.

7.1.2 Policy implementation

On Friday, 4 August 2017, APNIC announced the implementation of prop-117: Returned IPv4 address management and Final /8 exhaustion. As a result, two conflicting policy provisions were resolved by the community.

7.1.3 APNIC 44

7.1.3.1 Proposals

At APNIC 44 the Policy SIG considered six policy proposals.

Three proposals reached consensus at the SIG and Member meetings:

- prop-116-v004: Prohibit to transfer IPv4 addresses in the final /8 block
- prop-121-v001: Updating 'Initial IPv6 allocation' policy
- prop-122-v001: Updating 'Subsequent IPv6 allocation' policy

Three proposals were returned to the author for consideration:

- prop-118-v001: No need policy in APNIC region
- <u>prop-119-v001</u>: Temporary transfers
- prop-120-v001: Final /8 pool exhaustion plan

7.1.3.2 Confer

Confer was deployed using the new SSO system. Policy SIG Chairs were given access to the back-end administration screens and were able to monitor the system from the podium.

7.1.4 Policy implementation

On Monday, 20 November 2017, APNIC announced the implementation of all three proposals reaching consensus at APNIC 44. The proposals were implemented immediately requiring the editorial comment period to run following implementation instead of before implementation. The deadline for editorial comments is 19 December 2017.

7.2 NIR SIG

7.2.1 APNIC 44

An election was held for the role of Co-Chair. Zhen Yu nominated for another term and was the only candidate to stand for election. His new term will conclude at the beginning of APNIC 47. Ajai Kumar did not nominate.

Shyam Nair was unable to travel for personal reasons. The NIR SIG meeting was chaired by Zhen Yu, Co-Chair.

The APNIC 44 NIR SIG had presentations from the following NIRs: CNNIC, KRNIC, VNNIC, TWNIC, JPNIC, and IDNIC.

7.3 Cooperation SIG

7.3.1 APNIC 44

A Call for Presentations was sent to the mailing list on Tuesday, 18 July 2017. The meeting's theme was 'Trans-Border Cooperation on Cybersecurity'.

There were four presentations from TWNCERT, M3AAWG, Department of Cyber Security, Taiwan Executive Yuan, and Indian Infosec Consortium. The last of these was a remote presentation, which caused some disruptions due to poor connectivity.

7.4 Training

7.4.1 Key metrics

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

Table 16 - Training in 2017 (Q1)

Q2 2017	Face-to-Face	eLearning	
Courses	14	43	
Locations	13 cities in 12 economies	Online	
Participants	463	158	
YouTube	21,504 views + 261 subscribers		

Table 17 – Training in 2017 (Q2)

Q3 2017	Face-to-Face	eLearning	
Courses	22	25	
Locations	9 cities in 8 economies	Online	
Participants	861	97	
YouTube	19,283 views + 275 subscribers		

Table 18 - Training in 2017 (Q3)

Q4 2017	Face-to-Face	eLearning	Academy (YTD)
Courses	4	21	2
Locations	4 cities in 4 economies	Online	Registration total: 1,724
Participants	119	97	Enrolled - Security: 1,396 IRM: 218
YouTube	9,826 views + 123 subscribers		Certified - Security: 279 IRM: 22

Table 19 - Training in 2017 (Q4 to date)

7.4.2 Highlights

7.4.2.1 Resource plan Q3

- The APNIC Academy's second course on IRM was successfully launched.
- The SDN Train-the-Trainer's session was done and the course was launched at APNIC 44 with a good turnout.
- A new Community Trainer from Fiji was recruited, bringing the total to 11 Community Trainers.
- The Lab was upgraded with a Juniper router.
- The Training and Security teams have started collaborating more with the R&E (Research and Education) community by supporting workshops and tutorials. The Security team conducted a CERT/CSIRT development workshop at APAN 44 in Dalian in collaboration with GEANT, with funding support from Asi@Connect.

7.4.2.2 Resource plan Q4

The Training and Security teams conducted an Information Security workshop in Bhutan with funding support from Asi@Connect.

7.4.2.3 **Event plan Q3**

- Arranged a high-level security seminar at both the Solomon Islands and Kiribati during a training event.
- Collaborated with APT for IXP training in Cambodia.

7.4.2.4 Event plan Q4

- Conducted IPv6 training for the largest bank in Indonesia, BRI, with costs fully covered. We are
 planning to do more training with BRI and other banks in Indonesia and other economies in the future
 for better engagement and IPv6/IXP development.
- Collaborated with INTERPOL for Cybersecurity training in Fiji.
- Collaborated with APT for IPv6 training in Sri Lanka.
- Collaborating with APJII and CNNIC for training.
- Collaborating with ITU for IPv6 and Security training at PacNOG in Tonga.

7.5 Technical Assistance (TA)

7.5.1 TA summary

Q1 2017	Dedicated TA session	TA demo at conference	Email and 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 20 - TA in 2017 (Q1)

Q2 2017	Dedicated TA session	TA demo at conference	Email and 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 two new Members to PNG IXP

Table 21 - TA in 2017 (Q2)

Q3 2017	Dedicated TA session	TA demo at conference	Email and Skype TA
Number of activities	1	1	3
Locations	Kolkata, India	Myanmar	Mongolia, Myanmar, Fiji
Topics	IXP setup optimization and IPv6 deployment	Stakeholder discussion to support IXP setup	IXP improvement/ IXP deployment/ IXP deployment

Table 22 - TA in 2017 (Q3)

Q4 2017	Dedicated TA session	TA demo at conference	Email and Skype TA
Number of activities	1	0	3
Locations	Suva, Fiji	n/a	Mongolia, Fiji, PNG
Topics	IXP setup and routing optimization for IXP members	n/a	IXP improvement/IXP deployment/IXP improvement

Table 23 - TA in 2017 (Q4 to date)

7.5.2 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.
- The team visited relevant stakeholders and the local community in Myanmar to discuss on acceptable IXP model.
- The team helped set up the Fiji IX on site with four large ISPs connected and immediate benefits were witnessed with the peak traffic reaching 400Mbps.
- Observed the increased demand for help on IXP deployment and operations from less developed economies. The economies asking for help include not just Fiji, Myanmar and PNG, but also Bhutan, Cambodia, India, Mongolia, Pakistan, and Vanuatu.

7.5.3 TA resource plan 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.
- Brought in a new consultant, Mark Prior, to help with the Fiji IX set up. We are planning to engage with him more on IXP deployment projects around the Asia Pacific, and other network development projects in the Pacific.

7.6 Security outreach

- In July, APNIC participated in the INTERPOL Cybercrime Expert Group meeting in Singapore.
- At the APrIGF in Bangkok, APNIC collaborated with National CSIRT representatives (ThaiCERT, Tonga CERT, Bhutan CIRT, Taiwan CERT) to do a panel session on the role of National CSIRTs in improving cybersecurity.
- There were a number of activities in August. Adli Wahid was invited again as one of the instructors for the KrCERT/CC APISC training program. The program was attended by representatives from 20 economies. APNIC also contributed to the US-SG TCTP Cyber Security Workshop in Singapore,

- ICT4Peace workshop in Hanoi, and conducted a cybersecurity seminar followed by a technical workshop, for LaoCERT staff in Phnom Penh.
- APNIC's new Security Specialist, Jamie Gillespie, conducted a CSIRT workshop at the APAN Meeting in Dalian, China. This activity was carried out with support from GEANT.
- Before APNIC 44, Adli Wahid delivered a talk at CloudeSEC Taipei. At APNIC 44, a three-day FIRST Regional Symposia was organized in collaboration with FIRST and supported by local CERTS/CSIRTs in Taiwan. APNIC's Security Specialists also contributed to the Cooperation SIG and Data Gathering and Analysis BoF.
- In October, APNIC conducted a five-day Network Security workshop organized by the Bhutan Government Department of IT. The workshop was attended by more than 40 attendees from various agencies. APNIC also participated at the 8th APT Cyber Security Forum in Dhaka, Bangladesh.
- In November, Jamie Gillespie contributed to the Cyber Crime Investigation Training organized by INTERPOL and Fiji Police in Suva, Fiji. In addition, Adli Wahid was invited to participate at the ITU Regional Cyberdrill events in Moldova and Japanese Financial Sector Drill in Japan. Both Security Specialists participated at the APCERT Annual Conference in New Delhi, India.
- Pacific related activities: CERT awareness sessions were held in the Solomon Islands (July) and Kiribati (August). A CERT establishment workshop was organized in Papua New Guinea and Vanuatu in November. These events were facilitated by NICTA (in PNG) and the Office of the Government Chief Information Officer (Vanuatu). A Security workshop is also planned with TongaCERT in December.
- In December, APNIC will be contributing to a few security sessions at APECTEL in Bangkok, Thailand.
- APNIC provide sponsorship for regional security events organized by Sri Lanka CERT, The Honeynet Project, and Team Cymru (RISE).
- There has been increased participation and contributions from the community Honeynet project partners from Malaysia, Cambodia, Bhutan, Tonga, and Laos.

7.7 Community development

7.7.1 NOGs

- APNIC provided its fellowship management system to SANOG, APRICOT, APrIGF, and APIGA. Following feedback received from these organizations, work is underway on making the system more dynamic to cater to individual requirements rather than being constrained to the APNIC way of running the fellowships.
- The fellowship system has now gone through a major framework change to make the functions/modules dynamic so any organization or event can set up the system as they like and customize the application form. Some work is still in progress and is expected to be completed by mid-2018.
- APNIC is also planning to or has sponsored the following NOG events:
 - bdNOG 6
 - bdNOG 7
 - BTNOG 4
 - HKNOG 4.0
 - HKNOG 5.0
 - IDNOG 4
 - JANOG 41
 - LKNOG 1
 - MMNOG 2017

- MYNOG 2017
- npNOG 2
- npNOG 3
- NZNOG 2017
- PacNOG 20
- PacNOG 21
- PHNOG 2017
- PKNOG 1
- SANOG 29
- SANOG 30
- SGNOG 5
- VNNOG 2017

7.7.2 Security-focused event sponsorships

APNIC has sponsored or supported:

- APNIC APCERT, Viet Nam
- Global Honeynet Conference 2017, Australia
- RISE/Underground Economy Conference, Cambodia
- Networking, Systems and Security Conference (NSysS 2017), Bangladesh
- Sri Lanka Cert CC 2017, Sri Lanka
- LaoCERT Cyber Security Seminar

7.7.3 Organizational sponsorship and support

APNIC has sponsored or supported:

- AINTEC 2017
- APRALO
- APrIGF 2017
- APSIG 2017
- APIX @APNIC 43 and APNIC 44
- BKNIX Peering Forum
- MyIX Peering Forum 2017
- NetHui 2017
- NPIGF 2017
- IDIGF 2017
- GISWatch
- PacIGF 2017
- Peering Asia 1.0
- InternetWeek 2017
- IETF 100

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

7.7.4 Fellowships

Through an open process, <u>APNIC selected 50 fellows for APNIC 44</u> from the working professionals, youth, and the new 'Returning' fellowship categories. However, 48 fellows accepted the award and attended the event.

The fellows include 23 females and 25 males from 16 economies in the Asia Pacific region. This is the first time we have achieved close gender balance.

APNIC provided a level 1 basic Linux Administration training workshop to the APNIC 44 youth fellows, following feedback received from the youth fellows at APNIC 42. We also organized a <u>Fellows BoF</u> at APNIC 44.

APNIC contributed AUD 10,000 each to the APrIGF 2017 and PacIGF 2017 fellowship program and two technical fellowships to IETF 100, with an emphasis on diversity from developing economies from the region.

7.7.5 Regional infrastructure

Root servers

- Coordinated with Netnod and Sri Lanka Telecom to replace the failed I root server equipment in Colombo.
- APNIC assisted Verisign in the deployment of a J root server in Nepal.
- An APNIC-sponsored F root node installation is in progress at the PNG IXP, in collaboration with NICTA.
- The Brisbane F root node replacement is in progress.
- As discussed and agreed with ISC at APNIC 43 in HCMC, planning is underway to upgrade 10 old F nodes to a single server.
- Coordinating with the current F node host in Fiji to move it to the newly established Fiji IX facility so
 it benefits all the peers and the wider community.
- APNIC launched an Expression of Internet (EoI) from the community to deploy more root nodes in the Asia Pacific region.
- Received two Eols, one each from Indonesia and Taiwan, and coordination with these two hosts is in progress to deploy the K root nodes.
- Coordinating with Netnod to re-sign the outdated MoU with new terms. A new MoU is now in place with ISC.

Secondary DNS Support for ccTLDs

APNIC is gradually stopping its support and we are not accepting new requests. This is because
we have terminated the colo site in Hong Kong and we do not have large-scale anycast
infrastructure that is needed by the ccTLDs.

IXPs

- Supporting APIX meetings at APNIC 43 and APNIC 44, and their Steering Committee election.
- Sponsored open peering event working group lunch at APNIC 43.
- Successfully launched Islamabad IX, PNG IX, and Fiji IX with support from APNIC and ISOC.
 - Supporting PNG IX and Fiji IX continuously after its set up.
- Discussions are underway to set up IXes in Afghanistan (Kabul), Maldives, Pakistan (Lahore),
 Myanmar, Cambodia, and Bhutan.
- Updating our presentation materials for upcoming new IXPs to understand the BCPs.

Internet measurements

- RIPE Atlas Probes:
 - Around five probes are distributed at every training workshop. To date, we have distributed 290+ probes in total in our region.
- RIPE Atlas Anchors have been deployed in the following economies: Myanmar, Mongolia, Nepal, Indonesia, Australia, and Viet Nam.
- RIPE Atlas Anchor deployment is temporarily halted due to unavailability of servers from the supplier and possible closure of the Soekris business.
- RIPE NCC is testing new servers for all future Anchor deployments and selected PC Engines APU2C/APU4C. We plan to resume new deployments in 2018 with this new server.

8 APNIC Foundation

8.1 Activities

- Three more candidates selected by the EC will be appointed in the first quarter of 2018 to complete the first round of Board appointments (seven positions in total). The Foundation's first financial statements and Annual General Meeting will also be held in the first quarter of 2018.
- The Foundation has started implementing its first grant from the Australian Department of Foreign Affairs and Trade (DFAT) for the APNIC project 'Raising Cyber Security Capability and Awareness: A secure and resilient Internet infrastructure for development in the Pacific'. Led by APNIC's Adli Wahid, the two-year, AUD 200,000 project is working initially with PNG, Vanuatu, Samoa and Fiji, with others to follow, building on the experience supporting Tonga CERT, as part of APNIC's support to CERT development in the Pacific.
- The Foundation confirmed new funding from IDRC and ISOC for the ISIF Asia program.
- Funding discussions also continued with DFAT, the Japan International Cooperation Agency (JICA), and the Asian Development Bank (ADB).
- The following trips were also made:
 - Duncan travelled to Manila for the 14th APT Telecommunication/ ICT Development Forum (ADF-14) at the ADB; to Taiwan for APNIC 44; to Sydney for the launch of Australia's International Cyber Engagement Strategy; to Singapore for meetings with potential donors; to Dhaka for the first session of the Asia-Pacific Information Superhighway (AP-IS) Steering Committee; to Manila for meetings at the ADB; to Tokyo for Internet Week; to Wuzhen for the World Internet Conference; and will travel to Geneva for the Internet Governance Forum (IGF) in late December. Sylvia travelled to Cebu to speak at the ICT Disaster Response Conference; and to Sydney for the Impact Investment Summit.
- The Foundation website was migrated to a WordPress system and launched alongside the Foundation Facebook page and Twitter account. The website content was also updated.

8.2 ISIF Asia

- A workshop and Open Forum proposals for the IGF 2017 were developed and accepted and logistics are being finalized for the event in Geneva in late December.
- Under the ISOC grant, the video 'Introduction to CERTs', about the role of CERTs, was produced and launched at APrIGF 2017 in Bangkok.
- The ISIF Asia website was also migrated, with the online application and selection system updated. The new online reporting tool and statistics sections have also been completed and are undergoing final testing.
- The 2017 Grants and Award selection processes were completed with the support of three thematic Selection Committees, including a new cybersecurity committee. One award winner was selected and four grant recipients. The due diligence review process is currently underway to have the winners announced in late November for projects to start in January 2018.
- The 2016 final grant reports are in process. So far, three (out of 10) have been approved and published on the ISIF Asia website. Nine out of 10 reports are expected to be available by January 2018. One grant recipient has requested a time (at no cost) extension until April 2018.
- Planning for the 2018 call for grants and awards has started, to be launched in February 2018.
- The Seed Alliance website is currently in the process of being updated, as part of the final Technical and Financial reports to IDRC and ISOC for the current grant. The evaluation methodology for the Seed Alliance-supported projects was reviewed and a new set of scorecards is being developed, including a visual rating system and a SDG tool to identify what SDG a particular project supports.

- The Cross Community Working Group (CCWG) on new gTLD Auction proceeds continued its work, with Sylvia taking part as the ASO NRO representative.
- Planning for ISIF Asia's 10th Anniversary has also started for activities to be implemented throughout 2018.

8.3 Foundation next steps

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

9 Business Area

9.1 Activity costing

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

The following chart illustrates spending to date under each activity code, as a percentage of total budget.

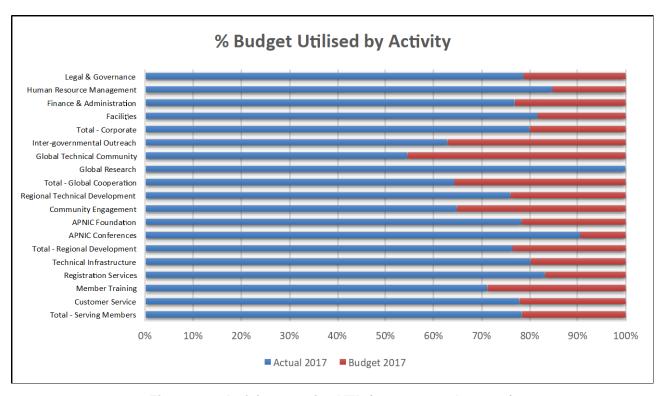


Figure 10 – Activity reporting YTD (as at 31 October 2017)

9.2 APNIC Survey

- In preparation for the Member Survey being conducted in June 2018, APNIC will be holding a series of Focus Groups early in the new year to inform and validate the Survey questions. The Focus Groups have been selected to consider locations previously visited, size of membership, and key relationships. Focus Groups will be held in 15 economies, with a combination of face-to-face and online meetings.
 - The purpose of the Focus Groups is to gather input from the broader industry and our membership on current trends and issues being experienced within the industry and feedback around the Secretariat's services and activities.
 - Findings from these sessions will be presented to the EC in March 2018 before the formation of the formal Survey questions.
- Focus Groups will be held between mid-January to late February 2018 in:
 - Japan, including JPNIC
 - China, including CNNIC
 - Taiwan, including TWNIC
 - Australia
 - New Zealand

- Pacific (Fiji and New Caledonia)
- Malaysia
- Philippines
- Indonesia, including APJII
- Timor-Leste
- India, including IRINN
- Pakistan
- Bangladesh
- Nepal
- Afghanistan

9.3 Facilities review

• Final plans have been developed to convert the large recreation room into a new media room facility. This work will be completed before year end upon final approval in December.

9.4 Business Continuity Planning

 Business Continuity Plan activities continue, with scenario testing undertaken by the core BCP team on a quarterly basis.

9.5 APNIC Foundation

The Business area continues to support the administration of the APNIC Foundation's financial activities. The Foundation's first 18 months of activities will be reported in early 2018; this will include filings with the Hong Kong authorities and inclusion in APNIC's annual independent audit.

9.6 APNIC's Taxation Status

APNIC's status as a 'Mutual' organization for taxation purposes has been confirmed. The latest
application submitted with support from KPMG for an extension of the private ruling from the
Commissioner of the Australian Taxation Office has confirmed this status for a five-year period until
June 2022.

9.7 2018 Budget and Activity Plan

 The 2018 Budget and Activity Plan has been completed and will be presented for approval at the EC meeting in December 2018.

9.8 Finance statistics to date

KPI Dashboard Finance Team YTD K	PI (2017)				
Number of	October-17	Avg/Mnth	YTD	2016	2015
Phones Calls (Outward)	327	292	2917	3500	
RTs Received (Total)	2410	2109	21088	21396	23275
E-Bill Queue	1501	1364	13643	15331	19603
Finance Queue	120	120	1202	1328	1332
Accounts Payable Queue	109	102	1024	1261	84
Bounce Queue	474	312	3116	1415	1490
Inward Payment Queue	206	189	1891	2061	3
Accounts Receivable					
APNIC Member Count	29	45	6443	5994	5268
New Members	60	71	708	1030	940
New Non-members	0	1	9	18	24
Receipts Processed	733	670	6702	7514	664
Invoices issued	730	689	6890	7537	727
Credit notes issued	42	47	471	529	57
Accounts Closed (Mem and Non-Mem)	36	30	295	322	358
Closure Notice sent	85	83	828	945	900
Reactivation Members	6	2	24	45	5
Reactivation fee waived	0	0	2	8	
Refund Members (Duplicate and Over- payment)	4	6	62	68	40
Accounts Payable					
Asset Created	17	24	238	189	150
Asset Disposal	7	8	76	127	14
PO created by Finance	68	41	406	213	20
PO Billed	173	162	1621	1947	198
Supplier <u>EFT</u> Payment	79	77	769	891	94
Nexonia Reimbursement Payments	53	35	346	386	38
Credit Card Payment	339	335	3353	3377	305
Journals processed	73	70	704	888	100
Cash Advance Request	2	2	20	18	28
Vendor Request	8	9	89	141	43

Figure 11 – Finance statistics

10 Human Resources (confidential)

[Please refer to the separate report]

Agenda Item 14 APNIC Foundation update

APNIC Foundation Update

Duncan Macintosh

CEO

Brisbane, December 2017



Foundation update

- Grants and funding proposals
- Administration and governance
- 2018 budget and activity plan
- Board selection



Grants





IDRC

Funding source: IDRC

Amount: CAD 100,000

Proposal: Seed Alliance: Gender Equality and Scaling Digital

Innovation

Activities:

- One small grant, scale-up and fellowship
- One award and IGF fellowship
- ISIF Asia 10 anniversary



Internet Society 2018

Funding source: ISOC Community Networks Grants and

Awards 2018

Proposal title: Seed Alliance: Connecting the Last Mile

Amount: USD 100,000

Activities: Four grants and two awards to support the development of community networks across the global south

ISIF Asia: One USD 20,000 grant and one USD 10,000 award (includes IGF Fellowship)

Overhead: 10% (AUD 3,770)



Proposals in Process





DFAT second proposal 2017-18

Funding source: DFAT's Cyber Cooperation Program to Build Capacity in the Indo-Pacific - Raising Cybersecurity Capability and Awareness

Proposal title: A secure and resilient Internet infrastructure for development in the Pacific - Samoa

Amount: AUD 100,000 approx

Overhead: 15% overhead (15,500)

Economies: Samoa



JICA second proposal 2018

Funding source: JICA's cyber security program

Proposal title: On-line cyber security training materials

(APNIC Academy)

Amount: Not confirmed

Overhead: 10%

Economies: Indonesia, Vietnam, Cambodia, Myanmar



Asian Development Bank

Funding source: ADB's Pacific program

Proposal title: Supporting CERT/security development in the

Pacific (travel support)

Amount: Travel grants

Overhead: No overhead, support for CERT officers

Economies: Pacific



Overhead income 2017/18 - predicted

- AUD 37,500 (DFAT two grants)
- AUD 12,000 (IDRC)
- AUD 3,700 (ISOC)

Total: AUD 53,200



Proposals Invited



China Internet Development Foundation

Funding source: China Internet Development Foundation

Proposal title: Conference support

Amount: RMB 1,421,000 (AUD 270,700)

Activities: Platinum sponsorships for three years

Next steps: Confirmation

Note: Also discussing IPv6 proposal



Unsuccessful proposals

Lee Foundation scholarships USD 3 million



Proposal discussions

- MIC and KDDI Foundation
- Sasakawa Foundation (Japan) on cybersecurity and diversity, NTT on scholarships
- Google, Facebook, AVPN community, World Bank
- Jaime Augusto Zóbel de Ayala II: Chairman of Globe Telecom, Bank of the Philippine Islands (APNIC members)
- Manuel V. Pangilinan: Chairman and CEO of PLDT



Administration and governance

- Cost recovery has begun on DFAT grant salaries and airfares
- Charitable application in process



Charitable status



"initial assessment is expected to be available in February 2018"



Foundation budget 2018

EXPENSES (AUD)	Forecast 2017	A PNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %
Bank charges	212	500	288	136%	43%
Communication expenses	0	3,000	3,000	0%	-40%
Computer expenses	524	1,000	476	91%	-80%
Grant Activity Expenses	5,000	145,000	140,000	2800%	0%
Meeting and training expenses	230	1,500	1,270	553%	0%
Postage & delivery	0	250	250	0%	0%
Printing & photocopy	3,596	1,000	(2,596)	-72%	-80%
Professional fees	79,656	40,000	(39,656)	-50%	33%
Recruitment expense	0	2,000	2,000	0%	-80%
Salaries and personnel expenses	450,273	532,873	82,600	18%	4%
Staff training/ Conference expenses	1,767	2,000	233	13%	-60%
Translation expenses	0	1,000	1,000	0%	-80%
Travel expenses	96,286	115,560	19,274	20%	-21%
TOTAL EXPENSES	637,544	845,683	208,139	33%	17%



2018 budget

Activities	Tentative schedu	Tentative budget allocation	
	Year 1	Year 2	
Surveys and focus groups, problem analysis, research	M1 M2 M3	M1 M2 M3	5,000.00
Security specialists	M1 to M12	M1 to M12	10,000.00
Training materials (technical security and cybersecurity drill design)	M4 M5		10,000.00
Online courses provision	M6 M7	M11 M12	
3 face-to-face training workshops including cybersecurity drill	M8	M1 M6	40,000.00
4 technical assistance interventions	M10 M12	M3 M6	30,000.00
Communications strategy and communication outcomes	M1 to M12	M1 to M12	5,000.00
4 community events organised around the workshops	M7 M10	M1 M3	6,000.00
14 fellowships	M1 to M12	M1 to M12	40,000.00
Monitoring and evaluation	M1 to M12	M1 to M12	3,000.00
Seed funding support for CERT establishment	M12	M6	20,000.00
Overhead 15%			30,000.00
Total			200,000.00



Advisory Council

- Developing a list of potential Council members for consideration by Foundation board
- 2. Conduct due diligence
- 3. Invite those approved to join the Council
- 4. Engage Council members in Foundation activities



Board process

• [Confidential information redacted]



Board selection - next steps

- 1. Due diligence shared with EC for final go ahead
- 2. Candidates contacted by CEO and invited to submit nomination(s)
- After receiving nomination(s), EC selects candidates for Board
- 4. Candidates appointed to Foundation Board by resolution
- First full Board meeting held in late March 2018 to approve first audited financial statements (launch of the foundation in Hong Kong)



Board selection - next candidates

• [Confidential information redacted]



Thank you



Agenda Item 19 Approval of 2018 budget and activity plan

APNIC Budget 2018 - Draft





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1 Executive Summary

This document contains the APNIC budget submission for the financial year from January to December 2018. The budget submission includes revenue, expense, and capital expenditure projections based on the planned activities for the APNIC Secretariat for 2018.

The purpose of this paper is to allow the APNIC Executive Council to approve an expenditure level for 2018, in the manner as described in the APNIC By-laws:

"to establish the basis for the budget of APNIC and determine, in the light of the decisions taken by the Members on the reports referred to in by-law 5(b) above, a ceiling for the expenditure of APNIC until the next AGM after considering all relevant aspects of the work of APNIC in that period" [APNIC By-laws 30 (g)]

The proposed budget includes operational expenditure of AUD \$21,917,453 and projected revenue of AUD \$22,164,017 providing an operating surplus of AUD \$246,564 for 2018. The capital expenditure requirements for 2018 are AUD \$1,013,800. All values in this document are expressed in Australian Dollars (AUD) unless otherwise indicated.

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2 Budget Summary

The 2018 budget for revenue, expenses, and capital expenditure are included in the table below:

REVENUE (AUD)	Forecast 2017	Budget 2018	Change	
Investment income	777,607	960,000	23.46%	
Membership fees	19,307,002	20,182,202	4.53%	
Non-members fees	263,398	237,315	-9.90%	
Reactivation fees	23,030	23,500	2.04%	
Sign-Up fees	373,870	378,000	1.10%	
Transfer fees	120,870	130,000	7.55%	
Sundry income	210,859	253,000	19.99%	
TOTAL REVENUE	21,076,636	22,164,017	5.16%	
EXPENSES (AUD)	Forecast 2017	Budget 2018	Change	
Bank service fees	180,355	180,500	0.08%	
Communication expenses	578,155	581,328	0.55%	
Computer expenses	680,901	886,136	30.14%	
Contribution to APNIC Foundation	632,544	700,683	10.77%	
Depreciation expense	809,158	827,368	2.25%	
Doubtful debt expenses	25,000	25,000		
ICANN contract fee	244,656	248,340	1.51%	
Insurance expense	178,914	186,000	3.96%	
Meeting and training expenses	402,989	479,000	18.86%	
Membership fees	53,581	52,840	-1.38%	
Office Operating Expenses	324,578	352,425	8.58%	
Postage & delivery	39,720	39,000	-1.81%	
Printing & photocopy	28,511	39,000	36.79%	
Professional fees	1,618,705	1,813,500	12.03%	
Recruitment expense	138,411	120,000	-13.30%	
Salaries and personnel expenses	11,266,199	12,094,603	7.35%	
Sponsorship and Publicity expenses	738,636	860,730	16.53%	
Staff training/ Conference expenses	158,688	157,500	-0.75%	
Translation expenses	11,450	23,500	105.24%	
Travel expenses	2,223,001	2,250,000	1.21%	
TOTAL EXPENSES	20,334,152	21,917,453	7.79%	
REVENUE and EXPENSES (AUD)	Forecast 2017	Budget 2018	Change	
Total Revenue	21,076,636	22,164,017	5.16%	
Total Expenses	20,334,152	21,917,453	7.79%	
OPERATING SURPLUS/(DEFICIT)	742,484	246,564	-66.79%	
CAPITAL (AUD)	Forecast 2017	Budget 2018	Change	
Equipment & Software	800,000	923,800	15.48%	
Office Furniture & Fittings	115,000	90,000	-21.74%	
Total - Capital Expenditure	915,000	1,013,800	10.80%	

Table 2.1 2018 Budget summary

3 Budget Preparation Notes

The budget is developed on a zero-based methodology, and involves extensive consultation across the organization.

There are a range of key inputs that are included in the budget process, including:

- The 2016 APNIC Survey
- The 2018 APNIC Activity Plan
- 2018 priorities as established through the operational planning process
- The APNIC organization structure, HR cost analysis and recruitment plans
- Membership projections, derived from analysis of historical membership growth and recent trends
- Investment return forecasts provided by APNIC's investment advisors
- The asset register and quantity survey reports, which form the basis of depreciation and capital allowance forecast

3.1 Projection techniques

Projections for membership fees are calculated by analysing recent trends in membership activity. 2018 membership revenues budgets are calculated based on the current (2015) fee schedule. A linear projection of membership growth and account closure is used to estimate the incremental growth in revenue for membership fees in 2018.

Interest income is based on analysis of APNIC's existing cash deposits and the contracted rates and maturity dates for fixed deposits. Estimates of interest from the current account are based on current returns. Investment income predictions are based on forecasts provided by APNIC's investment managers across the range of investment categories set out in APNIC's Investment Policy.

The ERP system allows for the verification of all current approved spending commitments. This data is combined with new planned expenditure in 2018.

An overall inflation rate of 1.8%, and (1.9% excluding volatile items) was recorded for the 12 months ending September 2017 and this has been used in projecting costs for 2018.

3.2 APNIC's Taxation Status

APNIC's taxation status as a "Mutual Organisation" by way of a Private Ruling from the Australian Taxation Office was re-confirmed in November 2017 for another five years ending June 2022.

4 Revenue

The table below tracks APNIC's revenue from 2012 through to the forecast for 2017 and the budget submission for 2018.

REVENUE (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Investment income	595,635	585,522	754,563	792,041	890,951	777,607	960,000	23.46%
IP Resource Application fee	2,232,250	1,420,625	1,323,250	-18,375				
Membership fees	14,361,213	15,074,781	15,903,111	16,933,413	18,354,898	19,307,002	20,182,202	4.53%
Non-members fees	227,966	240,225	254,706	243,049	243,923	263,398	237,315	-9.90%
Reactivation fees	43,200	37,050	67,800	37,600	37,700	23,030	23,500	2.04%
Sign-Up fees				456,000	465,000	373,870	378,000	1.10%
Transfer fees	11,616	61,339	81,304	77,943	130,139	120,870	130,000	7.55%
Sundry income	182,552	149,100	238,198	252,764	193,829	210,859	253,000	19.99%
TOTAL REVENUE	17,654,431	17,568,641	18,622,931	18,774,435	20,316,440	21,076,636	22,164,017	5.16%

Table 4.1 Revenue over time

4.1 Investment Income

The value APNIC's investments continue to increase as excess funds are transferred from the operating account to the Investment Fund and investment returns are reinvested in line with the Investment Policy. APNIC's investment advisors have forecast a yield of 3.49% in 2018. Interest on cash deposits not held in the fund are forecast to achieve 2.5% in 2018.

4.2 Membership Fees

4.2.1 Membership growth

APNIC's membership growth continues and the 2018 Budget assumes a linear continuation of membership growth. The 2018 budget was developed based on the modelling of the recent membership trends. The table below shows membership growth since 2010.

Member Tier	2010	2011	2012	2013	2014	2015	2016	F'cst 2017	Budget 2018
Extra Large	16	21	20	20	21	22	22	22	22
Very Large	33	41	45	43	40	44	43	42	42
Large	141	145	144	147	142	137	138	138	138
Medium	324	378	402	392	402	431	449	465	481
Small	867	970	1114	1198	1388	2165	2643	2901	3159
Very Small	637	817	1021	1294	1701	2336	2590	2843	3095
Associate	503	575	788	957	924	133	109	123	125
Total	2521	2947	3534	4051	4618	5268	5994	6534	7062
New	478	615	832	813	805	968	1048	849	840
Closed	163	189	245	296	238	318	322	309	312
Net Gain	315	426	587	517	567	650	726	540	528
Average Net Monthly Gain	26	36	49	43	47	54	61	45	44

Table 4.2 Membership growth over time

4.2.2 Membership fee revenue – sensitivity analysis

The table below illustrates the potential impact on membership revenue if the actual growth of membership in 2018 varies from the assumptions included in the budget. The average annual fee a new Member will pay is estimated at \$1,430 AUD which accounts for allocations from the last /8 and the IANA reclaimed pool, and for discounts applied to new Members from LDC's.

Impact of Member Growth on estimates	(% Variation in Member Numbers)
Variance to Budget \$	

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	2018
Budget New Members #	70	70	70	70	70	70	70	70	70	70	70	70	840
40%	3,337	6,673	10,010	13,347	16,683	20,020	23,357	26,693	30,030	33,367	36,703	40,040	260,260
30%	2,503	5,005	7,508	10,010	12,513	15,015	17,518	20,020	22,523	25,025	27,528	30,030	195,195
20%	1,668	3,337	5,005	6,673	8,342	10,010	11,678	13,347	15,015	16,683	18,352	20,020	130,130
10%	834	1,668	2,503	3,337	4,171	5,005	5,839	6,673	7,508	8,342	9,176	10,010	65,065
0%	-	-	-	-	-	-	-	-	-	-	-	-	-
-10%	(834)	(1,668)	(2,503)	(3,337)	(4,171)	(5,005)	(5,839)	(6,673)	(7,508)	(8,342)	(9,176)	(10,010)	(65,065)
-20%	(1,668)	(3,337)	(5,005)	(6,673)	(8,342)	(10,010)	(11,678)	(13,347)	(15,015)	(16,683)	(18,352)	(20,020)	(130,130)
-30%	(2,503)	(5,005)	(7,508)	(10,010)	(12,513)	(15,015)	(17,518)	(20,020)	(22,523)	(25,025)	(27,528)	(30,030)	(195,195)
-40%	(3,337)	(6,673)	(10,010)	(13,347)	(16,683)	(20,020)	(23,357)	(26,693)	(30,030)	(33,367)	(36,703)	(40,040)	(260,260)

Table 4.3 Sensitivity analysis – membership growth

Based on analysis of recent trends, it is forecast that 840 new Members will join APNIC in 2018, the average value of closed accounts is estimated at \$1,686 and it is 26 account closures are expected each month, in 60% of cases, resources are returned to APNIC. The table below illustrates the impact on Membership revenue if the actual number of membership closures in 2018 varies from the assumptions included in the budget.

Impact of Member Closures on estimates (% Variation in Member Numbers)

variance to Budget \$													
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	2018
Budget Closures #	26	26	26	26	26	26	26	26	26	26	26	26	312
-40%	877	1,754	2,631	3,508	4,384	5,261	6,138	7,015	7,892	8,769	9,646	10,523	68,398
-30%	658	1,315	1,973	2,631	3,288	3,946	4,604	5,261	5,919	6,577	7,234	7,892	51,298
-20%	438	877	1,315	1,754	2,192	2,631	3,069	3,508	3,946	4,384	4,823	5,261	34,199
-10%	219	438	658	877	1,096	1,315	1,535	1,754	1,973	2,192	2,411	2,631	17,099
0%	-	-		-							-	-	-
10%	(219)	(438)	(658)	(877)	(1,096)	(1,315)	(1,535)	(1,754)	(1,973)	(2,192)	(2,411)	(2,631)	(17,099)
20%	(438)	(877)	(1,315)	(1,754)	(2,192)	(2,631)	(3,069)	(3,508)	(3,946)	(4,384)	(4,823)	(5,261)	(34,199)
30%	(658)	(1,315)	(1,973)	(2,631)	(3,288)	(3,946)	(4,604)	(5,261)	(5,919)	(6,577)	(7,234)	(7,892)	(51,298)
40%	(877)	(1,754)	(2,631)	(3,508)	(4,384)	(5,261)	(6,138)	(7,015)	(7,892)	(8,769)	(9,646)	(10,523)	(68,398)

Table 4.4 Sensitivity analysis – membership closures

4.3 Non-Members Fees

Fees from Non-Member account holders continue to be very stable and it is anticipated that in 2018 that there will be minimal change to this revenue for this item.

4.4 Reactivation Fees

Reactivation Fees are charge to Members to reactivate their accounts after closure. The revenue for this item is expected to be in line with 2017.

4.5 Sign-Up Fees

Sign-Up fees are directly related to membership growth as outlined in table 4.2 above. The fee is \$500 and is discounted by 50% for LDC economies that represent in recent trends have averaged around 20% of forecasted new Member growth. The effect of a variance to the budget assumption for this revenue item is set out in the table below:

Variance to Budget \$													
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	2018
Sign-Up Fees - Budget \$	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	378,000
40%	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	151,200
30%	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	113,400
20%	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	75,600
10%	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	37,800
0%	-	-	-	-	-	-		-	-		-	-	-
-10%	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(37,800)
-20%	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(75,600)
-30%	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(113,400)
-40%	(12,600)	(12,600)	(12.600)	(12.600)	(12.600)	(12.600)	(12.600)	(12,600)	(12.600)	(12,600)	(12.600)	(12.600)	(151,200)

Table 4.5 Sensitivity analysis - Sign-Up fees

4.6 Transfer Fees

The revenue from transfer fees is estimated as similar to the actuals achieved in 2016, and 2017.

4.7 Sundry Income

Sundry income includes revenue for sources such as:

- Meeting receipt registration Members/Non-Members
- Meeting receipt Sponsorship
- External training receipts Members/Non-Members

Meeting Sponsorship will be higher in 2018 with some of the additional revenue used to fund the increased fellowship program.

4.8 Foreign Exchange Gains/Losses

The budget for exchange rate variances has been set as zero; it is not possible to forecast the total gain or loss on APNIC transactions. APNIC has a low exposure to currency variations as all fees from members and the majority of expenses in running APNIC's operations are paid in Australian dollars.

5 Expenses

The tables below set out APNIC's expenses since 2012, with commentary on the major expenses is included below:

EXPENSES (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Bank service fees	132,080	138,337	145,823	156,496	167,917	180,355	180,500	0.08%
Communication expenses	440,762	490,600	483,803	591,885	532,212	578,155	581,328	0.55%
Computer expenses	551,362	548,748	572,528	520,784	533,628	680,901	886,136	30.14%
Contribution to APNIC Foundation					18,003	632,544	700,683	10.77%
Depreciation expense	816,998	753,032	765,548	764,145	785,218	809,158	827,368	2.25%
Doubtful debt expenses	27,099	30,990	34,259	-54,293	-6,225	25,000	25,000	
ICANN contract fee	321,655	136,732	260,333	284,161	243,026	244,656	248,340	1.51%
Insurance expense	126,673	126,751	129,971	131,550	128,793	178,914	186,000	3.96%
Meeting and training expenses	191,561	332,819	374,850	350,313	363,343	402,989	479,000	18.86%
Membership fees	68,392	48,294	55,611	49,532	48,971	53,581	52,840	-1.38%
Miscellaneous expenses	3	-376,729						
Office Operating*	249,930	300,757	312,744	315,608	324,948	324,578	352,425	8.58%
Postage & delivery	28,493	45,269	22,071	51,029	41,893	39,720	39,000	-1.81%
Printing & photocopy	38,115	36,586	48,508	33,807	38,165	28,511	39,000	36.79%
Professional fees	939,882	1,246,373	1,052,757	1,195,494	1,409,430	1,618,705	1,813,500	12.03%
Recruitment expense	99,574	89,472	144,423	119,077	94,307	138,411	120,000	-13.30%
Rent and Outgoings	-12,562							
Salaries and personnel expenses	8,145,433	8,298,111	8,731,164	9,586,575	10,459,153	11,266,199	12,094,603	7.35%
Sponsorship and Publicity expense	270,696	319,623	340,946	575,775	624,179	738,636	860,730	16.53%
Staff training/ Conference expense	151,386	163,053	135,996	169,122	164,441	158,688	157,500	-0.75%
Tax expenses	-17,506	-96,166	-34,609	12,777	-18,217			
Translation expenses	11,928	15,255	1,623	2,883	11,147	11,450	23,500	105.24%
Travel expenses	1,822,239	1,937,230	1,955,471	1,961,551	2,085,745	2,223,001	2,250,000	1.21%
TOTAL EXPENSES	14,404,193	14,585,138	15,533,822	16,818,270	18,050,078	20,334,152	21,917,453	7.79%

Table 5.1 Expenses over time - by value

5.2 Salary and Wages

Salary and wages will increase by 7.35% in 2018 when compared to the forecast expenditure for the 2017 year. The assumptions included in this budget are:

- Employee superannuation contributions will remain at 9.5%
- All permanent staff will take 3.5 weeks of annual leave
- The overall allowance for salary increases resulting from role changes and annual performance reviews will be set at 3.5%
- Existing headcount commitments continue from 2017 with the no new positions requested in this budget submission
- As in 2017, two APNIC staff will be seconded to the APNIC foundation, their costs are included in the expense; Contribution to APNIC foundation.

5.3 Travel Expenses

APNIC's travel expenses will increase in 2018, the travel budget was developed based on assessment of individual travel plans for 2018.

This category includes travel for; APNIC Staff, APNIC EC, NRO AC, Support for SIG Chairs.

Travel expenses include all corporate travel management fees and International SOS membership, which provides advice and emergency assistance for those travelling on APNIC business.

5.4 Professional fees

Professional Fees will increase by 12%, the major contributors are the APNIC Survey and consultancy for the APNIC Academy. Details for 2018 expenses are:

•	Legal Advice & Expenses	155,000
•	Non-staff trainers	150,000
•	Survey Instrument, Analysis and Report	140,000*
•	Investment Consultant Service	125,000
•	Design Consultancy	120,000
•	Content development - APNIC Academy	120,000*
•	HR Agreements	120,000
•	Research Consulting Support	115,000
•	Technical Assistance Services	80,000
•	Benchmarking consultancy	60,000*
•	New community collaboration Consultant	50,000
•	Non-staff trainers - travel expenses	50,000
•	ISO27001 (ISMS) Consulting fees	44,000
•	Audit Fees	40,000
•	Financial and Tax advice	35,000
•	NetSuite Consulting Support	35,000
•	Travel for guest speakers	35,000
•	CMS & Web Consultation & Development	35,000

^{*} Incremental for 2018

5.5 Computer Expenses

Computer expenses include all non-capital purchases of equipment, consumables, license and support fees for hardware and software. There are a number of costs related to work already commenced which contribute to the increase in 2018. Major expenses in 2018 are:

•	ERP Licenses users and modules (Including FAM, Sandbox)	110,000
•	Salesforce Licence Expenses	80,000
•	Firewall & Intrusion detection/prevention system - IA, NX – Support	57,240

•	F5 BIG-IP Support and maintenance	54,000
•	Cloud computing costs - Labs	50,000
•	Vmware licenses - Hosts, Vcenter and ROBO/VSAN	40,000
•	ISC Bronze support/subscription	31,000
•	Pardot Licence Expenses	27,000
•	Expense Reporting applications	25,000
•	Office 365 Business Premium	22,000
•	E-learning [AdobeConnect] + IOS [Smart] + Other S/W licenses	20,000
•	API's (Zapier/Ungerboeck/MS, etc.)	20,000
•	Salesforce Applications	20,000
•	Maintenance contract - DNSSEC signers - Secure64	18,360
•	Halogen - Performance, Learning, Compensation & Job Description	15,500
•	NetApp IA and NX FAS storage maintenance and support	15,000
•	HR IS Licences	12,000
•	Jitterbit license fee	11,000
•	Virus and endpoint security	10,500
•	Ungerboeck license and hosting fees 11 user	10,500
•	Safenet Support and Maintenance - BPKI	10,200
•	Safenet Support and Maintenance - RPKI	10,200
•	Dell Server Maintenance	10,000
•	Network accessories (Cables, Fiber, etc.)	10,000
•	Data Visualisation	10,000

5.6 Depreciation Expenses

Depreciation expenses are budgeted based on analysis of the existing depreciation and capital allowance schedules; including anticipated depreciation based on Capital Expenditure planned for 2018. The amounts budgeted for 2018 are:

•	Equipment depreciation	661,500
•	Capital works allowances (6 Cordelia St)	165.868

5.7 Sponsorship and Publicity Expenses

Sponsorship and Publicity expenses include APNIC contributions to the NRO expenses, the ISIF program, and sponsorship of NOG's and other community events. Major expenses in 2018 include:

•	NRO Expenses APNIC Contribution	174,260
•	Regional technical development + new NOGs	100,000
•	APNIC contribution to ISIF grants pool	100,000
•	Google PPC Advertising	70.000

•	APNIC 46 Conference Additional 25 Fellows	65,000*
•	APNIC conference fellowships	60,000
•	Research grants on technical issues	60,000
•	Regional community development events	50,000
•	Regional/National IGFs sponsorship	40,000
•	Regional technical development - security & CERTs	40,000
•	Google PPC Advertising – ASN Project	20,000

New but offset by increased sponsorship in "Sundry Income".

5.8 Communication Expenses

Communication expenses include data network expenses, Internet connectivity expenses, telephony and mobile phone expenses. The major contributors to costs here are the ongoing cost of the dark fibre network and the cost of rack-space in the co-locations that are critical to APNIC's network resilience. The major costs included in the 2018 budget include the following:

•	Rack hire, power, cross connect	98,400
•	Telstra: IP MAN PRIM Dual access 10M rental	70,000
•	Interactive rack hire	58,000
•	AU switch, router, wifi, vpn smartnet	51,366
•	Peering: 250Mbps PIPE/TPG Transit & Peering	50,000
•	Dark Fibre: Office-EMP (Eight Mile Plain)	42,000
•	Autonomica Services (NetNod) Anycasted DNS service	35,700
•	DNS loadbalancing - for regional whois (port 43)	26,928
•	VoIP/Telephony support, rental, uplinks, SIP channels	24,000
•	Backup: Cloud storage	24,000
•	Vocus dark fibre and peering (Equinix)	18,360
•	Telstra: TBS equipment maintenance	15,000
•	Server hosting - DNS	12,000
•	Other Office Phone charges	10,750

5.9 Contribution to APNIC Foundation

As detailed in 4.1 above, APNIC will underwrite Foundation costs up to a maximum of \$700,683 in 2018. Included in this amount is the costs for the two APNIC staff seconded to the Foundation and recovery of other internal resource costs.

5.10 Meeting and Training Expenses

Meeting and Training expenses include all the costs incurred in running the meetings including APNIC conferences and other meeting/training events. This includes; venue and equipment hire, catering and social events. The major contributors to this expense are the APNIC conferences in 2018 at Nepal and New Caledonia. While not all meeting expenses are included in this expense, the major venue and logistic costs are included. A portion of these costs in some instances is offset by sponsorship and Registration/workshop income. Major costs included in the 2018 budget are:

•	APNIC 46 Conference - venue hire + catering	72,600
•	APNIC 46 Conference AV rental	50,000
•	Training support (venue and catering costs)	50,000
•	APNIC 46 Opening reception	33,500
•	End of Year and Mid-Year staff events	27,500
•	APNIC 45 (APRICOT Closing Reception)	26,000
•	APNIC 45 AV-Webcast Equipment Rental	17,000
•	APNIC 46 Conference closing dinner - Thursday 150 pax	15,000
•	APNIC 46 Workshop week - venue hire	14,500
•	APNIC 46 Workshop week - catering (90pax)	13,050
•	Services outreach exhibition (CommuniCast, CommunicAsia, etc.)	13,000
•	APNIC 46 Conference signage	12,500
•	APNIC 45 Conference Room Rental	12,000
•	Quarterly offsite meeting for ELT	12,000
•	APNIC 46 Conference week - venue hire	10,000
•	APNIC 46 Workshop week closing dinner	8,000
•	APNIC 45 - APRICOT Registration Fees for Guest	7,500
•	6 Member gathering	7,200
•	APNIC 45 APIX meeting - catering and meeting room	7,000
•	APNIC 46 Member Services Lounge furniture hire, signage and AV	6,000
•	APNIC 46 Meet the EC Cocktail	6,000

5.11 Office Operating Expenses

The major costs in this item include electricity, land tax, council and water rates, cleaning and rubbish removal, air-conditioning and security. Major planned expenditure for 2018 includes:

•	Cordelia Street - Electricity	60,000
•	Land Tax	54,200
•	Kitchen Supply and Catering Expense	52,500
•	Office Cleaning	37,500
•	Local Council Rates and charges	35,800

•	General Maintenance and repairs	12,500
•	Workplace Health and Safety	12,000
•	Rubbish removal and other general office expense	9,000
•	Office building A/C service/maintenance	7,500
•	General Workplace Services/ Staff Amenities	7,500
•	Staff Health Checks	7,500
•	Stationery Supplies	5,500
•	Long Service: 8x 10 years awards	5,500
•	Plant Hire	5,200
•	Water Rates	5,150
•	Electrical repair & testing	5,000

6 Capital Expenditure

Capital expenditure comprises equipment & software and office equipment. For the 2018 budget submission capital expenditure provision is \$1,013,800. Of this amount, \$923,900 relates to Equipment & Software, and \$90,000 relates to Office Furniture & Fittings as set out in the table below:

CAPITAL (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Equipment & Softw are	337,479	661,095	662,698	671,551	809,626	800,000	923,800	15.48%
Office Furniture & Fittings	60,664	89,911	31,728	36,731	12,136	115,000	90,000	-21.74%
Total - Capital Expenditure	398,143	751,006	694,425	708,282	821,762	915,000	1,013,800	-6.26%

Table 6.1 Capital Expenditure over time

Major items in Equipment & Software include:

•	New IXP Development - (4 x \$30K)	120,000
•	Root Server new installations and upgrades	100,000
•	CRM Development Work - Reduced form 250k	100,000
•	Stats & Data Development Work - Project Consultancy	100,000
•	APNIC Portal Development work - Project Consultancy	100,000
•	SQL server, storage expansion, switches, laptops, screens.	80,000
•	Telephony replacement equipment	40,000
•	Server - DNS - JP replacement	30,000
•	Switches - Openflow lab content of SDN workshop	25,000
•	Firewalls to enhance lab of security workshop	20,000
•	Virtualisation server storage cache	20,000
•	RIPE Anchors	15,000
•	VoIP Upgrade by Integrator	15,000
•	Intel NUC - for SDN lab in workshop	12,000
•	Conference/Spare laptops (4x replacements)	12,000
•	Software improvement to manage training, fellowships, etc.	10,000
•	Fibre testing kit	10,000
•	Sony PTZ main cameras (conference)	10,000
•	Staff monitors due for replacement	10,000

Office Furniture & Fittings include allowances for replacement of office furniture and kitchen equipment, office modifications and alterations.

7 APNIC Foundation

The APNIC foundation will require up to a maximum of \$700,683 of funding in 2018, this may be reduced if some current proposals are accepted. Details of expected revenue and expenses for the foundation are included below:

REVENUE (AUD)	Forecast 2017	APNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %	
Contribution from APNIC	632,544	700,683	208,139	11%	-3%	
Contribution from other Funders	5,000	145,000	0	2800%	0%	
TOTAL REVENUE	637,544	845,683	208,139	33%	17%	

EXPENSES (AUD)	Forecast 2017	APNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %	
Bank charges	212	500	288	136%	43%	
Communication expenses	0	3,000	3,000	0%	-40%	
Computer expenses	524	1,000	476	91%	-80%	
Grant Activity Expenses	5,000	145,000	140,000	2800%	0%	
Meeting and training expenses	230	1,500	1,270	553%	0%	
Postage & delivery	0	250	250	0%	0%	
Printing & photocopy	3,596	1,000	(2,596)	-72%	-80%	
Professional fees	79,656	40,000	(39,656)	-50%	33%	
Recruitment expense	0	2,000	2,000	0%	-60%	
Salaries and personnel expenses	450,273	532,873	82,600	18%	4%	
Staff training/ Conference expenses	1,767	2,000	233	13%	-60%	
Translation expenses	0	1,000	1,000	0%	-60%	
Travel expenses	96,286	115,560	19,274	20%	-21%	
TOTAL EXPENSES	637,544	845,683	208,139	33%	17%	

REVENUE and EXPENSES (AUD)	Forecast 2017	APNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %
Total Revenue	637,544	845,683	208,139	33%	17%
Total Expenses	637,544	845,683	208,139	33%	17%
OPERATING SURPLUS/(DEFICIT)	0	0	0	0%	0%

Table 7.1 APNIC Foundation - Financial Estimates 2018

Budget 2018

EC Retreat – December 2017

Issue Date:

01





Budget Submission 2018

The proposed 2018 budget includes:

- Operational expenditure of AUD \$21,917,453 and
- Revenue of AUD \$22,164,017
- providing an operating surplus of AUD \$246,564 for 2018
- The capital expenditure requirements of AUD \$1,013,800

Preparation notes

The budget is developed using a zero-based methodology, and involves extensive consultation across the organization.

Key inputs include:

- The 2016 APNIC Survey
- The 2018 APNIC Activity Plan
- 2018 priorities as established through the operational planning process
- The APNIC organization structure, HR cost analysis and recruitment plans
- Membership projections, derived from analysis of historical membership growth and recent trends
- Investment return forecasts provided by APNIC's investment advisors
- The asset register and quantity survey reports, which form the basis of depreciation and capital allowance forecast

Taxation Status

 APNIC's taxation status as a "Mutual Organisation" by way of a Private Ruling from the Australian Taxation Office was re-confirmed in November 2017 for five years ending June 2022



Revenue

REVENUE (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Investment income	595,635	585,522	754,563	792,041	890,951	777,607	960,000	23.46%
Membership fees	14,361,213	15,074,781	15,903,111	16,933,413	18,354,898	19,307,002	20,182,202	4.53%
Non-members fees	227,966	240,225	254,706	243,049	243,923	263,398	237,315	-9.90%
Reactivation fees	43,200	37,050	67,800	37,600	37,700	23,030	23,500	2.04%
Sign-Up fees				456,000	465,000	373,870	378,000	1.10%
Transfer fees	11,616	61,339	81,304	77,943	130,139	120,870	130,000	7.55%
Sundry income	182,552	149,100	238,198	252,764	193,829	210,859	253,000	19.99%
TOTAL REVENUE	17,654,431	17,568,641	18,622,931	18,774,435	20,316,440	21,076,636	22,164,017	5.16%
		-0.49%	6.00%	0.81%	8.21%	3.74%	5.16%	

APNIC



Investment Income

- For the 2018 budget, Credit Suisse have advise a forecast of 3.49% for Investment returns
- APNIC maintains other Cash/term deposits, these funds are invested with an average return of around 2.5%
- We will continue to transfer excess funds from the operating account into the Investment Portfolio
 - As at the end of October the Investment fund balance is \$22.7M

Membership Fees

Member Tier	2010	2011	2012	2013	2014	2015	2016	F'cst 2017	Budget 2018
Extra Large	16	21	20	20	21	22	22	22	22
Very Large	33	41	45	43	40	44	43	42	42
Large	141	145	144	147	142	137	138	138	138
Medium	324	378	402	392	402	431	449	465	481
Small	867	970	1114	1198	1388	2165	2643	2901	3159
Very Small	637	817	1021	1294	1701	2336	2590	2843	3095
Associate	503	575	788	957	924	133	109	123	125
Total	2521	2947	3534	4051	4618	5268	5994	6534	7062
New	478	615	832	813	805	968	1048	849	840
Closed	163	189	245	296	238	318	322	309	312
Net Gain	315	426	587	517	567	650	726	540	528
Average Net Monthly Gain	26	36	49	43	47	54	61	45	44

- Based on analysis of recent trends, it is forecast that:
 - 840 new Members will join APNIC in 2018,
 - the forecast average annual fee a new Member is estimated at \$1,430 AUD which accounts for allocations from the last/8 and the IANA reclaimed pool, and for discounts applied to new Members from LDC's
 - 312 account closures are expected in 2018
 - The average value of closed accounts is estimated at \$1,686
 - in 60% of cases, resources are returned to APNIC





Sensitivity Analysis – Membership Fees

The budget assumes new membership growth and closure trends to be similar to recent trends, the tables below provide an analysis of the impact if these estimates are not reflected in the actual membership trends.

Impact of Member Growth on estimates (% Variation in Member Numbers)

Variance to Budget \$

The second secon	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	2018
Budget New Members #	70	70	70	70	70	70	70	70	70	70	70	70	840
40%	3,337	6,673	10,010	13,347	16,683	20,020	23,357	26,693	30,030	33,367	36,703	40,040	260,260
30%	2,503	5,005	7,508	10,010	12,513	15,015	17,518	20,020	22,523	25,025	27,528	30,030	195,195
20%	1,668	3,337	5,005	6,673	8,342	10,010	11,678	13,347	15,015	16,683	18,352	20,020	130,130
10%	834	1,668	2,503	3,337	4,171	5,005	5,839	6,673	7,508	8,342	9,176	10,010	65,065
0%	-	-	-	1	-		-	-	-	-	-	-	-
-10%	(834)	(1,668)	(2,503)	(3,337)	(4,171)	(5,005)	(5,839)	(6,673)	(7,508)	(8,342)	(9,176)	(10,010)	(65,065)
-20%	(1,668)	(3,337)	(5,005)	(6,673)	(8,342)	(10,010)	(11,678)	(13,347)	(15,015)	(16,683)	(18,352)	(20,020)	(130,130)
-30%	(2,503)	(5,005)	(7,508)	(10,010)	(12,513)	(15,015)	(17,518)	(20,020)	(22,523)	(25,025)	(27,528)	(30,030)	(195,195)
-40%	(3,337)	(6,673)	(10,010)	(13,347)	(16,683)	(20,020)	(23,357)	(26,693)	(30,030)	(33,367)	(36,703)	(40,040)	(260,260)

Impact of Member Closures on estimates (% Variation in Member Numbers)

Variance to Budget \$

ranance to baaber y													
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	2018
Budget Closures #	26	26	26	26	26	26	26	26	26	26	26	26	312
-40%	877	1,754	2,631	3,508	4,384	5,261	6,138	7,015	7,892	8,769	9,646	10,523	68,398
-30%	658	1,315	1,973	2,631	3,288	3,946	4,604	5,261	5,919	6,577	7,234	7,892	51,298
-20%	438	877	1,315	1,754	2,192	2,631	3,069	3,508	3,946	4,384	4,823	5,261	34,199
-10%	219	438	658	877	1,096	1,315	1,535	1,754	1,973	2,192	2,411	2,631	17,099
0%	-	-	-	ı	-	-	-	-	-	-	-	-	-
10%	(219)	(438)	(658)	(877)	(1,096)	(1,315)	(1,535)	(1,754)	(1,973)	(2,192)	(2,411)	(2,631)	(17,099)
20%	(438)	(877)	(1,315)	(1,754)	(2,192)	(2,631)	(3,069)	(3,508)	(3,946)	(4,384)	(4,823)	(5,261)	(34,199)
30%	(658)	(1,315)	(1,973)	(2,631)	(3,288)	(3,946)	(4,604)	(5,261)	(5,919)	(6,577)	(7,234)	(7,892)	(51,298)
40%	(877)	(1,754)	(2,631)	(3,508)	(4,384)	(5,261)	(6,138)	(7,015)	(7,892)	(8,769)	(9,646)	(10,523)	(68,398)





Sensitivity Analysis – Sign-Up Fees

The Sign-Up fee revenue is based on new income estimates seen in the previous slide, variations to these will also impact revenue, as set out in the table below:

Variance	to	Budget	Ç
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	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	2018
Sign-Up Fees - Budget \$	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	31,500	378,000
40%	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	151,200
30%	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	9,450	113,400
20%	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	75,600
10%	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	3,150	37,800
0%	-	-	-	-	-	-	-	-	-	-	-	-	-
-10%	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(3,150)	(37,800)
-20%	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(6,300)	(75,600)
-30%	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(9,450)	(113,400)
-40%	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(12,600)	(151,200)

The Sign-Up fee is \$500, discounted by 50% to new members from LDC's.

The Budget assumes 20% from LDC economies.

Other Income

Non-Member Fees

Recent trends tracking lower than 2017

Transfer Fees

Estimated as similar to 2016 and 2017

Reactivation fees

In line with 2017

Sundry Income

- Meeting Registration Fees Members/Non-Members similar to 2017
- Sponsorship will increase to account for additional sponsorship for Meeting Fellowships, this will be offset with increased expenses
- External training Receipts similar to 2017

Expenses 2018

EXPENSES (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Bank service fees	132,080	138,337	145,823	156,496	167,917	180,355	180,500	0.08%
Communication expenses	440,762	490,600	483,803	591,885	532,212	578,155	581,328	0.55%
Computer expenses	551,362	548,748	572,528	520,784	533,628	680,901	886,136	30.14%
Contribution to APNIC Foundation					18,003	632,544	700,683	10.77%
Depreciation expense	816,998	753,032	765,548	764,145	785,218	809,158	827,368	2.25%
Doubtful debt expenses	27,099	30,990	34,259	-54,293	-6,225	25,000	25,000	
ICANN contract fee	321,655	136,732	260,333	284,161	243,026	244,656	248,340	1.51%
Insurance expense	126,673	126,751	129,971	131,550	128,793	178,914	186,000	3.96%
Meeting and training expenses	191,561	332,819	374,850	350,313	363,343	402,989	479,000	18.86%
Membership fees	68,392	48,294	55,611	49,532	48,971	53,581	52,840	-1.38%
Miscellaneous expenses	3	-376,729						
Office Operating Expenses	249,930	300,757	312,744	315,608	324,948	324,578	352,425	8.58%
Postage & delivery	28,493	45,269	22,071	51,029	41,893	39,720	39,000	-1.81%
Printing & photocopy	38,115	36,586	48,508	33,807	38,165	28,511	39,000	36.79%
Professional fees	939,882	1,246,373	1,052,757	1,195,494	1,409,430	1,618,705	1,813,500	12.03%
Recruitment expense	99,574	89,472	144,423	119,077	94,307	138,411	120,000	-13.30%
Rent and Outgoings	-12,562							
Salaries and personnel expenses	8,145,433	8,298,111	8,731,164	9,586,575	10,459,153	11,266,199	12,094,603	7.35%
Sponsorship and Publicity expenses	270,696	319,623	340,946	575,775	624,179	738,636	860,730	16.53%
Staff training/ Conference expenses	151,386	163,053	135,996	169,122	164,441	158,688	157,500	-0.75%
Tax expenses	-17,506	-96,166	-34,609	12,777	-18,217			
Translation expenses	11,928	15,255	1,623	2,883	11,147	11,450	23,500	105.24%
Travel expenses	1,822,239	1,937,230	1,955,471	1,961,551	2,085,745	2,223,001	2,250,000	1.21%
TOTAL EXPENSES	14,404,193	14,585,138	15,533,822	16,818,270	18,050,078	20,334,152	21,917,453	7.79%
		1.26%	6.50%	8.27%	7.32%	12.65%	7.79%	



Expenses 2018 - Ranked

EXPENSES (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Salaries and personnel expenses	8,145,433	8,298,111	8,731,164	9,586,575	10,459,153	11,266,199	12,094,603	7.35%
Travel expenses	1,822,239	1,937,230	1,955,471	1,961,551	2,085,745	2,223,001	2,250,000	1.21%
Professional fees	939,882	1,246,373	1,052,757	1,195,494	1,409,430	1,618,705	1,813,500	12.03%
Computer expenses	551,362	548,748	572,528	520,784	533,628	680,901	886,136	30.14%
Sponsorship and Publicity expens	270,696	319,623	340,946	575,775	624,179	738,636	860,730	16.53%
Depreciation expense	816,998	753,032	765,548	764,145	785,218	809,158	827,368	2.25%
Contribution to APNIC Foundation	0	0	0	0	18,003	632,544	700,683	10.77%
Communication expenses	440,762	490,600	483,803	591,885	532,212	578,155	581,328	0.55%
Meeting and training expenses	191,561	332,819	374,850	350,313	363,343	402,989	479,000	18.86%
Office Operating Expenses	249,930	300,757	312,744	315,608	324,948	324,578	352,425	8.58%
ICANN contract fee	321,655	136,732	260,333	284,161	243,026	244,656	248,340	1.51%
Insurance expense	126,673	126,751	129,971	131,550	128,793	178,914	186,000	3.96%
Bank service fees	132,080	138,337	145,823	156,496	167,917	180,355	180,500	0.08%
Staff training/ Conference expens	151,386	163,053	135,996	169,122	164,441	158,688	157,500	-0.75%
Recruitment expense	99,574	89,472	144,423	119,077	94,307	138,411	120,000	-13.30%
Membership fees	68,392	48,294	55,611	49,532	48,971	53,581	52,840	-1.38%
Postage & delivery	28,493	45,269	22,071	51,029	41,893	39,720	39,000	-1.81%
Printing & photocopy	38,115	36,586	48,508	33,807	38,165	28,511	39,000	36.79%
Doubtful debt expenses	27,099	30,990	34,259	-54,293	-6,225	25,000	25,000	0.00%
Translation expenses	11,928	15,255	1,623	2,883	11,147	11,450	23,500	105.24%
Tax expenses	-17,506	-96,166	-34,609	12,777	-18,217	0	0	
Miscellaneous expenses	3	-376,729	0	0	0			
Rent and Outgoings	-12,562	0	0	0	0			
TOTAL EXPENSES	14,404,193	14,585,138	15,533,822	16,818,270	18,050,078	20,334,152	21,917,453	7.79%

Expenses – Salary & Wages

Salary and wages will increase by 7.35% in 2018 compared to the forecast expenditure for the 2017 year. The assumptions included in this budget are:

- Employee superannuation contributions will remain at 9.5%
- All permanent staff will take 3.5 weeks of annual leave
- The overall allowance for salary increases resulting from role changes and annual performance reviews will be set at 3.5%
- Existing headcount commitments continue from 2017 with no new positions requested in this budget submission
- As in 2017, two APNIC staff are seconded to the APNIC foundation, their costs are included in the expenses as Contribution to APNIC Foundation

Expenses – Travel

APNIC's travel expenses will increase in 2018, the travel budget was developed based on assessment of individual travel plans and proposed events for 2018.

- This category includes travel for APNIC Staff, APNIC EC, NRO AC, Support for SIG Chairs
- Travel expenses include all corporate travel management fees and International SOS membership, which provides advice and emergency assistance for those travelling on APNIC business

Expenses – Professional Fees

Professional Fees will increase by \$195k (12%), the major contributors are the APNIC Survey and consultancy for the APNIC Academy. Major expenses for 2018 expenses include:

•	Legal Advice & Expenses	155,000
•	Non-staff trainers	150,000
•	Survey Instrument, Analysis and Report	140,000*
•	Investment Consultant Service	125,000
•	Design Consultancy	120,000
•	Content development - APNIC Academy	120,000*
•	HR Agreements	120,000
•	Research Consulting Support	115,000
•	Technical Assistance Services	80,000
•	Benchmarking consultancy	60,000*
•	New community collaboration Consultant	50,000
•	Non-staff trainers - travel expenses	50,000

^{*} Incremental for 2018



Expenses – Computer Expenses

Computer expenses include all non-capital purchases of equipment, consumables, license and support fees for hardware and software. There are a number of costs related to work already commenced which contribute to the increase in 2018.

Major expenses in 2018 are:

•	ERP Licenses users and modules	110,000
•	Salesforce Licence Expenses	80,000
•	Firewall & Intrusion detection/prevention system	57,240
•	F5 BIG-IP Support and maintenance	54,000
•	Cloud computing costs - Labs	50,000
•	Vmware licenses - Hosts, Vcenter and ROBO/VSAN	40,000
•	ISC Bronze support/subscription	31,000
•	Pardot Licence Expenses	27,000
•	Expense Reporting applications	25,000
•	Office 365 Business Premium	22,000

Expenses – Depreciation

Depreciation expenses are budgeted based on analysis of the existing depreciation and capital allowance schedules; including anticipated depreciation based on Capital Expenditure planned for 2018.

The amounts budgeted for 2018 are:

Equipment depreciation 661,500

- Capital works allowances (6 Cordelia St) 165,868

Expenses – Sponsorship & Publicity

Sponsorship and Publicity expenses include APNIC contributions to the NRO expenses, the ISIF program, and sponsorship of NOG's and other community events. Major expenses in 2018 include:

•	NRO Expenses APNIC Contribution	174,260
•	Regional technical development + new NOGs	100,000
•	APNIC contribution to ISIF grants pool	100,000
•	Google PPC Advertising	70,000
•	APNIC 46 Conference Additional 25 Fellows	65,000*
•	APNIC conference fellowships	60,000
•	Research grants on technical issues	60,000
•	Regional community development events	50,000
•	Regional/National IGFs sponsorship	40,000
•	Regional technical development - security & CERTs	40,000
•	Google PPC Advertising – ASN Project	20,000

^{*} New but offset by increased sponsorship in "Sundry Income"

Expenses – APNIC Foundation

APNIC will underwrite Foundation costs up to a maximum of \$700,683 in 2018. Included in this amount is the costs for the two APNIC staff seconded to the Foundation and recovery of other internal resource costs.

REVENUE (AUD)	Forecast 2017	APNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %
Contribution from APNIC	632,544	700,683	208,139	11%	-3%
Contribution from other Funders	5,000	145,000	0	2800%	0%
TOTAL REVENUE	637,544	845,683	208,139	33%	17%

EXPENSES (AUD)	Forecast 2017	APNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %
Bank charges	212	500	288	136%	43%
Communication expenses	0	3,000	3,000	0%	-40%
Computer expenses	524	1,000	476	91%	-80%
Grant Activity Expenses	5,000	145,000	140,000	2800%	0%
Meeting and training expenses	230	1,500	1,270	553%	0%
Postage & delivery	0	250	250	0%	0%
Printing & photocopy	3,596	1,000	(2,596)	-72%	-80%
Professional fees	79,656	40,000	(39,656)	-50%	33%
Recruitment expense	0	2,000	2,000	0%	-60%
Salaries and personnel expenses	450,273	532,873	82,600	18%	4%
Staff training/ Conference expenses	1,767	2,000	233	13%	-60%
Translation expenses	0	1,000	1,000	0%	-60%
Travel expenses	96,286	115,560	19,274	20%	-21%
TOTAL EXPENSES	637,544	845,683	208,139	33%	17%

REVENUE and EXPENSES (AUD)	Forecast 2017	APNIC Foundation Budget 2018	2018 Budget vs 2017 Forecast Var	Var %	Budget Var %
Total Revenue	637,544	845,683	208,139	33%	17%
Total Expenses	637,544	845,683	208,139	33%	17%
OPERATING SURPLUS/(DEFICIT)	0	0	0	0%	0%





Expenses - Communication

Communication expenses include data network expenses, Internet connectivity expenses, telephony and mobile phone expenses. The major contributors to costs here are the ongoing cost of the dark fibre network and the cost of rack-space in the co-locations that are critical to APNIC's network resilience. The major costs included in the 2018 budget include the following:

•	Rack hire, power, cross connect	98,400
•	Telstra: IP MAN PRIM Dual access 10M rental	70,000
•	Interactive rack hire	58,000
•	AU switch, router, wifi, vpn smartnet	51,366
•	Peering: 250Mbps PIPE/TPG Transit & Peering	50,000
•	Dark Fibre: Office-EMP (Eight Mile Plain)	42,000
•	Autonomica Services (NetNod) Anycasted DNS service	35,700
•	DNS loadbalancing - for regional whois (port 43)	26,928
•	VoIP/Telephony support, rental, uplinks, SIP channels	24,000
•	Backup: Cloud storage	24,000
•	Vocus dark fibre and peering (Equinix)	18,360
•	Telstra: TBS equipment maintenance	15,000

Expenses - Meeting & Training

- Meeting and Training expenses include all the costs incurred in running the meetings including APNIC conferences and other meeting/training events. This includes venue and equipment hire, catering and social events
- The major contributors to this expense are the APNIC conferences in 2018 at Nepal and New Caledonia. While not all meeting expenses are included in this expense, the major venue and logistic costs are included. A portion of these costs in some instances is offset by sponsorship

Meeting & Training Expenses

Major expenses include:

APNIC 46 Conference week - venue hire + catering	72,600
APNIC 46 Conference AV rental	50,000
Training support (venue and catering costs)	50,000
APNIC 45 AV-Webcast Equipment Rental	17,000
APNIC 46 Workshop week - venue hire	14,500
APNIC 46 Workshop week - catering (90pax)	13,050
Services outreach exhibition	13,000
APNIC 46 Conference signage (incl. Catch box insert)	12,500
APNIC 45 Conference Room Rental	12,000
Quarterly offsite meeting for ELT	12,000
APNIC 46 Conference week - venue hire	10,000

Expenses - Office Operating

The major costs in this item include electricity, land tax, council and water rates, cleaning and rubbish removal, air-conditioning and security. Major expenditure for 2018 includes:

•	Cordelia Street - Electricity	60,000
•	Land Tax	54,200
•	Kitchen Supply and Catering Expense	52,500
•	Office Cleaning	37,500
•	Local Council Rates and charges	35,800
•	General Maintenance and repairs	12,500
•	Workplace Health and Safety	12,000
•	Rubbish removal and other general office expense	9,000
•	Office building A/C service/maintenance	7,500
•	General Workplace Services/ Staff Amenities	7,500
•	Staff Health Checks	7,500

Capital Expenditure 2018

- Capital expenditure comprises equipment & software and office equipment
 - For the 2018 budget submission, the capital expenditure provision for 2018 is \$1,013,800

CAPITAL (AUD)	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	Forecast 2017	Budget 2018	Change
Equipment & Softw are	337,479	661,095	662,698	671,551	809,626	800,000	923,800	15.48%
Office Furniture & Fittings	60,664	89,911	31,728	36,731	12,136	115,000	90,000	-21.74%
Total - Capital Expenditure	398,143	751,006	694,425	708,282	821,762	915,000	1,013,800	10.80%
		88.63%	-7.53%	2.00%	16.02%	11.35%	10.80%	

Capital Expenditure 2018

Major CAPEX provisions for 2018 are:

•	New IXP Development - (4 x \$30K)	120,000
•	Root Server new installations and upgrades	100,000
•	CRM Development Work - Reduced form 250k	100,000
•	Stats & Data Development Work - Project Consultancy	100,000
•	APNIC Portal Development work - Project Consultancy	100,000
•	SQL server, storage expansion, switches, laptops, screens	80,000
•	Telephony replacement equipment	40,000
•	Server - DNS - JP replacement	30,000
•	Switches - Openflow lab content of SDN workshop	25,000
•	Firewalls to enhance lab of security workshop	20,000
•	Virtualisation server storage cache	20,000

Activity Plan 2018

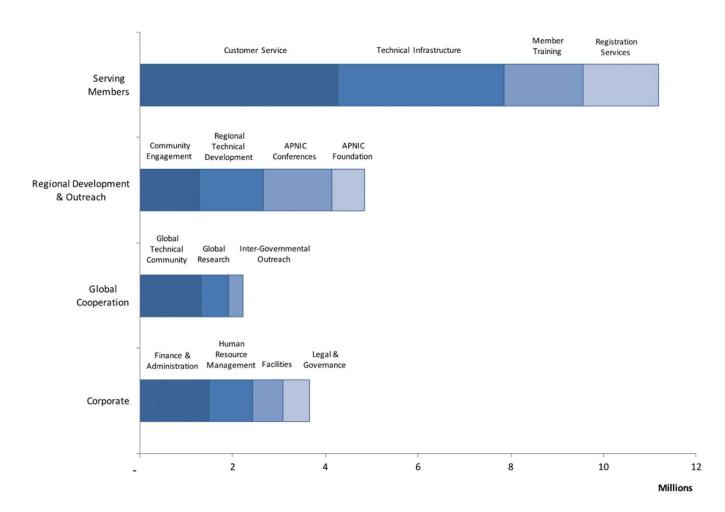
Issue Date:

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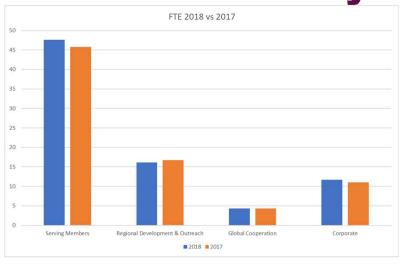
2018 Expenses by Activity

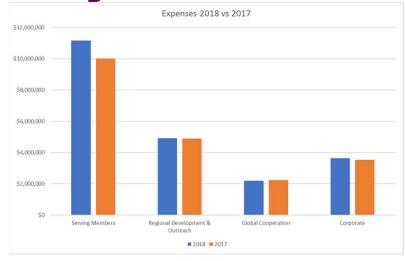


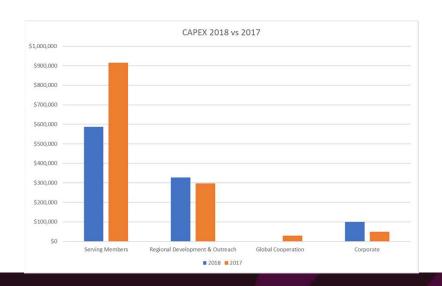
2018 Expenses by Activity

Activity:	FTE	Expenses	CAPEX
Corporate	11.7	3,630,256	99,000
Corporate : Facilities	1.7	646,319	90,000
Corporate: Finance & Administration	7.6	1,468,195	9,000
Corporate : Human Resource Management	2.0	930,620	
Corporate : Legal & Governance	0.4	585,122	
Global Cooperation	4.4	2,195,034	-
Global Cooperation: Global Research	0.9	610,772	-
Global Cooperation : Global Technical Community	2.8	1,314,340	
Global Cooperation : Inter-governmental Outreach	0.6	269,922	
Regional Development & Outreach	16.2	4,924,011	328,000
Regional Dev : APNIC Conferences	4.8	1,473,125	13,000
Regional Dev : APNIC Foundation	1.0	710,683	
Regional Dev : Community Engagement	5.1	1,412,411	
Regional Dev : Regional Technical Development	5.3	1,327,792	315,000
Serving Members	47.6	11,168,152	586,800
Serving Members : Customer Service	17.7	4,172,199	327,500
Serving Members : Member Training	6.9	1,718,833	57,000
Serving Members: Registration Services	9.2	1,687,192	
Serving Members : Technical Infrastructure	13.8	3,589,928	202,300
Serving Members : Technical Infrastructure	79.8	21,917,453	1,013,800

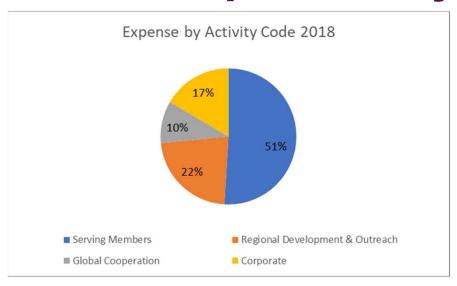
2018 vs 2017 by Activity







2018 Expenses by Activity





Serving Members- Registration Services

Ongoing

- IPv4, IPv6 and ASN delegation and registration services
 - In 2017, APNIC processed close to 6,000 resource and transfer requests. It is assumed that this activity level will continue and require similar resources in 2018 as in 2017.
- Registry operation and maintenance
 - This activity includes operation, maintenance and enhancement of:
 - The APNIC Whois Database
 - APNIC's Reverse DNS service, including DNSSEC management.
 - Members' DNSSEC configurations within MyAPNIC.
 - Members' contact management within MyAPNIC.
 - Resource certification services using RPKI.

Projects

- Whois accuracy support
 - Develop a more comprehensive system and processes to help Members to meet their obligations for maintaining accurate whois data easily via new functionality in MyAPNIC.
- RPKI "anysign" service
 - Expand the functionality of RPKI for issuing signed statements about resources for cryptographic verification by other parties. Potential applications could include authorisation requests to update a global IRR, automated verification of provision requests to ISPs, or signing documents related to transfers.
- · Resource transfer process automation
 - Remove several manual aspects of the resource transfer process to improve efficiency, user experience, and eliminate the risk of unnecessary delays.

Year	FTE	Expenses	CAPEX
2017	8.6	\$1,556,879	-
2018	9.2	\$1,687,192	1

Serving Members- Customer Service

Ongoing

Member Services/Helpdesk/Billing

- In 2017, the Member Services team handled a quarterly average of more than 7,000 Member requests, 200 phone calls, and 870 online chat sessions. In 2017, the Finance team processed more than 8,200 Member invoices and receipts. A similar workload is expected in 2018.

MyAPNIC development and maintenance

MyAPNIC development and maintenance in 2018 continues to focus on improving performance and usability

APNIC Blog

- The APNIC Blog provides a single destination for news and views from APNIC and the community. In 2017, the blog published 359 posts, including 130 community guest posts, generating 360,000 views. It is expected the Blog will maintain its readership levels in 2018.

New Membership outreach

APNIC's Membership outreach helps ensure that organizations that need Internet resources are aware of APNIC and the services it offers. The Secretariat will maintain its outreach efforts in 2018 including online and face-to-face engagements throughout the region at events including CommunicAsia and other regional industry events.

Quality management

An ISO 9001:2016 surveillance audit will be held during 2018 to ensure quality controls across all customer-facing processes are maintained.

Projects

Improving online experience

Integrating APNIC's online services to develop a personalised experience for users of APNIC's services. This is a multi-year project that began in 2017 and is expected to be completed in 2018.

Service Partners

- APNIC will conduct trials of a new "Service Partner" model to improve support to APNIC Members and Internet development according to local needs. The EC has approved a two-year pilot program.

APNIC Survey 2018

The 2018 survey has been commissioned by the APNIC EC and will be launched at APNIC 45, with results to be reported at APNIC 46 in September.

Customer Relationship Management (CRM)

Complete the implementation of CRM to support and streamline Member engagement, external relations and communications activities.

Year	FTE	Expenses	CAPEX
2017	17.9	\$3,819,787	\$233,000
2018	17.7	\$4,172,199	\$327,500



Serving Members- Technical Infrastructure Services

Ongoing

APNIC infrastructure services

- These activities include all technical support required to deliver services to APNIC Members and the Secretariat.
- Data centres and interconnections
 - Maintenance of two fully-redundant data centres in Brisbane, and connections to the APNIC office, and Internet, via a triangle of fibre interconnection.
 - Maintenance of APNIC data centres in Japan and USA providing additional redundancy and load-balancing
- Maintenance, depreciation and licensing
 - · Infrastructure activities related to equipment maintenance and depreciation, and all licenses associated with this equipment.
- APNIC continues to move towards more virtualized and 'cloud' infrastructure, and capital expenditure will decrease compared to 2017. Operational costs will increase due to licence fees associated with "pay-as-you-go" services.

Projects

Data integration

Mapping structures and relationships of all data and systems at APNIC to ensure that critical information can be used fully in the provision and management of APNIC services.

Systems Development

Implement a range of system improvements to ensure APNIC internal systems are managed efficiently and effectively.

Network consolidation and enhancements

Consolidate and optimise APNIC's network services in line with best practice to reduce costs and improve performance.

Year	FTE	Expenses	САРЕХ
2017	12.7	\$3,157,280	\$570,118
2018	13.8	\$3,589,928	\$202,300

Serving Members- Member Training

Ongoing

Training services

- APNIC will continue to develop online and face-to-face courses to increase quality, scope, acceptance and recognition of APNIC training
 - Three new APNIC Academy courses will be available in 2018: IPv4/IPv6 Routing Basics, IPv4/IPv6 Routing for ISPs, and Introduction to APNIC Resource Policy
 - APNIC's network of ten community trainers will be expanded in 2018. Additional funding is budgeted for professional development of community trainers during APNIC conferences in Kathmandu and Noumea
 - A study on future potential training improvements is also planned to ensure community needs will continue to be met and the quality of the training can be enhanced
 - It is anticipated that the APNIC Foundation will generate additional funds for the provision of training in the region, however it is not possible to budget for these activities at this time

Technical assistance

 APNIC will continue to respond to requests from Members for technical assistance wherever possible. We refer work to recognized technical experts, with funding by external agencies where available. Technical assistance activity in 2018 is expected to remain at a similar level as 2017, however may increase with project funding from the APNIC Foundation

Year	FTE	Expenses	CAPEX
2017	6.6	\$1,489,540	\$112,000
2018	6.9	\$1,718,833	\$57,000



Regional Development and Outreach – APNIC Conferences

Ongoing

APNIC Conferences

- APRICOT 2018 will be held in Kathmandu, Nepal (19 28 February 2018)
- APNIC 46 will be held in Noumea, New Caledonia (6 13 September 2018)

Expenditure on APNIC Conferences will increase in 2018 due to additional equipment hire expenses in Nepal and higher venue and supplier costs in New Caledonia. These higher expenses will be partially offset by increased sponsorship income at APNIC 46.

Year	FTE	Expenses	CAPEX
2017	4.8	\$1,274,959	\$23,000
2018	4.8	\$1,473,125	\$13,000

Regional Development and Outreach – Regional Technical Development

Ongoing

Policy development

Support for Policy SIG meetings (twice per year) and mailing lists, exchanging policy related information with other RIRs, and support of ASO Address Council Members from the APNIC region.

Rootserver maintenance

Ongoing support for DNS anycast rootservers, including coordinating with hosts and root server operators, upgrade and maintenance work. New servers will be considered in response to demand at strategic or underserved locations (with increased emphasis on deployment at IXPs for higher benefits and with a maximum provision of \$100,000 allowed for all rootserver capital costs).

Internet exchanges and measurement support

APNIC will continue to support the deployment and management of Internet Exchange Points (with increased emphasis on IXP deployment in Less Developed Economies and packaged with
rootserver deployment), and collaborate with the RIPE NCC in the deployment of probes for the RIPE Atlas program.

Network Operator Group (NOG) support

Support for technical expertise, training, and sponsorship will be maintained in 2018 for NOGs in the APNIC region. An increase in sponsorship and travel costs for this support is planned to service
the growing number of NOGs in the region.

Security support

Collaboration with regional and global security organizations - APCERT, FIRST, Interpol, GFCE and others – to access security training resources and provide speakers, sponsorship, and support for events in the APNIC region to promote security best practice among Members.

Projects

CERT/CSIRT Development

Support development of CERT/CSIRT capabilities in the Asia Pacific Region. This includes implementation of an APNIC Foundation-funded project for CERT development in the Pacific.

Integrated Information Services

Using a product management framework, explore the concept of gathering and providing aggregated operational and technical data from APNIC and the APNIC community through a public data portal.

Year	FTE	Expenses	CAPEX
2017	5.3	\$1,277,726	\$275,000
2018	5.3	\$1,327,792	\$315,000



Regional Development and Outreach – Community Engagement

Ongoing

Community sponsorship

APNIC sponsorship of Asia-Pacific Internet organizations and events will increase in 2018.

Fellowship program

Provide opportunities for community members to participate in APNIC conferences and training, including "returning" and "youth" fellowships. In 2018, additional fellowships for APNIC 46 will be provided through dedicated funding pledged by OPT.

Government and sub-regional liaison

 Engagement with governments and regional inter-governmental organizations such as APEC TEL, APT, OECD, Interpol, GFCE and ITU, in the form of providing advice on IP addressing and critical Internet infrastructure issues, will continue at the same level as in 2017.

Community outreach

Increasing awareness of APNIC activities and initiatives throughout the region to boost participation in APNIC community activities.

Internet Governance

APNIC supports and participates in Internet Governance Forums and events at a regional and individual economy-level. In 2018, APNIC plans to maintain the same level of resourcing for these activities as in 2017.

Projects

Research & Education Community Outreach

Help build a closer working relationship between the technical operations community and the Research & Education (R&E) community (universities, research institutes and National Research and Education Networks (NRENs)) to improve the stability and security of Internet.

Increasing Participation

Enhance information and awareness activities to encourage greater Member participation in APNIC community processes. In 2018, the Secretariat will focus awareness
activities on the Policy Development Process (PDP).

Year	FTE	Expenses	САРЕХ
2017	5.6	\$1,631,704	-
2018	5.1	\$1,412,411	-





Regional Development and Outreach – APNIC Foundation

Ongoing

Administrative support

 APNIC will continue to provide approximately one FTE of staff time in support of Foundation management and administration, in addition to the two full time staff employed by the Foundation under APNIC funding (both currently seconded from the Secretariat)

ISIF Asia

 APNIC will continue the existing contribution of \$160,000 to ISIF Grants and Awards in addition to the contribution to Foundation operational expenses

Foundation Activities

 Foundation activities will continue in accordance with the Foundation's plans for 2018, which are separately documented

Year	FTE	Expenses	САРЕХ
2017	1.0	\$720,281	-
2018	1.0	\$710,683	-

Global Cooperation — Inter-governmental Outreach

Ongoing

Inter-governmental liaison

- APNIC participates in inter-governmental forums as a recognized member of the technical community advocating:
 - The necessity of IPv6 adoption for future Internet growth
 - The importance of training and technical assistance to the security and stability of Internet infrastructure
 - The role of the RIRs and numbering community in supporting Internet security, through services and outreach to the Public Safety sector in particular
 - The role of the APNIC community in the Internet ecosystem and the multistakeholder model of Internet governance

Inter-governmental organizations include APEC TEL, APT, OECD, Interpol, GFCE and ITU.

Year	FTE	Expenses	CAPEX
2017	0.7	\$278,051	-
2018	0.6	\$269,922	-

Global Cooperation – Global Research

Ongoing

Global research and measurements

- In 2018, APNIC Labs will continue research and measurement of technologies including IPv6, BGP, RPKI and DNSSEC
- The primary aim is to assist discussions on IP addressing policy and Internet operational matters within the region and globally
- Research activities that will be undertaken in 2018 include KSK roll signalling, detecting DNSSEC-validating resolvers, use of QUIC, TCP algorithms, BGP convergence and ICMPv6 signalling
- Research expenditure is expected to increase in 2018

Technical advocacy at global forums

- Speaking opportunities for the presentation of research outcomes and current trends allow APNIC to raise awareness, gather input and address issues faced by its community.
- Staff time and travel spend will remain the same as last year

Year	FTE	Expenses	САРЕХ
2017	0.7	\$427,711	\$30,000
2018	0.9	\$610,772	-

Corporate — Human Resource Management

Ongoing

Secretariat staffing

 The focus of recruitment activity in 2018 will be on filling any vacancies created by normal staff turnover

Organisational Development

- The structure of APNIC and the roles in each area are managed actively to ensure that APNIC is organized in the best way to serve the needs of the community
- Product Management will be incorporated in the organizational structure in 2018

Staff retention and development

 An annual staff engagement survey will be conducted; skills training and professional development relevant to staff roles will continue to be provided at the same level as in 2017

Year	FTE	Expenses	CAPEX
2017	2.0	\$886,763	\$3,500
2018	2.0	\$930,620	-

Corporate — Finance and Administration

Ongoing

Financial management

 In 2018, APNIC's finance team is expected to pay in excess of 2,000 invoices, process 800 journals, settle over 380 expense claims, and reconcile more than 3,000 credit card transactions

Office management

 Management of office facilities and supplies, communications costs, postage/shipment, document management and collaboration tools, and general administrative tasks in 2018 is expected to remain the same as in 2017

Travel management

 Travel planning, quotations, booking, liaising with travel agencies and airlines, travel insurance and emergency support is expected to be at the same workload as last year. An internal review of travel processes and travel risk management will occur in 2018

Year	FTE	Expenses	САРЕХ
2017	6.9	\$1,508,299	\$12,500
2018	7.6	\$1,468,195	\$9,000

Corporate – Legal and Governance

Ongoing

Legal counsel and business advisors

 General legal advice, contract drafting and reviews, guidance in corporate governance, and legal cooperation with other organizations is expected to increase slightly in 2018

Workplace health and safety compliance

 APNIC actively manages health and safety awareness, compliance training for health and safety officers, and business conduct training such as bullying and harassment prevention, online fraud awareness and equal employment opportunity. We will also continue to provide external counselling services for staff who need it

Year	FTE	Expenses	САРЕХ
2017	0.4	\$522,538	-
2018	0.4	\$585,122	·

Corporate – Facilities

Ongoing

- Building and office facilities
 - The cost of building management, utility equipment, interior fit-outs, office furniture, building security, repair and maintenance of APNIC's office in Brisbane will increase slightly in 2018

Year	FTE	Expenses	CAPEX
2017	1.7	\$614,257	\$33,500
2018	1.7	\$646,319	\$90,000

Questions?

