

APNIC EC Meeting Minutes

Online meeting

Tuesday, 7 September 2021, 13:37 – 15:30 (UTC +10)

Wednesday, 8 September 2021, 11:10 – 16:03 (UTC +10)

Meeting started at 13:37 (UTC +10), Tuesday, 7 September 2021

Present

Gaurab Raj Upadhaya, EC Chair
Kam Sze Yeung
Kenny Huang, Treasurer
Paul Wilson, Director General
Sumon Ahmed Sabir
Vincent Achie Atienza, Secretary
Yoshinobu Matsuzaki
Feng Leng

Connie Chan, Strategic Executive Assistant (minutes)
Craig Ng, General Counsel
Nathan Harvey, Finance Director
Jeremy Harrison, Legal Counsel

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. EC Chair update
 7. WH&S update
 8. Financial reports
 9. HR report
 10. APNIC office space
 11. Joint APNIC EC and APNOG Board meeting
 12. Secretariat report
 13. 2022 Survey planning
 14. NRO NC appointment
 15. EC satisfaction survey
 16. Risk register
 17. APIDT update
 18. APNIC Foundation update
 19. Any other business
 20. Next EC meeting
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Minutes

1. Opening of meeting and declaration of quorum

The Chair of the Executive Council (EC Chair) welcomed all attendees to the meeting. The EC Chair declared the meeting open at 13:37 (UTC +10) on Tuesday, 7 September 2021, and noted that a quorum was present.

2. Agenda bashing

The EC Chair called for comments on the agenda. There were no new agenda items raised.

3. Declaration of interests

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

The EC Chair noted his new job title at Amazon, which had been updated in the Register Interests.

Kenny Huang noted that he had added the additional entries to the Register of Interests.

All other EC members present confirmed their entries in the Register of Interests were complete and correct.

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

The following circular resolutions (that 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 2021-20: The EC resolved to adopt the minutes of the EC meeting of 21-22 June 2021.

5. Matters arising from the last meeting

The following matters from the previous meetings were completed:

Action item 2021-04: The Secretariat to update the risk register.

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

[Confidential information redacted]

Action item 2021-05: The Secretariat to share the EC satisfaction survey with the EC. (See agenda item 15)

6. EC Chair update

The EC Chair provided some highlights since the EC meeting in June. He noted that there had not been much to report since the last meeting.

He noted the recent developments around AFRINIC, which would be discussed in tomorrow's agenda.

He noted that he might attend the next ARIN meeting in Minneapolis, USA.

7. WH&S update

Kam Sze Yeung spoke to the Workplace Health and Safety quarterly update.

Craig Ng gave a brief update about the legal framework around mandatory vaccination in the workplace.

8. Financial reports

Irene Chan joined the meeting for this agenda item.

Nathan Harvey spoke to the financial report presentation (attached).

The EC considered the monthly financial report and the investment report for July 2021 (attached). The EC noted that APNIC is solvent and able to meet all current debts.

The July financial report highlights a net surplus of AUD 4.4M to date, with revenue tracking very close to the budget and expenses tracking at 11% under the budget forecast. At the end of July 2021, APNIC had a total of 8,581 Members serving 53 economies.

Nathan Harvey also noted the plan of adopting a new financial analysis and reporting tool to provide more enhanced information for the EC in future.

[Irene Chan left the meeting at 14:35 (UTC +10)]

9. HR report

Louise Tromp joined the meeting for this agenda item.

Louise Tromp spoke to the HR report presentation.

[Louise Tromp left the meeting at 15:10 (UTC +10)]

10. APNIC office space

The Director General spoke to the office space update presentation (attached).

The EC noted the Secretariat's long-term accommodation options, and agreed to have the property subcommittee re-enacted and get involved in looking at potential properties for APNIC. The property sub-committee members are Gaurab Raj Upadhaya, Kenny Huang and Nathan Harvey.

Meeting adjourned at 15:30 (UTC +10), Tuesday, 7 September 2021

Meeting resumed at 11:10 (UTC +10), Wednesday, 8 September 2021

Tony Smith joined the meeting for the next three agenda items.

11. Joint APNIC EC and APNOG Board meeting

Philip Smith, Aftab Siddiqui, Ole Jacobsen, Gavin Tweedie and Raphael Ho of the APNOG Board joined the meeting for this agenda item.

The EC Chair extended a warm welcome to the APNOG Board.

Philip Smith gave an update on APRICOT 2022 and 2023. It was noted that the conference rotation around the sub-regions of the Asia Pacific was not likely to restart for another year, and thus APRICOT 2022 would be a virtual event in February next year. The boards also discussed the opportunities and challenges of virtual meetings.

The EC Chair gave an update on the recent community leaders' meeting and extended a sincere thank you to those who participated in the meeting. He further noted that the Secretariat would continue to run the leaders' meeting.

[The APNOG Board left the meeting at 11:42 (UTC +10)]

12. Secretariat Report

Sanjaya joined the meeting for this agenda item.

The Director General spoke to the Secretariat Report (attached).

The EC discussed several items in the Secretariat Report at length.

The Chair thanked the Director General for his leadership of the Secretariat, observing that the Secretariat had done a great job.

Sanjaya provided an update on the whois data incident (attached). The EC discussed the lesson learnt and thanked the Secretariat for handling this incident well. It was noted that a closing blog would be posted after APNIC 52, which would include a link to this presentation.

The EC considered the draft AMM agenda for APNIC 52 (attached).

Resolution 2021-21: The EC resolved to approve the draft agenda for the APNIC Members Meeting of 16 September 2021.

Motion proposed by Yoshinobu Matsuzaki; seconded by Kenny Huang. Passed unanimously.

Meeting adjourned at 13:07 (UTC +10), Wednesday, 8 September 2021

Meeting resumed at 13:30 (UTC +10), Wednesday, 8 September 2021

Craig Ng provided an update on the current legal status with the AFRINIC litigation.

13. 2022 Survey planning

Tony Smith spoke to the 2022 Survey planning presentation (attached).

It was noted that Brenda Mainland from Survey Matters would present the survey proposal to the EC at the December meeting.

[Tony Smith left the meeting at 13:58 (UTC +10)]

14. NRO NC appointment

The EC discussed the appointment process of the NRO Number Council (NC) position, and agreed to extend Nicole Chan's term for another year if she was available to continue on the NRO NC.

Action item 2021-06: The DG to contact Nicole Chan to confirm her willingness to accept the appointment.

15. EC satisfaction survey

Connie Chan presented the draft survey questions for the EC's consideration (attached).

The EC welcomed the survey, which would be launched after APNIC 52.

Action item 2021-07: The Secretariat to launch the EC satisfaction survey in October 2021.

16. Risk register

Nathan Harvey spoke to the risk register presentation.

The EC noted the priority risks, and provided some comments on the current risk register.

Action item 2021-08: The Secretariat to update the risk register.

17. APIDT update

The Director General spoke to the APIDT update presentation (attached).

He noted that the AMM report would include a brief update about the Foundation projects that were implemented by APNIC and the Trust.

18. APNIC Foundation update

Duncan Macintosh joined the meeting for this agenda item.

Duncan Macintosh spoke to the APNIC Foundation update presentation (attached).

The EC considered the potential board candidate and the nomination process of the APNIC Foundation board, and encouraged more names to be suggested in the future.

[Duncan Macintosh left the meeting at 15:43 (UTC +10)]

19. Any other business

The EC Chair called for any other business.

The EC Chair noted the importance of regular and informal engagement with the Secretariat before COVID, and suggested ways to drive engagement with the ELT.

Action item 2021-09: The Secretariat to schedule a meeting to discuss how to boost engagement with the ELT before the next EC meeting.

20. Next EC meeting

The next EC meeting is tentatively scheduled for 6 to 7 and 9 December 2021.

Meeting closed at 16:03 (UTC +10), Wednesday, 8 September 2021

Attachments:

- A. Register of interest**
- B. [Confidential information redacted]**
- C. July 2021 financial report presentation**
- D. July 2021 monthly financial report**
- E. July 2021 Credit Suisse investment report**
- F. July 2021 Credit Suisse commentary**
- G. [Confidential information redacted]**
- H. Office space update presentation**
- I. Secretariat report and presentation**
- J. Whois incident report presentation**
- K. AMM agenda for APNIC 52**
- L. 2022 Survey planning presentation**
- M. Draft EC satisfaction survey**
- N. [Confidential information redacted]**
- O. APIDT update presentation**
- P. APNIC Foundation update presentation**

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 **7 September 2021**.

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

- Employee of Amazon as Head of Global Video Delivery, Prime Video
- Founder of the Nepal Research and Education Network (NREN)
- Chairman of Nepal Internet Exchange (NPIX)
- Standing member of the Program Committee of SANOG
- Board Member of Internet Foundation Nepal

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

- Member of the HKNOG Program Committee
- Employee of Akamai Technologies, Inc
- Member of the Working Group of Peering Asia
- Member of the TWNOG Multi-stakeholder Steering Group (MSG)

Kenny Huang declared that he currently holds the following positions:

- Managing Director and CEO of TWNIC
- Member of the Advisory Council of DotAsia Organization
- Chair of NIIEPA
- Chair of ICANN ccPDP4 WG
- Co-Chair of ICANN CGP
- Board of Director of TWIA
- Board of Director of TWIGF

Yoshinobu Matsuzaki declared that he currently holds the following positions:

- Employee of Internet Initiative Japan Inc. (IIJ) as a Senior Engineer
- Board of Director of JPNIC
- Board of Director of APNOG/APIA
- Member of JANOG Committee
- Technical Advisor of JPCERT/CC
- Contact person at IIJ Europe (RIPE member) for RIPE
- Ph.D. student of Keio University Graduate School of Media Design
- TAC (Technical Advisory Council) of Team Cymru, Inc.

Feng Leng declared that he currently holds the following position:

- Employee of CNNIC as Director of Operation Management Department

Vincent Achie Atienza declared that he currently holds the following positions:

- Employee of Globe Telecom

- Chair of the Philippine Network Operators Group (PhNOG)
- Board member of Internet Society Philippines (ISOC-Ph)
- Member of Ph Technical working group for IPv6 & DNSSEC
- Member of Ph Technical working group for RPKI
- Member (Ph Representative) - APIX - Asia Pacific Internet Exchange Association)
- Member/Evangelist - Philippine Open Internet eXchange (PhOpenIX)
- Member of the Program Committee of APRICOT
- Program Committee Member - Asia Peering Forum (Equinix) 2021
- Program Committee collaborator - ISOC-PhNOG initiatives 2021

Sumon Ahmed Sabir declared that he currently holds the following positions:

- CTO, Fiber@Home Limited
- Sponsor of BDCOM Online Limited
- Member, Board of Trustee, BDIX
- Member, Board of Trustee, BDNOG
- Member, Corecom, SANOG
- Member, Board of Trustee, ISOC, Bangladesh, Dhaka Chapter

Paul Wilson declared that he currently holds the following position:

- Director of APIDTT Pty Ltd (trustee for the Asia Pacific Internet Development Trust)
- Director of APIDT Infrastructure Pty Ltd

Agenda Item 8

Financial reports

Finance Presentation

APNIC EC Meeting
September 2021

Finance Presentation

- Financial Performance – Year to date July 2021
- Financial Outlook – 2021 and 2022

Finance Performance

Year to date July 2021

All amounts are in Australian Dollars (AUD)

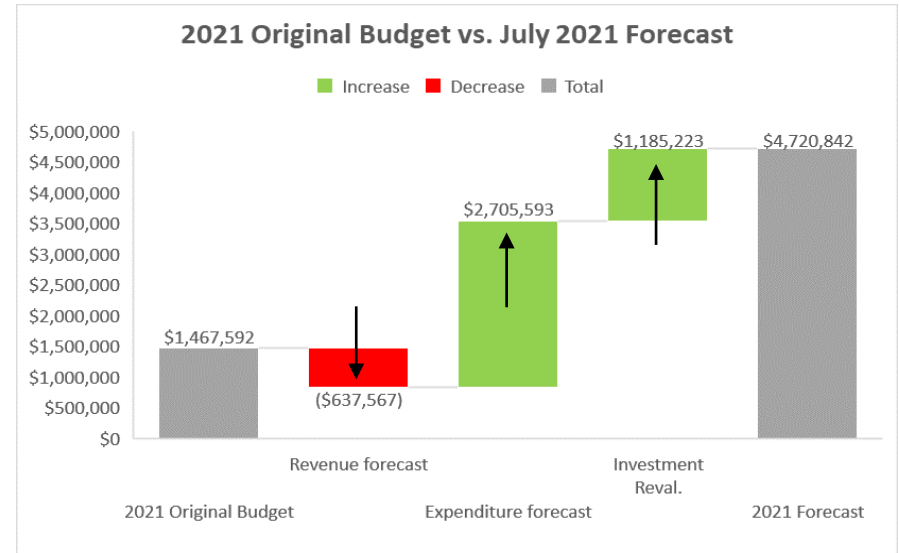
July 2021 YTD Financial Highlights

Key themes

- YTD membership growth is slower than budget expectations.
- Continued impacts of COVID have compressed travel and travel related activities. No international travel.

Highlights

- Revenue forecast \$638k below budget
- Expenses forecast \$2.7m below budget
- Investment revaluation \$1.1m not budgeted
- 2021 Operating surplus forecast at \$4.7m
- 2021 Equity Position has increased by 13%
- YTD positive cash flow of +\$1m plus additional \$1m transferred to investment portfolio.



Statement of Financial Position

Amount (AUD)	2021 (YTD)	2020	This year vs last year (\$)	This year vs last year (%)
ASSETS				
Total Current Assets	\$15,928,065	\$13,204,960	\$2,723,106	20.62%
Total Non-Current Assets	\$40,555,804	\$38,091,979	\$2,463,824	6.47%
TOTAL ASSETS	\$56,483,869	\$51,296,939	\$5,186,930	10.11%
LIABILITIES				
Total Current Liabilities	\$16,262,334	\$15,474,451	\$787,883	5.09%
Total Non-Current Liabilities	\$1,618,933	\$1,645,605	(\$26,672)	-1.62%
TOTAL LIABILITIES	\$17,881,268	\$17,120,056	\$761,211	4.45%
NET ASSETS / TOTAL EQUITY	\$38,602,602	\$34,176,883	\$4,425,719	12.95%

Observations:

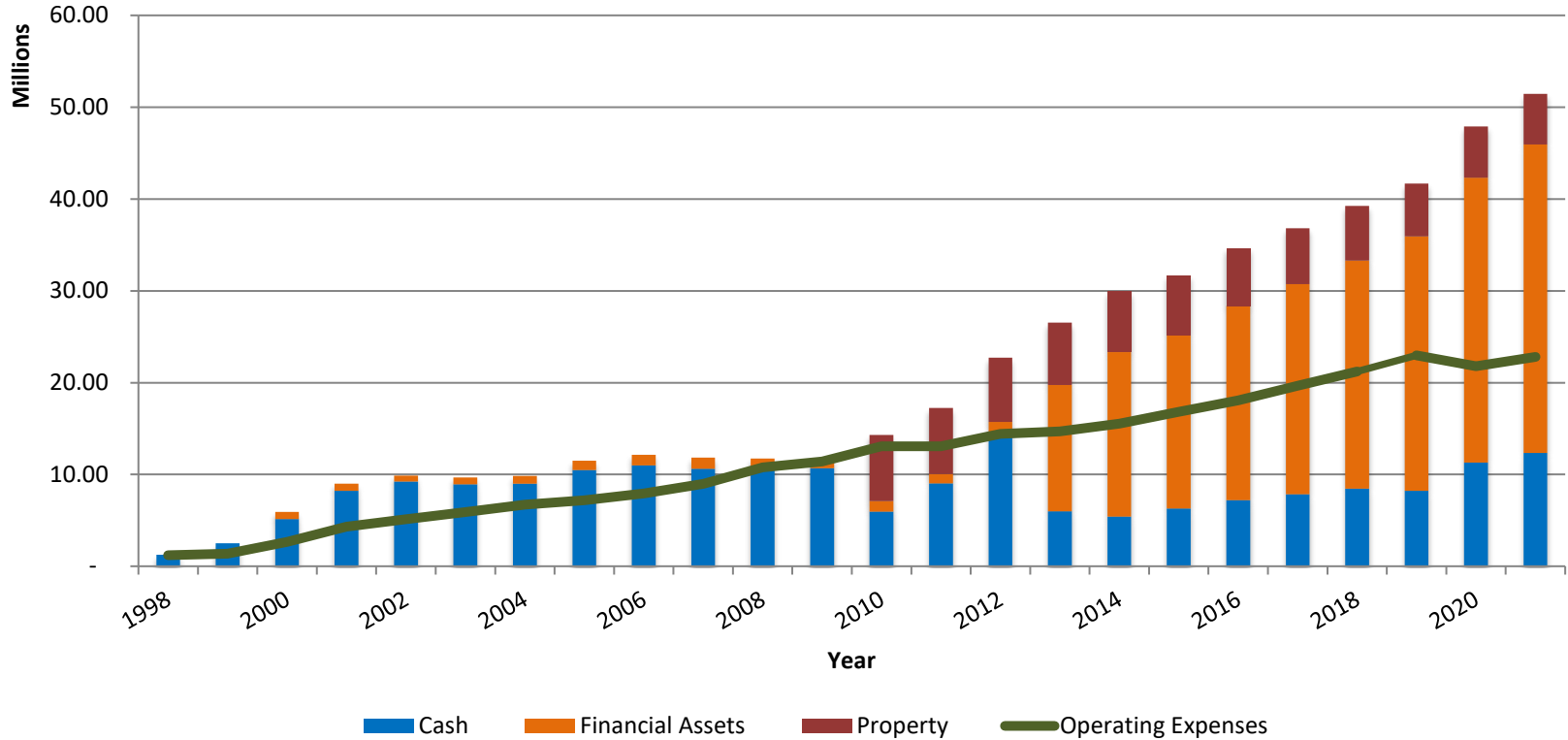
- Current Assets increased by 21% (\$2.7m)
 - Increase in cash of \$1.1m
 - Membership renewals have increased receivables by \$1.3m
 - Prepaid expenses have increased by \$372k
- Non-Current Assets increased by 6% (\$2.5m)
 - \$1m transferred to the Investment Portfolio
 - \$1.1m investment revaluation
- Current Liabilities increased by 5% (\$788k)
 - Accounts Payable decreased by \$381k
 - Staff Leave Provisions increased by \$203k
 - Unearned Revenue increased by \$966k
- Net Equity position has increased by 13% (\$4.4m)

Financial Stability Measure

Analysis of Reserves	*YTD 2021	Actual 2020	Actual 2019	Actual 2018
Total Equity (AUD)	\$38,602,602	\$34,176,883	\$30,724,702	\$28,820,985
% Equity Covered By Cash/ Cash Equivalents	119%	124%	117%	116%
Daily Operating Expenses (AUD) *	\$69,873	\$66,374	\$62,944	\$58,122
Number of Months of expenses covered by Equity*	18.16	16.88	16.05	16.30

** Calculation is based on the average daily operating expenses of approved budget for 2020 and 2021, as it better reflects the APNIC operating cost base in a COVID-free course of business.*

APNIC Capital Reserve



Statement of Income - Surplus

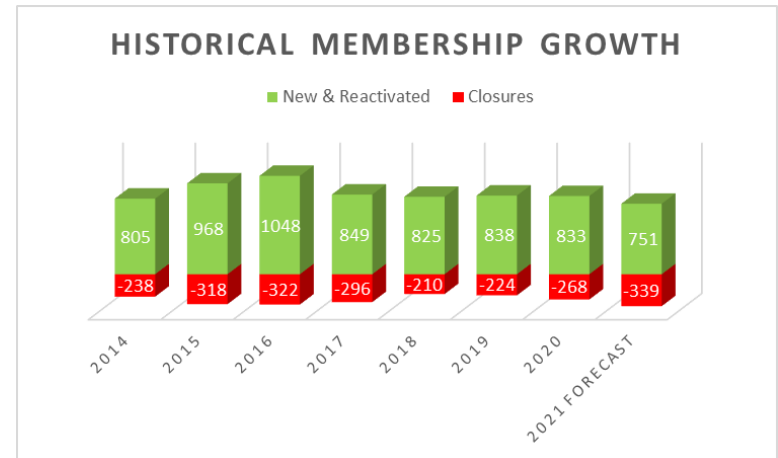
Revenue and Expenses (AUD)	2021 (YTD)	2020 (YTD)	This year vs		Budget (full FY)	Forecast vs
			last year (%)	Forecast (full year)		Budget (%)
Total Revenue	\$15,254,111	\$14,337,913	6.39%	\$26,333,682	\$26,971,249	-2.36%
Total Expenses	\$12,013,616	\$11,787,889	1.91%	\$22,798,063	\$25,503,657	-10.61%
Operating Surplus / (Deficit)	\$3,240,495	\$2,550,024	27.08%	\$3,535,619	\$1,467,592	140.91%
Revaluation of Financial Asset	\$1,185,223	(\$544,329)	-317.74%	\$1,185,223	\$0	0.00%
Surplus / (Deficit)	\$4,425,719	\$2,005,695	120.66%	\$4,720,842	\$1,467,592	221.67%

Statement of Income - Revenue

Revenue	2021 (YTD)	2020 (YTD)	This year vs		Budget (full FY)	Forecast vs Budget (%)
			last year (%)	Forecast (full year)		
Membership Fees	\$14,072,333	\$12,961,460	8.57%	\$24,283,873	\$24,300,595	-0.07%
Non-Member Fees Income	\$149,036	\$153,922	-3.17%	\$255,904	\$264,392	-3.21%
Reactivation Fees	\$10,500	\$11,700	-10.26%	\$18,000	\$18,091	-0.50%
Sign-Up Fee	\$170,250	\$216,000	-21.18%	\$289,643	\$343,000	-15.56%
Transfer Fees	\$123,008	\$103,325	19.05%	\$210,870	\$210,000	0.41%
Sundry Income	\$237,216	\$241,690	-1.85%	\$509,725	\$1,072,960	-52.49%
Operating Revenue	\$14,762,342	\$13,688,097	7.85%	\$25,568,015	\$26,209,038	-2.45%
Investment Income	\$491,769	\$649,815	-24.32%	\$765,667	\$762,211	0.45%
Total Revenue	\$15,254,111	\$14,337,913	6.39%	\$26,333,682	\$26,971,249	-2.36%

- Membership fees forecast to be in line with budget expectation.
- Actual average fees per member \$1,396 vs budget \$1,451
- 427 new members vs. 469 budget year to date.
- 198 member closures vs. 140 year to date.
- 32% of new members from LDCs compared to Budget 27%

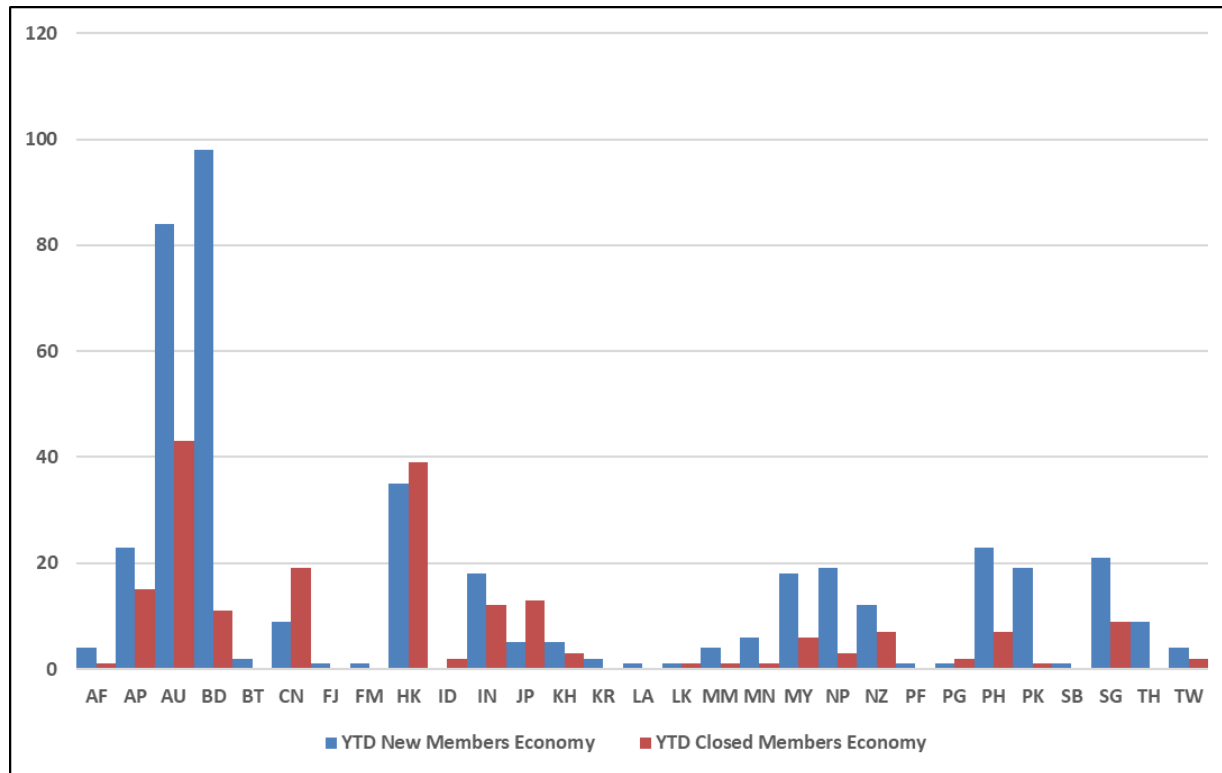
Historical Member Growth	2014	2015	2016	2017	2018	2019	2020	2021 Forecast
Total Members	4618	5268	5994	6,547	7,162	7,776	8,341	8,752
New & Reactivated	805	968	1048	849	825	838	833	751
Closures	-238	-318	-322	-296	-210	-224	-268	-339
Net Change	567	650	726	553	615	614	565	411
Average Monthly	47.25	54.17	60.50	46.08	51.25	51.17	47.08	34.29
Annual Growth %	14.0%	14.1%	13.8%	9.2%	9.4%	8.6%	7.3%	4.9%



Membership Tracking

Membership	Total Dec 2020	YTD New Jul-21	Reactivation Adjustment	YTD Closed Jul-21	YTD Size Change Jul-21	Total Jul-21	% Total
Extra Large	26	0		0	0	26	0%
Very Large	48	0		0	1	49	1%
Large	143	0		0	4	147	2%
Medium	521	5		-6	23	543	6%
Small	3,685	101	4	-88	9	3,711	43%
Very Small	3,778	306	7	-85	-40	3,966	46%
Associate	140	15		-19	3	139	2%
TOTAL	8,341	427	11	-198	0	8,581	100%

Membership Growth



Top 3 New Member Economies

- Bangladesh
- Australia
- Hong Kong

Top 3 Closed Member Economies

- Australia
- Hong Kong
- Mainland China

Membership Tracking - Closures by Economy

Economy	Breach of Agreement	Market transfer	Membership transfer to NIR	Merger & Acquisition	Non Payment [Uncontactable]	Non Payment [Contactable]	Voluntary member closure	Transfer to Other RIR	Grand Total	IPV4 Resources Reclaimed (/24's)	IPV6 Resources Reclaimed (/32's)	ASN Reclaimed
AF						1			1	4		1
AP		2		1	4		5	3	15	12	3	10
AU	1	8		10	4	1	19		43	35	6	19
BD		3		1	6		1		11	16	6	11
CN	1	4			9	2	3		19	48	9	14
HK	4	9		3	19		3	1	39	88	13	18
ID							2		2	1	0	1
IN	1		2			4	5		12	21	2	9
JP		2	1	3	4	1	2		13	10	1	1
KH					2		1		3	12	1	3
LK						1			1	1		1
MM					1				1	1	0	1
MN				1					1			
MY		1		1	2		2		6	18	3	3
NP					2		1		3	1	1	3
NZ		1		3	1		2		7	4	2	8
PG				1	1				2			
PH		1			3	1	2		7	18	2	6
PK					1				1	2	0	1
SG		1		1	2		5		9	19	3	7
TW		1		1					2		0	
Grand Total	7	33	3	26	61	11	53	4	198	311	52	117

Membership Tracking - Closures by Year Joined

Year Joined	Breach of Agreement	Market transfer	Membership transfer to NIR	Merger & Acquisition	Non Payment [Uncontactable]	Non Payment [Contactable]	Voluntary member closure	Transfer to Other RIR	Grand Total
1998				1			1		2
2000				1					1
2001		1							1
2003		1		1					2
2004					1		1		2
2005		1		2					3
2006				1			2		3
2008				1	1		1		3
2009		2		4			1		7
2010		1		1	1	1	1		5
2011		2	1	1			5		9
2012	1	1		4	5		5		16
2013		4		3	3	1	6		17
2014	2	2		1	8	2	4	1	20
2015	3	7		3	11	1	5	2	32
2016	1	11	1	2	4		4	1	24
2017					6	1	5		12
2018					10	2	2		14
2019					7	2	6		15
2020			1		4	1	4		10
Grand Total	7	33	3	26	61	11	53	4	198

[Confidential information redacted]

Statement of Income - Expenses

Expenses	2021 (YTD)	2020 (YTD)	This year vs		Budget (full FY)	Forecast vs Budget (%)
			last year (%)	Forecast (full year)		
Bank Service Fees	\$144,956	\$138,324	4.80%	\$249,630	\$251,212	-0.63%
Communication Expenses	\$377,780	\$390,991	-3.38%	\$774,826	\$1,019,592	-24.01%
Computer Expenses	\$805,128	\$715,423	12.54%	\$1,708,720	\$1,743,227	-1.98%
Contribution to APNIC Foundation	\$0	\$373,717	-100.00%	\$0	\$565,518	-100.00%
Depreciation Expenses	\$387,684	\$434,303	-10.73%	\$633,797	\$770,942	-17.79%
Doubtful Debt Expenses	(\$698)	(\$6,414)	-89.12%	\$20,000	\$20,000	0.00%
ICANN Contract Fees	\$115,217	\$123,232	-6.50%	\$197,515	\$240,000	-17.70%
Insurance Expenses	\$138,922	\$140,063	-0.81%	\$230,522	\$231,833	-0.57%
Meeting and Training Expenses	\$19,746	\$93,376	-78.85%	\$134,689	\$485,000	-72.23%
Membership Fees Expenses	\$33,598	\$35,094	-4.26%	\$63,766	\$60,040	6.21%
Office Operating Expenses	\$189,375	\$169,224	11.91%	\$392,891	\$385,430	1.94%
Postage & Delivery	\$10,331	\$20,107	-48.62%	\$15,500	\$37,500	-58.67%
Printing & Photocopy	\$13,301	\$22,707	-41.42%	\$32,500	\$39,500	-17.72%
Professional Fees	\$1,163,079	\$861,845	34.95%	\$2,302,432	\$2,519,399	-8.61%
Recruitment Expense	\$166,166	\$95,184	74.57%	\$223,200	\$223,200	0.00%
Salaries and Personnel Expenses	\$8,205,817	\$7,614,669	7.76%	\$15,075,074	\$14,994,013	0.54%
Sponsorship and Publicity Expense	\$123,074	\$167,182	-26.38%	\$398,531	\$554,400	-28.11%
Staff Training Expense	\$79,295	\$76,904	3.11%	\$223,350	\$264,650	-15.61%
Translation Expense	\$0	\$3,007	-100.00%	\$20,000	\$20,000	0.00%
Travel Expenses	\$40,845	\$318,951	-87.19%	\$101,120	\$1,078,200	-90.62%
Total Expenses	\$12,013,616	\$11,787,889	1.91%	\$22,798,063	\$25,503,657	-10.61%

Statement of Income - Expenses

- **COVID-19 impacts (Forecast \$1.5m below budget against travel and travel related expenditure categories)**
 - Border closures and ongoing travel restrictions
 - No face-to-face meeting and training opportunities
 - Limited sponsorship expenses
- **Communication expense (Forecast \$245k below budget)**
 - Capacity issues and delay in setting up 24-hours network operation center, installation of root servers overseas and deployment of network expenses
 - 378k YTD vs. 1m Budget vs. 774k Forecast
- **Contribution to APNIC Foundation (Forecast to be \$566k below budget)**
 - Contingent provision not utilized due to funding from Trust
- **Professional fees (Forecast \$217k below budget)**
 - Reallocation of expenses for Developers to Salary & personnel costs, rather than contractors
 - Delayed start in some consultancy fees expected to be consumed in 2nd half of the year
 - 1.2m YTD vs 2.5m budget vs, 2.3m forecast

Capital Expenditure

Capital Expenditure	2021 (YTD)	2020 (YTD)	This year vs last year		Forecast vs Budget	
			(%)	Forecast (full year)	Budget (full FY)	Budget (%)
Equipment & Software	\$290,418	190,912	52.12%	\$753,048	\$711,350	5.86%
Office Furniture & Fittings	\$4,394	4,314	1.85%	\$200,000	\$2,030,000	-90.15%
Total Capital Expenditure	\$294,811	\$195,226	51.01%	\$953,048	\$2,741,350	-65.23%

Equipment & Software

- Full year forecast is expected to be slightly higher than budget.
- The equipment cost for the RPKI HSM replacement was \$78k, against the budget provision of \$20k.

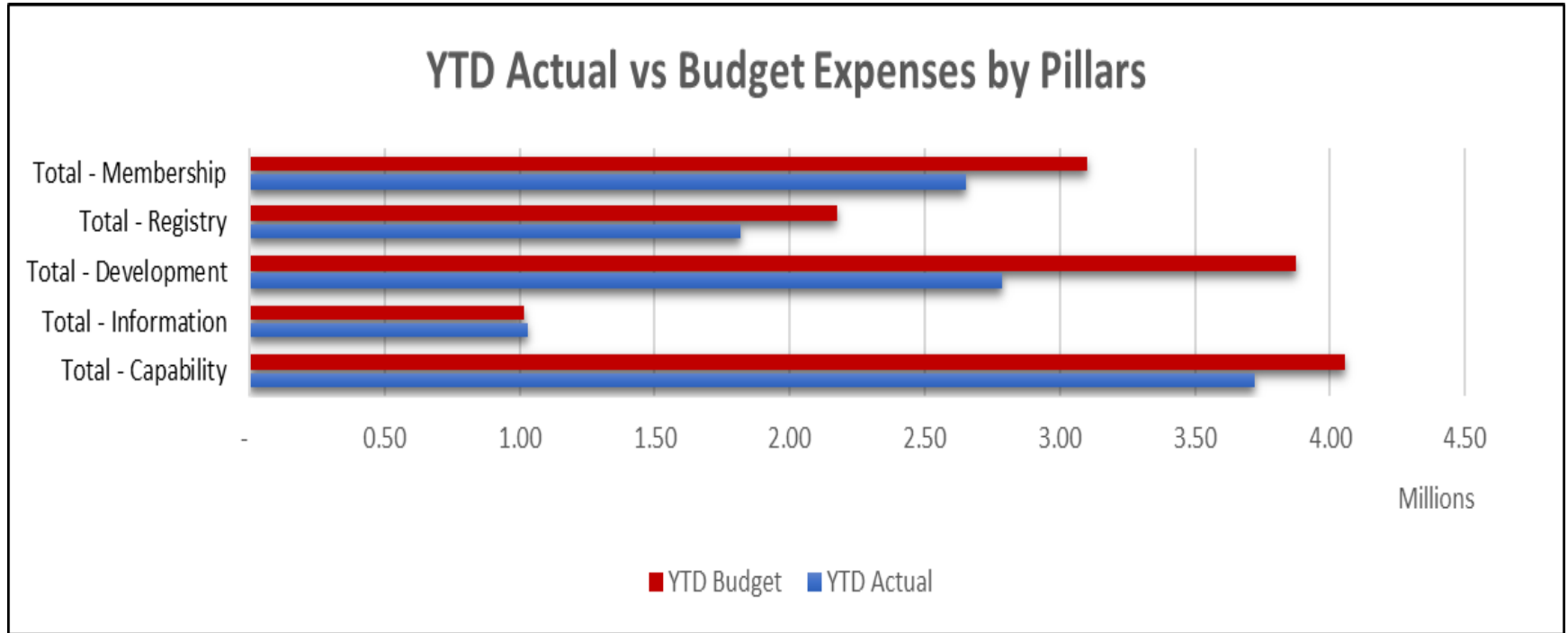
Office Furniture & Fittings

- Provision was made for a comprehensive renovation of 6 Cordelia Street, which proved unfeasible
- A smaller scale project is underway to uplift amenity and transition to hybrid working models ahead of an anticipated office relocation in the next 2 – 3 years.

July 2021 YTD Cash Flow

Amount (AUD)	YTD Jul 2021
Operating Activities	
Net Income	4,425,719
Adjustments to Profit/(Loss)	
Receivables	-1,555,451
Other Current Asset	-108,819
Accounts Payable	-101,900
Sales Tax Payable	90,961
Other Current Liability	798,823
Total Adjustments to Profit/(Loss)	-876,387
Total Operating Activities	3,549,332
Investing Activities	-2,463,824
Fixed Asset	94,437
Other Asset	-2,558,261
Total Investing Activities	-2,463,824
Financing Activities	-26,672
Long Term Liability	-26,672
Equity	0
Total Financing Activities	-26,672
Net Change in Cash for Period	1,058,835
Cash at Beginning of Period	11,281,050
Cash at End of Period	12,339,885

July 2021 YTD Expenses by Pillars



July 2021 YTD Expenses by Pillars & Workstreams

EXPENSES (AUD)	YTD Actual Jul 2021	YTD Budget Jul 2021	Variance \$	Variance %
Member services	1,143,734	1,287,043	-143,309	-11%
Membership products	1,159,618	1,402,981	-243,363	-17%
Membership reporting	351,282	410,027	-58,744	-14%
Total - Membership	2,654,634	3,100,050	-445,416	-14%
Registration Services	460,476	474,543	-14,067	-3%
Registry products	1,143,586	1,476,114	-332,528	-23%
Policy development	215,631	224,879	-9,248	-4%
Total - Registry	1,819,692	2,175,536	-355,843	-16%
APNIC conferences	507,374	618,714	-111,340	-18%
Foundation support	31,312	333,922	-302,611	-91%
Community engagement	848,325	1,043,165	-194,840	-19%
Community participation	128,204	175,443	-47,239	-27%
APNIC academy	1,057,447	1,366,181	-308,735	-23%
Internet infrastructure support	213,054	336,498	-123,445	-37%
Total - Development	2,785,715	3,873,924	-1,088,209	-28%
Information products	490,351	556,393	-66,042	-12%
Research and analysis	542,493	458,569	83,924	18%
Total - Information	1,032,844	1,014,962	17,881	2%
Internal technical infrastructure	934,689	1,086,498	-151,809	-14%
Finance and business services	1,105,082	1,224,571	-119,488	-10%
Employee experience	1,071,277	1,098,681	-27,403	-2%
Governance	609,683	646,818	-37,135	-6%
Total - Capability	3,720,732	4,056,567	-335,835	-8%
Total - Expenses	12,013,616	14,221,039	-2,207,423	-16%

July 2021 YTD Capex by Pillars & Workstreams

CAPITAL (AUD)	YTD Actual Jul 2021	YTD Budget Jul 2021	Variance %	Budget 2021	Forecast 2021	Budget Variance %
Member services	7,935		0%		7,935	0%
Total - Membership	7,935	0	0%	0	7,935	0%
APNIC conferences	3,924	43,150	-91%	43,150	10,000	-77%
APNIC academy	16,351	15,000	9%	15,000	16,351	9%
Internet infrastructure support		60,000	-100%	60,000	20,000	-67%
Total - Development	20,275	118,150	-83%	118,150	46,351	-61%
Research and analysis	24,890	56,000	-56%	80,000	80,000	0%
Total - Information	24,890	56,000	-56%	80,000	80,000	0%
Internal technical infrastructure	211,857	229,500	-8%	353,200	458,762	30%
Finance and business services	4,394	30,000	-85%	30,000	30,000	-0%
Employee experience	25,461	80,000	-68%	2,160,000	330,000	-85%
Total - Capability	241,712	339,500	-29%	2,543,200	818,762	-68%
Total - Capital Expenses	294,811	513,650	-43%	2,741,350	953,047	-65%

Finance Performance

Financial Outlook for 2021 - 2022

All amounts are in Australian Dollars (AUD)

2022 Budget & Activity Plan Timeline

Week of	9-Aug	16-Aug	23-Aug	30-Aug	6-Sep	13-Sep	20-Sep	27-Sep	4-Oct	11-Oct	18-Oct	25-Oct	1-Nov	8-Nov	15-Nov	22-Nov	29-Nov	6-Dec	13-Dec	20-Dec	27-Dec	3-Jan	10-Jan	17-Jan	24-Jan	31-Jan	7-Feb
Process																											
Develop planning process																											
Finalise process with ELT																											
Communicate process to company																											
Plan and Budget Development																											
Review existing commitments																											
Review progress against 2023 targets																											
Identify 2022 focus areas																											
Identify 2022 cross-area planning opps																											
Activity plan development - teams																											
Focus area cross team discussion meetings																											
Budget development ELT - first cut																											
Budget development - Finance compilation																											
Plan and Budget Review																											
Plan and budget review 1																											
Plans and budgets revision																											
Plan and budget review 2																											
Success measures development - overall and workstream																											
Overall plan and budget compilation																											
Overall plan and budget ELT review																											
Success Measures agreement																											
Plan document finalise																											
EC Approval																											
EC Chair and Treasurer plan preview																											
EC plan review and sign off																											
Final updates made from EC review																											
Plan to designer																											
Design edits																											
Design finalised and approved																											

Legend	
Establish Process	
Plan & Budget - Development	
Plan & Budget - Review	
EC Engagement	
Critical Deadline	

- A planning team has been assigned and preliminary planning timeframes and deliverables have been established.
- The APNIC Secretariat budget process will commence in September for completion in late November.
- The 2022 Budget and Activity Plan submission will be presented to the EC for approval at the EC retreat in early December 2021
- The budget and activity plan incorporates the operational plan for 2022, incorporating new projects and workstreams
- The budget will include known commitments together with provisions for planned expenditure on new projects and activities

2022 Expectations

Background

- A conservative “top down” desktop review exercise
- Should be considered a minimum viable expectation rather than a formal budget submission
- Assumptions and numbers will be tested throughout the development of the 2022 Activity Plan and Budget Planning

Assumptions in this forecast:

- Membership growth has trended downward in 2020/21
- Continued conservative outlook for investment returns
- Operating expenditures will increase at 4% per annum (2.5% CPI + 1.5% Consumption increment). Exceptions:
 - Insurance – benchmarked to 3 year rolling average
 - Travel – 50% of 2019 baseline (gradual return to travel from Q2)
 - Travel related costs – 50% of 2019 baseline (anticipating aggressive efforts to re-connect with the region once borders are open).
 - Salaries – impact of staffing uplifts and growth
 - Professional fees – 2020 as baseline
 - No provision for contribution to APNIC Foundation
- APNIC remains at its Cordelia Street office, with capex provision made for some enhancements.

Historical Member Growth	2014	2015	2016	2017	2018	2019	2020	2021 Forecast
Total Members	4618	5268	5994	6,547	7,162	7,776	8,341	8,752
New & Reactivated	805	968	1048	849	825	838	833	751
Closures	-238	-318	-322	296	210	224	268	339
Net Change	567	650	726	553	615	614	565	411
Average Monthly	47.25	54.17	60.50	46.08	51.25	51.17	47.08	34.29
Annual Growth %	14.0%	14.1%	13.8%	9.2%	9.4%	8.6%	7.3%	4.9%

2022 Revenue Expectations

Revenue	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Forecast 2021	Forecast 2022	Change to Forecast 2021
Membership fees	\$15,903,111	\$16,933,413	\$18,354,898	\$19,310,962	\$20,213,860	\$21,061,318	\$22,766,728	\$24,283,873	\$25,498,067	5.00%
Non-members fees	\$254,706	\$243,049	\$243,923	\$260,010	\$251,054	\$255,751	\$260,483	\$255,904	\$251,406	-1.76%
Reactivation fees	\$67,800	\$37,600	\$37,700	\$27,200	\$22,000	\$16,900	\$18,400	\$18,000	\$17,609	-2.17%
Sign-Up fees		\$456,000	\$465,000	\$373,250	\$330,000	\$345,500	\$347,250	\$289,643	\$241,593	-16.59%
Transfer fees	\$81,304	\$77,943	\$130,139	\$127,440	\$164,145	\$173,831	\$216,016	\$210,870	\$205,847	-2.38%
Sundry income	\$238,198	\$252,764	\$193,829	\$209,801	\$447,939	\$430,863	\$446,808	\$509,725	\$522,468	2.50%
Operating Revenue	\$16,545,118	\$18,000,769	\$19,425,489	\$20,308,663	\$21,428,997	\$22,284,164	\$24,055,684	\$25,568,015	\$26,736,989	4.57%
Investment income	\$754,563	\$792,041	\$890,951	\$841,080	\$872,034	\$981,871	\$924,590	\$765,667	\$634,061	-17.19%
Total Revenue	\$17,299,681	\$18,792,810	\$20,316,440	\$21,149,743	\$22,301,031	\$23,266,035	\$24,980,274	\$26,333,682	\$27,371,049	3.94%
Change		8.6%	8.1%	4.1%	5.4%	4.3%	7.4%	5.4%	3.9%	

Assumptions/Observations:

- Current year decline in membership growth will impact membership fees in 2022.
 - 2021 Membership revenue growth of 6.6%.
 - 2022 Membership revenue growth of 5%.
- Sign-up and reactivation fees in line with 2021 levels.
- Assumed stable levels of sundry income.
- Conservative approach to investment income – macro economic investment conditions are difficult to predict.

2022 Expense Expectations

Expenses	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Forecast 2021	Forecast 2022	Change to Forecast 2021
Bank service fees	\$145,823	\$156,496	\$167,917	\$177,670	\$193,762	\$207,759	\$241,477	\$249,630	\$259,616	4.00%
Communication expenses	\$483,803	\$591,885	\$532,212	\$561,271	\$542,895	\$570,832	\$697,060	\$774,826	\$805,819	4.00%
Computer expenses	\$572,528	\$520,784	\$533,628	\$647,453	\$817,599	\$1,067,957	\$1,216,809	\$1,708,720	\$1,777,069	4.00%
Contribution to APNIC Foundation			\$18,003	\$665,058	\$732,710	\$762,179	\$760,890			
Depreciation expense	\$765,548	\$764,145	\$785,218	\$807,596	\$856,029	\$862,055	\$707,658	\$633,797	\$659,149	4.00%
Doubtful debt expenses	\$34,259	(\$54,293)	(\$6,225)	\$14,653	(\$1,445)	\$24,302	(\$733)	\$20,000	\$20,000	
ICANN contract fee	\$260,333	\$284,161	\$243,026	\$244,657	\$278,866	\$263,386	\$223,432	\$197,515	\$205,416	4.00%
Insurance expense	\$129,971	\$131,550	\$128,793	\$173,610	\$189,738	\$206,523	\$229,242	\$230,522	\$255,880	11.00%
Meeting and training expenses	\$374,850	\$350,313	\$363,343	\$389,922	\$396,545	\$425,704	\$135,335	\$134,689	\$212,852	58.03%
Membership fees	\$55,611	\$49,532	\$48,971	\$52,296	\$48,309	\$58,241	\$62,381	\$63,766	\$66,317	4.00%
Office Operating	\$312,744	\$315,608	\$324,948	\$337,207	\$342,458	\$342,806	\$290,543	\$392,891	\$408,607	4.00%
Postage & delivery	\$22,071	\$51,029	\$41,893	\$40,610	\$42,808	\$35,060	\$26,198	\$15,500	\$16,120	4.00%
Printing & photocopy	\$48,508	\$33,807	\$38,165	\$29,311	\$35,605	\$36,145	\$32,428	\$32,500	\$33,800	4.00%
Professional fees	\$1,052,757	\$1,195,494	\$1,409,430	\$1,304,343	\$1,458,389	\$1,820,443	\$1,932,613	\$2,302,432	\$1,932,613	-16.06%
Recruitment expense	\$144,423	\$119,077	\$94,307	\$134,793	\$185,554	\$95,357	\$165,662	\$223,200	\$240,238	7.63%
Salaries and personnel expenses	\$8,731,164	\$9,586,575	\$10,459,153	\$11,096,470	\$11,962,294	\$12,789,661	\$14,070,813	\$15,075,074	\$16,733,332	11.00%
Sponsorship and Publicity expenses	\$340,946	\$575,775	\$624,179	\$681,342	\$759,741	\$627,766	\$437,724	\$398,531	\$414,472	4.00%
Staff training/ Conference expenses	\$135,996	\$169,122	\$164,441	\$148,603	\$199,349	\$381,567	\$218,474	\$223,350	\$258,355	15.67%
Translation expenses	\$1,623	\$2,883	\$11,147	\$9,027	\$7,855	\$6,668	\$3,007	\$20,000	\$20,000	
Travel expenses	\$1,955,471	\$1,961,551	\$2,085,745	\$2,161,034	\$2,165,459	\$2,390,238	\$331,259	\$101,120	\$1,195,119	1081.88%
Total Expenses	\$15,568,431	\$16,805,493	\$18,068,294	\$19,676,928	\$21,214,519	\$22,974,649	\$21,782,270	\$22,798,063	\$25,514,773	11.92%
Change		7.9%	7.5%	8.9%	7.8%	8.3%	-5.2%	4.7%	11.9%	

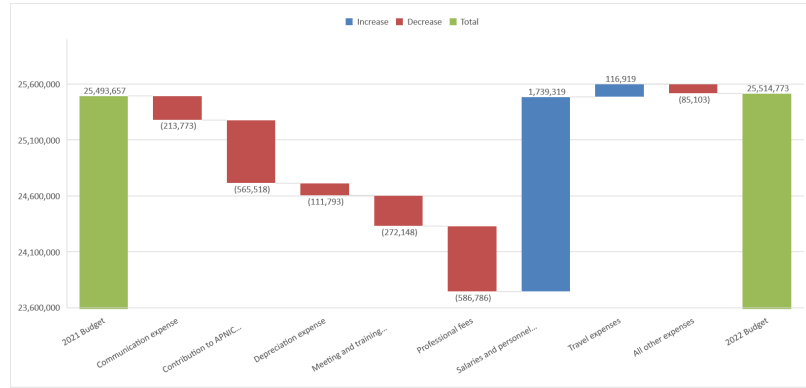
Assumptions/Observations:

- Insurance – benchmarked to 3 year rolling average
- Travel – Gradual return to travel from Q2 (50% of 2019 baseline).
- Salaries – Ongoing impact of 2021 staffing uplift.
- Professional fees – 2020 as baseline for 2022 budget.
- Other expenditure – 4% per annum increase (2.5% CPI + 1.5% Consumption increment).

Combined annual average growth from 2020 to 2022 is 8.6%

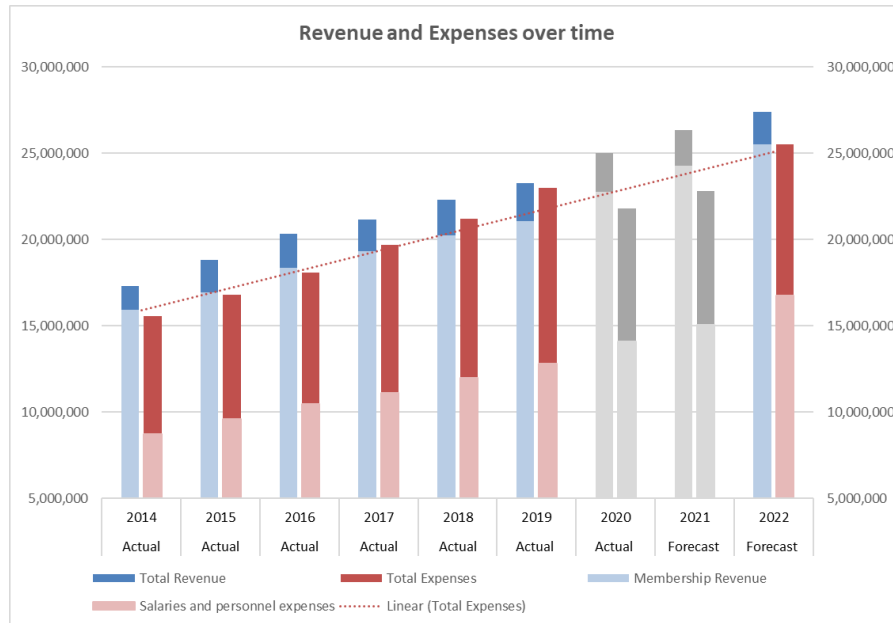
2021 vs 2022 Budgeted Expenditure Comparison

Expenses	Budget 2021	Budget 2022	2021 vs 2022 \$	2021 vs 2022 %
Bank service fees	\$251,212	\$259,616	\$8,404	3.24%
Communication expenses	\$1,019,592	\$805,819	(\$213,773)	-26.53%
Computer expenses	\$1,743,227	\$1,777,069	\$33,842	1.90%
Contribution to APNIC Foundation	\$565,518		(\$565,518)	
Depreciation expense	\$770,942	\$659,149	(\$111,793)	-16.96%
Doubtful debt expenses	\$20,000	\$20,000		
ICANN contract fee	\$240,000	\$205,416	(\$34,584)	-16.84%
Insurance expense	\$231,833	\$255,880	\$24,047	9.40%
Meeting and training expenses	\$485,000	\$212,852	(\$272,148)	-127.86%
Membership fees	\$60,040	\$66,317	\$6,277	9.46%
Office Operating	\$375,430	\$408,607	\$33,177	8.12%
Postage & delivery	\$37,500	\$16,120	(\$21,380)	-132.63%
Printing & photocopy	\$39,500	\$33,800	(\$5,700)	-16.86%
Professional fees	\$2,519,399	\$1,932,613	(\$586,786)	-30.36%
Recruitment expense	\$223,200	\$240,238	\$17,038	7.09%
Salaries and personnel expenses	\$14,994,013	\$16,733,332	\$1,739,319	10.39%
Sponsorship and Publicity expenses	\$554,400	\$414,472	(\$139,928)	-33.76%
Staff training/ Conference expenses	\$264,650	\$258,355	(\$6,295)	-2.44%
Translation expenses	\$20,000	\$20,000		
Travel expenses	\$1,078,200	\$1,195,119	\$116,919	9.78%
Total Expenses	\$25,493,657	\$25,514,773	\$21,116	0.08%



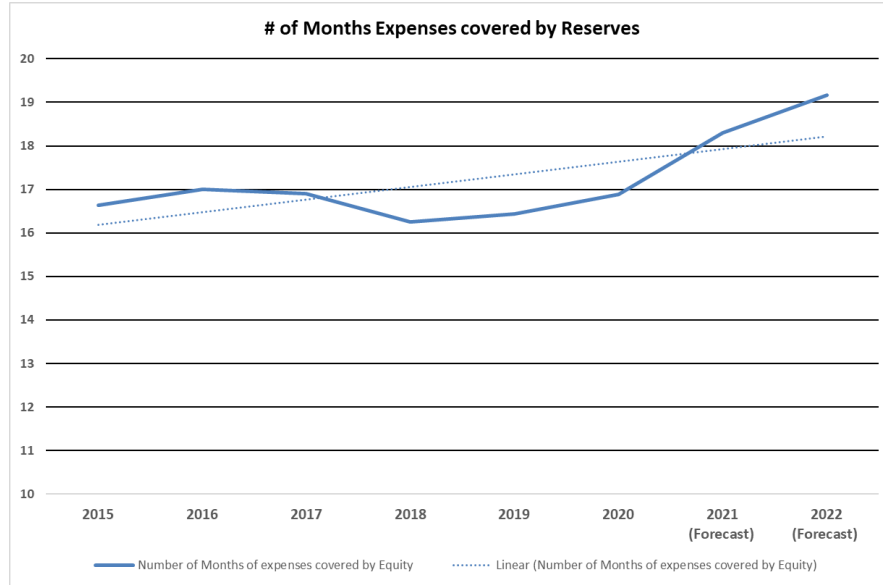
2022 Surplus Expectations

Revenue and Expenses	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Forecast 2021	Forecast 2022	Change to Forecast 2021
Total Revenue	\$17,299,681	\$18,792,810	\$20,316,440	\$21,149,743	\$22,301,031	\$23,266,035	\$24,980,274	\$26,333,682	\$27,371,049	3.94%
Total Expenses	\$15,568,431	\$16,805,493	\$18,068,294	\$19,676,928	\$21,214,519	\$22,974,649	\$21,782,270	\$22,798,063	\$25,514,773	11.92%
Operating Surplus	\$1,731,251	\$1,987,317	\$2,248,146	\$1,472,815	\$1,086,512	\$291,386	\$3,198,004	\$3,535,619	\$1,856,277	-47.50%
Fair value surplus/loss on financial assets					(\$73,475)	\$2,169,284	\$737,879	\$1,185,223		
Surplus	\$1,731,251	\$1,987,317	\$2,248,146	\$1,472,815	\$1,013,037	\$2,460,670	\$3,935,883	\$4,720,842	\$1,856,277	-60.68%



Performance against Reserve Target

Analysis of Reserves	2015	2016	2017	2018	2019	2020	2021 (Forecast)	2022 (Forecast)
Total Equity (AUD)	\$23,319,460	\$25,647,507	\$27,708,013	\$28,851,683	\$31,479,015	\$34,176,883	\$38,897,725	\$40,754,001
Forecast/Budget/Actual Daily Operating Expenses (AUD)	\$46,077	\$49,430	\$53,909	\$58,122	\$62,944	\$66,556	\$69,873	\$69,903
Number of Months of expenses covered by Equity	16.64	17.01	16.90	16.25	16.44	16.88	18.30	19.17



Assumptions/Observations:

- Budget revenue and expenditure assumptions as outlined in presentation
- No assumption of investment revaluation or other equity impacts
- At pre-pandemic expenditure levels, coverage would be reduced by approx. 1 month.

Questions?

Monthly Financial Report

(in AUD)

July 2021

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1 Executive Summary

Overview

For the period ended July 2021, APNIC's year to date surplus is \$4,425,719. APNIC holds net assets of \$38,602,602 which is a year-to-date increase of 13%.

APNIC forecast's a full year surplus of \$4,720,842 vs. budgeted surplus of \$1,467,592.

The charts and commentary below explain the key drivers to the variance between forecast and budget performance.

This report includes the full year forecast which has been derived from a detailed review of expected revenues, committed and planned expenditure for the remainder of 2021.

The Statement of Financial Position (Table 1)

The Statement of Financial Position compares APNIC's assets, liabilities and equity at the end of July 2021 against the 2020 year end balances.

Equity has increased by 13% since the end of 2020. This is driven by the year-to-date surplus of \$4.7m at the end of July.

The Statement of Income (Table 2)

The Statement of Income compares APNIC's year to date 2021 income and expenditure against the budget and the comparative period for 2020. It shows a year-to-date operating surplus (before fair value gain on financial assets) of \$3.5m.

The forecast surplus including fair value gain on financial assets is \$4.7m vs original budget of \$1.47m. Figure 1 below highlights key variances to budget and the accompanying commentary provides detailed explanations.

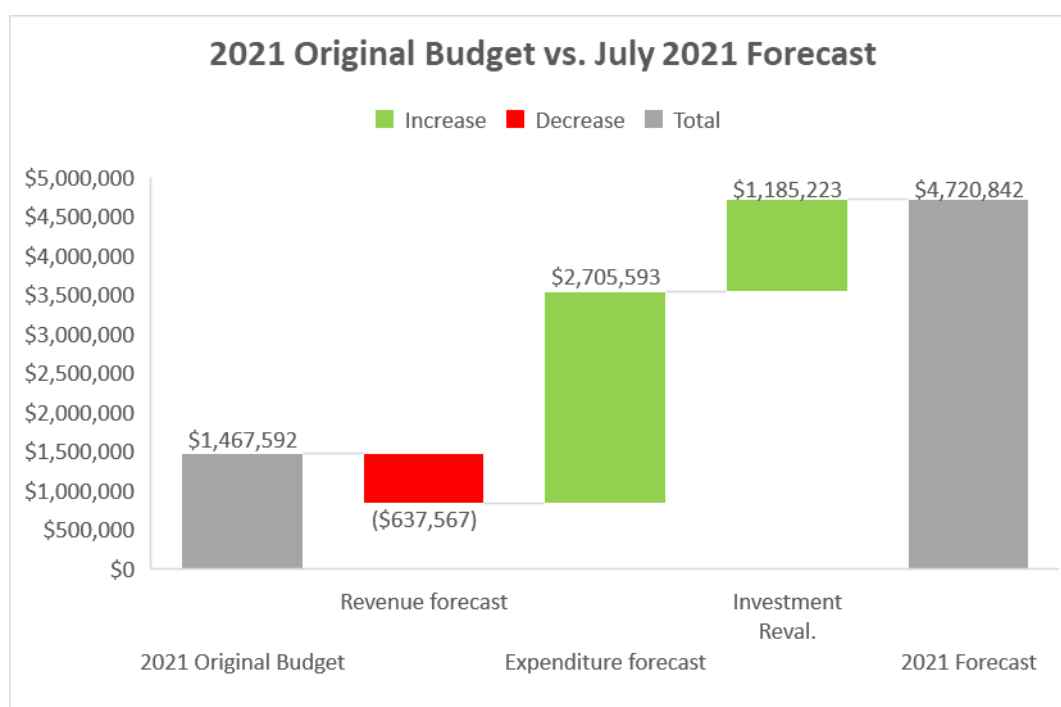


Figure 1: Original Budget vs. Forecast

Revenue is forecast to be \$637,567 below budget at the end of 2021.

- **Membership fees and Sign-Up fees:** Membership fees are forecast to be in line with budget expectation for the full year. Sign-Up fees are forecast to be \$53k below budget for the full year. Net membership growth (opening members plus new & re-activated members less closures) is 2.88% YTD for 2021 vs. 4.63% at the same time last year (See Figure 2: Net Membership Growth YTD).

	2020 YTD	2021 YTD
New Members	505	427
Reactivated Members	9	11
Closure	-154	-198
Net Change	360	240
As at 1 Jan	7,776	8,341
Net Change	360	240
As at 31 July	8,136	8,581
Year to Date Growth %	4.63%	2.88%

Figure 2: Net Membership Growth YTD

- **Sundry Income:** Sundry income primarily represents Foundation receipts from projects to support training activities. Foundation receipts are forecast to continue tracking below budget due to the ongoing COVID-19 travel restrictions which have impacted the delivery of Face-to-face training programs.
- **Investment Income:** Interest Income was below budget as cash deposit rates continue to be lower than anticipated in the budget. The full year forecast is forecast to be close to budget as a result of the increased value of the investment, despite lower cash deposit rates.

Expenses are forecast to be \$2.7m below budget at the end of 2021.

- **COVID-19 impacts:** Border closures and ongoing travel restrictions continue to create savings against the budget estimates across many expense categories including travel (\$977k below budget), meeting and training (\$350k below budget), and sponsorship expenses (\$156k below budget).
- **Communication expenses:** The full year budget is not expected to be exhausted due to capacity issues and delays in setting up 24-hours network operation center, installation of root servers overseas as well as deployment of other network expenses. The corresponding reduction in expenses is reflected in forecast (\$245k below budget).
- **Contribution to APNIC Foundation:** The contingency provision is not expected to be used due to funding received by the Foundation from APIDT (\$566k below budget).
- **Professional fees:** The full year budget is not forecast to be exhausted due to the recruitment of FTE employees originally budgeted as contractors. A corresponding increase in salary & personnel costs has been recognized in the forecast. Delays to commencement of some consultancy arrangements have also been observed but the related projects remain on track for completion by end of year (\$191k below budget).

Investment Revaluation is forecast to be \$1.18m above budget at the end of 2021.

- **Fair value gain:** The value of APNIC's investment has increased by \$1.18m year to date vs. a devaluation of \$544k for the same period last year. APNIC do not budget increases or decreases in the investment portfolio due to the volatility of markets. Therefore this \$1.18m revaluation impacts the variance between budget and forecast.

Capital Expenditure (Table 3) is currently tracking below budget. Full year forecast is expected to be lower than budget.

- The equipment cost for the RPKI HSM replacement was \$78k, against the budget provision of \$20k.
- Comprehensive renovation of 6 Cordelia Street provision proved unfeasible. A smaller scale project is underway to uplift amenity and transition to hybrid working models ahead of an anticipated office relocation in the next 2 – 3 years.

2 Statement of Financial Position

Amount (AUD)	31/07/2021	Year End 2020	% Change
CURRENT ASSETS			
Cash/ Term Deposits	12,339,885	11,281,050	9%
Receivables	2,416,895	1,130,303	114%
Others	1,171,285	793,606	48%
TOTAL CURRENT ASSETS	15,928,065	13,204,960	21%
NON-CURRENT ASSETS			
Other Financial Assets	33,594,669	31,036,408	8%
Property, plant and equipment	6,854,257	6,948,694	-1%
Deferred Tax Assets	106,877	106,877	0%
TOTAL NON-CURRENT ASSETS	40,555,804	38,091,979	6%
TOTAL ASSETS	56,483,869	51,296,939	10%
CURRENT LIABILITIES			
Payables	974,841	1,355,679	-28%
Provisions	2,436,123	2,233,396	9%
Unearned Revenue	12,851,371	11,885,376	8%
TOTAL CURRENT LIABILITES	16,262,334	15,474,451	5%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	1,238,861	1,238,861	0%
Total Provisions	380,072	406,744	-7%
TOTAL NON-CURRENT LIABILITIES	1,618,933	1,645,605	-2%
TOTAL LIABILITIES	17,881,268	17,120,056	4%
NET ASSETS	38,602,602	34,176,883	13%
EQUITY			0%
Share Capital	1	1	0%
Retained earnings	34,176,882	30,724,701	11%
Net Income	4,425,719	3,452,181	28%
TOTAL EQUITY	38,602,602	34,176,883	13%

Table 1. Statement of Financial Position

3 Statement of Income

Amount (AUD)	YTD Actual Jul 2021	YTD Actual Jul 2020	Variance %	Budget 2021	Forecast 2021	Budget Variance %
Membership fees	14,072,333	12,961,460	9%	24,300,595	24,283,873	-0%
Non-members fees	149,036	153,922	-3%	264,392	255,904	-3%
Reactivation fees	10,500	11,700	-10%	18,091	18,000	-1%
Sign-Up fees	170,250	216,000	-21%	343,000	289,643	-16%
Transfer fees	123,008	103,325	19%	210,000	210,870	0%
Sundry income	237,216	241,690	-2%	1,072,960	509,725	-52%
Operating Revenue	14,762,342	13,688,097	8%	26,209,038	25,568,015	-2%
Investment income	491,769	649,815	-24%	762,211	765,667	0%
TOTAL REVENUE	15,254,111	14,337,913	6%	26,971,249	26,333,682	-2%
Bank service fees	144,956	138,324	5%	251,212	249,630	-1%
Communication expenses	377,780	390,991	-3%	1,019,592	774,826	-24%
Computer expenses	805,128	715,423	13%	1,743,227	1,708,720	-2%
Contribution to APNIC Foundation	0	373,717	-100%	565,518	0	0%
Depreciation expense	387,684	434,303	-11%	770,942	633,797	-18%
Doubtful debt expenses	-698	-6,414	-89%	20,000	20,000	0%
ICANN contract fee	115,217	123,232	-7%	240,000	197,515	-18%
Insurance expense	138,922	140,063	-1%	231,833	230,522	-1%
Meeting and training expenses	19,746	93,376	-79%	485,000	134,689	-72%
Membership fees expenses	33,598	35,094	-4%	60,040	63,766	6%
Office operating expenses	189,375	169,224	12%	385,430	392,891	2%
Postage & delivery	10,331	20,107	-49%	37,500	15,500	-59%
Printing & photocopy	13,301	22,707	-41%	39,500	32,500	-18%
Professional fees	1,163,079	861,845	35%	2,519,399	2,302,432	-9%
Recruitment expense	166,166	95,184	75%	223,200	223,200	-0%
Salaries and personnel expenses	8,205,817	7,614,669	8%	14,994,013	15,075,074	1%
Sponsorship and Publicity expenses	123,074	167,182	-26%	554,400	398,531	-28%
Staff training/ Conference expenses	79,295	76,904	3%	264,650	223,350	-16%
Translation expenses	-	3,007	0%	20,000	20,000	0%
Travel expenses	40,845	318,951	-87%	1,078,200	101,120	-91%
TOTAL EXPENSES	12,013,616	11,787,889	2%	25,503,657	22,798,063	-11%
Operating Surplus/ (Deficit)	3,240,495	2,550,024	27%	1,467,592	3,535,619	141%
Fair value gain/ (loss) on financial assets	1,185,223	-544,329	-318%	0	1,185,223	0%
SURPLUS/ (DEFICIT)	4,425,719	2,005,695	121%	1,467,592	4,720,842	222%

Table 2. Statement of Income

4 Capital Expenditure

CAPITAL (AUD)	YTD Actual Jul 2021	YTD Actual Jul 2020	Variance %	Budget 2021	Forecast 2021	Budget Variance %
Equipment & Software	290,418	190,912	52%	711,350	753,048	6%
Office Furniture & Fittings	4,394	4,314	2%	2,030,000	200,000	-90%
Total - Capital Expenditure	294,811	195,226	51%	2,741,350	953,048	-65%

Table 3. Capital Expenditure by Category

5 Activity Reporting

5.1 Expenses by Pillars and Workstreams

EXPENSES (AUD)	YTD Actual Jul 2021	YTD Budget Jul 2021	Variance \$	Variance %
Member services	1,143,734	1,287,043	-143,309	-11%
Membership products	1,159,618	1,402,981	-243,363	-17%
Membership reporting	351,282	410,027	-58,744	-14%
Total - Membership	2,654,634	3,100,050	-445,416	-14%
Registration Services	460,476	474,543	-14,067	-3%
Registry products	1,143,586	1,476,114	-332,528	-23%
Policy development	215,631	224,879	-9,248	-4%
Total - Registry	1,819,692	2,175,536	-355,843	-16%
APNIC conferences	507,374	618,714	-111,340	-18%
Foundation support	31,312	333,922	-302,611	-91%
Community engagement	848,325	1,043,165	-194,840	-19%
Community participation	128,204	175,443	-47,239	-27%
APNIC academy	1,057,447	1,366,181	-308,735	-23%
Internet infrastructure support	213,054	336,498	-123,445	-37%
Total - Development	2,785,715	3,873,924	-1,088,209	-28%
Information products	490,351	556,393	-66,042	-12%
Research and analysis	542,493	458,569	83,924	18%
Total - Information	1,032,844	1,014,962	17,881	2%
Internal technical infrastructure	934,689	1,086,498	-151,809	-14%
Finance and business services	1,105,082	1,224,571	-119,488	-10%
Employee experience	1,071,277	1,098,681	-27,403	-2%
Governance	609,683	646,818	-37,135	-6%
Total - Capability	3,720,732	4,056,567	-335,835	-8%
Total - Expenses	12,013,616	14,221,039	-2,207,423	-16%

Table 4. Expense by Pillars and Workstreams

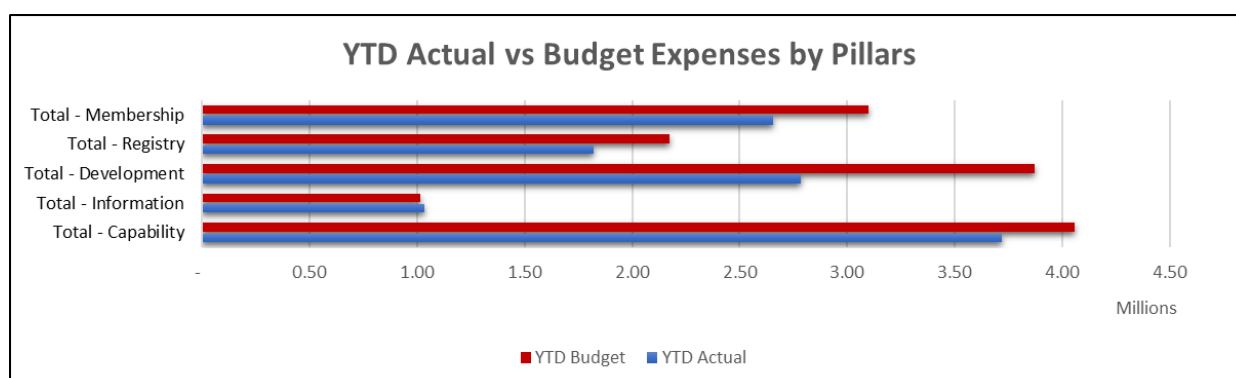


Figure 3. YTD Actual vs. Budget Expenses by Pillars

5.2 Capital Expenditure by Pillars and Workstreams

CAPITAL EXPENSES (AUD)	YTD Actual Jul 2021	YTD Budget Jul 2021	Variance \$	Variance %
Member services	7,935		7,935	0%
Total - Membership	7,935	0	7,935	0%
APNIC conferences	3,924	43,150	-39,226	-91%
APNIC academy	16,351	15,000	1,351	9%
Total - Development	20,275	118,150	-97,875	-83%
Research and analysis	24,890	56,000	-31,110	-56%
Total - Information	24,890	56,000	-31,110	-56%
Internal technical infrastructure	211,857	229,500	-17,643	-8%
Finance and business services	4,394	30,000	-25,606	-85%
Employee experience	25,461	80,000	-54,539	-68%
Total - Capability	241,712	339,500	-97,788	-29%
Total - Capital Expenses	294,811	513,650	-218,839	-43%

Table 5. Capital Expenditure by Pillars and Workstreams

6 APNIC Reserve

6.1 Cash Flow Statement

Amount (AUD)	YTD Jul 2021
Operating Activities	
Net Income	4,425,719
Adjustments to Profit/(Loss)	
Receivables	-1,555,451
Other Current Asset	-108,819
Accounts Payable	-101,900
Sales Tax Payable	90,961
Other Current Liability	798,823
Total Adjustments to Profit/(Loss)	-876,387
Total Operating Activities	3,549,332
Investing Activities	-2,463,824
Fixed Asset	94,437
Other Asset	-2,558,261
Total Investing Activities	-2,463,824
Financing Activities	-26,672
Long Term Liability	-26,672
Equity	0
Total Financing Activities	-26,672
Net Change in Cash for Period	1,058,835
Cash at Beginning of Period	11,281,050
Cash at End of Period	12,339,885

Table 6. Cash Flow Statement

6.2 Capital Reserve

Capital reserve is diversified among the key assets on Cash Investments, Investment Portfolio, and APNIC Property (i.e., APNIC Office). At the end of July, APNIC maintained \$12.3m in cash reserves, \$33.6m has been invested in the investment portfolio and \$5.5m invested in APNIC Property. Figure 3 below tracks the value and the allocation of these assets over time and tracks the operating expenses for each year for comparison:

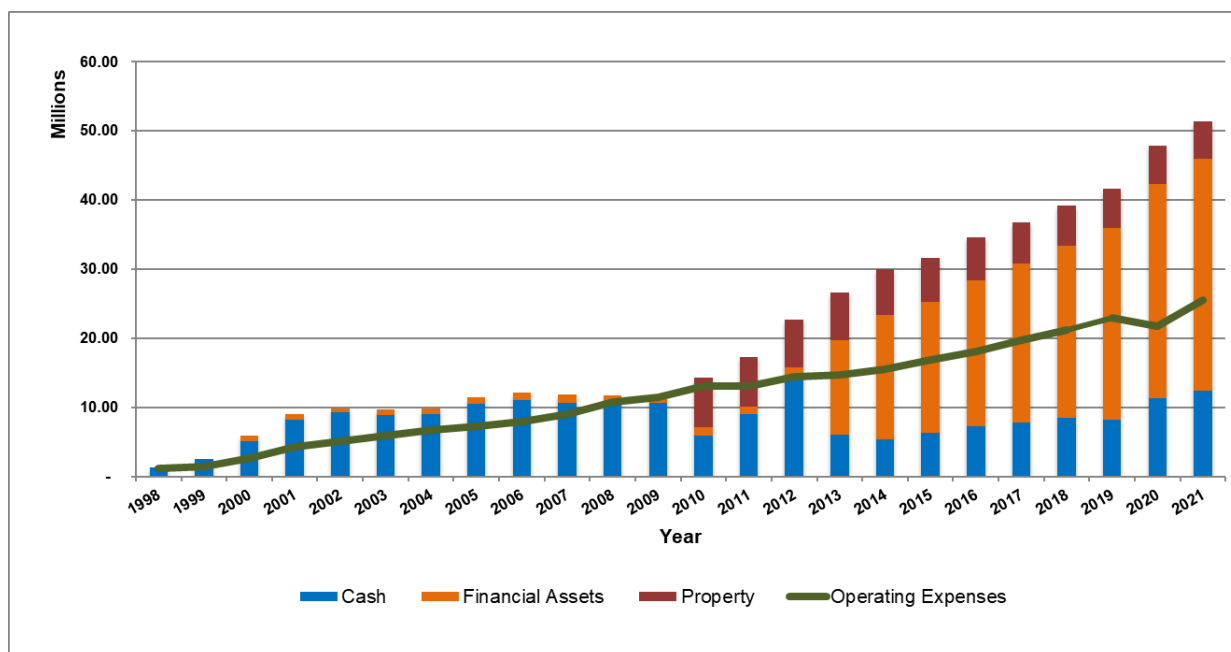


Figure 4. Capital Reserve

6.3 Equity and Reserves

By comparing the Total Equity (including retained earnings and unrealised capital gains), and the Daily Operating Expenses based on the approved budget* and forecast, the number of month's coverage of operational expenses is set out below:

	*YTD 2021	*Actual 2020	Actual 2019	Actual 2018
Total Equity (AUD)	\$38,602,602	\$34,176,883	\$30,724,702	\$28,820,985
% Equity Covered By Cash/ Cash Equivalentents	119.0%	123.8%	116.9%	115.6%
Daily Operating Expenses (AUD) *	\$69,873	\$66,374	\$62,944	\$58,122
Number of Months of expenses covered by Equity*	18.16	16.88	16.05	16.30

* Calculation is based on the average daily operating expenses of approved budget for 2020 and 2021, as it better reflects the APNIC operating cost base in a COVID-free course of business.

Table 7. Equity and Reserves

7 Membership

7.1 Membership by Category

Membership	Total Dec 2020	YTD New Jul-21	Reactivation Adjustment	YTD Closed Jul-21	YTD Size Change Jul-21	Total Jul-21	% Total
Extra Large	26	0		0	0	26	0%
Very Large	48	0		0	1	49	1%
Large	143	0		0	4	147	2%
Medium	521	5		-6	23	543	6%
Small	3,685	101	4	-88	9	3,711	43%
Very Small	3,778	306	7	-85	-40	3,966	46%
Associate	140	15		-19	3	139	2%
TOTAL	8,341	427	11	-198	0	8,581	100%

Table 8. Membership by Category

7.2 Membership Growth

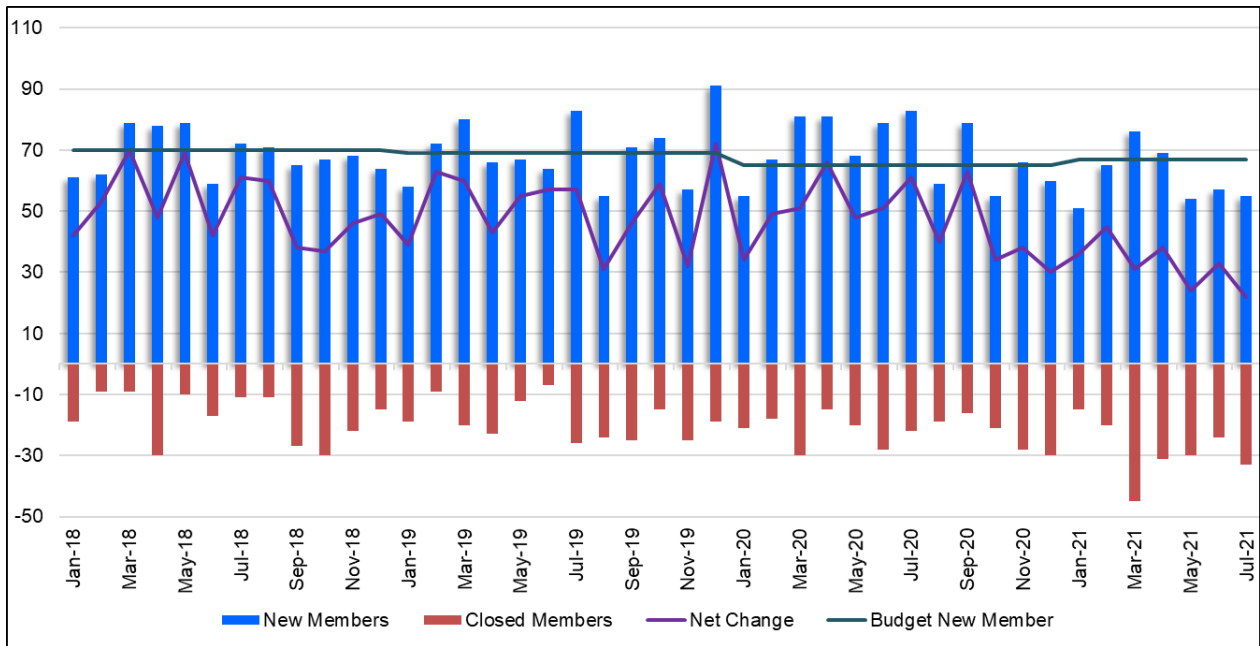


Figure 5. Membership Growth

7.3 Year-to-Date Membership Movement by Economy

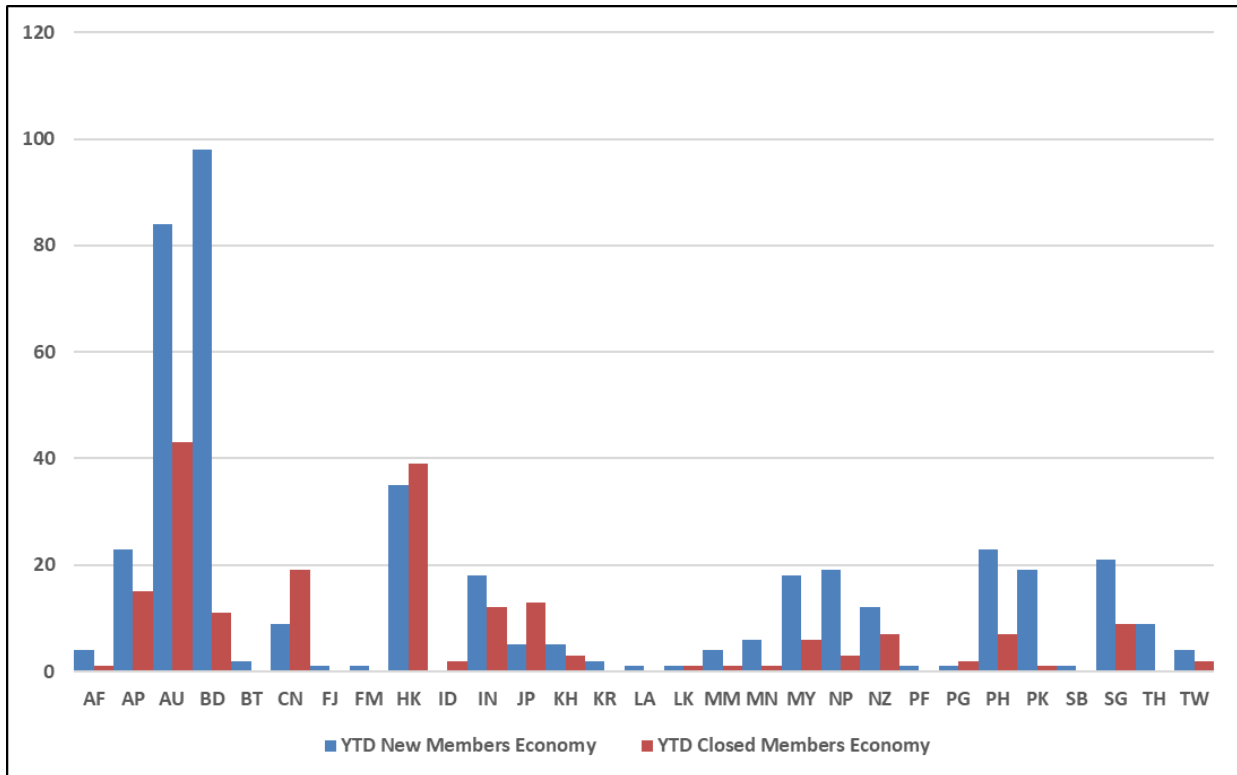


Figure 6. Year-to-Date Membership Movement by Economy

7.4 Membership Closures by Year Joined

Year Joined	Breach of Agreement	Market transfer	Membership transfer to NIR	Merger & Acquisition	Non Payment [Uncontactable]	Non Payment [Contactable]	Voluntary member closure	Transfer to Other RIR	Grand Total
1998				1			1		2
2000				1					1
2001		1							1
2003		1		1					2
2004					1		1		2
2005		1		2					3
2006				1			2		3
2008				1	1		1		3
2009		2		4			1		7
2010		1		1	1	1	1		5
2011		2	1	1			5		9
2012	1	1		4	5		5		16
2013		4		3	3	1	6		17
2014	2	2		1	8	2	4	1	20
2015	3	7		3	11	1	5	2	32
2016	1	11	1	2	4		4	1	24
2017					6	1	5		12
2018					10	2	2		14
2019					7	2	6		15
2020			1		4	1	4		10
Grand Total	7	33	3	26	61	11	53	4	198

Table 9. Membership Closures by Year Joined

7.5 Membership Closures by Economy

Economy	Breach of Agreement	Market transfer	Membership transfer to NIR	Merger & Acquisition	Non Payment [Uncontactable]	Non Payment [Contactable]	Voluntary member closure	Transfer to Other RIR	Grand Total	IPv4 Resources Reclaimed (/24's)	IPv6 Resources Reclaimed (/32's)	ASN Reclaimed
AF						1			1	4		1
AP		2		1	4		5	3	15	12	3	10
AU	1	8		10	4	1	19		43	35	6	19
BD		3		1	6		1		11	16	6	11
CN	1	4			9	2	3		19	48	9	14
HK	4	9		3	19		3	1	39	88	13	18
ID							2		2	1	0	1
IN	1		2			4	5		12	21	2	9
JP		2	1	3	4	1	2		13	10	1	1
KH					2		1		3	12	1	3
LK						1			1	1		1
MM					1				1	1	0	1
MN				1					1			
MY		1		1	2		2		6	18	3	3
NP					2		1		3	1	1	3
NZ		1		3	1		2		7	4	2	8
PG				1	1				2			
PH		1			3	1	2		7	18	2	6
PK					1				1	2	0	1
SG		1		1	2		5		9	19	3	7
TW		1		1					2		0	
Grand Total	7	33	3	26	61	11	53	4	198	311	52	117

Table 10. Membership Closures by Economy



Private Banking

Investment Report 1.7.2021 – 31.7.2021

APNIC PTY LTD

Portfolio Group: 3000039

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Private Banking

Investment Report 1.7.2021 – 31.7.2021

Portfolio Group **3000039**

In the Name of APNIC PTY LTD

Produced on 3.8.2021
Reporting Currency AUD

Relationship Manager Patrick Armitage
Phone +61 2 8205 4451

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

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Scope of Analysis

as of 31.7.2021

Components	Portfolio	Asset Value in AUD	Discretionary Mandate	Opened	Closed	Performance Activation	Performance Deactivation
Portfolio Group: 3000039							
Investment related Positions							
AUD Portfolio	3000039-10	0		16.08.2013		31.12.2013	
AUD Portfolio	3000039-70	33,594,669	Yes	16.08.2013		31.12.2013	
Total Investments		33,594,669					
Total Wealth		33,594,669					

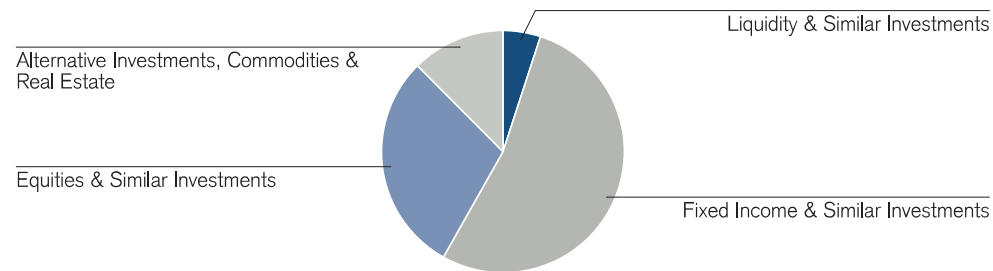
1. Overview

1.1. Asset Allocation

Asset Allocation by Asset Category

Period 1.7.2021 - 31.7.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ Liquidity & Similar Investments	1,450,026	226,252	1,676,277	4.99%
■ Fixed Income & Similar Investments	17,505,000	363,506	17,868,506	53.19%
■ Equities & Similar Investments	9,878,685	-8,097	9,870,588	29.38%
■ Alternative Investments, Commodities & Real Estate	4,258,971	-79,673	4,179,298	12.44%
Total Investments	33,092,681		33,594,669	100.00%

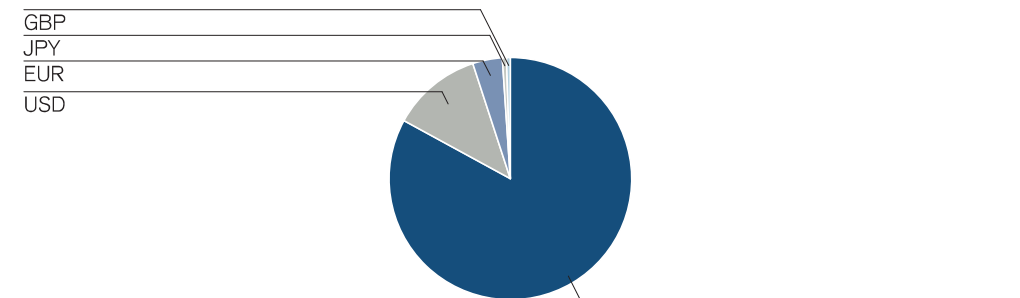


Investments in %

Asset Allocation by Currency

Period 1.7.2021 - 31.7.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ AUD - Australian Dollar	27,523,778	388,721	27,912,499	83.09%
■ USD - US Dollar	3,987,558	64,771	4,052,329	12.06%
■ EUR - Euro	1,282,545	52,553	1,335,099	3.97%
■ JPY - Japan Yen	192,642	-7,159	185,484	0.55%
■ GBP - Pound Sterling	106,158	3,102	109,260	0.33%
Total Investments	33,092,681		33,594,669	100.00%



Investments in %

1.2. Income and Activity

Income Summary

Period 1.7.2021 - 31.7.2021

	Current Period in AUD	Year to Date in AUD
Cash Dividend	218,798	466,613
Coupon Received/Paid	0	-229
Interest Earned	0	1
Interest Paid	0	0
Net Income	218,798	466,385

Activity Summary

Period 1.7.2021 - 31.7.2021

	Current Period in AUD	Year to Date in AUD
Asset Inflows	0	1,000,000
Asset Outflows	0	0
Net Investment Asset Flows	0	1,000,000
Net Non-Investment Flows	0	0

1.3. Performance

Performance Summary

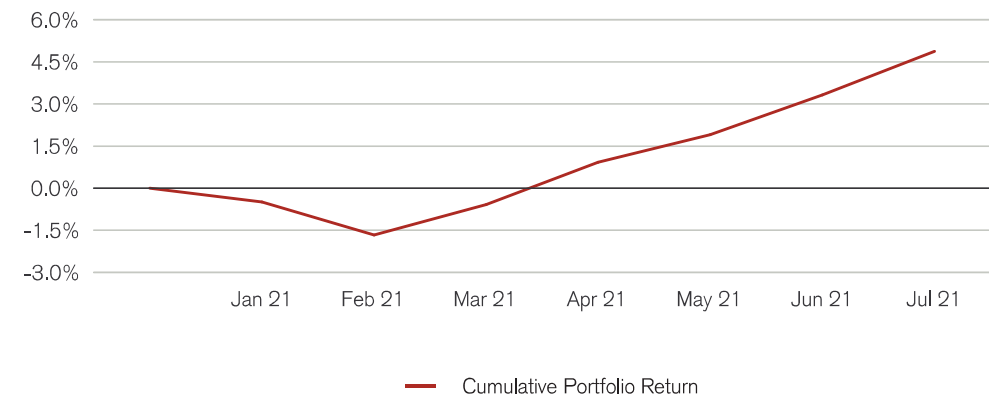
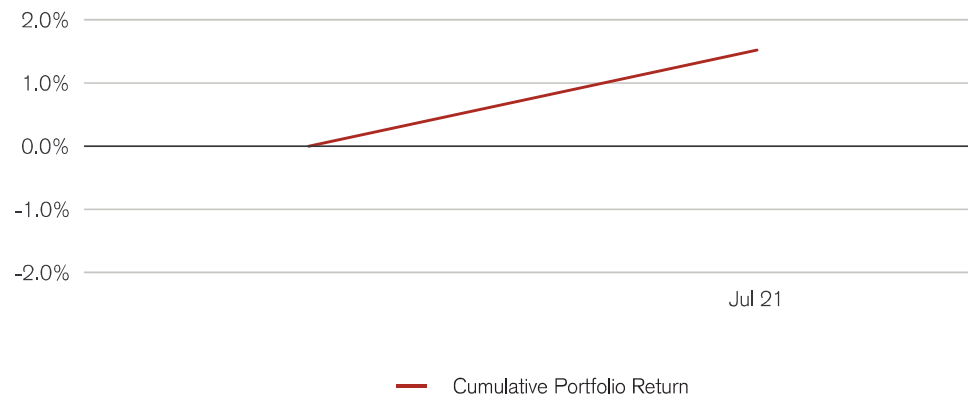
Period 1.7.2021 - 31.7.2021

	Asset Value in AUD	Asset Value in AUD
Ending Market Value		33,594,669
Beginning Market Value		33,092,681
Asset Flows including		0
Inflows	0	
Outflows	0	
Net Non-Investment Flows	0	
Taxes	0	
Flow Adjusted Value Change		501,988
Cumulative Portfolio Return – net		1.52%

Performance Year-to-date

Period 1.1.2021 - 31.7.2021

	Asset Value in AUD	Asset Value in AUD
Ending Market Value		33,594,669
Beginning Market Value		31,057,596
Asset Flows including		991,514
Inflows	1,000,000	
Outflows	0	
Net Non-Investment Flows	0	
Taxes	-8,486	
Flow Adjusted Value Change		1,545,560
Cumulative Portfolio Return – net		4.88%



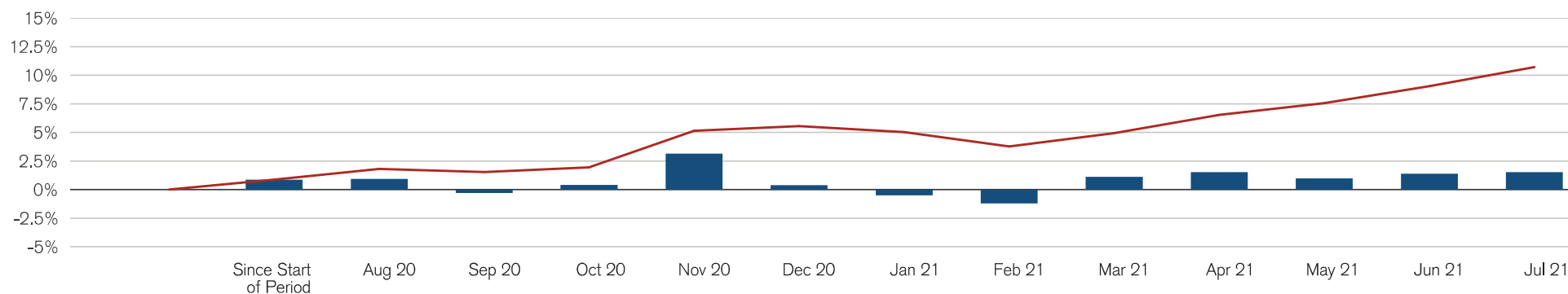
2. Analyses

2.1. Performance

Performance Details

Period 1.7.2020 - 31.7.2021

	Since Start of Period	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21
Ending Market Value	28,691,351	28,959,381	29,881,906	30,001,462	30,942,055	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,450	33,092,681	33,594,669
Beginning Market Value	27,447,506	28,691,351	28,959,381	29,881,906	30,001,462	30,942,055	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,450	33,092,681
Asset Flows including	1,000,000	0	996,136	0	0	-4,128	0	0	-4,216	0	0	995,730	0
Inflows	1,500,000	0	1,500,000	0	0	0	0	0	0	0	0	1,000,000	0
Outflows	-500,000	0	-500,000	0	0	0	0	0	0	0	0	0	0
Net Non-Investment Flows	0	0	0	0	0	0	0	0	0	0	0	0	0
Taxes	0	0	-3,864	0	0	-4,128	0	0	-4,216	0	0	-4,270	0
Performance Activated/Deactivated Portfolios	28,691,351												
Flow Adjusted Value Change	-28,447,506	268,030	-73,611	119,556	940,593	119,668	-152,455	-367,553	339,806	468,835	305,438	449,501	501,988
■ Portfolio Return – net	0.87%	0.93%	-0.27%	0.40%	3.14%	0.39%	-0.49%	-1.19%	1.11%	1.52%	0.97%	1.38%	1.52%
— Cumulative Portfolio Return	0.87%	1.81%	1.54%	1.94%	5.14%	5.55%	5.03%	3.78%	4.93%	6.53%	7.56%	9.05%	10.70%



2.2. Contribution Analysis

Multi-Period Contribution by Asset Category in %

as of 31.7.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
Liquidity & Similar Investments	0.07	0.07	-0.14	-0.47	0.07
Fixed Income & Similar Investments	0.85	0.85	0.22	1.23	0.85
Equities & Similar Investments	0.44	0.44	3.58	6.70	0.44
Alternative Investments, Commodities & Real Estate	0.16	0.16	1.23	2.29	0.16
Total – net ***	1.52	1.52	4.88	9.75	1.52

Multi-Period Contribution by Currency in %

as of 31.7.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
AUD - Australian Dollar	1.17	1.17	2.40	5.94	1.17
USD - US Dollar	0.20	0.20	1.90	2.85	0.20
EUR - Euro	0.16	0.16	0.57	0.74	0.16
JPY - Japan Yen	-0.02	-0.02	-0.02	0.17	-0.02
GBP - Pound Sterling	0.01	0.01	0.04	0.04	0.01
Total – net ***	1.52	1.52	4.88	9.75	1.52

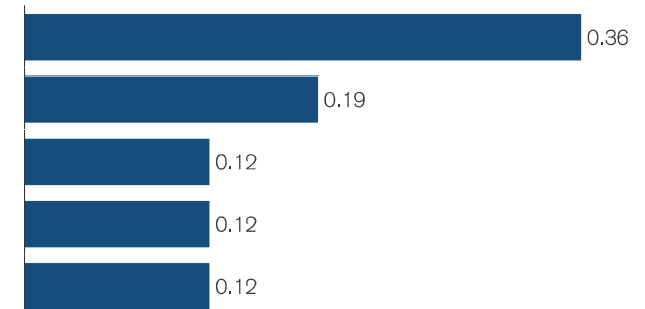
*** If applicable, fees charged in the relevant currency will be deducted from the cash account contribution, which is part of the Liquidity & Similar Investments asset category.

2.3. Contribution - Top Contributors & Detractors

Top Contributors in %

as of 31.7.2021

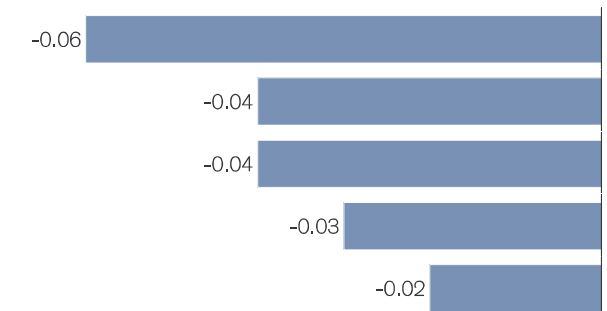
	Total Return	Average Weight	Contribution
UNITS LEGG MASON WESTERN ASSET AUSTRALIAN BOND TRUST CLASS -A-	1.91	18.88	0.36
UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	1.83	10.30	0.19
ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF	4.83	2.53	0.12
REGISTERED SHS BHP GROUP LTD	10.13	1.20	0.12
STAPLED SECURITY GOODMAN GROUP	6.95	1.72	0.12
Total – net ***		34.62	0.90



Top Detractors in %

as of 31.7.2021

	Total Return	Average Weight	Contribution
SHS -UCITS ETF USD C- AMUNDI INDEX SOLUTIONS SICAV - AMUNDI MSCI EMERGING MARKETS CAPITALISATION	-4.05	1.44	-0.06
REGISTERED SHS WESTPAC BANKING CORP	-5.00	0.83	-0.04
SHS -R (ACC.)- GOLDMAN SACHS FUNDS SICAV - GOLDMAN SACHS EMERGING MARKETS EQUITY PORTFOLIO CAPITALISATION	-3.31	1.17	-0.04
REGISTERED SHS MAGELLAN FINANCIAL GROUP LTD	-9.26	0.30	-0.03
UNITS NEXT FUNDS NIKKEI 225 EXCHANGE TRADED FUND	-3.72	0.57	-0.02
Total – net ***		4.31	-0.19



*** If applicable, fees charged in the relevant currency will be deducted from the cash account contribution, which is part of the Liquidity & Similar Investments asset category.

3. Positions

3.1. Investment Related Positions

as of 31.7.2021

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Liquidity & Similar Investments							
Accounts							
AUD	591,563.64	Current Account -20300003970945 AUD Portfolio: 3000039-70	1.0000		591,564		
					1.76%		
EUR	82,140.29	Current Account -20300003970056 AUD Portfolio: 3000039-70	1.0000		132,295	4,975	3.91%
			1.5500 EUR/AUD		0.39%	4,975	3.91%
USD	702,813.39	Current Account -20300003970780 AUD Portfolio: 3000039-70	1.0000		952,418	41,997	4.61%
			0.7720 AUD/USD		2.84%	41,997	4.61%
Total Liquidity & Similar Investments					1,676,277	0	4.99%
Fixed Income & Similar Investments							
Fixed Income & Similar Investments AUD							
AUD	997,000	0.25 % BONDS AUSTRALIA 2019-21.11.24 SERIES 159 Duration: 3.2873 / Rating: Moody's Aaa Yield to Maturity: 0.24% AUD Portfolio: 3000039-70	AU0000083768 54194735	99.2570%	99.9900% BID 30.07.2021	997,381 481 2.97%	7,308 7,308 0.74%
AUD	1,359,825.25	UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND AUD Portfolio: 3000039-70	AU60BGL01056 2244170	1.0421	1.0574 NAV 29.07.2021	1,437,938 4.28%	20,836 20,836 1.47%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD 3,276,497.18120	UNITS PERPETUAL ACTIVE FIXED INTEREST FUND AUD Portfolio: 3000039-70	AU60PER02627 35661784	1.0621	1.0623 NAV 29.07.2021	3,480,518 10.36%	436 436	0.01% 0.01%
AUD 4,853,881.023	UNITS LEGG MASON WESTERN ASSET AUSTRALIAN BOND TRUST CLASS -A- AUD Portfolio: 3000039-70	AU60SSB01221 2248336	1.2556	1.3064 NAV 29.07.2021	6,340,916 18.87%	246,257 246,257	4.04% 4.04%
AUD 401,816.29	UNITS VANGUARD AUSTRALIAN FIXED INTEREST INDEX FUND AUD Portfolio: 3000039-70	AU60VAN00014 1653500	1.1477	1.1772 NAV 30.07.2021	473,018 1.41%	11,838 11,838	2.57% 2.57%
AUD 45,071	SHS -I- AUD NEUBERGER BERMAN INVESTMENT FUNDS PLC - NEUBERGER BERMAN EMERGING MARKET DEBT - HARD CURRENCY FUND AUD Portfolio: 3000039-70	IE00B986FB81 53616359	10.6315	10.8000 NAV 30.07.2021	486,767 1.45%	7,595 7,595	1.59% 1.59%
AUD 105,426	SHS PIMCO FUNDS: GLOBAL INVESTORS SERIES PLC - GLOBAL INVESTMENT GRADE CREDIT FUND INSTITUTIONAL CLASS AUD (HEDGED) AUD Portfolio: 3000039-70	IE00BLOBLL78 3752613	10.7683	10.9400 NAV 30.07.2021	1,153,360 3.43%	18,099 18,099	1.59% 1.59%
AUD 306,721	SHS -L3- HEDGED AUD FEDERATED HERMES INVESTMENT FUNDS PLC - FEDERATED HERMES GLOBAL HIGH YIELD CREDIT FUND AUD Portfolio: 3000039-70	IE00BMZ15N91 57259812	3.0706	3.2185 NAV 29.07.2021	987,182 2.94%	45,368 45,368	4.82% 4.82%
AUD 4,957	UNITS SHS HEDGED AUD MUZINICH FUNDS - MUZINICH EMERGING MARKET CORPORATE DEBT FUND AUD Portfolio: 3000039-70	IE00BNC55647 110844223	100.4915	100.6300 NAV 30.07.2021	498,823 1.48%	686 686	0.14% 0.14%

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	6,971 SHS -I AUD HEDGED- AXA WORLD FUNDS SICAV - GLOBAL INFLATION BONDS DISTRIBUTION AUD Portfolio: 3000039-70	LU1774150491 40510321	114.3367	120.1100 NAV 30.07.2021	837,287 2.49%	40,246 40,246	5.05% 5.05%
AUD	5,391 SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION AUD Portfolio: 3000039-70	LU2128492191 52867287	95.3318	93.9000 NAV 30.07.2021	506,215 1.51%	-7,719 -7,719	-1.50% -1.50%
AUD	6,671 SHS -CH- ROBECO CAPITAL GROWTH FUNDS SICAV - ROBECOSAM GLOBAL SDG CREDITS DISTRIBUTION AUD Portfolio: 3000039-70	LU2207422291 56320962	99.8383	100.3000 NAV 30.07.2021	669,101 1.99%	3,080 3,080	0.46% 0.46%
Total Fixed Income & Similar Investments					17,868,506	481	
					53.19%		
Equities & Similar Investments							
Equities & Similar Investments AUD							
AUD	5,635 REGISTERED SHS AUSTRALIA & NEW ZEALAND BANKING GROUP LTD AUD Portfolio: 3000039-70	AU000000ANZ3 640139 ANZ.AX	28.2511	27.7100 CLO 30.07.2021	156,146 0.46%	-3,049 -3,049	-1.92% -1.92%
AUD	21,229 REGISTERED SHS ALUMINA LTD AUD Portfolio: 3000039-70	AU000000AWC3 1526402 AWC.AX	1.8097	1.6700 CLO 30.07.2021	35,452 0.11%	-2,966 -2,966	-7.72% -7.72%
AUD	31,889 REGISTERED SHS AURIZON HOLDINGS LTD AUD Portfolio: 3000039-70	AU000000AZJ1 20175896 AZJ.AX	4.6496	3.8600 CLO 30.07.2021	123,092 0.37%	-25,180 -25,180	-16.98% -16.98%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	7,892 REGISTERED SHS BHP GROUP LTD AUD Portfolio: 3000039-70	AU000000BHP4 640390 BHP.AX	31.1087	53.4900 CLO 30.07.2021	422,143 1.26%	176,633 176,633	71.95% 71.95%
AUD	2,647 REGISTERED SHS CARSALES.COM LTD AUD Portfolio: 3000039-70	AU000000CAR3 10476764 CAR.AX	16.0059	21.8800 CLO 30.07.2021	57,916 0.17%	15,549 15,549	36.70% 36.70%
AUD	3,529 REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA AUD Portfolio: 3000039-70	AU000000CBA7 646758 CBA.AX	76.4707	99.6500 CLO 30.07.2021	351,665 1.05%	81,800 81,800	30.31% 30.31%
AUD	4,830 REGISTERED SHS COMPUTERSHARE LTD AUD Portfolio: 3000039-70	AU000000CPU5 241285 CPU.AX	15.4958	15.6000 CLO 30.07.2021	75,348 0.22%	503 503	0.67% 0.67%
AUD	912 REGISTERED SHS CSL LTD AUD Portfolio: 3000039-70	AU000000CSL8 241548 CSL.AX	142.5455	288.9100 CLO 30.07.2021	263,486 0.78%	133,484 133,484	102.68% 102.68%
AUD	2,288 REGISTERED SHS FLIGHT CENTRE TRAVEL GROUP LTD AUD Portfolio: 3000039-70	AU000000FLT9 90307 FLT.AX	19.0306	15.0500 CLO 30.07.2021	34,434 0.10%	-9,108 -9,108	-20.92% -20.92%
AUD	1,161 REGISTERED SHS FORTESCUE METALS GROUP LTD AUD Portfolio: 3000039-70	AU000000FMG4 1655130 FMG.AX	8.8802	24.9100 CLO 30.07.2021	28,921 0.09%	18,611 18,611	180.51% 180.51%
AUD	2,291 CHESS UNITS OF FOREIGN SECURITIES JAMES HARDIE INDUSTRIES PLC AUD Portfolio: 3000039-70	AU000000JHX1 1303670 JHX.AX	24.9039	45.7300 CLO 30.07.2021	104,767 0.31%	47,713 47,713	83.63% 83.63%

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	1,896 REGISTERED SHS MAGELLAN FINANCIAL GROUP LTD AUD Portfolio: 3000039-70	AU000000MFG4 2807450 MFG.AX	40.4491	48.8700 CLO 30.07.2021	92,658 0.28%	15,966 15,966	20.82% 20.82%
AUD	299 REGISTERED SHS MACQUARIE GROUP LTD AUD Portfolio: 3000039-70	AU000000MQG1 3422370 MQG.AX	76.2190	156.9000 CLO 30.07.2021	46,913 0.14%	24,124 24,124	105.85% 105.85%
AUD	10,130 REGISTERED SHS NATIONAL AUSTRALIA BANK LTD AUD Portfolio: 3000039-70	AU000000NAB4 641643 NAB.AX	24.1589	25.9300 CLO 30.07.2021	262,671 0.78%	17,941 17,941	7.33% 7.33%
AUD	4,964 REGISTERED SHS NEWCREST MINING LTD AUD Portfolio: 3000039-70	AU000000NCM7 650853 NCM.AX	27.8877	26.4900 CLO 30.07.2021	131,496 0.39%	-6,938 -6,938	-5.01% -5.01%
AUD	17,461 REGISTERED SHS NINE ENTERTAINMENT CO. HOLDINGS LTD AUD Portfolio: 3000039-70	AU000000NEC4 22858707 NEC.AX	2.8186	2.7600 CLO 30.07.2021	48,192 0.14%	-1,024 -1,024	-2.08% -2.08%
AUD	8,813 REGISTERED SHS ORIGIN ENERGY LTD AUD Portfolio: 3000039-70	AU000000ORG5 1051439 ORG.AX	7.7762	4.1100 CLO 30.07.2021	36,221 0.11%	-32,310 -32,310	-47.15% -47.15%
AUD	2,172 REGISTERED SHS OZ MINERALS LTD AUD Portfolio: 3000039-70	AU000000OZL8 4334812 OZL.AX	10.0782	23.1800 CLO 30.07.2021	50,347 0.15%	28,457 28,457	130.00% 130.00%
AUD	15,704 REGISTERED SHS QANTAS AIRWAYS LTD AUD Portfolio: 3000039-70	AU000000QAN2 390413 QAN.AX	5.7028	4.5900 CLO 30.07.2021	72,081 0.21%	-17,475 -17,475	-19.51% -19.51%

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	6,959 REGISTERED SHS QBE INSURANCE GROUP LTD AUD Portfolio: 3000039-70	AU000000QBE9 641857 QBE.AX	11.5279	10.8900 CLO 30.07.2021	75,784 0.23%	-4,439 -4,439	-5.53% -5.53%
AUD	1,692 REGISTERED SHS RIO TINTO LTD AUD Portfolio: 3000039-70	AU000000RIO1 603520 RIO.AX	73.8229	133.4200 CLO 30.07.2021	225,747 0.67%	100,838 100,838	80.73% 80.73%
AUD	1,381 SHS RESMED INC CHESS DEPOSITORY INTERESTS REPR 1/10 SH AUD Portfolio: 3000039-70	AU000000RMD6 1058638 RMD.AX	14.8029	36.1200 CLO 30.07.2021	49,882 0.15%	29,439 29,439	144.01% 144.01%
AUD	17,959 REGISTERED SHS SOUTH32 LTD AUD Portfolio: 3000039-70	AU000000S320 27547963 S32.AX	2.6267	2.9700 CLO 30.07.2021	53,338 0.16%	6,165 6,165	13.07% 13.07%
AUD	69,540 UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000SLF1 1377855 SLF.AX	12.5358	12.8000 CLO 30.07.2021	890,112 2.65%	18,375 18,375	2.11% 2.11%
AUD	7,476 UNITS SPDR S&P/ASX 200 FUND ETF AUSTRALIAN EQUITY EXCHANGE TRADED FUNDS AUD Portfolio: 3000039-70	AU000000STW9 1285707 STW.AX	57.7768	68.5800 CLO 30.07.2021	512,704 1.53%	80,765 80,765	18.70% 18.70%
AUD	13,494 REGISTERED SHS TELSTRA CORPORATION LTD AUD Portfolio: 3000039-70	AU000000TLS2 720464 TLS.AX	4.5954	3.7800 CLO 30.07.2021	51,007 0.15%	-11,003 -11,003	-17.74% -17.74%
AUD	2,956 SHS VANGUARD MSCI AUSTRALIAN SMALL COMPANIES INDEX ETF EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000VSO2 13053435 VSO.AX	59.2892	69.3500 CLO 30.07.2021	204,999 0.61%	29,740 29,740	16.97% 16.97%

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	10,966 REGISTERED SHS WESTPAC BANKING CORP AUD Portfolio: 3000039-70	AU000000WBC1 642372 WBC.AX	27.1435	24.5200 CLO 30.07.2021	268,886 0.80%	-28,770 -28,770	-9.67% -9.67%
AUD	981 REGISTERED SHS WESFARMERS LTD AUD Portfolio: 3000039-70	AU000000WES1 642397 WES.AX	32.9532	61.1400 CLO 30.07.2021	59,978 0.18%	27,651 27,651	85.54% 85.54%
AUD	3,673 REGISTERED SHS WOOLWORTHS GROUP LTD AUD Portfolio: 3000039-70	AU000000WOW2 81350 WOW.AX	32.7417	38.7600 CLO 30.07.2021	142,365 0.42%	22,105 22,105	18.38% 18.38%
AUD	6,028 REGISTERED SHS WOODSIDE PETROLEUM LTD AUD Portfolio: 3000039-70	AU000000WPL2 642429 WPL.AX	28.0703	21.9100 CLO 30.07.2021	132,073 0.39%	-37,134 -37,134	-21.95% -21.95%
AUD	7,981 REGISTERED SHS COLES GROUP LTD AUD Portfolio: 3000039-70	AU0000030678 44059594 COL.AX	16.8736	17.4900 CLO 30.07.2021	139,588 0.42%	4,920 4,920	3.65% 3.65%
AUD	3,673 REGISTERED SHS ENDEAVOUR GROUP LTD AUD Portfolio: 3000039-70	AU0000154833 111541385 EDV.AX		6.6300 CLO 30.07.2021	24,352 0.07%	24,352 24,352	
AUD	0 UNITS ABERDEEN STANDARD EMERGING OPPORTUNITIES FUND AUD Portfolio: 3000039-70	AU60ETL00329 2220820		2.1007 NAV 29.07.2021			
AUD	108,854.2484 UNITS WHEB SUSTAINABLE IMPACT FUND AUD Portfolio: 3000039-70	AU60HHA00072 4431395	1.5341	1.6546 BID 29.07.2021	180,110 0.54%	13,114 13,114	7.85% 7.85%

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AUD	4,191	REGISTERED SHS THE A2 MILK COMPANY LTD AUD Portfolio: 3000039-70	NZATME0002S8 1841567 A2M.AX	14.1708	5.8600 CLO 30.07.2021	24,559 0.07%	-34,831 -34,831 -58.65%
AUD	28,236	PENDING SUCCESSFUL SUBSCRIPTION OF UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE AUD Portfolio: 3000039-70		1.0000	1.0000 MID 25.08.2016	28,236 0.08%	
Total Equities & Similar Investments AUD					5,457,671	0	16.25%
Equities & Similar Investments EUR							
EUR	5,005	SHS EUR ISHARES II PLC - ISHARES CORE MSCI EUROPE UCITS ETF AUD Portfolio: 3000039-70	IE00B1YZSC51 3246398 IQQY.DE	24.0690 1.5710 EUR/AUD	28.4250 CLO 30.07.2021	229,135 0.68%	39,888 35,114 21.08% 18.10% 2.98%
EUR	6,541	ACCUM.PTG.SHS WELLINGTON MANAGEMENT FUNDS (IRELAND) PLC - WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR AUD Portfolio: 3000039-70	IE00B9DPD161 20938626	15.1713 1.5305 EUR/AUD	22.5044 NAV 30.07.2021	237,082 0.71%	85,202 77,254 56.10% 48.34% 7.76%
EUR	16,166	ACCUM SHS -1C- USD XTRACKERS(IE)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF AUD Portfolio: 3000039-70	IE00BZ02LR44 41359963 XZW0.DE	25.8713 1.5494 EUR/AUD	28.2900 CLO 30.07.2021	736,586 2.19%	88,559 62,975 13.67% 9.35% 4.32%
Total Equities & Similar Investments EUR					1,202,803	0	3.58%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Equities & Similar Investments GBP							
GBP	480	ACCUM SHS GBP ISHARES VII PLC - ISHARES CORE FTSE 100 UCITS ETF GBP (ACC) AUD Portfolio: 3000039-70	IE00B53HP851 10737489 CUKX.L	113.1753 1.7723 GBP/AUD	120.4000 CLO 30.07.2021	109,260 0,33%	12,981 6,556 6,424 13.48% 6.38% 7.10%
Total Equities & Similar Investments GBP					109,260	0	0,33%
Equities & Similar Investments JPY							
JPY	536	UNITS NEXT FUNDS NIKKEI 225 EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	JP3027650005 1264151 1321.T	20,415.5970 83.5545 AUD/JPY	27,990.0000 CLO 30.07.2021	185,484 0,55%	54,518 50,194 4,324 41.63% 37.10% 4.53%
Total Equities & Similar Investments JPY					185,484	0	0,55%
Equities & Similar Investments USD							
USD	153	ACCUM.PTG.SHS ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD AUD Portfolio: 3000039-70	IE00B53SZB19 10737617 CSNDX.S	299.3392 0.7933 AUD/USD	842.9000 CLO 30.07.2021	174,765 0,52%	117,033 112,701 4,333 202.72% 181.59% 21.13%
USD	3,500	ACCUM.PTG.SHS WELLINGTON MANAGEMENT FUNDS (IRELAND) PLC - WELLINGTON GLOBAL HEALTH CARE EQUITY FUND CLASS -N- UNHEDGED USD AUD Portfolio: 3000039-70	IE00B84TGD38 20722572	36.7231 0.7733 AUD/USD	37.9709 NAV 30.07.2021	180,097 0,54%	13,875 5,918 7,957 8.35% 3.40% 4.95%
USD	5,034	ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF AUD Portfolio: 3000039-70	IE00BJ0KDR00 24268896 XD9U.L	93.1816 0.7125 AUD/USD	125.5800 CLO 30.07.2021	856,686 2,55%	198,342 221,016 -22,674 30.13% 34.77% -4.64%

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USD	13,692	SHS -R (ACC.)- GOLDMAN SACHS FUNDS SICAV - GOLDMAN SACHS EMERGING MARKETS EQUITY PORTFOLIO CAPITALISATION AUD Portfolio: 3000039-70	LU0830622741 19578737	14.9284 0.7044 AUD/USD	20,5600 NAV 30.07.2021	381,485 1.14%	91,316 104,492 -13,177 31.47% 37.72% -6.25%
USD	58,462	SHS -UCITS ETF USD C- AMUNDI INDEX SOLUTIONS SICAV - AMUNDI MSCI EMERGING MARKETS CAPITALISATION AUD Portfolio: 3000039-70	LU1681045453 38785088 AUEM.PA	4.9021 0.7290 AUD/USD	5.9072 CLO 30.07.2021	467,997 1.39%	74,868 79,631 -4,763 19.04% 20.50% -1.46%
USD	583	SHS -C- SCHRODER INTERNATIONAL SELECTION FUND SICAV - GLOBAL ENERGY TRANSITION CAPITALISATION AUD Portfolio: 3000039-70	LU2016063229 48843442	222.5170 0.7755 AUD/USD	216,2505 NAV 30.07.2021	170,849 0.51%	3,573 -4,951 8,524 2.14% -2.82% 4.95%
USD	127	SHS -EBP- CS INVESTMENT FUNDS 2 SICAV - CREDIT SUISSE (LUX) THEMATIC OPPORTUNITIES EQUITY FUND CAPITALISATION AUD Portfolio: 3000039-70	LU2269158932 58758856	1,008.8073 0.7755 AUD/USD	1,004.1100 NAV 30.07.2021	172,812 0.51%	7,610 -808 8,418 4.61% -0.47% 5.07%
USD	514	TRUST UNITS SPDR S&P 500 ETF TRUST AUD Portfolio: 3000039-70	US78462F1030 45088 SPY.P	247.6166 0.7574 AUD/USD	438,5100 CLO 30.07.2021	305,443 0.91%	137,394 132,966 4,428 81.76% 77.09% 4.67%

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USD	4,147 SHS FINANCIAL SELECT SECTOR SPDR FUND AUD Portfolio: 3000039-70	US81369Y6059 986018 XLF.P	32.6554 0.7801 AUD/USD	36.5200 CLO 30.07.2021	205,236 0.61%	31,635 21,718 9,917	18.22% 11.83% 6.39%
Total Equities & Similar Investments USD					2,915,370 0 8.68%		
Total Equities & Similar Investments					9,870,588 0 29.38%		
Alternative Investments, Commodities & Real Estate							
Hedge Funds							
AUD	509,492.85 UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE AUD Portfolio: 3000039-70	AU60MAL00181 3379478	1.2408	1,2190 NAV 29.07.2021	621,051 1.85%	-11,151 -11,151	-1.76% -1.76%
AUD	4,130 ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND AUD Portfolio: 3000039-70	IE00BKV41X02 54282717	104.4391	114.0550 NAV 29.07.2021	471,047 1.40%	39,714 39,714	9.21% 9.21%
AUD	6,292.382 ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES FUND AUD Portfolio: 3000039-70	IE00BMPRT797 56741323	102.4432	100.8088 NAV 30.06.2021	634,327 1.89%	-10,284 -10,284	-1.60% -1.60%
AUD	4,865 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	103.0398	115.8400 NAV 30.07.2021	563,562 1.68%	62,273 62,273	12.42% 12.42%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
USD	8,222	RED.PTG.SHS -A- CS RENAISSANCE ALTERNATIVE ACCESS FUND LTD USD AUD Portfolio: 3000039-70	KYG258511099 34032546	1,133.2802 0.7185 AUD/USD	888,5646 EST 23.07.2021	9,900 -3,069 -2,727 -342	-23.66% -21.59% -2.07%
Total Hedge Funds					2,299,888	0	6.85%
Private Equity							
AUD	248,927.18	UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE AUD Portfolio: 3000039-70	AU60ETL02762 26607292	2.0617	2.8995 NAV 31.05.2021	721,764 208,545 208,545	40.63% 40.63%
Total Private Equity					721,764	0	2.15%
Commodities & Precious Metals							
USD	111	UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN AUD Portfolio: 3000039-70	CH0031794263 3179426 TCMCI.S	976.2577 0.8134 AUD/USD	1,161,0000 CLO 30.07.2021	174,640 41,416 27,789 13,627	31.09% 18.92% 12.16%
Total Commodities & Precious Metals					174,640	0	0.52%
Real Estate							
AUD	24,060	STAPLED SECS DEXUS PROPERTY TRUST CONS OF 1 SH + 1 TR UT DEXUS OPER AUD Portfolio: 3000039-70	AU000000DXS1 112275620 DXS.AX	11.1558	10.2800 CLO 30.07.2021	247,337 -21,071 -21,071	-7.85% -7.85%

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	25,955 STAPLED SECURITY GOODMAN GROUP AUD Portfolio: 3000039-70	AU000000GMG2 18079202 GMG.AX	9.9413	22.6400 CLO 30.07.2021	587,621 1.75%	329,594 329,594	127.74% 127.74%
AUD	51,765 STAPLED SECURITY MIRVAC GROUP AUD Portfolio: 3000039-70	AU000000MGR9 821911 MGR.AX	1.9364	2.8600 CLO 30.07.2021	148,048 0.44%	47,811 47,811	47.70% 47.70%
Total Real Estate					983,006 0 2.93%		
Total Alternative Investments, Commodities & Real Estate					4,179,298 0 12.44%		
Total Investments					33,594,669 100.00%		
of which Accrued Interest					481		

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, which are aggregated as Net Investment Asset Flows. Non-Investment Flows refer to transactions related to Non-Investment Related Positions such as loan transactions to finance such Non-Investment Related Positions. Non-investment Flows do not contribute to the performance of the 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.

Fees/ Taxes

Fees include management or safekeeping fees.

Taxes include value-added taxes and service related taxes, depending on country specific rules.

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-allocable Effect

As a general rule, in most cases the sum of all the return contributions usually equal the portfolio return figure indicated. In some cases, however, the two figures may not tally exactly (for example, due to rounding differences). These discrepancies are being accounted for and indicated as "Non-allocable effect" return contribution.

Non-Investment Related Positions

Non-Investment Related Positions refer to non-asset/ non-investment type positions such as those relating to insurance policies or mortgages. Guarantees, standby letters of credit, holdcovers or other credit instruments which have been issued by the Bank pursuant to facilities granted are reflected under the sub-section entitled "Pro Memoria 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.

Performance Calculation

The performance figures are calculated based on investment related positions using the TWR Daily method (Time Weighted Rate of Return), which is based on geometrically linking daily rates of return.

The start of period displayed for the performance calculation is referring to Beginning Market Value, which is the closing balance of the previous day. The end of period displayed is referring to Ending Market Value, which is the closing balance of the day.

The net of fees and gross of taxes return is calculated after deduction of fees and before deduction of taxes.

The cumulative return calculation is reset, every time when geometrically linking the rates of return would render distorted values. Such scenarios can happen when the market values fluctuate around zero.

Return values prior 2015 displayed in this report might be different from previously reported return values.

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.

Return contribution

The contribution figure refers to the contribution of an individual asset category and/or currency to the overall performance on a portfolio level. The figure is calculated based on investment related positions using the TWR Daily method (Time Weighted Rate of Return), the return is computed by aggregating the daily returns.

Reference to the average weight of an instrument is computed by dividing the aggregated daily instrument weight by the number of days in the reporting period. The daily weight of an instrument is calculated by dividing the instrument's start of day market value and cash flow by the portfolio's start of day market value and cash flow.

Yield

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

Abbreviations

BID = Bid Price

CLO = Closing Price

EST =

MID = Average Price

NAV = Net Asset Value

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 31.7.2021

AUD 1.0000 = JPY 80.8840

AUD 1.0000 = USD 0.7379

EUR 1.0000 = AUD 1.6106

GBP 1.0000 = AUD 1.8906

4.2. Legal Information

This ad-hoc investment report is a statement of account provided to you upon your request and in accordance with and subject to the Account Opening Terms and Conditions.

For accounts booked with Credit Suisse AG, Hong Kong Branch: This ad-hoc investment report has been generated specifically for you as additional information for reference only and is not to be treated as the monthly statement of account under section 11(2) of the Securities and Futures (Contract Notes, Statements of Account and Receipts) Rules which we provide to you on a regular basis. This ad-hoc investment report shall be conclusive and binding if the Bank does not receive your objection in writing to any matters contained in this ad-hoc investment report within 90 days from the issue date.

For accounts booked with Credit Suisse AG, Singapore Branch: This ad-hoc investment report shall be conclusive and binding if the Bank does not receive your objection in writing to any matters contained in this ad-hoc investment report within 14 days from the issue date. Assets detailed within this ad-hoc investment report will not be directly custodied by Credit Suisse AG, Singapore Branch but with third party custodians in accounts for and on behalf of Credit Suisse AG, Singapore Branch, unless otherwise informed by the Bank.

For All:

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 prices reflected for instruments and other information detailed within this ad-hoc investment report are attained or derived by the Bank from market data sources believed to be reliable, however the Bank does not make any representation as to the accuracy or completeness of such prices or information. In the absence of reliable market reference prices, the Bank may assign a nominal value or make an appropriate comment on the ad-hoc investment report. As a result, this ad-hoc 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 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.

The Bank will, at the time of printing this ad-hoc 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 by the Bank in this ad-hoc investment report will not always reflect the price indications available on the last business day of the reporting period 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 Relationship Manager if you need further information on the FX conversion rate applied in relation to your CNY positions.

If you have any credit facilities in place with the Bank, please note that potentially all of the assets detailed within this ad-hoc investment report may be held as collateral for those facilities. If you have any questions in relation to the collateral for your facility, please contact your Relationship Manager.

The information in this ad-hoc 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.

The fee charged for the provision of the Bank's Advisory Service (referring to portfolio(s) ending with -30 to -39) is a Flat Fee notwithstanding that prior to June 2017 the fee may have been described as a Management Fee or All-In Fee in statements or documents received by the client whether by hardcopy, email, Internet Banking or any other form of delivery.

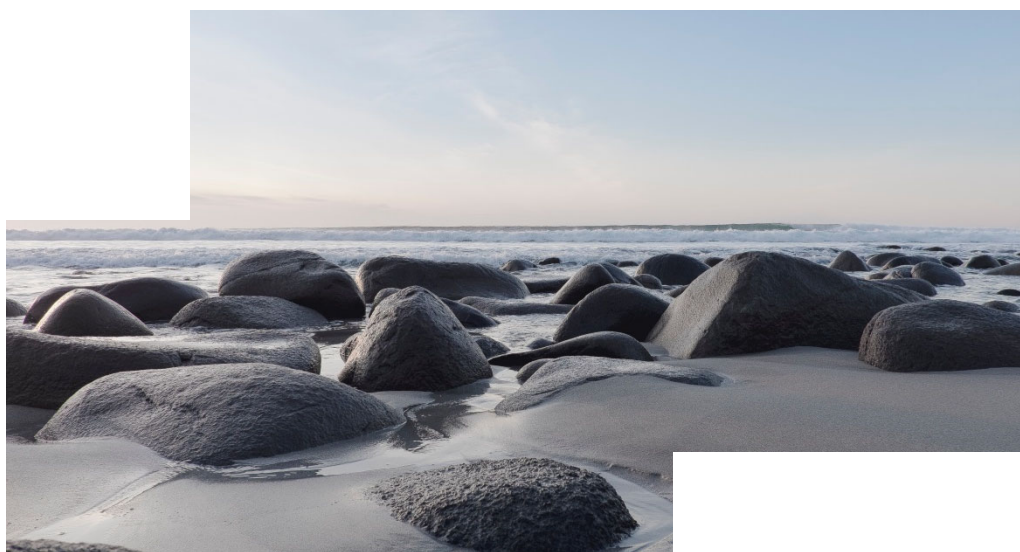
Hong Kong Deposit Protection Scheme (the "DPS"): "Protected deposit" is defined under section 2(1) of the Deposit Protection Scheme Ordinance (Cap. 581 of the Laws of Hong Kong) (the "Ordinance"). Protected deposit does not include those specified in section 1 of Schedule 1 of the Ordinance. In particular, please note that a deposit held or placed in an account with the Bank's Singapore branch is not a protected deposit (as defined in the Ordinance) and consequently is not eligible for the protection under the DPS, notwithstanding that the

account holding the deposit is managed by representatives of the Bank's Hong Kong branch. In addition, a deposit held or placed in an account with the Bank's Hong Kong branch where the current term negotiated and agreed exceeds 5 years is not a protected deposit as defined in the Ordinance and consequently is not eligible for protection under the DPS. Certificates of Deposit: Investments in certificates of deposit are not protected deposits as defined in the Ordinance and consequently are not eligible for protection under the DPS.

An individual who is an account holder of an Individual or Joint Account with RMB Services opened and maintained with the Bank's Hong Kong branch is requested to notify the Bank immediately if there is any change to such individual's status in terms of holding a HK Identity Card or not.

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

APNIC Monthly Reporting



Summary

- The APNIC portfolio was indicatively +1.48% in July.
- Global equities ex-Australia advanced 2.82% in AUD terms.
- Australian equities advanced 1.10%.
- Bond markets rallied as global yield curves flattened.

Market Commentary

A strong US reporting season kicked off a generally positive month for global financial markets in July. The depreciating AUD provided a further tailwind for Australian investors. In AUD terms, US, European and Australian equities advanced 4.46%, 4.08% and 1.10%, respectively. Emerging Markets equities were an exception to the trend, retreating 4.79% on the back of a correction in the Chinese equities market that was triggered by unexpected regulatory changes. Global bond markets reacted to rising concerns over the spread of the more virulent Delta COVID-19 strain which flattened yield curves and pushed up bond prices.

The robust economic recovery in Australia has hit a COVID driven speed bump as a rapid increase in virus infection rates triggered lockdowns across several states. The latest labour market report showed an improvement in the unemployment rate to 4.9% in June but signs of a slowdown in economic growth trickled through other data points. Retail sales fell 1.8% in June, the biggest one month drop this year. Housing data showed continued growth in national home values but at a slightly moderated pace with gains of 1.6% in July versus 1.9% in the month prior. In this context, it was interesting to see a delineation of messaging from monetary and fiscal policy makers. The RBA reiterated their intention to start tapering their bond buying program in September. On the other hand, the government loosened fiscal policy by extending COVID-19 financial hardship relief programs.

The US economic recovery proceeded in a steady fashion in the June quarter with an annualised GDP growth rate of 6.5% versus 6.4% in the March quarter. The labour market improved in July, pushing the unemployment rate downward from 5.9% to 5.4%. An early estimate of retail sales for the month of June indicated a return to positive growth of 0.6% following a 1.3% dip in the prior month. July ISM manufacturing and services PMIs were not as strong as expected but remained firmly in expansionary territory at 59.5 and 64.1, respectively. Inflation surprised to the upside, with the core CPI measure surging 4.5% in June. For now, the Fed maintains its accommodative monetary policy on the view that inflationary pressures are transitory but further sustained upward pressure could challenge this view in the future.

Having lagged the rest of the world this year, the economic recovery in Europe is accelerating with GDP growing 2% in the June quarter compared to a 0.3% contraction in the prior quarter. The Markit PMI readings signalled economic growth expansion in both the manufacturing and services sectors which contributed to an increase in the July Composite reading from 59.5 to 60.2. Labour data also showed signs of improvement with the unemployment rate falling from 7.9% to 7.7% in July.

Chinese economic growth appeared to stabilise in July following a large slowdown in the June quarter where GDP YoY was up 7.9% compared to 18.3% in the previous quarter. The Caixin China PMI Composite reflected a mildly expansionary environment in July with a reading of 53.1 which was supported by small improvements in both the manufacturing and services sectors. Retail sales YoY grew 12.1% in July compared to 12.3% in the previous month.

Market Value as at 31 July 2021

	Market Value
APNIC Portfolio	A\$33,607,253

Performance as of 31 July 2021

APNIC Portfolio				
	Portfolio	Benchmark	Relative	CPI + 2.5%
Month	1.48%	1.20%	+0.28%	0.53%
3 Months	3.96%	3.81%	+0.15%	1.36%
Year To Date	4.92%	5.07%	-0.15%	2.54%
1 Year	9.80%	10.29%	-0.48%	3.71%
3 Years pa	6.86%	7.01%	-0.15%	3.93%
Since Inception pa	5.79%	6.03%	-0.24%	4.26%

* Performance is after fees but before franking

Asset Allocation

Asset Class	Tactical Position
Cash	Neutral
Bonds	Neutral
Australian Equities	Neutral
International Equities	Neutral
Alternative Investments	Neutral

Significant Recent Portfolio Changes

Position	Comments
Woodside Petroleum	Increased: Quality undervalued energy exposure lagging strength in energy prices.
Goodman Group	Decreased: Opportunity to take profits, strong outlook appears fully priced.
Coles / Woolworths	Increased / Decreased: Reallocating from Woolworths to Coles. Valuation on the former appears stretched whereas the latter is trading on a valuation discount in an environment where market share is starting to improve.
Qantas	Increased: Confirmed recovery in domestic travel and progress on balance sheet repair.
UBS CMCI Commodity Tracker	Decreased: Taking some profit on overweight commodities exposure in line with cooling Global Investment Committee view. The macro backdrop remains supportive, but bottom-up fundamentals show signs of near-term softness.

Outlook

As we enter August, the GIC continues to see equities as the preferred asset class from a strategic perspective and on a medium term horizon of 3-6 months. That said, in the short term the GIC is neutral equities. We have been waiting for a dip in markets to change our stance to buy equities. That dip hasn't occurred, despite the rise of the Delta COVID-19 variant and despite some concerns around inflation. Also, the regulation issues in China have been contained to Chinese stocks. What the uncertainty created by Delta and Chinese action has done is feed into lower bond yields, which perversely has made shares outside of China look more attractive. After the slowdown in global economic momentum in May and June – driven by COVID-related restrictions and chip shortages that weighed on supply chains – we expect a production rebound later in the year. Uncertainties regarding the Delta variant remain, but our economic base case is positive.

Data Sources

Credit Suisse, unless otherwise specified.

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Agenda Item 10

APNIC office space

APNIC Office Space

EC Meeting

7-8 September 2021

Online



APNIC office space

- Agreement: APIDT will purchase, for long-term lease to APNIC as permanent home
- The choice of site will be for APNIC
- Flexible timelines: Search, purchase, and build/renovate while continuing to occupy Cordelia St
- Estimated budget: \$25-30M USD

Vision

- “Campus” Style
- Room for long-term
 - Build/expand as needed
- Accommodation for all needs
 - APNIC
 - APNIC Foundation
 - Trust
 - Projects, partners and visitors.



Process: APIDT

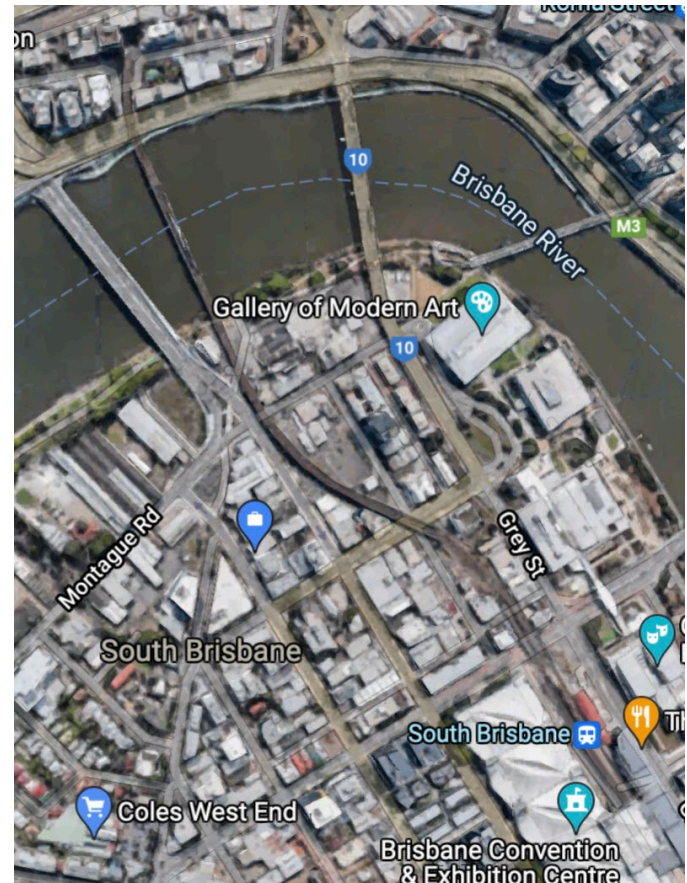
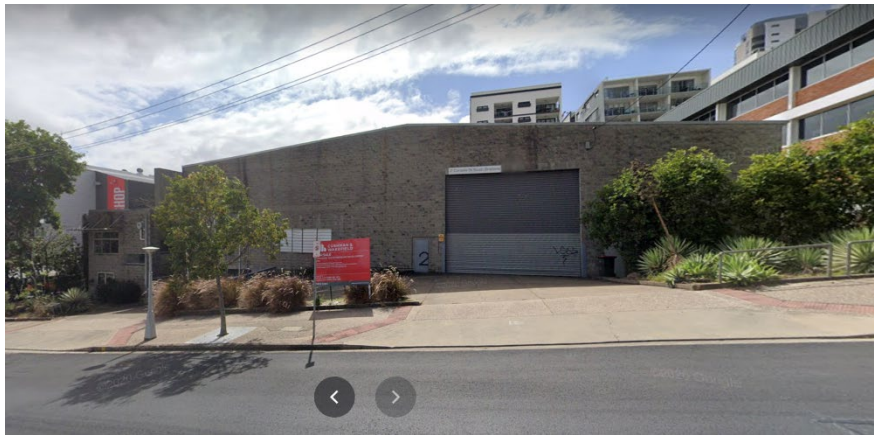
- Real estate search
 - APIDT's financial parameters
 - Guided by APNIC requirements for position, services (transport etc), building envelop, etc.
- Engaged O'Neill Architects
 - Development architect with ample experience in site development, regulations, negotiations etc

Process: APNIC

- Interior design process
 - Hybrid working environment post-COVID
 - Uncertain long-term growth: Agility
- Engaged ODO (Outline Design Office)
 - commercial/business architects with office space analysis and design skills
- Cordelia St office as “testbed”
 - APNIC continues to occupy – 2 years or more?
 - Improvements to utilisation and configuration
 - All improvements relocatable to new office (minimise fixtures)

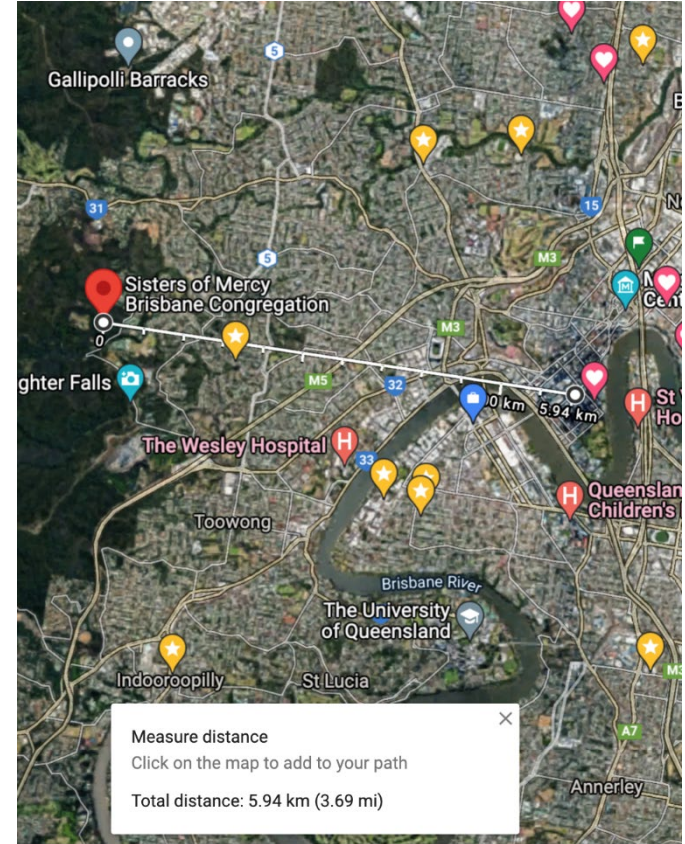
Case Study: 2 Cordelia St

- \$20M AUD, 1000 m²
- Central location
- No building



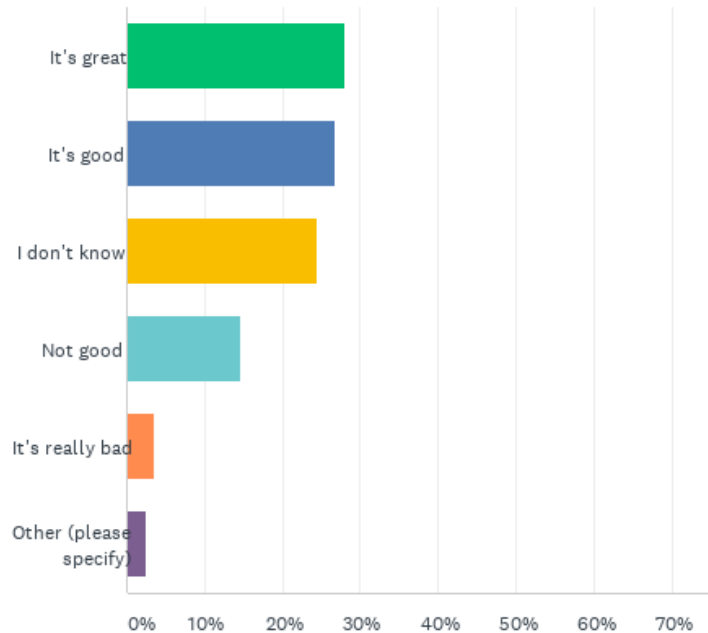
Case Study: Sisters of Mercy

- \$15M AUD, 14 Ha*
- 6km from City centre
- Large building, renovation
- Required unconditional offer

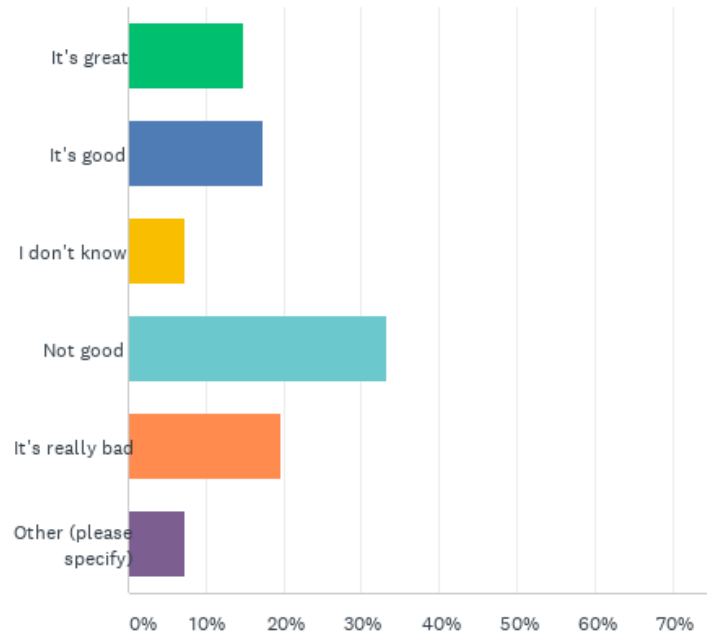


Case Study: Sisters of Mercy

Q1 For APNIC....

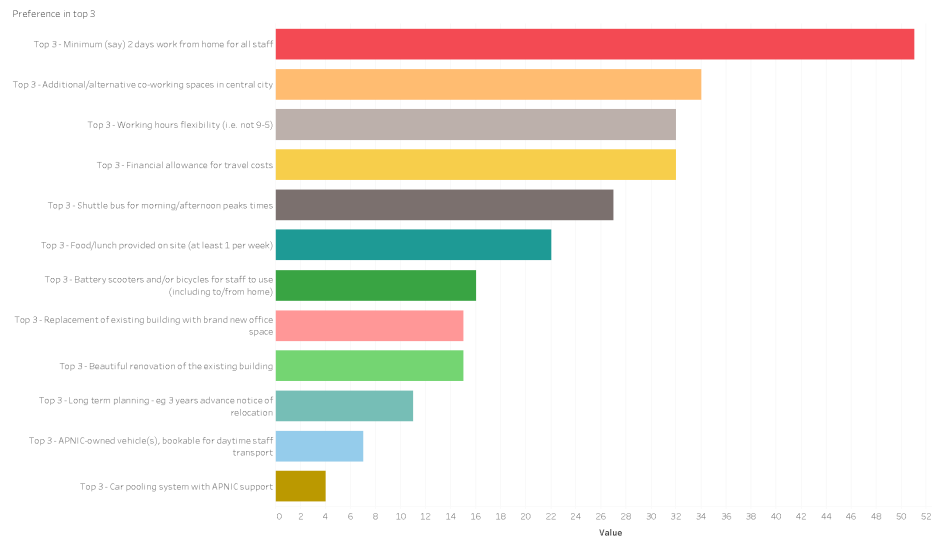
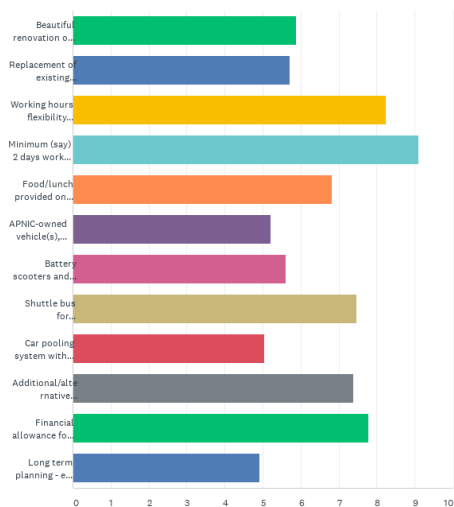


Q2 For me personally....

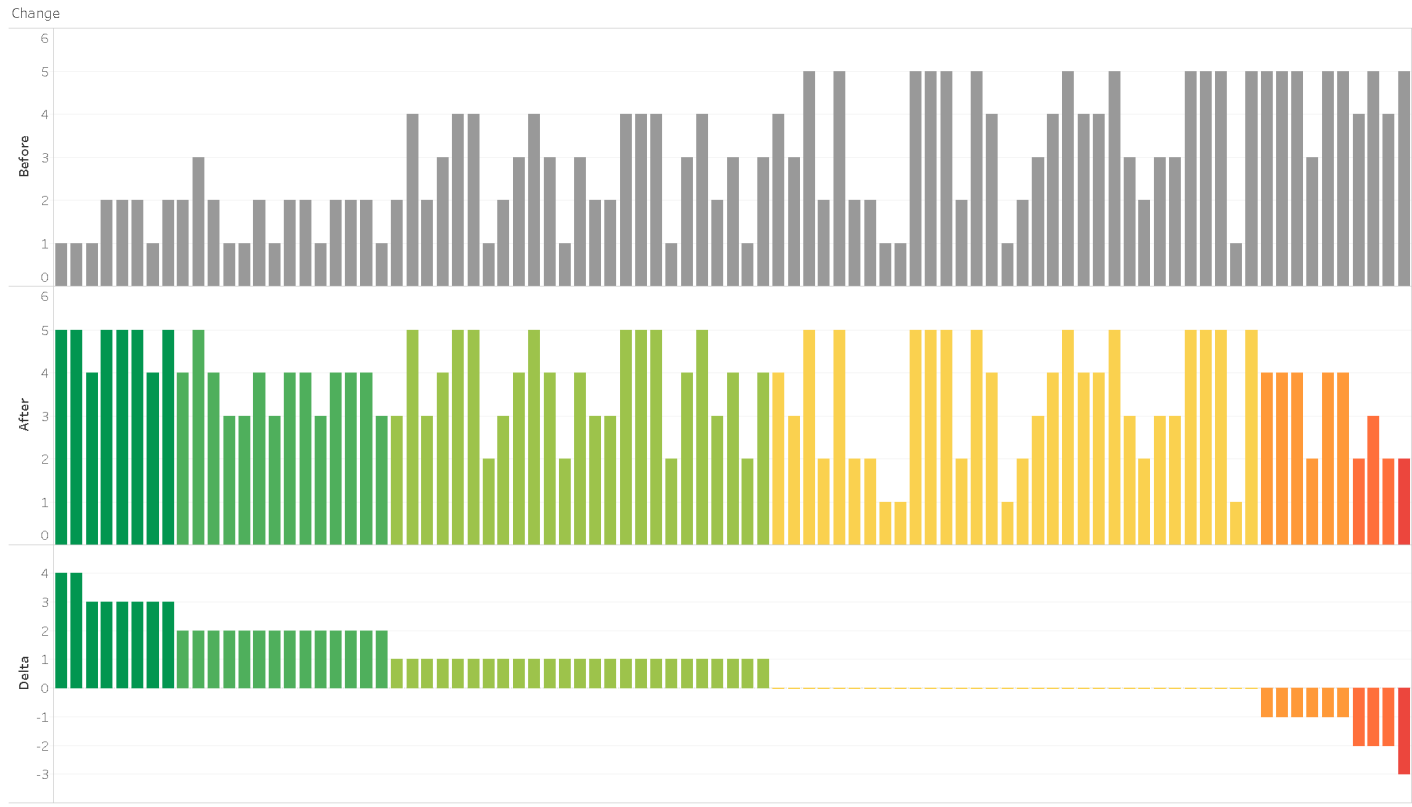


Case Study: Sisters of Mercy

Q2 Here are some possible measures to make this location easier. Please assume these are permanent measures, and don't worry about cost, wh&s etc. Please prioritise these, from your point of view:



Case Study: Sisters of Mercy



Timeframe

- Unpredictable!
 - State of local Real Estate market
 - Unique needs
- Decision within 2 years?

Questions



Agenda Item 12

Secretariat report

APNIC Secretariat Report

1 January – 31 July 2021

CONFIDENTIAL DRAFT 1.0

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Executive Summary

Introduction

This report is provided to the APNIC Executive Council (EC) for the quarterly meeting on 7-8 September 2021. It provides a summary of activities from 1 January - 31 July 2021.

The structure of this report reflects the APNIC Strategic Plan 2020-2023 and the 2021 Operational Plan, with activities reported according to Strategic Pillar and Workstream, and against their Success Measures.

Feedback on this report is very welcome.

Highlights

The following is a summary of significant highlights for the year to date, also grouped according to Strategic Pillar.

Membership

- All responses to Member queries were met within the 48-hour SLA. (1A.1).
- 174 feedback items were resolved (on conferences, training, staff presentations, website information). The User Feedback Group grew to 432 (target 500) (1A.2).
- 427 new Members joined APNIC (four from Service Partners and two from Member referrals). Current total membership stands at 8,581 (1A.3).
- The online Help Centre was deployed in February (1B.1).
- Voting system updates for SIG and IANA RC elections were completed for APNIC 52 (1B.1)
- 'Tribe' was selected for further testing for the Online Community Platform and is being trialled with three communities (1B.2).

Registry

- APNIC received 4,096 ASNs from IANA (2A.1).
- The percentage of Members holding IPv6 reached 67.29% in July (2A.1).
- Confirmation rate for IRT email validations is 71.4% (2A.2).
- 71 of 293 prefixes identified by the IPv4 reclamation project have been returned to APNIC (2A.3).
- prop-133 was endorsed by the EC following APNIC 51 (2C.1).
- Twelve policy proposals were submitted to the Policy SIG Chairs for consideration for APNIC 52 (2C.2).
- A community Working Group was formed to review the Policy Document Review Report (2C.3).

Development

- APRICOT 2021 attracted 852 attendees, with 1,861 additional live views via YouTube (reaching 3,855 during the week) (3A.1).
- Automatic conference session transcription using 'Otter' will be used at APNIC 52 (3A.1).
- 46 fellows (25 females) were selected for the online fellowship program. Nine presentations have been delivered with 85% attendance (3A.2).
- Nineteen technical community events were supported, and technical support was provided to nine online NOG events (3C.1).
- Staff participated in 20 security community events (3C.2).

- A new study about Internet Success Factors was commissioned by APNIC and LACNIC, with Analysys Mason selected (3C.3).
- Three workshop proposals were accepted by the IGF, and two workshop proposals were accepted by the APriGF (3C.4).
- From January to July 2021, APNIC recorded 184 engagements (3C.6).
 - 46% of the total engagements were related to training (3E.2); 25% of the total engagements were global, outside the APNIC region; and 20% to Internet governance activities (3C.4).
- The APNIC EC initiated and held two quarterly meetings with community elected leaders (3D.1).
- A survey on language understanding and translation was developed for August launch (3D.3).
- APNIC Academy launched one new course, six new labs, and additional language support in online courses (3E.1).
- 72 training courses were delivered to 1,587 attendees, and 13 webinars to 799 attendees (3E.2).
- The proportion of Members with ROAs grew from 58.2% to 75.5%. (3E.5).
- A new ROA measurement tool was released to help monitor RPKI deployment (3E.5).
- IPv6 capability in the Asia Pacific reached 34.64% (3E.6).
- Deployment of M-root servers is progressing in nine locations (3F.3).

Information

- The Blog averaged 70,420 views per month, 8.7% above 2020's monthly average of 64,778 (4A.1).
- The Internet Directory was renamed Resource Explorer (REx) (4A.2).
- 24 APNIC Labs research articles were published, and 19 research presentations delivered (4B.3).

Capability

- RPKI service infrastructure is being improved to support data centre failover (5A.3).
- A major SSO system upgrade is in progress, to be completed in December (5A.6).
- The annual financial audit was completed and presented to the EC at APNIC 51 (5B.2).
- 14 permanent roles (including two new Directors for the Services and Finance areas) and two casual roles were filled (5C.3).
- A workspace remodelling consultancy has been engaged to inform work to the existing premises as well as requirements for potential new premises (5C.7).

Budget Performance

The following table summarizes budget performance to date, for FTE (staff time) allocation, and operational and capital expenditure, across all workstreams.

Pillar	Workstream	FTE			Expense			Capital		
		Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
Membership	Member Services	8.58	9.86	-15%	1,287,043	1,143,734	-11%	-	7,935	0%
	Membership Products	12.28	8.44	-31%	1,402,981	1,159,618	-17%	-	-	
	Membership Reporting	1.56	1.02	-35%	410,027	351,282	-14%	-	-	
Registry	Registration Services	4.53	5.07	12%	474,543	460,476	-3%	-	-	
	Registry Products	9.04	6.42	-29%	1,476,114	1,143,586	-23%	-	-	
	Policy Development	0.64	0.77	20%	224,879	215,631	-4%	-	-	
Development	APNIC Conferences	5.04	4.55	-10%	618,714	507,374	-18%	43,150	3,924	-91%
	Foundation Support	1.58	1.37	-13%	333,922	31,312	-91%	-	-	
	Community Engagement	6.38	4.30	-33%	1,043,165	848,325	-19%	-	-	
	Community Participation	1.52	0.93	-39%	175,443	128,204	-27%	-	-	
	APNIC Academy	10.8	8.62	-20%	1,366,181	1,057,447	-23%	15,000	16,351	9%
	Internet Infrastructure Support	0.76	1.08	42%	336,498	213,054	-37%	60,000	-	
Information	Information Products	5.52	9.50	72%	556,393	490,351	-12%	-	-	
	Research and Analysis	1.02	1.05	3%	458,569	542,493	18%	56,000	24,890	-56%
Capability	Internal Technical Infrastructure	6.2	14.42	133%	1,086,498	934,689	-14%	229,500	211,857	-8%
	Finance and Business Services	10.14	9.50	-6%	1,224,571	1,105,082	-10%	30,000	4,394	-85%
	Employee Experience	4.65	5.25	13%	1,098,681	1,071,277	-2%	80,000	25,461	-68%
	Governance	2.76	1.85	-33%	646,818	609,683	-6%			
		93	94.0	1%	14,221,039	12,013,616	-16%	513,650	294,811	-43%

Notes: ■ ≤ 25% variance ■ > 25% ≤ 50% variance ■ > 50% variance

Table 1: Budget performance summary

Tracking Success Measures

The status of Success Measures in the document's following pages is denoted by a coloured circle for at-a-glance reference on progress.

- Completed
- In progress
- At risk

1 Membership



1A Member Services

Operations

1A.1 Member service delivery

Service requests SLA

- The SLA to respond to Member queries within 48 hours has been 100% met.

Service satisfaction ratings

- 87% of service satisfaction ratings (477/514 requests) were either 'Excellent' or 'Above Average'.
- Follow up of all 'Poor' ratings revealed 11 poor feedback ratings were submitted in error when completing the feedback form. Colour coding improvements were made to the form in July to reduce the chances of false negative feedback for the remainder of the year.
- Other 'poor' ratings included eight requests that were out of scope for the Helpdesk, seven requests by Members with additional questions, one because the Member account was overdue for renewal, and one due to a software bug that affected the Member's login.

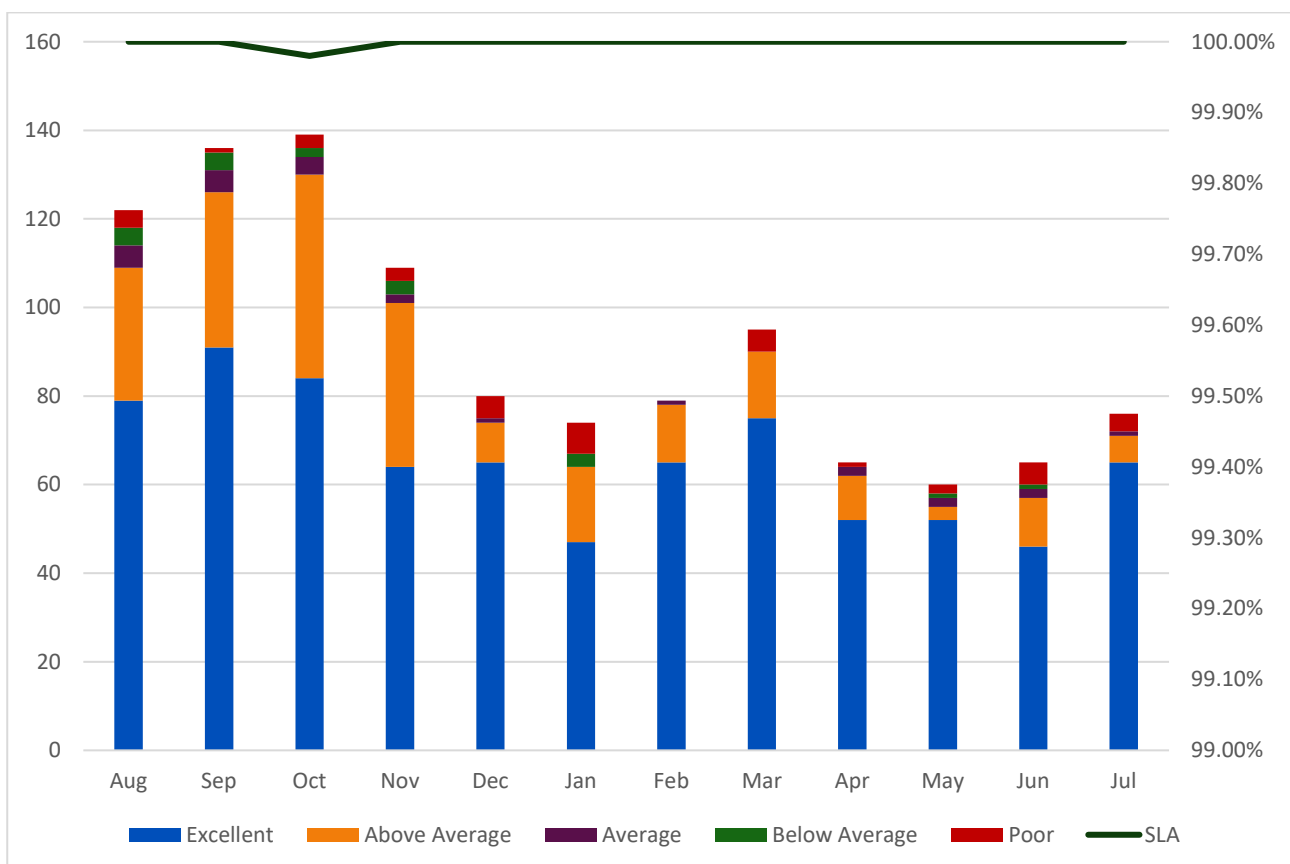


Figure 1: Service SLA and satisfaction

Member Outreach

- There were 93 Member Services engagements across 33 economies, covering RPKI, resource transfers, technical assistance, awareness of upcoming events and a security incident involving the APNIC Whois database.

Member Outreach by Subregion & Economy

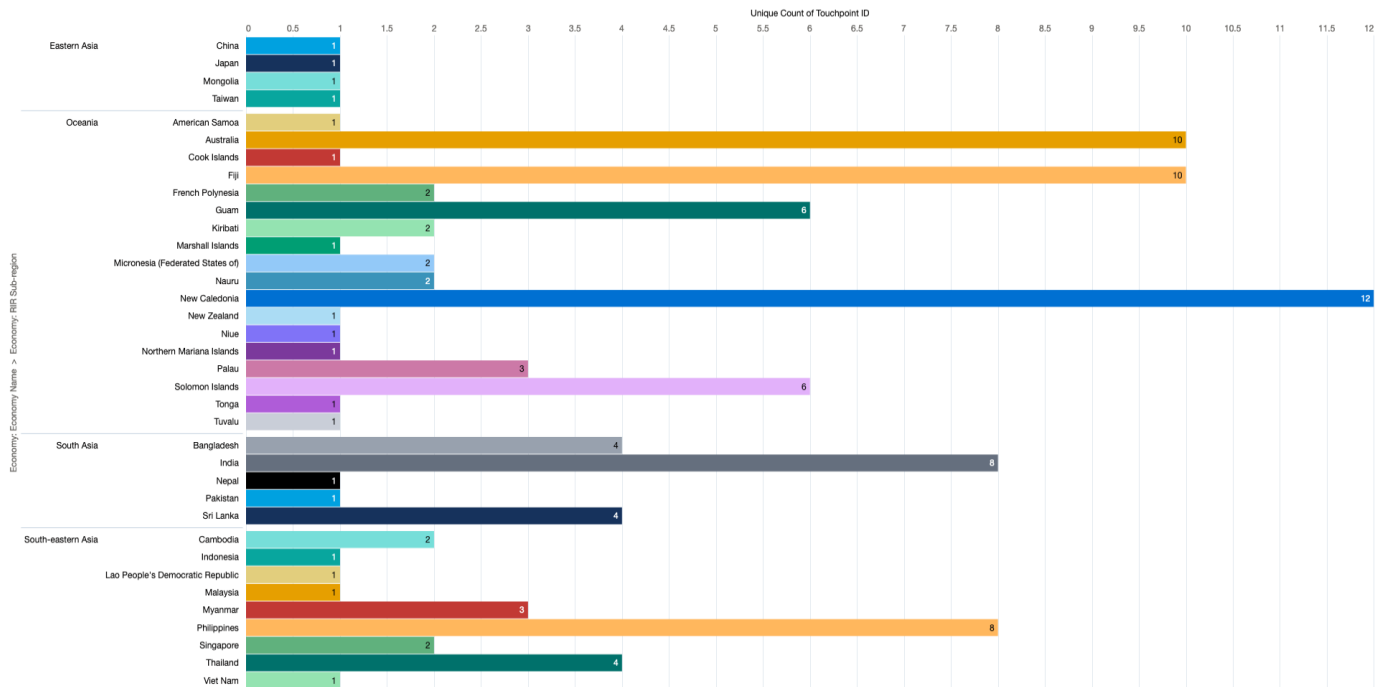


Figure 2: Touchpoints per economy

Fraud Handling

- Fraud cases remain steady, most involving attempts to open APNIC accounts with fabricated documents.
- Two membership applications were received from individuals claiming to be students needing resources for research but identified as existing Members seeking more IPv4 addresses.

Type	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Identity theft	-	-	-	-	-	-	-	-	-	-	-	-
Fabricated documents	3	-	2	3	2	-	1	2	2	-	3	1
Fabricated needs	-	-	-	1	-	-	-	-	-	2	-	-
Total fraud cases	3	0	2	4	2	0	1	2	2	2	3	1

Table 2: Fraud cases

Success Measures – 1A.1.		Results	Status
1	Maintain Helpdesk SLA of two business day response to enquiries (>99.90%).	100%	●
2	Maintain service satisfaction ratings of at least 93% “excellent and above average” feedback.	87%	●
3	All “poor and below average” feedback is followed-up and actioned.	100% resolved	●
4	Proactive Member service engagement in a minimum of 47 economies.	33 out of 47	●

1A.2 Member experience

Feedback

- Members and the community provided 968 feedback items, 174 requiring action (investigating, monitoring, or fixing the issue). All have been followed up.
- Feedback topics included APNIC conferences (participation and content); training; feature improvements; staff presentations; and website information.

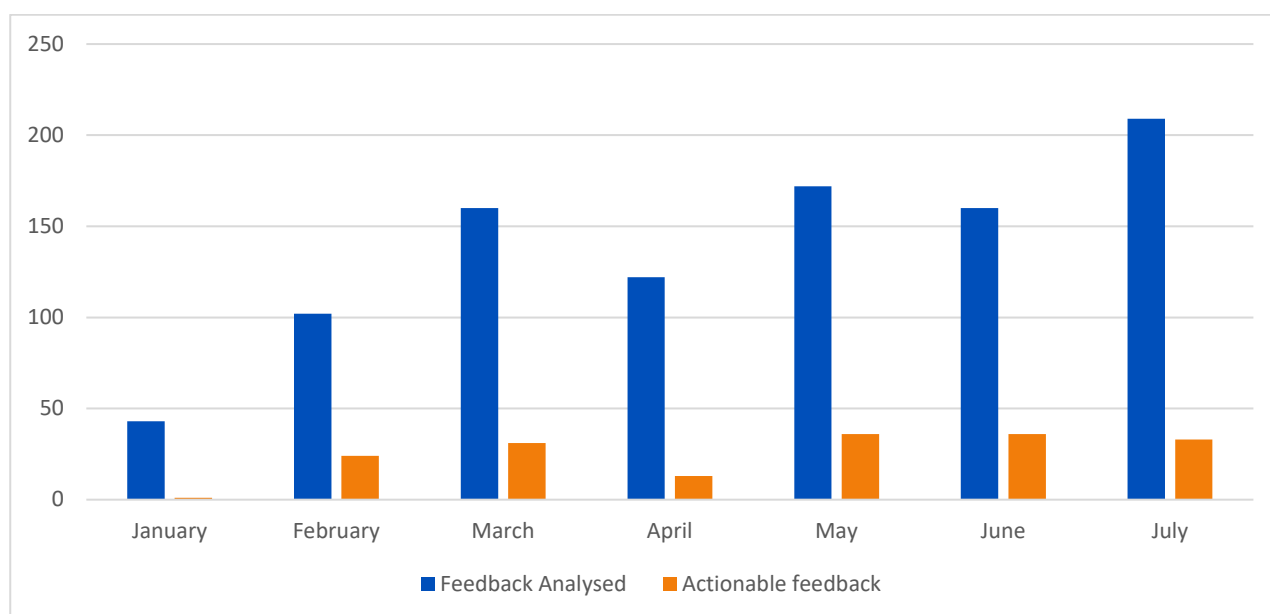


Figure 3: Feedback Received/Actionable

User Feedback Group

- Community members are encouraged to join the voluntary User Feedback Group to provide views on product developments. This group grew to 432 people (ahead of the growth target).

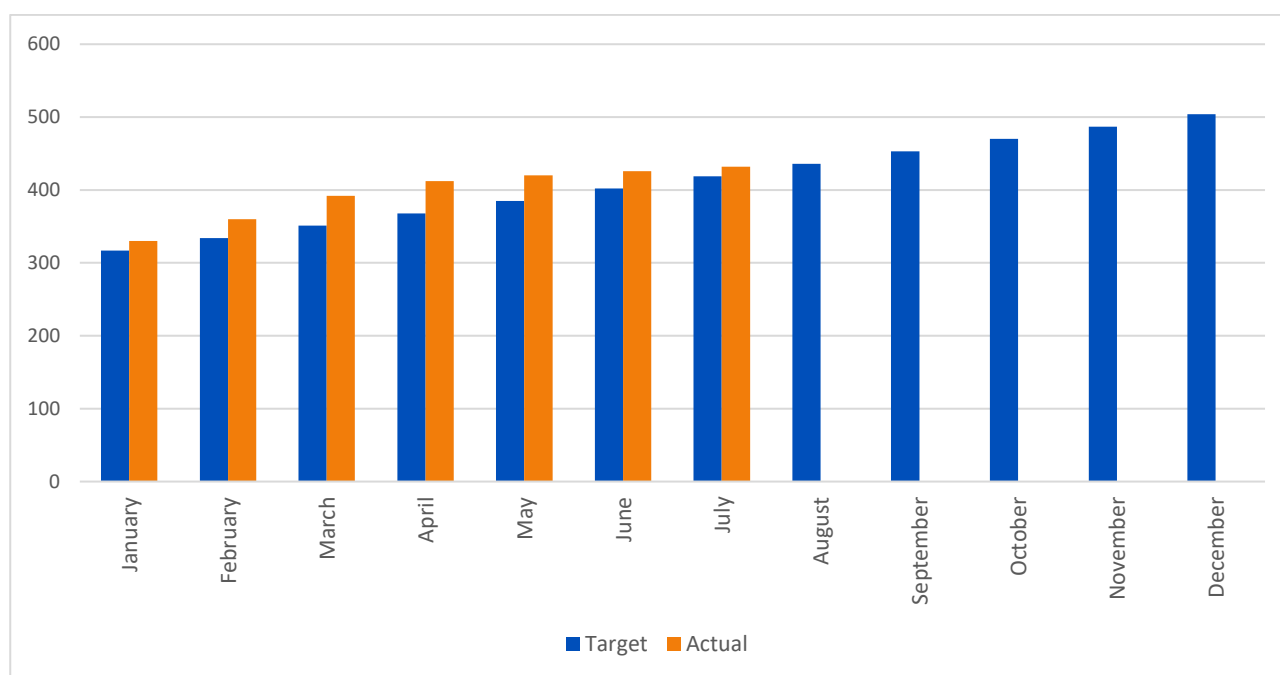


Figure 4: User Feedback Group Growth

Online accessibility

- All sixteen critical issues have been resolved.
- Sixty-six high issues were identified, with three resolved, seven in progress and the remaining tasks with product teams to resolve by 31 December.
- Completed 10 online one-on-one sessions with the remainder to be completed by 31 December.

Success Measures – 1A.2.			Status
1	All improvement suggestions received from all feedback channels are followed up and actioned.	100%	●
2	All critical and high accessibility issues are resolved.	82 issues: 13 fixed, 7 in progress	●
3	Grow product and service user feedback group from 300 to 500 members.	432	●
4	One-on-one feedback sessions with at least 50 Members.	Due in second half of 2021	●

1A.3 Membership development

- New Member outreach was conducted at the PCTA e-Tech Show, PITA Business Forum & Expo 2021, and CommunicAsia 2021.
- Meetings were held with two new potential Services Partners: Lao National Internet Center (LA), which became a Service Partner on 11 June, and Information Beam Company Limited (MM).
- A total of 427 new Members joined APNIC, four from Service Partners and four from Member referrals.



Figure 5: Membership transactions

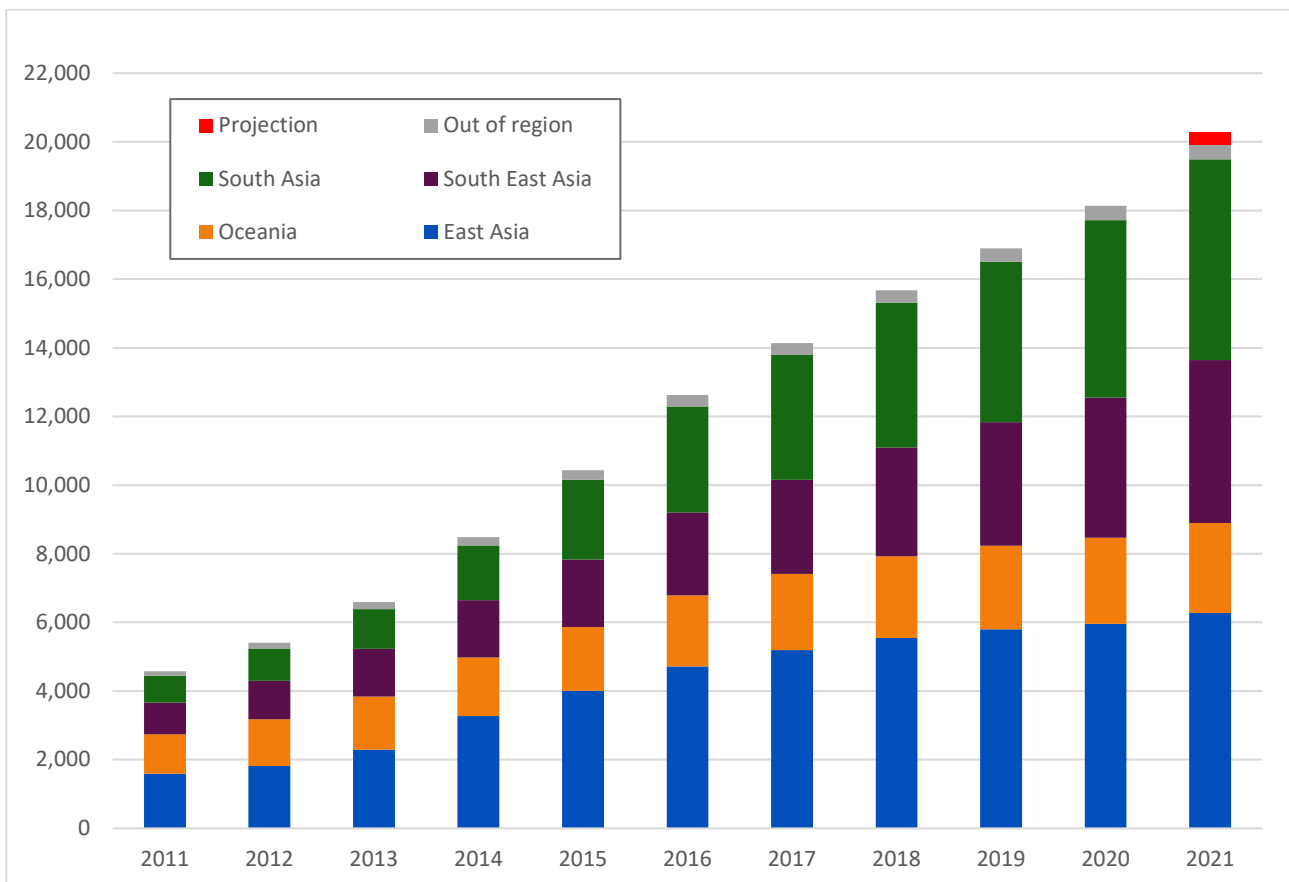


Figure 6: Total membership (APNIC + NIR, by subregion)

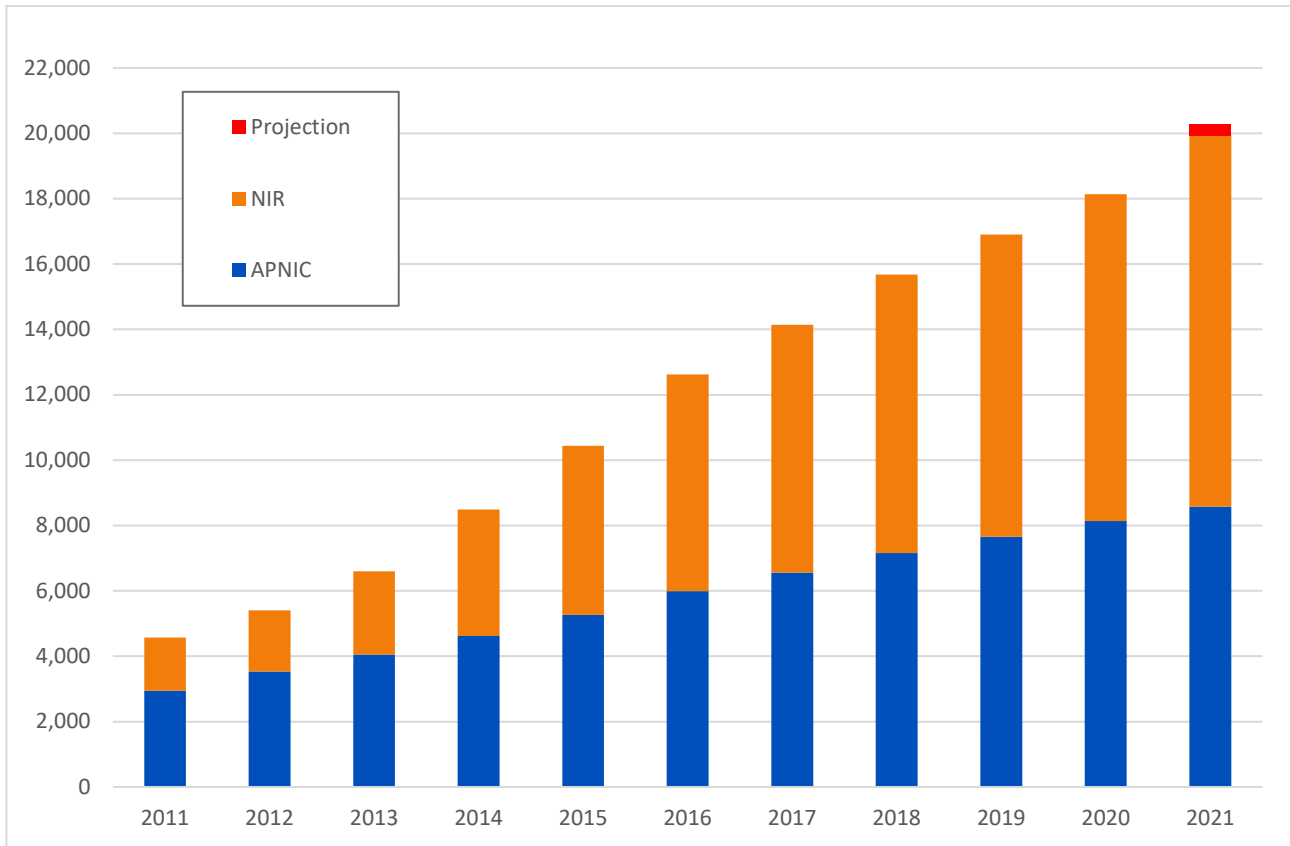


Figure 7: Total membership (APNIC + NIR)

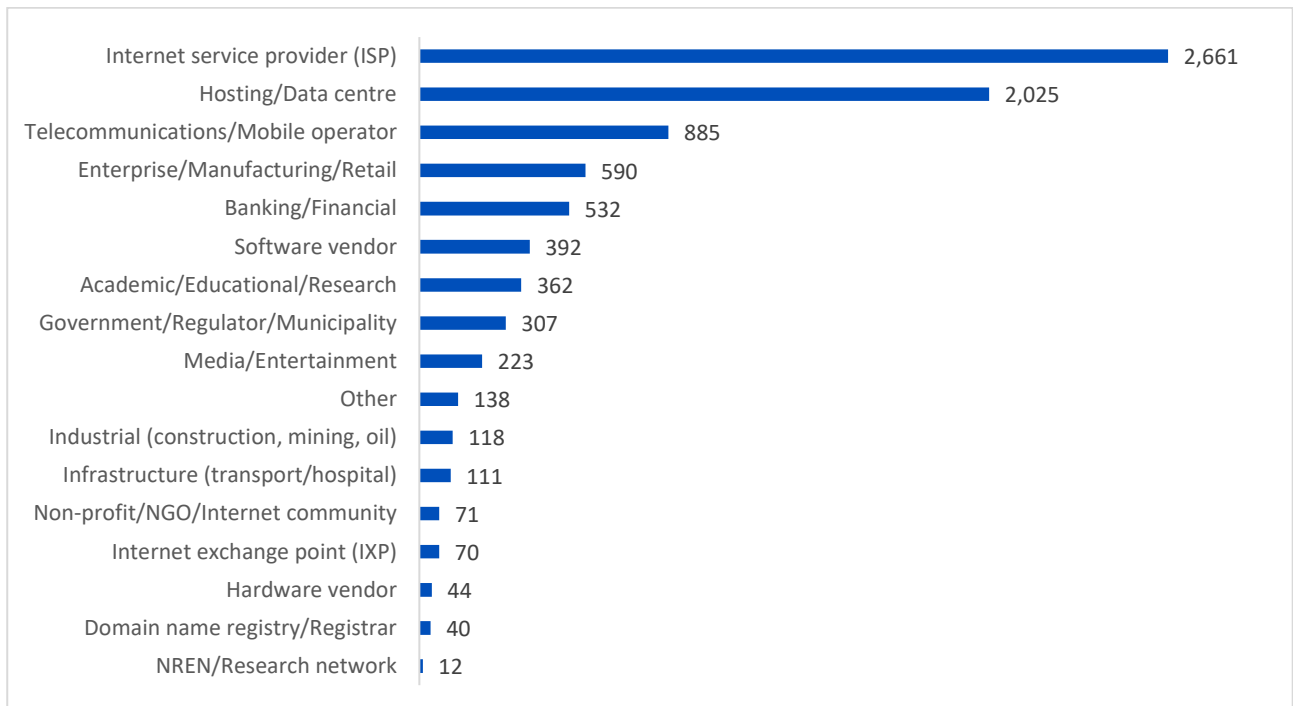


Figure 8: APNIC membership by industry type

	Success Measures – 1A.3.	Results	Status
1	At least eight membership development activities, in economies with low membership relative to their Internet growth potential.	5 out of 8	●
2	Total number of Members to match or exceed the 2021 budget assumption of 8,940.	8,581	●

1B Membership Products

Operations

1B.1 Membership product management

Help Centre

- The Help Centre — containing FAQ articles and ‘how to’ information to help Members quickly find answers to service queries — was deployed in February.
- Feedback is being gathered to improve usability and article content during the year.

MyAPNIC

- The EC election dashboard in MyAPNIC was improved, reducing support load for the APNIC 51 elections.
- The MyAPNIC architecture conversion from WordPress to Java is 95% complete.
- Improvements to the billing section, including advanced invoice management, downloadable receipts and better billing due date visibility, is in user acceptance testing.
- The migration of membership management functions in MyAPNIC from Perl to Java began. APIs will be adopted to take advantage of improvements in modern testing, deployment, and front-end technologies.
- Chat support via Salesforce Service Cloud in the MyAPNIC test environment is in user acceptance testing.
- Baseline metrics for common MyAPNIC tasks were developed to understand task completion and reduce error rates.
- Voting system updates to accommodate the addition of SIG and IANA RC elections were completed for APNIC 52.

Membership application form

- Implemented Member application referrals in the new application form and deprecated the old form.

Other process and system improvements

- Migration of APNIC Logins is delayed until the existing SSO system is replaced in December (see 5A.6).
- New testing infrastructure was deployed to the membership application form and election system to reduce the time needed for user acceptance testing and improve code quality.
- Updated Member API to retrieve Member accounts associated with a SSO UID, allowing external systems (such as event management) to access data.
- Duplicate user accounts have been removed from the SSO.
- Billing surcharges were removed for Members paying annual fees by instalment.

	Success Measures – 1B.1.	Results	Status
1	Member Help Centre deployed.	Completed	●
2	Migrate 100% of APNIC Logins to a new identity management system.	Scheduled Q4	●
3	Establish comprehensive testing infrastructure for membership product applications.	Completed	●
4	Deliver problem-free EC, NRO and SIG Elections via BigPulse.	APNIC 51 elections completed	●

Investments

1B.2 Online community platform

“Validate community requirements and prototype an online platform for community members to share knowledge and experience and participate in discussions online.”

Status:

- The ‘Tribe’ platform has been selected for testing following the product evaluation process.
- A pilot trial with three communities (SWITCH SEA, APNIC 52 Online Fellows and APNIC Academy) and 110 users is underway. The trial aims to understand how people use Tribe and its capabilities.

1C Membership Reporting

Operations

1C.1 Planning and reporting

- The 2021 Activity Plan and Budget and the 2020 Annual Report were presented at the APNIC AGM on 4 March.
- All Event Wraps and EC Minutes have been published in line with the KPI.
- A public webpage tracking progress against 2021 activities was published.

	Success Measures – 1C.1.	Results	Status
1	Publishing of required reports on the day of the APNIC Member Meetings.	Done (APNIC 51)	●
2	Publishing of EC Minutes within two months of each EC meeting.	100% achieved	●
3	Event Wraps published for 100% of reportable events within one month of event.	29/29 achieved	●



2 Registry

2A Registration Services

Operations

2A.1 IPv4, IPv6 and ASN delegation and registration services

Resource pools

- The following table shows the current status of all APNIC number resource pools.

	Total at 1 Jan 2021	From IANA	Transfers in	Transfers out	Total at 31 July 2021	Total delegated	Total reserved	Total available
IPv4 /24s	3,482,617	0	1,655	616	3,483,656	3,461,282	8,750	13,624
IPv6 /32s	1,067,008	0	0	0	1,067,008	93,025	113,661	860,322
ASNs	21,143	4,096	2	3	25,238	23,528	0	1,710

Table 3: Resource pool status

IPv4 pool status

- The following chart shows the amount of reserved and available space in APNIC's IPv4 pool.

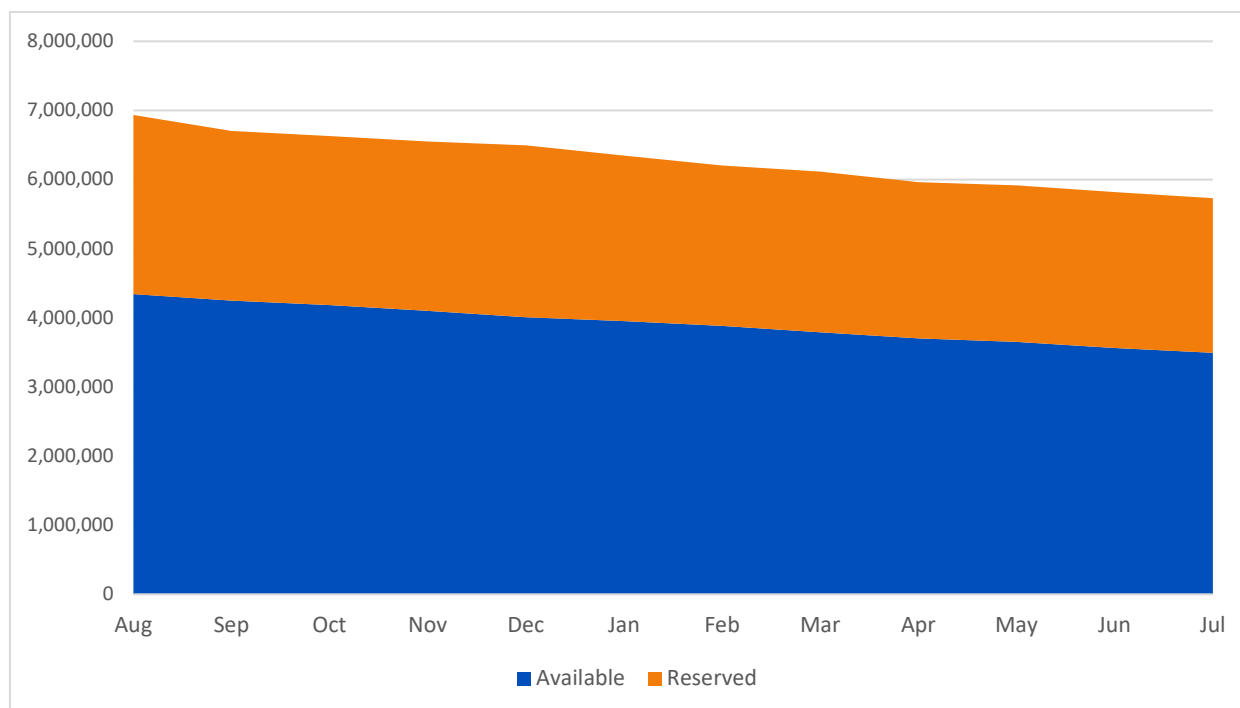


Figure 9: IPv4 pool status

IPv4, IPv6 and ASN delegations

- The following graphs show the number of delegations for each resource type, by sub-region.
- The peak in ASN delegations in April and May were due to bulk allocations to a Chinese confederation Member, CERNET, for their 'Future Internet Technology Infrastructure' (FITI). APNIC received an additional 4,096 ASNs from IANA to make this large delegation.

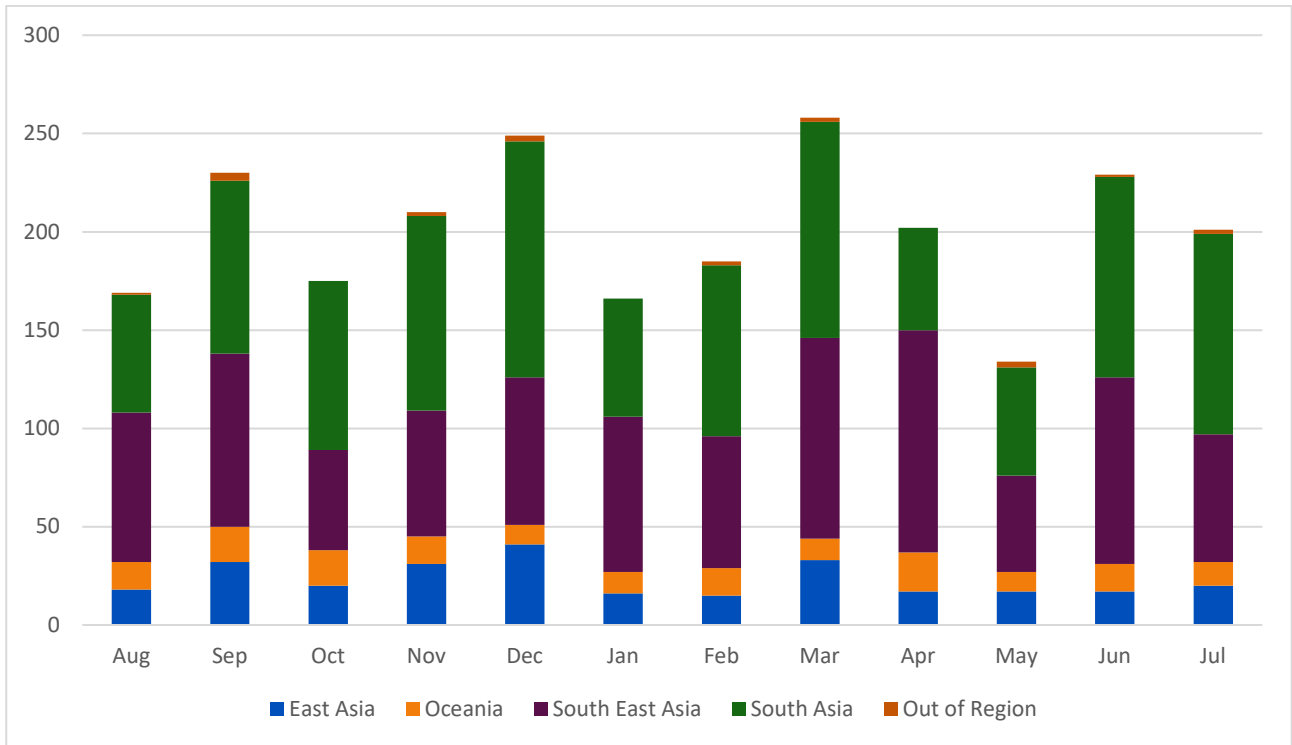


Figure 10: IPv4 delegations by sub-region

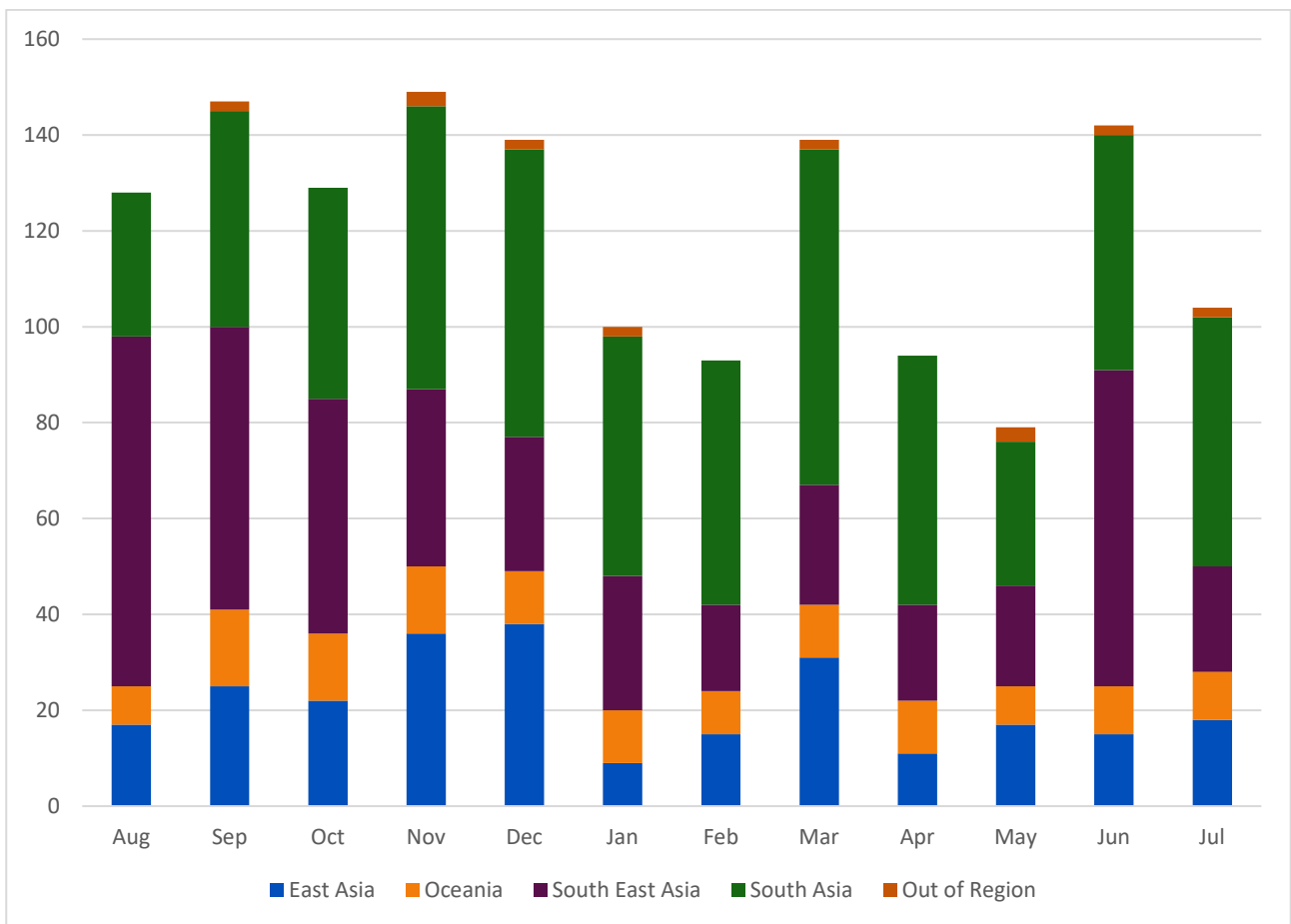


Figure 11: IPv6 delegations by sub-region

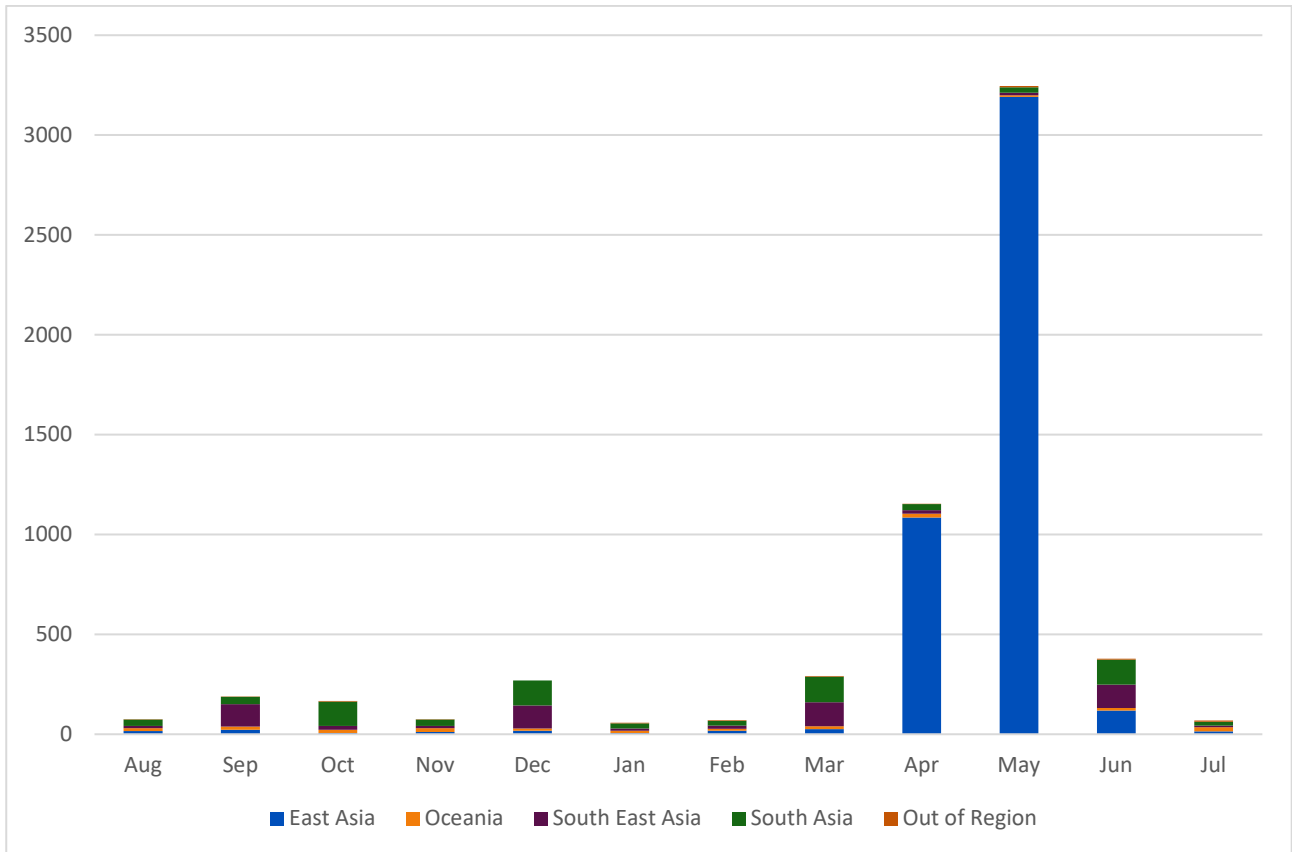


Figure 12: ASN delegations by sub-region (including NIRs)

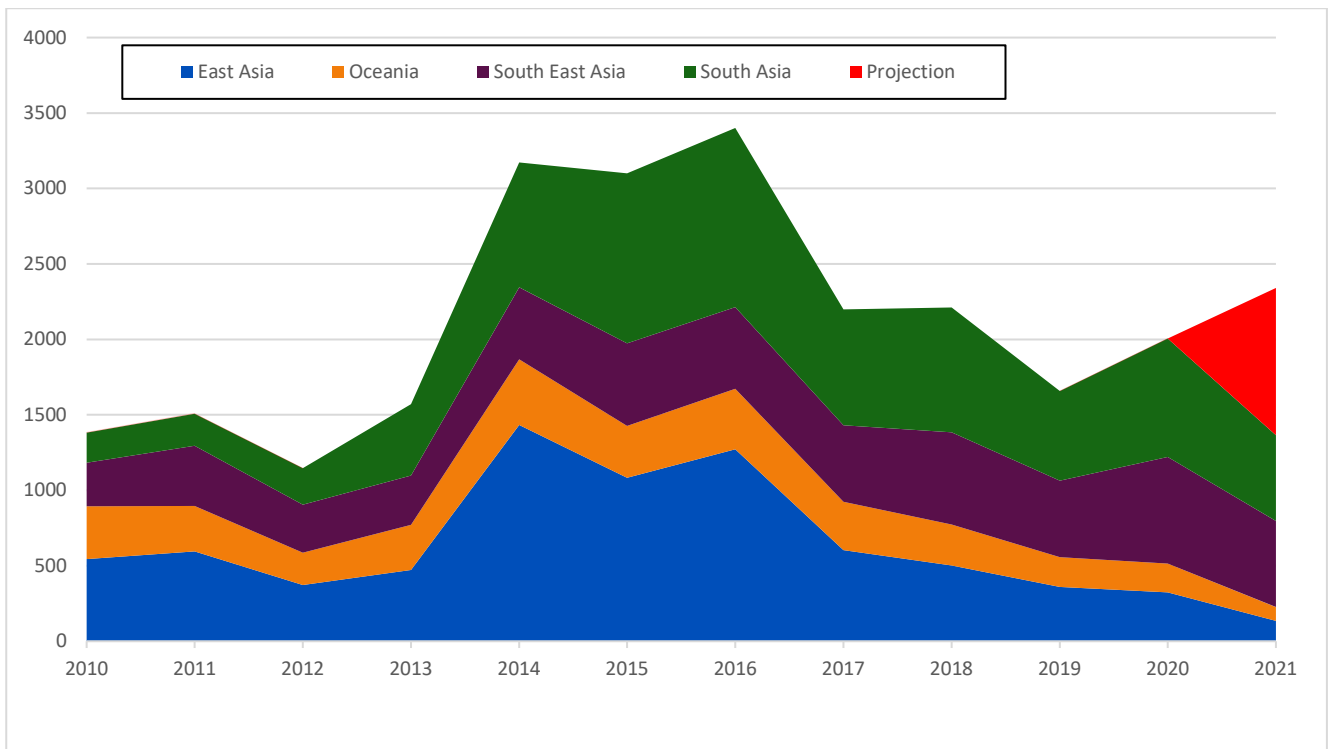


Figure 13: Annual IPv4 delegations

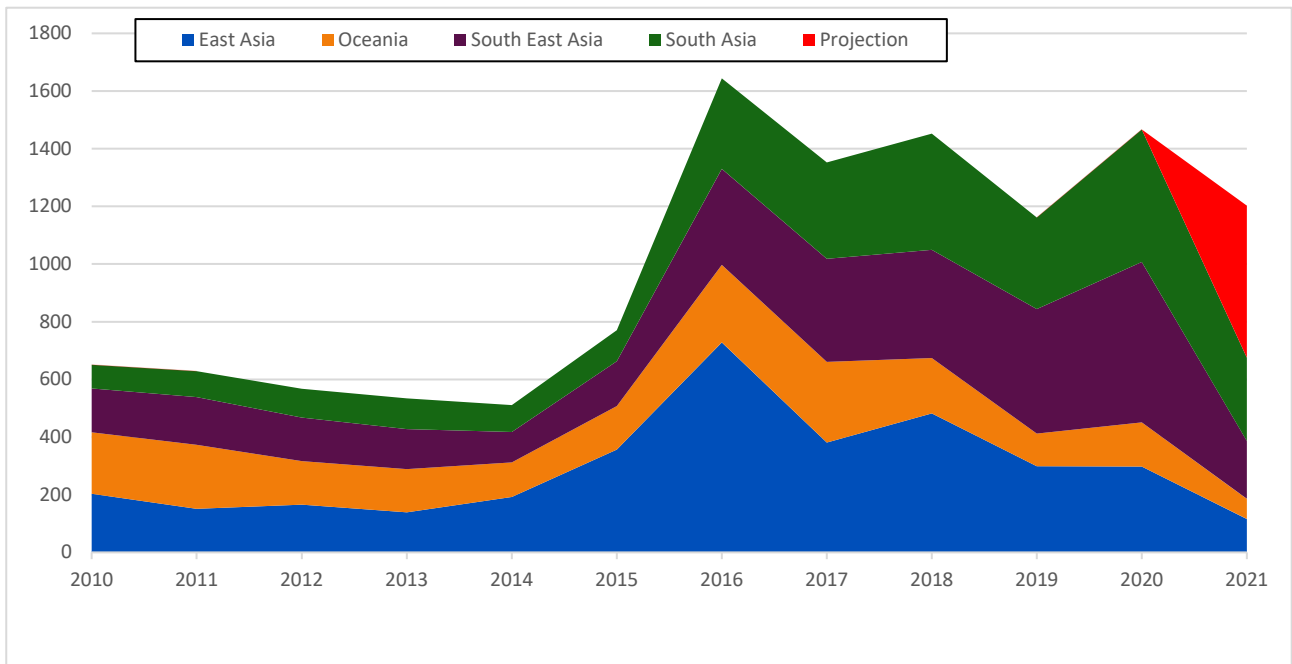


Figure 14: Annual IPv6 delegations

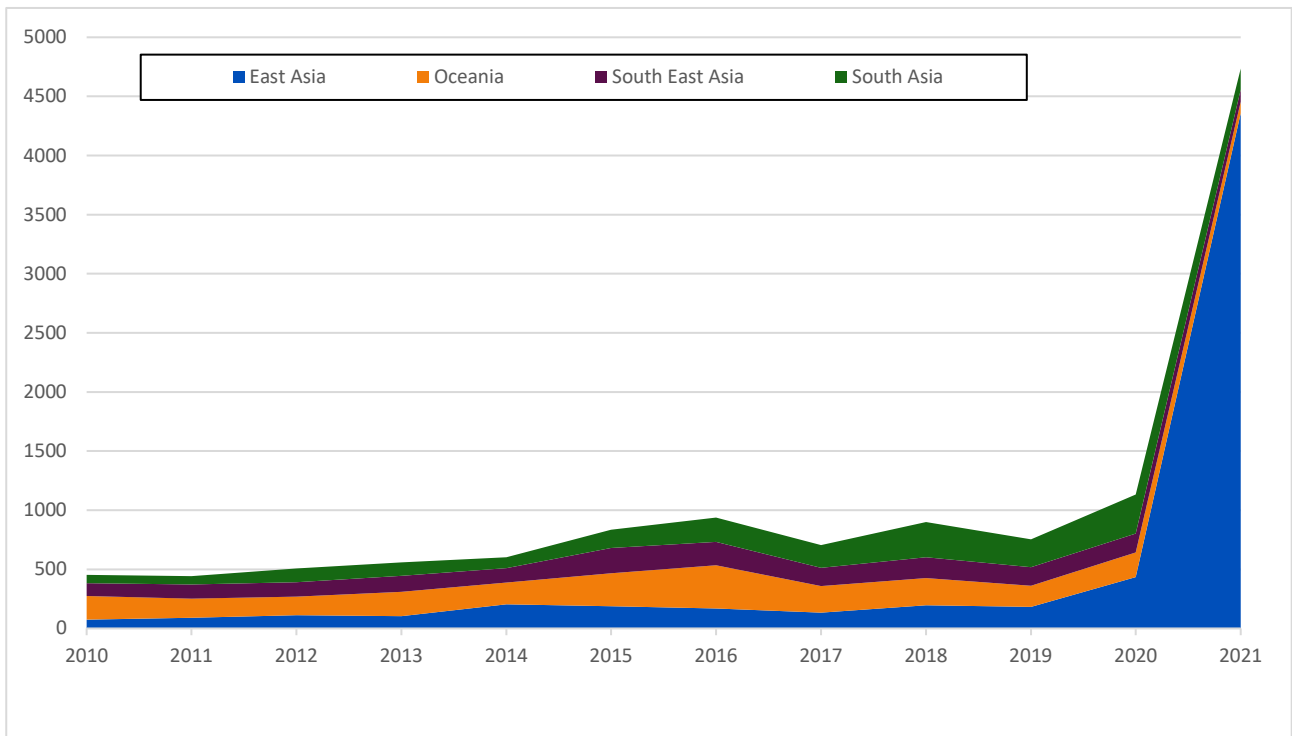


Figure 15: Annual ASN delegations

Member resource holdings

- The proportion of APNIC Members holding specific resource types is as follows. The percentage of Members holding IPv6 reached 67.29% in July 2021 (target is 70%).

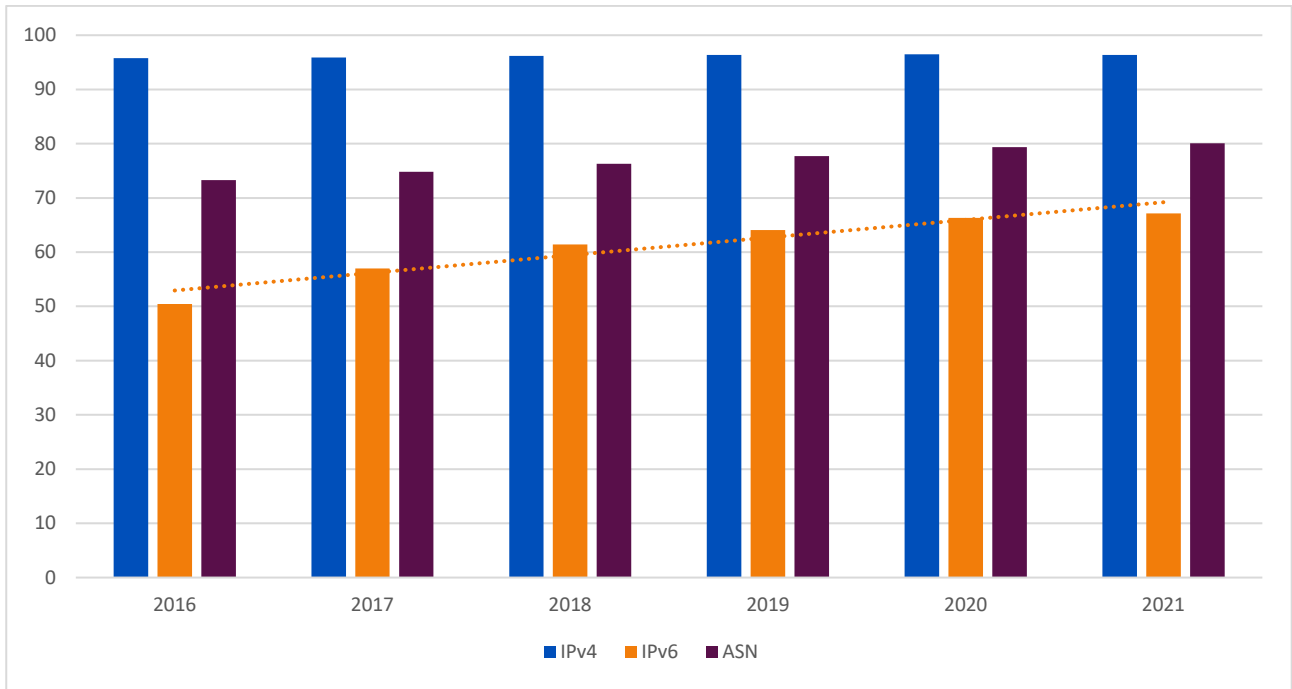


Figure 16: Member resource type holdings

IPv4 transfers: Mergers/acquisitions and historical

- M&A transfer activity increased in March 2021, mostly due to transfers in NIRs.
- A large transfer within KRNIC accounts for the December 2020 peak.

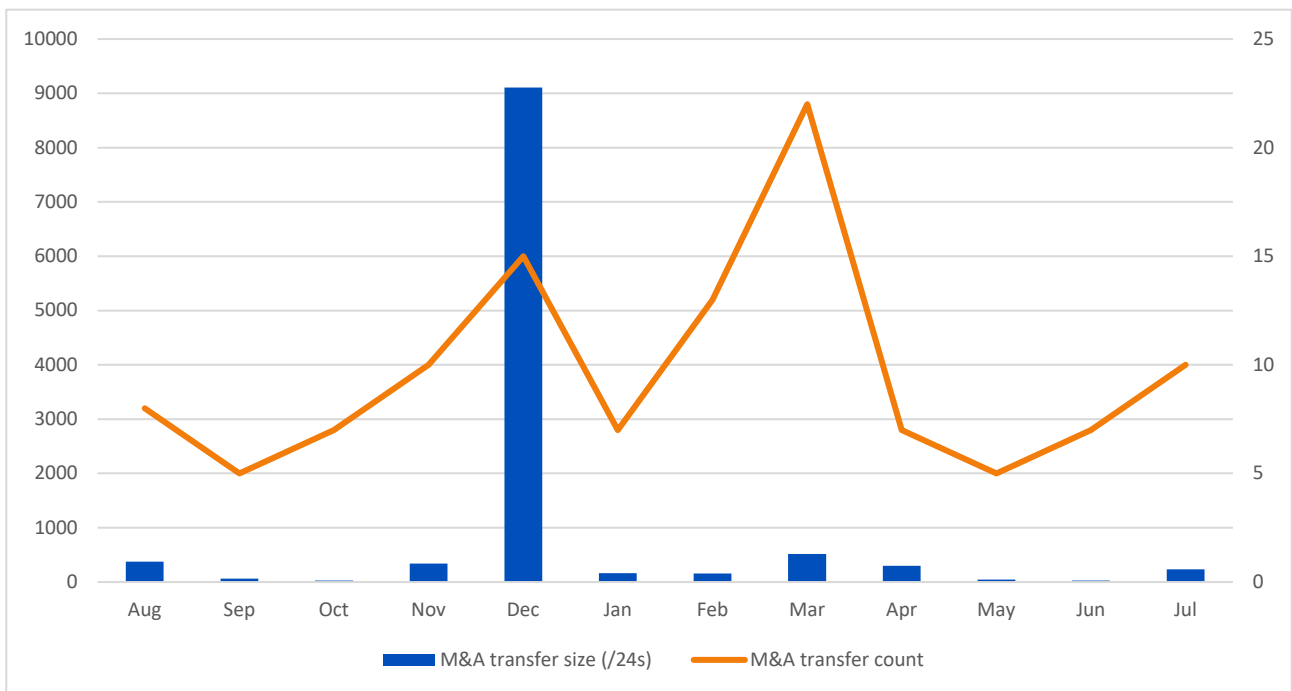


Figure 17: M&A and historical transfers

IPv4 market transfers

- There were several IPv4 transfers by IRINN in October 2020 and January 2021, which drove higher counts in the chart below.
- There were three large IPv4 transfers from APIDT in the last 12 months: a /9 in August 2020, a /10 in Oct 2020 and a /12 in June 2021.

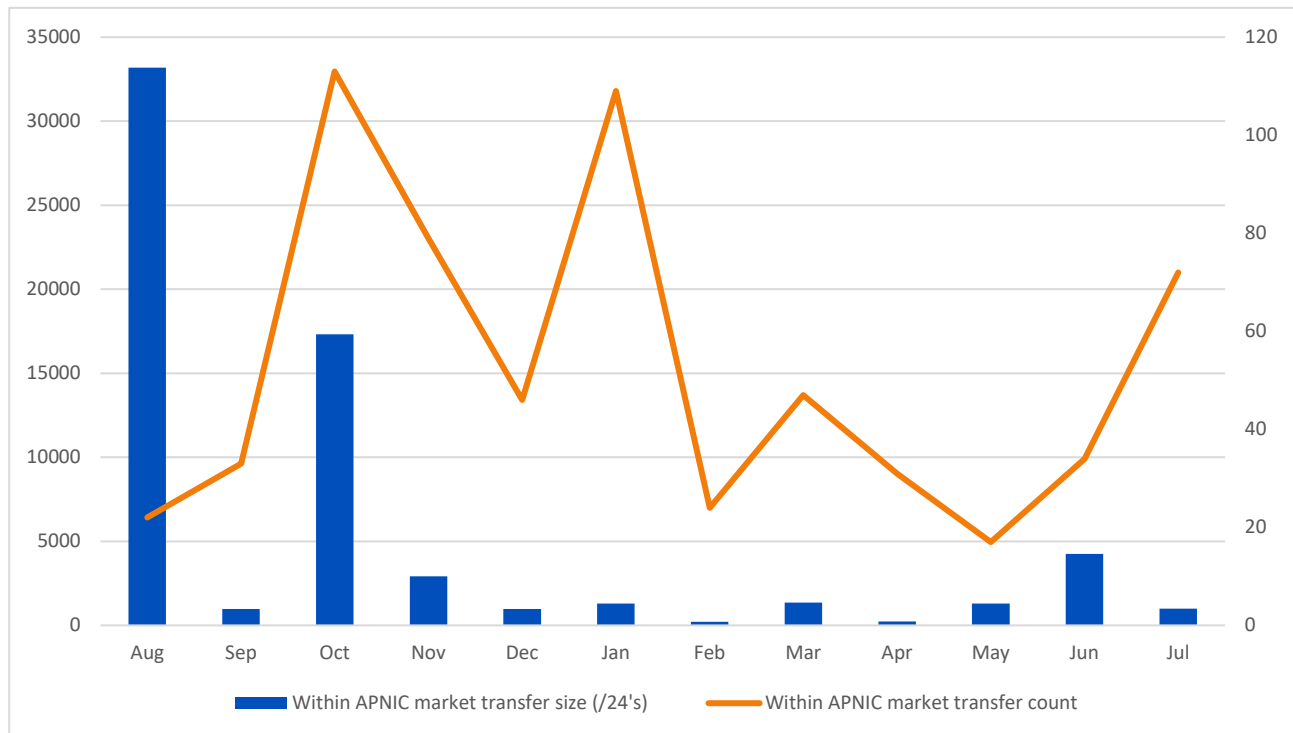


Figure 18: Market transfers

Market transfers: Inter-RIR

- No large inter-RIR market transfers occurred in the last 12 months.
- Inter-RIR transfer activity has slightly increased in 2021.

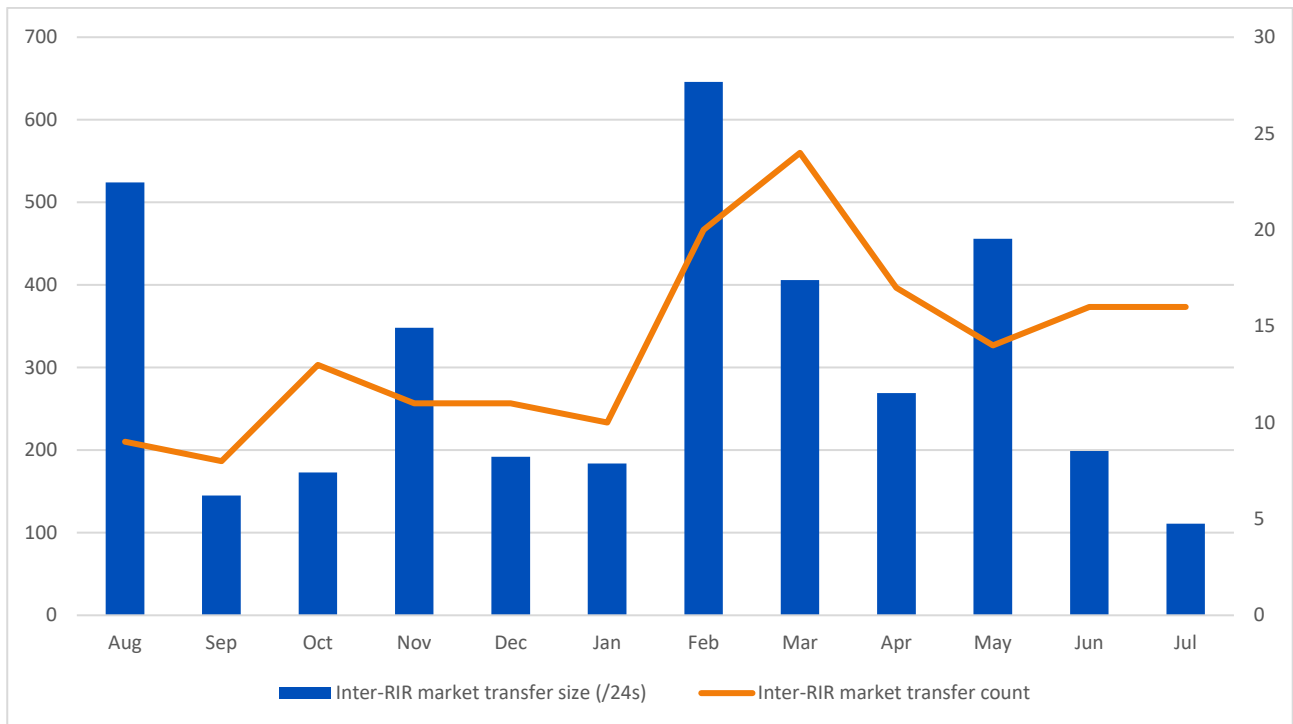


Figure 19: Inter-RIR IPv4 transfers

Success Measures – 2A.1.		Results	Status
1	Maintain Registration Services SLA of two business day response to enquiries (>99.90%).	100%	●
2	Increase percentage of Members holding IPv6 address space to 70%.	67.29%	●

2A.2 Maintain correct and current registry data

- Improvements were made to IRT validation under Prop-125.
 - Email templates used for IRT validation and Member notifications were simplified.
 - IRT management in MyAPNIC was improved to help update IRT details and handle validation emails.
 - 12,793 email validation requests have been issued; 9,131 email validation requests confirmed. The confirmation rate is 71.4%.
- Work commenced on collecting NRO-defined data for ICANN’s Identifier Technical Health Indicators (ITHI) initiative.

Success Measures – 2A.2.		Results	Status
1	Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting.	In progress	●
2	Increase rate of validation by Members of registration records.	69.1% validation	●

2A.3 Reclaiming unused IPv4 address space

- Around 2.3 million unadvertised historical IPv4 addresses (293 prefixes) were identified under prop-017. Custodians have been identified and contacted to encourage them to claim, transfer or return the resources.
- All publicly available information including online company registries, company websites and web searches are being used to identify custodian contacts. Address space for uncontactable custodians, or custodians that do not respond by the end of the year, will be reclaimed by APNIC.

Status	31 March	31 July	Percentage	Addresses
Yet to contact	60	32	10.92%	534,528
Not contactable	51	54	18.43%	144,384
No response	66	55	18.77%	537,088
Prefixes being claimed by holder	37	31	10.58%	270,848
Prefixes claimed by holder	29	50	17.06%	413,952
Prefixes returned to APNIC	50	71	24.23%	484,352
Total number of unrouted prefixes	293	293	100%	2,385,152

Table 4: Status of reclaimed address space

	Success Measures – 2A.3.	Results	Status
1	All unrouted historical resource prefixes identified under policy prop-017 are claimed, transferred, or returned to APNIC.	In progress	●

2B Registry Products

Operations

2B.1 Internet number registry management

NIR API

- Implementation began on an NIR API to ease the administrative burden on the NIRs, and to improve the accuracy of APNIC's data sources.
- An internal end-to-end test environment is being set up for final internal review as well as a similar external environment for review by the NIRs.

APNIC Registry Management System (ARMS)

- Significant performance improvements (5-10x faster for typical requests) were made to the core registry service to make ARMS more usable.

Registry re-architecture

- Requirements gathering is in progress, for input into defining the plan for re-architecting the registry. This is a multi-year project under APNIC's Next-generation Registry initiative.

	Success Measures – 2B.1.	Results	Status
1	Implement the NIR API and operate in conjunction with the NIRs.	In progress	●
2	Create initial design documentation for the “Next-generation Registry” by the end of Q4.	In progress	●

2B.2 Registry product management

RPKI

- Repository publication was made entirely atomic to avoid repository inconsistency/invalidity problems.
- MyAPNIC updates were made to improve route management.
- The RPKI CPS was updated and republished to remove out-of-date statements/descriptions.

RDAP

- To improve consistency among the RIRs' RDAP services, the NRO RDAP profile was published in the IANA RDAP registry.

	Success Measures – 2B.2.	Results	Status
1	Implement a bulk update method to improve usability of the MyAPNIC Routing Management feature.	Scheduled for Q3/4	●
2	Improved support for “BYO IP” services in MyAPNIC.	Scheduled for Q3/4	●
3	Create a public specification of a general Member registry API.	In progress	●
4	Implement the NIR KPI monitor for RPKI.	Scheduled for Q3/4	●

2C Policy development

Operations

2C.1 Policy development

APNIC 51

- Two policy proposals were considered at the APNIC 51 Open Policy Meeting (OPM). One proposal reached consensus in the OPM and AGM:
 - [prop-133](#): Clarification on Sub-Assignments

- A second proposal was discussed but did not reach consensus and was abandoned:
 - [prop-130](#): Modification of transfer policies
- Following the meeting, the comment period for prop-133 closed with no objections raised and the policy was endorsed by the APNIC EC for adoption.

APNIC 52

- Twelve policy proposals were submitted to the Policy SIG Chairs for consideration for APNIC 52.

	Success Measures – 2C.1.	Results	Status
1	Achieve minimum overall satisfaction rating of 6/7 from Policy Chairs in annual review of SIG Chair support.	N/A	●

2C.2 Policy implementation

- Policy text changes resulting from prop-133 were implemented and published as apnic-127-v009.

	Success Measures – 2C.2.	Results	Status
1	Meet 100% of implementation timelines.	100%	●

2C.3 Policy analysis

- Impact assessments of the two policy proposals submitted for APNIC 51 were conducted by APNIC staff, shared with the Policy SIG, and presented during the meeting.
- An update on the Policy Document Review was presented at APNIC 51, including an analysis of potential issues in the current documentation. An additional Policy SIG Community Consultation meeting (attracting 40 attendees) was held online on 19 March.
- A community Working Group (WG) was formed to review the Policy Document Review Report and develop proposals for discussion at APNIC 52. Amrita Choudhury, Tomohiro Fujisaki, and Simon Sohel Baroi were appointed WG Chair and Co-Chairs respectively. The WG submitted nine proposals to the Policy SIG Chairs for consideration for APNIC 52.

	Success Measures – 2C.3.	Results	Status
1	Deliver two policy analysis presentations at SIG meetings.	1/2 done	●
2	Publish a policy proposals analysis before each Policy SIG meeting.	1/2 done	●



3 Development

Operations

3A APNIC Conferences

3A.1 APNIC conferences

APRICOT 2021 / APNIC 51

- [APRICOT 2021](#) was held online from 22 February to 4 March 2021.

Conference statistics	
Total number of remote participants (Zoom)	852
Economies represented	61
APNIC Member organizations represented	TBC
Remote viewers – YouTube	3,855 views; 832.04 hours
#apricot2021 tweets	266 from 116 users

Table 5: APRICOT 2021 statistics

- APRICOT 2021 was the second 100% online conference managed by APNIC due to the COVID pandemic.
- Tutorial week from 22 to 26 February attracted 416 attendees, with 552 attending the conference from 1 to 4 March. The YouTube stream of APNIC 51 sessions attracted an additional 1,861 live views, with total YouTube views for the entire conference reaching 3,855 during the conference week (including session views that were not live).
- At the APNIC EC election, Feng Leng (2,612 votes), Yoshinobu Matsuzaki (2,605 votes), and Gaurab Raj Upadhaya (2,567 votes) were elected for two-year terms.
- Other Internet community events held at APRICOT included the DotAsia AGM, APIX meeting, AP* Retreat, and an APNG Seminar.

APNIC 52

- APNIC 52 will be held online from 13 to 16 September 2021.
- The Program Committee was selected, and the Call for Papers launched in May. Registration opened in July with 399 delegates registered.
- Technology options for chat and delegate networking were identified and evaluated, with Cometchat selected and testing underway. Testing of automated transcription of conference sessions (using “Otter.ai”) was completed and it will be used at APNIC 52.

	Success Measures – 3A.1.	Results	Status
1	Achieve total attendance of 1,000 delegates across two conferences.	852 attendees	●
2	Achieve 6,000 remote conference session views.	4,707 views	●
3	Achieve average conference participant satisfaction survey rating of 90%.	93%	●
4	Achieve average participant satisfaction of 85% for speakers.	96%	●
5	Select and integrate online meeting technologies to provide a seamless online experience for APNIC 51 and 52.	Complete APNIC 51; testing for APNIC 52	●

Investments

3A.2 Fellowships

“Support participation in APNIC conferences and workshops, including ‘returning’ and ‘youth’ fellowships, with a continued focus on diversity”.

Status:

- A new online fellowships program was developed, comprising 12 technical, policy and Internet governance presentations over five months; pairing fellows with industry mentors; APNIC Academy training; and guidance during APNIC 52. Certificates will be issued to fellows who meet training and attendance requirements.
- 48 fellows were shortlisted from 293 applicants, with 46 accepting (24 female and 22 male; 34 professionals and 12 youth). South Asia had 25 fellows, Oceania 12, South East Asia 5, and East Asia 4.
- Nine presentations have been delivered to date with 85% overall attendance.
- Fellows have completed 68 APNIC Academy self-paced courses (with 38 in progress) and attended an additional 21 Academy webinars.
- Twelve mentoring sessions have been arranged for August to September between 27 fellows and 25 volunteer mentors from the APNIC community.

3B Foundation support

Investments

3B.1 Operational and administrative support

“Operational and Administrative Support for the APNIC Foundation, in accordance with the AoC of 2018”.

Status:

- Six positions seconded from APNIC, and one position (Comms) transferred from APNIC for three days a week. Ongoing hosting and technical support continues for administrative, project and financial platforms.
- New Affirmation of Commitments developed that covers both APNIC support and Foundation funding for APNIC activities.

3C Community Engagement

Operations

3C.1 Technical community support

NOGs and other technical community events

- Ongoing discussion with the Pakistan community (as a part of RPKI outreach and PKIX – Lahore setup) for PKNOG.

Month	Event	Location	Sponsorship	Committee/ PC	Talk/Panel discussion	Training	Tech / Zoom Support
Jan	MMNOG 4	South East Asia	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jan	SANOG 36	South Asia	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Jan	JANOG 47	East Asia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jan	TWNOG	East Asia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feb	APAN 51	Asia Pacific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Feb	MANRS Tech Talk	Oceania	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feb	APIX	Asia Pacific	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Feb	APRICOT 2021	Asia Pacific	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mar	Crikey Con VII	Oceania	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apr	PCTA e-Tech Show	South East Asia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
May	ThaiNOG 3	South East Asia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
May	BKNIX Peering Forum	Southeast Asia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jun	BdNOG 13	South Asia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jun	PacNOG 28	Oceania	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Jul	LKNOG 5/SANOG 37	South Asia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Jul	vPhNOG 2.0	South East Asia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Jul	JANOG 48	East Asia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jul	SGNOG 8	South East Asia	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Jul	SecTalks – TWB Series	Oceania	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Table 6: NOG and technical community event participation

Other sponsorships for Technical Community

Recipient	Sponsorship	Duration
Peering DB	Peering DB	12 months
Island Bridge Network	IXP Manager	12 months
Internet Society	MANRS Ambassadors and Fellowship Program Sponsor	9 months

Table 7: Other sponsorships

	Success Measures – 3C.1.	Results	Status
1	Sponsor/participate in 30 technical community events including NOGs, Peering Forums, and Research & Education events.	19 events	●
2	Support 20 NOGs to conduct online events if physical events are not possible.	9 NOGs	●
3	Facilitate and support two new/revived NOGs in two sub-regions.	1 in progress	●

3C.2 Security community support

CERT/CSIRT Support

- Presented on the APNIC Community Honeynet Project at the FIRST Regional Lightning Talk session.
- Delivered Linux Forensics for System Administrator training in collaboration with the Bhutan Computer Incident Response Team (BtCIRT).
- Conducted a Table Top Exercise for the FIRST Fellowship teams.
- Participated at the FIRST CTI Summit 2021.
- Delivered a hands-on tutorial for the PacSON Community.
- Collaborated with Timor Leste CERT to organize a workshop on Incident Response.
- Collaborated with CERT Tonga to deliver a honeypot hands-on workshop.

Security Community Support

- Delivered a security tutorial on Practical Intrusion Detection System at IBCAST 2021 in Pakistan.
- Delivered a security tutorial on Practical Incident Response at the 3rd International Cyber Resilience Conference in Malaysia.
- Delivered a tutorial on Security Monitoring with Elasticsearch at the Samoa Cyber Week.
- Presented at the APECTEL 62 Security and Prosperity Working Group meeting.
- Presented at security sessions at the 2nd ICANN APAC-TWNIC Engagement Forum.

- Participated in three other security events: CrikeyCon VII (and provided sponsorship), BrisSEC21, and AusCERT 2021 (and participated on the Program Committee).
- Collaborated with ACSC to deliver two workshops for Cyber Safety Pasifika.
- Participated as a panellist for two sessions at the ASEAN Cyber Security Forum (Cydes 2021).
- Supported the FIRST Annual Security Conference 2021 as a Program Committee member and session Chair.
- Participated at the 6th INTERPOL Global Cyber Crime Expert Group meeting and the INTERPOL Forum on Ransomware.

	Success Measures – 3C.2.	Results	Status
1	Sponsor or participate in 10 security community events.	20 events	●
2	Support targeted development of four new/existing CERTs/CSIRTs.	3 CERT/CSIRT	●
3	Deliver six presentations/training sessions on the Security Threat Sharing Platform.	4 presentations	●

3C.3 Internet organization cooperation

NRO and RIRs

- Partnered with LACNIC to commission a study on the Internet’s technical success factors:
 - Developed requirements and selection criteria; published RFP; and selected Analysys Mason (from 13 respondents) to conduct the study.
 - Supported Analysys Mason in conducting 15 community interviews. Final report is due in Q4.
- Participated in six NRO EC meetings and 12 NRO coordination group meetings (PACG (5), ECG (2), PSCG (2) and CCG (3)).
- Supported proposed revisions to the NRO MoU and proposed review of the NRO Strategic Plan.
- Supported LACNIC’s recruitment of a new Strategic Engagement Manager.
- Provided advice and support to AFRINIC around ongoing legal proceedings.
- Participated in ARIN 47, LACNIC 35, RIPE 82 and AIS’21 (AFRINIC).

I* (ICANN, IETF, ISOC, ITAC)

- Participated in seven Internet Technical Collaboration Group (ITCG) calls.
- Participated in four OECD-ITAC calls to coordinate work on an OECD draft document on Routing and DNS Security.
- Participated at ICANN 70 and 71, ICANN DNS Symposium 2021, and IETF 110 and 111.
- Participated in the ICANN Root Service Governance Working Group, the Root Zone Evolution Working Group and the Security and Stability Advisory Committee (SSAC).

NIRs

- Attended meetings with IRINN and the CEO of NIXI.

- Participated in the ICANN-TWNIC Engagement Forum held with the 35th TWNIC OPM.
- Provided a training session for IRINN Hostmaster and Helpdesk teams on IRM, IPv6, the PDP and routing.
- Attended a meeting with the KRNIC Policy team and new Policy Manager.

	Success Measures – 3C.3.	Results	Status
1	Participate in all NRO and 'I*' coordination meetings.	100%	●
2	Participate in all NIR and RIR Open Policy Meetings.	100%	●

3C.4 Internet governance participation

IGF

- Attended 13 IGF Multistakeholder Advisory Group (MAG) meetings; eight MAG Working Group-Strategy meetings; four Policy Network for Environment and Digitalization (PNE) Multistakeholder Working Group (MWG) meetings; coordination and planning of BP workstream on Environmental Data; and the Road to IGF webinar in Ethics in Technology & Internet.
- Participated in the Cybersecurity Best Practices Forum coordination and report development.
- Three workshop proposals for the 2021 IGF program were accepted. Topics are Learning Resiliency, Supply Chain IoT, and a Townhall to present the results of the Internet Study on Technical Success Factors.
- Provided input to the UN open consultation on the proposed Multistakeholder High Level Body under the IGF+ model.
- Participated in ten IGF Support Association (IGFSA) Executive Committee Meetings and two follow-up meetings with the IGFSA Secretariat. Assisted IGFSA with communication improvements.

APrIGF

- Participated in twelve APrIGF Multistakeholder Steering Group (MSG) meetings and sixteen PC meetings. Two workshop proposals for the 2021 APrIGF were accepted: Interoperable Internet infrastructure with ISOC, and the Internet study on Technical Success Factors.

Sub-regional and economy-level IGFs

- Participated in the Open Consultation for SEA-IGF and three meetings of the SEA-IGF Steering Committee. One workshop proposal with ISOC on international connectivity was accepted.
- Participated in seven Pacific IGF meetings for event planning.
- Participated in six Steering Committee meetings for NetThing (AU).
- Participated in a HKIGF webinar on Internet censorship.
- Sponsored and participated in Youth IGF Bangladesh.

Other Internet Governance events and communities

- Presented the opening remarks at bdSIG.

- Participated in two Paris Call Working Group 4 (Advancing International Norms) meetings, one Working Group 3 (Promoting a multistakeholder approach in UN cyber negotiations) meeting, and the UN Digital Cooperation High-Level Thematic Debate on Digital Cooperation and Connectivity and the WSIS Forum 2021.
- Published a blog post to promote the Internet Jurisdiction and Policy Network Toolkit.
- Participated in RightsCon 2021.
- Participated in four planning calls for the Asia Pacific internet Governance Academy (APIGA).

	Success Measures – 3C.4.	Results	Status
1	Sponsor and participate in APriGF and IGF with workshop proposals, MSG/MAG participation, and speaking roles.	3 proposals to IGF 2 proposals to APriGF Sponsoring APriGF	●
2	Participate in at least three national Internet governance initiatives.	2/3	●
3	Sponsor and participate in at least two schools of Internet governance.	1/2	●

3C.5 Government engagement

Intergovernmental forums

- ITU
 - Participated in, or monitored, 11 ITU meetings including IEG-WTPF-21, Global Cybersecurity Agenda open consultation, CWG-Internet open consultations, Regional Preparatory Meeting for Asia Pacific to WTDC-21, Interregional meeting, ITU-T/ITU-D meetings, and the 21st Global Symposium for Regulators (GSR-21).
 - Agreed to provide training and technical assistance support to the Mongolian government’s Digital Nation (e-Mongolia) initiative.
 - Held four coordination meetings with the ITU Regional Office in Asia and the Pacific.
 - Presented at the ITU Regional Preparatory Meeting for Asia Pacific and ITU Emerging Technology Week.
- APT
 - Met with APT Secretary General and APT Secretariat to coordinate on regional initiatives (three meetings).
 - Delivered three online tutorials to Myanmar, Laos and Philippines, with further technical training planned for an additional three APT member states (in response to a request for assistance).
 - Monitored discussions at the APT preparatory meeting for WTDC-21.
 - Participated in the 1st Preparatory Meeting for PP-22 (APT PP22-1).
- OECD
 - Contributed to OECD paper on routing security and monitored discussions at five OECD meetings.
- APEC TEL
 - Participated in APEC TEL 62 and presented at the DSG, SPSG sessions and the Plenary.
- Other
 - Monitored discussions at the UN GGE and the OEWG informal consultation meeting.

- Participated in the hybrid track of the GSMA Mobile World Congress Ministerial Summit.
- Participated in a consultation about GFCE presence in the Pacific region.

Bilateral government engagement

- Provided advice to the Australian government ahead of ITU and APT meetings (two meetings).
- Presented at the Executive Cybersecurity Workshop organized by the Daniel K. Inouye Asia Pacific Center for Security Studies.

Law Enforcement and Public Safety

- Met with AFP representatives from Cyber Safety Pasifika to organize LEA training for 2021-2022.
- Delivered two workshops for Cyber Safety Pasifika.
- Participated at the 6th INTERPOL Global Cyber Crime Expert Group meeting and the INTERPOL Forum on Ransomware.

Success Measures – 3C.5.		Results	Status
1	Participate in at least 12 engagements with governments/intergovernmental organizations.	19	●
2	Participate in at least three capacity building partnerships with governments/intergovernmental organizations.	Completed	●
3	Participate in six engagements with the Public Safety community.	4	●

3C.6 External relations coordination

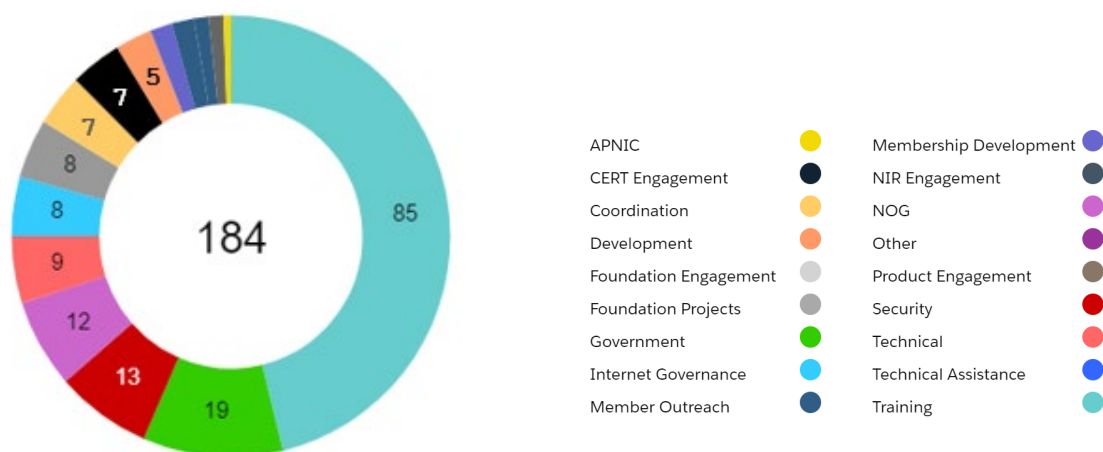
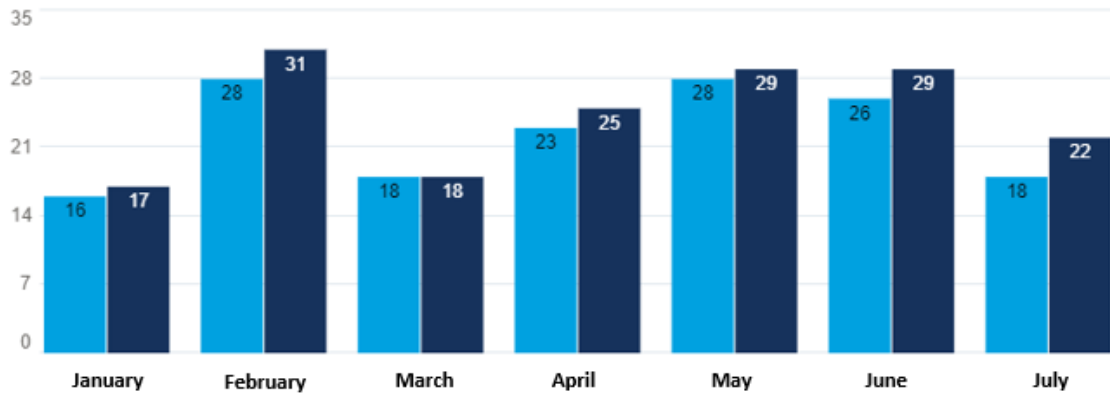


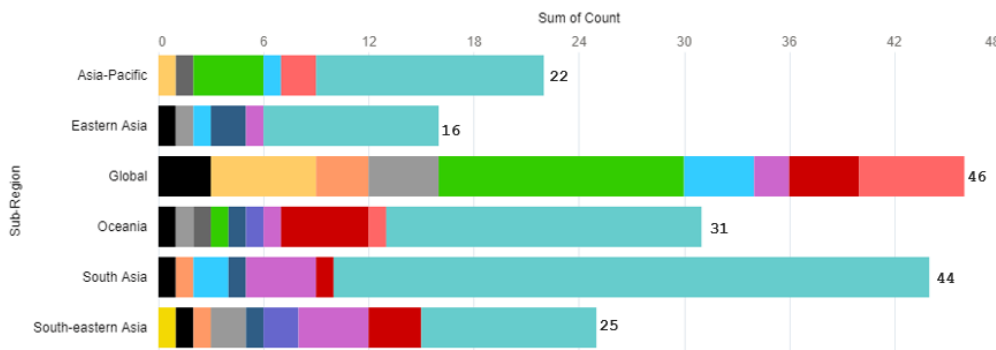
Figure 20: Engagements summary by type



*Not including APNIC Academy webinar numbers.

Events ■
Engagements ■

Figure 21: Engagement summary by month

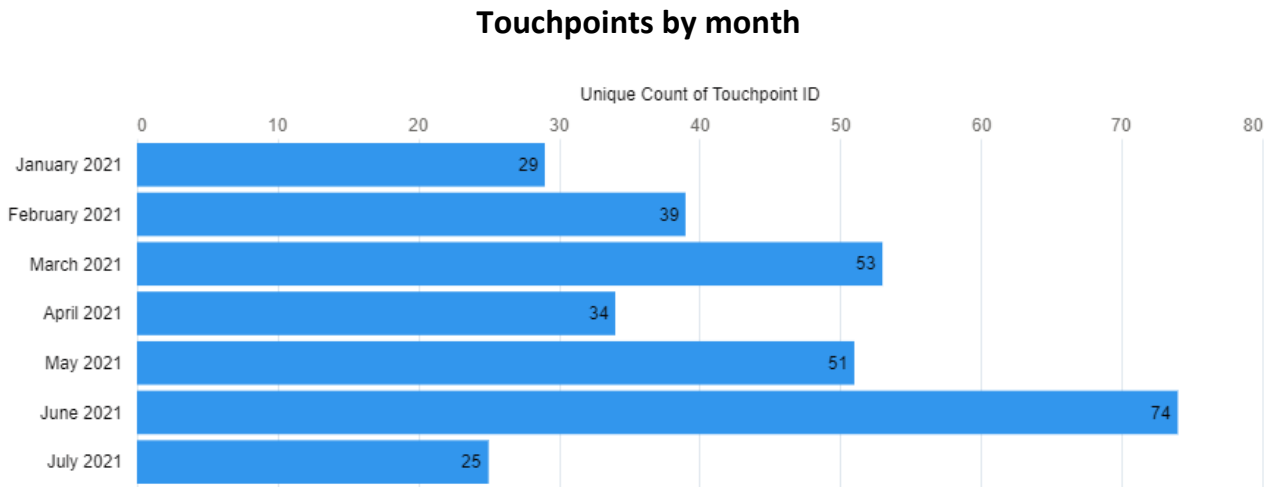


APNIC	●	Membership Development	●
CERT Engagement	●	NIR Engagement	●
Coordination	●	NOG	●
Development	●	Other	●
Foundation Engagement	●	Product Engagement	●
Foundation Projects	●	Security	●
Government	●	Technical	●
Internet Governance	●	Technical Assistance	●
Member Outreach	●	Training	●

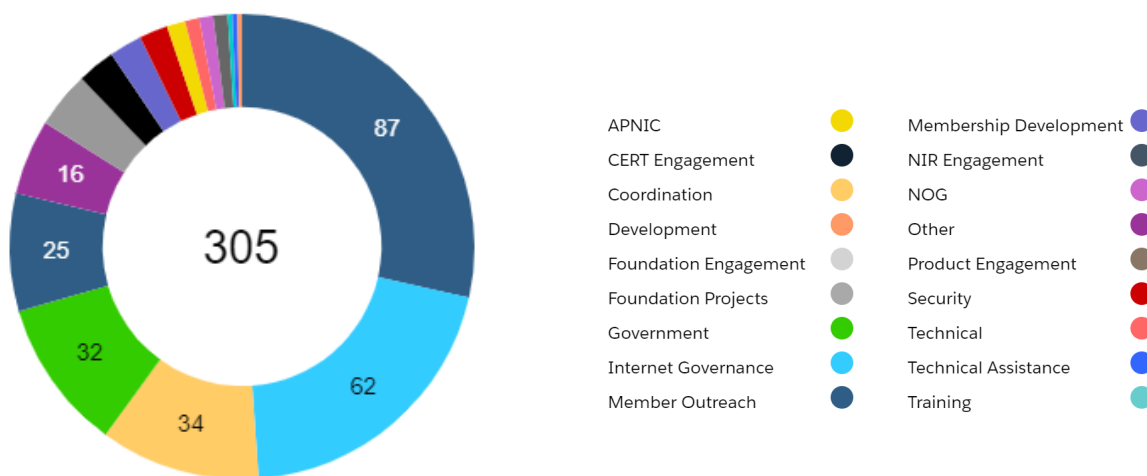
*New subregion added as 'Asia Pacific' to capture live eTutorials delivered for the AP region and regional events that are not economy specific.

*South East Asia, South Asia, East Asia and Oceania now each have an 'Open Economy' to capture delivery of events targeted to a specific subregion and not others, to avoid diluting the stats for Asia Pacific.

Figure 23: Engagement detail by economy



Touchpoints by engagement types



Unique contacts in touchpoints by subregion

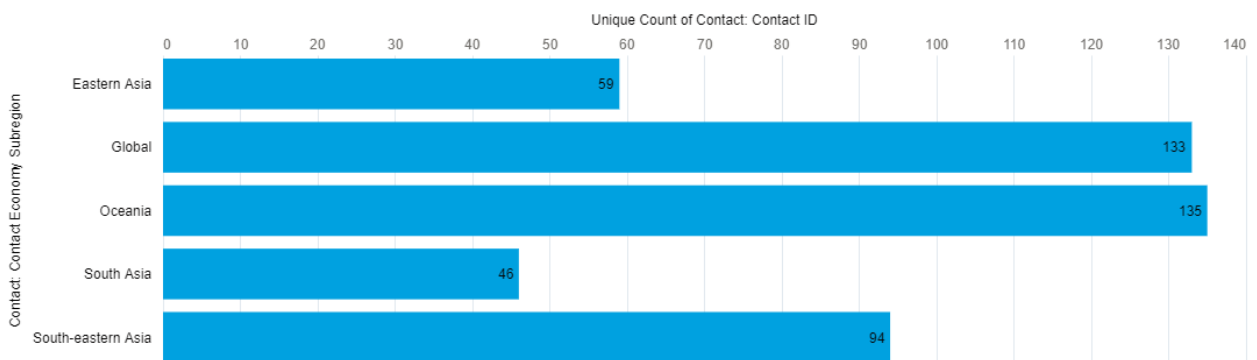




Figure 24: Touchpoints summary

Note: Touchpoints are records of interactions by APNIC staff with a contact (APNIC Member or Non-Member), usually during an event.

- An External Relations (ER) coordination retreat was held in February to evaluate 2020 engagement activities and lessons learned, and to plan for 2021.
- Five ER team coordination meetings have been held in 2021.

	Success Measures – 3C.6.	Results	Status
1	Facilitate one External Relations coordination retreat.	Completed	
2	Facilitate 10 External Relations team coordination meetings.	5/10	

3D Community Participation

Operations

3D.1 Community-led processes

- At APNIC 51, 473 people participated in SIG meetings online. An additional 40 people joined the Policy SIG Chairs' online community consultation for the Policy Document Review in March, leading to the creation of the Policy Document Review WG.
- A joint SIGs meeting was held at APNIC 51 to discuss proposed changes to SIG elections. A call for comment on documented changes concluded on 21 April and the updated SIG Guidelines became active on 22 April.
- The Routing Security SIG held an online community forum in June for 44 participants.
- Promotion of APRICOT 2021/APNIC 51 included email bulletins; mailing list posts; social media promotion via Facebook, Twitter, and LinkedIn; and blog posts. The same methods were used to promote the online SIG consultations in March and June, and to invite participants to join the Policy Document Review WG.

Community Representatives discussion

- Online discussions between the APNIC EC, elected representatives of the SIGs, IANA RC, NRO NC, members of APIX and APNOG, and Secretariat staff were held on 22 April and 5 July. The discussions covered community feedback on APRICOT 2021/APNIC 51, the online conference format, election procedures and information, and the online community platform trial.
- The meetings will continue to be held quarterly to provide an opportunity to share information between community representatives, the EC, and the Secretariat.

	Success Measures – 3D.1.	Results	Status
1	Achieve 800 online SIG participants across two conferences.	473 participants	●
2	Grow SIG mailing lists subscribers from 1,268 to 1,325.	1,317 subscribers	●
3	Achieve 6,000 remote conference session views.	4,707 views	●
4	Achieve attendance of 1,000 conference delegates across two conferences.	852 attendees	●

3D.2 Online participation

apnic.net

- Visitor numbers to apnic.net increased in February and March, with time on site at its highest point in July. The top five visitor economies were the United States, India, China, Australia, and Japan.

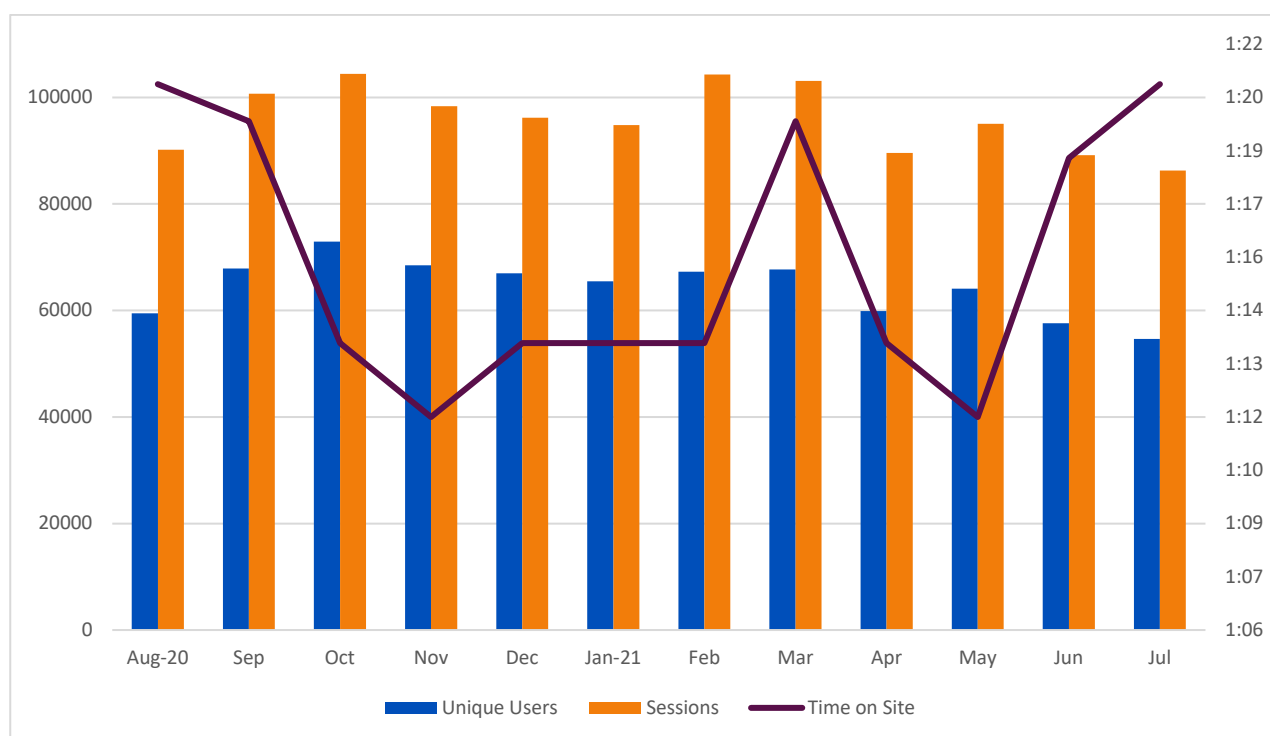


Figure 25: apnic.net website visits

Economy	Total Sessions	Unique Users
United States	164,394	148,980
India	72,496	46,471
China	56,271	35,548
Australia	46,853	27,240
Japan	36,532	24,664
Brazil	19,494	18,144
Bangladesh	35,022	17,924
Hong Kong	77,135	11,980
Indonesia	20,191	11,757
Philippines	17,723	9,336

Table 8: Top 10 economies - apnic.net website sessions and visitors

Social Media

		2020 Mthly Avg	Jan	Feb	Mar	Apr	May	Jun	July	Total
Facebook	Reach	282,214	292,708	54,236	124,38	161,84	142,426	282,506	550,676	1,608,778
	Likes	N/A	30,330	30,354	1	5	30,319	32,833	36,292	36,292
Twitter	Followers	N/A	12,290	12,393	12,505	12,593	12,697	12,805	12,896	12,896
	Engagement	5,312	4,199	4,661	4,244	4,737	4,280	5,895	8,743	36,729
YouTube	Views	3,600	2,217	2,778	6,814	2,523	2,253	2,362	2,195	21,142
	Hours	392.1	184.9	348.6	988.1	207.0	207.4	196.0	210.4	2,342.4
Slideshare	Views	13,117	10,790	11,960	11,234	10,327	11,528	8,865	9,795	74,499
LinkedIn	Reach	11,820	19,683	20,431	17,185	15,253	20,189	15,424	18,311	126,476
	Followers	N/A	5,517	5,630	5,760	5,861	5,970	6,124	6,221	6,221

Table 9: Social Media reach

	Success Measures – 3D.2.	Results	Status
1	Grow all-time Blog views from 2.6 million to 3.4 million.	3.1 million	●
2	Increase 12-month tweet engagements from 60,000 to 62,000.	36,729	●
3	Increase annual Facebook posts reach from 3 million to 3.2 million.	1.6 million	●

3D.3 Encouraging newcomers and diversity

- APNIC presented and participated in the Diversity in Tech Panel session at APRICOT 2021/APNIC 51.
- 37% of APRICOT 2021/APNIC 51 attendees (317) were newcomers.
- Achieved 159 new blog subscribers (total 1,159), 681 new Twitter followers, and 810 new LinkedIn followers.
- Community survey on language understanding and translation developed for August launch. Survey Matters has been commissioned to execute the survey.

	Success Measures – 3D.3.	Results	Status
1	Attract 400 newcomers to APNIC conferences.	317 newcomers	●
2	Attract 125 new Blog email subscribers to reach 1,125 total.	159 new subscribers (total 1,159)	●
3	Grow Twitter followers from 12,100 to 13,250.	12,896	●

3E APNIC Academy

Operations

3E.1 Product management

- A new self-paced Routing Fundamentals course was published to replace the existing Routing Basics course. The course includes 39 new topics and five hours of new learning material.
- New virtual labs were added including Hashing (File Integrity), SSH (Secure Shell), DHCPv6-PD, Linux Basics, PGP (File and Email Security) and Use Suricata to Analyse Packet Captures. The RPKI Lab was updated.
- Added mobile support and functionality to the APNIC Academy course catalogue.
- Supporting the design of the Community Platform project, including a prototype for the Academy.
- Developing initial Minimum Viable Product (MVP) wireframes and design for the technical assistance platform.

	Success Measures – 3E.1.	Results	Status
1	Migrate legacy training site information to APNIC Academy and decommission previous site.	Scheduled Q4	●
2	Develop a comprehensive curriculum of blended learning for future certification.	In progress	●

3E.2 Instructor-led Training

- APNIC remains unable to deliver face-to-face training due to COVID-19 restrictions (all training is remote). Testing of ‘hybrid mode’ training events (where participants gather at a common venue and instructors deliver content remotely) has begun with assistance from local hosts/partners.
- Completed development of the Network Management and Monitoring (NMM) course, with initial discussions completed with SMEs for configuration management module development (project to start in August).
- Completion of the Network Automation course is due in Q4.
- Completed updating content for the following existing courses (modules):
 - Internet routing: BGP-TE/multihoming lab module; BGP OpSec (Operations & Security) BCP lab.
 - IPv6 deployment: New DHCPv6-PD lab (both for instructor-led and virtual labs for Academy); new IPv6 transition techniques slides — 6rd and NAT64/DNS64/464XLAT.
 - Network security: New SSL/TLS slides and lab module; Intrusion Detection with Suricata module with labs.

January to July 2021	APNIC Instructor-led training
Courses (by topic)	72 courses delivered/1,587 attendees
Webinars	13 webinars (5 external/guest speakers)/799 attendees

Table 10: Instructor-led training

	Success Measures – 3E.2.	Results	Status
1	Develop two new/updated courses for instructor-led tutorials/workshops.	1 new course completed 3 courses updated with 6 new modules	●
2	Conduct 70 instructor-led tutorials/workshops across four sub-regions.	72 tutorials/workshops delivered	●
3	Conduct 18 live webinars.	13 webinars delivered	●

3E.3 Self-paced training

January to July 2021	APNIC Academy
Courses (by topic)	1,031 completions; 2,127 hours contact
Virtual Labs	3,304 labs launched; 3,050 hours completed
Students	3,366 new accounts (14,943 in total)
Locations	46 economies

Table 11: APNIC Academy training

	Success Measures – 3E.3.	Results	Status
1	Publish four new/revised self-paced online courses.	2 new courses, 2 in progress	●
2	Publish five new self-paced Virtual Labs (associated with multiple courses).	Completed	●

3E.4 Technical Assistance

RPKI

- Proactive outreach and support to 17 network operators in 7 economies (PH, PK, AU, BT, IN, FJ and NP), to reduce invalid routes.

Network Design

- Developed new address plan and a high-level network design with Tonga's Ministry of MEIDECC.
- Ongoing network (re)design discussion with NCell (NP).

IXP

- PKIX (Lahore): Passive network work completed; training on active network configuration confirmed for August. The IX setup and configuration will be carried out after the training.
- Fiji IX: High-level passive and active network design discussed and agreed. Passive network work to start in August.

	Success Measures – 3E.4.	Results	Status
1	Begin conducting technical assistance via the APNIC Academy online platform.	Platform in development	●

3E.5 RPKI awareness and deployment support

- In addition to direct RPKI support provided to 17 Members (3E.4), 14 RPKI training events were delivered.
- Four RPKI deployment case studies covering Mongolia and Pakistan’s nationwide efforts; Australian ISP, Vocus; and transit service provider, Hurricane Electric, were published. Twenty-nine RPKI-tagged posts have been published on the APNIC Blog, including six in support of the Internet Society’s ‘RPKI Week’ promotion.
- The proportion of Members with ROAs grew from 58.2% to 75.5%.
- Four economies achieved 90%+ ROA coverage – PK (97%), MV (98.9%), TO (95%), NP (92%).
- APNIC Labs released an ROA measurement tool (alongside the existing ROV measurement tool) to help monitor the progressive deployment of RPKI across the Internet (see 4B.1). The two measurement tools are available at:
 - ROA: <https://stats.labs.apnic.net/roa>
 - ROV: <https://stats.labs.apnic.net/rpki>

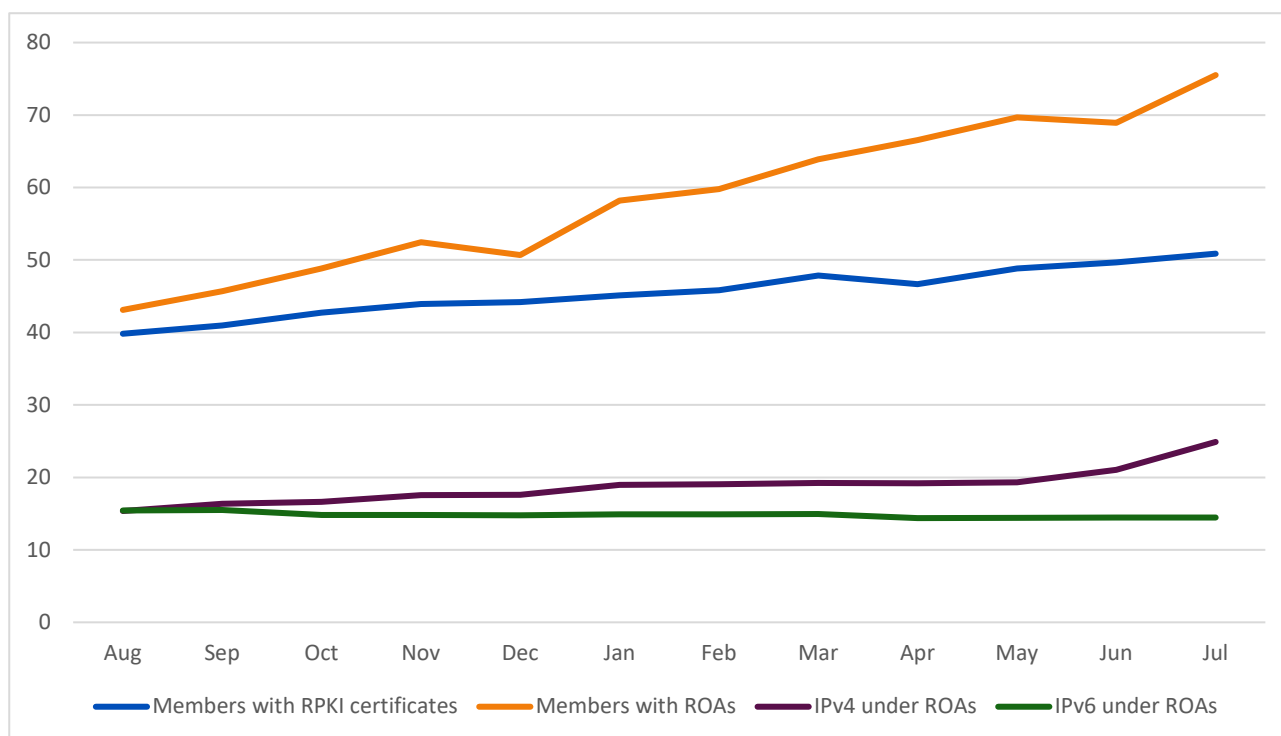


Figure 26: RPKI usage

	Success Measures – 3E.5.	Results	Status
1	Conduct eight RPKI/ROV focused instructor-led tutorials/workshops spread equally across sub-regions.	14 completed	●
2	Achieve 90% ROA coverage for four additional economies.	Completed	●
3	Publish four RPKI/ROA/ROV deployment case studies.	4 published	●

3E.6 IPv6 awareness and deployment support

- APNIC delivered 11 IPv6 deployment focused training events.
- Published 14 IPv6-tagged posts on the APNIC Blog.
- Published one new IPv6 deployment success story on China Telecom, bringing the total number of IPv6 deployment stories on the APNIC website to 40.
- IPv6 capability for the Asia Pacific region was 34.64% as measured by APNIC Labs.

	Success Measures – 3E.5.	Results	Status
1	Conduct eight IPv6 deployment focused instructor-led tutorials/workshops spread equally across sub-regions.	14 done	●
2	Publish three IPv6 deployment case studies.	1 published	●

Investments

3E.7 Platform and curriculum development

“Development of APNIC Academy to support training and technical assistance, and a comprehensive curriculum for self-paced and instructor-led training to help meet community demand for technical skills development”.

Status:

- Bengali language support was added to the Academy, and Mongolian subtitles added to online courses.
- Integration of online training systems scheduled to begin in Q3.
- MVP of online technical assistance platform scheduled for launch in Q3.

3E.8 Community Trainers network

“Recruit, retain and develop more Community Trainers to expand the scope and effectiveness of APNIC training to help meet increasing community demand for technical skills development”.

Status:

- There are 28 active Community Trainers with two additional candidates interviewed and shortlisted.
- Twenty-two Community Trainers from 12 economies were engaged for 53 instructor-led online training events.

- A new Community Trainers model for dedicated on-the-ground local support to the community is due to be launched in Q3 2021. Some existing Community Trainers will be converted to the new model.

3E.9 Curriculum for non-technical audiences

“Build introductory Internet courseware about fundamental Internet concepts, IP address management, and Internet governance to help non-technical audiences better understand Internet operations and improve interactions with the technical community”.

Status:

- A recruitment process commenced in February and a team of instructional designers was appointed in May.
- The ‘Analysis’ phase of product development concluded with agreed project goals, learning objectives, target audience and high-level design.
- An MVP is scheduled to be delivered mid-2022.

3F Internet Infrastructure Support

Operations

3F.1 Internet infrastructure deployment

IXPs

- Fiji IX upgrade: High-level network design and address plan completed and agreed. The redesigned passive network work is scheduled for August completion, with active network configuration to follow.
- Pakistan IX (Lahore) setup: Passive network work completed in July. Training and Phase-1 IX configuration scheduled for completion in August. Phase-2 (RS, LG, RPKI) will follow.
- APNIC is encouraging IXP hosts to install RIPE Atlas anchors and deploy ROV as part of the IX deployment, however established IXPs have indicated they are reluctant to make changes to production route servers (to avoid instability).

RIPE Atlas anchors

- Seven disconnected anchor hosts were contacted and APNIC is progressing discussions with RIPE NCC to arrange hardware replacements.

Root Servers

- Root server deployment is focused on the M-root project (see 3F.3).

	Success Measures – 3F.1.	Results	Status
1	Support deployment of two new or upgraded IXPs.	0 deployed 2 in progress	●
2	Support four additional IXPs to deploy RPKI/ROV on their route servers.	0 deployments 2 in progress	●
3	Deploy or upgrade four RIPE Atlas anchors at various networks.	0 deployed 7 in progress	●
4	Deploy 12 new root server instances.	0 deployed 9 in progress	●

3F.2 Community Honeynet and Security Threat Sharing Platform

- Feeds from the honeynet datasets were created for consumption by instances of the MISP threat sharing platform. The relevant feeds are shared with National CERTs and the ShadowServer Foundation.
- Five security engagements were held with communities in Bhutan, Mongolia, Taiwan, and Tonga based on datasets from the Honeynet Project.
- Content for the Introduction to Suricata Intrusion Detection System course was developed based on the honeynet dataset.
- Recruited new partner from Tonga.
- Enhanced the system backend to include a sandbox for processing Linux/Unix malware.
- Supported eight requests for additional insights from DASH users.
- Hosted an intern from Griffith University (Masters in Cybersecurity program) to assist in honeynet data analysis.

	Success Measures – 3F.2.	Results	Status
1	Increase Community Honeynet partners from 10 to 15.	12 partners	●

Investments

3F.3 M-root anycast instance deployment support

“Establishing a new partnership with the WIDE Project and JPRS to support anycast deployment of M-root”.

Status:

- Deployment of M-root servers in Guam, Hanoi, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta and Singapore are progressing.

4 Information



Operations

4A Information Products

4A.1 APNIC Blog

	Jan	Feb	Mar	Apr	May	Jun	Jul	YTD	All time
Views	62,057	56,903	74,376	72,576	71,578	73,289	82,163	492,942	3,131,877
Posts	27	30	38	27	28	27	31	208	2,608

Table 12: APNIC Blog activity

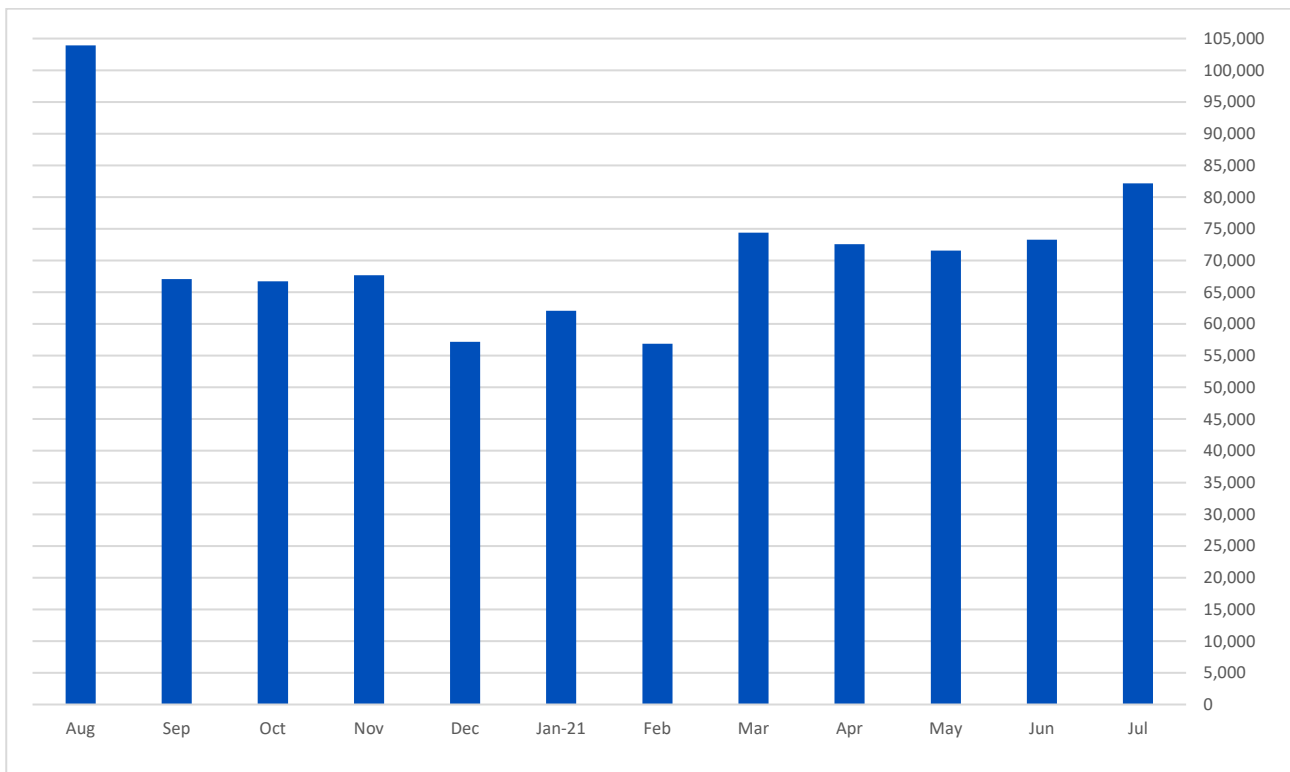


Figure 27: APNIC Blog views

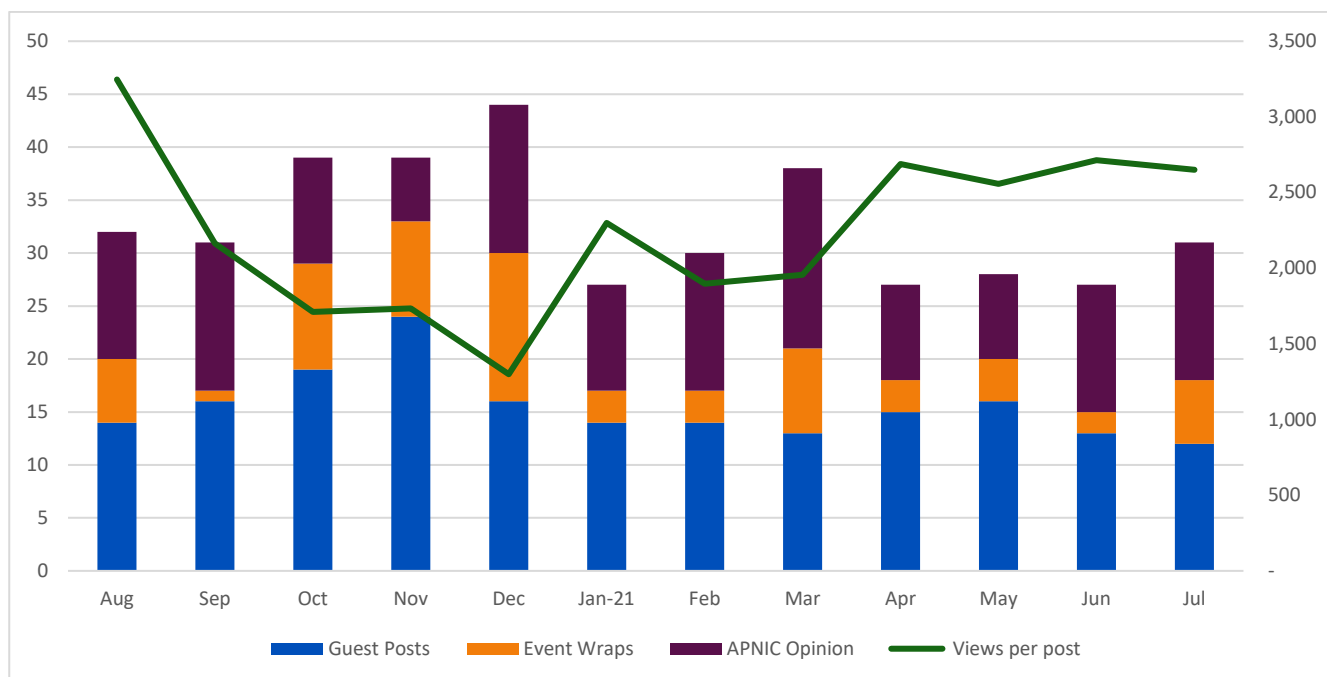


Figure 28: APNIC Blog posts

- The Blog averaged 70,420 views per month, an 8.7% increase on 2020’s monthly average of 64,778. The Blog passed the milestone of 3 million views (all-time) in June.
- There have been 97 Guest Posts in 2021, representing 54% of total opinion posts (down 2% on 2020).
- Popular new posts included:
 - [A Brief History of Router Architecture](#), a Guest Post by Tony Li.
 - [BGP in 2020 – The BGP Table](#) by Geoff Huston.
 - [How Chromium Reduced Root DNS Traffic](#), a Guest Post by Duane Wessels.
 - [TCP Fast Open? Not so fast!](#), a Guest Post by Otto Moerbeek.
- ‘Related articles’ functionality was added to the Blog in June.

Success Measures – 4A.1.		Results	Status
1	Grow all-time Blog views from 2.6 million to 3.4 million.	3.1 million	●
2	Average 64,000 Blog views per month.	70,420 views	●
3	Maintain Blog Guest Post ratio between 45-65%.	54%	●

4A.2 Information product management

Internet Directory (renamed REx)

- A new version of the Internet Directory was launched as Resource Explorer (REx). It includes better support for new users, new information architecture, and other UX improvements.

- Work is in progress to improve tablet and mobile device user experience.

DASH

- A recurring reports feature was released, allowing users to receive PDF reports by email at their chosen frequency.
- New empty states were designed and implemented to improve usability.
- The “Identifying suspicious traffic with DASH” webinar was delivered to 45 attendees from 20 economies to increase community awareness of the product.
- Alert functionality is in development and scheduled for Q3 deployment.
- Improvements to the backend architecture are currently being implemented to improve performance and reliability.

NetOX

- A new ‘Experimental’ tab was created for widgets to improve usability. The IRR Explorer widget was moved to this new section and data about the value of the widget is being assessed.
- A ‘share’ feature has also been designed to improve usability but is pending implementation.
- Stability and performance improvements have been deployed in the backend.

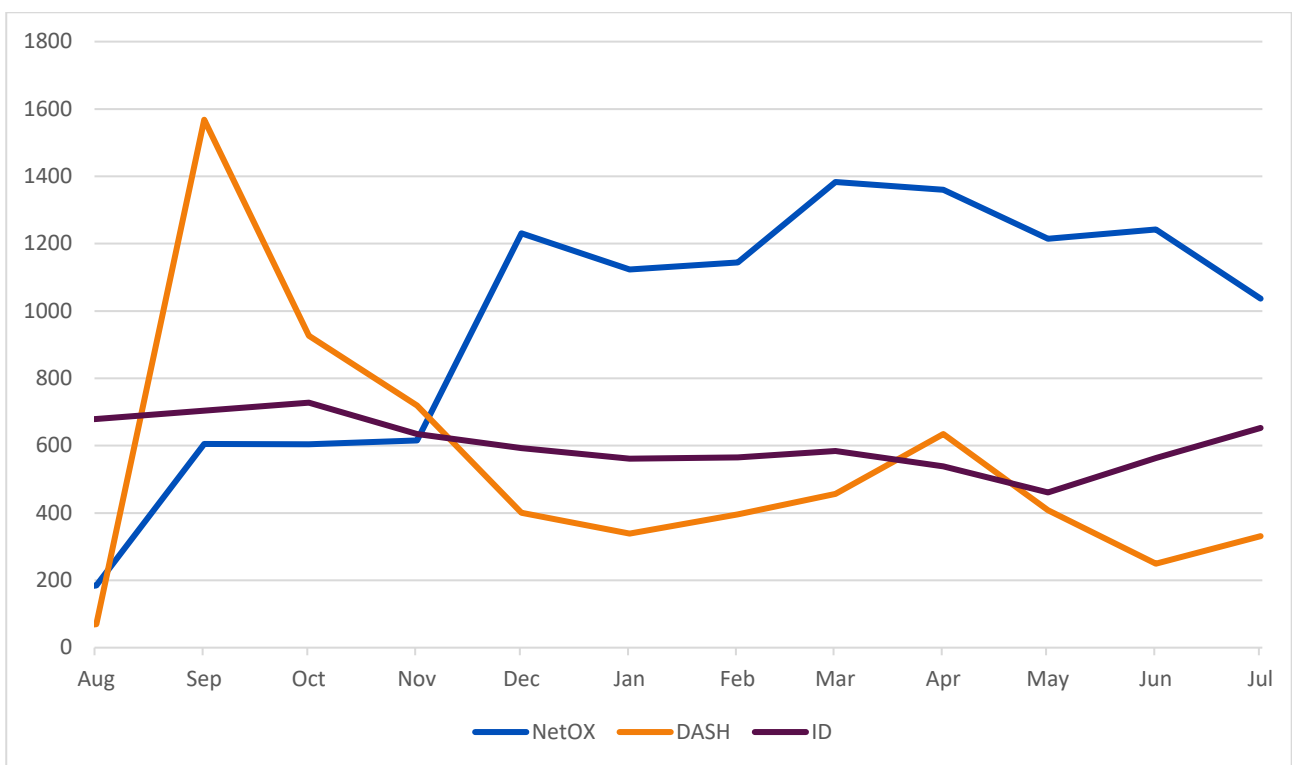


Figure 29: Monthly number of users

	Success Measures – 4A.2.	Results	Status
1	Reach an average of 400 users per month to NetOX and DASH, and of 700 users per month to the Internet Directory.	904, 517 and 606	●
2	Achieve a net promoter score (NPS) of 80+ for all products.	69, 71 and 44	●
3	Achieve a usability score of at least 4.5/5 for all products.	4.5, 4.5 and 4.4	●

4B Research and Analysis

Operations


4B.1 Conducting research and measurements

- New measurements on the use of IPv6 as a transport protocol for the DNS and IPv6 Extension Header handling, including fragmentation, were completed.
- Analysis of IPv4 and IPv6 advertised, unadvertised and reserved address pools over time continues.
- Completed reporting on the annual state of BGP, and further development of routing bogon and CIDR reports, as input to the ISOC MANRS activity. Work continues on automated BGP anomaly detection.
- An RPKI ROA monitor was developed, in addition to the existing ROV monitor, to help measure progressive deployment of RPKI.
- DNS research included analysis of the handling of large DNS responses, adoption of DOH, and DNS query patterns.
- Measurement of QUIC use continues, following the release of beta software that adds QUIC support to NGINX servers.
- Research is also in progress on ECN measurement and RSA 2048-bit keys in DNSSEC.
- Published 24 blog articles, including research findings, analysis of trust infrastructure, and a commentary on new Internet technologies, and three podcasts recorded.

	Success Measures – 4B.1.	Results	Status
1	Twelve research articles and reports published.	24 articles published	●



4B.2 Cooperative research opportunities

- Entered a cooperative research program with ISOC in support of MANRS, providing a feed of routing data.
- Worked on a measurement framework for the Identifier Health Indicators (ITHI) program, as well as collaborative measurements on aspects of the DNS and DNSSEC, as part of a cooperative research agreement with ICANN.
- Research collaboration continues with Cloudflare.

	Success Measures – 4B.2.	Results	Status
1	Conduct cooperative research with organizations such as CloudFlare, ICANN, RIPE NCC and others.	3 collaborative research projects	

4B.3 Sharing research outcomes

- Delivered 19 presentations at community and industry events.

	Success Measures – 4B.3.	Results	Status
1	Ten research presentations delivered.	19 presentations delivered	
2	At least two research presentations at APNIC conferences.	3 presentations at APNIC 51	

5 Capability



Operations

5A Internal Technical Infrastructure

5A.1 Architecture and technical coordination

- The workflow for documenting and implementing APIs was reviewed and improved. The use of OpenAPI to describe internal APIs is now standard practice.
- Dependencies between products and components is now managed using APIs and architectural documentation.
- The Information Product team has experimentally used Rust to achieve lower memory footprint deployments than Java or Python, with strong static safety checks. This experiment is the first to have gone through the full technical coordination process for exploring new technologies.
- Dependency management tooling (Dependabot) has been deployed across several products to ensure systems are kept current. It will be applied to more products as part of the regular maintenance cycle.
- End-to-end testing practices are in place for the Membership and Academy product teams to automate full lifecycle testing of their products.

	Success Measures – 5A.1.	Results	Status
1	Complete review of testing environment and practices.	In progress	●

5A.2 Network and infrastructure operations

- A shared POP deployment in Singapore SG1 for both APNIC critical services and M-root global anycast node is in progress.
- Signed up to the NextDC carbon offset program to offset 100% of the carbon emissions generated by the power consumed in APNIC's NextDC data centre service.
- Brisbane to HKIX connectivity via PCCW is in progress.

	Success Measures – 5A.2.	Results	Status
1	Complete quarterly data centre failover tests.	Q2 completed	●
2	Upgrade internal infrastructure NOC from overnight 'on-call' to full 24x7 operation.	In progress	●
3	Maintain availability of 99.99% for critical APNIC services and 99.95% for less-critical services.	99.99% and 99.98%	●

5A.3 System and platform operations

- Two new high performance storage arrays have been deployed to two separate data centres, replacing existing network storage.


- The Hardware Security Module (HSM) is being reconfigured to provide High Availability (HA) service to RPKI allowing data centre failover.
- Completed the upgrade of the on-premises Kubernetes test cluster, virtual machine environment hosts, and management server.
- Work is in progress to consolidate and return IPv4 addresses to the free pool.
- Completed migration of the DNSSEC signer from Secure64 to Knot.
- Completed migration of APNIC Academy to use Cloudflare.
- Deployed RDNS anycast node in Hong Kong to cover local and regional RDNS traffic.

	Success Measures – 5A.3.	Results	Status
1	Develop strategy for cloud and interconnection.	In progress	●
2	Complete service migration to cloud for six services/websites.	In progress	●

5A.4 Internal security operations

- As part of ISMS for ISO 27001 preparations, the vulnerability scanning, and Security Information and Event Management (SIEM) system began deployment on APNIC infrastructure. Rapid7 will provide the selected systems.
- Through our public Vulnerability Reporting Program, APNIC received 34 unique and verified vulnerability reports from external security researchers in 2021. Twenty-five vulnerabilities were resolved, with seven still in progress within the 90-day period.
- Unresolved vulnerability reports outside of 90 days include:
 - Vulnerabilities related to login.apnic.net are on hold, pending the new SSO replacement.
 - Medium severity vulnerabilities in stats.labs.apnic.net are being addressed as part of a server-wide remediation of the root cause.
- Completed cyber fraud awareness training for finance and services staff.
- The Acceptable Use and Bring Your Own Device policies were reviewed and updated in consultation with staff.
- Work was done with directors and managers to update policies and procedures that align with ISO 27001.

	Success Measures – 5A.4.	Results	Status
1	Achieve readiness for ISO27001 certification.	Preparation of documents in progress	●

2	Track and resolve all vulnerability reports within 90 days.	25/34 reports resolved (7 in progress)	
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5A.5 Enterprise application management

- All EC members have now migrated to Okta SSO for authentication to APNIC systems.
- The migration of Confluence to Atlassian Cloud has been rescheduled to Q4 with work to commence on JIRA first due to dependencies.
- The Legacy Application roadmap to migrate from certificate-based auth for internal applications is progressing to scheduled completion in Q4.
- Implemented next generation backup solution for the CRM.
- The initial implementation of DocuSign for contract management was completed.
- Initial work began on the migration of the phone system to a new platform. This is scheduled to complete in Q4.
- A trial of Zoom room technology was completed.

Success Measures – 5A.5.		Results	Status
1	CRM roadmap established.	In progress	

Investments

5A.6 Product platform development

“Further development of infrastructure and services platforms common to APNIC products, to streamline product development, integration, and consistency”.

Status:

- A new Single Sign-On (SSO) architecture was developed and the existing SSO service is expected to be replaced in December.
- An instance of the replacement SSO system has been created in the product testing environment and is being configured to support the migration.
- Centralized product build tooling has been deployed to select products.

5B Finance and Business Services

Operations

5B.1 Internal knowledge management

- The staff intranet is being migrated from Foswiki to Confluence and SharePoint, with hub sites created for all departments.
- A July user satisfaction survey of current tools received 61 staff responses. The results will inform any changes to system usage policies.

	Success Measures – 5B.1.	Results	Status
1	Successful implementation of internal knowledge management tools with increased user satisfaction and experience.	In progress	●

5B.2 Financial services

- The 2021 Activity Plan and Budget was implemented into the APNIC accounts in January. A monthly forecast process has been implemented to track income and expenses and monitor expense variations to budget caused by COVID-19 restrictions.
- Implementation support for the new ERP solution for APNIC Foundation Australia was provided, as well as development of accounting procedures to manage Foundation-funded projects in 2021.
- The annual audit of APNIC's 2020 financial accounts was completed by Deloitte and presented to the EC at APNIC 51.

	Success Measures – 5B.2.	Results	Status
1	Achieve a successful audit of APNIC's annual financial accounts.	Completed	●

5B.3 Business services

- An external surveillance audit of APNIC's ISO9001:2016 quality management system will be performed in August. Internal audits have been completed.
- A project to digitize legacy paper membership forms was completed at the end of March to improve access for services and finance teams.
- BCP scenario testing is scheduled for September and November.

	Success Measures – 5B.3.	Results	Status
1	Complete annual ISO Quality management compliance audit successfully.	Due August	●
2	Undertake quarterly BCP scenario testing.	Scheduled	●

5B.4 Data governance and business intelligence

- Reporting functions in APNIC's legacy business intelligence system (O3) have been replicated into a new system. O3 will be decommissioned at the end of the year.

- A team focused on analytics was established in July to increase the outcomes of this activity.
- Commenced evaluation of additional software platforms to improve production of reports/charts.

	Success Measures – 5B.4.	Results	Status
1	Complete APNIC-wide data model and data dictionary.	In progress	●
2	Generate all Secretariat report data/charts from BI system.	In progress	●

5C Employee Experience

Operations

5C.1 Organizational development

- The Aspire Leadership program has continued for APNIC’s executive and wider leadership teams, with regular webinars on leadership topics including strength-based leadership and feedback.
- A new goal setting process was launched to clearly link all individual goals to an organizational goal and improve goal progress monitoring.
- A monthly agile leaders forum has been established for continuous learning and development.

	Success Measures – 5C.1.	Results	Status
1	Strategic goals clearly cascade to individual performance measures in performance management system in 2021.	Complete	●
2	Deploy agile work practices across the organization.	56% complete	●

5C.2 Work environment management

- With COVID-19 restrictions changing regularly, a hybrid environment of office access and work from home arrangements continues with the APNIC office open for staff when allowed.
- The impact of COVID restrictions on staff and operations continues to be monitored; to date there has been no measured effect on productivity.

	Success Measures – 5C.2.	Results	Status
1	No WHS incidents caused by APNIC’s local or remote work environments — zero fault incident reports.	2 incidents	●

5C.3 Talent attraction and retention

- Fourteen permanent roles (including two new Directors for the Services and Finance areas) and two casual roles were filled, with two contractors and four Community Trainers engaged.
- Three APNIC Foundation operational staff were also hired.

	Success Measures – 5C.3.	Results	Status
1	Maintain staff turnover rate within acceptable benchmarks of 5-15%.	5.1% turnover*	●
2	Training budget is 100% allocated and distributed across the organization.	45% spent	●

* Includes 1 staff member who transitioned from APNIC to be hired by APIDT

5C.4 People operations management

- The development of a hybrid working model is in progress so that staff have guidelines for combining remote and office work to maximize engagement and effectiveness.
- Staff who have had to travel overseas for compassionate reasons have been supported during quarantine and remote work.
- Emergency leave was introduced for staff to access when childcare has been impacted by COVID restrictions, and for COVID testing and vaccinations.

	Success Measures – 5C.4.	Results	Status
1	All HR policies, in particular, flexible work, parental leave and oncall allowance policies, reflect best practice.	In progress	●

Investments

5C.5 Agile APNIC

“Expand adoption of Agile methodologies to non-technical teams within APNIC”.

Status:

- Five non-technical teams have adopted appropriate Agile practices for the management of their work. The remaining four teams will be completed by end Q4.

5C.6 People management portal

“Procure and implement a cloud-based solution to unify recruitment, onboarding, performance management, learning and development, salary data and reporting under one HR platform”.

Status:

- Implementation of the Sage People human resources portal project ‘Discovery’ phase is completed and UAT is almost complete.

- A soft launch to the People & Performance Team is scheduled for September. Performance and Recruitment modules will be configured and tested ready for completion in December.

5C.7 APNIC workspace remodelling

“On the 10-year anniversary of the establishment of the current Brisbane office, remodel premises to accommodate an increased workforce and better integrate with remote working and hotdesking practices”.

Status:

- An architectural and structural review of the office facility was completed. The outcome indicated the current accommodation can be extended to seat 140 staff, but at significant cost.
- A consultancy has been engaged to conduct a study of the use of the current workspace, to inform any remodelling that may be needed at the existing premises as well as requirements for new premises in the future.

5D Governance

Operations

5D.1 Executive Council (EC) support

- Feng Leng was elected to the APNIC EC for the first time at APNIC 51, with Gaurab Raj Upadhaya, Kenny Huang, and Yoshinobu Matsuzaki re-elected to the EC, for two-year terms.
- Feng Leng participated in the EC induction program in April.
- Two EC meetings have been held (Meeting 1: 22 February and 4 March; Meeting 2: 21 to 22 June).

	Success Measures – 5D.1.	Results	Status
1	Achieve a high level of satisfaction from a survey of EC members.	Survey is being developed	●

5D.2 Corporate governance and legal

- A revised Strategic Risk Register was presented to the EC in February.
- The Strategic Risk Register is being linked to the Activity Planning for 2022.

	Success Measures – 5D.2.	Results	Status
1	Quarterly Strategic Risk Register updated and reviewed.	2/4 complete	●

Events/Activities in 2021

Start Month ↑	Event Name	City	Economy
Jan	Webinar: Practical Threat Information Sharing	Online	AP
	Live eTutorial: Segment Routing	Online for TWNOG	TW
	Focus Group Discussion on Capital Mobilisation	Online	AP
	MMNOG 4 (2021)	Online	MM
	CWG-Internet Open Consultation	Online	CH
	Live eTutorial: Network Security	Online	AU
	Live eTutorial: IPv6 Deployment	Online	AU
	Live eTutorial: Securing Internet Routing with RPKI	Online	AU
	Live eTutorial: Network Security	Online	AU
	JANOG 47	(Hybrid) Fukuoka	JP
	3rd International Cyber Resilience Conference (CRC)	Online	MY
	SANOG 36	Online	NP
	3rd Meeting of ITU TDAG WG on WTDC Resolutions	Online	CH
	2021 TPRE (Trans-Pacific RandE) Virtual Meeting	Online	US
	SANOG: Securing Internet Routing tutorial (RPKI/ROV implementation)	Online	NP
	Outreach/TA - TashiCell	Online	BT
	IBCAST 2021 Pakistan	Online	PK
	Live eTutorial: Securing Internet Routing with RPKI	Online	AU
	Live eTutorial: IPv6 Deployment	Online	AU
	PTC '21	Online	US
Feb	APEC TEL 62 DSG Meeting	Online	NZ
	1st IGF 2021 Open Consultations and MAG Meeting	Online	CH
	APRICOT 2021/APNIC 51	Online	
	Live eTutorial: Cryptography Fundamentals	Online	AU
	NDSS Symposium 2021	Online	US
	Live eTutorial: DNS Fundamentals	Online	AU
	Samoa Cyber Security Week	Online	WS
	Live eWorkshop: Securing Internet Routing with RPKI	Online for PK	PK
	MANRS Tech Talk with Tashi Phuntsho	Online	AU
	Live eTutorial: IPv6 Transition Techniques	Online	PK
	Live eTutorial: Secure Internet Routing	Online	PK
	APAN 51	Online	PK
	NANOG 81	Online	US
	Live eTutorial: Securing Internet Routing with RPKI	Online for North/North-East India	IN
	Outreach/TA - u-blox Lahore Pvt Ltd.	Online	PK
	Outreach/TA - Bank Alfalah Limited	Online	PK
	Outreach/TA - Pakistan Software Export Board	Online	PK

	Outreach/TA - Interwood Mobel Pvt Ltd	Online	PK
	Outreach/TA - National Telecommunication Corporation	Online	PK
	Outreach/TA - i2c inc.	Online	PK
	Outreach/TA - CubeXS Pvt Ltd	Online	PK
	Outreach/TA - IJ Internet Services (PVT.) Limited	Online	PK
	Outreach/TA - Pakistan Petroleum Limited	Online	PK
	Live eTutorial: DNS Fundamentals	Online	AU
	Live eTutorial: IS-IS Operations	Online	AU
	Live eTutorial: OSPF Operations	Online	AU
	Live eTutorial: IPv6 Architecture & Address Planning	Online	AU
	Live eTutorial: BGP Fundamentals	Online	AU
	FIRST Regional Lightning Talk Session	Online	JP
	Live eWorkshop: Introduction to SDN	Online for ISOC Chennai	IN
	DNS-OARC 34 Workshop	Online	US
	Live eTutorial: OSPF Operations	Online	AU
	Webinar: Single Sign On (SSO) for Remote Workforce	Online	AP
	Live eTutorial: Cryptography Fundamentals	Online	AU
	Live eTutorial: IS-IS Operations	Online	AU
	Live eTutorial: BGP Fundamentals	Online	AU
	APT WTDC21-2 Preparatory Meeting	Online	TH
	Live eTutorial: IPv6 Architecture & Address Planning	Online	AU
	Webinar: Internet Resource Management	Online	AP
	Informal Experts Group on WTPF-21	Online	CH
	APRICOT: Live eTutorial: ROA/RPKI	Online	PH
	Root Server System (RSS) Information Sharing	Online	AP
	APNIC EC Meeting - 22 Feb 2021	Online	AU
	bdNOG Policy Discussion for APNIC51	Online	BD
Mar	APEC TEL 62 SPSG Meeting	Online	NZ
	Internet & Jurisdiction Policy Network Toolkit Lounge	Online	FR
	BrisSEC21	Brisbane	AU
	CrikeyCon VII	Brisbane	AU
	ICANN 70	Online	MX
	IETF 110	Online	CZ
	WIDE Project Camp 2021	Online	JP
	IPv6 Deployment (Intensive) - Vanuatu - Pacific Technical Training Project	Online	VU
	APEC TEL 62 Plenary	Online	NZ
	ITU RPM-ASP WTDC-21	Online	TH
	Live eTutorial: Securing Internet Routing with RPKI	Online for IN	IN
	Live eTutorial: MPLS Fundamentals	Online	AU
	Live eTutorial: 464XLAT	Online	AU
	Live eTutorial: Packet Analysis	Online	AU

	ITU 1st Interregional Meeting for WTDC-21	Online	CH
	Outreach/TA - Optus	Online	AU
	Webinar: Identifying Suspicious Traffic with DASH	Online	AP
	ITU-T Study Group 13 Meeting 2021	Online	CH
	Live eTutorial: Securing Internet Routing with RPKI	Online for CN	CN
	ROA workshop with PH cable operators	Online	PH
	OECD - 3rd Session of the Working Party on Security in the Digital Economy	ONLINE	FR
Apr	Live eTutorial: MPLS Fundamentals	Online	AU
	Live eTutorial: BGP OpSec BCP	Online	AU
	Live eTutorial: DNSSEC Fundamentals	Online	AU
	Live eTutorial: BGP TE Techniques	Online	AU
	Live eTutorial: 464XLAT	Online	AU
	Live eTutorial: Packet Analysis	Online	AU
	Digital Connectivity and LEO Satellite Constellations: Opportunities for AP	Online	PH
	bdSIG 2021	Online	BD
	Webinar: OTT – Challenges and Technical Evolution	Online	AP
	ARIN 47	Online	US
	5th Meeting of ITU TDAG WG on WTDC Resolutions	Online	CH
	MPLS - Fiji - Pacific Technical Training Project	Online for FJ	FJ
	Outreach/TA - Globe Telecom	Online	PH
	HKIGF 2021 (Internet Censorship)	Online	HK
	SWITCHSEA Welcome Event	Online	AP
	PITA Exposition & Business Forum	Online	FJ
	35th TWNIC IP OPM	(Hybrid) Taipei	TW
	2nd ICANN APAC-TWNIC Engagement Forum 2021	(Hybrid) Taipei	TW
	PCTA e-Tech Show (Convention) 2021	Online for PH	PH
	Live eTutorial: Introduction to Suricata Intrusion Detection System	Online	AU
	Webinar: Demystifying ASO	Online	
	Office Visit	Brisbane	AU
	PNG 2021 ICT Summit and Expo	Port Moresby	PG
	IPv6 Deployment live eTutorial	Online for CN	CN
	Table Top Exercises for FIRST Fellowship Teams	Online	Global
	Securing Internet Routing with Resource Key Public Infrastructure (RPKI) - PCTA	Online for PH	PH
	Webinar: Datacentre Power Systems and solutions	Online	AP
	Talk: Securing the Internet Routing	Online	PH
	FIRST Cyber Threat Intelligence (CTI) Summit 2021	Online	US
	Connectivity Capital Deep Dive: Hybrid Fiber/RF for Creative Deployments	San Francisco	US
	Marshall Center APCSS 2021	Online	DE
	Philanthropy Australia National Conference 2021	Online	AU
	EC induction 14 April '21	Brisbane	AU

May	APNIC 52 Online Fellowships - IPv6 Fundamentals	Online	AU
	APNIC 52 Online Fellowships - Network Security Fundamentals	Online	AU
	Webinar: What to Expect in a Cyber Security Assessment	Online	AP
	BKNIX Peering Forum 2021	(Hybrid) Bangkok	TH
	APT WTDC21-3 Preparatory Meeting	Online	AP
	WSIS Forum 2021	Geneva	CH
	WTPF 2021 (ITU World Telecommunication/ICT Policy Forum)	Geneva	CH
	ThaiNOG 3	(Online) Bangkok	TH
	28th Meeting of the ITU Telecommunication Development Advisory Group (TDAG-21)	Online	CH
	LACNIC 35	Online	MX
	RIPE 82	Online	DE
	ITU 2nd Interregional Meeting for WTDC-21	Online	CH
	Digital Transformation - Opportunities for The Downs & South West Region (ACS)	Toowoomba	AU
	Live eTutorial: BGP TE Techniques (2 Parts)	Online	AU
	Live eTutorial: IPv6 Security	Online	AU
	Live eTutorial: BGP OpSec BCP	Online	AU
	Live eTutorial: TLS/SSL	Online	AU
	DNS-OARC 35	Online	US
	Global Digital Development Forum	Online	US
	ELT Quarterly Strategic Meeting	Brisbane	AU
	Telemars Engagement at APNIC	Brisbane	AU
	5th Meeting of the Informal Experts Group for ITU WTPF-21 (IEG-WTPF-21)	Online	CH
	AusCERT 2021 Conference	Gold Coast	AU
	Live eTutorial: Cyber Security	Online	AU
	AIS'21	Online	MU
	Live eTutorial: OpenFlow	Online	AU
	ThaiNOG eTutorial: IPv6 Protocol Architecture & Address Planning	Online for TH	TH
	Stockholm Internet Forum 2021 - SIDA	Online	SE
	Live eTutorial: Cyber Security	Online	AU
	NMM - Tonga - Pacific Technical Training Project	Online	TO
	Live eTutorial: DNSSEC Fundamentals	Online	AU
	Conference talk: RPKI status in Thailand	Online for TH	TH
	Webinar: Anycast service deployment	Online	AP
Live eTutorial: Securing Internet Routing with RPKI	Online TWNIC	TW	
BTCIRT Community Workshop 2021	Online	BT	
ICANN DNS Symposium 2021	Online	US	
Jun	CSP Threat Landscape 1	Online	Pacific Islands
	CSP Threat Landscape 2	Online	Pacific Islands
	UNITAR (MY) Security Talk	Online	MY

	GFCE Pacific Consultation Meeting 2021	Online	Oceania
	ROW #10	Online	US
	APNIC 52 Online Fellowships - Routing/RPKI Fundamentals	Online	AU
	Live eTutorial: Packet Analysis	Online	NP
	Live eTutorial: Cryptography Fundamentals	Online	NP
	FIRST Annual Conference 2021	Online	US
	APNIC 52 Online Fellowships - Demystifying SDN	Online	AU
	ICANN 71	Online	NL
	RightsCon 2021	Online	US
	APNG Webinar #1	Online	AP
	ASEAN CyberSecurity Forum	Online	MY
	PacNOG 28	Online	FJ
	bdNOG - NMM live eTutorial	Online	BD
	Live eTutorial : OpenFlow	Online	OP1
	PacNOG: Routing Fundamentals eTutorial	Online	FJ
	bdNOG 13	Online	BD
	Securing Internet Routing with RPKI live eTutorial	Online	OP1
	Live eTutorial: IPv6 Security	Online	OP1
	Live eTutorial: TLS/SSL	Online	OP4
	PacSON Community Security Webinar	Online	NZ
	APNIC Routing Security SIG	Online	AP
	APONet MoU signing ceremony	Online	AP
	Live eTutorial: Introduction to Suricata Intrusion Detection System	Online	OP3
	bdNOG - Segment Routing live eTutorial	Online	BD
	GSMA Mobile World Congress 2021	Hybrid	ES
	APNIC EC Meeting June 2021	Brisbane	AU
	ITU 21st Global Symposium for Regulators (GSR-21)	Online	CH
	NANOG 82	Online	US
	Fluxxcon 2021	Online	US
	Live eTutorial: Securing Internet Routing with RPKI	Online	IN
	Webinar: Hosted vs. Delegated RPKI	Online	AP
	Webinar: Automating and Securing Route Servers with IXP Manager	Online	AP
Jul	6th INTERPOL Global Cybercrime Expert Group (IGCEG)	Online	SG
	Live eTutorial - Information Security for System Administrators	Online	OP4
	Youth IGF Bangladesh 2021	Online	BD
	ATxSG (CommunicAsia)	Online	SG
	Live eTutorial: NMM: Network Documentation with NetBox - SANOG 37	Online	LK
	TL Security Community Engagement	Online	TL
	Consultation: RPKI Consultation and Technical Assistance for PH community	Online	PH
	INTERPOL Forum on Ransomware	Online	FR

Live eTutorial: NMM: Model Driven Programmability - SANOG 37	Online	LK
ITU Emerging Technology Week	Online	CH
Live eTutorial: IPv6 Protocol Architecture & Address Planning - SANOG 37	Online	LK
LKNOG 5 (SANOG 37)	Online	LK
Live eTutorial: Introduction to Suricata Intrusion Detection System- SecTalks	Online	AU
Honeypots / Threat Sharing Handson - Tonga	Online	TO
SGNOG 8	Online	SG
IETF 111	Online	US
vPhNOG 2.0	Online	PH
JANOG 48	Online	JP
SANOG 37	Online	LK
Live eTutorial: DNS Fundamentals	Online	IN
CommunicAsia 2021	Singapore	SG
1st Meeting of the APT Preparatory Group for PP-22 (APT PP22-1)	Online	AP
Live eTutorial: Securing Internet Routing with RPKI -phNOG	Online	PH
Webinar: WiFi Security	Online	AP
Webinar: APNIC Policy Framework and Development Process	Online	AP
Live eTutorial: IPv6 Protocol Architecture & Address Planning	Online	OP2
Outreach/TA - RACQ - IPv6 Deployment	Online	AU

Table 13: Events attended

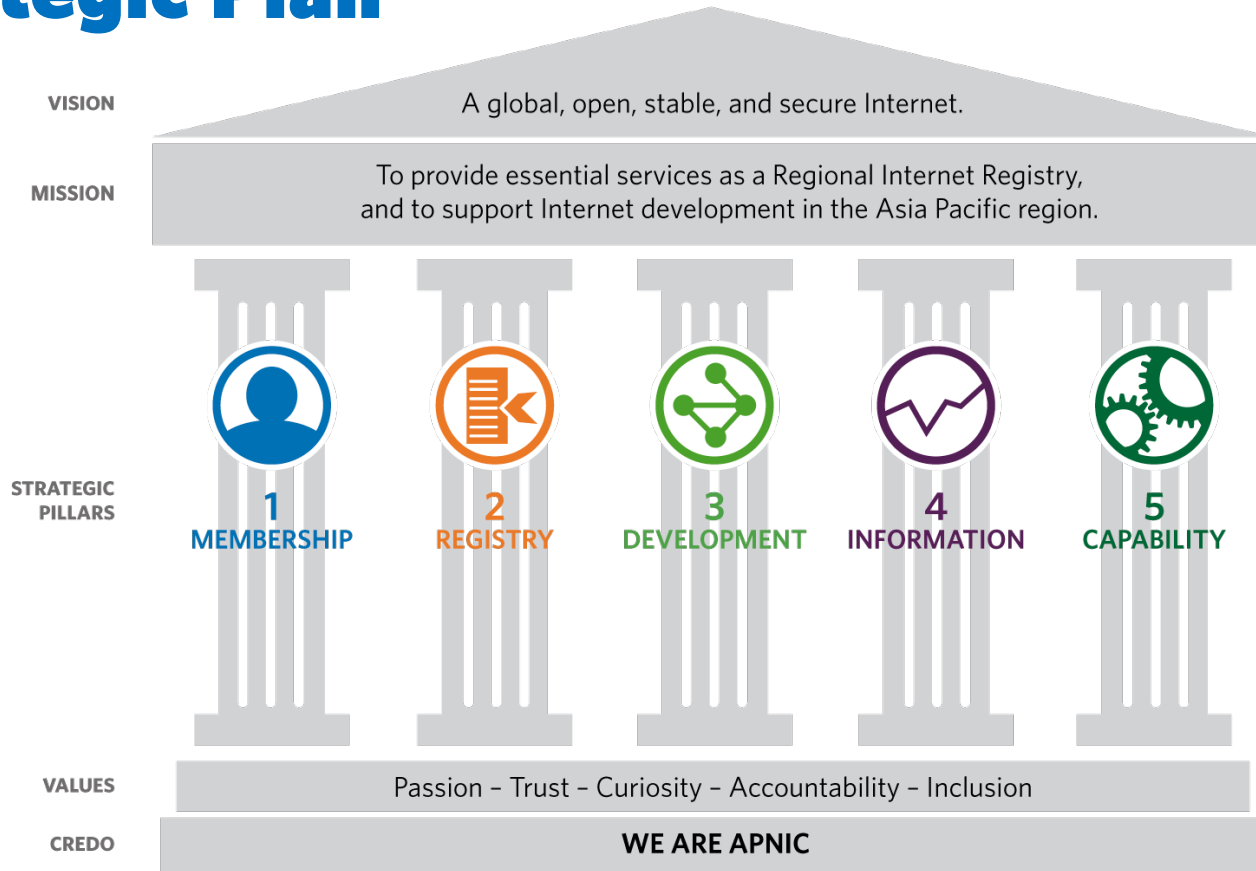
APNIC Secretariat Report

EC Meeting

7-8 September 2021

Online

Strategic Plan



Strategic Pillar	Workstreams
 <p>1. Membership</p>	<p>1A Member Services</p> <p>1B Membership Products</p> <p>1C Membership Reporting</p>
 <p>2. Registry</p>	<p>2A Registration Services</p> <p>2B Registry Products</p> <p>2C Policy Development</p>
 <p>3. Development</p>	<p>3A APNIC Conferences</p> <p>3B Foundation Support</p> <p>3C Community Engagement</p> <p>3D Community Participation</p> <p>3E APNIC Academy</p> <p>3F Internet Infrastructure Support</p>
 <p>4. Information</p>	<p>4A Information Products</p> <p>4B Research and Analysis</p>
 <p>5. Capability</p>	<p>5A Employee Experience</p> <p>5B Finance and Business Services</p> <p>5C Internal Technical Infrastructure</p> <p>5D Governance</p>

Activity Tracking

- ▶ What we do
- ▶ Service updates
- ▶ Transparency
- ▼ **Corporate Documents**
 - ▶ Documents
 - ▶ Annual Reports
 - ▼ **Plans and Strategies**
 - ▶ **2021 Activity Tracker**
 - ▶ Brochures
- ▶ Meet the team
- ▶ APNIC Careers
- ▶ APNIC Supporters
- ▶ Social Media

2021 Activity Tracker

The [Activity Plan and Budget](#) outlines APNIC's planned activities in 2021, structured under five pillars (Membership, Registry, Development, Information and Capability) and 18 workstreams. You can track the progress of those activities on this page.

Last updated: 23/07/2021

Progress against success measures

Completed = ●

In Progress = ●

At Risk = ●

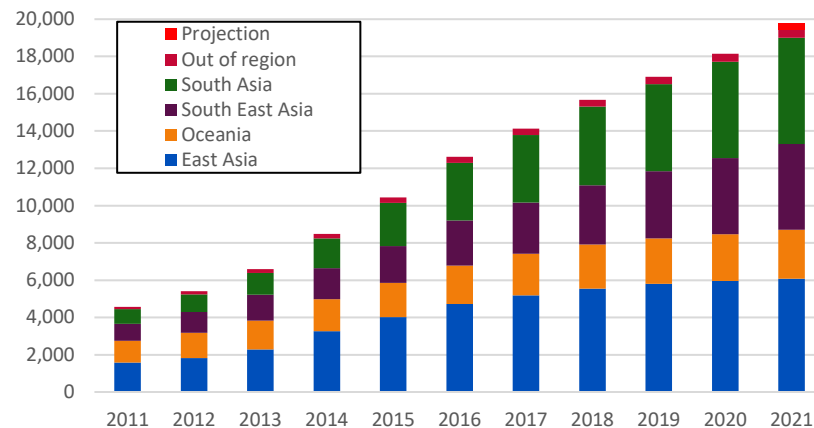
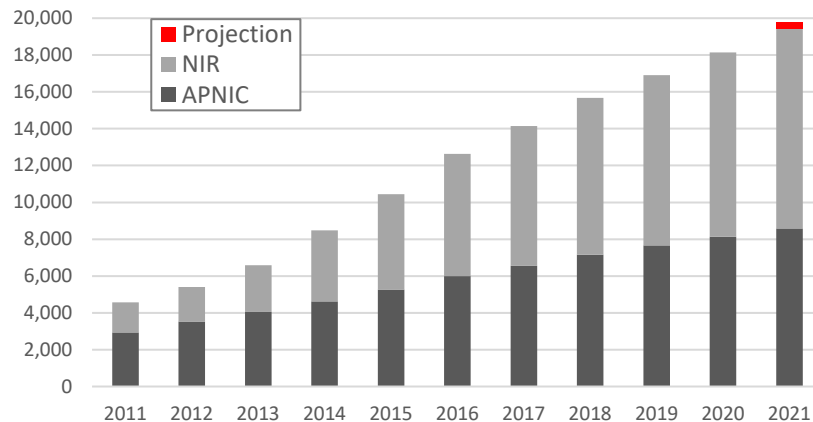
Membership

1A. Member Services

Member Services



- Total APNIC Members 8,581
- Service satisfaction 87% 'excellent' and 'above average' (477/514)
- SLA response time on Helpdesk queries 100% met
- 432 User Feedback Group participants
 - All community feedback items actioned
 - Detecting 1.8 fraud cases per month



1A. Member Services

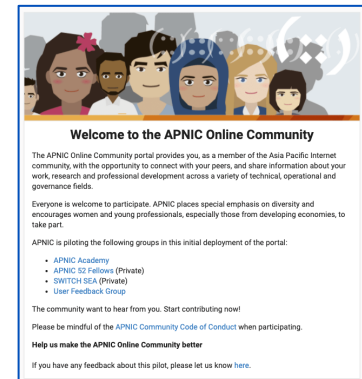
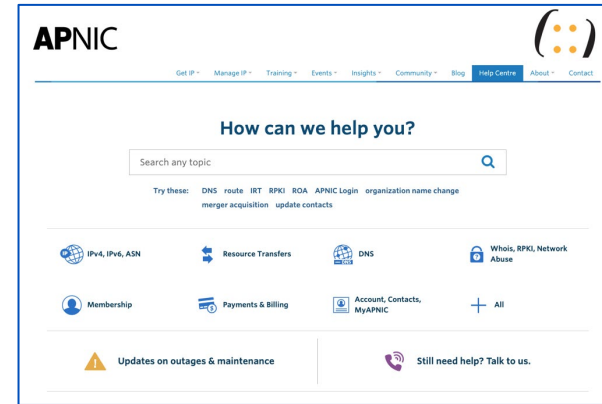


Activity	Target	Results	Status
1A.1. Member service delivery	1. Maintain Helpdesk SLA of two business day response to enquiries (>99.90%).	100%	●
	2. Maintain service satisfaction ratings of at least 93% "excellent and above average" feedback.	87%	●
	3. All "poor and below average" feedback is followed-up and actioned.	100% resolved	●
	4. Proactive Member service engagement in a minimum of 47 economies.	33 out of 47	●
1A.2. Member experience	All improvement suggestions received from all feedback channels are followed up and actioned.	100%	●
	1. All critical and high accessibility issues are resolved.	82 issues: 13 fixed, 7 in progress	●
	2. Grow product and service user feedback group from 300 to 500 Members.	432	●
1A.3. Membership development	1. At least eight membership development activities, in economies with low membership relative to their Internet growth potential.	5 out of 8	●
	2. Total number of Members to match or exceed the 2021 budget assumption of 8,940.	8,581	●

Membership Products



- Help Centre deployed and improvements ongoing
 - ‘Tribe’ selected for Community Platform pilot with 110 users
- Voting system updates include SIG and IANA RC elections for APNIC 52
 - MyAPNIC billing section improvements – invoice management, downloadable receipts
 - Migration of MyAPNIC management functions from Perl to Java underway
- New testing infrastructure used for election system and membership application form updates





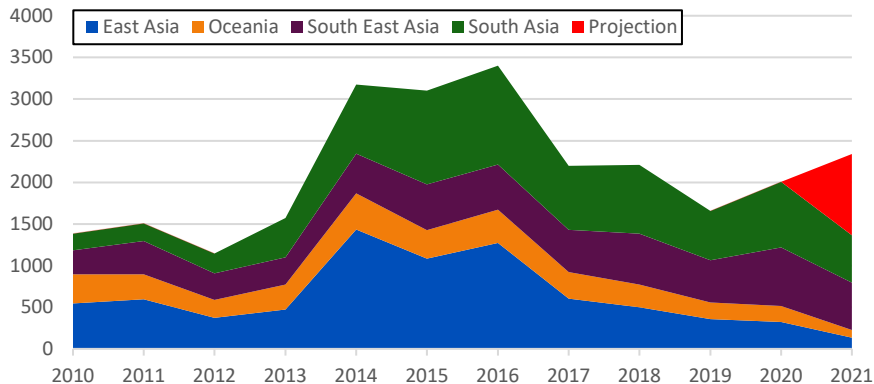
1B. Membership Products

Activity	Target	Results	Status
1B.1. Membership product management	1. Member Help Centre deployed.	Completed	●
	2. Migrate 100% of APNIC Logins to a new identity management system.	Scheduled Q4	●
	3. Establish comprehensive testing infrastructure for membership product applications.	Completed	●
	4. Deliver problem-free EC, NRO and SIG Elections via BigPulse.	APNIC 51 elections completed	●

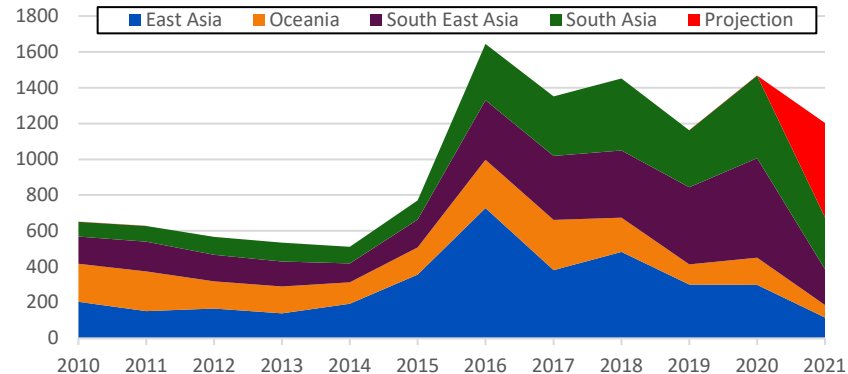
1C. Membership Reporting

Activity	Target	Results	Status
1C.1. Planning and reporting	1. Publishing of required reports on the day of the APNIC Member Meetings.	Done (APNIC 51)	●
	2. Publishing of EC Minutes within two months of each EC meeting.	100% achieved	●
	3. Event Wraps published for 100% of reportable events within one month of event.	29/29 achieved	●

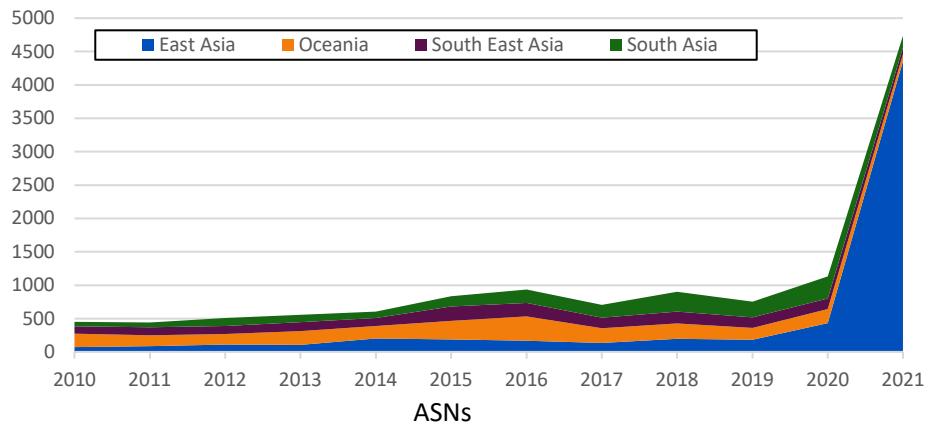
Resource Delegations



IPv4

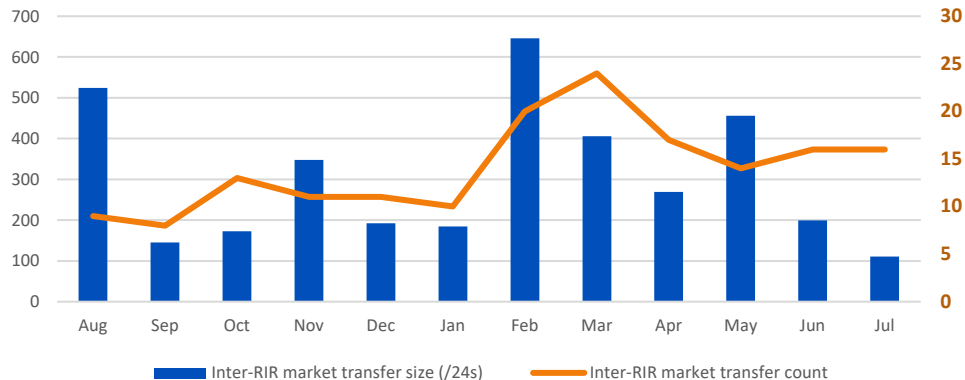
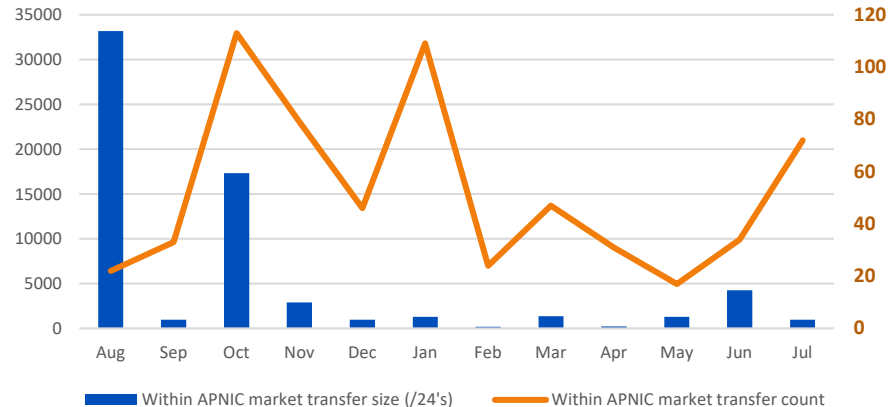
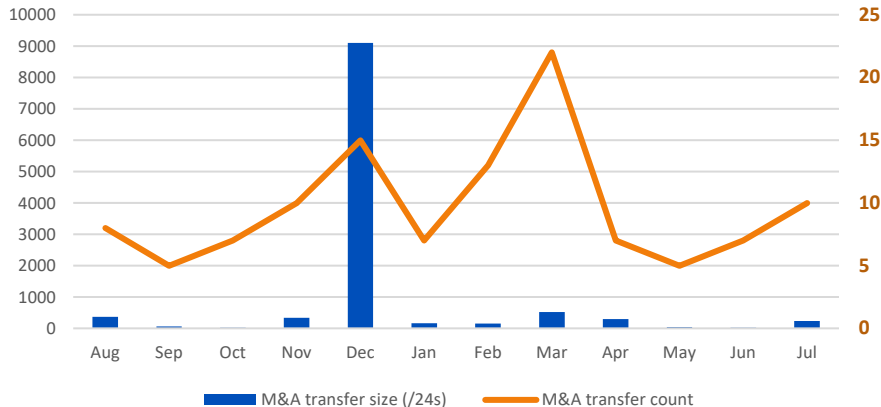


IPv6



ASNs

APNIC Transfers



Registration Services



- IRT email validation rate 71.4%
- Working on NRO-defined ITHI reporting
- Reclaiming unadvertised IPv4 addresses:

Status	31 March	31 July	Percentage	Addresses
Yet to contact	60	32	10.92%	534,528
Not contactable	51	54	18.43%	144,384
No response	66	55	18.77%	537,088
Prefixes being claimed by holder	37	31	10.58%	270,848
Prefixes claimed by holder	29	50	17.06%	413,952
Prefixes returned to APNIC	50	71	24.23%	484,352
Total unrouted prefixes	293	293	100%	2,385,152

Registration Services



2A. Registration Services

Activity	Target	Results	Status
2A.1. IPv4, IPv6 and ASN delegation and registration services	1. Maintain Registration Services SLA of two business day response to enquiries (>99.90%).	100%	●
	2. Increase percentage of Members holding IPv6 address space to 70%.	67.29%	●
2A.2. Maintain correct and current registry data	1. Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting.	In progress	●
	2. Increase rate of validation by Members of registration records.	69.1% validation	●
2A.3. Reclaiming unused IPv4 address space	1. All unrouted historical resource prefixes identified under policy prop-017 are claimed, transferred, or returned to APNIC.	In progress	●

Registry Products



- NIR API implementation launching Q4
 - Significant performance improvement to ARMS (5-10x faster for typical requests)
- Next generation registry design work begun
 - RPKI repository made entirely atomic to avoid inconsistency
 - Updates to MyAPNIC to improve route management
 - NRO RDAP profile published in IANA RDAP registry

Registry Products



2B. Registry Products

Activity	Target	Results	Status
2B.1. Internet number registry management	1. Implement the NIR API and operate in conjunction with the NIRs.	In progress	●
	2. Create initial design documentation for the "Next-generation Registry" by the end of Q4.	In progress	●
2B.2. Registry product management	1. Implement a bulk update method to improve usability of the MyAPNIC Routing Management feature.	Scheduled for Q3/4	●
	2. Improved support for "BYO IP" services in MyAPNIC.	Scheduled for Q3/4	●
	3. Create a public specification of a general Member registry API.	In progress	●
	4. Implement the NIR KPI monitor for RPKI.	Scheduled for Q3/4	●

Policy Development



- prop-133 approved at APNIC 51 and implemented
- Policy proposal analysis ready for APNIC 52
- Community Policy Consultation meeting in March
- Policy Document Review Working Group formed with 44 participants
- 7 policy proposals to be discussed at APNIC 52



Policy Development



2C. Policy Development

Activity	Target	Results	Status
2C.1. Policy development	1. Achieve minimum overall satisfaction rating of 6/7 from Policy Chairs in annual review of SIG Chair support.	N/A	●
2C.2. Policy implementation	1. Meet 100% of implementation timelines.	100%	●
2C.3. Policy analysis	1. Deliver two policy analysis presentations at SIG meetings.	1/2 done	●
	2. Publish a policy proposals analysis before each Policy SIG meeting.	1/2 done	●

APNIC Conferences



- APRICOT 2021/APNIC 51
 - Tutorial week: 416 attendees
 - Conference week: 552 attendees from 61 economies (+ 3,855 YouTube views)
- APNIC 52
 - Third 100% online APNIC conference
 - Introduced new chat (Cometchat) and automated transcription (Otter)





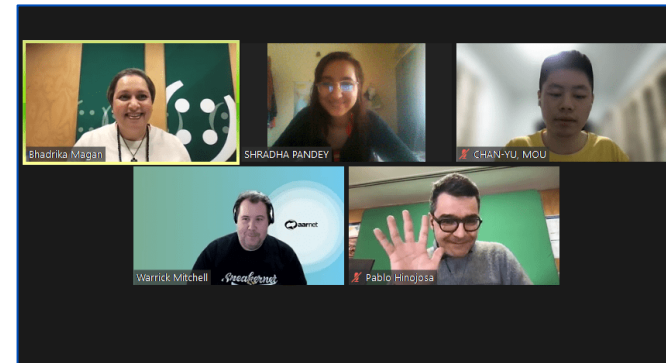
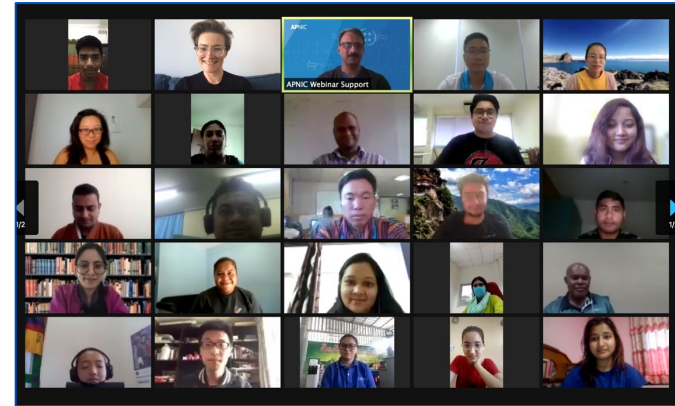
3A. APNIC Conferences

Activity	Target	Results	Status
3A.1. APNIC conferences	1. Achieve total attendance of 1,000 delegates across two conferences.	852 attendees	●
	2. Achieve 6,000 remote conference session views.	4,707 views	●
	3. Achieve average conference participant satisfaction survey rating of 90%.	93%	●
	4. Achieve average participant satisfaction of 85% for speakers.	96%	●
	5. Select and integrate online meeting technologies to provide a seamless online experience for APNIC 51 and 52.	Complete APNIC 51; testing for APNIC 52	●

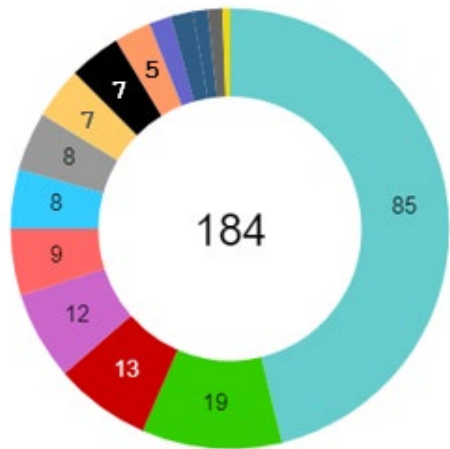
Online Fellowship Program



- New six-month program
 - 12 technical, policy and Internet governance presentations
 - APNIC Academy training
 - Sessions with community mentors
- 46 fellows (24 female + 22 male)
 - 85% attendance at presentations
 - 68 Academy courses completed; 38 in progress
 - 27 fellows met with 25 community mentors
 - Graduation at APNIC 52

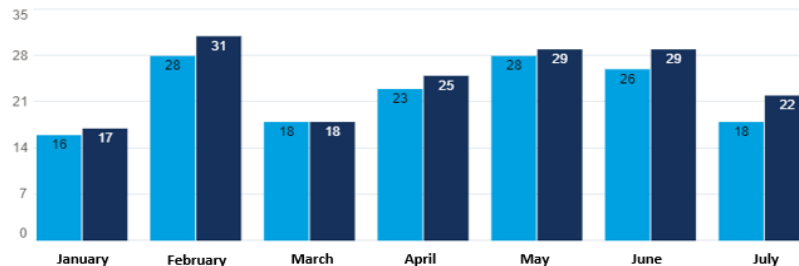


Community Engagement

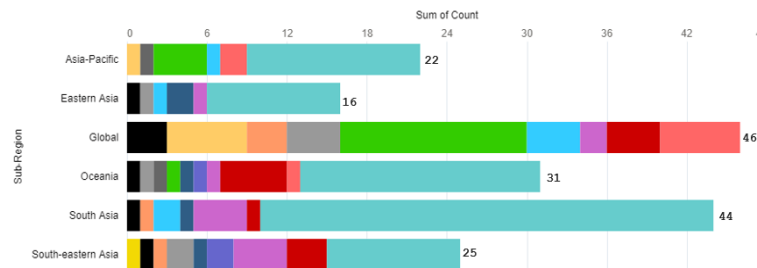


- APNIC
- CERT Engagement
- Coordination
- Development
- Foundation Engagement
- Foundation Projects
- Government
- Internet Governance
- Member Outreach
- Membership Development
- NIR Engagement
- NOG
- Other
- Product Engagement
- Security
- Technical
- Technical Assistance
- Training

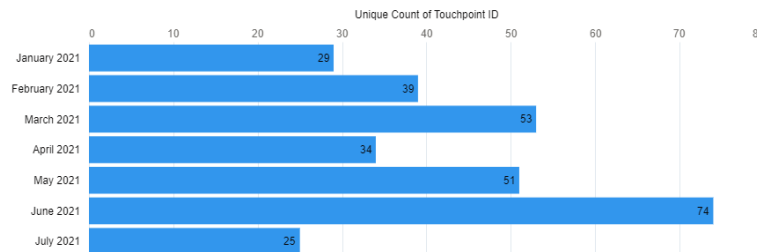
Engagement summary by type



Engagement summary by month



Engagement summary by region/subtype

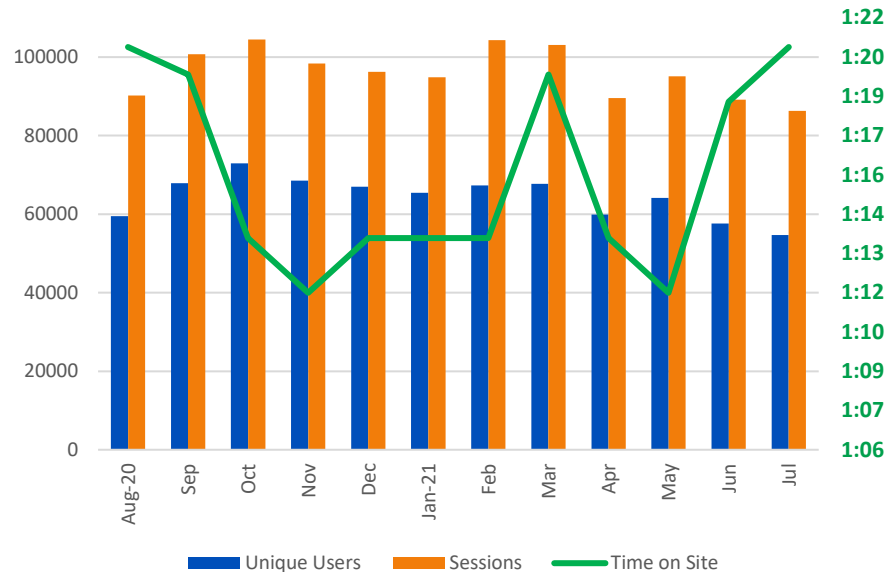


Unique touchpoints by subregion

Community Online Participation



- SIGs
 - 473 meeting participants + 84 at online consultations
 - Updated SIG Guidelines agreed and now active
- EC quarterly discussions with elected community representatives
- Encouraging newcomers online
 - 317 conference newcomers
 - 159 new Blog subscribers
 - 3,366 new Academy users
 - 681 new Twitter followers
 - 810 new LinkedIn followers



apnic.net visits

Technical /Security Community



- Participated in 19 technical community events
- Sponsored 9 NOG events
- Sponsored 20 security community events + Peering DB, IXP Manager, MANRS Fellowship Program
- Eight security training sessions and 3 presentations at security events, plus 5 Honeynet Project engagements

Internet Organization Cooperation



- RIR meetings (all online)
- NRO EC and CG meetings
 - ITCG (Internet Tech Community)
 - ICANN 70, 71, ICANN DNS Symposium 2021, IETF 110 and 111
 - ICANN Root Service Governance WG; Root Zone Evolution WG; SSAC
 - Joint research project with LACNIC
 - Study on “Internet technical success factors”
 - Analysys Mason started work

3C. Community Engagement

Activity	Target	Results	Status
3C.1. Technical community support	1. Sponsor or participate in 30 technical community events including NOGs, Peering Forums and Research & Education events.	19 events	●
	2. Support 20 NOGs to conduct online events if physical events are not possible.	9 NOGs	●
	3. Facilitate and support two new/revived NOGs in two sub-regions.	1 in progress	●
3C.2. Security community support	1. Sponsor or participate in 10 security community events.	20 events	●
	2. Support targeted development of four new/existing CERTs/CSIRTs.	3 CERT/CSIRT	●
	3. Deliver six presentations/training sessions on the Security Threat Sharing Platform.	4 presentations	●
3C.3. Internet organization cooperation	1. Participate in all NRO and 'I*' coordination meetings.	100%	●
	2. Participate in all NIR and RIR Open Policy Meetings.	100%	●

Internet Governance



- Global IGF (online in 2021)
 - Three session proposals submitted and accepted
 - MAG membership – Joyce Chen (13 meetings)
 - IGFSA Executive Committee (10 meetings)
- APrIGF (online in 2021)
 - Two workshop proposals accepted for APrIGF
 - Participated in MSG (12 meetings) and PC (16)
- NRIs and other
 - Preparatory: Pacific IGF (7 meetings); 6 NetThing AU (6), APIGA (4)
 - Participated in HKIGF; sponsored/participated bdSIG; RightsCon 2021

Governmental Engagement



- ITU: participated and observed at 11 meetings, including regional prep meetings for WTDC-21
- APT: Training agreement for six APT states (three online tutorials delivered to MM, LA and PH)
 - OECD: Contributed to routing security paper
 - APEC TEL: Presented at APEC TEL 62 sessions
- Presented at the Daniel K. Inouye Asia Pacific Center for Security Studies Executive Cybersecurity Workshop
- Participated at Cyber Safety Pasifika, 6th INTERPOL Global Cyber Crime Expert Group, INTERPOL Forum on Ransomware

3C.4. Internet governance participation	<ol style="list-style-type: none"> 1. Sponsor and participate in APriIGF and IGF with workshop proposals, MSG/MAG participation, and speaking roles. 2. Participate in at least three national Internet governance initiatives. 3. Sponsor and participate in at least two schools of Internet governance. 	<p>3 proposals to IGF; 2 proposals to APriIGF; Sponsoring APriIGF</p> <p>2/3</p> <p>1/2</p>	<p>●</p> <p>●</p> <p>●</p>
3C.5. Government engagement	<ol style="list-style-type: none"> 1. Participate in at least 12 engagements with governments/intergovernmental organizations. 2. Participate in at least three capacity building partnerships with governments/ intergovernmental organizations. 3. Participate in six engagements with the Public Safety community. 	<p>19</p> <p>Completed</p> <p>4</p>	<p>●</p> <p>●</p> <p>●</p>
3C.6. External relations coordination	<ol style="list-style-type: none"> 1. Facilitate one External Relations coordination retreat. 2. Facilitate 10 External Relations team coordination meetings. 	<p>Completed</p> <p>5/10</p>	<p>●</p> <p>●</p>



- Online training due to COVID-19 restrictions
- 28 Community Trainers, with 22 engaged for 53 events
- New content: Network Management and Monitoring; Network Automation; three courses updated; five new virtual labs
- Bengali language support and Mongolian subtitles added to online courses
- TA support for 22 Members on RPKI, network design and IXP
 - Academy platform TA feature set for Q3 launch

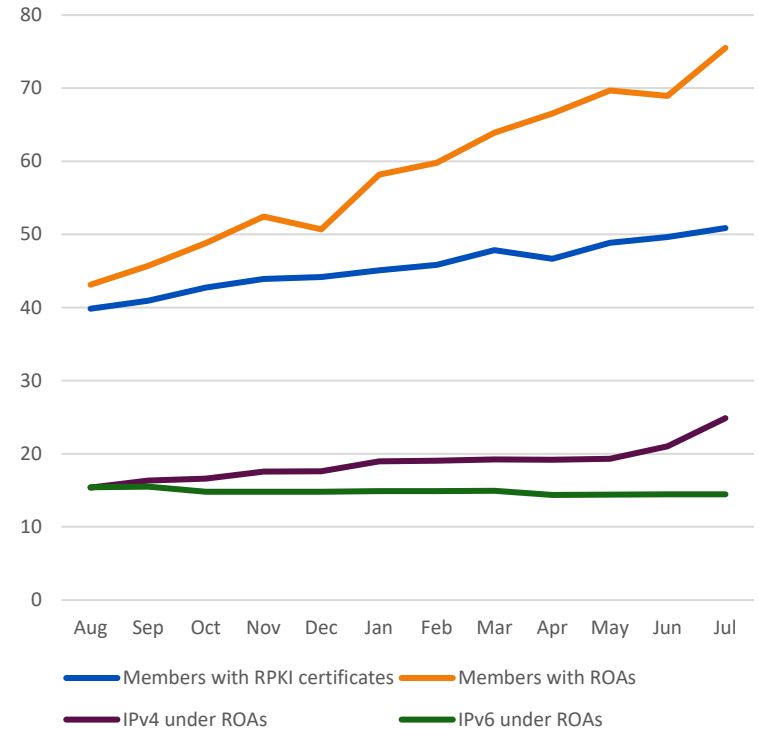
	Instructor-led	Self-paced
Courses	72	1,031 completions; 2,127 enrolments
Students	1,587	3,366 new (14,943 in total)
Locations		41 economies
Virtual Labs		2,052 labs 2,100 hours
Webinars	13 webinars 799 attendees	

3E. APNIC Academy

Activity	Target	Results	Status
3E.1. Product management	1. Migrate legacy training site information to APNIC Academy and decommission previous site.	Scheduled Q4	●
	2. Develop a comprehensive curriculum of blended learning for future certification.	In progress	●
3E.2. Instructor-led training	1. Develop two new/updated courses for instructor-led tutorials/workshops.	1 new course completed; 3 courses updated with 6 new modules	●
	2. Conduct 70 instructor-led tutorials/workshops across four sub-regions.	72 tutorials/workshops delivered	●
	3. Conduct 18 live webinars.	13 webinars delivered	●
3E.3. Self-paced training	1. Publish four new/revised self-paced online courses.	2 new courses; 2 in progress	●
	2. Publish five new self-paced Virtual Labs (associated with multiple courses).	Completed	●



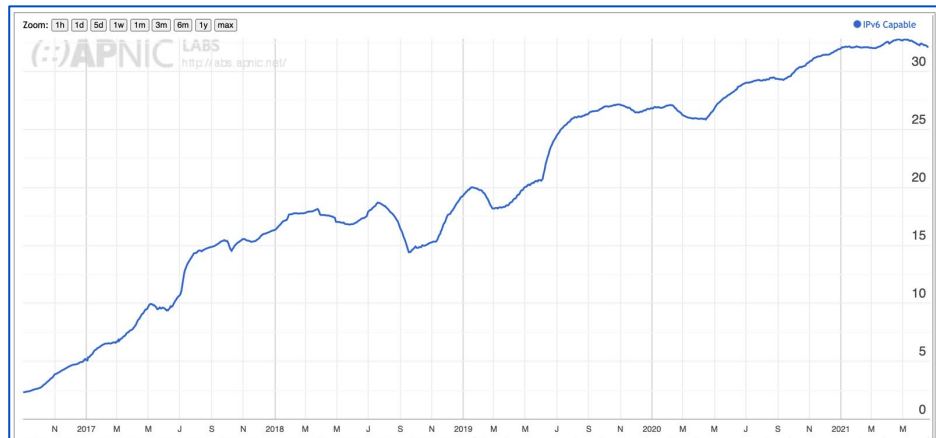
- 14 RPKI training events
- ROA adoption
 - 75.5% with ROAs (up from 58.2%)
 - 50.9% with RPKI certificates (up from 45.1%)
 - PK, MV, TO and NP achieved 90%+ ROA coverage
- Four RPKI deployment success stories published
 - New Labs ROA measurement tool:
<https://stats.labs.apnic.net/roa>









IPv6



- 11 online IPv6 tutorials (AU, PK, VU, CN, TH)
- China Telecom deployment story published – now 40 deployment stories online
- 34.64% IPv6 capability for region








3E.4. Technical assistance	1. Begin conducting technical assistance via the APNIC Academy online platform.	Platform in development	
3E.5. RPKI awareness and deployment support	1. Conduct eight RPKI/ROV focused instructor-led tutorials/workshops spread equally across sub-regions. 2. Achieve 90% ROA coverage for four additional economies. 3. Publish four RPKI/ROA/ROV deployment case studies.	14 completed Completed 4 published	  
3E.6. IPv6 awareness and deployment support	1. Conduct eight IPv6 deployment focused instructor-led tutorials/workshops spread equally across sub-regions. 2. Publish three IPv6 deployment case studies.	14 done 1 published	 

Internet Infrastructure Support



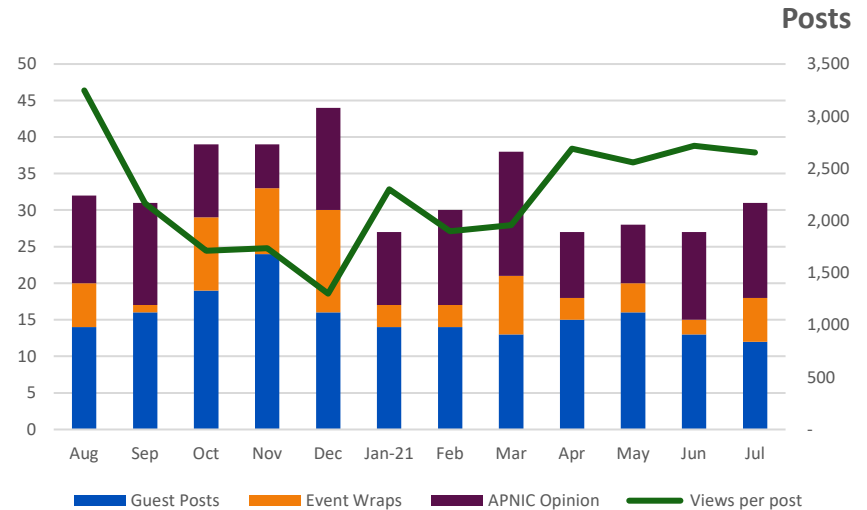
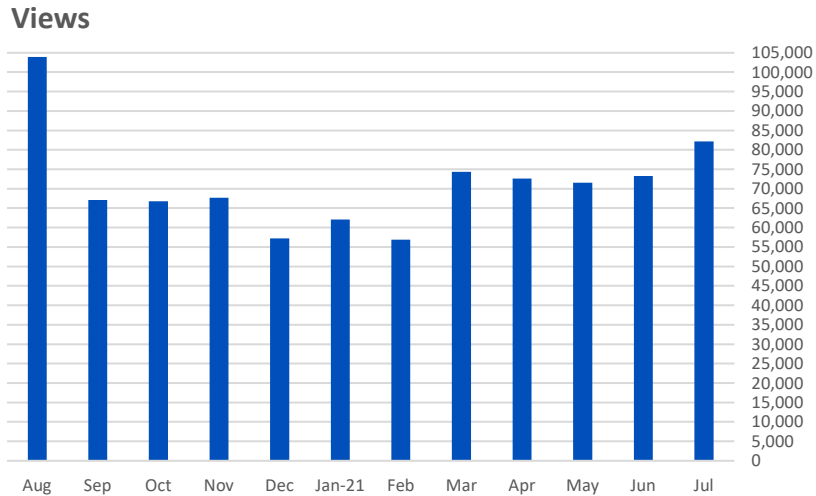
- Supporting Fiji IX upgrade and PK IX (Lahore) setup
- Working with seven disconnected RIPE Atlas anchor hosts to arrange hardware replacements
- Nine M-root server deployments are progressing in Guam, Hanoi, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta and Singapore
- 12 Community HoneyNet partners

3F. Internet Infrastructure Support

Activity	Target	Results	Status
3F.1. Internet infrastructure development	1. Support deployment of two new or upgraded IXPs.	0 deployed, 2 in progress	
	2. Support four additional IXPs to deploy RPKI/ ROV on their route servers.	0 deployments, 2 in progress	
	3. Deploy or upgrade four RIPE Atlas anchors at various networks.	0 deployed, 7 in progress	
	4. Deploy 12 new root server instances.	0 deployed, 9 in progress	
3F.2. Community Honeynet and Security Threat Sharing Platform	1. Increase Community Honeynet partners from 10 to 15.	12 partners	



- 70,420 views/month (↑ 8.7% on 2020)
- Passed milestone of 3 million views all time in June



Information Products



- Resource Explorer (REx) - formerly Internet Directory

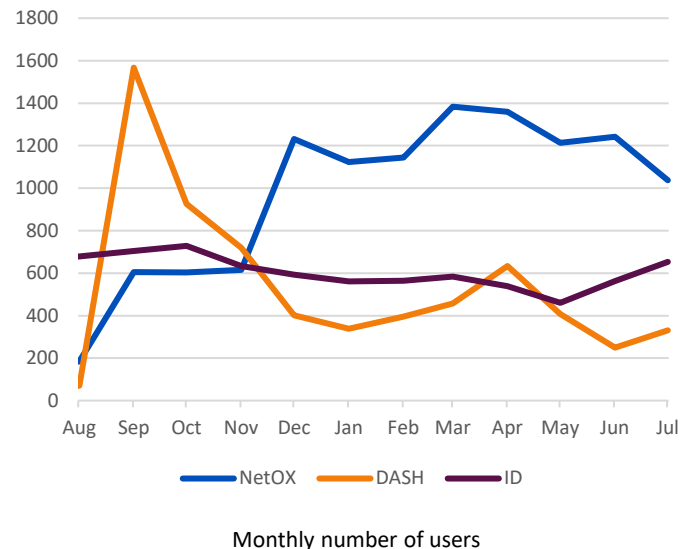
- Interface improvements
- NPS 44, Usability 4.4, 87% returning users

- DASH

- Recurring reports implemented
- Webinar to 45 pax from 20 economies
- NPS 71, Usability 4.5, 129% returning users

- NetOX

- New ‘Experimental’ widgets tab
- ‘NPS 69, Usability 4.4, 226% returning users



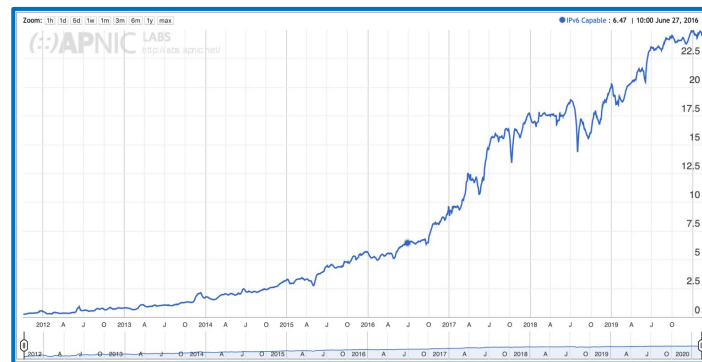
4A. Information Products

Activity	Target	Results	Status
4A.1. APNIC Blog	1. Grow all-time Blog views from 2.6 million to 3.4 million.	3.1 million	●
	2. Average 64,000 Blog views per month.	70,420 views	●
	3. Maintain Blog Guest Post ratio between 45-65%.	54%	●
4A.2. Information product management	1. Reach 400 users per month to NetOX and DASH, and 700 users per month to the Internet Directory.	904, 517 and 606	●
	2. Achieve a net promoter score of 80+ for all products.	69, 71 and 44	●
	3. Achieve a usability score of at least 4.5/5 for all products.	4.5, 4.5 and 4.4	●

Research and Analysis



- 19 presentations at RIRs, NOGs, IETF
- 24 research blog posts (and 3 podcasts)
 - Research projects
 - IPv6 capability
 - Advertised, unadvertised and reserved pools analysis
 - BGP growth and anomaly detection
 - RPKI ROA monitor developed
 - DNS research — DOH usage, large responses
 - QUIC measurements
 - ECN measurement and RSA 2048-bit keys in DNSSEC
- Cooperative research
 - Routing data for MANRS
 - ITHI measurement framework
 - Cloudflare collaboration (1.1.1.1)



4B. Research and Analysis

Activity	Target	Results	Status
4B.1. Conducting research and measurements	1. Twelve research articles and reports published.	24 articles published	
4B.2. Cooperative research opportunities	1. Conduct cooperative research with organizations such as CloudFlare, ICANN, RIPE NCC and others.	3 collaborative research projects	
4B.3. Sharing research outcomes	1. Ten research presentations delivered.	19 presentations delivered	
	2. At least two research presentations at APNIC conferences.	3 presentations at APNIC 51	

Internal Technical Infrastructure



Architecture and technical coordination

- OpenAPI for internal API development
- Dependency management tools
- End-to-end testing for Membership and Academy product teams

Network and infrastructure operations

- Shared POP in SG for critical services and M-root
- Brisbane to HKIX connectivity via PCCW
- New SSO architecture for Q4 deployment

System and platform operations

- Two new high-performance arrays
- Migrated DNSSEC signer from Secure64 to Knot
- Deployed RDNS anycast node to HK
- Completed migration of APNIC Academy to Cloudflare

Internal security operations

- 34 vulnerability reports received; 25 solved within 90 days
- Internal Cyber fraud awareness training
- Policies and procedures updated to align with ISO 27001

Enterprise application management

- Implemented upgraded backup solution for CRM
- Zoom room technology in deployment

Service availability

- 99.99% critical services; 99.98% non-critical services

5A. Internal Technical Infrastructure





Activity	Target	Results	Status
5A.1. Architecture and technical coordination	1. Complete review of testing environment and practices.	In progress	●
5A.2. Network and infrastructure operations	1. Complete quarterly data centre failover tests.	Q2 completed	●
	2. Upgrade internal infrastructure NOC from overnight 'on-call' to full 24x7 operation.	In progress	●
	3. Maintain availability of 99.99% for critical APNIC services and 99.95% for less-critical services.	99.99% and 99.98%	●
5A.3. System and platform operations	1. Develop strategy for cloud and interconnection.	In progress	●
	2. Complete service migration to cloud for six services/websites.	In progress	●
5A.4. Internal security operations	1. Achieve readiness for ISO27001 certification.	Preparation of documents in progress	●
	2. Track and resolve all vulnerability reports within 90 days.	25/34 reports resolved (7 in progress)	●
5A.5. Enterprise application management	1. CRM roadmap established.	In progress	●









Finance and Employee Experience

- Annual audit of 2020 accounts completed by Deloitte
 - External surveillance audit for ISO9001:2016 QMS completed
 - COVID-19 response
 - Hybrid working model of WFH and WFO continues
 - Monthly financial forecasts to monitor income and expense variations
- 5/9 non-technical teams adopted Agile working processes
- 16 permanent/casual roles successfully filled
 - Two new directors appointed for Services and Finance
 - Total staff turnover 5.1%
- Workspace architectural and structural review

5B. Finance and Business Services

Activity	Target	Results	Status
5B.1. Internal knowledge management	1. Successful implementation of internal knowledge management tools with increased user satisfaction and experience.	In progress	
5B.2. Financial services	1. Achieve a successful audit of APNIC's annual financial accounts.	Completed	
5B.3. Business services	1. Complete annual ISO Quality management compliance audit successfully.	Due August	
	2. Undertake quarterly BCP scenario testing.	Scheduled	
5B.4. Data governance and business intelligence	1. Complete APNIC-wide data model and data dictionary.	In progress	
	2. Generate all Secretariat report data/charts from BI system.	In progress	

5C. Employee Experience

Activity	Target	Results	Status
5C.1. Organizational development	1. Strategic goals clearly cascade to individual performance measures in performance management system in 2021.	Complete	
	2. Deploy agile work practices across the organization.	56% complete	
5C.2. Work environment management	1. No WHS incidents caused by APNIC's local or remote work environments — zero fault incident reports.	2 incidents	
5C.3. Talent attraction and retention	1. Maintain staff turnover rate within acceptable benchmarks of 5-15%.	5.1% turnover	
	2. Training budget is 100% allocated and distributed across the organization.	45% spent	
5C.4. People operations management	1. All HR policies, in particular, flexible work, parental leave and oncall allowance policies, reflect best practice.	In progress	

AFRINIC Update



- AFRINIC defending itself from legal action brought by Cloud Innovation Ltd
 - Action follows alleged breach of AFRINIC service agreement
- AFRINIC bank accounts frozen by court order
 - Access provided for monthly operating expense (<\$200,000 USD)
- NRO Stability Fund ready to be activated if required
 - APNIC commitment: up to 5% of balance sheet equity (\$1.9M AUD)
 - ARIN as treasurer would manage payments and reporting
- APNIC providing advice and assistance
 - Directly and through the NRO, and NRO CGs

THANKS!



Whois dump file incident update

APNIC 52 AMM

16 September 2021

Overview

- What happened?
- Corrective actions
- Preventive actions
- Communication
- Lessons learned

What happened?

- Vulnerability report receive on 4 June 2021
 - Google storage bucket found to be publicly accessible (via guessed URL)
 - Thanks to vulnerability reporting program
- All buckets were reviewed and a copy of the whois database (**whois dump file**) was discovered that had been placed there for test purposes
 - A configuration error meant the bucket was publicly accessible when thought to be protected
- This error persisted for three months
 - No evidence of access in the last two-week logs
 - No other evidence of discovery

Dump file contents

- IRT and maintainer password hashes
 - Prone to dictionary attack
- Pre-Oct 2017 private objects in public whois
 - 100k private objects from 824 different APNIC accounts
 - Possible customer details?
 - Possible personally identifiable information (PII)?
 - Possible sensitive network details?
- Further analysis
 - A subset of private objects accessible via RDAP & whowas due to software bug

Private whois objects

- What are they?

Registering your sub delegations in the APNIC Whois Database

1. Login to MyAPNIC.
2. Go to : Home -> Resources -> Whois is updates -> Add -> Object Type : inetnum/inet6num
3. Select Public (visible to public via whois database) or Private (visible to your account contacts via MyAPNIC).
4. Fill the template with the preferred information. (Note that you cannot make a sub delegation as the same size as the parent block. They have to be smaller.)
5. Submit.

Note: The utilization % of your IP address blocks will get updated in MyAPNIC within a day.

Corrective actions

- IRT and maintainer password hashes
 - Removed whois dump file from the bucket
 - Rectified bucket configuration error
 - All IRT and maintainer passwords were reset, and Members notified
 - MyAPNIC users – transparent to users
 - Email update (auto-dbm) users – notified individually
- Pre-Oct 2017 private objects
 - Private objects removed from the whois database

Preventive actions

- IRT and maintainer password hashes
 - Stronger hash algorithm (bcrypt) implemented for all Members
 - Anomaly checks for email update (auto-dbm) users
 - No indication of compromised passwords
- Pre-Oct 2017 private objects
 - RDAP service patched to correct software bug
 - WhoWas service taken offline until 30 Aug while removing private objects from the database
 - Legal review of possible PII breach
 - No breach found

Communication

- IRT and maintainer password hashes
 - Password reset email notification sent to Members
 - Blog post was published on 18 June 2021
 - <https://blog.apnic.net/2021/06/18/whois-data-incident-resolved/>
- Pre-Oct 2017 private objects
 - Overriding objective was to minimize Member risk from disclosure
 - Personal contact (teleconference) with affected accounts having the greatest number of potentially exposed private objects
 - Discussion of potential risks/concerns
 - Email to remainder of affected accounts, with a clear action required and time to rectify (if needed)
- Provide an update at APNIC 52 (this presentation)

Lessons learned

- Data security
 - Production data cannot be used in testing
 - Restricted developer access to production database
 - Strict control of cloud storage configuration
 - Best cloud security practice being adopted
- Registry architecture
 - Old designs/technologies will be deprecated
 - Old password hash algorithm replaced with bcrypt
 - Email update (auto-dbm) to be replaced with API
- Software development practices
 - Data source sensitivity review enforced
 - Commercially sensitive data
 - PII data

APNIC 52 (UTC+8) – AMM – Agenda – Draft v1.2

AMM 1

Time	Topic	Speaker	Zoom Appearance
14:00	EC Chair welcome and opening remarks	Gaurab Raj Upadhaya	Gallery view. All EC to have video on.
14:05	APNIC Secretariat Report	Paul Wilson	Presenter view. Video off if not presenting.
14:30	APNIC EC Treasurer report	Kenny Huang	Presenter view. Video off if not presenting.
14:40	APNIC EC Report	Gaurab Raj Upadhaya	Presenter view. Video off if not presenting.
14:55	Open Mic		Gallery view. All EC to have video on.
15:00	Afternoon Tea Break		

AMM 2

Time	Topic	Speaker	Zoom Appearance
15:15	NRO NC, SIG and IANA RC Election Results		Presenter view. Video off if not presenting.
15:25	Policy SIG Report	Bertrand Cherrier	Presenter view. Video off if not presenting.
15:35	PDR WG Report	Amrita Choudary	Presenter view. Video off if not presenting.
15:40	Cooperation SIG Report	Joy Chan	Presenter view. Video off if not presenting.
15:45	Routing Security SIG Report	Aftab Siddiqui	Presenter view. Video off if not presenting.
15:50	NIR SIG Report	Billy Cheon	Presenter view. Video off if not presenting.
15:55	Open Mic		Gallery view. All EC to have video on.
16:05	Vote of Thanks	Paul Wilson	Presenter view. Video off if not presenting.
16:10	EC final Remarks and Close	Gaurab Raj Upadhaya	Gallery view. All EC to have video on.

Agenda Item 13

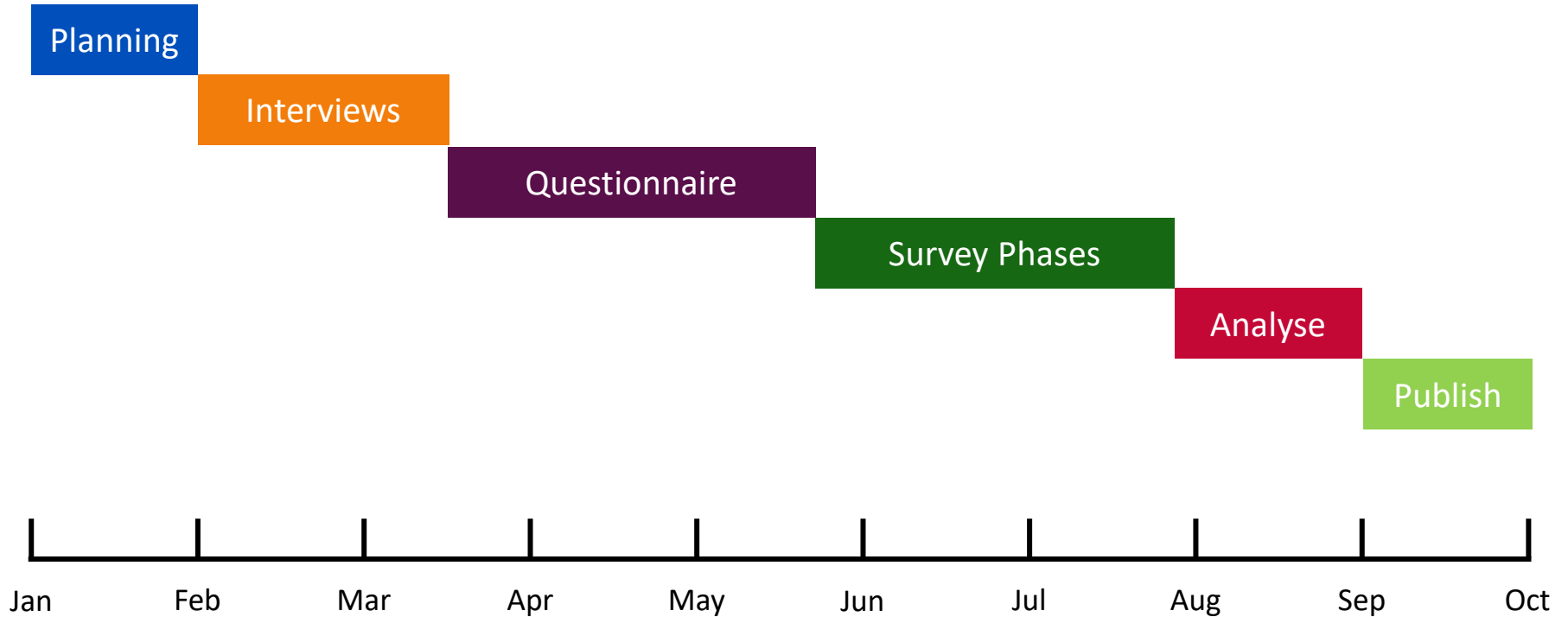
2022 Survey planning

APNIC Survey 2022

APNIC EC Meeting

September 2021

Draft timings overview



Methodology

- Conducted by independent researchers, Survey Matters
- Follow research best practice
 - Qualitative interviews followed by Quantitative survey
- Multiple reports – Interview Report and Survey Report
- Potential areas to investigate
 - Understanding those who engage less with APNIC
 - Whether Member needs from APNIC have changed due to pandemic

Qualitative Research: Interviews

- A mix of identified influencers and random individual Member contacts
 - Suggestion to increase the ratio of random participants
- Interviews conducted by SM
- All interviews conducted remotely this time
- Report helps inform survey questionnaire

Quantitative Research: Online Survey

- Online survey hosted and managed independently by SM
- Promoted by APNIC Secretariat
- Recommend continuing translation but refining list based on 2020 response and current (2021) language survey
- Aim to improve on 1,624 participants
- Examine other survey dimensions – such as company size, job role

Quantitative Research: Digging deeper

- Follow up with those with low contact with APNIC – find out why, and if APNIC can serve them better
- Method being explored – could be second online survey, telephone survey, further interviews, or a hybrid approach
- Shorter survey with different questions
- Intended to supplement main findings and offer greater insights into low-contact groups

Next Steps

- Finalise survey project plan
- EC input into survey themes and issues to be explored
- EC approval of survey plan

Questions?

Agenda Item 15

EC satisfaction survey

Draft EC satisfaction survey v3

Secretariat support

- How easy did you find it to get secretariat support?
- Overall, how satisfied were you with the secretariat services and support this year?
- The EC decisions are implemented on a timely basis
- There was a positive climate of trust and respect
- How can we make it easier for you to use our services in the future?

Induction

- New EC members are oriented to the unique aspects of the APNIC as a not-for-profit membership organisation, including its mission, bylaws, policies etc. Were you provided with sufficient information about APNIC to assist you to serve your role as EC member?
- Was the induction provided in a time that met your needs?

Meetings

- The EC meeting's agenda items were appropriate for EC discussion
- Each EC meeting has a written agenda and the materials relating to significant decisions are given to the EC members in advance of the meeting
- The EC meeting materials were received in a timely manner
- Appropriate information is available to support the EC in making informed decisions
- The materials received in advance provided me with sufficient time to prepare for the meeting
- Time was used effectively, and discussions were focused during EC meetings
- Next steps and action items from EC meetings were identified and documented
- The EC participated in a responsible way and made decisions with the right perspective
- Are you able to regularly attend the EC meetings, and do you find them productive and informative?

Reporting

- The status of implementation of the strategic plan is monitored and discussed regularly
- You are provided with regular financial reports to help you understand and monitor the financial status of APNIC, including by approving an annual budget
- The organization maintains a conflict-of-interest policy and all EC members regularly review and comply with the policy

Communication

- Does the Executive Leadership Team (ELT) keep you informed about everything that impacts the organization to ensure you probably do your function as an EC member?

Tools and facilities

- Do you find it easy to access the EC wiki, online chat, and related information?

Agenda Item 17
APIDT update

APIDT Update

APNIC EC meeting, September 2021

CONFIDENTIAL

Sale Process/Status

- Stage 1/2/3, 2000
 - 43/9 to Alibaba, Singapore
 - 43.128/10 to Tencent, China
 - 43.128/10: 2x/16 to NEC and Line (JP)
- Stage 3B, 2021
 - Remainder of 43.192/11
 - /12 complete Jun 2021
 - /13+/14+/15 underway, to be completed in 2021
- Sale Proceeds
 - Announcement made on 10 August 2021
 - Final proceeds of USD \$420M+

[Confidential information redacted]

[Confidential information redacted]

[Confidential information redacted]

Financial Oversight

- Investment Policy

- Under development with assistance from Credit Suisse
- Considering investment lifetime, income expectations, future spending, liquidity, risk tolerance, etc
- With advice from IAC

- Property Investment

- Agreed to purchase for long-term lease to APNIC
- Budget \$25-30M USD in total (property + improvements)
- Search continues (multi-year process)



Arterial Research and Educational Network in Asia-Pacific

ARENA-PAC is a new regional backbone network of high-capacity international submarine cable circuits, serving NRENs at multiple locations in the Asia Pacific. It will comprise several long-term IRU circuits, of 10 and 100Gbps, between a central exchange point in Guam and sites in Tokyo, Philippines and Indonesia. All circuits will be leased from regional cable companies including RTI Cables and others.

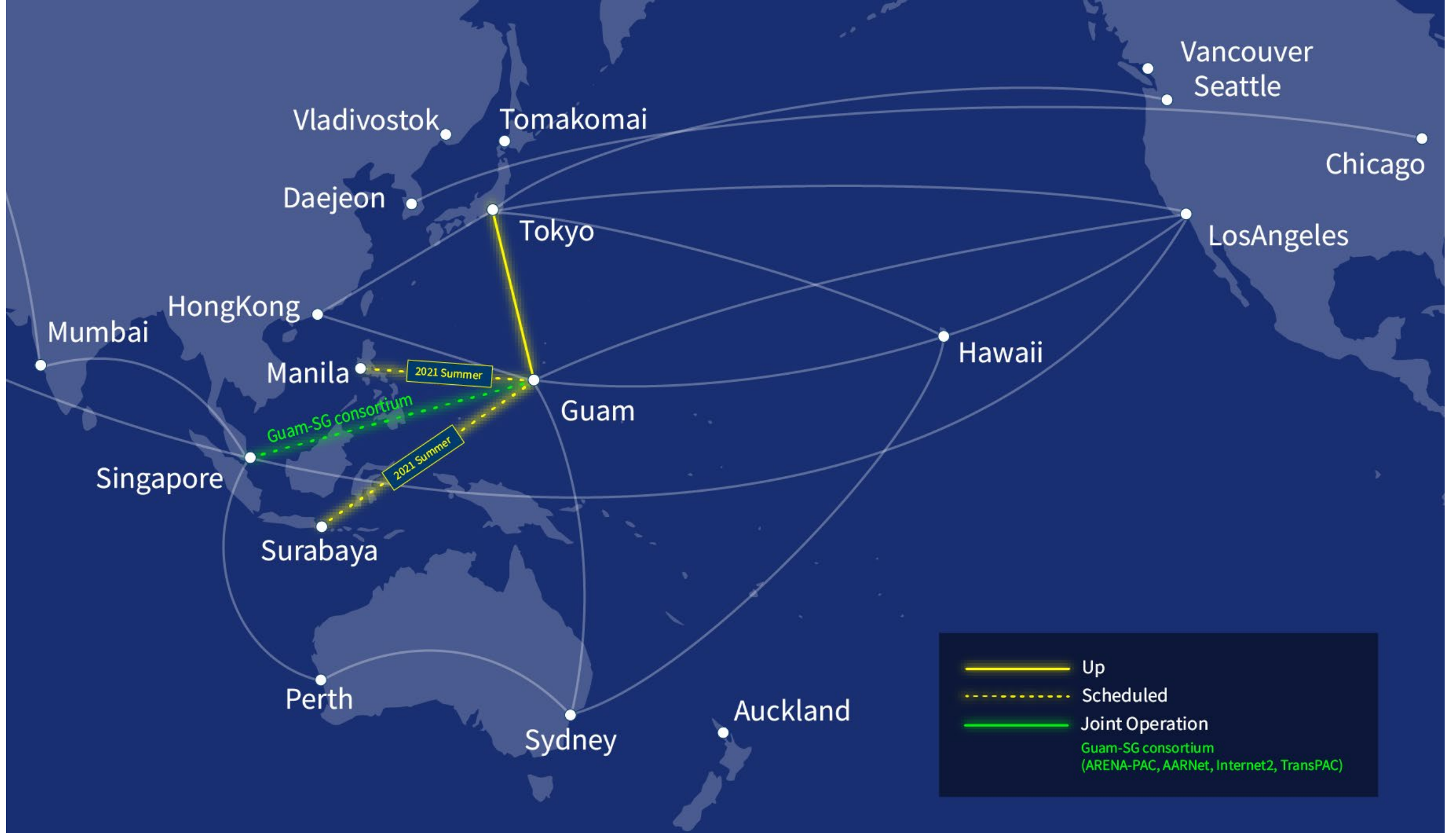
ARENA-PAC is a project of APIDT Infrastructure Pty Ltd, and operated by WIDE Project.

[VIEW MORE](#)

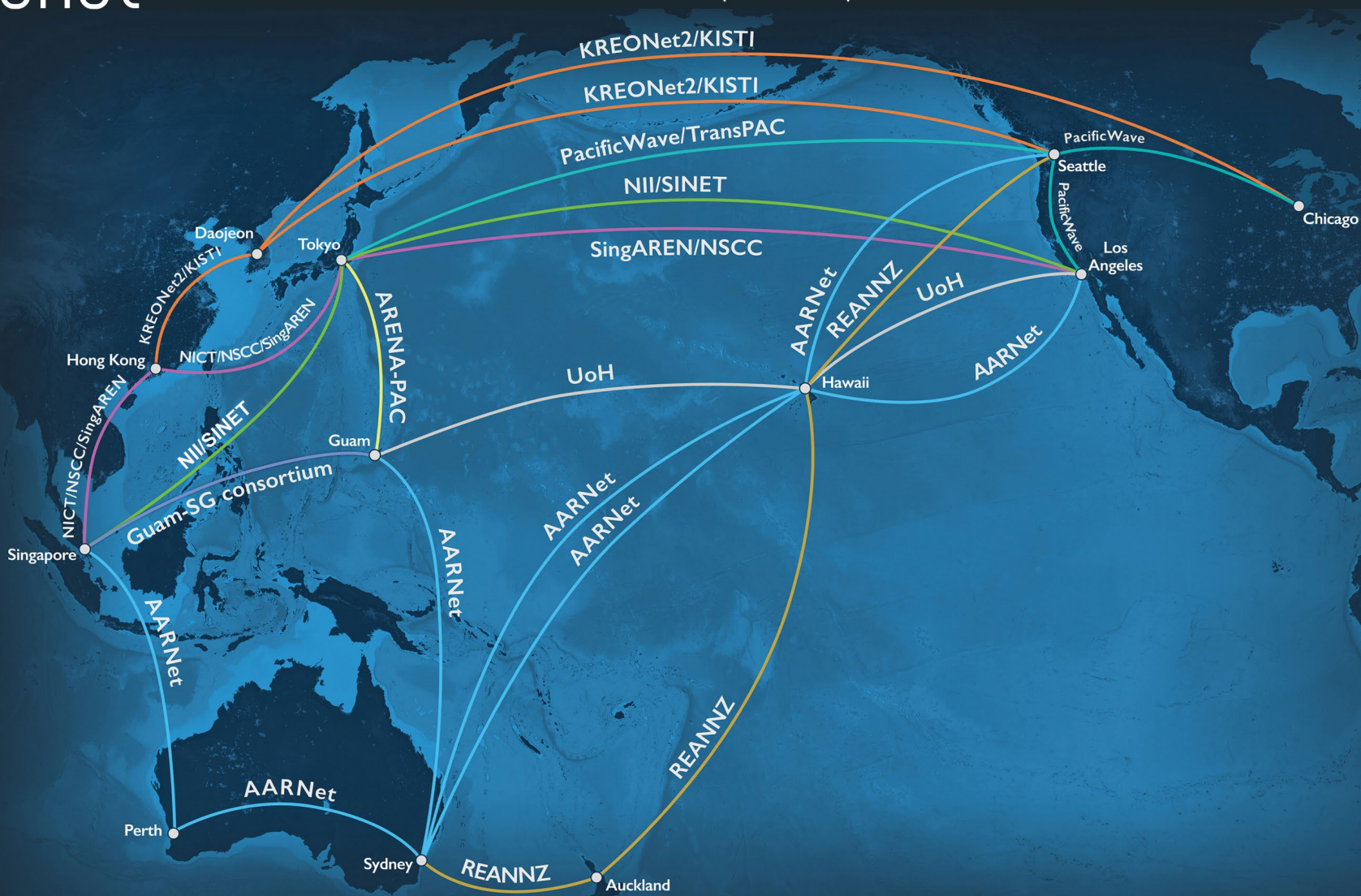
WIDE
PROJECT

ARENA-PAC

- Group of cable circuits at GOREX, GU
 - GU-JP 100G 15-year IRU
 - Next: GU-SG (Consortium led by Internet2)
 - Later: GU-PH, GU-ID
 - Also: Interest in capacity on new Arctic (EU-JP), and/or South Pacific (AU-CL) cables
- “SARENA-PAC”
 - Satellite segments of ARENA-PAC
 - First case may be in Timor L’este
- MoU with APNIC
 - For access to ARENA-PAC network for expanded regional presence
 - Ready for signing



aponet ASIA PACIFIC OCEANIA NETWORK (APOnet)



- NII/SINET
- AARNet
- KREONet2/KISTI
- ARENA-PAC
- UoH
- Guam-SG consortium (ARENA-PAC, AARNet, Internet2, TransPAC)
- PacificWave
- PacificWave/TransPAC
- SingAREN/NSCC
- NICT/NSCC/SingAREN
- REANNZ



APNIC Foundation

- APIDT received interim report to 30 June 2021
 - To be published on APIDT website shortly
- Refer to report coming up

Questions?

Agenda Item 18
APNIC Foundation update

Foundation Update

EC meeting (On-line)

8 Sept 2021

Duncan Macintosh

Foundation CEO

[Confidential information redacted]



[Confidential information redacted]



AFHK Board meeting

❖ Friday, 13 August:

- Two Board members attended (quorum):
- Danish Lakhani was Chair with Efie Sumarlin

❖ Agenda:

- Resignation of Michael Malone
- Approval of Affirmation of Commitment – the AoC with APNIC is now approved and signed

Strategic planning process underway

- ❖ Board meeting to approve new strategy planned for November
- ❖ Draft strategy focuses on:
 - Engagement (community)
 - Partnerships (fund raising)
 - Impact (projects)
 - Performance (operations)

Staffing and Administration

Staffing

Foundation staff

Six new Foundation positions (seconded from APNIC)

1. Grants management lead (4 days)
2. Monitoring and evaluation lead (3 days)
3. Administration officer (F/T)
4. Finance and Business manager (F/T)
5. Comms (3 days – July 1)
6. **HR (four days a week)**

Total Foundation positions: : **8**
(including CEO and Head of Programs)

Trust Interim Report

Executive Summary

- ❖ All five APNIC projects continued/commenced successfully (there has been substantial underspending by several projects mostly because of hiring challenges).
- ❖ Funded by grant overhead, new systems and processes and now in place at the Foundation:
 - NetSuite for finance;
 - Fluxx for grant management;
 - Confluence for project management;
 - SharePoint for document management.
- ❖ Three new Foundation staff positions:
 - Finance and business manager;
 - Monitoring and evaluation lead
 - Grants management lead
- ❖ New project staff are now in place at all five projects.

[Confidential information redacted]



[Confidential information redacted]



Projects under development

Trust projects for 2022



Project proposal development has begun



M-root; APNIC Academy; Training Delivery; Community Trainers; Curriculum for non-technical audiences will all be proposed again



Additional projects may include IPv6 in Pakistan and training in Timor Leste



Project funding to APNIC in 2022 will increase because existing projects are underway, and there should be additional new projects



Project implementation to start in January 2022

Project and funding development - ongoing

- U.S. State Department/USAID - Philippines
- Asia Development Bank (ADB) - Satellites
- Singapore and Cybergreen
- U.S. State Department - Pacific

Questions?