

APNIC EC Meeting Minutes

Online meeting

Monday, 21 February 2022, 12:10 – 17:35 (UTC +10)

Thursday, 3 March 2022, 16:55 – 17:30 (UTC +10)

Meeting started at 12:10 (UTC +10), Monday, 21 February 2022

Present

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

Connie Chan, Strategic Executive Assistant (minutes)
Craig Ng, General Counsel
Nathan Harvey, Finance Director
Jeremy Harrison, Senior Legal Counsel
Anton Strydom, Product Development Director
Che-Hoo Cheng, Infrastructure and Development Director
Duncan Macintosh, CEO, APNIC Foundation
Geoff Huston, Chief Scientist
Karla Skarda, Services Director
Louise Tromp, People and Productivity Director
Pablo Hinojosa, Strategic Engagement Director
Sanjaya, Director of Information Management
Tony Smith, Communications Director

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 EC due diligence review
11. Secretariat report
12. APNIC fee structure
13. Conference update
14. APNIC Foundation update
15. APIDT update
16. APNIC 53 EC election procedures

17. Risk register
 18. Any other business
 19. Closing the meeting
 20. Appointment of officeholders
 21. APNIC fee structure (continued)
 22. Next 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 12:10 (UTC +10) on Monday, 21 February 2022, and noted that a quorum was present.

The EC Chair has designated Vincent Achie Atienza as the Chair of this meeting (Meeting Chair) and handed over the chairing of the meeting to him.

2. Agenda bashing

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

3. Declaration of interests

The Meeting 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.

All 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 2022-01: The EC resolved to adopt the minutes of the EC meeting of 6, 7 and 9 December 2021.

5. Matters arising from the last meeting

The following matters from the previous meetings were completed:

Action item 2021-10: The Secretariat to update the risk register. (See agenda item 18).

[Confidential information redacted]

6. EC Chair update

The EC Chair provided the EC Chair update. He noted that there had not been much to report since the last meeting.

He noted the ongoing NRO EC discussions, and noted that the DG will be giving an update on the recent NRO retreat in Dubai later in this meeting.

He also asked the EC to consider what can be done to support those affected by the volcanic eruption and tsunami in Tonga.

He reminded the EC to complete the annual WHS compliance training.

He noted that the travel calendar has been updated. He suggested that the EC start planning for travels for the second half of 2022.

7. WH&S update

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

8. Financial reports

Irene Chan joined the meeting for this agenda item.

Nathan Harvey spoke to the annual financial report presentation for 2021 (attached).

The EC noted and discussed the annual financial report for the year ended 31 December 2021. The EC noted APNIC's equity position of AUD 38.8M, represents a 14% increase in total net assets through 2021. Total revenue was AUD 26.4M and total expenses were AUD 22.8M for the year. The operating results for the year was an operating surplus of AUD 3.6M which exceeded the budget by AUD 2.1M.

As of 31 December 2021, APNIC had a total of 8,768 Members serving 53 economies. There were 770 new and reactivated Members and 343 Members who had closed their accounts, representing a net increase of 427 Members during 2021.

Ernst & Young has issued an unmodified audit report on the financial report; however, the Auditor's Report has not yet been received. The EC would pass a circular resolution to accept the Auditor's Report once issued by the auditor.

Resolution 2022-02: The EC resolved to adopt the Special Purpose Financial Report for 2021 as representing the financial position of APNIC as at 31 December 2021, noting that APNIC is solvent and able to pay its debts as and when they fall due.

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

[Irene Chan left the meeting at 13:08 (UTC +10)]

9. HR report

Louise Tromp spoke to the HR report presentation.

Meeting adjourned at 13:26 (UTC +10), Monday, 21 February 2022

Meeting resumed at 13:50 (UTC +10), Monday, 21 February 2022

10. APNIC EC due diligence review

Jeremy Harrison spoke to the outcomes of a review into the APNIC EC governance procedures initiated in 2021, especially on the EC due diligence processes.

The EC discussed and acknowledged that the proposed recommendations were reasonable and should be implemented.

[Confidential information redacted]

11. Secretariat Report

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

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

The EC discussed the fee structure, membership growth and engagements in the NIR economies.

The EC considered the draft Annual General Meeting (AGM) agenda for APNIC 53 (attached).

Resolution 2022-03: The EC resolved to approve the draft agenda for the Annual General Meeting of 3 March 2022.

Motion proposed by Paul Wilson; seconded by Kenny Huang. Passed unanimously.

12. APNIC fee structure

Karla Skarda spoke to the APNIC fee structure presentation related to the HRM fee changes.

The EC discussed the HRM fee changes at length and asked the Secretariat to finalize the changes set out in the APNIC Member Fee Schedule and the APNIC Non-Member Fee Schedule for EC consideration. It was suggested that this decision could be deferred until after the EC election.

13. Conference update

Tony Smith presented the APNIC 54 presentation.

The EC discussed the matter at length and agreed to hold a face-to-face component of APNIC 54 in September 2022 in a location outside the usual conference location rotation.

Action item 2022-02: The Secretariat to consider possible locations for APNIC 54 for EC consideration.

14. APNIC Foundation update

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

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

[Confidential information redacted]

Resolution 2022-04: The EC resolved that Paul Wilson be appointed as APNIC's representative at the 2022 Annual General Meeting of each of APNIC Foundation Limited (Hong Kong) and APNIC Foundation Limited (Australia), with the power to make decisions and to vote on such matters as he considers appropriate or expedient at such meeting.

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

Resolution 2022-05: The EC resolved that each of: (1) Sylvia Efi Widyantari Sumarlin; (2) Tian Suning; (3) Sharad Kumar Sanghi; (4) Danish Ali Lakhani; and (5) Jun Murai be reappointed as a director of APNIC Foundation Limited (Hong Kong), subject to each of them first consenting and agreeing to be so appointed, and that Paul Wilson be authorized to sign any document or resolution on behalf of APNIC Pty Ltd to give effect to this resolution.

Motion proposed by Yoshinobu Matsuzaki; seconded by Sumon Ahmed Sabir. Passed unanimously.

Resolution 2022-06: The EC resolved that each of: (1) Sylvia Efi Widyantari Sumarlin and (2) Danish Ali Lakhani be reappointed as a director of APNIC Foundation Limited (Australia), subject to each of them first consenting and agreeing to be so appointed, and that Paul Wilson be authorized to sign any document or resolution on behalf of APNIC Pty Ltd to give effect to this resolution.

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

15. APIDT update

Richard Brown joined the meeting for this agenda item.

Richard Brown spoke to the APIDT update presentation (attached).

[Richard Brown left the meeting at 17:10 (UTC +10)]

16. APNIC 53 EC Election procedures

Craig Ng noted that the EC election procedures remain consistent with the previous elections (attached).

Resolution 2022-07: The EC resolved to appoint DY Kim as Election Chair, Connie Chan and Andre Gelderblom of the APNIC Secretariat as Election Officers, and endorse the APNIC 53 EC Election procedures.

Motion proposed by Kenny Huang; seconded by Paul Wilson. Passed without objection.

Vincent Achie Atienza, Kam Sze Yeung and Sumon Ahmed Sabir abstained from voting.

17. Risk register

Nathan Harvey spoke to the risk register presentation.

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

Nathan Harvey discussed the changes and developments to be made to the risk register in the coming year.

18. Any other business

The Meeting Chair called for any other business.

a. Briefing for APNIC 53 AGM

The EC asked the Secretariat to reschedule the briefing.

Action item 2022-04: The Secretariat to reschedule the AGM briefing.

b. Travel matrix 2022

The EC would discuss the travel matrix at the mid-year EC meeting.

19. Closing the meeting

Vincent Achie Atienza handed the Chair duties back to the EC Chair. From this point, Gaurab Raj Upadhaya chaired the meeting.

The EC Chair noted that the Director General's remuneration review was to be completed. He proposed a meeting be held before the AGM.

Action item 2022-05: The Secretariat to schedule a private meeting for the EC to complete the DG's remuneration review.

Meeting adjourned at 17:35 (UTC +10), Monday, 21 February 2022

Meeting resumed at 16:55 (UTC +10), Thursday, 3 March 2022

20. Appointment of officeholders

The EC held officer elections, to take office immediately following the AGM.

In accordance with the APNIC By-laws, the Chair of the EC serves as Chair until his term as a member of the EC has expired. Gaurab Raj Upadhaya assumed the role of Chair of the Meeting. The presence of quorum was noted.

Nominations were called for the position of Treasurer. Yoshinobu Matsuzaki nominated Kenny Huang. There were no other nominations. Kenny Huang was elected unopposed as the Treasurer of the EC.

Nominations were called for the position of Secretary. Gaurab Raj Upadhaya nominated Vincent Achie Atienza. There were no other nominations. Vincent Achie Atienza was elected unopposed as the Secretary of the EC.

21. APNIC fee structure (continued)

There was a recap of the discussion from the previous meeting regarding the historical fee changes. There was significant discussion regarding the historical fee changes. The EC agreed to defer the discussion on this issue for the NIRs until the next meeting.

Action 2022-06: The Secretariat to circulate the revised fee schedules to the EC for approval.

22. Next meeting

The next EC meeting is tentatively scheduled for end of May 2022.

Meeting closed at 17:30 (UTC +10), Thursday, 3 March 2022

Attachments:

- A. Register of interest**
- B. [Confidential information redacted]**
- C. 2021 special purpose financial report**
- D. 2021 annual financial report and presentation**
- E. January 2022 financial report**
- F. December 2021 and January 2022 investment reports and commentary**
- G. [Confidential information redacted]**
- H. [Confidential information redacted]**
- I. [Confidential information redacted]**
- J. Secretariat report and presentation 2021**
- K. APNIC Annual Report 2021**
- L. APNIC Activity Plan 2022**
- M. APNIC 53 AGM draft agenda**
- N. [Confidential information redacted]**
- O. [Confidential information redacted]**
- P. [Confidential information redacted]**
- Q. APNIC Foundation update presentation**
- R. APIDT update presentation**
- S. APNIC EC 53 election procedures**
- T. [Confidential information redacted]**

Agenda Item 3

Declaration of Interests

APNIC EC Register of Interests

Declaration of interests of EC members

This register records the interests of EC members, which may conflict with the EC members' duties to APNIC. This register is accurate as at **20 February 2022**.

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)
- Member of the SGNOG Organising Committee

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
- ISIF Selection Committee Member

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

- CTO, Fiber@Home Limited
- Technical Advisor, Fiber@Global Limited
- Advisor, Felicity IDC 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

APNIC Pty Ltd
ABN 42 081 528 010
Special purpose financial report
for the year ended 31 December 2021

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Director's report

Your director submits his report on APNIC Pty Ltd (the "Company") for the year ended 31 December 2021.

Director

The sole director of the Company in office during the financial year and until the date of this report is Mr Paul Byron Wilson. The director has been in office for this entire period.

Dividends

The Company does not pay or declare dividends due to its non-profit status as determined by its constituent documents.

Principal activity

The principal activity during the year of the Company was to act as a not-for-profit internet registry organisation for the Asia-Pacific region.

There was no significant change in the nature of the activity during the year.

Operating results for the year

The net profit after tax of the Company for year ended 31 December 2021 was \$4,668,679 (2020: \$3,452,180). Included in the result is a \$1,061,285 (2020: \$650,379) gain on financial assets held at fair value through profit or loss.

The COVID-19 pandemic has continued to develop in 2021. The outbreak and the response of governments in dealing with the pandemic is interfering with general activity levels within the community and the economy. The Company's ability to carry out activities within the 56 economies under its responsibility including training and infrastructure delivery have been significantly impacted during the year as a result of travel restrictions and border closures due to the COVID-19 pandemic.

Significant changes in the state of affairs

There were no significant changes in the state of affairs of the Company during the year.

Significant events after the reporting period

There were no significant events occurring after the reporting period which may affect either the Company's operations or results of those operations or the Company's state of affairs.

Likely developments and expected results

Likely developments in the operations of the Company and the expected results of those operations in future financial years have not been included in this report as the inclusion of such information is likely to result in unreasonable prejudice to the Company.

Environmental regulation and performance

The Company is not subject to any particular or significant environmental regulation under laws of the Commonwealth or of a State or Territory.

Share options

No option to acquire shares in the Company has been granted to any person. No shares have been issued during the financial year or since the end thereof by virtue of the exercise of any options. There are no unissued shares under option at the date of this report.

Indemnification and insurance of director and officer

During the financial year, APNIC Pty Ltd paid a premium of \$23,106 (2020: \$22,460) to insure the director, officeholders (including executive council) and staff of the Company.

Director's report (continued)

Indemnification and insurance of director and officer (continued)

The liabilities insured are legal costs that may be incurred in defending civil or criminal proceedings that may be brought against the officers in their capacity as officers of entities in the Company, and any other payments arising from liabilities incurred by the officers in connection with such proceedings. This does not include such liabilities that arise from conduct involving a wilful breach of duty by the officers or the improper use by the officers of their position or of information to gain advantage for themselves or someone else or to cause detriment to the Company. It is not possible to apportion the premium between amounts relating to the insurance against legal costs and those relating to other liabilities.

Indemnification of auditors

To the extent permitted by law, the Company has agreed to indemnify its auditors, Ernst & Young (Australia), as part of the terms of its audit engagement agreement against claims by third parties arising from the audit (for an unspecified amount). No payment has been made to indemnify Ernst & Young (Australia) during or since the financial year.

Proceedings on behalf of the Company

No person has applied for leave of Court to bring proceedings on behalf of the Company or intervene in any proceedings to which the Company is a party for the purpose of taking responsibility on behalf of the Company for all or any part of those. The Company was not a party to any such proceedings during the year.

Auditor's independence declaration

The director has received a declaration from the auditor of APNIC Pty Ltd. This has been included on page 3.

Signed in accordance with a resolution of the director.

Paul Byron Wilson
Director
Brisbane
21 February 2022

Auditor's independence declaration

{The Auditor's declaration will be provided by your Auditor.}

Statement of profit or loss and other comprehensive income

For the year ended 31 December 2021

	Notes	2021 \$	2020 \$
Revenue from contracts with customers	3	25,079,028	23,608,877
Other income	4.1	1,304,779	1,388,143
Finance income	4.2	37,296	70,754
Communication and meeting expenses		(655,157)	(741,735)
Computer expenses		(1,514,824)	(1,216,809)
Contribution to APNIC Foundation		-	(760,890)
Contributions to ICANN		(197,515)	(223,432)
Depreciation expense		(652,409)	(707,658)
Donations and sponsorships		(238,501)	(325,889)
Employee benefits expense		(15,857,644)	(14,289,286)
Insurance expenses		(224,060)	(229,242)
Professional fees		(2,212,253)	(1,932,613)
Travel expenses		(65,455)	(331,259)
Occupancy costs		(384,567)	(334,244)
Other expenses		(817,011)	(761,661)
Profit before income tax and fair value gain on financial assets		3,601,707	3,213,056
Gain on financial assets held at fair value through profit or loss		1,061,285	650,379
Profit before income tax		4,662,992	3,863,435
Income tax benefit/(expense)		5,687	(411,255)
Profit for the year		4,668,679	3,452,180
Other comprehensive income		-	-
Total comprehensive income for the year		4,668,679	3,452,180

The above statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes.

Statement of financial position

As at 31 December 2021

		<u>2021</u>	<u>2020</u>
		\$	\$
	Notes		
Assets			
Current assets			
Cash and cash equivalents	5	7,065,707	7,081,222
Trade and other receivables	6	5,340,114	5,356,419
Prepayments		973,041	780,654
Total current assets		<u>13,378,862</u>	<u>13,218,295</u>
Non-current assets			
Financial assets	7	36,728,127	31,036,408
Property, plant and equipment	8	6,726,988	6,948,694
Total non-current assets		<u>43,455,115</u>	<u>37,985,102</u>
Total assets		<u>56,833,977</u>	<u>51,203,397</u>
Liabilities			
Current liabilities			
Trade and other payables	10	1,535,635	1,369,013
Employee benefit liabilities	11	2,700,030	2,233,396
Contract liabilities	12	12,243,100	11,885,376
Total current liabilities		<u>16,478,765</u>	<u>15,487,785</u>
Non-current liabilities			
Employee benefit liabilities	11	383,353	406,744
Net deferred tax liabilities	9	1,126,296	1,131,984
Total non-current liabilities		<u>1,509,649</u>	<u>1,538,728</u>
Total liabilities		<u>17,988,414</u>	<u>17,026,513</u>
Net assets		<u>38,845,563</u>	<u>34,176,884</u>
Equity			
Issued capital	13	1	1
Retained earnings		38,845,562	34,176,883
Total equity		<u>38,845,563</u>	<u>34,176,884</u>

The above statement of financial position should be read in conjunction with the accompanying notes.

Statement of changes in equity

For the year ended 31 December 2021

	Issued capital (Note 13)	Retained earnings	Total equity
	\$	\$	\$
At 1 January 2021	1	34,176,883	34,176,884
Profit for the period	-	4,668,679	4,668,679
Other comprehensive income	-	-	-
Total comprehensive income for the year	-	4,668,679	4,668,679
At 31 December 2021	1	38,845,562	38,845,563
At 1 January 2020	1	30,724,703	30,724,704
Profit for the year	-	3,452,180	3,452,180
Other comprehensive income	-	-	-
Total comprehensive income for the year	-	3,452,180	3,452,180
At 31 December 2020	1	34,176,883	34,176,884

The above statement of changes in equity should be read in conjunction with the accompanying notes.

Statement of cash flows

For the year ended 31 December 2021

	2021	2020
Notes	\$	\$
Operating activities		
Receipts from customers	25,549,754	24,574,280
Payments to suppliers and employees	(21,374,400)	(19,250,306)
Interest received	46,080	70,754
Net cash flows from operating activities	5.1 <u>4,221,434</u>	<u>5,394,728</u>
Investing activities		
Proceeds from sale of property, plant and equipment	8,264	4,811
Purchase of property, plant and equipment	(442,940)	(517,273)
Investment distribution income	828,161	853,836
Purchase of financial assets	(4,630,434)	(2,683,188)
Net cash flows used in investing activities	(4,236,949)	(2,341,814)
Financing activities		
Net cash flows from/(used in) financing activities	<u>-</u>	<u>-</u>
Net (decrease)/increase in cash and cash equivalents	(15,515)	3,052,914
Cash and cash equivalents at 1 January	7,081,222	4,028,308
Cash and cash equivalents at 31 December	5 <u>7,065,707</u>	<u>7,081,222</u>

The above statement of cash flows should be read in conjunction with the accompanying notes.

Notes to the financial statements

For the year ended 31 December 2021

1. Corporate information

The financial statements of APNIC Pty Ltd (the "Company") for the year ended 31 December 2021 were authorised for issue in accordance with a resolution of the director on 21 February 2022.

APNIC Pty Ltd is a not-for-profit (NFP) company limited by shares, incorporated and domiciled in Australia.

The registered office and principal place of business of the Company is 6 Cordelia Street, South Brisbane, Queensland, 4101.

Further information on the nature of the operations and principal activity of the Company are described in the director's report.

2. Significant accounting policies

2.1 Basis of preparation

In the director's opinion, the Company is not a reporting entity because there are no users dependent on general purpose financial reports.

These are special purpose financial statements that have been prepared at the request of the Executive Committee for the interest of the APNIC members and for the purpose of complying with the *Corporations Act 2001* requirements to prepare and distribute financial statements to the members and must not be used for any other purpose.

The financial statements have been prepared in accordance with *Corporations Act 2001* and with the recognition and measurement principles of all applicable Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board. It contains the disclosures that are mandatory under the following Accounting Standards:

AASB 101: *Presentation of Financial statements*

AASB 107: *Cash Flow Statements*

AASB 108: *Accounting Policies, Changes in Accounting Estimates and Errors*

AASB 1054: *Australian Additional Disclosures*

Accounting Standard AASB 10 *Consolidated Financial Statements* has not been adopted in the preparation of these special purpose financial statements.

These financial statements have been prepared under the historical cost convention, except for financial assets and liabilities measured at fair value.

2.2 Changes in accounting policies, disclosure, standards and interpretations

New and amended standards and interpretations

The new and amended Australian Accounting Standards and Interpretations that apply for the first time in 2021 do not materially impact the financial statements of the Company.

Accounting Standards and Interpretations issued but not yet effective

Australian Accounting Standards and Interpretations have recently been issued or amended but are not yet effective and have not been adopted by the Company for the annual reporting year ended 31 December 2021. The Company intends to adopt the new or amended standards or interpretations, when they become effective.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies

a) Going concern

The financial statements have been prepared on a going concern basis, which assumes continuity of normal business activities and the realisation of assets and the settlements of liabilities in the ordinary course of business. The financial statements show the Company has negative working capital of \$3,099,903 (2020: \$2,269,490). Whilst the Company is in a negative working capital position, there are non-current financial assets of \$36,728,127 which can be realised on a short-term basis should the Company require funds to meet their current obligations.

The cash flow forecast prepared for the assessment of going concern, factors in certain estimates and assumptions which would be impacted by developments related to COVID-19 and the impact on the performance of financial assets and customer demand. The financial forecasts in response to COVID-19 have been adjusted, to account for the current and possible future impacts to revenue, expenses and cash flows.

For the year ended 31 December 2021, there was a cash inflow from operating activities amounting to \$4,221,434 (2020: \$5,394,728). As at this date, the Company had cash and cash equivalents amounting to \$7,065,707 (2020: \$7,081,222) and total net assets of \$38,845,563 (2020: \$34,176,884). With the strong cash and financial position, the director believes it remains appropriate to prepare the financial statements on a going concern basis.

b) Current versus non-current classification

The Company presents assets and liabilities in the statement of financial position based on current/non-current classification. An asset is current when it is:

- Expected to be realised or intended to be sold or consumed in the normal operating cycle;
- Held primarily for the purpose of trading;
- Expected to be realised within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in the normal operating cycle;
- It is held primarily for the purpose of trading;
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

The Company classifies all other liabilities as non-current.

Deferred tax assets and deferred tax liabilities are classified as non-current assets and non-current liabilities respectively.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

c) Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The financial statements are presented in Australian dollars (\$), which is the Company's functional and presentation currency.

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

d) Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at banks and on hand.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash, as defined above.

e) Trade and other receivables

Trade receivables are amounts due from customers for services performed in the ordinary course of business. They are generally due for settlement within 30 days and therefore are all classified as current. Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Company holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest rate (EIR) method, less loss allowance.

Collectability of trade receivables is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off by reducing the carrying amount directly. An allowance account (future expected credit losses) is used when there is objective evidence that the Company will not be able to collect all amounts due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The amount of the impairment allowance is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original EIR. Cash flows relating to short-term receivables are not discounted if the effect of discounting is immaterial.

The amount of the impairment loss is recognised in profit or loss within other expenses. When a trade receivable for which an impairment allowance had been recognised becomes uncollectible in a subsequent period, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against other expenses in profit or loss.

f) Investments and other financial assets

(i) Classification

The Company classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through other comprehensive income (OCI) or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows. For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. It has been elected that changes in fair value be designated through profit and loss.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

f) Investments and other financial assets (continued)

(ii) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Company commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

(iii) Measurement

Debt instruments

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Company classifies its debt instruments:

- **Amortised cost:** Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the EIR method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in other gains/(losses) together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the statement of profit or loss and other comprehensive income.
- **Fair value through other comprehensive income (FVOCI):** Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in other gains/(losses). Interest income from these financial assets is included in finance income using the EIR method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss and other comprehensive income.
- **Fair value through profit or loss (FVPL):** Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within other gains/(losses) in the period in which it arises.

Equity instruments

The Company subsequently measures all equity investments at fair value. Where the Company's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment.

Dividends from such investments continue to be recognised in profit or loss as other income when the Company's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in other gains/(losses) in the statement of profit or loss and other comprehensive income as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

(iv) Impairment

From 1 January 2019, the Company assesses on a forward-looking basis, the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Company applies the simplified approach permitted by AASB 9 *Financial Instruments*, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

f) Investments and other financial assets (continued)

Impairment losses on equity instruments that were recognised in profit or loss were not reversed through profit or loss in a subsequent year.

Subsequent measurement

The fair values of quoted investments are based on current bid prices. If the market for a financial asset is not active (and for unlisted securities), the Company establishes fair value by obtaining independent valuation statements or by using valuation techniques. These include the use of recent arm's length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, and option pricing models making maximum use of market inputs and relying as little as possible on entity specific inputs.

g) Contract liabilities

A contract liability is recognised if a payment is received or a payment is due (whichever is earlier) from a customer before the Company transfers the related goods or services. Contract liabilities are recognised as revenue when the Company performs under the contract (i.e., transfers control of the related goods or services to the customer).

h) Property, plant and equipment

Property, plant and equipment is stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting year in which they are incurred.

Depreciation on assets acquired are calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

Property related assets	2.5%-50%
Computer equipment	5%-50%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting year. Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss.

i) Impairment of non-financial assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU)'s fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

i) Impairment of non-financial assets (continued)

The Company bases its impairment calculation on most recent budgets and forecast calculations, which are prepared separately for each of the Company's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses are recognised in the statement of profit or loss and other comprehensive income as an expense.

An assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Company estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the statement of profit or loss and other comprehensive income.

j) Employee benefit liabilities

Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits, bonus, time-in-lieu and annual leave expected to be settled within 12 months after the end of the period in which the employees render the related service are recognised in respect of employee's services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liability for annual leave is recognised in the provision for employee benefits. All other short-term employee benefit obligations are presented as payables.

Other long-term employee benefit obligations

The Company also has liabilities for long service leave and annual leave that are not expected to be settled wholly within 12 months after the end of the year in which the employees render the related service. These obligations are therefore measured as the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting year using the projected unit credit method.

Consideration is given to expected future wage and salary levels, experience of employee departures and years of service.

Expected future payments are discounted using market yields at the end of the reporting year of high-quality corporate bonds with terms and currencies that match, as closely as possible, the estimated future cash outflows. Remeasurements as a result of experience adjustments and changes in actuarial assumptions are recognised in profit or loss.

The obligations are presented as current liabilities in the statement of financial position if the entity does not have an unconditional right to defer settlement for at least twelve months after the reporting date, regardless of when the actual settlement is expected to occur.

k) Issued capital

Ordinary shares are classified as equity.

l) Revenue from contracts with customers

The Company has applied revenue recognition methodologies provided both under AASB 1058 *Income of not-for-profit entities* as well as AASB 15 for the purpose of recognising revenue.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

l) Revenue from contracts with customers (continued)

Revenue recognition under AASB 15

Under AASB 15, the Company recognises revenue when the control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company has generally concluded that it is the principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer.

Revenue recognition and application of AASB 1058

AASB 1058 provides that an entity receiving certain 'volunteer services' or entering to 'certain transactions' and where the consideration to acquire an asset is significantly less than the fair value of the asset. In the latter case, the entity will recognise and measure the asset at fair value in accordance with the applicable Australian Accounting Standard (e.g. AASB 116 *Property, Plant and Equipment*).

AASB 1058 does not apply when a transaction completely falls under the scope of AASB 15 as a contract with a customer. This is when the transaction has the all the following characteristics:

- The transaction is enforceable and has sufficiently specific obligations;
- The goods or services are not retained by the entity for its own use; and
- The transaction is neither a donation transaction nor a volunteer service.

Accordingly, AASB 1058 applies to entity's transactions that are not ordinarily contracts at fair value with customers. The timing of income recognition depends on whether such a transaction gives rise to a liability or other performance obligation (a promise to transfer a good or service), or a contribution by owners, related to an asset (such as cash or another asset) received by an entity.

The Company has confirmed that there are no transactions significantly below the fair value, therefore AASB 1058 has no application on the entity, and therefore revenue is recognised for the major business activities using the methods outlined under AASB 15 as provided below:

(i) Member fees

Member fees are recognised over time where the performance obligation is satisfied over the period of membership. Member fees received in advance of the service being provided are classified as unearned income. Transfer fees, reactivation fees and application fees are recognised at a point in time where the performance obligation is satisfied when the service is performed.

Under AASB 1058, if the above fees include a donation element, the same is treated as 'donation' transactions and the value of the same is required to be recognised in the financial statements. A donation component, and thereby a donation transaction, exists if:

- The consideration to acquire an asset is significantly less than its fair value; and
- The intent is to primarily to enable the NFP entity to further its objectives

At present, there are no significant 'donation' components included within member fees. Therefore, there are no donation transactions to be recognised in the financial statements.

(ii) Volunteer services

Volunteer services received by the Company are recognised by principles enunciated under AASB 1058 to ascertain donation element contained in them and recognise the equivalent fair market value in the books of accounts.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

l) Revenue from contracts with customers (continued)

Under AASB 1058 a NFP entity may, as an accounting policy choice to recognise volunteer services, or a class of volunteer services, if the fair value of those services can be measured reliably, whether the services would have been purchased if they had not been donated. The value of such volunteer services shall be measured at fair value. On the initial recognition of volunteer services as an asset or an expense, an entity shall recognise any related amounts as well. The entity shall recognise the excess of the fair value of the volunteer services over the recognised related amounts as income immediately in profit or loss account.

The Company has represented to us that it cannot reliably measure the value of volunteer services received by it given the nature of its business, sparsity of volunteering received apart from inability to obtain comparative market estimates. Therefore, the Company has not recognised the value of volunteering services in its financial statements in accordance with the exemption provided by the AASB 1058.

Under AASB 1058, if the volunteer services include a donation element, the same is treated as 'donation' transactions and the value of the same is required to be recognised in the financial statements. A donation component, and thereby a donation transaction, exists if:

- The consideration to acquire an asset is significantly less than its fair value; and
- The intent is to primarily to enable the NFP entity to further its objectives

At present, there are no significant 'donation' components included in the volunteer services. Therefore, there are no donation transactions to be recognised in the financial statements.

(iii) Grants

Grants relating to costs are deferred and recognised in profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Grants are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Company will comply with all attached conditions.

(iv) Dividends

Dividends received from investments in equity instruments are recognised in profit or loss, as other income, when the Company's right to receive payment is established.

m) Taxes

The income tax expense or revenue for the period is the tax payable on the current period's taxable income based on the applicable income tax rate adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the country where the Company operates and generates taxable income.

Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects either accounting nor taxable profit or loss.

Notes to the financial statements (continued)

For the year ended 31 December 2021

2. Significant accounting policies (continued)

2.3 Summary of significant accounting policies (continued)

m) Taxes (continued)

Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled. Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

The Company has self-assessed that the "principle of mutuality" applies to its affairs and has calculated its income tax using this principle for the year ended 31 December 2021.

n) Goods and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included with other receivables or payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to the taxation authority, are presented as operating cash flows.

o) Comparative amounts

Where necessary, comparatives have been reclassified and repositioned for consistency with current period disclosures.

p) Significant accounting judgements, estimates and assumptions

The director evaluates estimates and judgements incorporated into the financial report based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained both externally and within the Company.

There were no critical accounting judgements, estimates or assumptions exercised by management.

Notes to the financial statements (continued)

For the year ended 31 December 2021

3. Revenue from contracts with customers

3.1 Disaggregated revenue information

Set out below is the disaggregation of the Company's revenue from contracts with customers:

	<u>2021</u>	<u>2020</u>
	\$	\$
Type of service		
Membership fees	24,252,513	22,766,728
Non-membership fees	257,209	260,483
Sign-up fees	302,750	347,250
Transfer fees	244,156	216,016
Member reactivation fees	20,000	16,000
Non-member reactivation fees	2,400	2,400
Total revenue from contracts with customers	<u>25,079,028</u>	<u>23,608,877</u>
Timing of revenue recognition		
Services transferred over time	24,509,722	23,027,211
Services transferred at a point in time	569,306	581,666
Total revenue from contracts with customers	<u>25,079,028</u>	<u>23,608,877</u>

4. Other income

4.1 Other income

	<u>2021</u>	<u>2020</u>
	\$	\$
Investment distribution income	828,161	853,836
Sundry income	444,338	534,307
Net foreign exchange gain	32,280	-
	<u>1,304,779</u>	<u>1,388,143</u>

4.2 Finance income

	<u>2021</u>	<u>2020</u>
	\$	\$
Interest income	<u>37,296</u>	<u>70,754</u>

5. Cash and cash equivalents

	<u>2021</u>	<u>2020</u>
	\$	\$
Petty cash	400	400
Cash at bank	7,065,307	7,080,822
	<u>7,065,707</u>	<u>7,081,222</u>

Notes to the financial statements (continued)

For the year ended 31 December 2021

5. Cash and cash equivalents (continued)

5.1 Cash flow reconciliation

	<u>2021</u>	<u>2020</u>
	\$	\$
Cash flow reconciliation		
Reconciliation of net profit after tax to net cash flows from operations:		
Profit for the year	4,668,679	3,452,180
Adjustments for:		
Depreciation expense	652,409	707,658
Investment distribution income	(828,161)	(853,836)
Loss on disposal of property, plant and equipment	3,973	5,533
Gain on financial assets held at fair value through profit or loss through profit or loss	(1,061,285)	(650,379)
Expected credit losses	13,413	-
Net foreign exchange gain	(32,280)	-
Changes in assets and liabilities:		
Decrease in trade and other receivables	35,172	287,188
(Increase)/decrease in prepayments	(192,387)	55,905
(Decrease)/increase in net deferred tax liabilities	(5,688)	411,255
Increase in trade and other payables	166,622	201,838
Increase in employee benefit liabilities	443,243	462,091
Increase in contract liabilities	357,724	1,315,295
Net cash flows from operating activities	<u>4,221,434</u>	<u>5,394,728</u>

6. Trade and other receivables

	<u>2021</u>	<u>2020</u>
	\$	\$
Trade receivables	1,137,005	841,633
Allowance for expected credit losses	(80,762)	(67,349)
	<u>1,056,243</u>	<u>774,284</u>
GST receivable	-	13,334
Interest receivable	4,170	12,954
Short term deposits	4,150,000	4,150,000
Other receivables	129,701	405,847
	<u>5,340,114</u>	<u>5,356,419</u>

7. Financial assets

	<u>2021</u>	<u>2020</u>
	\$	\$
Non current		
Units in managed investment funds – at fair value	<u>36,728,127</u>	<u>31,036,408</u>

Notes to the financial statements (continued)

For the year ended 31 December 2021

8. Property, plant and equipment

	2021	2020
	\$	\$
<i>Plant and equipment</i>		
At cost	7,470,264	7,470,264
Accumulated depreciation	(2,012,821)	(1,872,378)
Net carrying amount	<u>5,457,443</u>	<u>5,597,886</u>
 <i>Furniture and fittings</i>		
At cost	595,396	595,210
Accumulated depreciation	(293,471)	(250,941)
Net carrying amount	<u>301,925</u>	<u>344,269</u>
 <i>Computer equipment</i>		
At cost	3,686,572	3,705,386
Accumulated depreciation	(2,718,952)	(2,698,847)
Net carrying amount	<u>967,620</u>	<u>1,006,539</u>
 <i>Total property, plant and equipment</i>		
At cost	11,867,232	11,885,860
Accumulated depreciation	(5,140,244)	(4,937,166)
Net carrying amount	<u>6,726,988</u>	<u>6,948,694</u>

9. Net deferred tax liabilities

	2021	2020
	\$	\$
Total deferred tax assets	321,557	106,877
Total deferred tax liabilities	(1,447,853)	(1,238,861)
Net deferred tax liabilities	<u>(1,126,296)</u>	<u>(1,131,984)</u>

10. Trade and other payables

	2021	2020
	\$	\$
Current		
Trade payables	462,788	530,395
Accrued expenses	1,018,949	838,618
GST payable	53,898	-
	<u>1,535,635</u>	<u>1,369,013</u>

Notes to the financial statements (continued)

For the year ended 31 December 2021

11. Employee benefit liabilities

	<u>2021</u>	<u>2020</u>
	\$	\$
Current		
Annual leave	1,391,128	1,159,809
Long service leave	1,281,180	1,056,440
Time in lieu leave	27,722	17,147
	<u>2,700,030</u>	<u>2,233,396</u>
Non current		
Long service leave	<u>383,353</u>	<u>406,744</u>

12. Contract liabilities

	<u>2021</u>	<u>2020</u>
	\$	\$
Current		
Unearned member and non-member fees	12,193,930	11,879,564
Unearned sponsorship income	2,750	5,812
Unearned research service income	46,420	-
	<u>12,243,100</u>	<u>11,885,376</u>

13. Issued capital

	<u>2021</u>	<u>2020</u>
	\$	\$
1 fully paid ordinary share (2020: 1)	<u>1</u>	<u>1</u>

Ordinary shares entitle the holder to participate in dividends and the proceeds on winding up of the Company in proportion to the number of and amounts paid on the shares held.

On a show of hands every holder of ordinary shares present at a meeting in person or by proxy, is entitled to one vote, and upon a poll each share is entitled to one vote.

Ordinary shares have no par value and the Company does not have a limited amount of authorised capital.

There were no movements in issued capital during the year (2020: none).

14. Commitments and contingencies

Commitments

The Company had no capital commitments at 31 December 2021 (2020: \$nil).

Contingencies

The Company had no contingent assets or contingent liabilities at 31 December 2021 (2020: \$nil).

Notes to the financial statements (continued)

For the year ended 31 December 2021

15. Auditor's remuneration

The auditor of APNIC Pty Ltd is Ernst & Young (Australia) (2020: Deloitte Touche Tohmatsu).

	<u>2021</u>	<u>2020</u>
	\$	\$
<i>Amounts received or due and receivable by Ernst & Young (Australia) for:</i>		
An audit or review of the financial report of the entity	37,000	31,000
Other services	5,000	4,000
	<u><u>42,000</u></u>	<u><u>35,000</u></u>

16. Events after the reporting period

There were no significant events occurring after the reporting period which may affect either the Company's operations or results of those operations or the Company's state of affairs.

Director's declaration

In accordance with a resolution of the director of APNIC Pty Ltd, I state that:

In the opinion of the director:

- (a) the Company is not a reporting entity as defined in the Australian Accounting Standards;
- (b) the financial statements and notes of the Company are in accordance with the *Corporations Act 2001*, including:
 - (i) giving a true and fair view of the the Company's financial position as at 31 December 2021 and its performance for the year ended on that date; and
 - (ii) complying with Australian Accounting Standards to the extent described in Note 2.1 to the financial statements and complying with the *Corporations Regulations 2001*;
- (c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Paul Byron Wilson
Director
Brisbane
21 February 2022

Independent auditor's report

{The Auditor's report will be provided by your Auditor.}

2021 Financial Report

All dollar values are denoted in Australian dollars (unless otherwise stated)

Highlights

- Operating surplus of \$3.6m exceeded budget by \$2.1m ✓
- Revenue \$550k below budget (2% of budget)
- Expenses \$2.7m below budget ✓
- Equity position increased by \$4.7m compared to FY2020 ✓
- Fair value surplus on financial assets \$1.1m ✓
- Financial stability measure at 18.28* Months of Operating Expenses ✓
- Successful audit outcome ✓

**Calculation is based on the average monthly operating expenses of 2021 approved budget as it better reflects APNIC operating cost base in a COVID-free course of business*

Operating Surplus

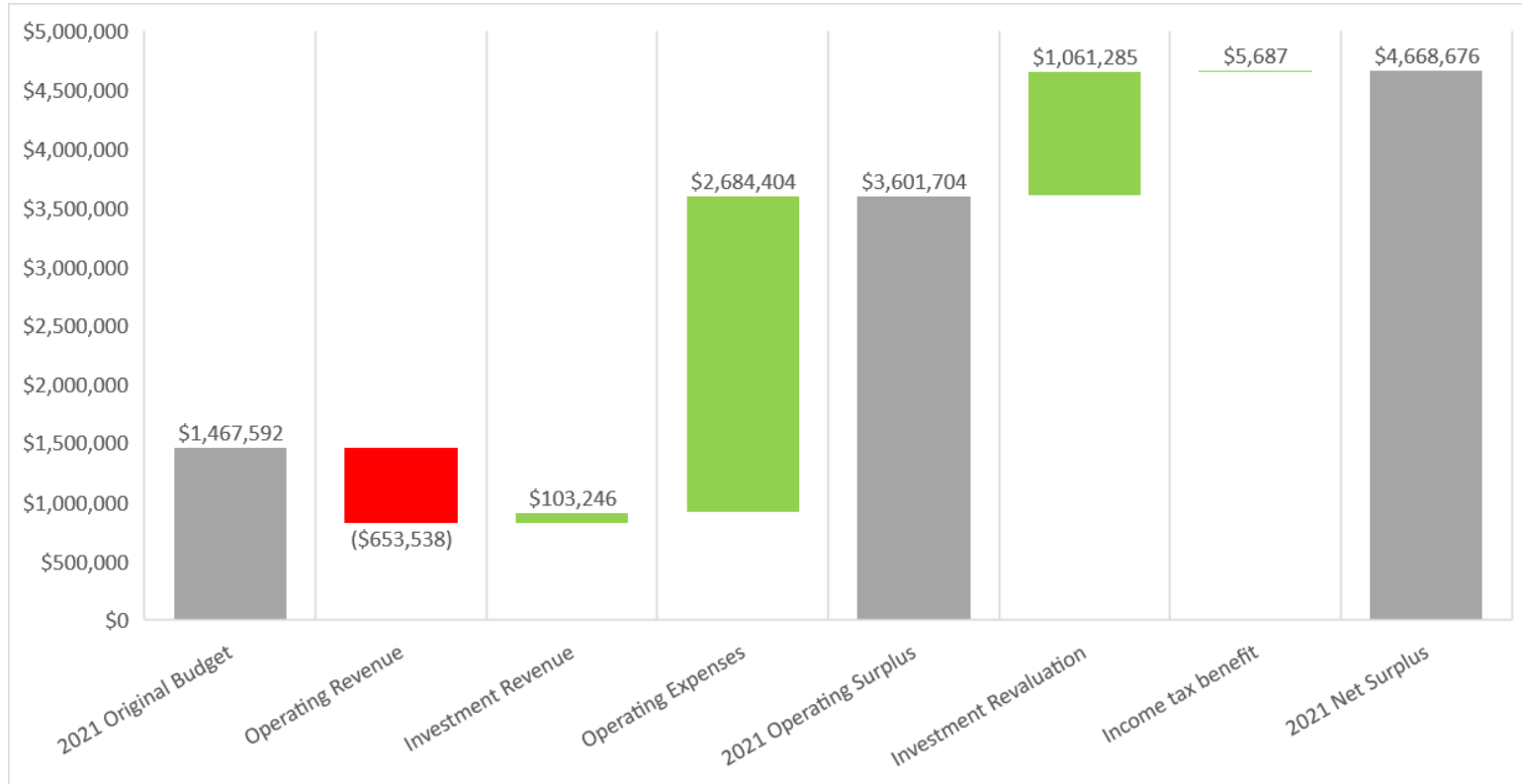
REVENUE and EXPENSES (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Total Revenue	26,420,957	24,995,326	6%	26,971,249	-550,292	-2%
Total Expenses	22,819,252	21,782,270	5%	25,503,657	-2,684,404	-11%
Operating Surplus/ (Deficit)	3,601,705	3,213,056	12%	1,467,592	2,134,113	145%

Net Surplus

REVENUE and EXPENSES (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Total Revenue	26,420,957	24,995,326	6%	26,971,249	-550,292	-2%
Total Expenses	22,819,252	21,782,270	5%	25,503,657	-2,684,404	-11%
Operating Surplus/ (Deficit)	3,601,705	3,213,056	12%	1,467,592	2,134,113	145%
Fair value gain on financial assets	1,061,285	650,379	63%	0	1,061,285	0%
Surplus before Tax	4,662,990	3,863,435	21%	1,467,592	3,195,398	218%
Income tax benefit/ (expense)	5,687	-411,254	-101%	0	5,687	0%
NET SURPLUS FOR THE YEAR	4,668,677	3,452,181	35%	1,467,592	3,201,085	218%

The investment portfolio increased by \$1m during 2021, recovering from a loss of over \$445k in February

2021 Budget vs Actual Result



Revenue

REVENUE (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Membership fees	24,252,513	22,766,728	7%	24,300,595	-48,082	-0%
Non-members fees	257,209	260,483	-1%	264,392	-7,183	-3%
Reactivation fees	22,400	18,400	22%	18,091	4,309	24%
Sign-Up fees	302,750	347,250	-13%	343,000	-40,250	-12%
Transfer fees	244,156	216,016	13%	210,000	34,156	16%
Sundry income	476,472	461,859	3%	1,072,960	-596,488	-56%
Operating Revenue	25,555,500	24,070,736	6%	26,209,038	-653,538	-2%
Investment income	865,457	924,590	-6%	762,211	103,246	14%
TOTAL REVENUE	26,420,957	24,995,326	6%	26,971,249	-550,292	-2%

Revenue

Overall revenue was below budget by 2% (\$550k)

Operating Revenue:

Membership fees and Sign-Up fees

- These fees finished slightly below budget with highlights as follows:
 - New members for the year was 763 (63 per month), below the budget estimate of 804
 - Average fees for new members was \$1,423, below the budget assumption of \$1,451
 - 33.6% of new members originated from LDC economies, above the budget assumption of 27.5%
 - Closure for the year was 343 (29 per month), above the budget estimate of 240

Sundry Income

- These include funding from lab research activities, Foundation receipts, sponsorship and fees from training registrations:
 - Foundation receipts were below budget due to the ongoing COVID-19 travel restrictions
 - COVID-19 travel restrictions also impacted the revenue for sponsorship and registration fees from training events
 - \$100k not-for-profit COVID-19 business stimulus package from the Australian Government was voluntarily repaid

Revenue – Investment Income

Investment Income:

- Total investment income achieved \$865k, exceeded budget by \$103k
 - Investment returns were higher due to the injection of the additional \$4m into the portfolio during the year
 - Since inception, the portfolio has returned 5.52% (after fees) against the benchmark (CPI +2.5%) or 4.34%

Investment Income against benchmarks:

Market Value as at 31 December 2021

	Market Value
APNIC Portfolio	A\$36,728,127

Performance as of 31 December 2021

APNIC Portfolio				
	Portfolio	Benchmark	Relative	CPI + 2.5%
Month	0.78%	0.91%	-0.13%	0.46%
3 Months	0.64%	0.89%	-0.25%	1.38%
Year To Date	5.23%	5.75%	-0.52%	4.98%
1 Year	5.23%	5.75%	-0.52%	4.98%
3 Years pa	7.01%	7.42%	-0.41%	4.11%
Since Inception pa	5.52%	5.79%	-0.27%	4.34%

* Performance is after fees but before franking

Source: Credit Suisse 2021 Annual Investment Report

Expenses

EXPENSES (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Bank service fees	259,116	241,477	7%	251,212	7,904	3%
Communication expenses	634,015	697,060	-9%	1,019,592	-385,577	-38%
Computer expenses	1,514,823	1,216,809	24%	1,743,227	-228,404	-13%
Contribution to APNIC Foundation	0	760,890	-100%	565,518	-565,518	-100%
Depreciation expense	652,408	707,658	-8%	770,942	-118,534	-15%
Doubtful debt expenses	13,413	-733	-1929%	20,000	-6,587	-33%
ICANN contract fee	197,515	223,432	-12%	240,000	-42,485	-18%
Insurance expense	224,060	229,242	-2%	231,833	-7,773	-3%
Meeting and training expenses	88,785	135,335	-34%	485,000	-396,215	-82%
Membership fees expenses	62,720	62,381	1%	60,040	2,680	4%
Office operating expenses	367,000	290,543	26%	385,430	-18,430	-5%
Postage & delivery	11,674	26,198	-55%	37,500	-25,826	-69%
Printing & photocopy	22,109	32,428	-32%	39,500	-17,391	-44%
Professional fees	2,212,254	1,932,613	14%	2,519,399	-307,145	-12%
Recruitment expense	297,997	165,662	80%	223,200	74,797	34%
Salaries and personnel expenses	15,707,940	14,070,813	12%	14,994,013	713,927	5%
Sponsorship and Publicity expenses	315,397	437,724	-28%	554,400	-239,003	-43%
Staff training/ Conference expenses	149,705	218,474	-31%	264,650	-114,945	-43%
Translation expenses	22,867	3,007	660%	20,000	2,867	14%
Travel expenses	65,455	331,259	-80%	1,078,200	-1,012,745	-94%
TOTAL EXPENSES	22,819,252	21,782,270	5%	25,503,657	-2,684,404	-11%

Expenses

Total expenses were below budget by 11% (\$2.7m).

COVID-19 impacts (\$1.6m savings on budget against travel and travel related expense categories):

- Border closures and ongoing travel restrictions
- No face-to-face meeting and training opportunities
- Limited sponsorship expenses

Communication expenses (-38%, \$386k below budget):

- Delayed start in installation of root servers overseas as well as network presence and peering projects.
- The decision to drop setting up 24-hour network operation center also attributed to the reduction in expenses

Computer expenses (-13%, \$228k below budget):

- Deferral of online community platform and source code vulnerability scanner projects to 2022
- Part year effect of implementing SSO APNIC login, managed vulnerability reporting program and security information and event management has also resulted in lower than budgeted expenses

Expenses cont'd

Contribution to APNIC Foundation (-100%, \$566k below budget)

- The contingency provision was not drawn on due to the Foundation receiving sufficient funding from APIDT to support its activities.

Professional fees (-12%, \$307k below budget)

- Savings due to conversion and recruitment of full-time employees originally budgeted as contractors.
- A corresponding increase in salary & personnel costs has been recognized.

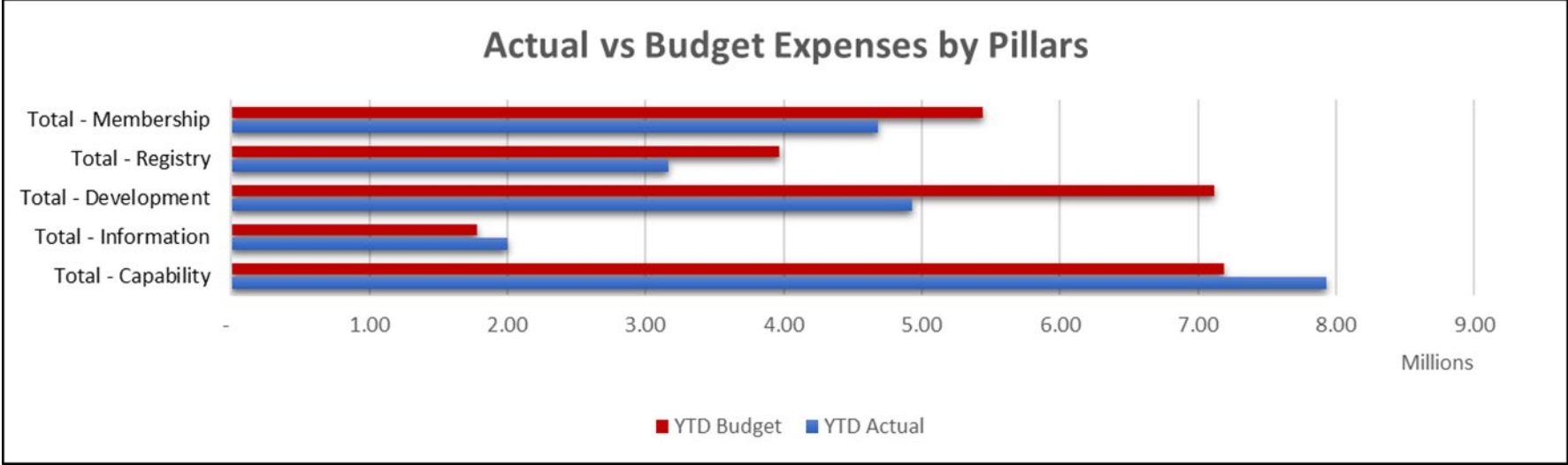
Capital Expenditure 2021

CAPITAL (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Equipment & Software	483,322	502,865	-4%	711,350	-228,028	-32%
Office Furniture & Fittings	9,244	14,408	-36%	2,030,000	-2,020,756	-100%
Total - Capital Expenditure	492,566	517,274	-5%	2,741,350	-2,248,784	-82%

Major variances on capital expenditure:

- \$2m provision for comprehensive renovation of 6 Cordelia Street was not utilized as the project proved unfeasible.

Expenses by Pillars



Expenses by Pillars

EXPENSES (AUD)	Actual 2021	Budget 2021	Variance \$	Variance %
Member services	2,219,361	2,253,270	-33,909	-2%
Membership products	1,856,909	2,473,335	-616,426	-25%
Membership reporting	619,054	715,263	-96,209	-13%
Total - Membership	4,695,325	5,441,868	-746,543	-14%
Registration Services	890,233	842,899	47,334	6%
Registry products	1,831,592	2,580,512	-748,920	-29%
Policy development	442,384	545,263	-102,879	-19%
Total - Registry	3,164,209	3,968,674	-804,465	-20%
APNIC conferences	930,345	1,466,163	-535,818	-37%
Foundation support	76,428	571,518	-495,090	-87%
Community engagement	1,410,868	1,826,724	-415,856	-23%
Community participation	244,552	310,076	-65,524	-21%
APNIC academy	1,886,157	2,392,222	-506,065	-21%
Internet infrastructure support	379,668	551,384	-171,717	-31%
Total - Development	4,928,017	7,118,088	-2,190,071	-31%
Information products	1,254,806	985,151	269,655	27%
Research and analysis	747,795	799,201	-51,405	-6%
Total - Information	2,002,601	1,784,352	218,249	12%
Internal technical infrastructure	2,472,811	1,903,032	569,779	30%
Finance and business services	2,353,479	2,207,847	145,632	7%
Employee experience	2,137,539	1,945,989	191,550	10%
Governance	1,065,271	1,133,807	-68,536	-6%
Total - Capability	8,029,100	7,190,675	838,425	12%
Total - Expenses	22,819,252	25,503,657	-2,684,404	-11%

Expenses by Pillars

Total expenses was below budget by 11% (\$2.7m). Major variance are:

Membership (-14%, \$747k below budget):

- Membership engagement events were delivered remotely due to COVID-19 travel restrictions, which resulted in savings in travel related member services activities

Registry (-20%, \$804k below budget):

- Registry activity communication expenses for the year was lower than budget due to delayed start in installation of root servers overseas as well as network presence and peering projects. The decision to drop setting up 24-hour network operation center also attributed to the reduction in registry expenses. Registry outreach activities were being conducted online due to COVID-19 travel restrictions

Development (-31%, \$2.2m below budget):

- All training and APNIC conferences were being delivered online upon COVID-19 travel restrictions, which resulted in lower than budget development engagement activities travel expenses. The contingency provision for Foundation support activities was not being drawn on

Information (12%, \$218k higher than budget):

- Higher than budgeted due to increase on information products management and blog activities. The increase was offset by the savings in related travel activities due to COVID travel restrictions

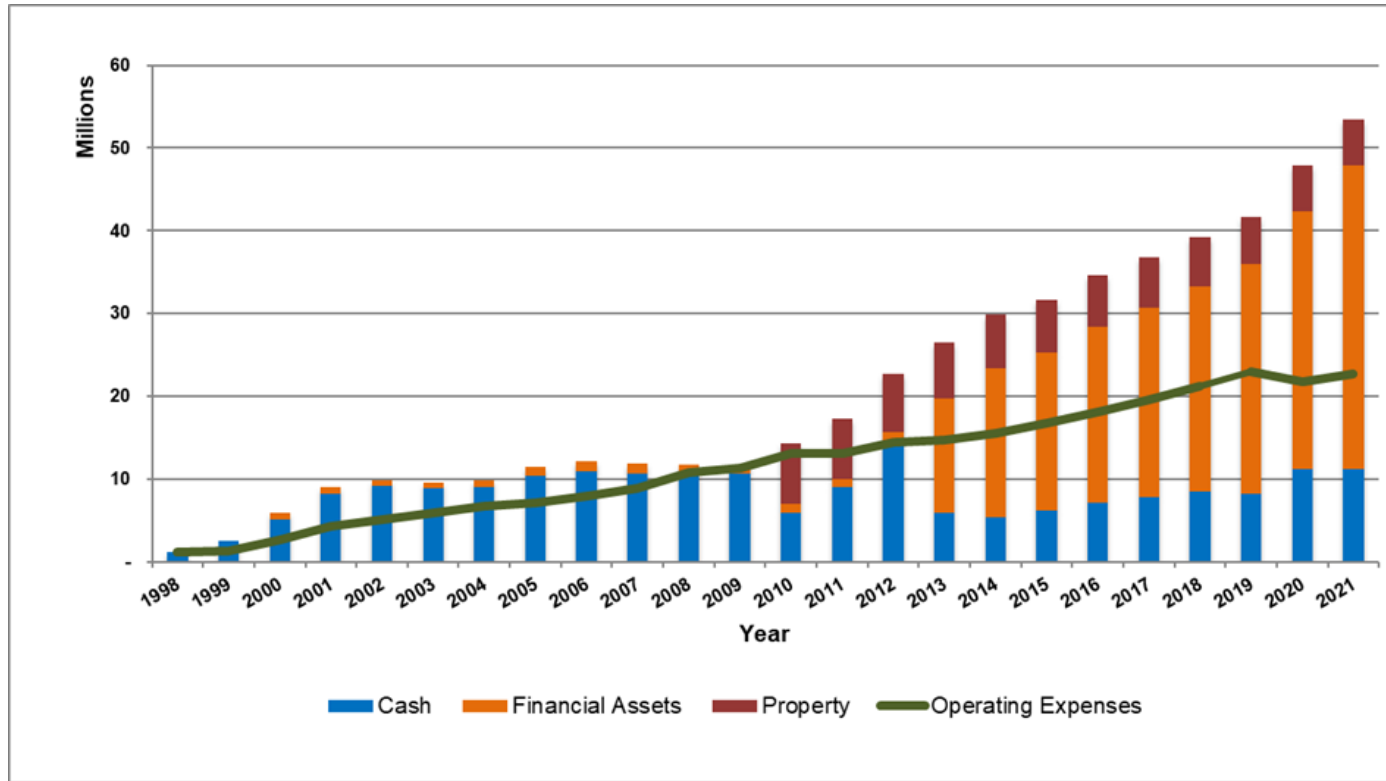
Capability (10%, \$741k above budget):

- Increase on Internal Technical Infrastructure personnel activities to enhance the network infrastructure, internal security operations, and enterprise application management while savings on various activity expenses.

Statement of Financial Position

Amount (AUD)	Year End 2021	Year End 2020	Change	% Change
ASSETS				
Total Current Assets	13,378,858	13,204,960	173,899	1%
Total Non-Current Assets	43,776,672	38,091,979	5,684,693	15%
TOTAL ASSETS	57,155,530	51,296,939	5,858,591	11%
LIABILITIES				
Total Current Liabilities	16,478,765	15,474,451	1,004,314	6%
Total Non-Current Liabilities	1,831,206	1,645,605	185,601	11%
TOTAL LIABILITIES	18,309,971	17,120,056	1,189,915	7%
NET ASSETS/ TOTAL EQUITY	38,845,560	34,176,883	4,668,677	14%

APNIC's Reserve



All amounts in AUD – Australian Dollars

Financial Stability Measure

	2021*	2020*	2019	2018
Total Equity (AUD)	38,845,560	34,176,883	30,724,702	28,820,985
% Equity Covered By Cash/ Cash Equivalents	123%	124%	117%	116%
Monthly Operating Expenses (AUD) *	2,125,305	2,024,419	1,914,554	1,767,877
Number of Months of expenses covered by Equity*	18.28	16.88	16.05	16.30

Observations:

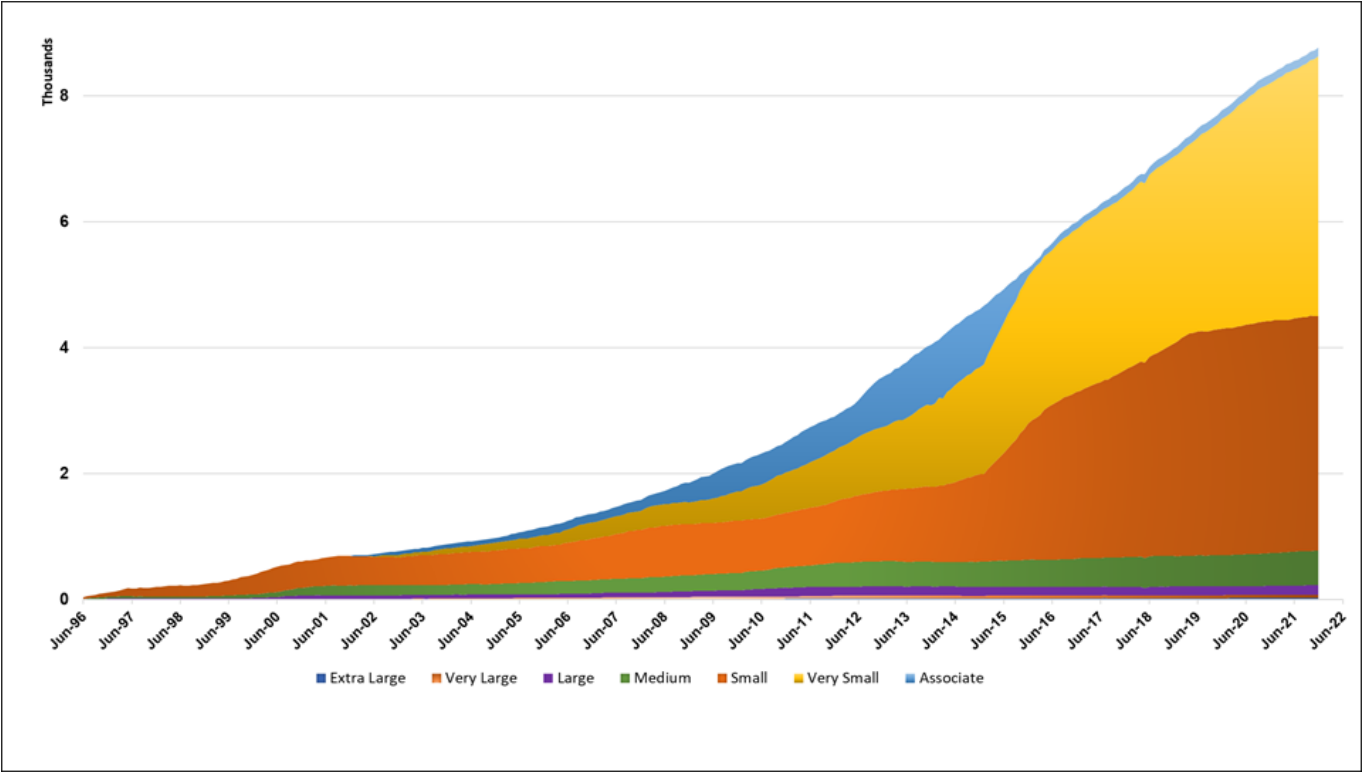
- Target of 18 months of Operating expenses was achieved as at 31 December 2021.
- Based on 2022 budgeted monthly operating expenses, the forecast number of months of expenses covered by equity will reduce to approximately 16.81 months.

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

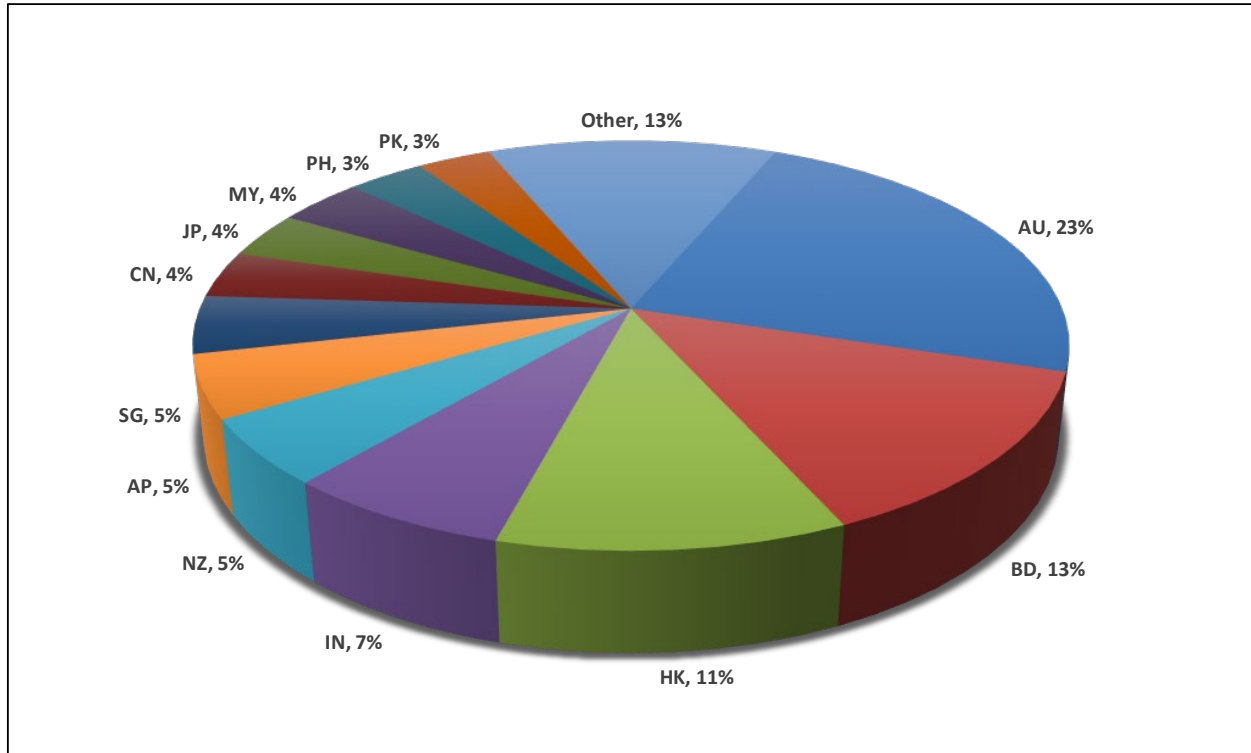
Membership Growth

Membership fees	2013	2014	2015	2016	2017	2018	2019	2020	2021
Extra Large	20	21	22	22	23	24	24	26	26
Very Large	43	40	44	43	41	44	46	48	49
Large	147	142	137	138	138	143	143	143	151
Medium	392	402	431	449	473	483	493	521	548
Small	1,198	1,388	2,165	2,643	2,971	3,376	3,601	3,685	3,733
Very Small	1,294	1,701	2,336	2,590	2,769	2,967	3,334	3,778	4,126
Associate	957	924	133	109	132	125	135	140	135
Total	4,051	4,618	5,268	5,994	6,547	7,162	7,776	8,341	8,768
New & Reactivation Adjust	813	805	968	1,048	849	825	838	833	770
Close	296	238	318	322	296	210	224	268	343
Total	517	567	650	726	553	615	614	565	427
Average Monthly Gain	43	47	54	61	46	51	51	47	36

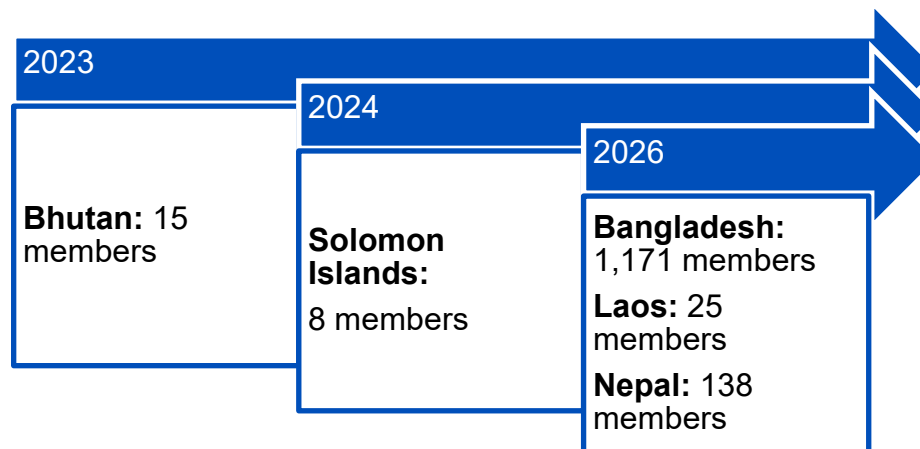
Membership Growth



Membership by Economy



Membership – LDC Graduation Timeline



1,357 members to graduate by 2026:

- 15.4% of existing total members
- BD is fastest growing APNIC economy - 25.5% of new members in 2021.
- All 2021 new accounts in graduating economies were very small (79%) and small (21%)

Audit

New Auditor Appointment:

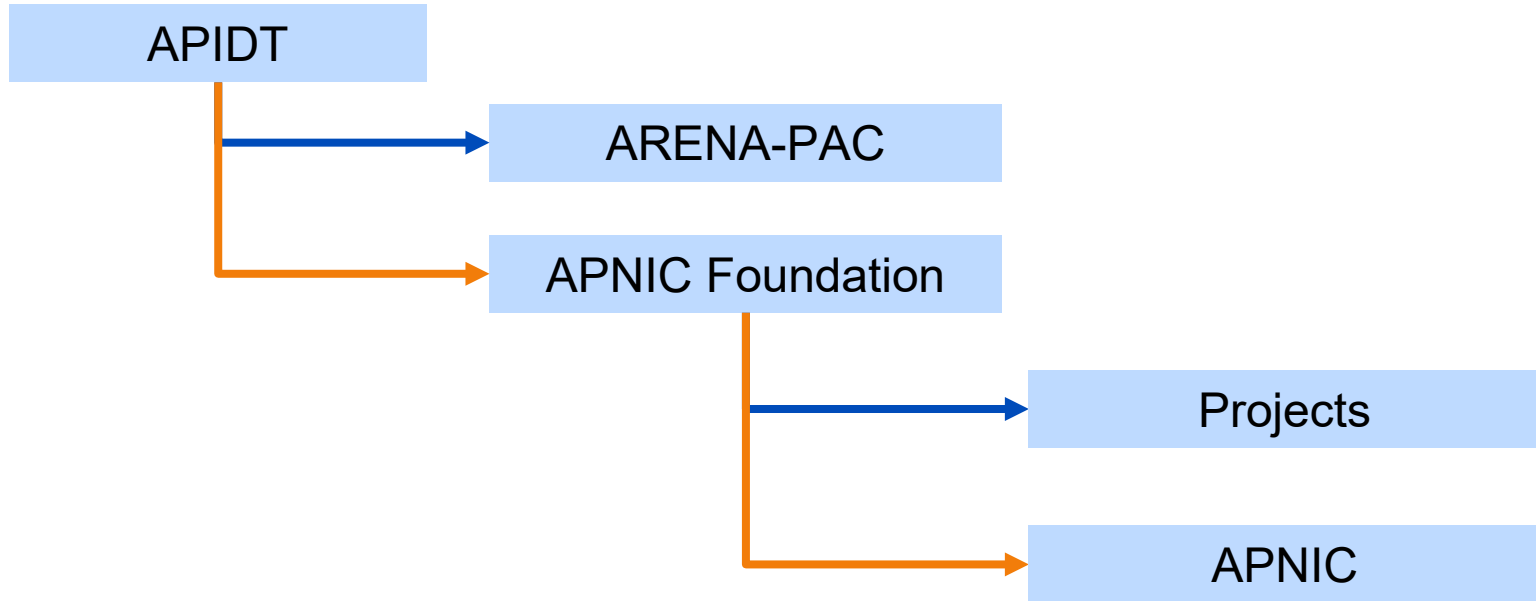
- Ernst & Young undertook the audit of 2021 accounts
- Previous Auditor, Deloitte (appointed in 2020 for an initial 2 years term) advised they were unable to complete audit within APNIC timeframes due to resourcing issues
- APNIC approached Tier 1 Auditors PwC & EY. Only EY had capacity to complete audit within required timeframes

Audit Outcome:

- Ernst & Young issued an unmodified audit report:
 - The accounts give a true and fair view of APNIC's financial position
 - Comply with the relevant accounting standards

2022 Budget Funding – APIDT, APNIC Foundation & APNIC

2022 Budget Funding



APIDT to APNIC Foundation

APIDT TO APNIC FOUNDATION BUDGET SUMMARY (DRAFT)	APIDTT (USD)	APNIC Foundation (USD)
Income		
Investment Income (after fees)	20,736,260	0
Funding Income Receipts	0	14,357,603
Member / Operating Income	0	0
Total Income	20,736,260	14,357,603
Funding Expenses		
Grant Funding - APNIC Foundation	(14,357,603)	0
Grant Funding - APNIC	0	(4,221,000)
Grant Funding - Other	0	(8,366,347)
Other Funding Costs	(1,306,096)	
Total Funding Expenses	(15,663,699)	(12,587,347)
Operating Expenses	(701,904)	(1,770,256)
Total Funding & Operating	(16,365,603)	(14,357,603)
Surplus / Deficit - Investing, Funding & Operating	4,370,657	0

APNIC FOUNDATION FUNDING SUMMARY (DRAFT)	APNIC Foundation (USD)
APNIC Funding	4,221,000
ISIF Asia	2,748,000
SOI Asia-AI3	3,782,267
Sponsorships	250,000
Small project grant fund	250,000
Afghanistan training and mentoring	240,000
SEA gender and diversity	1,096,080
Funding sub-total	12,587,347
Overheads	1,770,256
Total Foundation funding	14,357,603

APNIC Foundation to APNIC

APNIC FOUNDATION TO APNIC BUDGET SUMMARY (DRAFT)	APNIC Foundation (USD)	APNIC (USD)	APNIC (AUD)
Income			
Investment Income (after fees)	0	442,547	606,229
Funding Income Receipts	14,357,603	4,646,200	6,364,658
Member / Operating Income	0	18,828,181	25,792,028
Total Income	14,357,603	23,916,928	32,762,915
Funding Expenses			
Grant Funding - APNIC Foundation	0	0	0
Grant Funding - APNIC	(4,221,000)	(4,646,200)	(6,364,658)
Grant Funding - Other	(8,366,347)	0	0
Other Funding Costs		0	0
Total Funding Expenses	(12,587,347)	(4,646,200)	(6,364,658)
Operating Expenses	(1,770,256)	(19,855,820)	(27,199,753)
Total Funding & Operating	(14,357,603)	(24,502,020)	(33,564,411)
Surplus / Deficit - Investing, Funding & Operating	0	(585,092)	(801,496)

APNIC FOUNDATION PROJECT BUDGETS	APNIC PROJECTS (USD)	APNIC PROJECTS (AUD)
Training delivery/community trainers	1,378,000	1,887,671
APNIC Academy	1,170,000	1,602,740
M-root deployment	1,366,000	1,871,233
Research: Internet measurement	250,000	342,466
Cybersecurity: HoneyNet	57,000	78,082
APNIC sub-total	4,221,000	5,782,192
Small Project Grant Fund	120,000	164,384
IPGO (2021 Carryover)	305,200	418,082
APNIC Funding Total	4,646,200	6,364,658

USD / AUD

0.73

January 2022 APNIC Financial Report

All dollar values are denoted in Australian dollars

Highlights

- Operating surplus of \$666k exceeded budget by \$508k
- Revenue \$373k below budget
- Expenses \$880k below budget
- Equity position decreased by \$452K as compared to FY2021
- Fair value loss on financial assets \$1.1m
- Financial stability measure at 16.81* Months of Operating Expenses

**Calculation is based on the average monthly operating expenses of 2022 approved budget as it better reflects APNIC operating cost base in a COVID-free course of business.*

January 2022 Financial Status

	YTD Actual Jan 2022	YTD Actual Jan 2021	Variance %	YTD Budget Jan 2022	Budget Variance \$	Budget Variance %
Total Revenue	2,328,598	2,150,377	8%	2,701,144	-372,546	-14%
Total Expenses	1,662,696	1,457,321	14%	2,542,962	-880,267	-35%
Operating Surplus/ (Deficit)	665,902	693,055	-4%	158,182	507,721	321%
Fair value gain on financial assets	-1,117,934	-159,687	600%	0	-1,117,934	100%
Surplus before Tax	-452,032	533,368	-185%	158,182	-610,213	-386%

Thank you

Annual Financial Report

(in AUD)

2021

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1 Statement of Financial Position

Amount (AUD)	Year End 2021	Year End 2020	% Change
CURRENT ASSETS			
Cash/ Term Deposits	11,234,947	11,281,050	-0%
Receivables	1,166,701	1,130,303	3%
Others	977,210	793,606	23%
TOTAL CURRENT ASSETS	13,378,858	13,204,960	1%
NON-CURRENT ASSETS			
Other Financial Assets	36,728,127	31,036,408	18%
Property, plant and equipment	6,726,989	6,948,694	-3%
Deferred Tax Assets	321,557	106,877	201%
TOTAL CURRENT LIABILITES	43,776,672	38,091,979	15%
TOTAL ASSETS	57,155,530	51,296,939	11%
CURRENT LIABILITIES			
Payables	1,535,635	1,355,679	13%
Provisions	2,700,030	2,233,396	21%
Unearned Revenue	12,243,099	11,885,376	3%
TOTAL CURRENT LIABILITES	16,478,765	15,474,451	6%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	1,447,853	1,238,861	17%
Total Provisions	383,353	406,744	-6%
TOTAL NON-CURRENT LIABILITIES	1,831,206	1,645,605	11%
TOAL LIABILITIES	18,309,971	17,120,056	7%
NET ASSETS	38,845,560	34,176,883	14%
EQUITY			
Share Capital	1	1	0%
Retained earnings	34,176,882	30,724,701	11%
Net Income	4,668,677	3,452,181	35%
TOTAL EQUITY	38,845,560	34,176,883	14%

Table 1. Statement of Financial Position

Notes to Financial Position (Table 1):

The Statement of Financial Position shows that APNIC's net equity position increased by 14% (\$4.7m) compared to the end of last year. Key drivers are:

- The investment portfolio has increased by 18% (\$5.7m) from cash injections (\$4m), unrealised gains on revaluation (\$1.1m) and investment income net of management fees (\$630k).
- Other assets have increased by 23% (\$184k) due to increase in prepayment (\$193k)
- Provisions have increased by 21% (\$467k) due to the accumulation of staff leave provision

- o Unearned Revenue increased by 3% (\$358k) which was in line with the net increase in membership fees revenue

2 Statement of Income

This annual financial report incorporates 2021 financial results compared with the budget and last year results.

Amount (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Membership fees	24,252,513	22,766,728	7%	24,300,595	-48,082	-0%
Non-members fees	257,209	260,483	-1%	264,392	-7,183	-3%
Reactivation fees	22,400	18,400	22%	18,091	4,309	24%
Sign-Up fees	302,750	347,250	-13%	343,000	-40,250	-12%
Transfer fees	244,156	216,016	13%	210,000	34,156	16%
Sundry income	476,472	461,859	3%	1,072,960	-596,488	-56%
Operating Revenue	25,555,500	24,070,736	6%	26,209,038	-653,538	-2%
Investment income	865,457	924,590	-6%	762,211	103,246	14%
TOTAL REVENUE	26,420,957	24,995,326	6%	26,971,249	-550,292	-2%
Bank service fees	259,116	241,477	7%	251,212	7,904	3%
Communication expenses	634,015	697,060	-9%	1,019,592	-385,577	-38%
Computer expenses	1,514,823	1,216,809	24%	1,743,227	-228,404	-13%
Contribution to APNIC Foundation	0	760,890	-100%	565,518	-565,518	-100%
Depreciation expense	652,408	707,658	-8%	770,942	-118,534	-15%
Doubtful debt expenses	13,413	-733	-1929%	20,000	-6,587	-33%
ICANN contract fee	197,515	223,432	-12%	240,000	-42,485	-18%
Insurance expense	224,060	229,242	-2%	231,833	-7,773	-3%
Meeting and training expenses	88,785	135,335	-34%	485,000	-396,215	-82%
Membership fees	62,720	62,381	1%	60,040	2,680	4%
Office operating expenses	367,000	290,543	26%	385,430	-18,430	-5%
Postage & delivery	11,674	26,198	-55%	37,500	-25,826	-69%
Printing & photocopy	22,109	32,428	-32%	39,500	-17,391	-44%
Professional fees	2,212,254	1,932,613	14%	2,519,399	-307,145	-12%
Recruitment expense	297,997	165,662	80%	223,200	74,797	34%
Salaries and personnel expenses	15,707,940	14,070,813	12%	14,994,013	713,927	5%
Sponsorship and Publicity expenses	315,397	437,724	-28%	554,400	-239,003	-43%
Staff training/ Conference expenses	149,705	218,474	-31%	264,650	-114,945	-43%
Translation expenses	22,867	3,007	660%	20,000	2,867	14%
Travel expenses	65,455	331,259	-80%	1,078,200	-1,012,745	-94%
TOTAL EXPENSES	22,819,252	21,782,270	5%	25,503,657	-2,684,404	-11%
Operating Surplus	3,601,705	3,213,056	12%	1,467,592	2,134,113	145%
Fair value gain on financial assets	1,061,285	650,379	63%	0	1,061,285	0%
SURPLUS BEFORE TAX	4,662,990	3,863,435	21%	1,467,592	3,195,398	218%
Income tax benefit/ (expense)	5,687	-411,254	-101%	0	5,687	0%
NET SURPLUS FOR THE YEAR	4,668,677	3,452,181	35%	1,467,592	3,201,085	218%

Table 2. Statement of Income

Notes to Revenue (Table 2):

Operating revenue was 2% below budget for the year of 2021. Major variances are:

- **Membership fees and Sign-Up fees** – these fees finished slightly below budget. Membership growth in 2021 was tracking below budget projections.
 - New members for the year was 763, below the budget estimate of 804. There were 343 closures over the year, higher than the budget estimate of 240.
 - At the end of December, the average annual fee for closed accounts was \$1,893, compared to the budget assumption of \$1,892.
 - Average fees for new members over the year was \$1,423, compared to the budget assumption of \$1,451.
 - In 2021, 33.6% of all new members were eligible for LDC discount, compared to the budget assumption of 27.5%.
 - Overall revenue from Membership and Sign-up Fees were slightly below budget due to slow membership growth, while Transfer Fees was slightly higher than budget at the end of 2021.

- **Sundry income** – Includes Meeting and Training/Workshop Registrations, Sponsorship, Foundation income and funding for Labs research activities.
 - Foundation receipts were below budget due to the ongoing COVID-19 travel restrictions which impacted delivery of face-to-face training programs.
 - COVID-19 travel restrictions also impacted the revenue for sponsorship and registration fees from training and conference events.
 - A total of \$100k not-for-profit business stimulus package from the Australian Government as part of the response to the impact of COVID-19 was received in the year of 2020 (\$87.5k) and 2021 (\$12.5k) respectively. The full amount was voluntarily repaid this year.

- **Investment income** – interest and investment income was \$103k above budget.
 - While interest rates remained lower than budget, investment returns were higher due to the injection of an additional \$4m into the portfolio during the year.
 - Since inception in August 2013, the portfolio has returned 5.52% (after fees) against the benchmark (CPI + 2.5%) of 4.34%.

Notes to Expenses (Table 2):

Total expenses were 11% below budget for the year of 2021. Major variances include:

- **Communication expenses (-38%, \$386k below budget)** – savings due to the delayed start in installation of root servers overseas as well as network presence and peering projects. The decision to drop the setting up 24-hour network operation center also attributed to the reduction in expenses.
- **Computer expenses (-13%, \$228k below budget)** – savings due to deferral of online community platform and source code vulnerability scanner projects to 2022; part year effect of implementing SSO APNIC login, managed vulnerability reporting program and security information and event management has also resulted in lower than budgeted expenses.
- **Contribution to APNIC Foundation (-100%, \$566k below budget)** - The contingency provision was not drawn on due to the Foundation receiving sufficient funding from APIDT to support its activities.
- **Meeting and training expenses (-82%, \$396k below budget)** – savings due to all training and APNIC conference events were being delivered online due to ongoing travel restrictions.
- **Professional fees (-12%, \$307k below budget)** – savings due to conversion and recruitment of full time employees originally budgeted as contractors. A corresponding increase in Salary & Personnel costs has been recognized.

- **Sponsorship and publicity expenses (-43%, \$239k below budget)** – savings due to COVID-19 travel restrictions impacting APNIC and NRO activities).
- **Travel expenses (-94%, \$1m below budget)** – savings due to continual COVID-19 travel restrictions.

Notes to Operating Surplus/(Deficit) (Table 2):

The Operating Surplus was \$2.1m higher than budget in 2021. The Net Surplus was \$3.2m higher, due to the unrealised gain of \$1m in the fair value adjustment of the APNIC investment portfolio.

3 Capital Expenditure

The table below provides overview of 2021 capital expenditure.

CAPITAL (AUD)	Actual 2021	Actual 2020	Variance %	Budget 2021	Budget Variance \$	Budget Variance %
Equipment & Software	483,322	502,865	-4%	711,350	-228,028	-32%
Office Furniture & Fittings	9,244	14,408	-36%	2,030,000	-2,020,756	-100%
Total - Capital Expenditure	492,566	517,274	-5%	2,741,350	-2,248,784	-82%

Table 3. Capital Expenditure

Notes to Capital Expenditure (Table 3):

Capital expenditure was \$2.2m below budget for the year. Major variances related to:

- Delay in order delivery for router and switch replacement due to global chips shortage; and
- Comprehensive renovation of 6 Cordelia Street provisioned for \$2m in the budget proved unfeasible. Modest enhancements to amenities for supporting the transition to hybrid working models are being undertaken ahead of an anticipated office relocation in the next 2 – 3 years.

4 Activity Reporting

4.1 Expense by Activity Pillars and Workstreams

EXPENSES (AUD)	Actual 2021	Budget 2021	Variance \$	Variance %
Member services	2,219,361	2,253,270	-33,909	-2%
Membership products	1,856,909	2,473,335	-616,426	-25%
Membership reporting	619,054	715,263	-96,209	-13%
Total - Membership	4,695,325	5,441,868	-746,543	-14%
Registration Services	890,233	842,899	47,334	6%
Registry products	1,831,592	2,580,512	-748,920	-29%
Policy development	442,384	545,263	-102,879	-19%
Total - Registry	3,164,209	3,968,674	-804,465	-20%
APNIC conferences	930,345	1,466,163	-535,818	-37%
Foundation support	76,428	571,518	-495,090	-87%
Community engagement	1,410,868	1,826,724	-415,856	-23%
Community participation	244,552	310,076	-65,524	-21%
APNIC academy	1,886,157	2,392,222	-506,065	-21%
Internet infrastructure support	379,668	551,384	-171,717	-31%
Total - Development	4,928,017	7,118,088	-2,190,071	-31%
Information products	1,254,806	985,151	269,655	27%
Research and analysis	747,795	799,201	-51,405	-6%
Total - Information	2,002,601	1,784,352	218,249	12%
Internal technical infrastructure	2,472,811	1,903,032	569,779	30%
Finance and business services	2,353,479	2,207,847	145,632	7%
Employee experience	2,137,539	1,945,989	191,550	10%
Governance	1,065,271	1,133,807	-68,536	-6%
Total - Capability	8,029,100	7,190,675	838,425	12%
Total - Expenses	22,819,252	25,503,657	-2,684,404	-11%

Table 4. Expense by Activity Pillars and Workstreams

Notes to Activity Reporting (Table 4):

This report includes the activity grouping into pillars and workstreams as outlined in the Strategic Plan and Activity Plan for 2021.

- **Membership (-14%, \$747k below budget)** – membership engagement events were delivered remotely due to COVID travel restrictions and resulted in savings in travel related member services activities.
- **Registry (-20%, \$804k below budget)** – registry activity communication expenses for the year were lower than budget due to delayed start in installation of root servers overseas as well as network presence and peering projects. The decision to drop setting up 24-hour network

operation center also attributed to the reduction in registry expenses. Registry outreach activities were being conducted online due to COVID travel restrictions.

- **Development (-31%, \$2.2m below budget)** – all training and APNIC conferences were being delivered online upon COVID travel restrictions, which resulted in lower than budget development engagement activities travel expenses. The contingency provision for Foundation support activities was not required.
- **Information (12%, \$218k higher than budget)** – higher than budgeted due to increase in information products management and blog activities. The increase was offset by the savings in related travel activities due to COVID travel restrictions.
- **Capability (12%, \$838k higher than budget)** – higher than budget due to increase in Internal Technical Infrastructure personnel activities to enhance the network infrastructure, internal security operations, and enterprise application management while savings on various activity expenses.

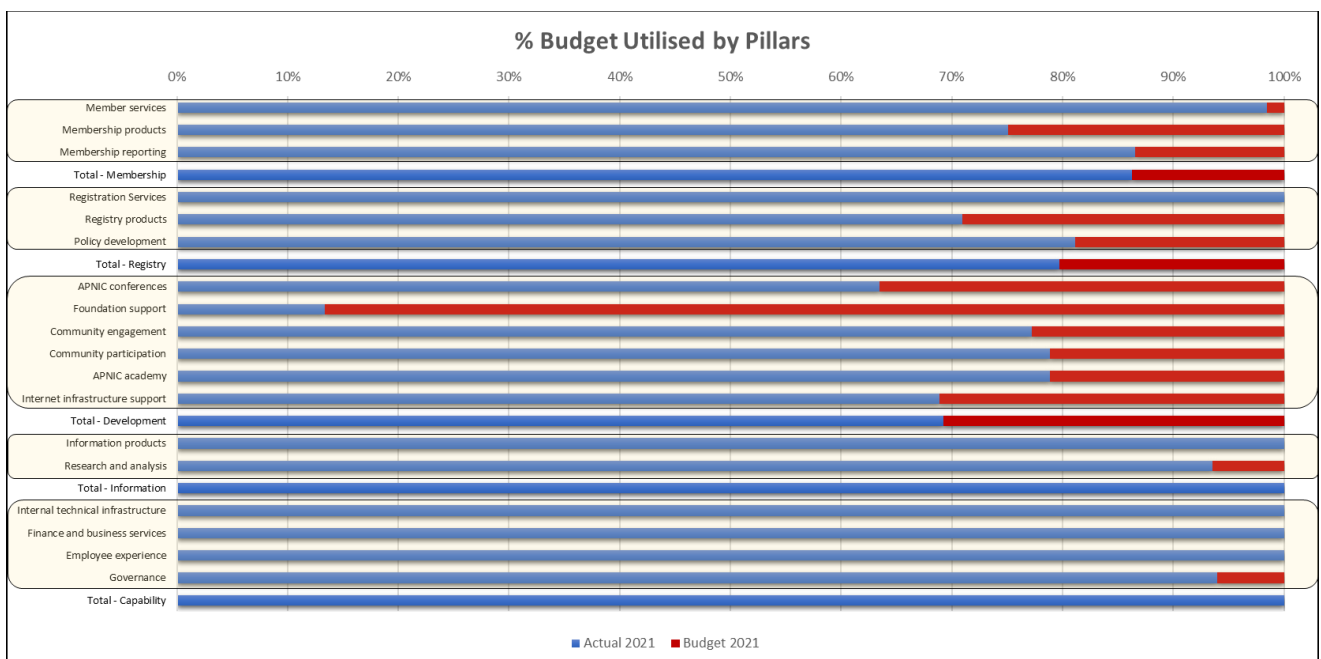


Figure 1. % Budget Utilised by Pillars and Workstreams

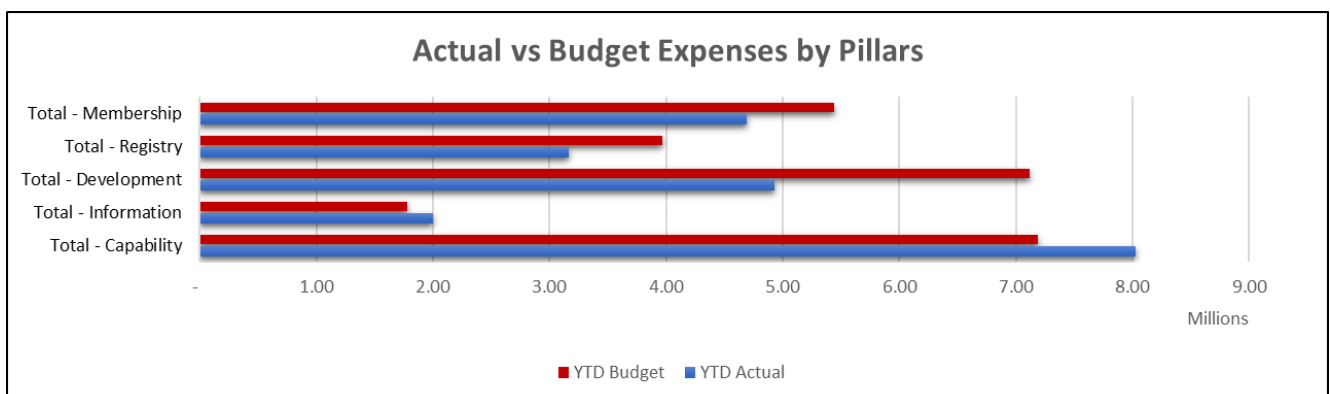


Figure 2. Actual vs. Budget by Pillars

4.2 Capital Expenditure by Pillars and Workstreams

CAPITAL EXPENSES (AUD)	Actual 2021	Budget 2021	Variance \$	Variance %
Member services	7,935		7,935	
Total - Membership	7,935		7,935	
APNIC conferences	4,296	43,150	- 38,854	-90%
APNIC academy	16,351	15,000	1,351	9%
Internet infrastructure support	1,231	60,000	- 58,769	-98%
Total - Development	21,878	118,150	- 96,272	-81%
Research and analysis	62,532	80,000	- 17,468	-22%
Total - Information	62,532	80,000	- 17,468	-22%
Internal technical infrastructure	390,978	353,200	37,778	11%
Finance and business services	9,244	30,000	- 20,756	-69%
Employee experience		2,160,000	- 2,160,000	-100%
Total - Capability	400,222	2,543,200	- 2,142,978	-84%
Total - Capital Expenses	492,566	2,741,350	- 2,248,784	-82%

Table 5 Capital Expenditure by Pillars and Workstreams

5 APNIC Reserve

5.1 Cash Flow Statement

This report shows the cash flow status as at the end of December 2021.

Year end cash position has remained stable as compared to the beginning of the year. APNIC has generated \$5.4m year to date cashflow from operating activities, out of which, \$4m was injected into the investment portfolio.

Amount (AUD)	YTD Dec 2021
Total Operating Activities	
YTD Net Income	4,668,677
Total Adjustments to Profit/(Loss)	
Receivables	-295,371
Other Current Asset	-139,309
Accounts Payable	-39,538
GST Payable	67,232
Other Current Liability	1,185,612
Total Adjustments to Profit/(Loss)	778,625
Total Operating Activities	5,447,302
Total Investing Activities	
Fixed Asset	221,705
Other Asset	-5,691,719
Total Investing Activities	-5,470,014
Total Financing Activities	
Long Term Liability	-23,392
Equity	0
Total Financing Activities	-23,392
Net Change in Cash for Period	-46,103
Cash at Beginning of Year	11,281,050
Cash at End of Year	11,234,947

Table 6. Cash Flow Statement

5.2 Capital Reserve

The Capital Reserve is diversified between Cash Investments, Investment Portfolio, and Property (APNIC Office). During 2021, \$4m has been transferred from APNIC's operating accounts into the investment portfolio.

At the end of December, APNIC maintained \$11.2m in cash reserves, \$36.7m is invested in the investment portfolio and \$5.5m invested in Property. Figure 3 below tracks the value and the allocation of these reserves over time and tracks the operating expenses for each year for comparison.

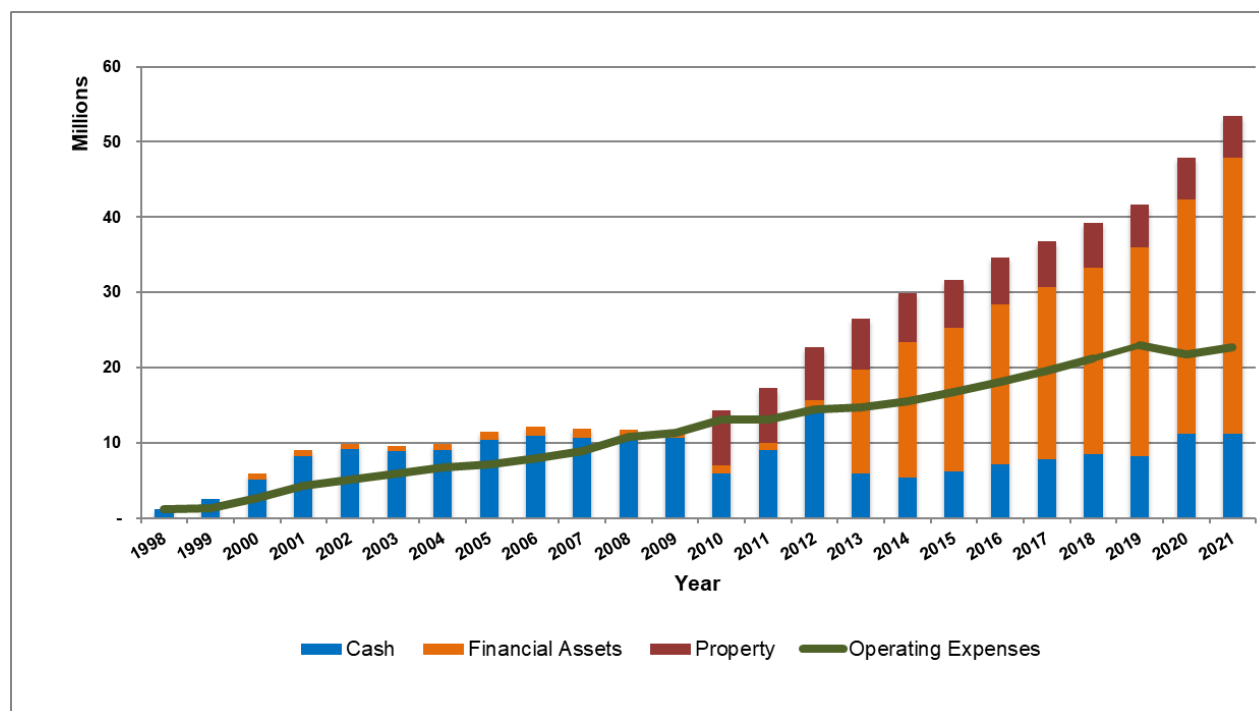


Figure 3. APNIC Reserves

5.3 APNIC's Equity and Reserves

By comparing the Total Equity (including retained earnings and unrealised capital gains) to the monthly Operating Expenses based on the approved budget for 2021 *, the number of month's coverage of operational expenses is set out below:

	2021*	2020*	2019	2018
Total Equity (AUD)	38,845,560	34,176,883	30,724,702	28,820,985
% Equity Covered By Cash/ Cash Equivalents	123%	124%	117%	116%
Monthly Operating Expenses (AUD) *	2,125,305	2,024,419	1,914,554	1,767,877
Number of Months of expenses covered by Equity*	18.28	16.88	16.05	16.30

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

Table 7. Equity and Reserves

6 Membership

6.1 Membership Statistics

As at the end of December 2021, APNIC had a total of 8,768 Members serving 53 economies.

6.2 Membership by Category

Overall net membership growth for the year was 427 members. There have been:

- 770 new and reactivated members vs. 804 budgeted new members
- 343 closures vs. 240 budgeted account closures

Membership fees	2013	2014	2015	2016	2017	2018	2019	2020	2021
Extra Large	20	21	22	22	23	24	24	26	26
Very Large	43	40	44	43	41	44	46	48	49
Large	147	142	137	138	138	143	143	143	151
Medium	392	402	431	449	473	483	493	521	548
Small	1,198	1,388	2,165	2,643	2,971	3,376	3,601	3,685	3,733
Very Small	1,294	1,701	2,336	2,590	2,769	2,967	3,334	3,778	4,126
Associate	957	924	133	109	132	125	135	140	135
Total	4,051	4,618	5,268	5,994	6,547	7,162	7,776	8,341	8,768
New & Reactivation Adjust	813	805	968	1,048	849	825	838	833	770
Close	296	238	318	322	296	210	224	268	343
Total	517	567	650	726	553	615	614	565	427
Average Monthly Gain	43	47	54	61	46	51	51	47	36

Table 8. Membership by Category

6.3 Membership by Economy

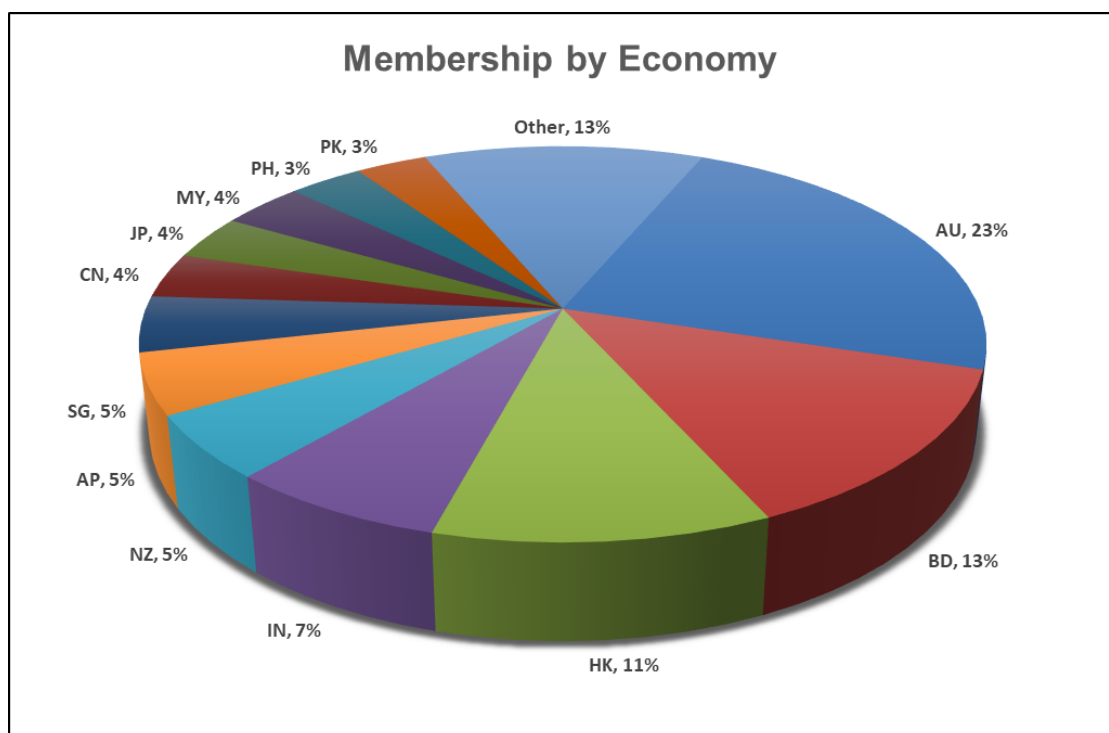


Figure 4. Membership by Economy

6.4 Membership Growth

Membership monthly movements are illustrated at Figure 5 below.

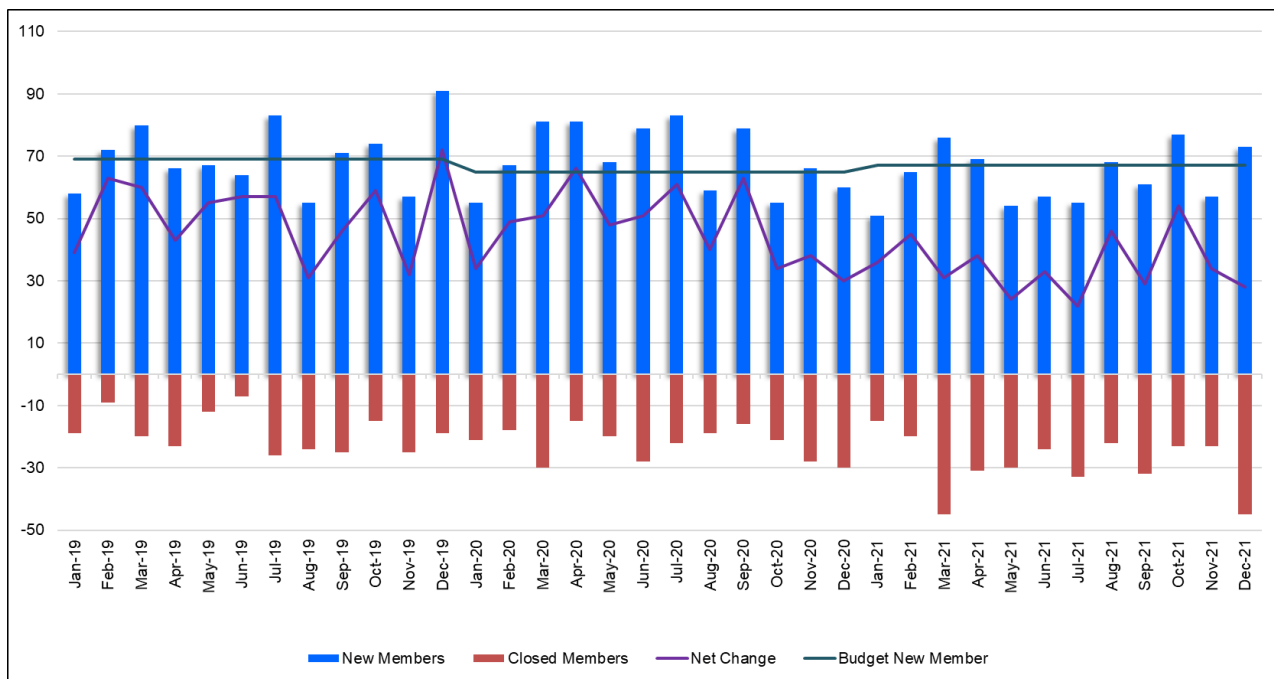


Figure 5. Membership Growth Analysis

Figure 6 below illustrates membership growth by tier:

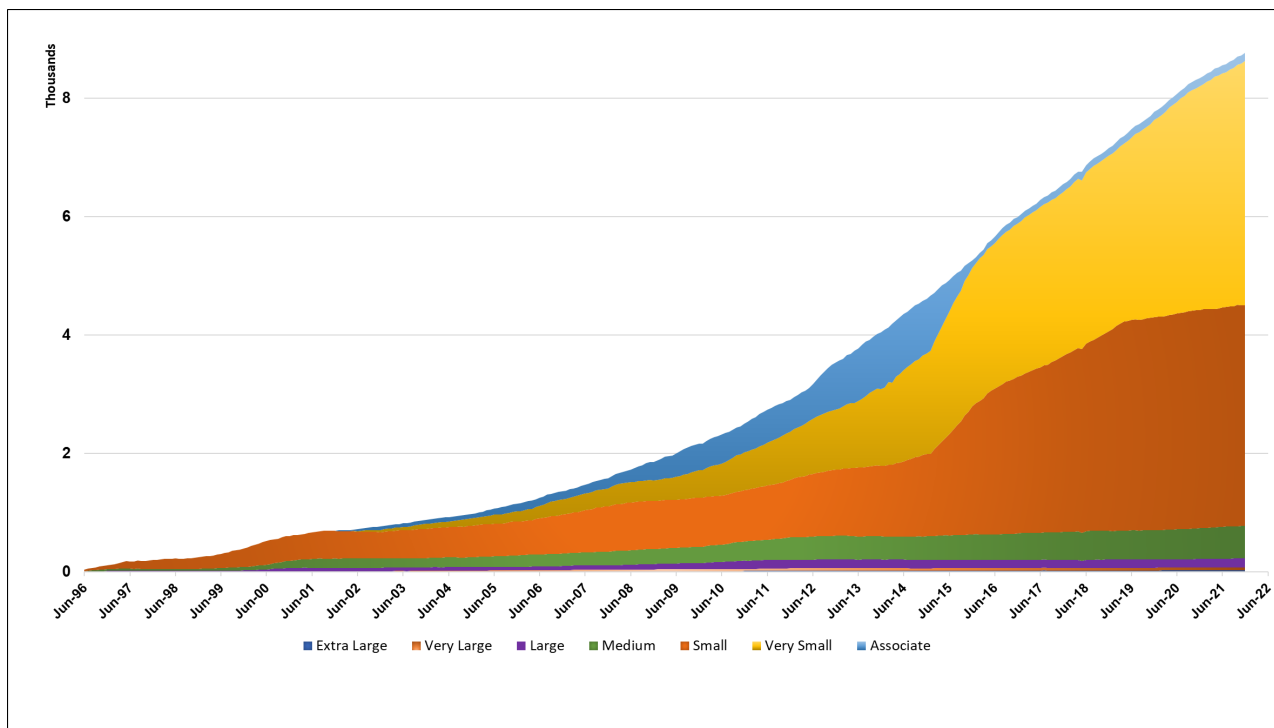


Figure 6. Total Membership

6.5 Year-to-Date Membership Movement by Economy

Figure 7 shows new and closed membership movement by economy as at the end of December 2021. Consistent with previous months, year to date:

- Top 3 new member economies are Australia, Bangladesh and Hong Kong.
- Top 3 closed member economies are Australia, Hong Kong and China.

Until 2020, the Top 3 closed member economies have included Australia, Hong Kong and India.

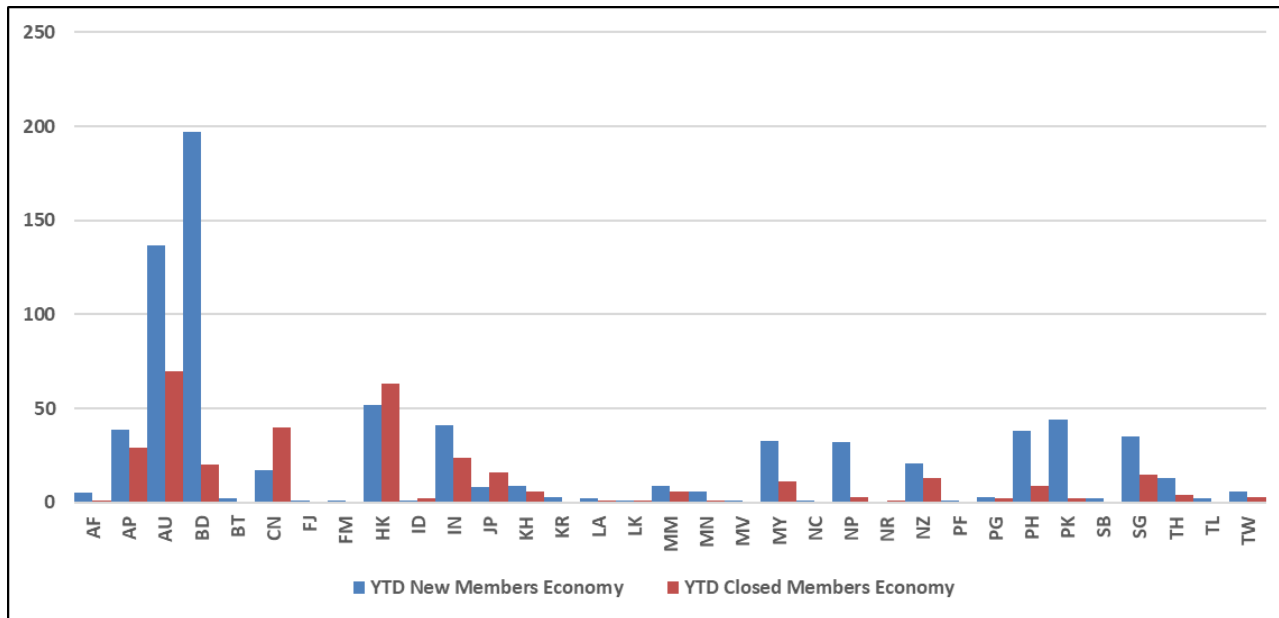


Figure 7. New and Closed Members Analysis

6.6 Membership Closure Analysis

Figure 8 below provides an analysis of Membership account closures as at the end of December. 60.7% of the closures relate to accounts closed due to the failure to establish contact, the business is no longer operating, or breach of agreement, where resource holdings are returned to APNIC.

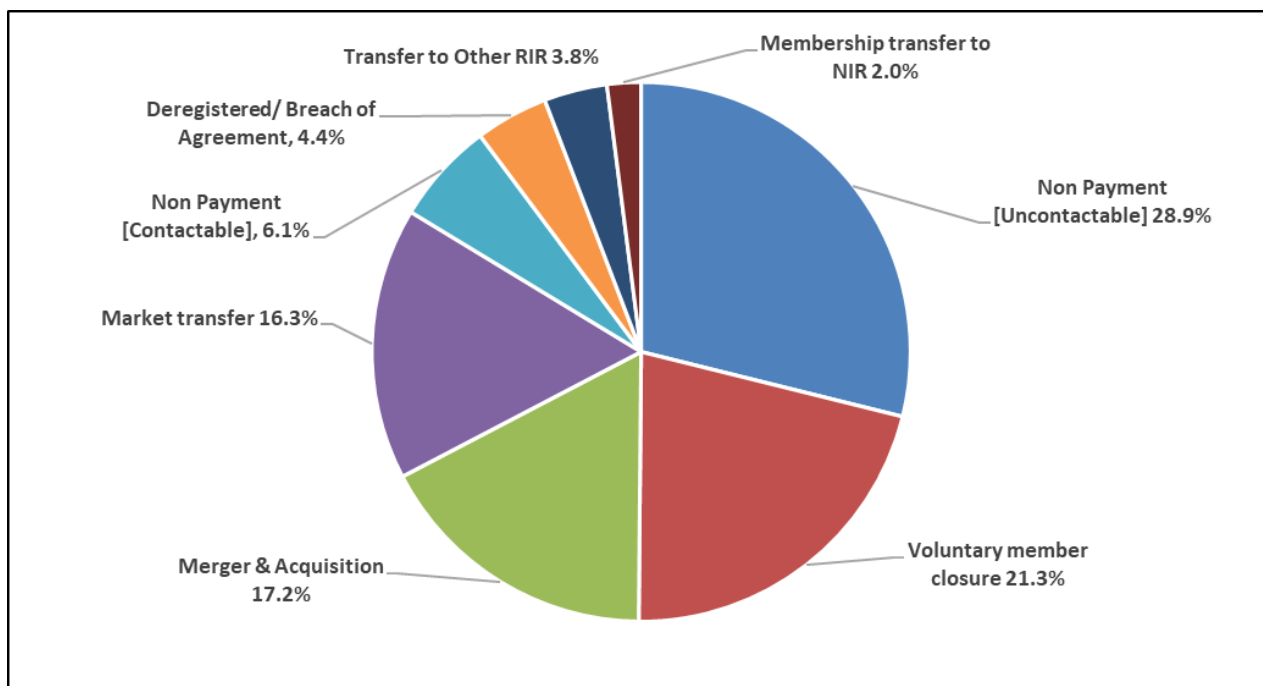


Figure 8. Closure Analysis

6.7 Membership Closures by Year Joined

Year Joined	Deregistered / 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
1997				1					1
1998				1			1		2
1999			1	1					2
2000				1					1
2001		1		2					3
2003		1		1					2
2004					1		1		2
2005		1		3			1		5
2006		1		1			2		4
2007				1	1	1	1		4
2008				1	2		1		4
2009		2		5	1		1		9
2010		1		3		1	2		7
2011		2	1	4		1	6	1	15
2012	1	2		9	8	1	5		26
2013	3	6		6	3	1	6		25
2014	2	3	1	4	9	2	4	1	26
2015	5	13		8	16	1	7	3	53
2016	3	22	2	6	6		8	5	52
2017			1	1	8	1	8		19
2018	1				20	5	3		29
2019					13	3	9	1	26
2020		1	1		11	4	7	2	26
Grand Total	15	56	7	59	99	21	73	13	343

Table 9. Membership Closure by Year Joined

The top three closure reasons in 2021 are:

- Non-payment (uncontactable) – 99 closures (2020: 84)
- Voluntary closure – 73 (2020: 74)
- Mergers and Acquisitions – 59 (2020: 50)

In 2021, there were 56 closures due to market transfer vs. 24 closures in 2020. The increase coincides with the expiry of the 5-year transfer restriction on IPv4 delegations made under the last /8 policy.

6.8 Membership Closures by Economy

In December, there has been – 9 market transfers, 9 members’ merger & acquisitions, 6 non-payment members closures (contactable & uncontactable), 3 voluntary members closures, 3 members transferred to NIR (IRINN) and 4 transferred to other RIR (RIPE NCC and ARIN)

Economy	Deregistered/ 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	8	1	1
AP		4		3	8		7	7	29	38	8	15
AU	3	10		17	11	2	24	3	70	70	12	30
BD		8		2	8	1	1		20	19	10	19
CN	4	9		2	15	3	7		40	98	19	25
HK	7	13		7	27	2	5	2	63	187	23	30
ID							2		2	1	0	1
IN	1	2	5	1	1	9	5		24	35	6	15
JP		2	2	6	3	1	2		16	9	1	1
KH					3		2	1	6	18	4	6
LA					1				1	4	1	1
LK						1			1	1		1
MM				2	3		1		6	10	1	4
MN				1					1			
MY		1		3	4		3		11	24	4	5
NP					2		1		3	1	1	3
NR					1				1	2	0	1
NZ		3		6	1		3		13	4	3	9
PG				1	1				2			
PH		1			4	1	3		9	22	3	7
PK		1			1				2	2	1	1
SG		1		5	3		6		15	21	3	10
TH				2	2				4	2	0	2
TW		1		1			1		3		0	
Grand Total	15	56	7	59	99	21	73	13	343	576	101	187

Table 10. Membership Closure by Economy

Monthly Financial Report

(in AUD)

January 2022

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1 Executive Summary

Overview

This report provides the financial status for January 2022, compared with January budget provisions and actuals for the same period last year. It shows an operating surplus of \$665,902 and a net deficit of \$452,032 after fair value loss on financial assets.

APNIC holds net assets of \$38,393,528 which is a 1% year-to-date reduction. The combined effect of equities and bond market movement has seen a decrease in value of the investment portfolio by \$1.1m.

The Statement of Financial position (Table 1)

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

Equity has reduced by 1% or \$452k, a result of the net deficit position at the end of January.

The Statement of Income (Table 2)

The Statement of Income compares APNIC's January 2022 income and expenditure with January budget provisions and actuals for the same period last year.

Revenue: Membership and Sign-Up fees are tracking very close to the budget estimates up to end of January.

- Net membership growth (new & re-activated members less closures) is 0.42% YTD for 2022 vs 0.49% same time last year (See Figure 1: Net Membership Growth YTD).
- Year-to-date new member growth is 64 vs budget of 67. Year-to-date account closures is 35 vs budget of 26.
- Year-to-date average fees for new members is \$1,324, compared to budget assumption of \$1,435. The average annual fee for closed accounts is \$1,646, compared to the budget assumption of \$1,769. 38.6% of all new members are eligible for the LDC discount, compared to the budget assumption of 27.5%.

	2022 YTD	2021 YTD
New Members	64	51
Reactivated Members	8	5
Closure	-35	-15
Net Change	37	41
As at 1 Jan	8,768	8,341
Net Change	37	41
As at 31 January	8,805	8,382
Year to Date Growth %	0.42%	0.49%

Figure 1. Net Membership Growth YTD

Foundation Receipts and Expenses: Foundation receipts are expected to align more closely with budget estimates as 2022 Foundation funded projects are being implemented.

For greater transparency, APNIC is now reporting 'Foundation Receipts' and 'Foundation Expenses' separately as Revenue and Expenses. Previous accounting treatment was to offset the Foundation receipts and expenses within the Income Statement.

Expenses: Operating expenses are expected to align more closely with budget estimates as the 2022 Activity Plan is being implemented. COVID-19 is continuing to impact travel activity, meeting and training expenses and sponsorship.

Fair Value Loss on Financial Assets: The value of the investment portfolio has reduced by \$1.1m in the month of January. APNIC does not budget for increases or decreases in the investment portfolio due to market volatility. Therefore, the decrease in value of the portfolio has impacted the net result and attributed to the net deficit for the period.

Capital Expenditure (Table 3)

Capital Expenditure: is tracking below budget due to timing of order delivery. Capex is expected to align more closely with budget estimates as the 2022 Activity Plan is being implemented.

2 Statement of Financial Position

The Statement of Financial Position compares APNIC's assets, liabilities and equity at the end of January 2022 against the 2021 year end balances.

Amount (AUD)	YTD Jan 2022	Year End 2021	% Change
CURRENT ASSETS			
Cash/ Term Deposits	11,158,572	11,234,947	-1%
Receivables	1,095,185	1,166,701	-6%
Others	900,938	977,210	-8%
TOTAL CURRENT ASSETS	13,154,695	13,378,858	-2%
NON-CURRENT ASSETS			
Other Financial Assets	35,663,092	36,728,127	-3%
Property, plant and equipment	6,704,013	6,726,989	-0%
Deferred Tax Assets	321,557	321,557	0%
TOTAL CURRENT LIABILITES	42,688,662	43,776,672	-2%
TOTAL ASSETS	55,843,357	57,155,530	-2%
CURRENT LIABILITIES			
Payables	1,293,485	1,535,635	-16%
Provisions	2,550,632	2,700,030	-6%
Unearned Revenue	11,740,172	12,243,099	-4%
TOTAL CURRENT LIABILITES	15,584,289	16,478,765	-5%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	1,447,853	1,447,853	0%
Total Provisions	417,687	383,353	9%
TOTAL NON-CURRENT LIABILITIES	1,865,540	1,831,206	2%
TOAL LIABILITIES	17,449,829	18,309,971	-5%
NET ASSETS	38,393,528	38,845,560	-1%
Equity			
Share Capital	1	1	0%
Retained earnings	38,845,559	34,176,882	14%
Net Income	-452,032	4,668,677	-110%
TOTAL EQUITY	38,393,528	38,845,560	-1%

Table 1. Statement of Financial Position

3 Statement of Income

The Statement of Income compares APNIC's January 2022 income and expenditure with January budget provisions and actuals for the same period last year.

Amount (AUD)	YTD Actual Jan 2022	YTD Actual Jan 2021	Variance %	YTD Budget Jan 2022	Budget Variance \$	Budget Variance %
Membership fees	2,048,317	1,999,101	2%	2,043,646	4,671	0%
Non-members fees	20,925	21,059	-1%	21,644	-720	-3%
Reactivation fees	800	3,500	-77%	3,570	-2,770	-78%
Sign-Up fees	22,000	20,500	7%	21,525	475	2%
Transfer fees	11,419	9,821	16%	10,116	1,303	13%
Sundry income	18,543	2,496	643%	7,683	10,860	141%
Foundation receipts	151,640	28,880	425%	530,167	-378,527	-71%
Operating Revenue	2,273,643	2,085,357	9%	2,638,351	-364,707	-14%
Investment income	54,954	65,020	-15%	62,793	-7,839	-12%
TOTAL REVENUE	2,328,598	2,150,377	8%	2,701,144	-372,546	-14%
Bank service fees	20,129	15,328	31%	21,750	-1,621	-7%
Communication expenses	53,333	58,755	-9%	55,144	-1,811	-3%
Computer expenses	130,459	93,005	40%	182,827	-52,368	-29%
Foundation funded project expenses	151,640	0	0%	530,219	-378,579	-71%
Depreciation expense	56,312	54,823	3%	52,956	3,356	6%
Doubtful debt expenses	-30,595	-4,143	639%	1,667	-32,262	-1935%
ICANN contract fee	18,800	20,000	-6%	18,800	0	0%
Insurance expense	17,257	17,836	-3%	18,700	-1,443	-8%
Meeting and training expenses	311	3,278	-91%	5,237	-4,926	-94%
Membership fees expenses	5,149	5,374	-4%	9,004	-3,855	-43%
Office operating expenses	28,581	21,241	35%	33,623	-5,042	-15%
Postage & delivery	583	686	-15%	600	-17	-3%
Printing & photocopy	1,557	1,836	-15%	1,834	-277	-15%
Professional fees	93,498	131,336	-29%	128,925	-35,427	-27%
Recruitment expense	26,941	13,042	107%	25,500	1,441	6%
Salaries and personnel expenses	1,072,380	1,002,090	7%	1,326,029	-253,649	-19%
Sponsorship and Publicity expenses	6,003	14,104	-57%	23,425	-17,422	-74%
Staff training/ Conference expenses	7,184	3,567	101%	21,167	-13,983	-66%
Translation expenses	0	0	0%	0	0	0%
Travel expenses	3,174	5,165	-39%	85,555	-82,381	-96%
TOTAL EXPENSES	1,662,696	1,457,321	14%	2,542,962	-880,267	-35%
Operating Surplus	665,902	693,055	-4%	158,182	507,721	321%
Fair value gain/ (loss) on financial assets	-1,117,934	-159,687	600%	0	-1,117,934	0%
(DEFICIT) / SURPLUS	-452,032	533,368	-185%	158,182	-610,213	-386%

Table 2. Statement of Income

4 Capital Expenditure

The table below provides overview of current capital expenditure as of January 2022.

CAPITAL (AUD)	YTD Actual Jan 2022	YTD Actual Jan 2021	Variance %	YTD Budget Jan 2022	Budget Variance \$	Budget Variance %
Equipment & Software	2,726	21,932	-88%	80,800	-78,074	-97%
Office Furniture & Fittings	29,837	0	-	10,000	19,837	198%
Total - Capital Expenditure	32,563	21,932	48%	90,800	-58,237	-64%

Table 3. Capital Expenditure

5 Activity Reporting

5.1 Expenses by Pillars and Workstreams

EXPENSES (AUD)	YTD Actual Jan 2022	YTD Budget Jan 2022	Variance \$	Variance %
Member services	168,394	222,945	-54,551	-24%
Membership products	115,092	140,447	-25,355	-18%
Membership reporting	40,233	52,810	-12,577	-24%
Total - Membership	323,720	416,202	-92,482	-22%
Registration Services	50,714	58,276	-7,562	-13%
Registry products	166,625	197,575	-30,950	-16%
Policy development	27,286	32,377	-5,091	-16%
Total - Registry	244,626	288,228	-43,602	-15%
APNIC conferences	42,380	65,951	-23,571	-36%
Foundation support	17,452	500	16,952	3390%
Community engagement	65,946	133,178	-67,232	-50%
Community participation	20,457	30,845	-10,388	-34%
APNIC academy	196,978	412,994	-216,016	-52%
Internet infrastructure support	35,290	202,227	-166,937	-83%
Total - Development	378,503	845,696	-467,193	-55%
Information products	89,880	110,050	-20,170	-18%
Research and analysis	53,169	85,927	-32,758	-38%
Total - Information	143,049	195,977	-52,928	-27%
Internal technical infrastructure	205,278	306,338	-101,060	-33%
Finance and business services	182,436	238,469	-56,033	-23%
Employee experience	124,052	191,032	-66,980	-35%
Governance	61,032	61,020	12	0%
Total - Capability	572,799	796,859	-224,061	-28%
Total - Expenses	1,662,696	2,542,962	-880,267	-35%

Table 4. Expenses by Pillars and Workstreams

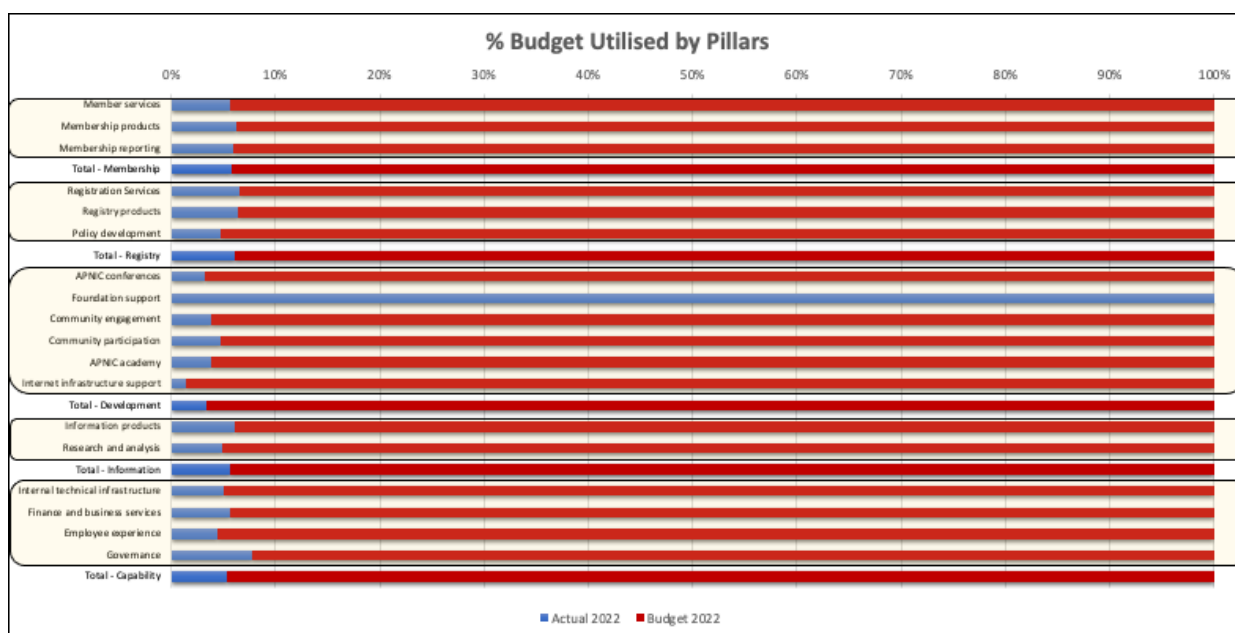


Figure 2. % Budget Utilised by Pillars

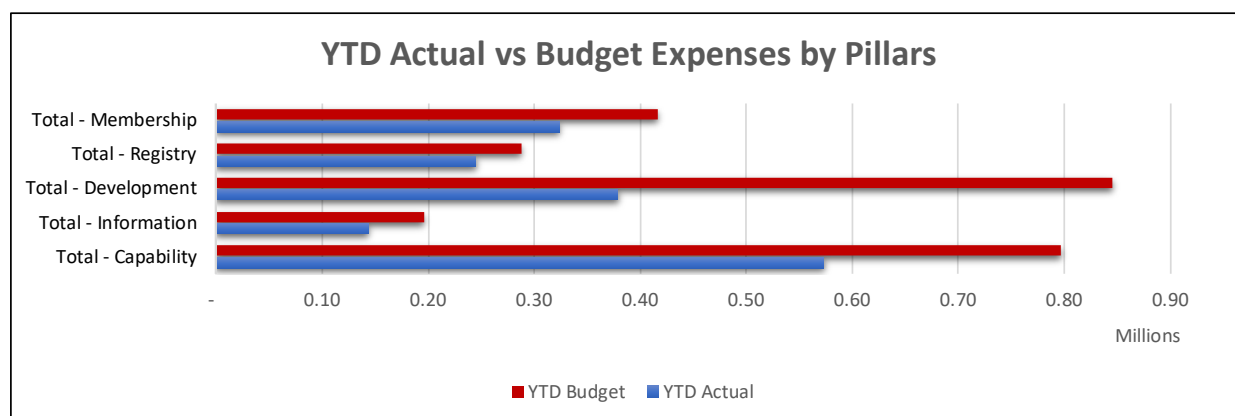


Figure 3. YTD Actual vs. Budget Expenses by Pillars

This report includes the activity grouping into pillars and workstreams as outlined in the 2022 Activity Plan. All Pillars are tracking behind budget at the first month of the year.

CAPITAL EXPENSES (AUD)	YTD Actual Jan 2022	YTD Budget Jan 2022	Variance \$	Variance %
Internal technical infrastructure	2,726	80,800	-78,074	-97%
Finance and business services	5,179	10,000	-4,821	-48%
Employee experience	24,658		24,658	
Total - Capability	32,563	90,800	-58,237	-64%
Total - Capital Expenses	32,563	90,800	-58,237	-64%

Table 5. Capital Expenditure by Pillars and Workstreams

6 APNIC Reserve

6.1 Cash Flow Statement

This report shows the cash flow status as at the end of January 2022.

Amount (AUD)	YTD Jan 2022
Total Operating Activities	
YTD Net Income	-452,032
Total Adjustments to Surplus/ (Deficit)	
Receivables	114,279
Other Current Asset	33,509
Accounts Payable	-53,866
GST Payable	34,519
Other Current Liability	-875,128
Total Adjustments to Surplus/ (Deficit)	-746,687
Total Operating Activities	-1,198,719
Total Investing Activities	
Fixed Asset	22,975
Other Asset	1,065,035
Total Investing Activities	1,088,010
Total Financing Activities	
Long Term Liability	34,334
Equity	0
Total Financing Activities	34,334
Net Change in Cash for Period	-76,375
Cash at Beginning of Period	11,234,947
Cash at End of Period	11,158,572

Table 6. Cash Flow Statement

6.2 Capital Reserve

The Reserve is diversified between Cash Investments, Investment Portfolio, and APNIC Property (i.e. APNIC Office). At the end of January, APNIC maintained \$11.2m in cash reserves, \$35.7m has been invested in the investment portfolio and \$5.4m invested in APNIC Property. Figure 4 below tracks the value and the allocation of these assets over time and tracks the operating expenses for each year for comparison:

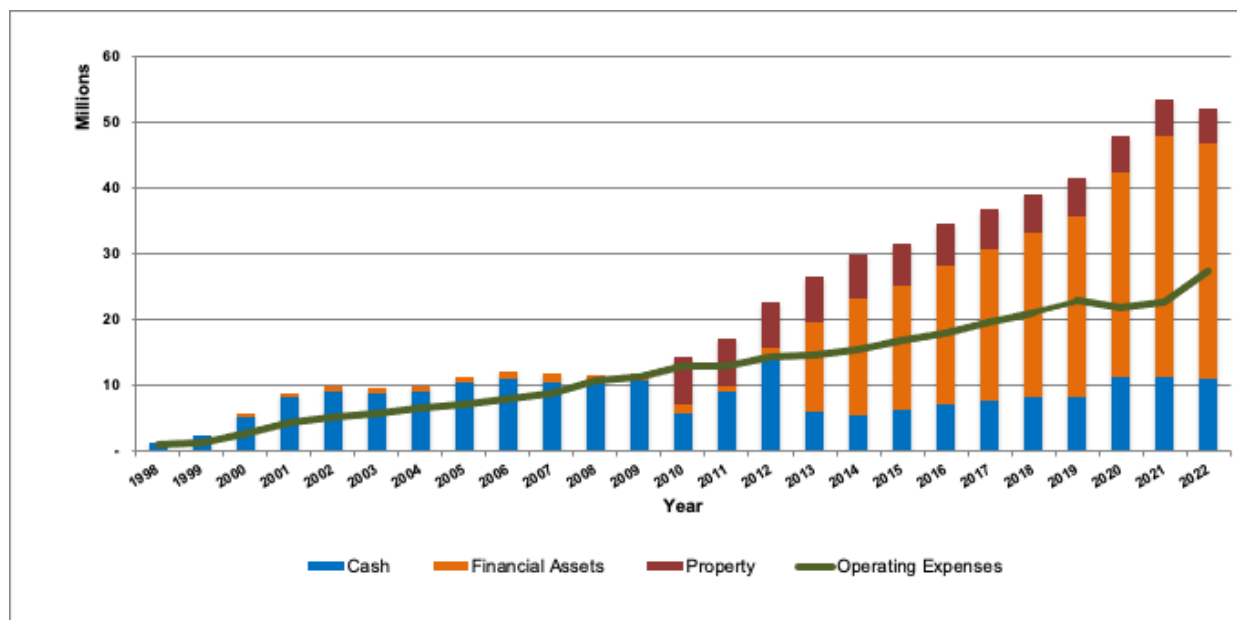


Figure 4. APNIC Reserves

6.3 APNIC’s Equity and Reserves

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

	YTD 2022*	Actual 2021*	Actual 2020*
Total Equity (AUD)	38,393,528	38,845,560	34,176,883
% Equity Covered By Cash/ Cash Equivalentents	122%	123%	124%
Monthly Operating Expenses (AUD) *	2,283,484	2,125,305	2,024,419
Number of Months of expenses covered by Equity*	16.81	18.28	16.88

Table 7. Equity and Reserves

* Calculation is based on the average monthly operating expenses of the approved budget, excluding Foundation project expenses, as it better reflects the APNIC operating cost base in a COVID-free course of business.

7 Membership

7.1 Membership by Category

There were 72 new and reactivated members and 35 account closures in January 2022. Overall net membership growth is 37 members. Year to date there have been:

- 64 new members vs. 67 budgeted new members
- 35 closures vs. 26 budgeted account closures

As at the end of January 2022, APNIC had a total of 8,805 Members serving 53 economies.

Membership	Total Dec 2021	YTD New Jan-22	Reactivation Adjustment	YTD Closed Jan-22	YTD Size Change Jan-22	Total Jan-22	% Total
Extra Large	26	0		0	0	26	0%
Very Large	49	0		0	0	49	1%
Large	151	0		0	0	151	2%
Medium	548	1		0	5	554	6%
Small	3,733	16	2	-21	5	3,735	42%
Very Small	4,126	44	5	-10	-10	4,155	47%
Associate	135	3	1	-4	0	135	2%
TOTAL	8,768	64	8	-35	0	8,805	100%

Table 8. Membership by Category

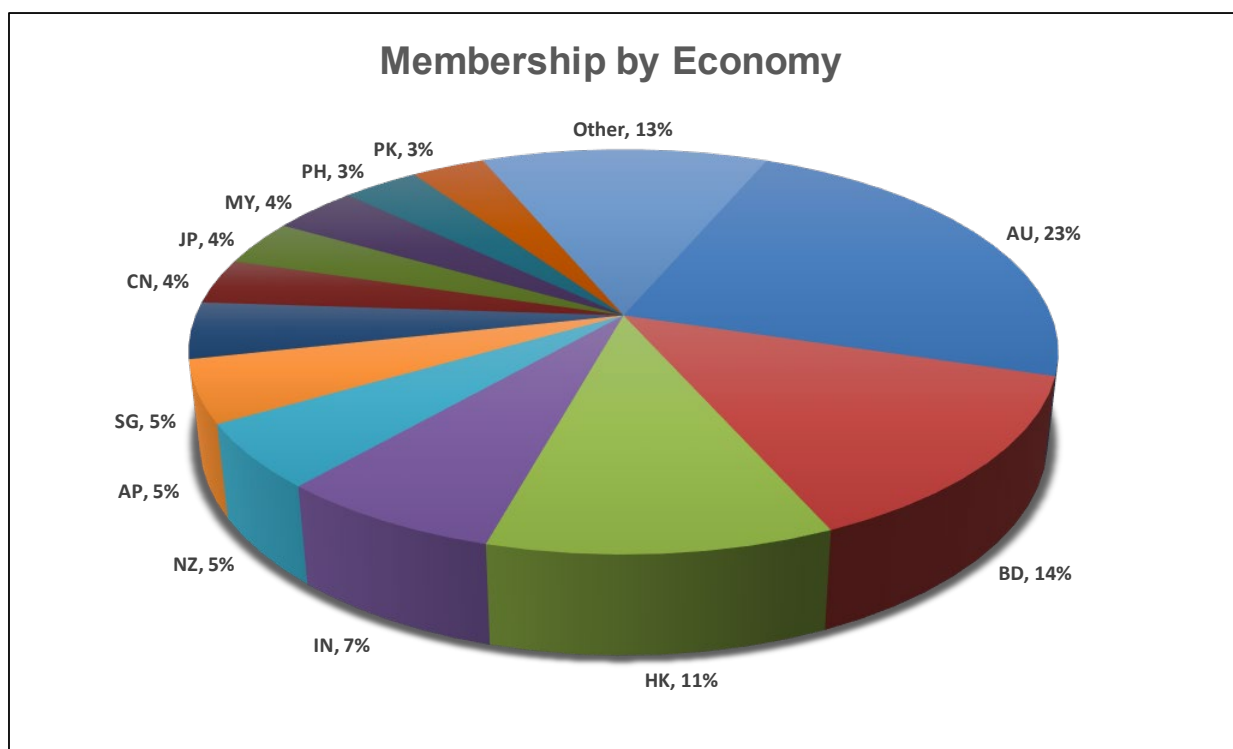


Figure 5. Membership by Economy

7.3 Membership Growth

APNIC membership monthly movements are illustrated at Figure 6 below.

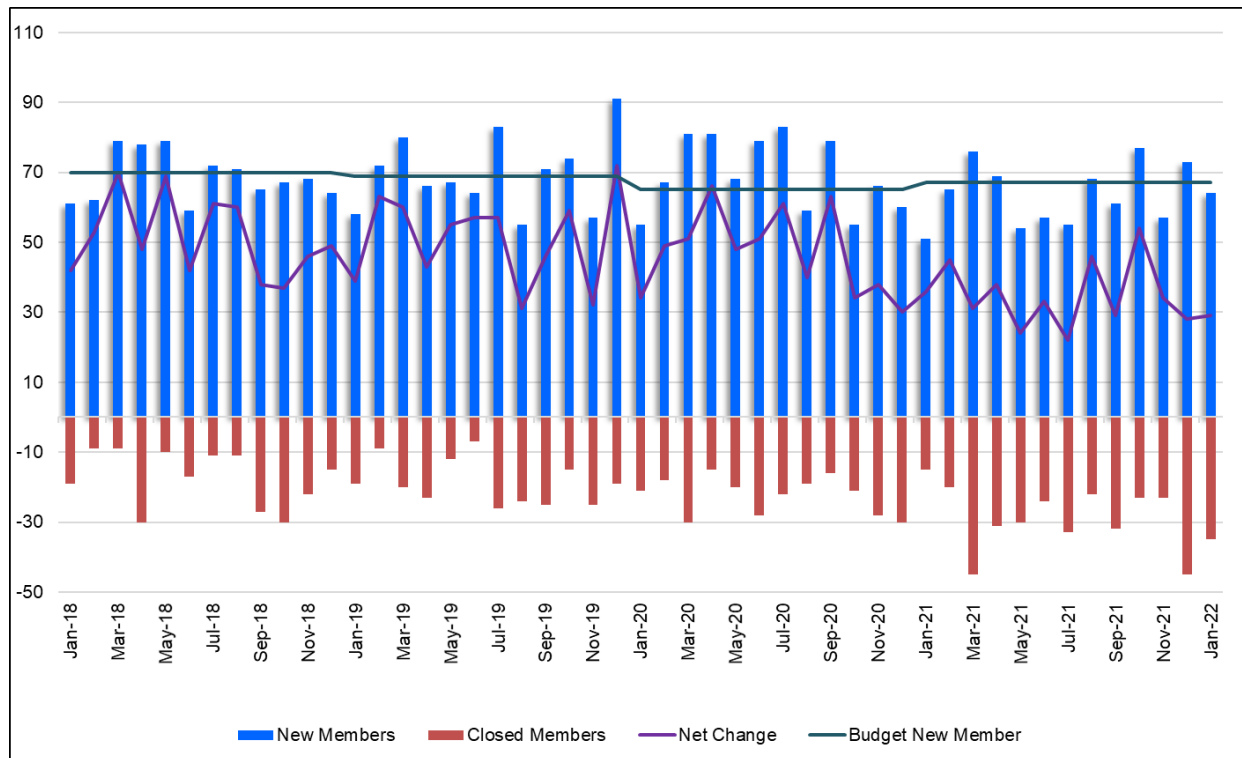


Figure 6. Membership Growth

Figure 7 below illustrates Membership growth by membership tier:

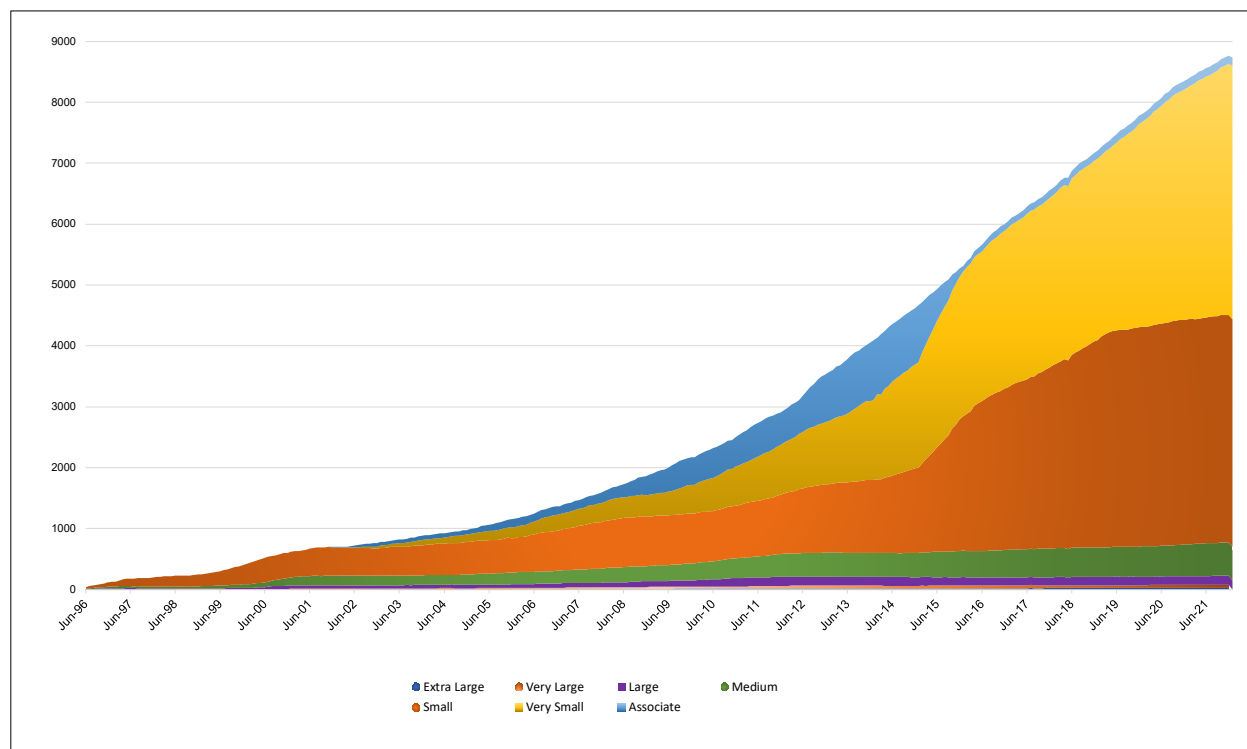


Figure 7. Total Membership

7.4 Year-to-Date Membership Movement by Economy

Figure 8 below shows new and closed membership movement by economy as at end of January.

- Top new member economies are Bangladesh, followed by Australia
- Top closed member economies are Australia, followed by China

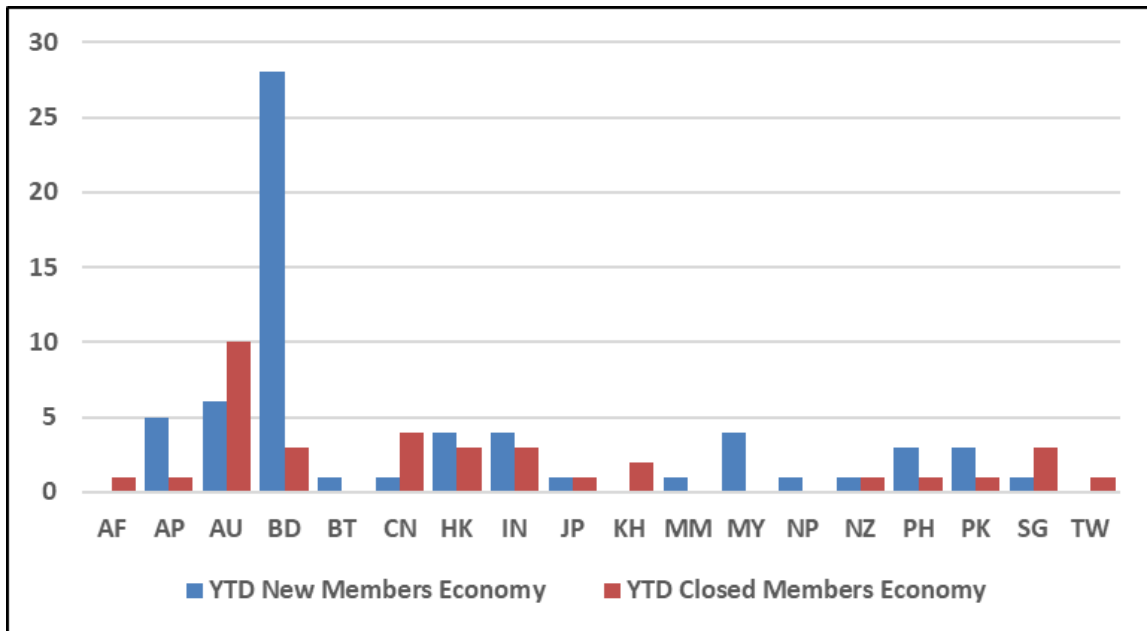
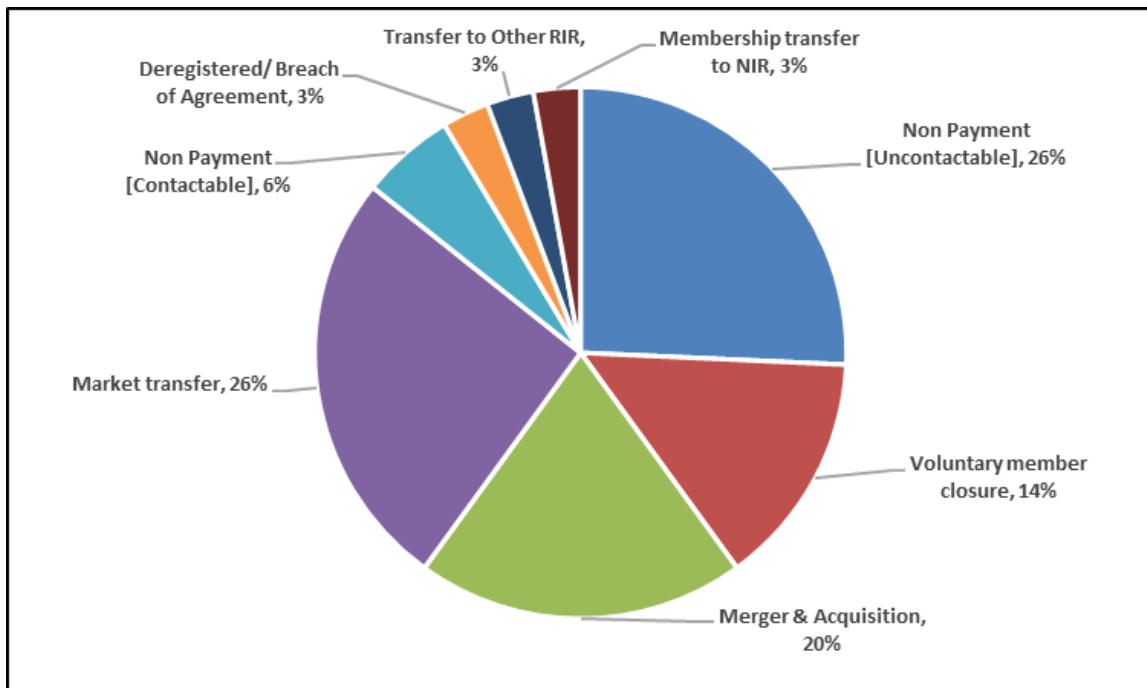


Figure 8. Year-to-Date Membership Movement by Economy

7.5 Membership Closures Analysis

Figure 9 below provides an analysis of Membership account closures as at the end of January. 48.6% of the closures relate to accounts closed due to the failure to establish contact, the business is no longer operating, or breach of agreement, where resource holdings are returned to APNIC.



7.6 Membership Closures by Year Joined

Year Joined	Deregistered / Breach of Agreement	Market transfer	Membersh ip transfer to NIR	Merger & Acquisition	Non Payment [Uncontactable]	Non Payment [Contactable]	Voluntary member closure	Transfer to Other RIR	Grand Total
2005					1				1
2006		1							1
2008					1				1
2010				2					2
2012				3		1		1	5
2013	1	1			1				3
2014				1			1		2
2015		2			2		1		5
2016		5		1	1				7
2017					1		3		4
2018			1			1			2
2019					2				2
Grand Total	1	9	1	7	9	2	5	1	35

Table 9. Membership Closures by Year Joined

7.7 Membership Closures by Economy

Economy	Deregistered / 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		1	
AP					1				1		1	
AU		1		3	2		3	1	10	20	3	7
BD		1			1	1			3	5	2	5
CN		3				1			4	2	3	2
HK	1	1			1				3	16	2	2
IN		1	1	1					3		1	
JP				1					1			
KH							2		2	4	1	3
NZ		1							1		1	1
PH					1				1			
PK		1							1		1	
SG				1	2				3	2	0	1
TW				1					1			2
Grand Total	1	9	1	7	9	2	5	1	35	49	16	23

Table 10. Membership Closures by Economy



Private Banking

Investment Report 1.1.2021 – 31.12.2021

APNIC PTY LTD

Portfolio Group: 3000039

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Private Banking

Investment Report 1.1.2021 – 31.12.2021

Portfolio Group **3000039**

In the Name of APNIC PTY LTD

Produced on 5.1.2022
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 31.12.2021

Components	Portfolio	Asset Value in AUD	Discretionary Mandate	Opened	Closed
Portfolio Group: 3000039					
Investment related Positions					
AUD Portfolio	3000039-10	0		16.08.2013	
AUD Portfolio	3000039-70	36,728,127	Yes	16.08.2013	
Total Investments		36,728,127			
Total Wealth		36,728,127			

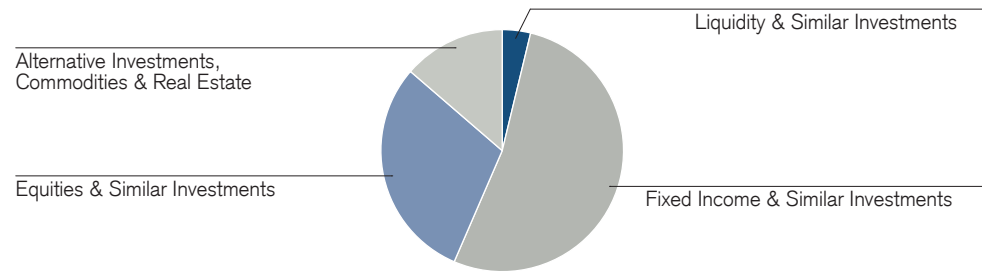
1. Overview

1.1. Asset Allocation

Asset Allocation by Asset Category

Period 1.1.2021 - 31.12.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ Liquidity & Similar Investments	1,341,244	42,266	1,383,510	3.77%
■ Fixed Income & Similar Investments	16,833,501	2,526,084	19,359,585	52.71%
■ Equities & Similar Investments	8,170,988	2,800,429	10,971,417	29.87%
■ Alternative Investments, Commodities & Real Estate	4,711,862	301,753	5,013,615	13.65%
Total Investments	31,057,596		36,728,127	100.00%

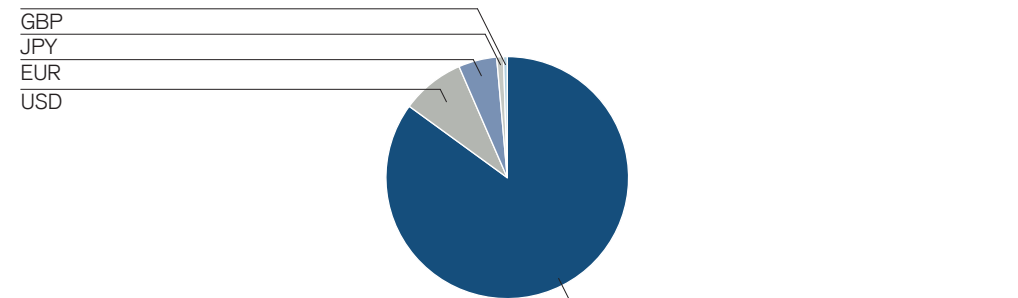


Investments in %

Asset Allocation by Currency

Period 1.1.2021 - 31.12.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ AUD - Australian Dollar	26,486,792	4,792,696	31,279,488	85.16%
■ USD - US Dollar	3,637,362	-522,265	3,115,098	8.48%
■ EUR - Euro	626,710	1,249,944	1,876,654	5.11%
■ JPY - Japan Yen	306,732	25,624	332,356	0.90%
■ GBP - Pound Sterling	0	124,532	124,532	0.34%
Total Investments	31,057,596		36,728,127	100.00%



AUD

Investments in %

1.2. Income and Activity

Income Summary

Period 1.1.2021 - 31.12.2021

	Current Period in AUD	Year to Date in AUD
Cash Dividend	827,300	827,300
Coupon Received/Paid	857	857
Interest Earned	4	4
Interest Paid	0	0
Net Income	828,161	828,161

Activity Summary

Period 1.1.2021 - 31.12.2021

	Current Period in AUD	Year to Date in AUD
Asset Inflows	7,000,000	7,000,000
Asset Outflows	-3,000,000	-3,000,000
Net Investment Asset Flows	4,000,000	4,000,000
Net Non-Investment Flows	0	0

2. Analyses

2.1. Contribution Analysis

Multi-Period Contribution by Asset Category in % as of 31.12.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
Liquidity & Similar Investments	-0.15	-0.15	-0.44	-0.44	-0.44
Fixed Income & Similar Investments	0.16	-0.60	-1.05	-1.05	-1.05
Equities & Similar Investments	0.55	0.92	4.80	4.80	4.80
Alternative Investments, Commodities & Real Estate	0.25	0.50	1.96	1.96	1.96
Total – net ***	0.81	0.68	5.26	5.26	5.26

Multi-Period Contribution by Currency in % as of 31.12.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
USD - US Dollar	-0.02	0.27	2.23	2.23	2.23
AUD - Australian Dollar	0.73	0.15	2.13	2.13	2.13
EUR - Euro	0.11	0.30	0.87	0.87	0.87
GBP - Pound Sterling	0.01	0.01	0.05	0.05	0.05
JPY - Japan Yen	-0.02	-0.05	-0.02	-0.02	-0.02
Total – net ***	0.81	0.68	5.26	5.26	5.26

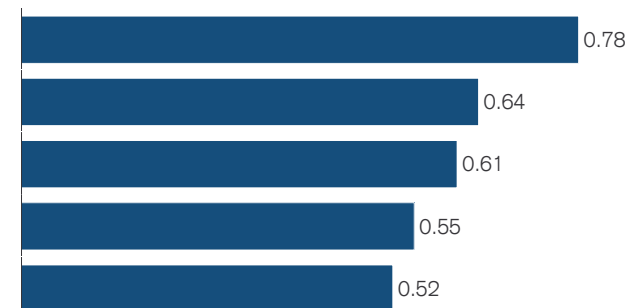
*** If applicable, fees charged in the relevant currency will be deducted from the cash account contribution, which is part of the Liquidity & Similar Investments asset category.

2.2. Contribution - Top Contributors & Detractors

Top Contributors in %

as of 31.12.2021

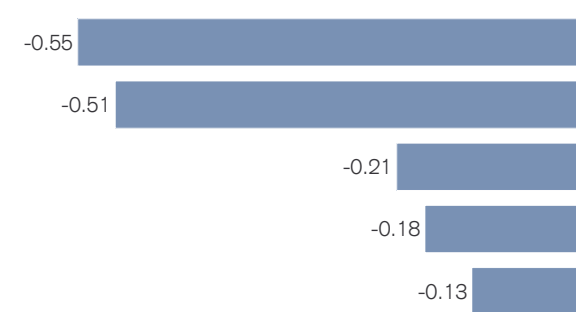
	Total Return	Average Weight	Contribution
ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF	36.14	2.47	0.78
STAPLED SECURITY GOODMAN GROUP	42.14	1.66	0.64
UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND	23.35	2.72	0.61
UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN	35.87	1.10	0.55
ACCUM SHS -1C- USD XTRACKERS(IE)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF	27.06	1.81	0.52
Total – net ***		9.77	3.10



Top Detractors in %

as of 31.12.2021

	Total Return	Average Weight	Contribution
Current Account -20300003970945	-18.32	3.04	-0.55
UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A-	-2.71	18.26	-0.51
UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	-2.33	10.23	-0.21
REGISTERED SHS MAGELLAN FINANCIAL GROUP LTD	-60.37	0.25	-0.18
UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND	-3.00	4.38	-0.13
Total – net ***		36.16	-1.59



*** 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 31.12.2021

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	946,747.18	Current Account -20300003970945 AUD Portfolio: 3000039-70	1.0000		946,747			
					2.58%			
EUR	1,305.75	Current Account -20300003970056 AUD Portfolio: 3000039-70	1.0000		2,035	5	0.27%	
			1.5545 EUR/AUD		0.01%	5	0.27%	
GBP	66,942.50	Current Account -20300003970089 AUD Portfolio: 3000039-70	1.0000		124,532	43	0.03%	
			1.8596 GBP/AUD		0.34%	43	0.03%	
USD	225,186.30	Current Account -20300003970780 AUD Portfolio: 3000039-70	1.0000		310,195	-3,678	-1.17%	
			0.7174 AUD/USD		0.84%	-3,678	-1.17%	
Total Liquidity & Similar Investments					1,383,510	0	3.77%	
Fixed Income & Similar Investments								
Fixed Income & Similar Investments AUD								
AUD	1,623,101.85	UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND AUD Portfolio: 3000039-70	AU60BGL01056 2244170	1.0395	1.0221 NAV 31.12.2021	1,659,019	-28,136 -28,136	-1.67% -1.67%
					4.52%			

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		P/L Unreal. in % Instr. in % FX in %
						Unrealized in AUD of which Instrument of which Forex		
AUD 4,240,643.84570	UNITS PERPETUAL ACTIVE FIXED INTEREST FUND AUD Portfolio: 3000039-70	AU60PER02627 35661784	1.0550	1.0248 NAV 31.12.2021	4,345,956 11.83%	-127,977 -127,977		-2.86% -2.86%
AUD 5,540,931.6647	UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A- AUD Portfolio: 3000039-70	AU60SSB01221 2248336	1.2577	1.2588 NAV 30.12.2021	6,975,091 18.99%	6,450 6,450		0.09% 0.09%
AUD 442,410.68	UNITS VANGUARD AUSTRALIAN FIXED INTEREST INDEX FUND AUD Portfolio: 3000039-70	AU60VAN00014 1653500	1.1484	1.1395 NAV 31.12.2021	504,127 1.37%	-3,956 -3,956		-0.78% -0.78%
AUD 49,678	SHS -I- AUD NEUBERGER BERMAN INVESTMENT FUNDS PLC - NEUBERGER BERMAN EMERGING MARKET DEBT - HARD CURRENCY FUND AUD Portfolio: 3000039-70	IE00B986FB81 53616359	10.6287	10.3200 NAV 31.12.2021	512,677 1.40%	-15,335 -15,335		-2.90% -2.90%
AUD 116,247	SHS PIMCO FUNDS: GLOBAL INVESTORS SERIES PLC - GLOBAL INVESTMENT GRADE CREDIT FUND INSTITUTIONAL CLASS AUD (HEDGED) AUD Portfolio: 3000039-70	IE00BL0BLL78 3752613	10.7653	10.5700 NAV 31.12.2021	1,228,731 3.35%	-22,703 -22,703		-1.81% -1.81%
AUD 338,211	SHS -L3- HEDGED AUD FEDERATED HERMES INVESTMENT FUNDS PLC - FEDERATED HERMES GLOBAL HIGH YIELD CREDIT FUND AUD Portfolio: 3000039-70	IE00BMZ15N91 57259812	3.0819	3.1822 NAV 31.12.2021	1,076,255 2.93%	33,915 33,915		3.25% 3.25%
AUD 5,425	UNITS SHS HEDGED AUD MUZINICH FUNDS - MUZINICH EMERGING MARKET CORPORATE DEBT FUND AUD Portfolio: 3000039-70	IE00BNC55647 110844223	100.3753	96.4100 NAV 31.12.2021	523,024 1.42%	-21,512 -21,512		-3.95% -3.95%

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	5,938 SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION AUD Portfolio: 3000039-70	LU2128492191 52867287	94.9706	89.6900 NAV 31.12.2021	532,579 1.45%	-31,356 -31,356	-5.56% -5.56%
AUD	11,116 SHS -CH- ROBECO CAPITAL GROWTH FUNDS SICAV - ROBECOSAM GLOBAL SDG CREDITS DISTRIBUTION AUD Portfolio: 3000039-70	LU2207422291 56320962	99.0605	97.7900 NAV 31.12.2021	1,087,034 2.96%	-14,123 -14,123	-1.28% -1.28%
AUD	9,119 SHS -EAH- CS INVESTMENT FUNDS 1 SICAV - CREDIT SUISSE (LUX) GLOBAL INFLATION LINKED BOND FUND DISTRIBUTION AUD Portfolio: 3000039-70	LU2407926216 114771252	100.0000	100.3500 NAV 31.12.2021	915,092 2.49%	3,192 3,192	0.35% 0.35%
Total Fixed Income & Similar Investments					19,359,585	0	
					52.71%		
Equities & Similar Investments							
Equities & Similar Investments AUD							
AUD	6,126 REGISTERED SHS AUSTRALIA & NEW ZEALAND BANKING GROUP LTD AUD Portfolio: 3000039-70	AU000000ANZ3 640139 ANZ.AX	28.2539	27.5100 CLO 31.12.2021	168,526 0.46%	-4,557 -4,557	-2.63% -2.63%
AUD	33,641 REGISTERED SHS ALUMINA LTD AUD Portfolio: 3000039-70	AU000000AWC3 1526402 AWC.AX	1.9144	1.8650 CLO 31.12.2021	62,740 0.17%	-1,661 -1,661	-2.58% -2.58%
AUD	34,858 REGISTERED SHS AURIZON HOLDINGS LTD AUD Portfolio: 3000039-70	AU000000AZJ1 20175896 AZJ.AX	4.5903	3.4900 CLO 31.12.2021	121,654 0.33%	-38,354 -38,354	-23.97% -23.97%

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	8,636 REGISTERED SHS BHP GROUP LTD AUD Portfolio: 3000039-70	AU000000BHP4 640390 BHP.AX	32.1085	41.5000 CLO 31.12.2021	358,394 0.98%	81,105 81,105	29.25% 29.25%
AUD	2,799 REGISTERED SHS CARSALES.COM LTD AUD Portfolio: 3000039-70	AU000000CAR3 10476764 CAR.AX	16.4680	25.0900 CLO 31.12.2021	70,227 0.19%	24,133 24,133	52.36% 52.36%
AUD	3,217 REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA AUD Portfolio: 3000039-70	AU000000CBA7 646758 CBA.AX	81.5356	101.0000 CLO 31.12.2021	324,917 0.88%	62,617 62,617	23.87% 23.87%
AUD	6,140 REGISTERED SHS COMPUTERSHARE LTD AUD Portfolio: 3000039-70	AU000000CPU5 241285 CPU.AX	16.0032	20.0000 CLO 31.12.2021	122,800 0.33%	24,541 24,541	24.98% 24.98%
AUD	1,173 REGISTERED SHS CSL LTD AUD Portfolio: 3000039-70	AU000000CSL8 241548 CSL.AX	178.5819	290.7200 CLO 31.12.2021	341,015 0.93%	131,538 131,538	62.79% 62.79%
AUD	2,504 REGISTERED SHS FLIGHT CENTRE TRAVEL GROUP LTD AUD Portfolio: 3000039-70	AU000000FLT9 90307 FLT.AX	19.0671	17.6200 CLO 31.12.2021	44,120 0.12%	-3,624 -3,624	-7.59% -7.59%
AUD	2,510 CHESS UNITS OF FOREIGN SECURITIES JAMES HARDIE INDUSTRIES PLC AUD Portfolio: 3000039-70	AU000000JHX1 1303670 JHX.AX	27.0838	55.3000 CLO 31.12.2021	138,803 0.38%	70,823 70,823	104.18% 104.18%
AUD	330 REGISTERED SHS MACQUARIE GROUP LTD AUD Portfolio: 3000039-70	AU000000MQG1 3422370 MQG.AX	85.9818	205.4000 CLO 31.12.2021	67,782 0.18%	39,408 39,408	138.89% 138.89%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	9,455 REGISTERED SHS NATIONAL AUSTRALIA BANK LTD AUD Portfolio: 3000039-70	AU000000NAB4 641643 NAB.AX	24.5148	28.8400 CLO 31.12.2021	272,682 0.74%	40,895 40,895	17.64% 17.64%
AUD	4,479 REGISTERED SHS NEWCREST MINING LTD AUD Portfolio: 3000039-70	AU000000NCM7 650853 NCM.AX	27.6429	24.4800 CLO 31.12.2021	109,646 0.30%	-14,167 -14,167	-11.44% -11.44%
AUD	19,096 REGISTERED SHS NINE ENTERTAINMENT CO. HOLDINGS LTD AUD Portfolio: 3000039-70	AU000000NEC4 22858707 NEC.AX	2.8159	2.9100 CLO 31.12.2021	55,569 0.15%	1,797 1,797	3.34% 3.34%
AUD	9,661 REGISTERED SHS ORIGIN ENERGY LTD AUD Portfolio: 3000039-70	AU000000ORG5 1051439 ORG.AX	7.5195	5.2400 CLO 31.12.2021	50,624 0.14%	-22,022 -22,022	-30.31% -30.31%
AUD	2,275 REGISTERED SHS OZ MINERALS LTD AUD Portfolio: 3000039-70	AU000000OZL8 4334812 OZL.AX	10.7556	28.2200 CLO 31.12.2021	64,201 0.17%	39,731 39,731	162.37% 162.37%
AUD	17,180 REGISTERED SHS QANTAS AIRWAYS LTD AUD Portfolio: 3000039-70	AU000000QAN2 390413 QAN.AX	5.6657	5.0100 CLO 31.12.2021	86,072 0.23%	-11,264 -11,264	-11.57% -11.57%
AUD	6,689 REGISTERED SHS QBE INSURANCE GROUP LTD AUD Portfolio: 3000039-70	AU000000QBE9 641857 QBE.AX	11.5695	11.3500 CLO 31.12.2021	75,920 0.21%	-1,469 -1,469	-1.90% -1.90%
AUD	1,646 REGISTERED SHS RIO TINTO LTD AUD Portfolio: 3000039-70	AU000000RIO1 603520 RIO.AX	76.5155	100.1100 CLO 31.12.2021	164,781 0.45%	38,837 38,837	30.84% 30.84%

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		P/L Unreal. in % Instr. in % FX in %
						Unrealized in AUD of which Instrument of which Forex		
AUD	2,410 SHS RESMED INC CHESS DEPOSITORY INTERESTS REPR 1/10 SH AUD Portfolio: 3000039-70	AU000000RMD6 1058638 RMD.AX	23.6564	35.7800 CLO 31.12.2021	86,230 0.23%	29,218 29,218	51.25% 51.25%	
AUD	19,650 REGISTERED SHS SOUTH32 LTD AUD Portfolio: 3000039-70	AU000000S320 27547963 S32.AX	2.6985	4.0100 CLO 31.12.2021	78,797 0.21%	25,770 25,770	48.60% 48.60%	
AUD	76,774 UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000SLF1 1377855 SLF.AX	12.5989	14.5900 CLO 31.12.2021	1,120,133 3.05%	152,865 152,865	15.80% 15.80%	
AUD	8,245 UNITS SPDR S&P/ASX 200 FUND ETF AUSTRALIAN EQUITY EXCHANGE TRADED FUNDS AUD Portfolio: 3000039-70	AU000000STW9 1285707 STW.AX	58.8197	68.9000 CLO 31.12.2021	568,081 1.55%	83,112 83,112	17.14% 17.14%	
AUD	14,246 REGISTERED SHS TELSTRA CORPORATION LTD AUD Portfolio: 3000039-70	AU000000TLS2 720464 TLS.AX	4.5550	4.1800 CLO 31.12.2021	59,548 0.16%	-5,342 -5,342	-8.23% -8.23%	
AUD	3,230 SHS VANGUARD MSCI AUSTRALIAN SMALL COMPANIES INDEX ETF EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000000VSO2 13053435 VSO.AX	60.3498	75.1100 CLO 31.12.2021	242,605 0.66%	47,675 47,675	24.46% 24.46%	
AUD	9,974 REGISTERED SHS WESTPAC BANKING CORP AUD Portfolio: 3000039-70	AU000000WBC1 642372 WBC.AX	26.9089	21.3500 CLO 31.12.2021	212,945 0.58%	-55,445 -55,445	-20.66% -20.66%	
AUD	1,031 REGISTERED SHS WESFARMERS LTD AUD Portfolio: 3000039-70	AU000000WES1 642397 WES.AX	34.0342	59.3000 CLO 31.12.2021	61,138 0.17%	26,049 26,049	74.24% 74.24%	

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	2,499 REGISTERED SHS WOOLWORTHS GROUP LTD AUD Portfolio: 3000039-70	AU000000WOW2 81350 WOW.AX	34.1257	38.0100 CLO 31.12.2021	94,987 0.26%	9,707 9,707	11.38% 11.38%
AUD	4,372 REGISTERED SHS WOODSIDE PETROLEUM LTD AUD Portfolio: 3000039-70	AU000000WPL2 642429 WPL.AX	27.6704	21.9300 CLO 31.12.2021	95,878 0.26%	-25,097 -25,097	-20.75% -20.75%
AUD	8,724 REGISTERED SHS COLES GROUP LTD AUD Portfolio: 3000039-70	AU0000030678 44059594 COL.AX	16.9597	17.9400 CLO 31.12.2021	156,509 0.43%	8,552 8,552	5.78% 5.78%
AUD	326 UNITS ISHARES S&P 500 AUD HEDGED ETF EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU000001HVV8 26323289 IHVV.AX	461.5500	467.5600 CLO 31.12.2021	152,425 0.42%	1,959 1,959	1.30% 1.30%
AUD	1,983 UNITS VANGUARD ETHICALLY CONSCIOUS AUST ETF EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	AU0000103533 57145371 VETH.AX	60.1201	61.6000 CLO 31.12.2021	122,153 0.33%	2,935 2,935	2.46% 2.46%
AUD	4,018 REGISTERED SHS ENDEAVOUR GROUP LTD AUD Portfolio: 3000039-70	AU0000154833 111541385 EDV.AX	0.5888	6.7400 CLO 31.12.2021	27,081 0.07%	24,716 24,716	>999.99% >999.99%
AUD	119,980.46 UNITS WHEB SUSTAINABLE IMPACT FUND AUD Portfolio: 3000039-70	AU60HHA00072 4431395	1.5473	1.7253 BID 31.12.2021	207,002 0.56%	21,352 21,352	11.50% 11.50%
AUD	62,841.8135 UNITS EIGER AUSTRALIAN SMALL COMPANIES FUND AUD Portfolio: 3000039-70	AU60HOW29675 112847137	1.7805	1.7886 NAV 31.12.2021	112,399 0.31%	512 512	0.46% 0.46%

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	29,657.9379	UNITS PERENNIAL BETTER FUTURE TRUST AUD Portfolio: 3000039-70	AU60WPC56007 112127492	1.5041	1.4684 NAV 31.12.2021	43,550 -1,059 -1,059	-2.37% -2.37%
Total Equities & Similar Investments AUD					6,141,933 0 16.72%		
Equities & Similar Investments EUR							
EUR	8,999	SHS EUR ISHARES II PLC - ISHARES CORE MSCI EUROPE UCITS ETF AUD Portfolio: 3000039-70	IE00B1YZSC51 3246398 IQQY.DE	25.9541 1.5726 EUR/AUD	29.9700 CLO 31.12.2021	420,368 56,328 -3,253	14.45% 15.47% -1.02%
EUR	7,210	ACCUM.PTG.SHS WELLINGTON MANAGEMENT FUNDS (IRELAND) PLC - WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR AUD Portfolio: 3000039-70	IE00B9DPD161 20938626	15.8682 1.5372 EUR/AUD	23.4640 NAV 31.12.2021	263,685 87,819 85,361 2,458	49.93% 47.87% 2.07%
EUR	23,900	ACCUM SHS -1C- USD XTRACKERS(IE)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF AUD Portfolio: 3000039-70	IE00BZ02LR44 41359963 XZW0.DE	27.3164 1.5576 EUR/AUD	31.9600 CLO 30.12.2021	1,190,565 173,669 172,981 688	17.08% 17.00% 0.08%
Total Equities & Similar Investments EUR					1,874,619 0 5.10%		
Equities & Similar Investments JPY							
JPY	933	UNITS NEXT FUNDS NIKKEI 225 EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	JP3027650005 1264151 1321.T	24,587.7931 81.7284 AUD/JPY	29,770.0000 CLO 30.12.2021	332,356 51,665 57,855 -6,190	18.41% 21.08% -2.67%
Total Equities & Similar Investments JPY					332,356 0 0.90%		

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 USD							
USD	71	ACCUM.PTG.SH5 ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD AUD Portfolio: 3000039-70	IE00B53SZB19 10737617 CSNDX.S	348.3821 0.7807 AUD/USD	927.0000 CLO 31.12.2021	90,663 0.25%	186.16% 166.09% 20.07%
USD	5,550	ACCUM SH5 -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF AUD Portfolio: 3000039-70	IE00BJ0KDR00 24268896 XD9U.L	96.2694 0.7155 AUD/USD	136.1000 CLO 30.12.2021	1,040,506 2.83%	39.35% 41.37% -2.03%
USD	19,007	SH5 -R (ACC.)- GOLDMAN SACHS FUNDS SICAV - GOLDMAN SACHS EMERGING MARKETS EQUITY PORTFOLIO CAPITALISATION AUD Portfolio: 3000039-70	LU0830622741 19578737	16.4768 0.7133 AUD/USD	19.4600 NAV 30.12.2021	509,506 1.39%	16.05% 18.11% -2.05%
USD	323	SH5 -C- SCHRODER INTERNATIONAL SELECTION FUND SICAV - GLOBAL ENERGY TRANSITION CAPITALISATION AUD Portfolio: 3000039-70	LU2016063229 48843442	222.0619 0.7719 AUD/USD	207.8388 NAV 31.12.2021	92,475 0.25%	-0.48% -6.41% 5.93%
USD	6,273	SH5 ISHARES ESG AWARE MSCI EM ETF AUD Portfolio: 3000039-70	US46434G8630 33080862 ESGE.OQ	43.6753 0.7443 AUD/USD	39.7500 CLO 31.12.2021	343,483 0.94%	-6.68% -8.99% 2.31%
USD	3,161	SH5 ISHARES ESG AWARE MSCI USA SMALL-CAP ETF AUD Portfolio: 3000039-70	US46435U6635 41349509 ESML.Z	41.6890 0.7285 AUD/USD	40.3200 CLO 31.12.2021	175,565 0.48%	-2.94% -3.28% 0.34%

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		P/L Unreal. in % Instr. in % FX in %
						Unrealized in AUD of which Instrument of which Forex		
USD	566 TRUST UNITS SPDR S&P 500 ETF TRUST AUD Portfolio: 3000039-70	US78462F1030 45088 SPY.P	265.5437 0.7544 AUD/USD	474.9600 CLO 31.12.2021	370,311 1.01%	171,076 163,275 7,801	85.87% 78.86% 7.00%	
Total Equities & Similar Investments USD					2,622,510 0 7.14%			
Total Equities & Similar Investments					10,971,417 0 29.87%			
Alternative Investments, Commodities & Real Estate								
Hedge Funds								
AUD	694,630.01 UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE AUD Portfolio: 3000039-70	AU60MAL00181 3379478	1.2351	1.2310 NAV 31.12.2021	855,074 2.33%	-2,886 -2,886	-0.34% -0.34%	
AUD	4,552 ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND AUD Portfolio: 3000039-70	IE00BKV41X02 54282717	105.2748	112.5360 NAV 31.12.2021	512,264 1.39%	33,053 33,053	6.90% 6.90%	
AUD	7,023.834 ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES FUND AUD Portfolio: 3000039-70	IE00BMPRT797 56741323	102.8866	103.3715 NAV 30.11.2021	726,064 1.98%	3,406 3,406	0.47% 0.47%	
AUD	5,123 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	103.6336	114.7900 NAV 31.12.2021	588,069 1.60%	57,154 57,154	10.77% 10.77%	

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	1,941	SHS -D2 HEDGED- BLACKROCK STRATEGIC FUNDS SICAV - BLACKROCK EMERGING COMPANIES ABSOLUTE RETURN FUND CAPITALISATION AUD Portfolio: 3000039-70	LU2402058403 114466865	98.2200	99.9900 NAV 31.12.2021	194,081 0.53%	3,436 3,436 1.80%
Total Hedge Funds					2,875,551	0	7.83%
Private Equity							
AUD	276,039	UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE AUD Portfolio: 3000039-70	AU60ETL02762 26607292	2.1653	3.2205 NAV 30.11.2021	888,984 2.42%	291,290 291,290 48.74%
Total Private Equity					888,984	0	2.42%
Commodities & Precious Metals							
USD	108	UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN AUD Portfolio: 3000039-70	CH0031794263 3179426 TCMCI.S	1,222.7004 0.7285 AUD/USD	1,226.0000 BID 30.12.2021	182,393 0.50%	1,134 491 0.63%
Total Commodities & Precious Metals					182,393	0	0.50%
Real Estate							
AUD	13,927	STAPLED SECS DEXUS PROPERTY TRUST CONS OF 1 SH + 1 TR UT DEXUS OPER AUD Portfolio: 3000039-70	AU000000DXS1 112275620 DXS.AX	11.1013	11.1200 CLO 31.12.2021	154,868 0.42%	260 260 0.17%

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	28,086	STAPLED SECURITY GOODMAN GROUP AUD Portfolio: 3000039-70	AU000000GMG2 18079202 GMG.AX	11.0006	26.5000 CLO 31.12.2021	744,279 2.03%	435,317 435,317 140.90%
AUD	57,574	STAPLED SECURITY MIRVAC GROUP AUD Portfolio: 3000039-70	AU000000MGR9 821911 MGR.AX	2.0391	2.9100 CLO 31.12.2021	167,540 0.46%	50,141 50,141 42.71%
Total Real Estate					1,066,688	0	2.90%
Total Alternative Investments, Commodities & Real Estate					5,013,615	0	13.65%
Total Investments					36,728,127	100.00%	
of which Accrued Interest					0		

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.

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.

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.

For realized profit and loss for FX Spots, Forwards and Swaps (including all currencies and Precious Metals) in Transactions section, in the 'Execution of FX Purchase' and 'Execution of FX Sales' rows, the value in the realized Profit/Loss column is calculated by comparing the Transaction Valuation based on the end of day exchange rate on the Value Date against the Cost Valuation based on the FX contract rate; this does not mean that the Profit/Loss for that transaction can be or has been cashed out.

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.

For unrealized profit and loss for Precious Metal Account and Current Account in Position Section, where there have been FX Spots, Forwards and Swaps transactions (including all currencies and Precious Metals), the Cost Valuation exchange rate is calculated based on the weighted average end of day exchange rate on respective transactions' value date. The value in the unrealized Profit/Loss column is calculated by comparing the Current Valuation (based on conversion rates stated in the statement) as of reporting date against Cost Valuation.

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

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 31.12.2021

AUD 1.0000 = JPY 83.5714

AUD 1.0000 = USD 0.7260

EUR 1.0000 = AUD 1.5587

GBP 1.0000 = AUD 1.8603

4.2. Legal Information

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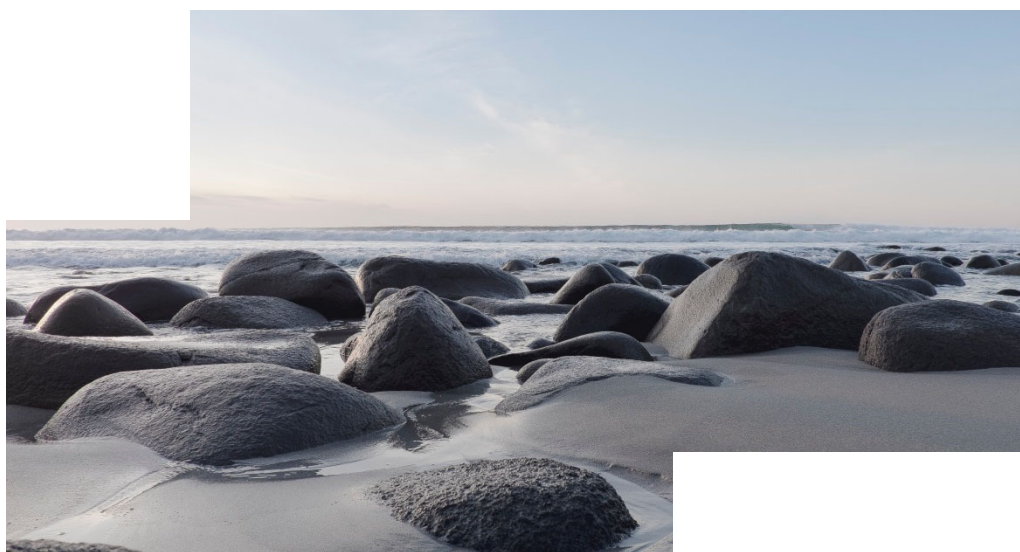
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APNIC Monthly Reporting



Summary

- The APNIC portfolio was indicatively up 0.78% in December.
- Global equities advanced 1.77% in AUD terms on the back of positive data on both the economic and virus front.
- Australian equities advanced 2.76%.
- Global bonds yields rose as central banks shifted towards less accommodative tones.

Market Commentary

Equity markets bounced back in December, supported by positive data on both the economic and virus front. However, a strengthening AUD partially offset some of the gains from international equities for Australian investors. In AUD terms, US, Europe, Emerging Markets and Australian equities returned 1.42%, 3.66%, -0.57% and 2.76%, respectively. In bond markets, global yields trended higher as central banks shifted towards less accommodative tones.

The Australian economic recovery accelerated in November alongside the continued easing of Delta related lockdown measures, with the improvement in the services sector being particularly pronounced. The labour market delivered a positive surprise, adding 366k jobs to the economy, which brought the unemployment rate down to 4.6%. Retail sales growth accelerated to 7.3% MoM in November, compared to 4.9% in the month prior. The RBA meeting in December was relatively uneventful following the surprise abandonment of the Yield Curve Control program in November and without a meeting in January, policy makers have indicated that they will review their bond buying program in the February meeting which will likely set the tone for 2022.

Economic data for the US has also been trending upwards despite an Omicron variant led surge in COVID-19 cases. The US ISM Manufacturing PMI printed at 58.7 in December, pointing to strong expansion in factory activity. The labour market continued its strong recovery with 807k new jobs added to the economy in December, more than doubling economist expectations. However, the strong economic momentum has also

put strong upward pressure on inflation and the US Core PCE, the Fed's preferred inflation measure, surprised to the upside with a 4.7% YoY reading in November. This suggests that higher inflation is now more persistent and less temporary than the central bank had previously anticipated and triggered a hawkish shift from the Fed to accelerate the end of easy monetary policy.

The economic recovery in Europe continued in December but the pace has slowed with key governments in the region reimposing virus containment measures at year-end. The Eurozone Market Manufacturing PMI printed at 58.0 for December, well above the 50.0 mark which separates expansion from contraction, but a touch down from the 58.4 level observed in November. Retail sales was surprisingly resilient in November, increasing 1.0% for the month, but a poll in December showed a fall in Services Sentiment, suggesting Omicron variant related concerns remain a downside risk to economic recovery. At the same time, the Eurozone CPI increased from 4.1% to 4.9% in November which kept the Euro Area Core inflation rate at an obstinately high level of 2.6%, placing the ECB in the difficult position of supporting economic recovery while also attempting to contain inflation to its 2.0% target.

The rate of economic growth in China has been soft compared to global peers but incremental improvements in the latest data is encouraging. The Caixin Manufacturing PMI returned to expansionary territory in December with a reading of 50.9, up from 49.9 in the prior month. The Services PMI also took a step up in December from 52.1 to 53.1. Given the Chinese government's commitment to stabilising the economy and supporting growth, the tepid growth outlook could drive further fiscal stimulus in early 2022.

Market Value as at 31 December 2021

	Market Value
APNIC Portfolio	A\$36,718,541

Performance as of 31 December 2021

APNIC Portfolio				
	Portfolio	Benchmark	Relative	CPI + 2.5%
Month	0.78%	0.91%	-0.13%	0.46%
3 Months	0.64%	0.89%	-0.25%	1.38%
Year To Date	5.23%	5.75%	-0.52%	4.98%
1 Year	5.23%	5.75%	-0.52%	4.98%
3 Years pa	7.01%	7.42%	-0.41%	4.11%
Since Inception pa	5.52%	5.79%	-0.27%	4.34%

* Performance is after fees but before franking

Asset Allocation

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

Significant Recent Portfolio Changes

Position	Comments
AXA World Funds – Global Inflation Linked Bonds / CSAM Global Inflation Linked Bond Fund	Sold / Bought: Switched out of AXA fund to CSAM fund for inflation-linked bond allocation as the latter more accurately tracks the benchmark.
CBA	Decreased: Fully valued, lower margins weakening income growth.
Eiger Australian Small Companies Fund / Perennial Better Future Trust	Bought: Increase small cap exposure to market weight via the addition of positions in two small cap managers with good track record and capacity for further inflows.
SPDR US Financial / iShares ESG Aware MSCI USA Small Cap ETF	Sold / Bought: Added exposure to US small caps in line with favourable shift in Global Investment Committee view which is based on bottom up analysis that valuation is more attractive. Funded by closing out financials position which has done well.
Resmed	Increased: Performing well with opportunities to grow market share.
Westpac	Decreased: Revenue weaker than expected undermining upside from targeted efficiencies
Woolworths	Decreased: Fully valued with positive restructuring of group completed.

Outlook

The Global Investment Committee (GIC) reassessed several risks across two meetings in December, including the tensions between Western countries and Russia, the potential for an energy crisis in Europe and Omicron COVID-19 variant related concerns. Although Omicron appears linked to a lower rate of hospitalisations, we are conscious that its highly infectious nature could still have a meaningful economic impact. Already making up for three quarters of COVID-19 cases in US alone, it is spreading rapidly at a global scale, increasing risks for the return of stringent lockdowns to provide relief to challenged healthcare systems. This comes at a time when global inflation is at elevated levels and central banks are reducing monetary stimulus. To manage these risks, the GIC believes it is prudent to close out the positive equities bias, previously expressed through developed markets.

Accordingly, we have brought the overall equities position in portfolios down to benchmark weight by reducing the allocation to European and US equities. That being said, we still believe that equity markets have upside potential over a 6-month time horizon, as our base case still calls for robust global growth to be maintained over the medium term. Within equities, we maintain a slight cyclical tilt in portfolios, preferring markets and sectors like Japan, financials and materials.

Data Sources

Credit Suisse, unless otherwise specified.

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Private Banking

Investment Report 1.1.2022 – 31.1.2022

APNIC PTY LTD

Portfolio: 3000039-70

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Private Banking

Investment Report 1.1.2022 – 31.1.2022

Portfolio 3000039-70
In the Name of APNIC PTY LTD
Produced on 1.2.2022
Reporting Currency AUD
Relationship Manager Patrick Armitage
Phone +61 2 8205 4451

APNIC PTY LTD
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Scope of Analysis

as of 31.1.2022

Components	Portfolio	Asset Value in AUD	Discretionary Mandate	Opened	Closed	Performance Activation	Performance Deactivation
Investment related Positions							
AUD Portfolio	3000039-70	35,663,092	Yes	16.08.2013		31.12.2013	
Total Wealth		35,663,092					

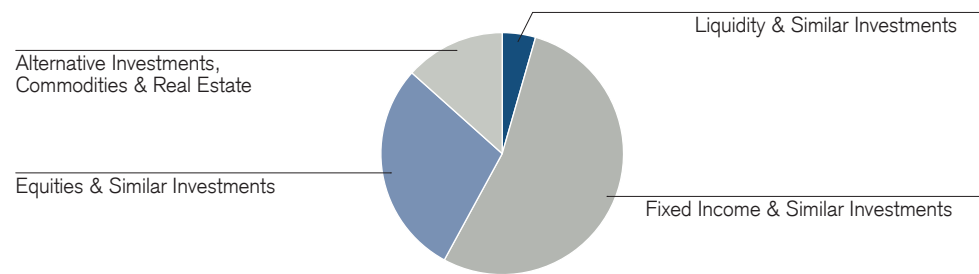
1. Overview

1.1. Asset Allocation

Asset Allocation by Asset Category

Period 1.1.2022 - 31.1.2022

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ Liquidity & Similar Investments	1,383,510	199,486	1,582,996	4.44%
■ Fixed Income & Similar Investments	19,350,737	-276,988	19,073,748	53.48%
■ Equities & Similar Investments	10,971,417	-732,437	10,238,980	28.71%
■ Alternative Investments, Commodities & Real Estate	5,001,947	-234,579	4,767,368	13.37%
Total Investments	36,707,611		35,663,092	100.00%

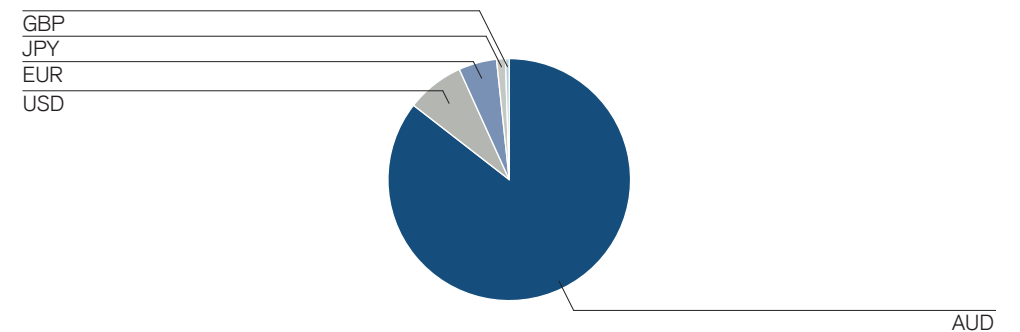


Investments in %

Asset Allocation by Currency

Period 1.1.2022 - 31.1.2022

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ AUD - Australian Dollar	31,258,972	-711,794	30,547,177	85.65%
■ USD - US Dollar	3,115,098	-358,203	2,756,895	7.73%
■ EUR - Euro	1,876,654	-64,853	1,811,801	5.08%
■ JPY - Japan Yen	332,356	87,069	419,425	1.18%
■ GBP - Pound Sterling	124,532	3,262	127,795	0.36%
Total Investments	36,707,611		35,663,092	100.00%



Investments in %

1.2. Income and Activity

Income Summary

Period 1.1.2022 - 31.1.2022

	Current Period in AUD	Year to Date in AUD
Cash Dividend	52,888	52,888
Coupon Received/Paid	0	0
Interest Earned	11	11
Interest Paid	0	0
Net Income	52,899	52,899

Activity Summary

Period 1.1.2022 - 31.1.2022

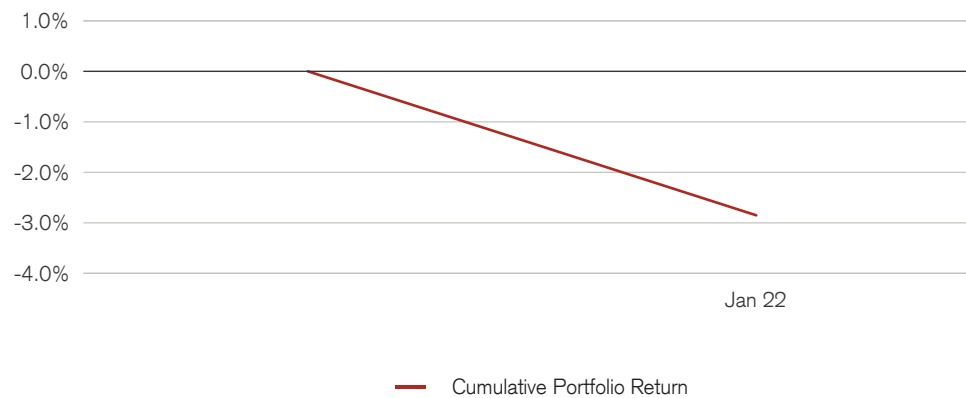
	Current Period in AUD	Year to Date in AUD
Asset Inflows	0	0
Asset Outflows	0	0
Net Investment Asset Flows	0	0

1.3. Performance

Performance Summary

Period 1.1.2022 - 31.1.2022

	Asset Value in AUD	Asset Value in AUD
Ending Market Value		35,663,092
Beginning Market Value		36,707,611
Asset Flows including		0
Inflows	0	
Outflows	0	
Net Non-Investment Flows	0	
Taxes	0	
Flow Adjusted Value Change		-1,044,518
Cumulative Portfolio Return – net		-2.85%



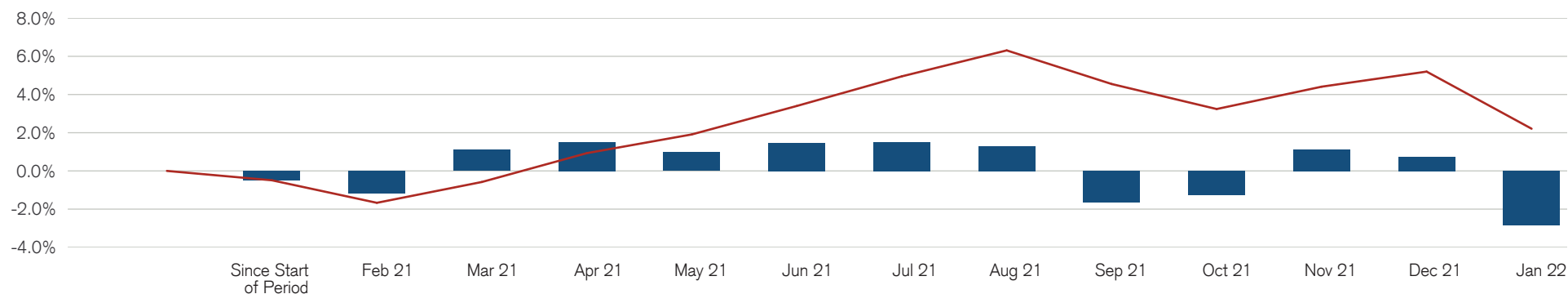
2. Analyses

2.1. Performance

Performance Details

Period 1.1.2021 - 31.1.2022

	Since Start of Period	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22
Ending Market Value	30,905,140	30,537,588	30,873,178	31,342,012	31,647,449	33,118,359	33,615,539	35,059,695	34,474,900	36,030,062	36,438,420	36,707,611	35,663,092
Beginning Market Value	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,449	33,118,359	33,615,539	35,059,695	34,474,900	36,030,062	36,438,420	36,707,611
Asset Flows including	0	0	-4,216	0	0	995,730	0	1,000,000	-4,620	2,000,000	0	-4,869	0
Inflows	0	0	0	0	0	1,000,000	0	1,000,000	0	2,000,000	0	0	0
Outflows	0	0	0	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	-4,216	0	0	-4,270	0	0	-4,620	0	0	-4,869	0
Flow Adjusted Value Change	-152,455	-367,553	339,806	468,835	305,436	475,180	497,180	444,156	-580,175	-444,837	408,358	274,060	-1,044,518
■ Portfolio Return – net	-0.49%	-1.19%	1.11%	1.52%	0.97%	1.46%	1.50%	1.30%	-1.65%	-1.25%	1.13%	0.75%	-2.85%
— Cumulative Portfolio Return	-0.49%	-1.67%	-0.58%	0.93%	1.91%	3.40%	4.95%	6.31%	4.55%	3.24%	4.41%	5.20%	2.21%



2.2. Contribution Analysis

Multi-Period Contribution by Asset Category in % as of 31.1.2022

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
Liquidity & Similar Investments	0.02	0.02	0.02	-0.41	0.02
Fixed Income & Similar Investments	-0.87	-0.87	-0.87	-1.75	-0.87
Equities & Similar Investments	-1.42	-1.42	-1.42	3.29	-1.42
Alternative Investments, Commodities & Real Estate	-0.58	-0.58	-0.58	1.58	-0.58
Total – net ***	-2.85	-2.85	-2.85	2.71	-2.85

Multi-Period Contribution by Currency in % as of 31.1.2022

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
AUD - Australian Dollar	-2.46	-2.46	-2.46	0.22	-2.46
USD - US Dollar	-0.18	-0.18	-0.18	1.76	-0.18
EUR - Euro	-0.18	-0.18	-0.18	0.72	-0.18
JPY - Japan Yen	-0.03	-0.03	-0.03	-0.06	-0.03
GBP - Pound Sterling	0.01	0.01	0.01	0.07	0.01
Total – net ***	-2.85	-2.85	-2.85	2.71	-2.85

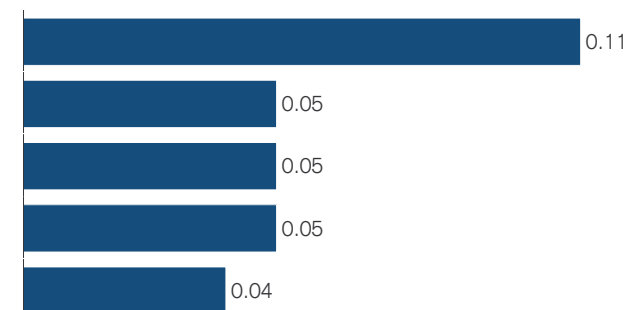
*** If applicable, fees charged in the relevant currency will be deducted from the cash account contribution, which is part of the Liquidity & Similar Investments asset category.

2.3. Contribution - Top Contributors & Detractors

Top Contributors in %

as of 31.1.2022

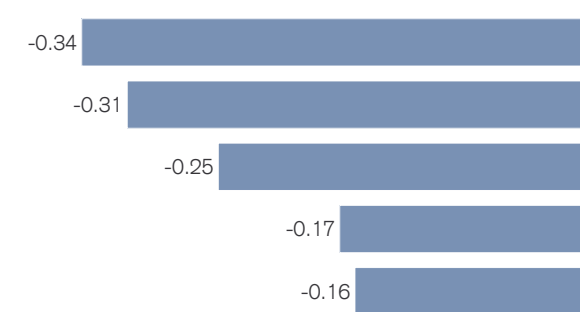
	Total Return	Average Weight	Contribution
REGISTERED SHS BHP GROUP LTD	10.84	1.13	0.11
REGISTERED SHS RIO TINTO LTD	11.44	0.49	0.05
UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN	9.62	0.53	0.05
SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION	3.21	1.49	0.05
REGISTERED SHS WOODSIDE PETROLEUM LTD	14.32	0.29	0.04
Total – net ***		3.93	0.29



Top Detractors in %

as of 31.1.2022

	Total Return	Average Weight	Contribution
UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A-	-1.79	19.09	-0.34
UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND	-10.01	2.91	-0.31
STAPLED SECURITY GOODMAN GROUP	-12.49	1.81	-0.25
UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	-1.42	11.88	-0.17
ACCUM SHS -1C- USD XTRACKERS(E)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF	-4.98	3.08	-0.16
Total – net ***		38.78	-1.22



*** 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 31.1.2022

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	1,354,138.66	Current Account -20300003970945	1.0000		1,354,139		
					3.80%		
EUR	63,656.15	Current Account -20300003970056	1.0000		101,063	789	0.79%
			1.5752 EUR/AUD		0.28%	789	0.79%
GBP	66,948.13	Current Account -20300003970089	1.0000		127,795	3,295	2.65%
			1.8596 GBP/AUD		0.36%	3,295	2.65%
Total Liquidity & Similar Investments					1,582,996	0	4.44%
Fixed Income & Similar Investments							
Fixed Income & Similar Investments AUD							
AUD	1,623,821.25	UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND	AU60BGL01056 2244170	1.0395	1.0001 NAV 27.01.2022	1,623,946 -63,936	-3.79% -3.79%
					4.55%		
AUD	4,241,397.29700	UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	AU60PER02627 35661784	1.0550	1.0067 NAV 28.01.2022	4,269,637 -205,060	-4.58% -4.58%
					11.97%		
AUD	5,543,019.2592	UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A-	AU60SSB01221 2248336	1.2577	1.2335 NAV 27.01.2022	6,837,259 -133,972	-1.92% -1.92%
					19.17%		

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	442,410.68	UNITS VANGUARD AUSTRALIAN FIXED INTEREST INDEX FUND AU60VAN00014 1653500	1.1484	1.1139 NAV 28.01.2022	492,801 1.38%	-15,282 -15,282	-3.01% -3.01%
AUD	49,678	SHS -I- AUD NEUBERGER BERMAN INVESTMENT FUNDS PLC - NEUBERGER BERMAN EMERGING MARKET DEBT - HARD CURRENCY FUND IE00B986FB81 53616359	10.6287	9.8900 NAV 28.01.2022	491,315 1.38%	-36,697 -36,697	-6.95% -6.95%
AUD	86,998	SHS PIMCO FUNDS: GLOBAL INVESTORS SERIES PLC - GLOBAL INVESTMENT GRADE CREDIT FUND INSTITUTIONAL CLASS AUD (HEDGED) IE00BL0BLL78 3752613	10.7653	10.3300 NAV 28.01.2022	898,689 2.52%	-37,870 -37,870	-4.04% -4.04%
AUD	338,211	SHS -L3- HEDGED AUD FEDERATED HERMES INVESTMENT FUNDS PLC - FEDERATED HERMES GLOBAL HIGH YIELD CREDIT FUND IE00BMZ15N91 57259812	3.0819	3.0854 NAV 28.01.2022	1,043,516 2.93%	1,176 1,176	0.11% 0.11%
AUD	9,599	UNITS SHS HEDGED AUD MUZINICH FUNDS - MUZINICH EMERGING MARKET CORPORATE DEBT FUND IE00BNC55647 110844223	97.4683	93.8100 NAV 28.01.2022	900,482 2.52%	-35,116 -35,116	-3.75% -3.75%
AUD	5,938	SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION LU2128492191 52867287	94.9706	92.5700 NAV 28.01.2022	549,681 1.54%	-14,255 -14,255	-2.53% -2.53%
AUD	11,116	SHS -CH- ROBECO CAPITAL GROWTH FUNDS SICAV - ROBECOSAM GLOBAL SDG CREDITS DISTRIBUTION LU2207422291 56320962	99.0605	95.3000 NAV 28.01.2022	1,059,355 2.97%	-41,802 -41,802	-3.80% -3.80%
AUD	9,119	SHS -EAH- CS INVESTMENT FUNDS 1 SICAV - CREDIT SUISSE (LUX) GLOBAL INFLATION LINKED BOND FUND DISTRIBUTION LU2407926216 114771252	100.0000	99.4700 NAV 28.01.2022	907,067 2.54%	-4,833 -4,833	-0.53% -0.53%
Total Fixed Income & Similar Investments					19,073,748	0	53.48%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
Equities & Similar Investments							
Equities & Similar Investments AUD							
AUD	6,126	REGISTERED SHS AUSTRALIA & NEW ZEALAND BANKING GROUP LTD	AU000000ANZ3 640139 ANZ.AX	28.2539	26.5300 CLO 31.01.2022	162,523 0.46%	-10,561 -10,561 -6.10%
AUD	33,641	REGISTERED SHS ALUMINA LTD	AU000000AWC3 1526402 AWC.AX	1.9144	1.8850 CLO 31.01.2022	63,413 0.18%	-988 -988 -1.53%
AUD	34,858	REGISTERED SHS AURIZON HOLDINGS LTD	AU000000AZJ1 20175896 AZJ.AX	4.5903	3.5200 CLO 31.01.2022	122,700 0.34%	-37,308 -37,308 -23.32%
AUD	12,015 3,379	REGISTERED SHS BHP GROUP LTD of which is pending settlement	AU000000BHP4 640390 BHP.AX	36.2723	46.3500 CLO 31.01.2022	556,895 1.56%	121,084 121,084 27.78%
AUD	2,799	REGISTERED SHS CARSALES.COM LTD	AU000000CAR3 10476764 CAR.AX	16.4680	22.0400 CLO 31.01.2022	61,690 0.17%	15,596 15,596 33.84%
AUD	2,870	REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA	AU000000CBA7 646758 CBA.AX	81.5356	93.7400 CLO 31.01.2022	269,034 0.75%	35,027 35,027 14.97%
AUD	6,140	REGISTERED SHS COMPUTERSHARE LTD	AU000000CPU5 241285 CPU.AX	16.0032	19.4900 CLO 31.01.2022	119,669 0.34%	21,409 21,409 21.79%

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	1,173	REGISTERED SHS CSL LTD	AU000000CSL8 241548 CSL.AX	178.5819	260.3500 CLO 31.01.2022	305,391 0.86%	95,914 95,914 45.79%
AUD	2,504	REGISTERED SHS FLIGHT CENTRE TRAVEL GROUP LTD	AU000000FLT9 90307 FLT.AX	19.0671	16.5400 CLO 31.01.2022	41,416 0.12%	-6,328 -6,328 -13.25%
AUD	1,749	CHESSE UNITS OF FOREIGN SECURITIES JAMES HARDIE INDUSTRIES PLC	AU000000JHX1 1303670 JHX.AX	27.0838	47.0600 CLO 31.01.2022	82,308 0.23%	34,938 34,938 73.76%
AUD	330	REGISTERED SHS MACQUARIE GROUP LTD	AU000000MQG1 3422370 MQG.AX	85.9818	183.6200 CLO 31.01.2022	60,595 0.17%	32,221 32,221 113.56%
AUD	8,982	REGISTERED SHS NATIONAL AUSTRALIA BANK LTD	AU000000NAB4 641643 NAB.AX	24.5148	27.1300 CLO 31.01.2022	243,682 0.68%	23,490 23,490 10.67%
AUD	4,479	REGISTERED SHS NEWCREST MINING LTD	AU000000NCM7 650853 NCM.AX	27.6429	21.5500 CLO 31.01.2022	96,522 0.27%	-27,290 -27,290 -22.04%
AUD	19,096	REGISTERED SHS NINE ENTERTAINMENT CO. HOLDINGS LTD	AU000000NEC4 22858707 NEC.AX	2.8159	2.6200 CLO 31.01.2022	50,032 0.14%	-3,741 -3,741 -6.96%
AUD	9,661	REGISTERED SHS ORIGIN ENERGY LTD	AU000000ORG5 1051439 ORG.AX	7.5195	5.6200 CLO 31.01.2022	54,295 0.15%	-18,351 -18,351 -25.26%

Number/ Nominal	Description	Identification ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	2,275 REGISTERED SHS OZ MINERALS LTD	AU000000OZL8 4334812 OZL.AX	10.7556	24.1800 CLO 31.01.2022	55,010 0.15%	30,540 30,540	124.81% 124.81%
AUD	17,180 REGISTERED SHS QANTAS AIRWAYS LTD	AU000000QAN2 390413 QAN.AX	5.6657	4.7800 CLO 31.01.2022	82,120 0.23%	-15,216 -15,216	-15.63% -15.63%
AUD	6,689 REGISTERED SHS QBE INSURANCE GROUP LTD	AU000000QBE9 641857 QBE.AX	11.5695	11.1300 CLO 31.01.2022	74,449 0.21%	-2,940 -2,940	-3.80% -3.80%
AUD	1,646 REGISTERED SHS RIO TINTO LTD	AU000000RIO1 603520 RIO.AX	76.5155	111.5600 CLO 31.01.2022	183,628 0.51%	57,683 57,683	45.80% 45.80%
AUD	2,410 SHS RESMED INC CHESS DEPOSITORY INTERESTS REPR 1/10 SH	AU000000RMD6 1058638 RMD.AX	23.6564	31.9000 CLO 31.01.2022	76,879 0.22%	19,867 19,867	34.85% 34.85%
AUD	19,650 REGISTERED SHS SOUTH32 LTD	AU000000S320 27547963 S32.AX	2.6985	3.8500 CLO 31.01.2022	75,653 0.21%	22,626 22,626	42.67% 42.67%
AUD	76,774 UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND	AU000000SLF1 1377855 SLF.AX	12.5989	13.1300 CLO 31.01.2022	1,008,043 2.83%	40,775 40,775	4.22% 4.22%
AUD	3,982 UNITS SPDR S&P/ASX 200 FUND ETF AUSTRALIAN EQUITY EXCHANGE TRADED FUNDS	AU000000STW9 1285707 STW.AX	60.9604	64.4700 CLO 31.01.2022	256,720 0.72%	13,975 13,975	5.76% 5.76%
	-2,399 of which is pending settlement						

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	14,246	REGISTERED SHS TELSTRA CORPORATION LTD	AU000000TLS2 720464 TLS.AX	4.5550	3.9200 CLO 31.01.2022	55,844 0.16%	-9,046 -9,046 -13.94%
AUD	3,230	SHS VANGUARD MSCI AUSTRALIAN SMALL COMPANIES INDEX ETF EXCHANGE TRADED FUND	AU000000VSO2 13053435 VSO.AX	60.3498	67.5300 CLO 31.01.2022	218,122 0.61%	23,192 23,192 11.90%
AUD	9,974	REGISTERED SHS WESTPAC BANKING CORP	AU000000WBC1 642372 WBC.AX	26.9089	20.3000 CLO 31.01.2022	202,472 0.57%	-65,918 -65,918 -24.56%
AUD	1,031	REGISTERED SHS WESFARMERS LTD	AU000000WES1 642397 WES.AX	34.0342	52.7100 CLO 31.01.2022	54,344 0.15%	19,255 19,255 54.87%
AUD	2,499	REGISTERED SHS WOOLWORTHS GROUP LTD	AU000000WOW2 81350 WOW.AX	34.1257	34.4200 CLO 31.01.2022	86,016 0.24%	735 735 0.86%
AUD	4,372	REGISTERED SHS WOODSIDE PETROLEUM LTD	AU000000WPL2 642429 WPL.AX	27.6704	25.0700 CLO 31.01.2022	109,606 0.31%	-11,369 -11,369 -9.40%
AUD	7,762	REGISTERED SHS COLES GROUP LTD	AU0000030678 44059594 COL.AX	16.9597	16.2000 CLO 31.01.2022	125,744 0.35%	-5,897 -5,897 -4.48%
AUD	326	UNITS ISHARES S&P 500 AUD HEDGED ETF EXCHANGE TRADED FUND	AU000000IHVV8 26323289 IHVV.AX	461.5500	433.3400 CLO 31.01.2022	141,269 0.40%	-9,196 -9,196 -6.11%

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	1,983	UNITS VANGUARD ETHICALLY CONSCIOUS AUST ETF EXCHANGE TRADED FUND	AU0000103533 57145371 VETH.AX	60.1201	56.0600 CLO 31.01.2022	111,167 0.31%	-8,051 -8,051 -6.75%
AUD	4,018	REGISTERED SHS ENDEAVOUR GROUP LTD	AU0000154833 111541385 EDV.AX	0.5888	6.2800 CLO 31.01.2022	25,233 0.07%	22,867 22,867 966.64%
AUD	119,980.46	UNITS WHEB SUSTAINABLE IMPACT FUND	AU60HHA00072 4431395	1.5473	1.5252 BID 28.01.2022	182,994 0.51%	-2,656 -2,656 -1.43%
AUD	62,841.8135	UNITS EIGER AUSTRALIAN SMALL COMPANIES FUND	AU60HOW29675 112847137	1.7805	1.5397 NAV 28.01.2022	96,758 0.27%	-15,130 -15,130 -13.52%
AUD	29,657.9379	UNITS PERENNIAL BETTER FUTURE TRUST	AU60WPC56007 112127492	1.5041	1.3359 NAV 28.01.2022	39,620 0.11%	-4,988 -4,988 -11.18%
Total Equities & Similar Investments AUD						5,551,853 0 15.57%	
Equities & Similar Investments EUR							
EUR	8,999	SHS EUR ISHARES II PLC - ISHARES CORE MSCI EUROPE UCITS ETF	IE00B1YZSC51 3246398 IQQY.DE	25.9541 1.5726 EUR/AUD	29.0200 CLO 31.01.2022	414,612 1.16%	47,320 43,803 3,517 12.88% 11.81% 1.07%
EUR	7,210	ACCUM.PTG.SHS WELLINGTON MANAGEMENT FUNDS (IRELAND) PLC - WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR	IE00B9DPD161 20938626	15.8682 1.5372 EUR/AUD	22.9096 NAV 28.01.2022	262,243 0.74%	86,376 80,602 5,774 49.11% 44.37% 4.74%

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 %
EUR	21,849	ACCUM SHS -1C- USD XTRACKERS(IE)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF	IE00BZ02LR44 41359963 XZW0.DE	27.3164 1.5576 EUR/AUD	29.8050 CLO 31.01.2022	1,033,883 2.90%	104,253 86,324 17,929 11.21% 9.11% 2.10%
Total Equities & Similar Investments EUR					1,710,738	0	4.80%
Equities & Similar Investments JPY							
JPY	1,220	UNITS NEXT FUNDS NIKKEI 225 EXCHANGE TRADED FUND	JP3027650005 1264151 1321.T	25,375.1033 81.6809 AUD/JPY	27,910.0000 CLO 31.01.2022	419,425 1.18%	40,418 38,094 2,324 10.66% 9.99% 0.67%
Total Equities & Similar Investments JPY					419,425	0	1.18%
Equities & Similar Investments USD							
USD	71	ACCUM.PTG.SH.S ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD	IE00B53SZB19 10737617 CSNDX.S	348.3821 0.7807 AUD/USD	832.5400 CLO 31.01.2022	84,044 0.24%	52,362 48,875 3,486 165.27% 138.97% 26.30%
USD	5,550	ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF	IE00BJ0KDR00 24268896 XD9U.L	96.2694 0.7155 AUD/USD	125.6600 CLO 31.01.2022	991,594 2.78%	244,901 231,924 12,977 32.80% 30.53% 2.27%
USD	19,007	SHS -R (ACC.)- GOLDMAN SACHS FUNDS SICAV - GOLDMAN SACHS EMERGING MARKETS EQUITY PORTFOLIO CAPITALISATION	LU0830622741 19578737	16.4768 0.7133 AUD/USD	18.0200 NAV 28.01.2022	486,981 1.37%	47,959 41,704 6,255 10.92% 9.37% 1.56%

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	912 SHS ISHARES GLOBAL HEALTHCARE ETF	US4642873255 1352444 IXJ.P	85.0576 0.7193 AUD/USD	84.0900 CLO 31.01.2022	109,039 0.31%	1,199 -1,255 2,453	1.11% -1.14% 2.25%
USD	6,273 SHS ISHARES ESG AWARE MSCI EM ETF	US46434G8630 33080862 ESGE.OQ	43.6753 0.7443 AUD/USD	39.9000 CLO 31.01.2022	355,871 1.00%	-12,208 -33,672 21,464	-3.32% -8.64% 5.33%
USD	3,161 SHS ISHARES ESG AWARE MSCI USA SMALL-CAP ETF	US46435U6635 41349509 ESML.Z	41.6890 0.7285 AUD/USD	37.2400 CLO 31.01.2022	167,370 0.47%	-13,514 -19,995 6,481	-7.47% -10.67% 3.20%
USD	566 TRUST UNITS SPDR S&P 500 ETF TRUST	US78462F1030 45088 SPY.P	265.5437 0.7544 AUD/USD	449.9100 CLO 31.01.2022	362,065 1.02%	162,829 148,369 14,461	81.73% 69.43% 12.30%
Total Equities & Similar Investments USD					2,556,964	0	7.17%
Total Equities & Similar Investments					10,238,980	0	28.71%
Alternative Investments, Commodities & Real Estate							
Hedge Funds							
AUD	694,630.01 UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE	AU60MAL00181 3379478	1.2351	1.1623 NAV 27.01.2022	807,339 2.26%	-50,620 -50,620	-5.90% -5.90%
AUD	4,552 ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND	IE00BKV41X02 54282717	105.2748	110.5760 NAV 28.01.2022	503,342 1.41%	24,131 24,131	5.04% 5.04%

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	7,023.834	ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES FUND	IE00BMPRT797 56741323	102.8866	101.7103 NAV 31.12.2021	714,396 2.00%	-8,262 -8,262	-1.14% -1.14%
AUD	5,123	PTG.SHS LEGG MASON GLOBAL FUNDS PLC - LEGG MASON WESTERN ASSET MACRO OPPORTUNITIES BOND FUND PREMIER CLASS DISTRIBUTING (S) HEDGED AUD	IE00BYYQZZ17 28828240	103.6336	109.3300 NAV 28.01.2022	560,098 1.57%	29,183 29,183	5.50% 5.50%
AUD	1,941	SHS -D2 HEDGED- BLACKROCK STRATEGIC FUNDS SICAV - BLACKROCK EMERGING COMPANIES ABSOLUTE RETURN FUND CAPITALISATION	LU2402058403 114466865	98.2200	87.6800 NAV 31.01.2022	170,187 0.48%	-20,458 -20,458	-10.73% -10.73%
Total Hedge Funds						2,755,362 0 7.73%		
Private Equity								
AUD	276,039	UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE	AU60ETL02762 26607292	2.1653	3.2205 NAV 30.11.2021	888,984 2.49%	291,290 291,290	48.74% 48.74%
Total Private Equity						888,984 0 2.49%		
Commodities & Precious Metals								
USD	108	UBS ETC UBS AG, LONDON BRANCH 2007- OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN	CH0031794263 3179426 TCMCI.S	1,222.7004 0.7285 AUD/USD	1,302.0000 BID 31.01.2022	199,930 0.56%	18,671 12,177 6,494	10.30% 6.49% 3.82%
Total Commodities & Precious Metals						199,930 0 0.56%		

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 %
Real Estate							
AUD	13,927 STAPLED SECS DEXUS PROPERTY TRUST CONS OF 1 SH + 1 TR UT DEXUS OPER	AU000000DXS1 112275620 DXS.AX	11.1013	10.2500 CLO 31.01.2022	142,752 0.40%	-11,856 -11,856	-7.67% -7.67%
AUD	27,170 STAPLED SECURITY GOODMAN GROUP	AU000000GMG2 18079202 GMG.AX	11.0006	23.1900 CLO 31.01.2022	630,072 1.77%	331,187 331,187	110.81% 110.81%
AUD	57,574 STAPLED SECURITY MIRVAC GROUP	AU000000MGR9 821911 MGR.AX	2.0391	2.6100 CLO 31.01.2022	150,268 0.42%	32,869 32,869	28.00% 28.00%
Total Real Estate					923,092 0 2.59%		
Total Alternative Investments, Commodities & Real Estate					4,767,368 0 13.37%		
Total Investments					35,663,092 100.00%		
of which Accrued Interest					0		

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.

For realized profit and loss for FX Spots, Forwards and Swaps (including all currencies and Precious Metals) in Transactions section, in the 'Execution of FX Purchase' and 'Execution of FX Sales' rows, the value in the realized Profit/Loss column is calculated by comparing the Transaction Valuation based on the end of day exchange rate on the Value Date against the Cost Valuation based on the FX contract rate; this does not mean that the Profit/Loss for that transaction can be or has been cashed out.

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.

For unrealized profit and loss for Precious Metal Account and Current Account in Position Section, where there have been FX Spots, Forwards and Swaps transactions (including all currencies and Precious Metals), the Cost Valuation exchange rate is calculated based on the weighted average end of day exchange rate on respective transactions' value date. The value

in the unrealized Profit/Loss column is calculated by comparing the Current Valuation (based on conversion rates stated in the statement) as of reporting date against Cost Valuation.

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

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 31.1.2022

AUD 1.0000 = JPY 81.1830

AUD 1.0000 = USD 0.7033

EUR 1.0000 = AUD 1.5876

GBP 1.0000 = AUD 1.9089

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.

Please note that financial institutions are preparing to transition away from Interbank Offered Rates (IBORs) to alternative reference rates (ARRs). This may affect products issued by Credit Suisse or third parties in your portfolio. Please refer to our Credit Suisse IBOR website www.credit-suisse.com/IBOR for more information, or reach out to your Credit Suisse Relationship Manager with any questions you may have.

Please be aware that the financial industry's transition away from IBOR interest rate benchmarks may have an impact on valuations of OTC derivative transactions, as the inputs that Credit Suisse uses to calculate valuations may change.

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.

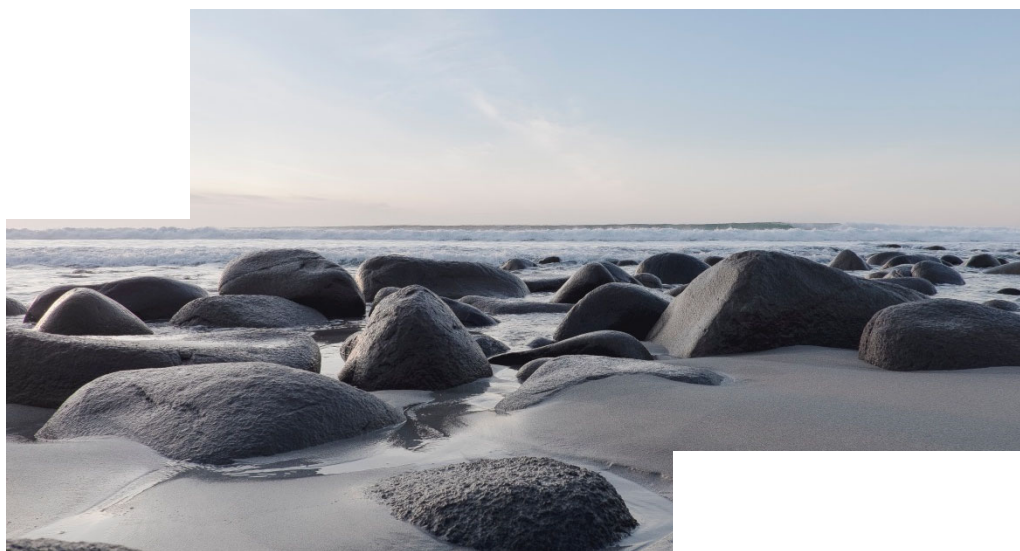
The fee charged for the provision of the Bank's Advisory Service (referring to portfolio(s) ending with -30 to -39) is a Flat Fee notwithstanding that prior to June 2017 the fee may have been described as a Management Fee or All-In Fee in statements or documents received by the client whether by hardcopy,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

- Global equities retreated -2.42% in AUD terms on the back of a hawkish Fed and expectation of earlier interest rate hikes
- Australian equities declined -6.35%.
- Global bonds yields rose as central banks brought forward their tightening plans

Market Commentary

Equity markets pulled back in January as hawkish comments from the Fed, high CPI prints and rising bond yields saw global equity markets sell off. However, a weakening AUD helped boost returns from international equities for Australian investors. In AUD terms, US, Europe, Emerging Markets and Australian equities returned -2.82%, -1.75%, 1.08% and -6.35% respectively. In bond markets, global yields rose sharply as central banks brought forward their tightening plans.

The Australian economy continued to show resilience despite the spike of COVID-19 cases to a record high with improvements in job numbers being particularly prominent. Reflecting the rebounding economy, unemployment fell to 4.2%. However, inflation surprised on the upside with the RBA's preferred "trimmed mean" printing at 2.6% YoY for the December quarter. Despite this, the RBA kept its benchmark cash rate at 0.1% but said its quantitative easing program would end on 10th February, following a slew of strong economic data.

US economic activity indicators were slightly weaker. US ISM Manufacturing PMI printed at 57.6 in January, down from 58.7 in December and the ISM Services PMI fell to 59.9 in January, down from 62.3 in December. Despite supply chain impediments, small increases were seen in production, new orders and supply deliveries. The labour market continued its strong run, with little obvious impact from Omicron with 467k new jobs added to the economy in January, exceeding economist expectations. However, strong business activity and economic growth has put upward pressure on inflation.

The US Core PCE, the Fed's preferred inflation measure, continued to rise with a 4.9% YoY reading in December. Persistently high inflation has caused a hawkish Fed to shift its policy guidance towards the faster tapering of asset purchases and earlier interest rate hikes.

Economic data for Europe was mixed as the region deals with geopolitical tension between the US, Russia and Ukraine, volatile energy prices and ongoing COVID-19 restrictions. The Eurozone Markit Manufacturing PMI printed at 58.7 in January, up from 58 observed in December with production and new orders registering faster increases as manufacturers reported an easing of supply chain issues. However, retail sales fell 3% for December as the Omicron variant of COVID-19 constrained activity. Eurozone CPI marginally increased from 4.9% to 5.0% in December which kept Euro Area core inflation unchanged at 2.6% but still above the ECB target of 2.0%. Though any potential military conflict and rise in energy prices could worsen the inflation picture as the region attempts to emerge from the Omicron wave of the pandemic.

Soft economic data continued out of China as COVID-19 restrictions and uncertainty around property developers continue to depress economic growth. The Caixin Manufacturing PMI returned to contraction territory with a reading of 49.1 in January down from 50.9 in December, missing market consensus of 50.4. However, economic growth surprised to the upside with a GDP reading of 4%YoY. Given the uncertainty around future growth, more policy support may be introduced in 2022 to further stimulate the economy.

Market Value as at 31 January 2022

	Market Value
APNIC Portfolio	A\$35,783,404

Performance as of 31 January 2022

APNIC Portfolio				
	Portfolio	Benchmark	Relative	CPI + 2.5%
Month	-2.53%	-2.38%	-0.15%	0.50%
3 Months	-0.68%	-0.27%	-0.41%	1.47%
Year To Date	-2.53%	-2.38%	-0.15%	0.50%
1 Year	3.06%	3.47%	-0.41%	5.26%
3 Years pa	5.48%	5.96%	-0.48%	4.17%
Since Inception pa	5.14%	5.43%	-0.29%	4.36%

* Performance is after fees but before franking

Asset Allocation

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

Significant Portfolio Changes

Position	Comments
BlackRock Emerging Companies Absolute Return Fund	Bought: Initiating position in new hedge fund.
CS Thematic Opportunities Fund / iShares S&P 500 AUD-Hedged ETF	Sold / Bought: A recent review of managed funds held in the portfolio resulted in the loss of conviction for the CS Thematic Opportunities Fund. Factors considered included recent underperformance and the dilutive effect of the fund's multi-strategy approach on alpha. Proceeds were reallocated to a broad US market exposure.
Dexus	Decreased: Reduced property exposure down to neutral after strong run in recent weeks.
Magellan Financial	Sold: With the unexpected CEO departure and loss of their largest client we regard Magellan as being in a high risk phase and have therefore exited the investment.
Marshall Wace Global Opportunities Fund	Sold: Taking profits.
iShares FTSE100 ETF GBP	Sold: Exited following a call by the Global Investment Committee to neutralise previously favourable UK view.
iShares NASDAQ100 ETF USD [^]	Decreased: Reduced following a call by the Global Investment Committee to neutralise previously favourable view on developed market equities.

Outlook

The Global Investment Committee (GIC) continued to see multiple risks in January. Geopolitical tensions between the USA, Russia and Ukraine have deepened, the pandemic is not yet over and persistently high inflation, which could force the Fed to a rate-hiking strategy that is more aggressive than expected, all represent a worst-case scenario. However, January is the starting point of a meaningful economic and financial transition in 2022 and bouts of volatility are symptoms of the bumps to be expected as we move to more normal monetary policy. As it usually is, the Fed holds the key to the course markets and its management of inflation, but positively, global economic growth is still robust, and the omicron wave appears to have peaked in many countries. Having de-risked a positive bias in December, the GIC believes it's prudent to remain cautious but is comfortable with a current neutral stance on equities.

That being said, robust demand fundamentals should continue to support strong economic growth through the rest of the year which supports further upside potential to equity markets.

Data Sources

Credit Suisse, unless otherwise specified.

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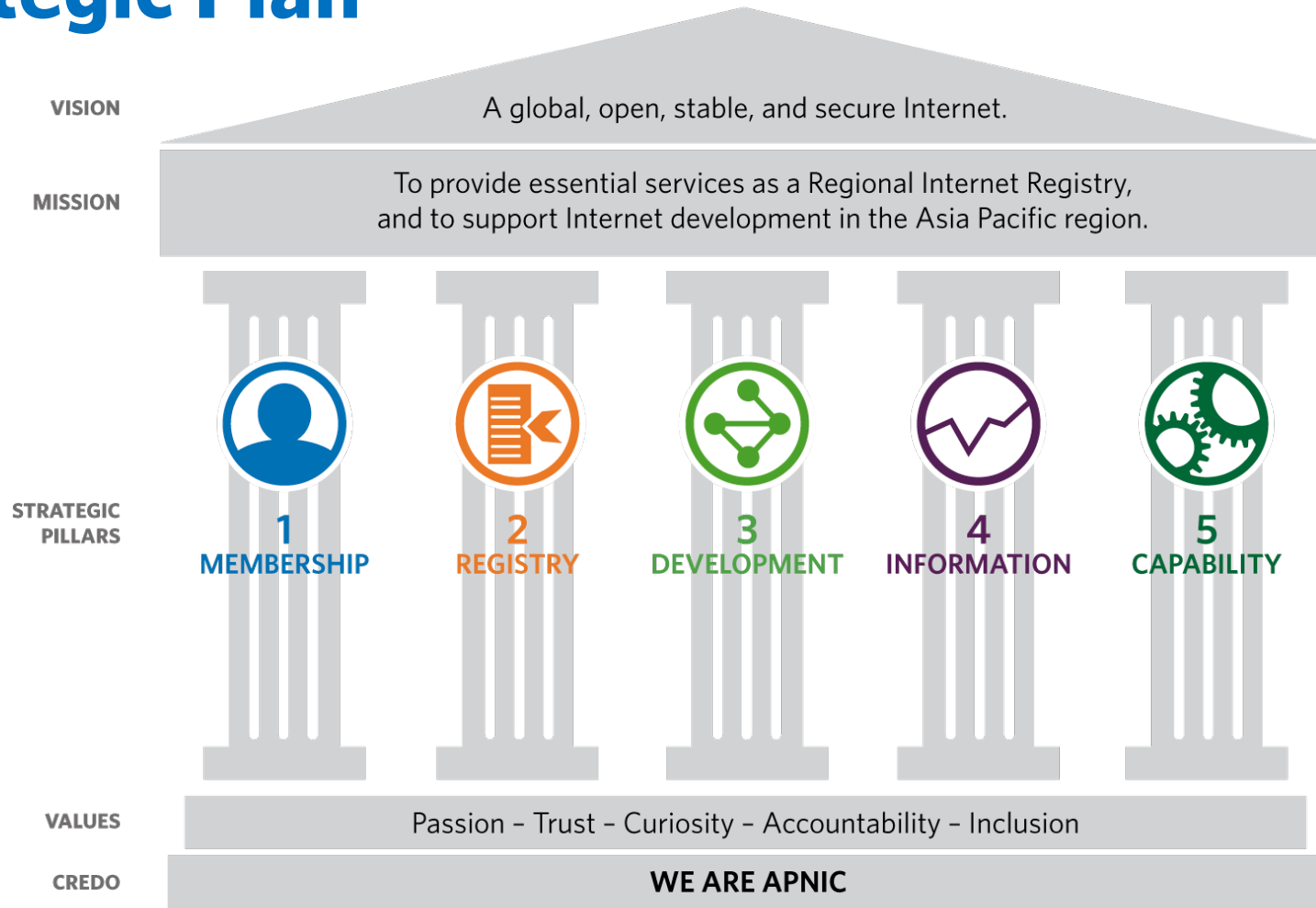
Agenda Item 11

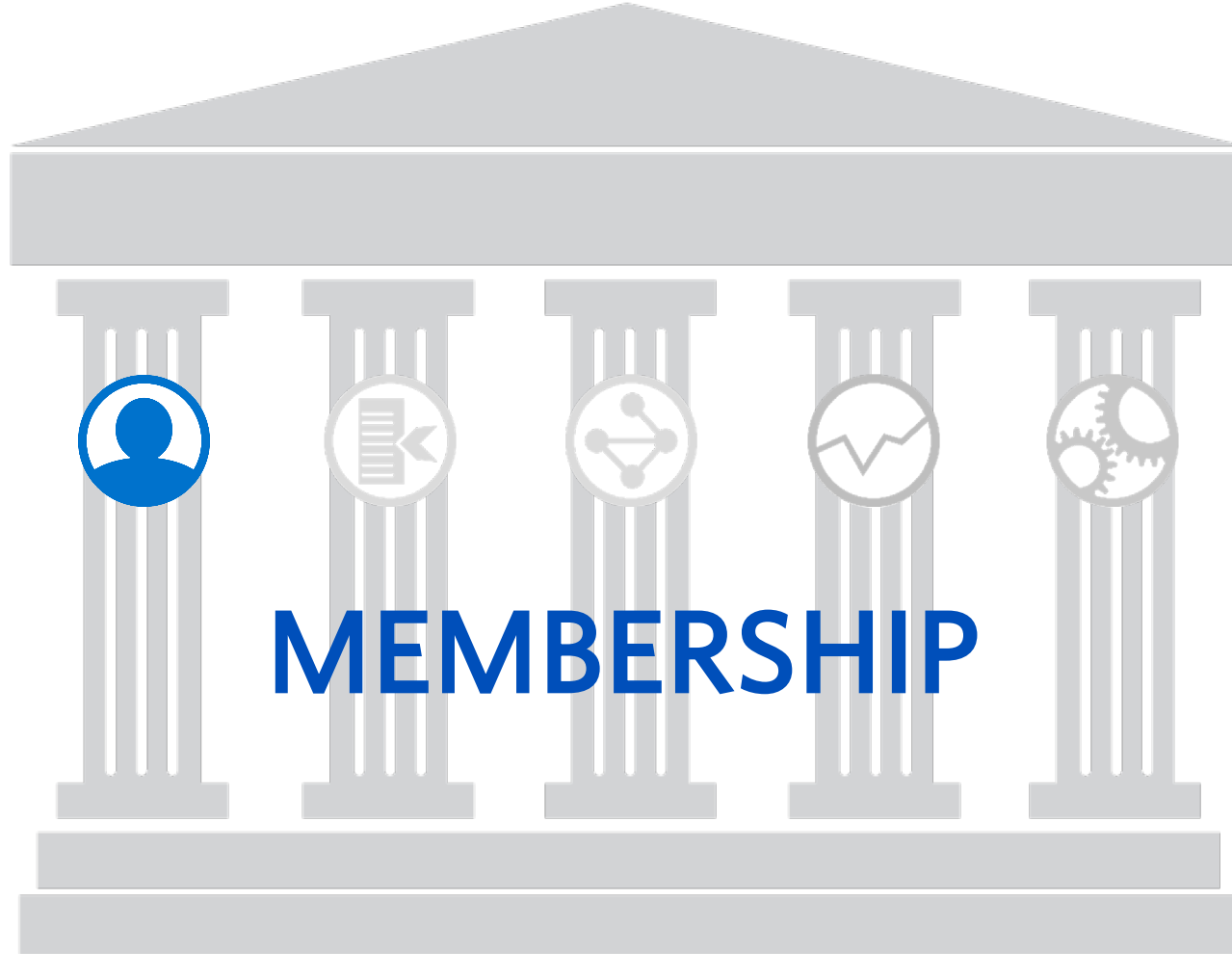
Secretariat report

APNIC Secretariat Report

EC Meeting
21 February 2022
Online

Strategic Plan

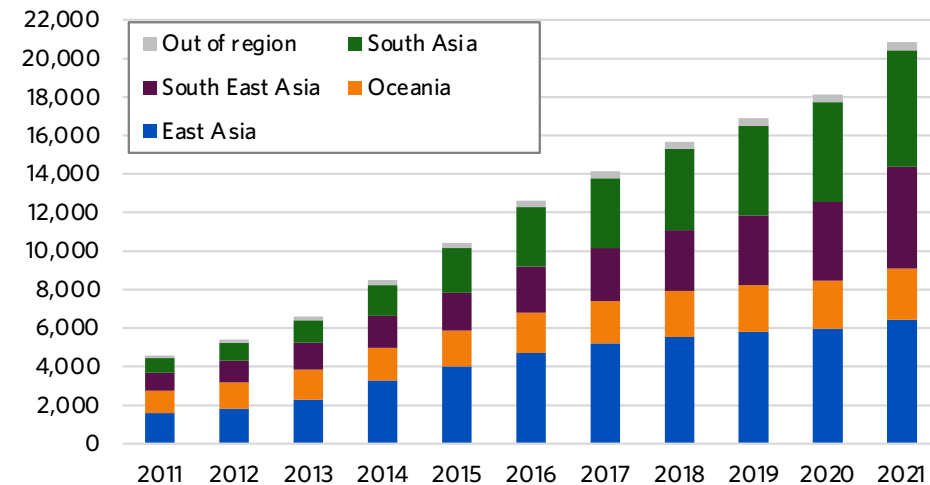
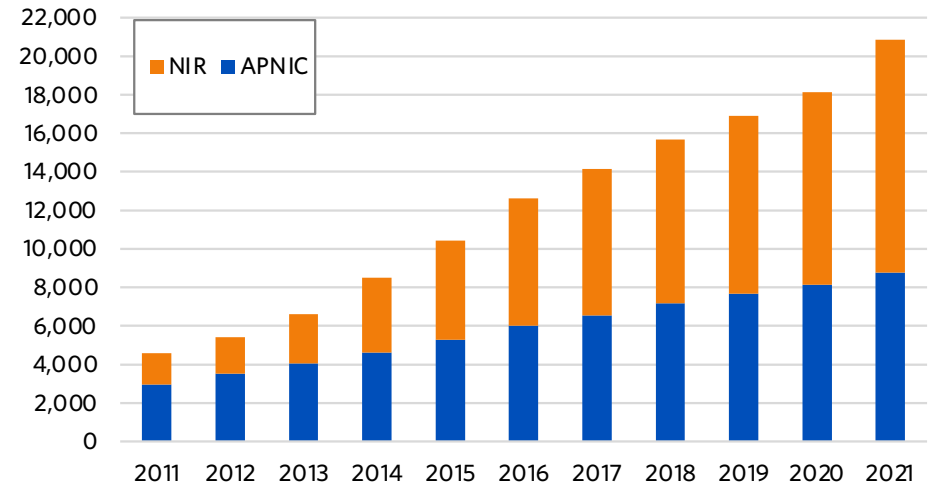




Member Services



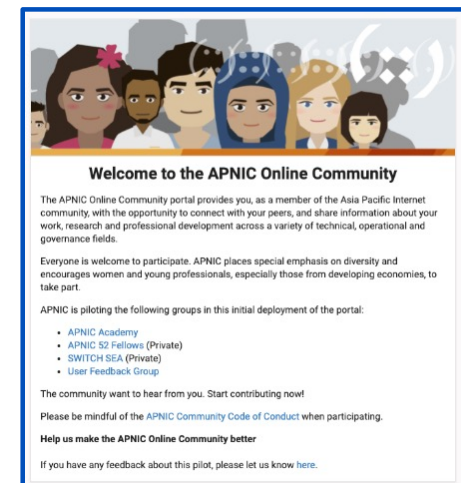
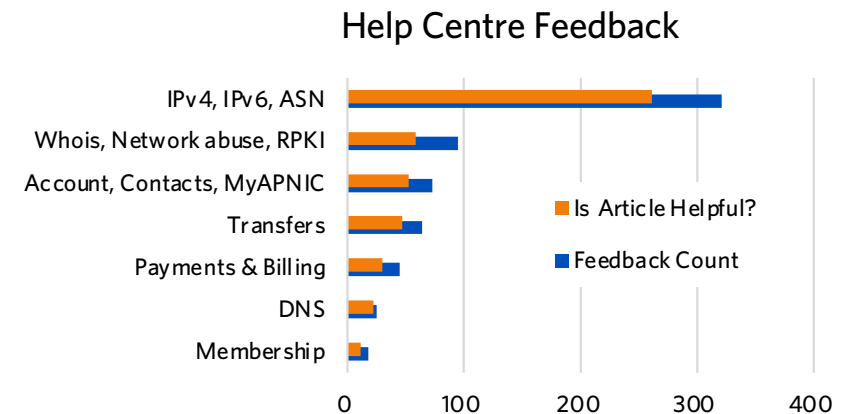
- Total Members 8,768 (↑5% on 2020); NIR sub accounts 12,089 (↑ 21% on 2020)
- Service satisfaction 93% 'excellent' and 'above average' (830/891)
- Helpdesk response time SLA 100% met
- 22 fraud attempts detected and prevented
- 526 User Feedback Group participants
- Resolved 81 critical and high impact website accessibility issues impacting users with a disability
- 2,125 feedback items received; 473 required action and resolved



Membership Products

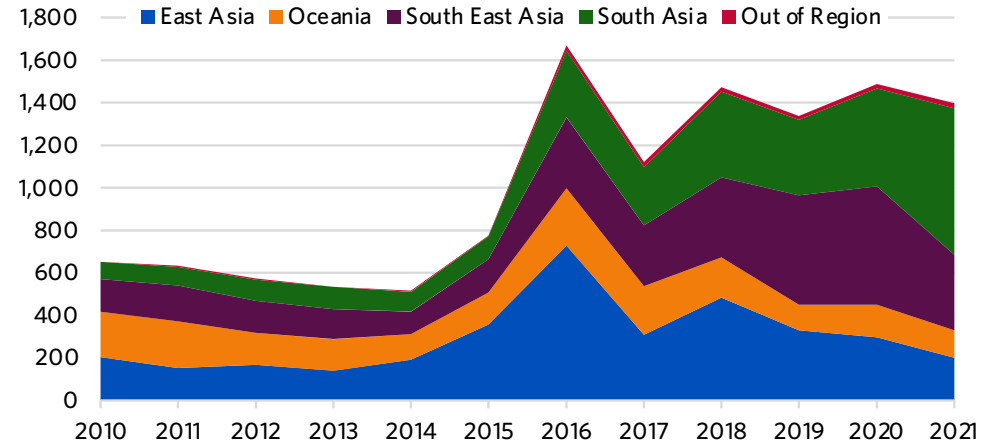
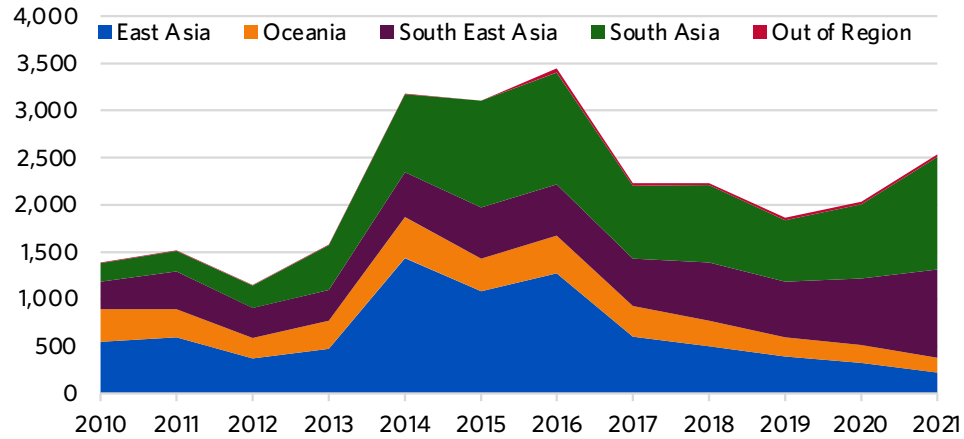


- Help Centre deployed with 50 articles in 7 categories; 74% users found it 'helpful'
- Community Platform pilot for 110 users, product launch in 2022
- MyAPNIC improvements
 - Invoice in advance, downloadable receipts, removal of billing surcharge for instalment payments
 - Voting system updates for elections at APNIC 52
 - Architecture conversion from WordPress to Java
 - Completed migration of billing, elections and portal features to microservice architecture
 - Better EC election dashboard



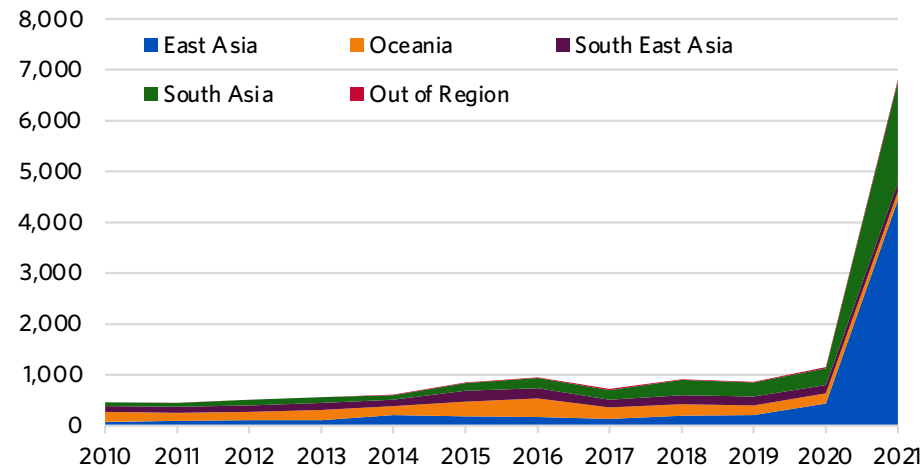


Resource Delegations



IPv4

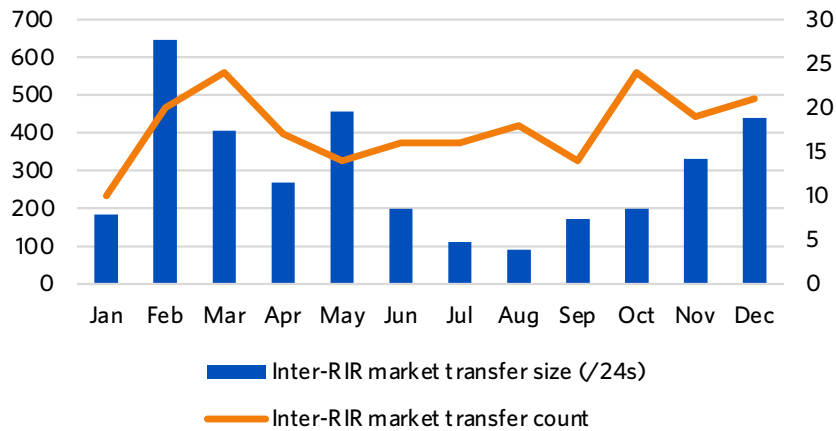
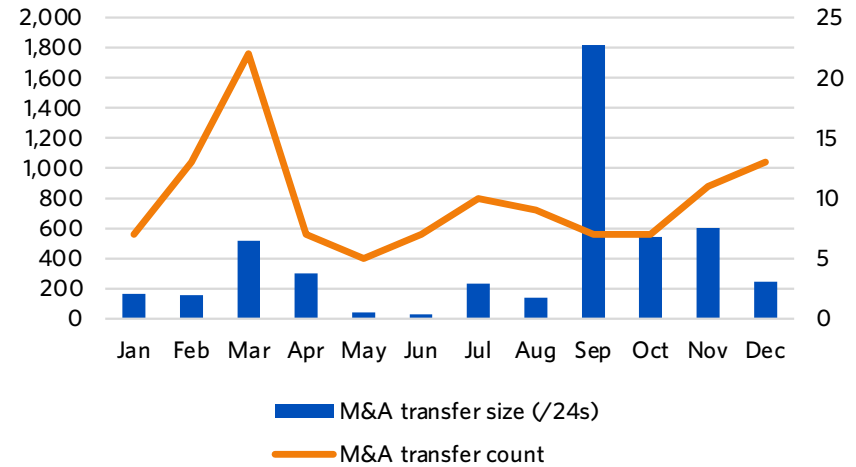
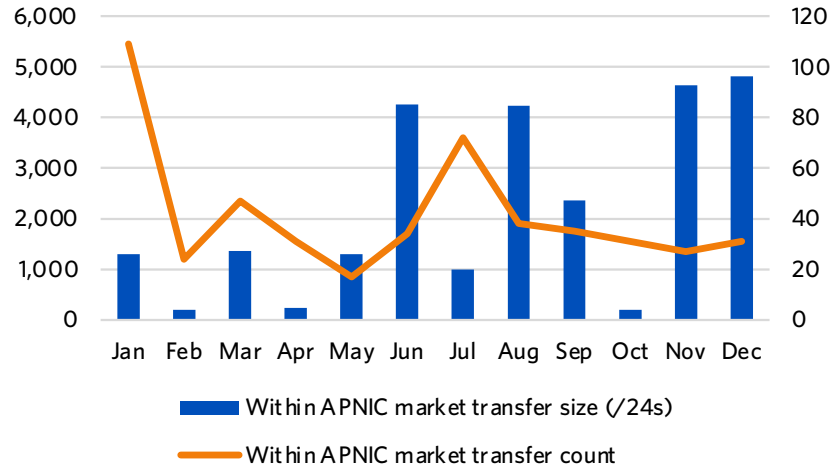
IPv6



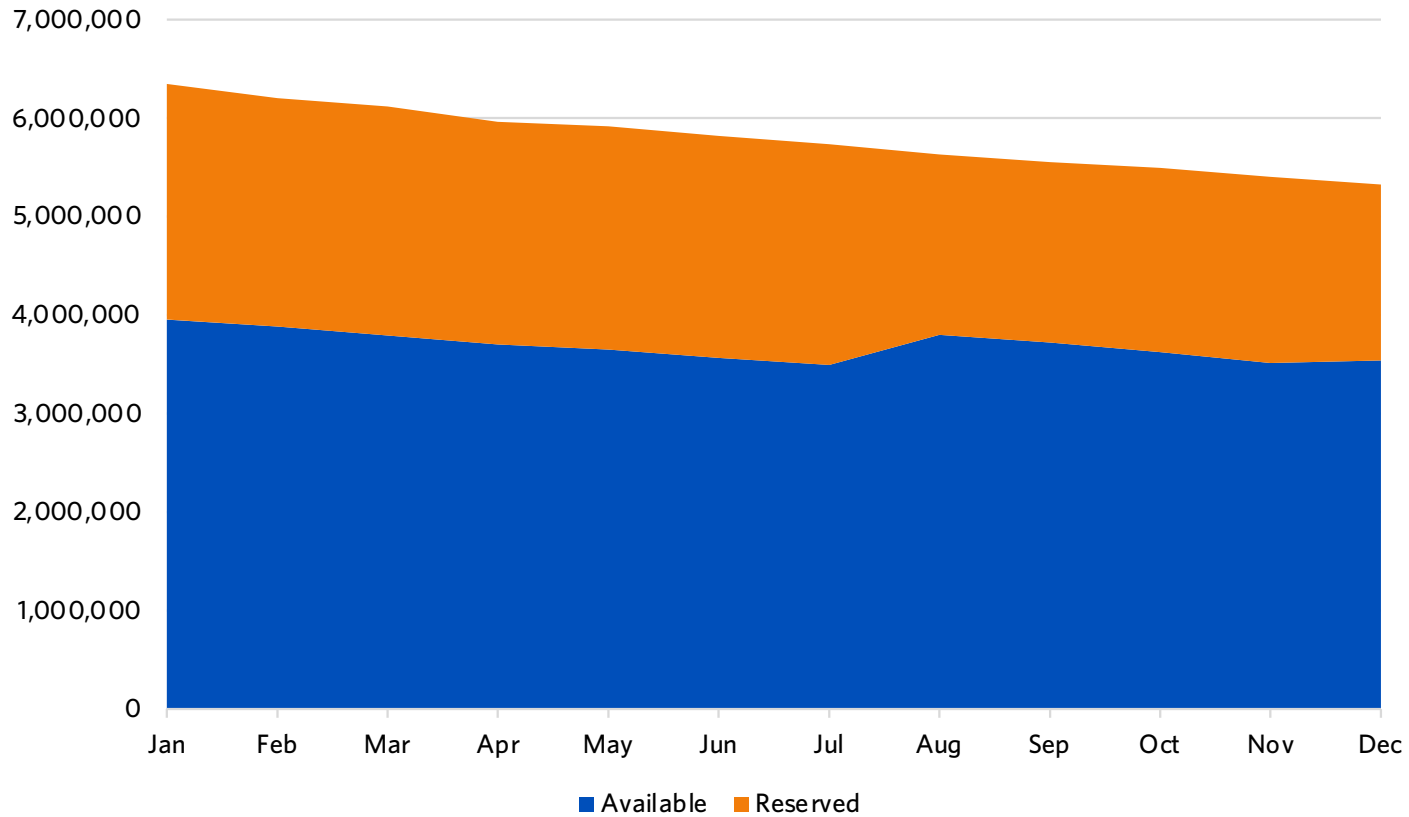
ASNs



APNIC Transfers



Available IPv4 Address Space



- 488,704 historical IPv4 addresses voluntarily returned to free pool
- 99.4% IPv4 address pool allocated; 0.6% available



Registry accuracy

- IRT email validation rate 74.3%
 - Simplified email and notification templates
 - Better IRT functionality in MyAPNIC
- Worked started on measuring NRO data for ITHI
 - Comprehensive and Correct (below), and Current (coming in 2022)

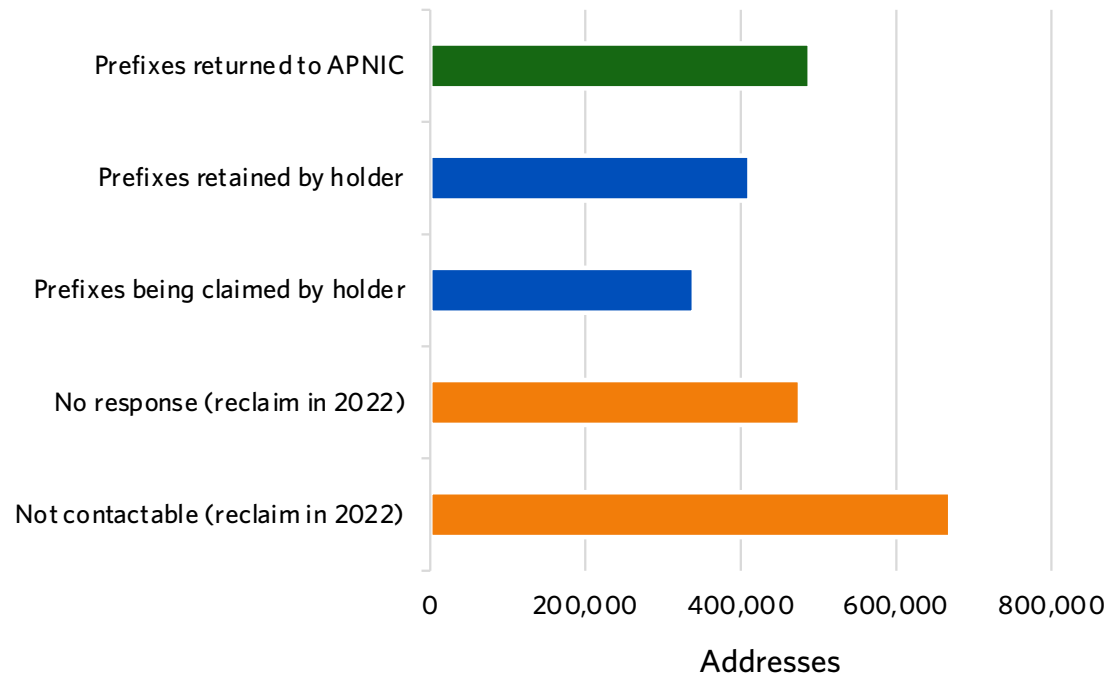
Type of record	Number of records	Score	% of total records
Have a parent block with org object and IRT	36,912	100	89.5%
Have no org object and no IRT	3,125	0	7.6%
Have IRT but no org object	1,189	50	2.9%
Have org object but no IRT	2	50	.0004%

Comprehensive

Type of record	Number of records	Score	% of total records
Have a parent block with org object and validated IRT	30,217	100	73%
Have no org object but no IRT	6,697	50	16%
Have nor org object and no validated IRT	3,950	0	10%
Have validated IRT but no org object	392	50	1%

Correct

Reclaiming unused IPv4



- 1,909 /24s returned to APNIC
- 4,300 /24s (approx) remaining to be reclaimed in 2022



Registry Products

- NIR API implementation in progress
- Significant performance improvement to ARMS (5-10x faster)
- 'Next-Generation Registry' design work begun
- RPKI repository made entirely atomic to avoid inconsistency
- RPKI updates to MyAPNIC to improve route management
- NRO RDAP profile published in IANA RDAP registry
- MyAPNIC users can manage BYOIP attributes directly

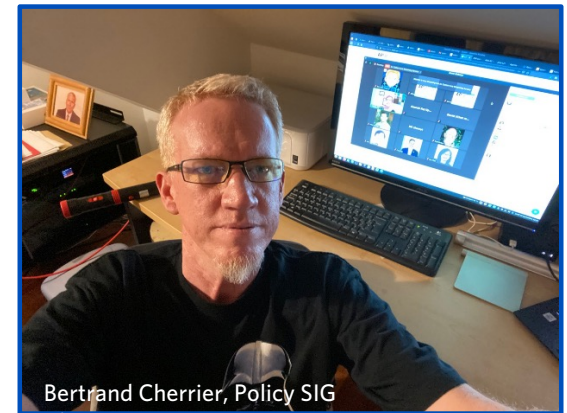


Policy Development



Proposal	Result
prop-130: Modification of transfer policies	APNIC 51: No consensus, abandoned.
prop-133: Clarification on Sub-Assignments	APNIC 51: Reached consensus, adopted.
prop-135: Documentation	APNIC 52: Reached consensus, adopted.
prop-136: Registration requirements	APNIC 52: Reached consensus, adopted.
prop-137: IPv6 assignment for Associate Members	APNIC 52: Reached consensus but returned to author for clarification.
prop-138: Restricting AS-ID in ROA	APNIC 52: Accepted as a guideline only.
prop-139: SOR not required	APNIC 52: Reached consensus, adopted.
prop-140: Update End-Site Definition	APNIC 52: Reached consensus, adopted.
prop-141: Change maximum delegation size of IPv4 from 512 (/23) to 768 (/23+/24)	APNIC 52: No consensus, returned to mailing list.

- Policy SIG Community Consultation in March; Policy Document Review Working Group formed with 44 participants
- WG submitted nine proposals for APNIC 52 Policy SIG; four were accepted and all reached consensus



APNIC Conferences

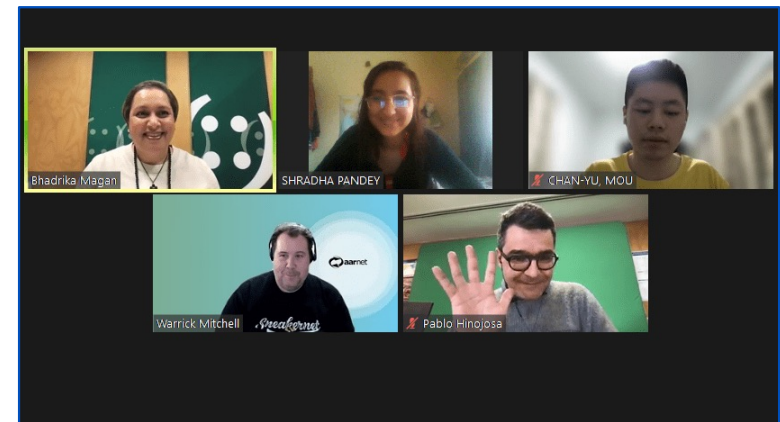
- APNIC 51 / APRICOT 2021
 - 852 attendees from 61 economies
 - Tutorials: 416
 - Conference: 552
 - 3,855 YouTube views
- APNIC 52
 - 706 attendees from 48 economies
 - Tutorials: 374
 - Conference: 543
 - 3,438 YouTube views
 - Introduced new chat (Cometchat) and automated transcription (Otter)
 - NPS of 62 from delegate survey



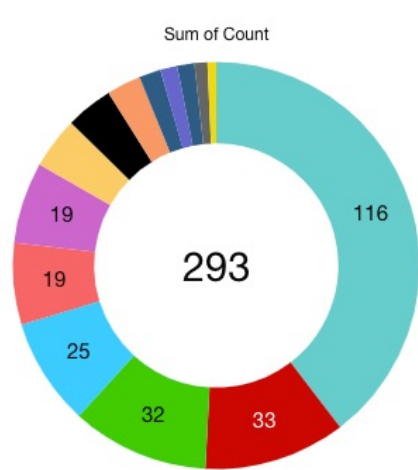
Fellowship Program



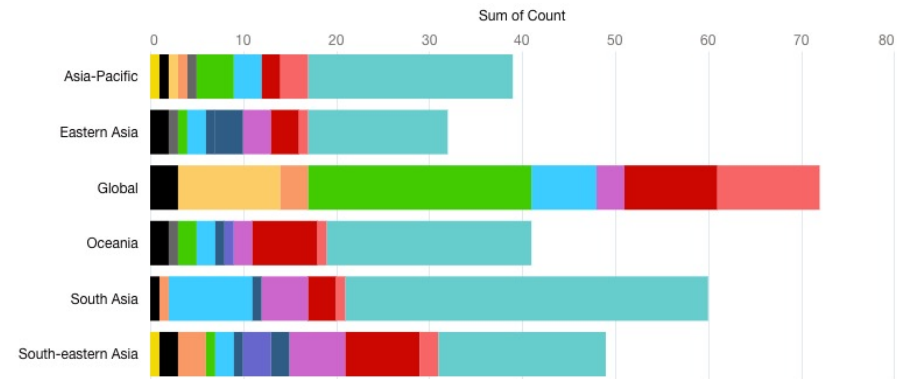
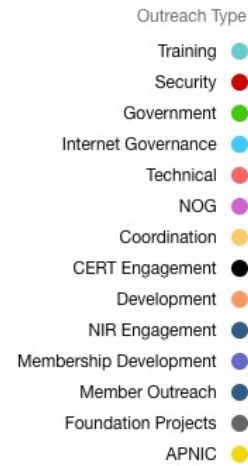
- New six-month online program
 - 11 technical, policy and Internet governance presentations
 - Training by APNIC Academy
 - Sessions with community mentors
- 46 fellows (24 female + 22 male)
 - 86% attendance in program
 - 136 Academy courses + 26 webinars completed
- NPS of 92



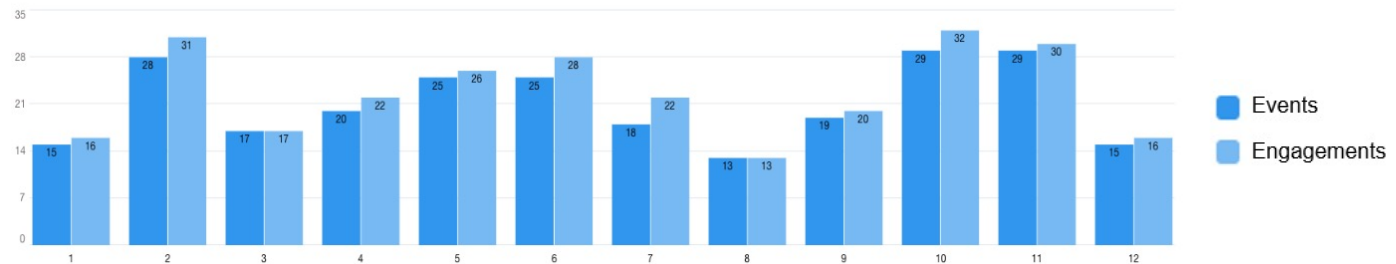
Community Engagement



Event engagement



Event summary by sub-region



Engagement summary by month

Technical Community Support



- Participated in 28 tech community events
 - 15 NOG events: sponsorship, speakers, and training
 - 16 other technical events: webcasting and technical support
- 43 security events
 - Including 7 training sessions and 6 CERTs
 - PC support for AusCERT 2021 and FIRST Annual Security Conference
- Sponsored software and services for technical community
 - Peering DB, IXP Manager, IXPDB, Shadowserver and MANRS Fellowships



Internet Cooperation



Internet organizations

- Study on Internet Technical Success Factors
 - Joint project with LACNIC
 - Report published and presented at 2021 IGF
- NRO EC and CGs (34 online meetings)
- Participated in ITAC, ITCG (Internet Tech Community)
- Participated in all RIR, ICANN and IETF meetings
- ICANN Root Service Governance WG; Root Zone Evolution WG; SSAC



Internet governance

- 2021 IGF: 62 prep meetings including MAG and IGFS Executive Committee; Conducted three IGF sessions
- 2021 APrIGF: 60 prep meetings including MSG, PC and fellowships; Conducted two APrIGF workshops
- IGF regional: SEA IGF, Pacific IGF; APIGA, APSIG
- Other IGF: HKIGF, bdSIG; India IGF 2021, Youth IGF Bangladesh, Youth IGF Vietnam, Youth IGF India, NetThing 2021 (AU)
- And: RightsCon 2021, WSIS Forum 2021, UN Digital Cooperation and Connectivity meeting

Government Engagement

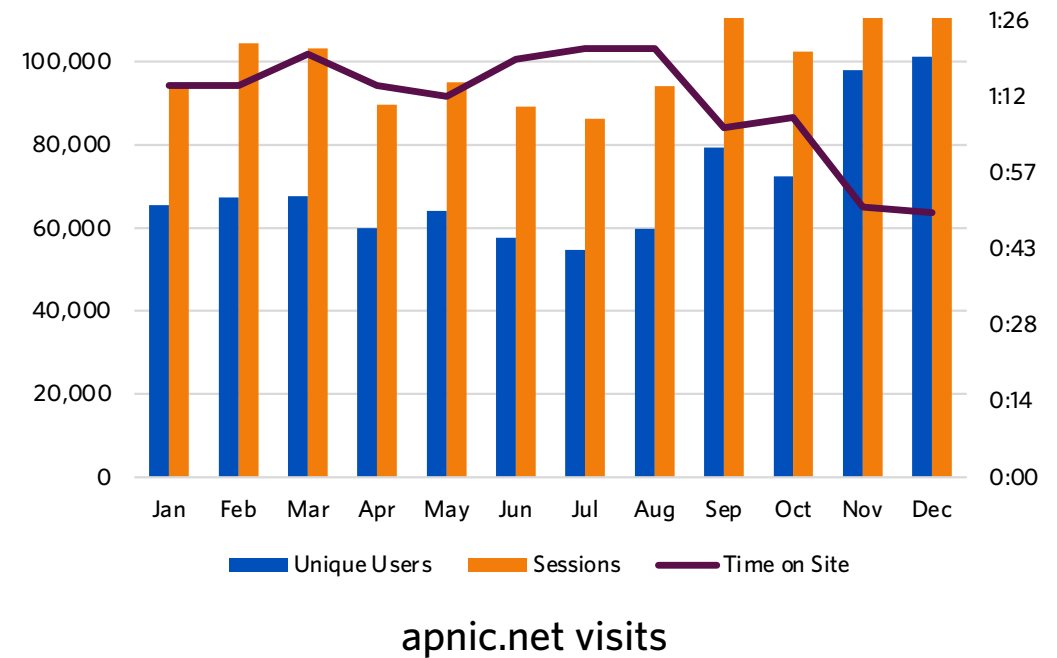


- 25 intergovernmental meetings and consultations, including 19 ITU meetings
- Meeting with the APT (Secretary General and Secretariat)
- Training and technical assistance support to the Mongolian government's Digital Nation (e-Mongolia) initiative.
- Contributing to an OECD draft document on routing and DNS security and monitored discussions at five OECD meetings.
- LEA training at Cyber Safety Pasifika and engagement with other national LEAs
- Participation at 6th INTERPOL Global Cyber Crime Expert Group and INTERPOL Forum on Ransomware

Community Participation



- SIGs
 - 950 meeting participants + 183 at four online consultations
 - Updated SIG Guidelines agreed
 - 40% SIG leadership is female
- Encouraging newcomers
 - 578 conference newcomers
 - 235 new Blog subscribers
 - 5,428 new Academy users
 - 1,548 new Twitter followers
 - 1,414 new LinkedIn followers

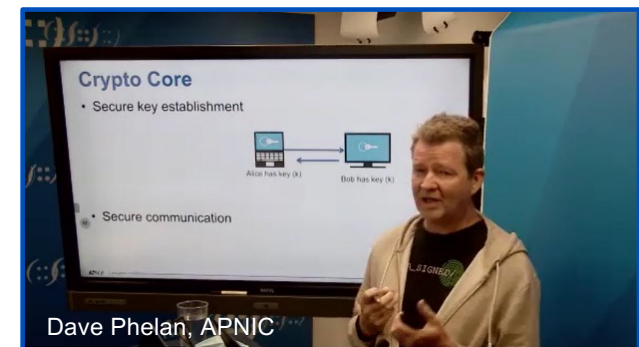


APNIC Academy



- Online training due to COVID-19 restrictions
- 30 Community Trainers, with 28 engaged for 68 events
 - New Retained Community Trainer model created
- New Network Management and Monitoring and Network Automation courses
- Updates to routing, IPv6 and network security courses and six new virtual labs
- Extended translation to online video-based courses
- Technical assistance (TA) support for 34 Members in 14 economies on RPKI, network design, IPv6, DNSSEC and IXP setup
 - Online TA platform launched

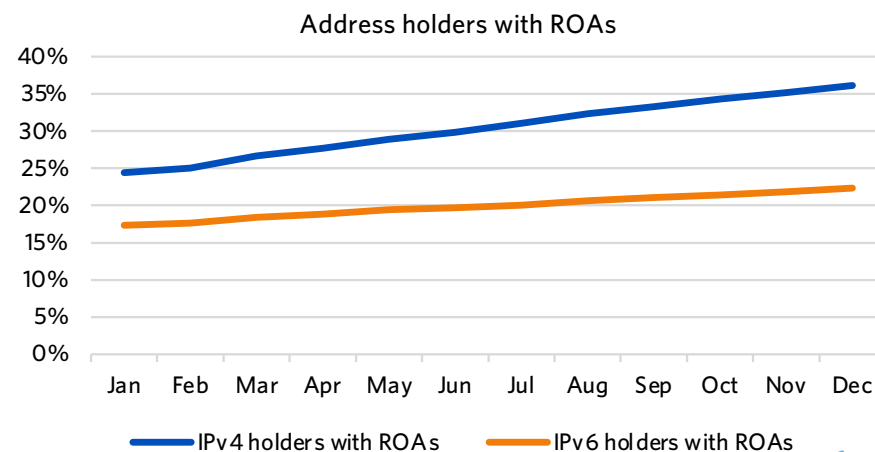
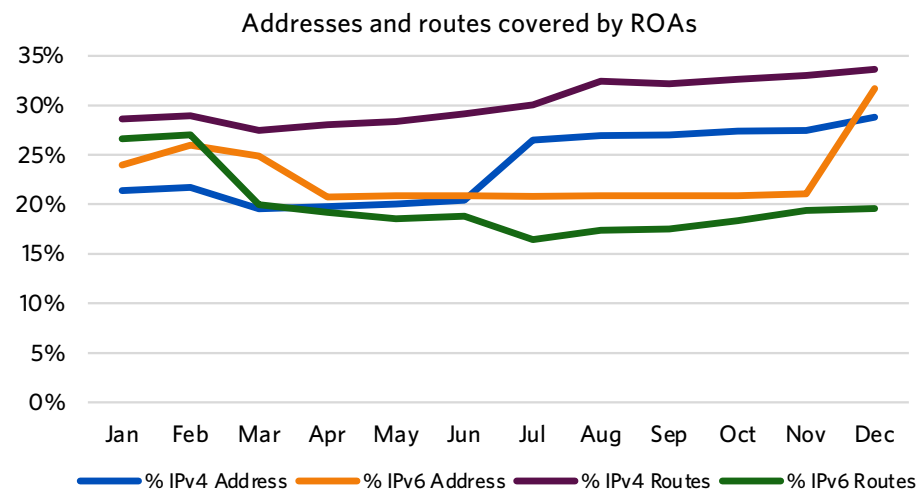
	Instructor-led	Self-paced
Courses	96	1,735 completions; 3,340 hours contact
Students	2,382	5,428 new (17,018 in total)
Locations		48 economies
Virtual Labs		6,070 labs 6,902 hours
Webinars	20 webinars 1,202 attendees	



RPKI

- 11 economies achieved 90%+ ROA coverage
- 18 RPKI training events
- Five RPKI deployment success stories published
- New Labs ROA measurement tool: <https://stats.labs.apnic.net/roa>

	Jan 2021	Dec 2021
% IPv4 address holders with ROAs	24.4%	36.1%
% IPv4 addresses covered by ROAs	21.4%	28.8%
% IPv6 address holders with ROAs	17.3%	22.3%
% IPv6 addresses covered by ROAs	24.0%	31.7%



Internet Infrastructure Support



- IXPs
 - Fiji IX upgraded, Pakistan IX (Lahore) installed, MV IX high-level design support, Bhutan IX ROV implemented
- Root servers
 - M-root deployed in Hanoi and 11 in progress in Guam, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta, Ulaanbaatar, Kathmandu, Mumbai and Singapore
- Community Honeynet and Security Threat Sharing Platform
 - 5 new Community Honeynet partners (15 total)
 - New content developed based on honeynet datasets (Introduction to Suricata Intrusion Detection System)
- RIPE Atlas
 - Working with seven disconnected Anchor hosts to restore service

IPv6

- 17 online IPv6 tutorials
 - East Asia x3, Oceania, South Asia x5
 - PK, VU, CN x2, LKx2, TH, TL
- 37.65% IPv6 capability for AP region
- Blog: 3 new deployment stories with 42 now online



Akamai shows support is key to growing IPv6

By [Robbie Mitchell](#) on 10 Dec 2021

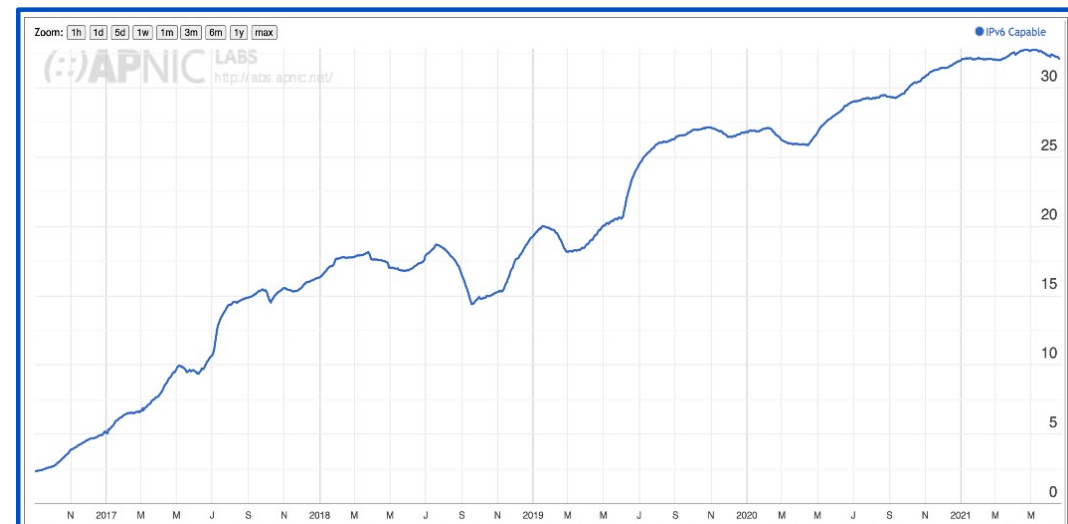
Category: Tech matters



China Telecom's IPv6 efforts are beginning to show in the numbers

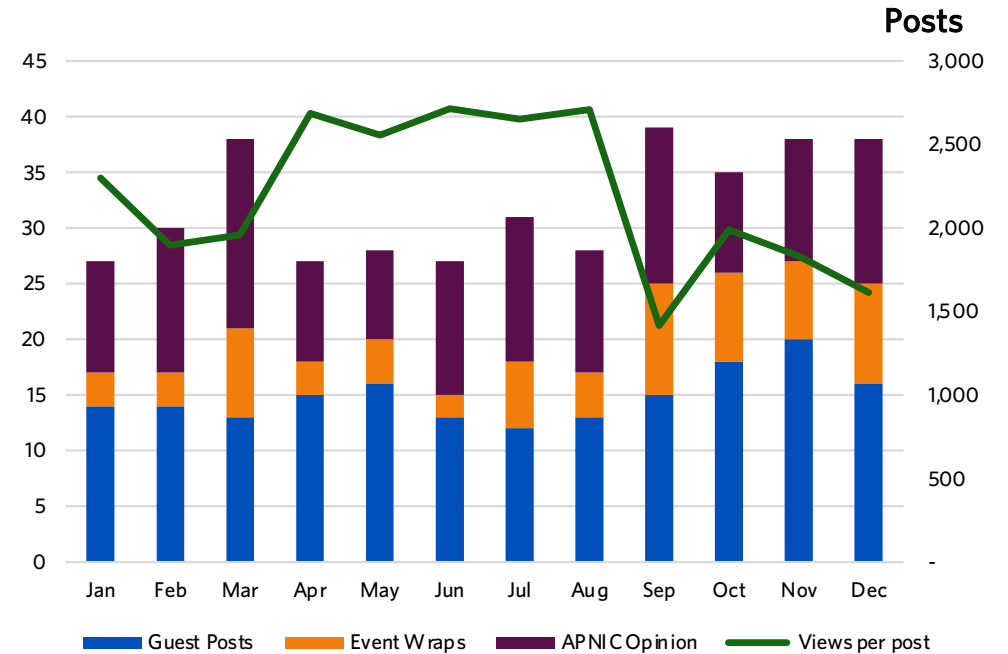
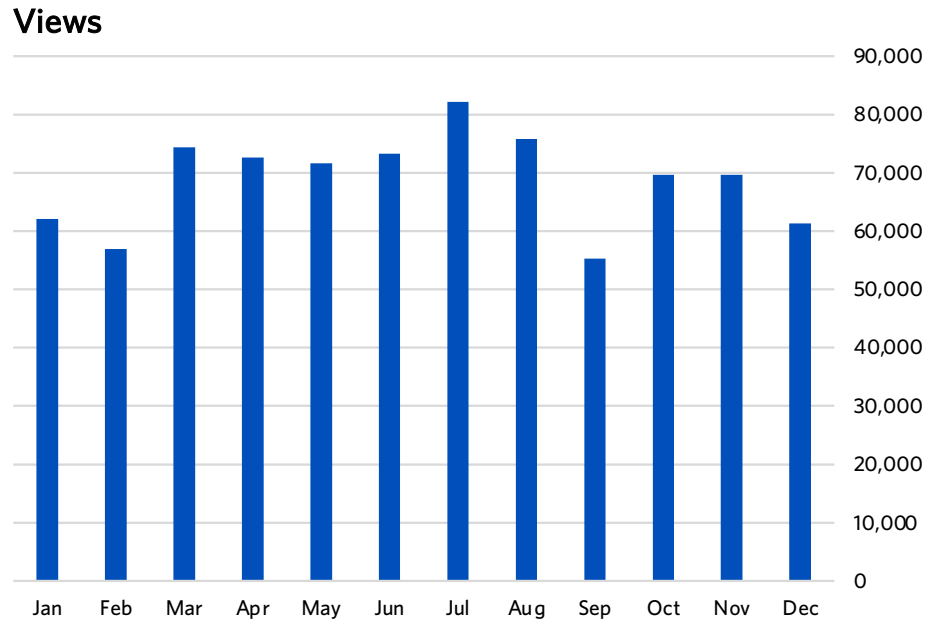
By [David Dawson](#) on 12 Jan 2021

Category: Tech matters

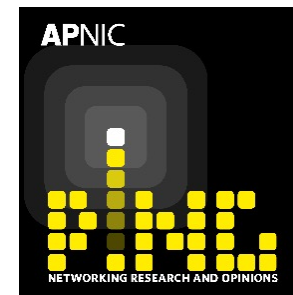




APNIC Blog



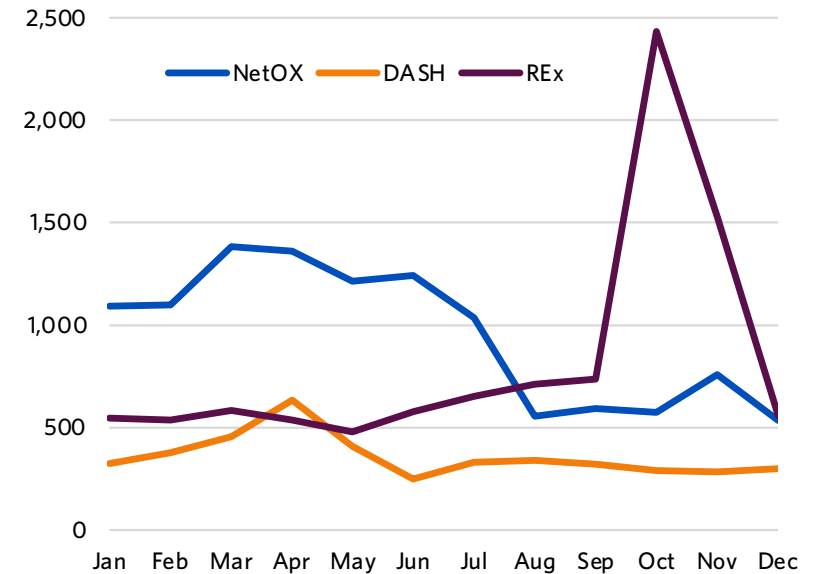
- 69,721 views/month (↑6.1% on 2020)
- 3M+ views in June (all time)
- New Podcast launched: PING



Information Products

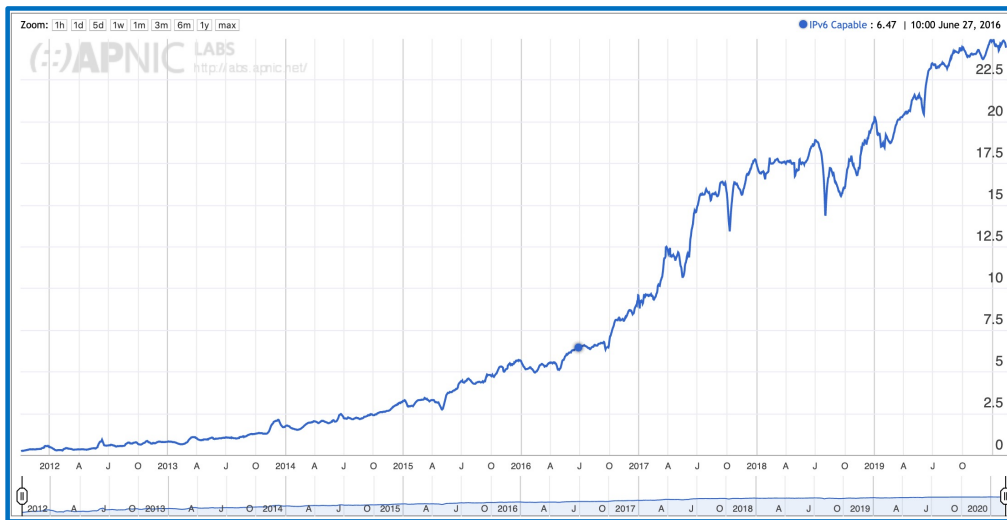


- Resource Explorer (REx)
 - Formerly Internet Directory
 - Updated UI/UX
 - NPS 59, Usability 4.4, 86% returning users
- DASH
 - Recurring reports
 - Performance and reliability improvements
 - Webinar to 45 attendees from 20 economies
 - NPS 68, Usability 4.5, 109% returning users
- NetOX
 - New 'Experimental' tab
 - Comparison feature in development
 - NPS 68, Usability 4.4, 408% returning users



Monthly users

Research and Analysis



- 41 presentations at RIRs, NOGs, IETF
- 43 blog posts and 3 podcasts
- Research
 - IPv6 capability
 - Address pools analysis
 - BGP growth and anomaly detection
 - RPKI ROA monitor developed
 - DNS: DOH, large responses
 - QUIC measurements
 - ECN and RSA 2048-bit in DNSSEC
- Cooperation
 - Routing data for MANRS
 - ITHI measurement framework
 - DNS/SEC measurements with ICANN
 - Cloudflare collaboration

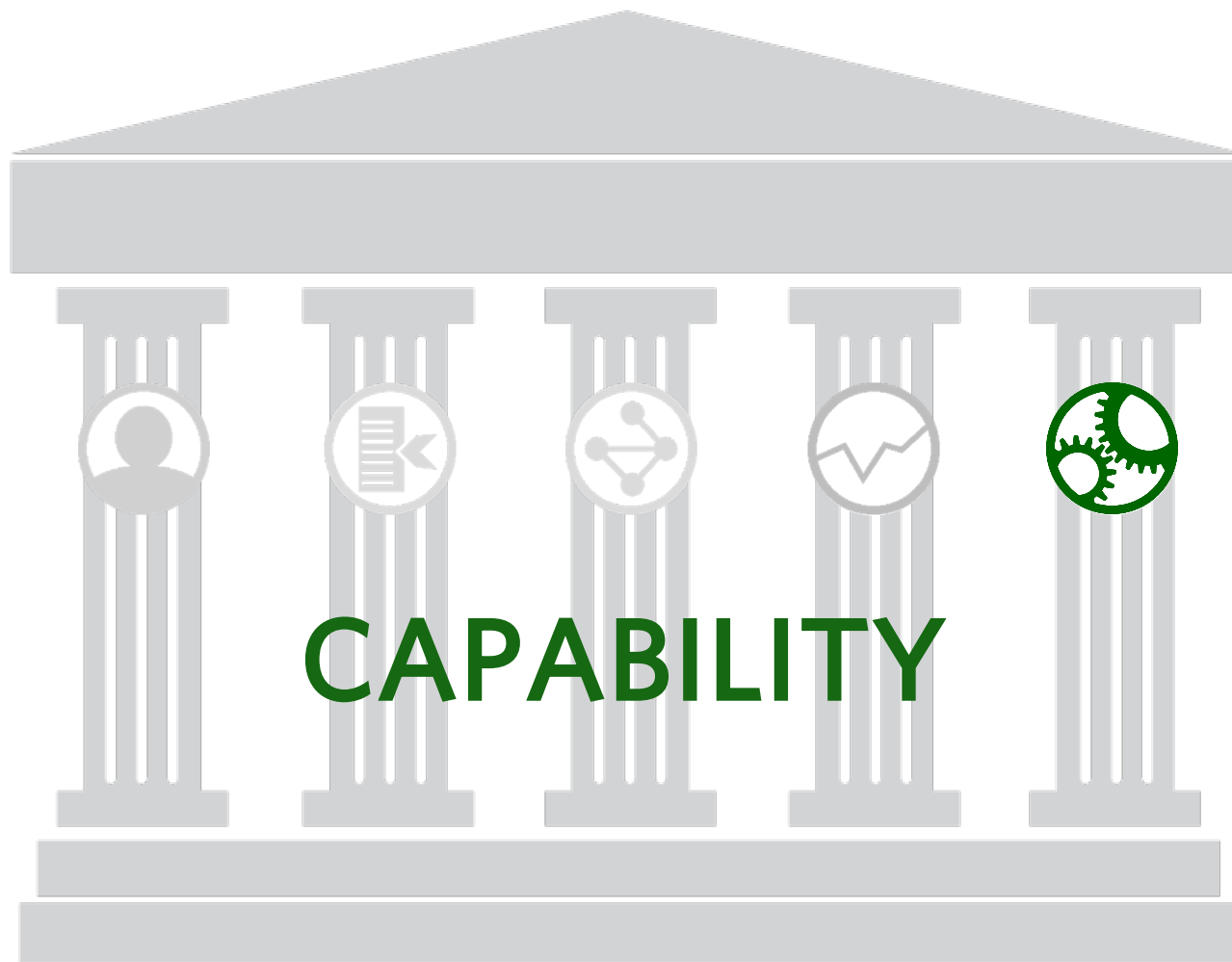
APNIC 52

"AS AN INDUSTRY, HOW DO WE
CREATE A CULTURE OF LEARNING
FROM OUR MISTAKES?"

KEYNOTE AND TECHNICAL SESSION 1
Tuesday, 14 September 2021

Geoff Huston
APNIC, Chief Scientist





Internal Technical Infrastructure






Architecture and technical coordination	<ul style="list-style-type: none">• Use of OpenAPI to describe internal APIs now standard practice• Rust now a supported language for APNIC product development• Centralized product build tooling deployed to select products
Network and infrastructure operations	<ul style="list-style-type: none">• Shared POP deployment in SG for critical services and M-root in progress• Signed up to NextDC carbon offset program• Brisbane to HKIX connectivity via PCCW completed• New 24/7 service status page deployed
System and platform operations	<ul style="list-style-type: none">• Deployed two new high-performance storage arrays in two data centres• Migrated DNSSEC signer from Secure64 to Knot• Deployed RDNS anycast nodes in HK, MX, CA, UK• Deployed whois node in KDDI data centre• RRPD upgraded and deployment in Google Cloud in Virginia and SG progressing• Reconfiguring HSM for HA service to RPKI• Community mailing lists interface upgraded
Internal security operations	<ul style="list-style-type: none">• 52 vulnerability reports received; all actioned• Readiness for ISO27001 certification achieved• Outsourced vulnerability reporting and continuous penetration testing (HackerOne)• Rapid7 deployed for vulnerability scanning and SIEM
Enterprise application management	<ul style="list-style-type: none">• Implemented upgraded backup solution for CRM• Initial implementation of DocuSign completed• Zoom room technology and Zoom phone rolled out
Service availability	<ul style="list-style-type: none">• 99.99% critical services; 99.98% non-critical services




Finance and Employee Experience


- External surveillance audit for ISO9001:2016 QMS
- Annual audit of 2020 accounts completed by Deloitte
- COVID-19 response
 - Hybrid working model of WFH and WFO continues
 - Monthly financial forecasts to monitor income and expense variations
- 76% of APNIC teams adopted Agile working processes
- 20 permanent and five casual roles successfully filled
 - Two new directors appointed (Services and Finance)
 - Nine contractors and six CTs engaged
- Workspace review — 2-year future needs
 - Prior to planned relocation
- Upgraded internal (staff) intranet

Success Measures - Overall Summary

Targets			
Membership	14	1	2
Registry	11	1	3
Development	41	2	6
Information	7	2	1
Capability	17	1	4
TOTAL %	80%	6%	14%

 Completed

 $\geq 90\%$ Complete

 $< 90\%$ complete

2021 Annual Report



apnic.net/annualreport

THANKS!



APNIC Secretariat Report

1 January – 31 December 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 21 February 2022. It provides a summary of activities from 1 January to 31 December 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).
- 473 feedback items were resolved (on conferences, training, staff presentations, website information). The User Feedback Group grew to 526 (target 500) (1A.2).
- 783 new Members joined APNIC (7 from Service Partners and 11 from Member referrals). Current total membership stands at 8,768 (1A.3).
- The online Help Centre was deployed in February (1B.1).
- Voting system updates for SIG and IANA RC elections were concluded for APNIC 52, and voting was successfully completed (1B.1)
- The prototype Online Community Platform was trialled with three communities and 110 users (1B.2).

Registry

- APNIC received 8,192 ASNs from IANA (2A.1).
- The percentage of Members holding IPv6 reached 68.43% in July (2A.1).
- Confirmation rate for IRT email validations is 74.3% (2A.2).
- 488,704 IPv4 addresses have been reclaimed by APNIC (2A.3).
- prop-133, -135, -136, -139, -140 were endorsed by the EC for adoption; prop-138 was accepted as a guideline only (2C.1).
- A community Working Group (WG) was formed to review the Policy Document Review Report. Four proposals submitted by the WG were discussed at APNIC 52 (2C.3).

Development

- APRICOT 2021 and APNIC 52 attracted 1,588 attendees, with 7,293 additional live views via YouTube (3A.1).
- Automatic conference session transcription using 'Otter.ai' replaced stenographers at APNIC 52 (3A.1).
- APNIC 52 achieved a Net Promoter Score of 62 in the attendee survey (3A.1).
- 46 fellows (25 females) were selected for the online fellowship program. Eleven presentations were delivered with 86% attendance (3A.2).
- 28 technical community events were supported, and technical support was provided to 14 online NOG events (3C.1).

- Staff participated in 43 security community events (3C.2).
- A new study about Internet Success Factors was commissioned by APNIC and LACNIC, with Analysys Mason selected. The report was presented at the 2021 IGF (3C.3).
- APNIC was involved in the conducting three sessions at the IGF, and two workshops at the APriGF (3C.4).
- From January to Dec 2021, APNIC recorded 302 engagements (3C.6).
- The APNIC EC initiated and held four quarterly meetings with community elected leaders (3D.1).
- A survey on language understanding and translation was completed with 489 responses (3D.3).
- APNIC Academy launched one new course, six new labs, and additional language support in online courses (3E.1).
- 96 training courses were delivered to 2,382 attendees, and 20 webinars to 1,202 attendees (3E.2).
- The proportion of IPv4 address holders with ROAs grew from 24.4% to 36.1%. (3E.5).
- A new ROA measurement tool was released to help monitor RPKI deployment (3E.5).
- IPv6 capability in the Asia Pacific reached 37.65% (3E.6).
- Deployment of M-root servers is progressing in 11 locations (3F.3).

Information

- The Blog averaged 68,721 views per month, 6.1% above 2020's monthly average of 64,778 (4A.1).
- The Internet Directory was renamed Resource Explorer (REx) (4A.2).
- 43 APNIC Labs research articles were published, and 41 research presentations delivered (4B.3).

Capability

- A [new service status](#) page was created to display the real-time operational status of APNIC's services (5A.2).
- 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 March 2022 (5A.6).
- The annual financial audit was completed and presented to the EC at APNIC 51 (5B.2).
- 20 permanent roles (including two new Directors for the Services and Finance areas) and five 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	9.51	-11%	2,253,270	2,219,361	-2%	-	7,935	0%
	Membership Products	12.28	9.25	-25%	2,473,335	1,856,909	-25%	-	-	
	Membership Reporting	1.56	1.12	-28%	715,263	619,054	-13%	-	-	
Registry	Registration Services	4.53	4.89	8%	842,899	890,233	6%	-	-	
	Registry Products	9.04	6.18	-32%	2,580,512	1,831,592	-29%	-	-	
	Policy Development	0.64	0.64	-1%	545,263	442,384	-19%	-	-	
Development	APNIC Conferences	5.04	4.75	-6%	1,466,163	930,345	-37%	43,150	4,296	-90%
	Foundation Support	1.58	1.24	-22%	571,518	76,428	-87%	-	-	
	Community Engagement	6.38	4.46	-30%	1,826,724	1,410,868	-23%	-	-	
	Community Participation	1.52	1.37	-10%	310,076	244,552	-21%	-	-	
	APNIC Academy	10.8	8.07	-25%	2,392,222	1,886,157	-21%	15,000	16,351	9%
Information	Internet Infrastructure Support	0.76	1.03	35%	551,384	379,668	-31%	60,000	1,231	
	Information Products	5.52	9.31	69%	985,151	1,254,806	27%	-	-	
Capability	Research and Analysis	1.02	1.00	-2%	799,201	747,795	-6%	80,000	62,532	-22%
	Internal Technical Infrastructure	6.2	14.78	138%	1,903,032	2,472,811	30%	353,200	390,978	11%
	Finance and Business Services	10.14	11.45	13%	2,207,847	2,353,479	7%	30,000	9,244	-69%
	Employee Experience	4.65	5.69	22%	1,945,989	2,137,539	10%	2,160,000	-	-100%
	Governance	2.76	1.96	-29%	1,133,807	1,065,271	-6%	-	-	
		93	96.7	4%	25,503,657	22,819,252	-11%	2,741,350	492,566	-82%

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
- At least 90% complete
- Less than 90% complete

1 Membership



1A Member Services

Operations

1A.1 Member service delivery

Service requests SLA

- The SLA to respond to Member queries within 48 hours (two working days) has been 100% met.

Service satisfaction ratings

- 93% of service satisfaction ratings (830/891 requests) were either ‘Excellent’ or ‘Above Average’.
- Follow up of all ‘Poor’ ratings revealed 16 poor feedback ratings were submitted in error when completing the feedback form, and the form was improved in July to reduce the chances of error.
- Other ‘poor’ ratings included 13 requests that were out of scope for the Helpdesk, 11 requests by Members with additional questions, one because the Member account was overdue for renewal, and one bug report.

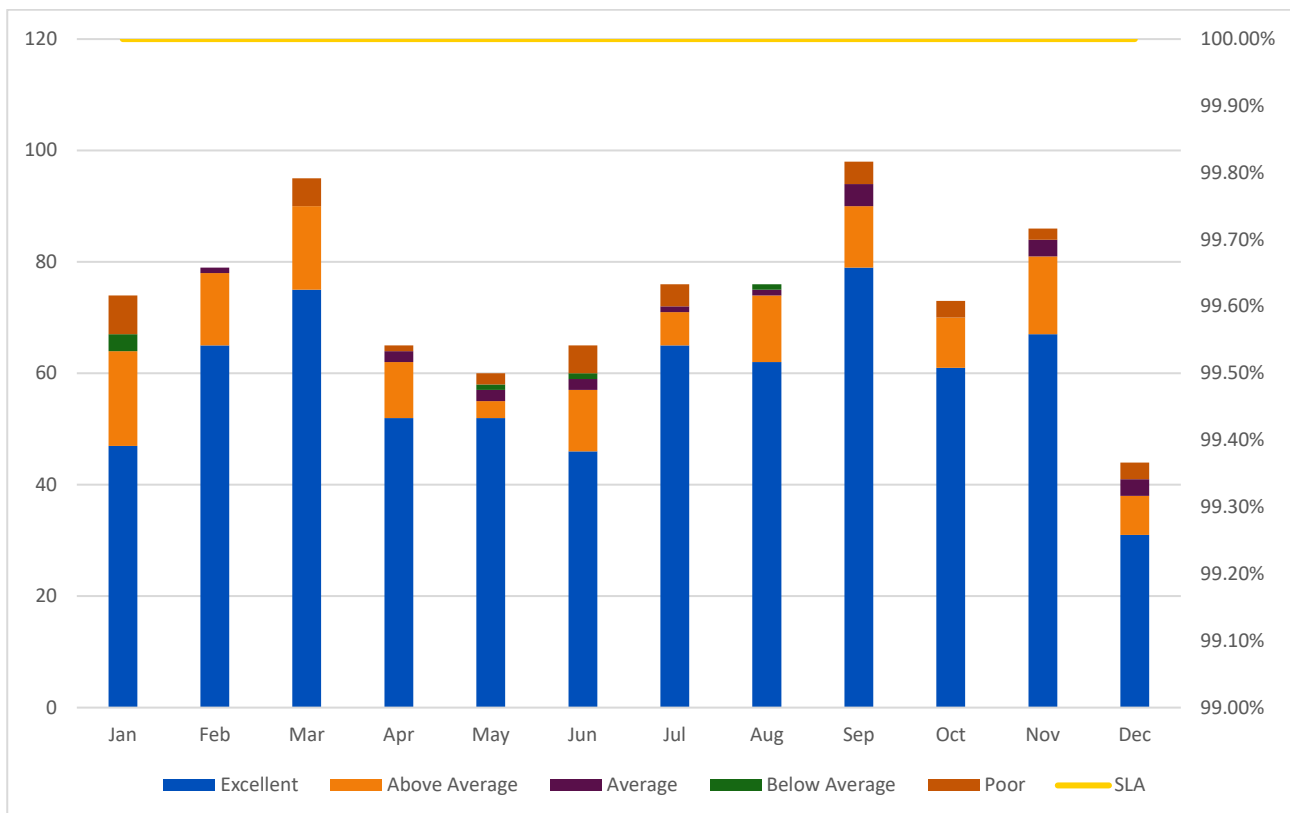


Figure 1: Service SLA and satisfaction

Member Outreach

- There were 148 Member Services engagements across 47 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

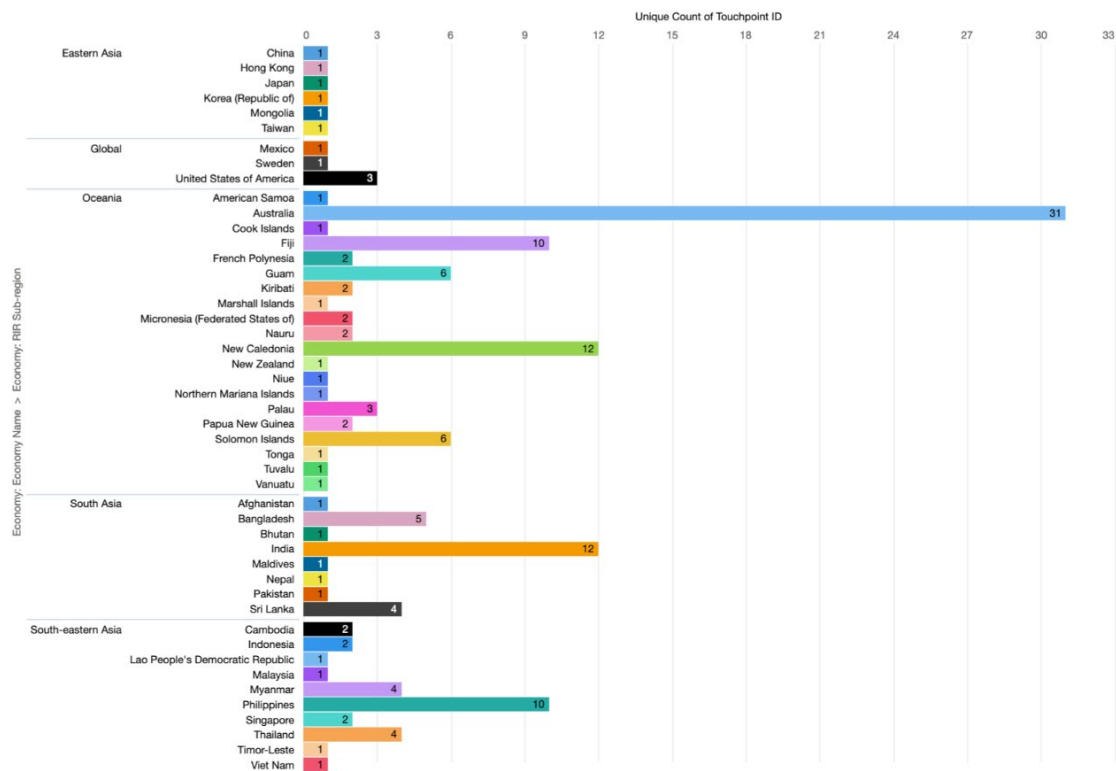


Figure 2: Touchpoints per economy

Fraud Handling

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

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.	93%	●
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.	47 out of 47	●

1A.2 Member experience

Feedback

- Members and the community provided 2,125 feedback items, with 473 requiring action (investigating, monitoring, or fixing the issue). All have been resolved.
- Feedback topics included conference and training content, presentations, website improvements, TOTP/2FA, and bug fixes.

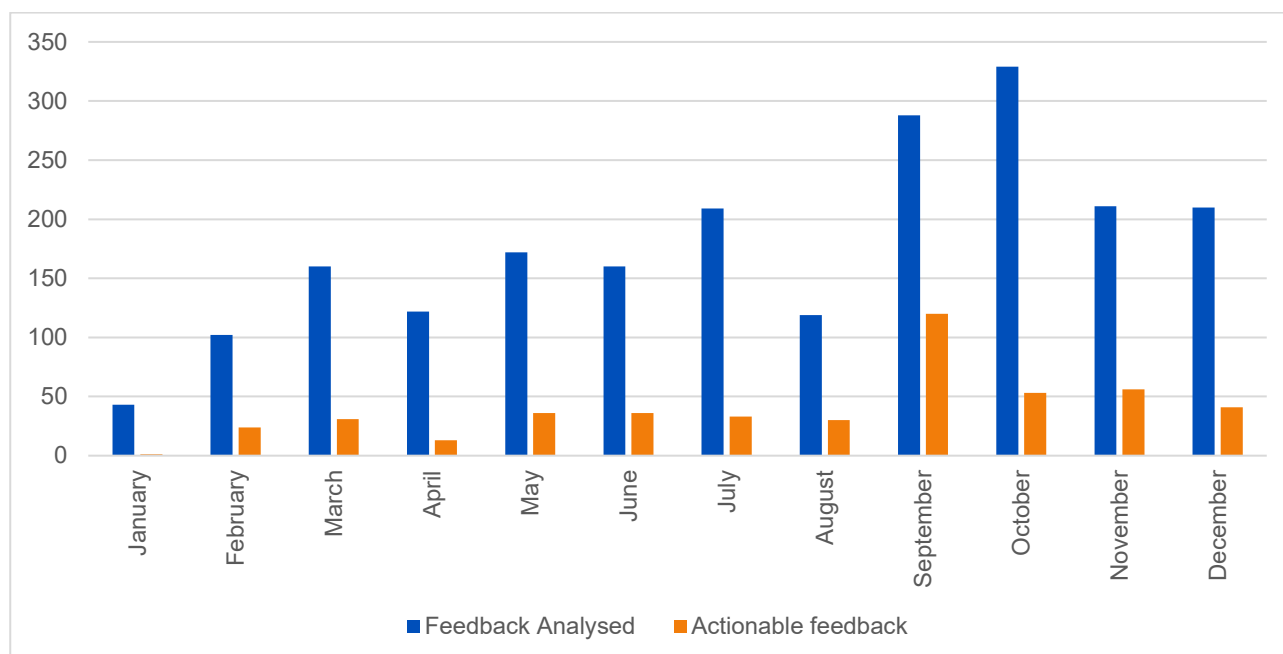


Figure 3: Feedback Received/Actionable

User Feedback Group

- Community members are encouraged to join the voluntary [User Feedback Group](#) to provide views on product developments. This group grew to 526 people.
- There have been 56 one-on-one feedback interviews with Members.

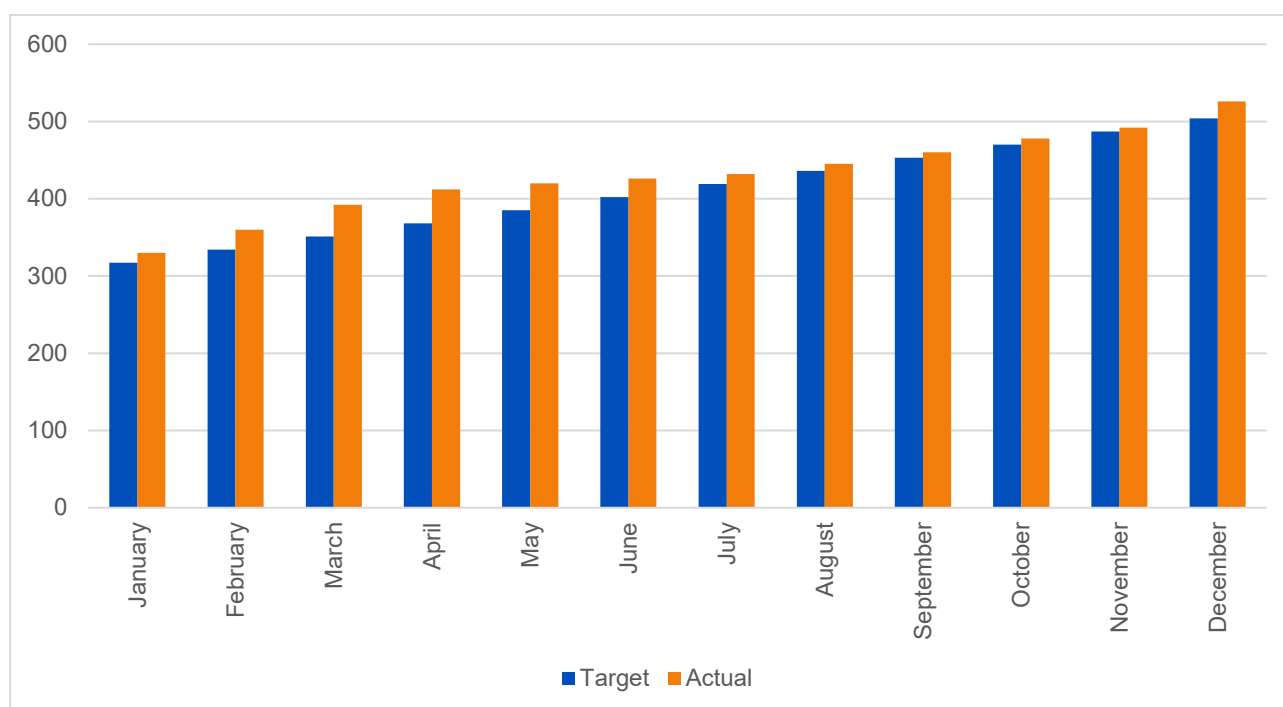


Figure 4: User Feedback Group Growth

Web accessibility

- An independent audit identified 81 critical and high accessibility issues that could impact users with a disability. All have been resolved.

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.	81 issues resolved	●
3	Grow product and service user feedback group from 300 to 500 members.	526	●
4	One-on-one feedback sessions with at least 50 Members.	56	●

1A.3 Membership development

- New Member outreach was conducted at the PCTA e-Tech Show, PITA Business Forum & Expo 2021, and CommunicAsia 2021.
- Two new Services Partners engaged: Lao National Internet Center (LA), which became a Service Partner on 11 June, and Information Beam Company Limited (MM) on 20 October.
- A total of 783 new Members joined APNIC, seven from Service Partners and 11 from Member referrals.

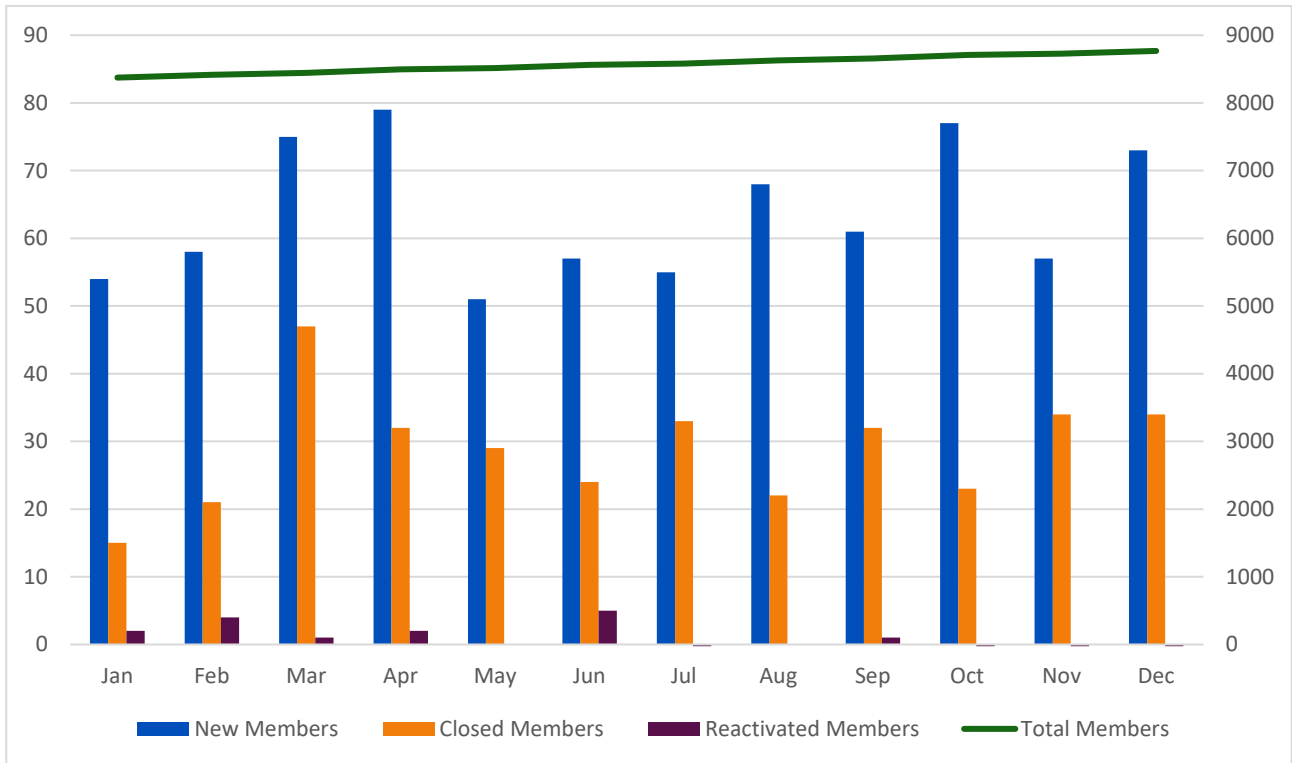


Figure 5: Membership transactions

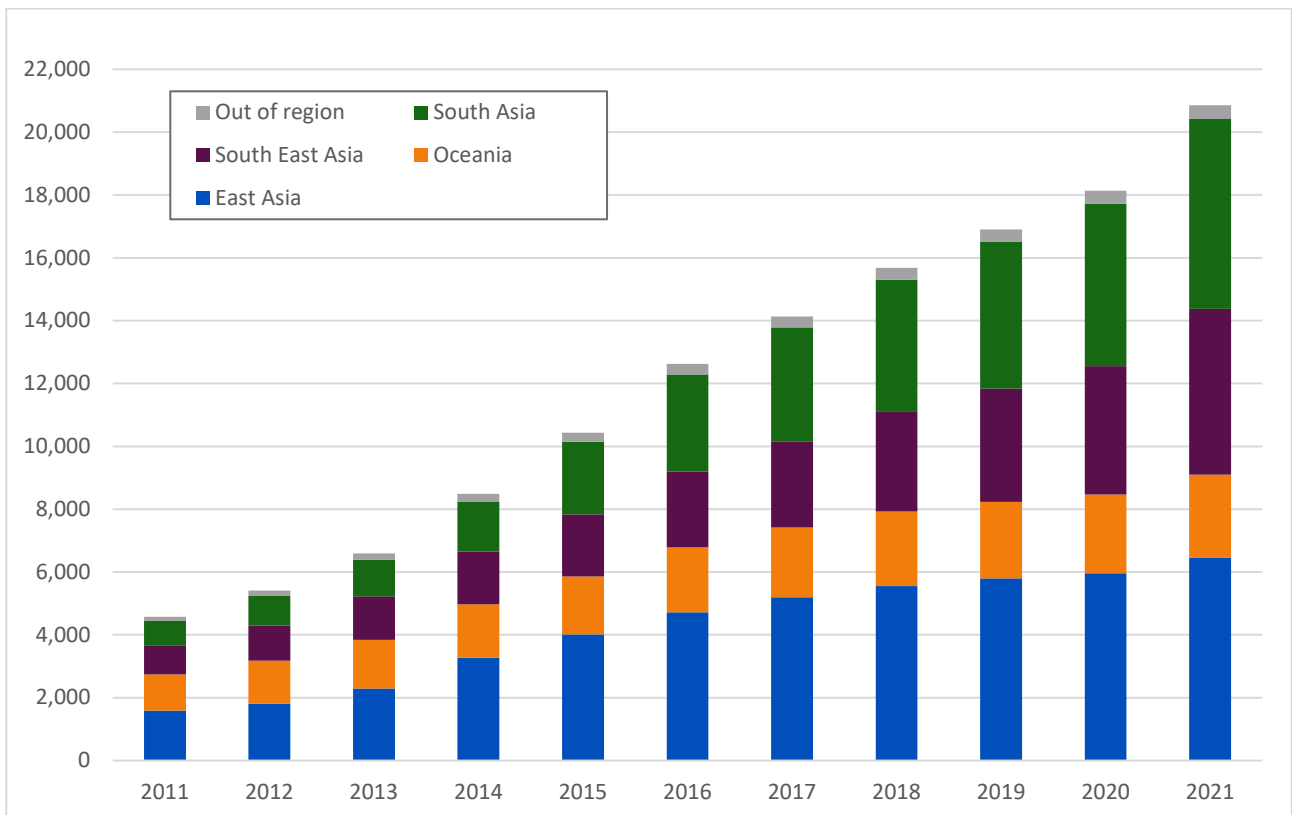


Figure 6: Total membership (APNIC + NIR, by subregion)

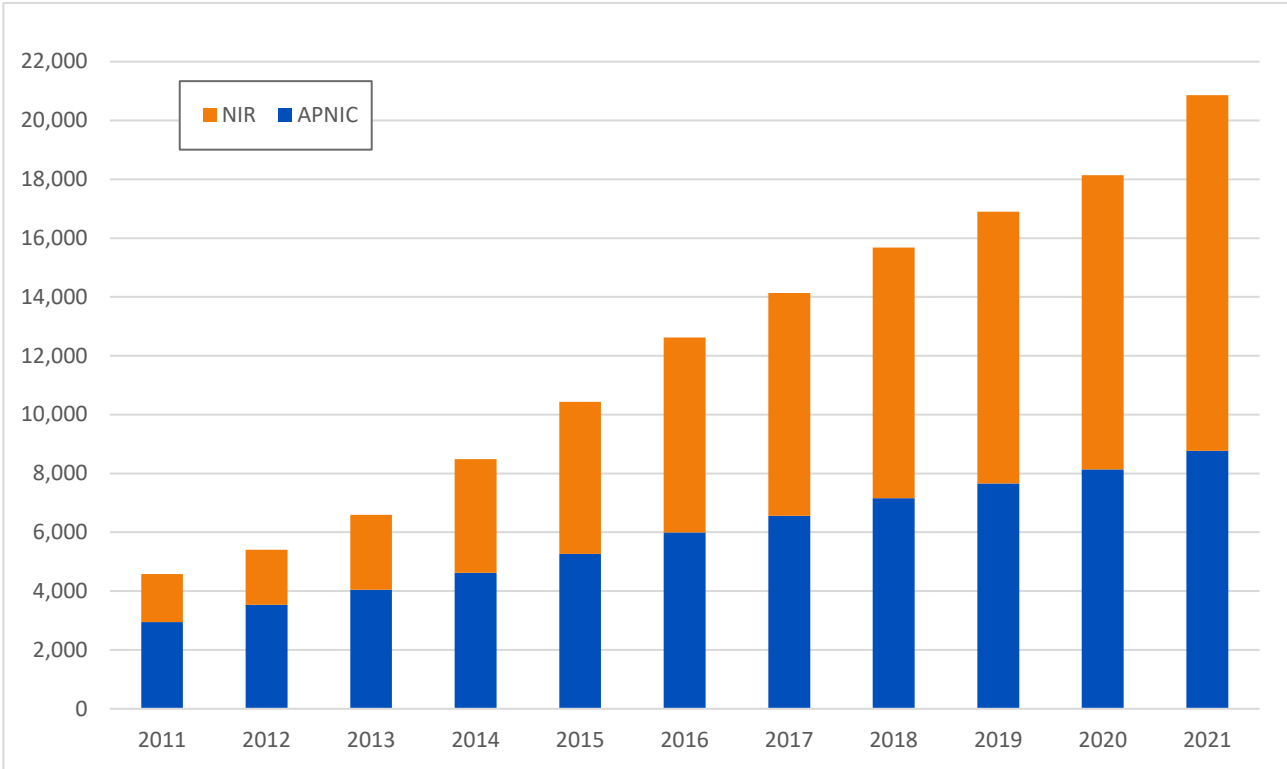


Figure 7: Total membership (APNIC + NIR)

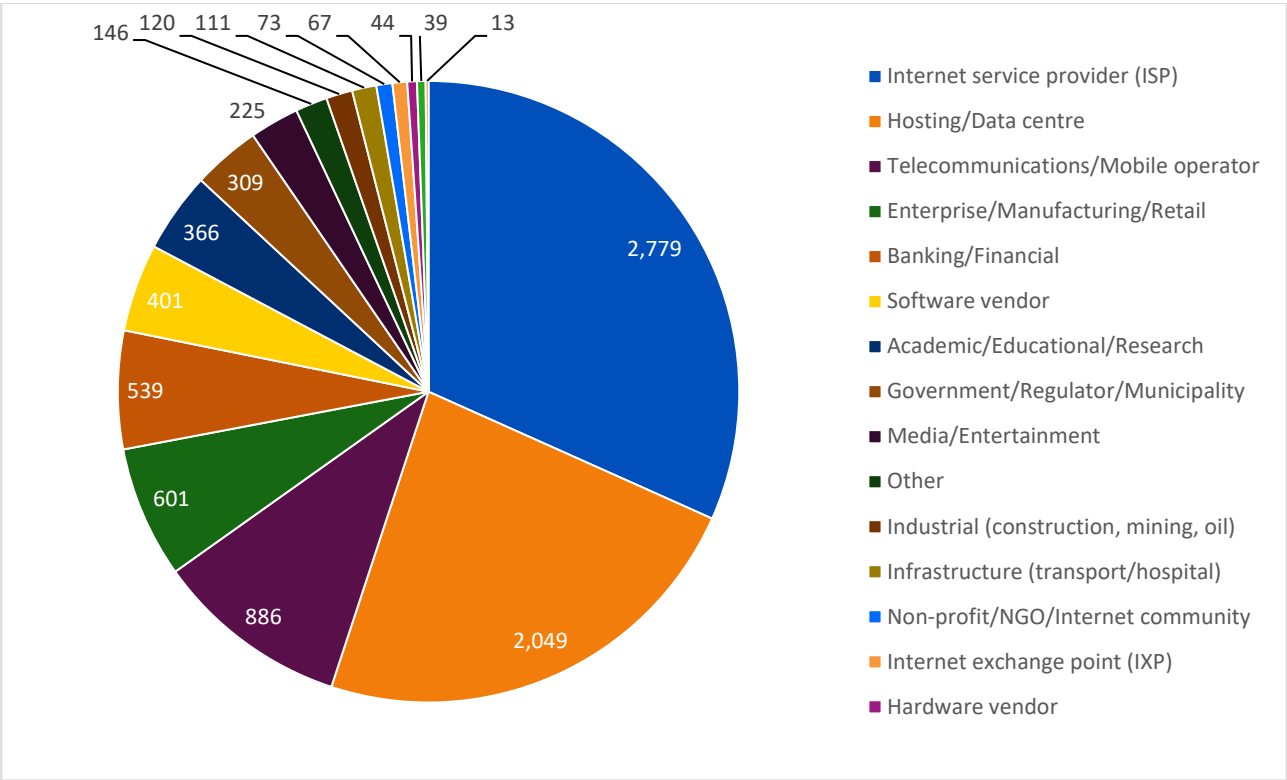


Figure 8: APNIC membership by industry type

	Success Measures – 1A.3.	Results	Status
1	At least eight membership development activities, in economies with low membership relative to their Internet growth potential.	7 out of 8	●
2	Total number of Members to match or exceed the 2021 budget assumption of 8,940.	8,768	●

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 update articles.

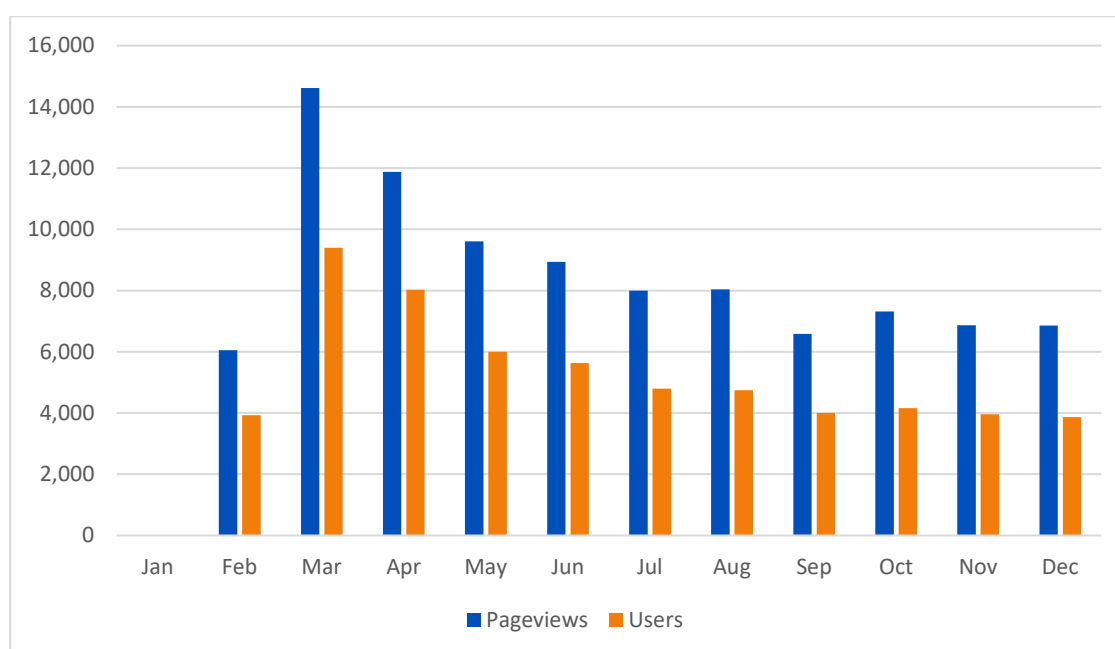


Figure 9: Help Centre visitors

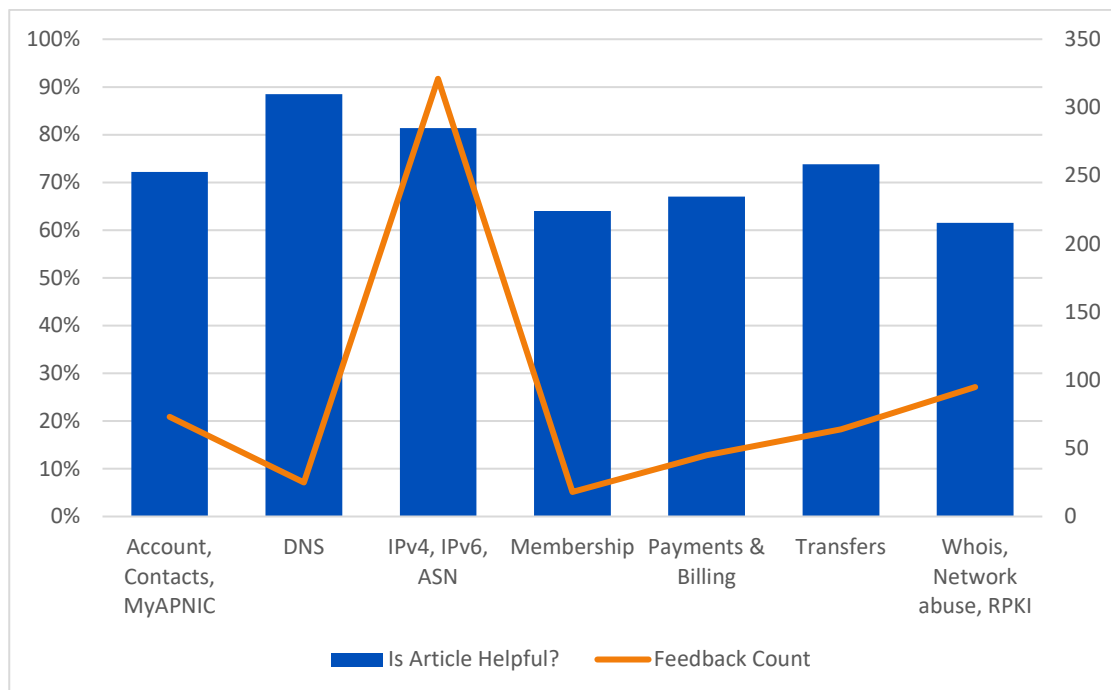


Figure 10: Help Centre feedback

MyAPNIC

- Improved the EC election dashboard in MyAPNIC, reducing support load for the APNIC 51 elections.
- Completed the MyAPNIC architecture conversion from WordPress to Java.
- Completed improvements to the billing section, including new advance invoice management feature, downloadable receipts, and better billing due date visibility. Billing surcharges were removed for Members paying annual fees by instalment.
- The migration of membership management functions in MyAPNIC from Perl to Java is ongoing. APIs will be adopted to take advantage of improvements in modern testing, deployment, and front-end technologies.
- Chat support via Salesforce is now in production.
- 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 concluded for APNIC 52, and voting was successfully completed.
- Web style updates were implemented in the MyAPNIC Resource Manager.

Membership application form

- Implemented Member application referrals in the new application form and deprecated the old form.
- The Non-Member application form is being improved, based on the recently deployed Member application form.

Other process and system improvements

- Migration of APNIC Logins is delayed until the existing SSO system is replaced in March 2022 (5A.6).
- New testing infrastructure was deployed to the membership application form and election system to reduce the time needed for UAT and improve code quality.
- Updated the Member API to retrieve Member accounts associated with a SSO UID, allowing external systems (such as event management) to access data.

- Duplicate user accounts were removed from the SSO.
- The prop-125 IRT validation process feedback has resulted in several improvements to make it easier for Members to validate their IRT information (see 2A.2). Additional user research has resulted in plans to streamline the email update process in 2022.
- Work started to improve and automate manual processes required for historical resource holder fee change implementation in 2022.

	Success Measures – 1B.1.	Results	Status
1	Member Help Centre deployed.	Completed	●
2	Migrate 100% of APNIC Logins to a new identity management system.	Deferred to 2022	●
3	Establish comprehensive testing infrastructure for membership product applications.	Completed	●
4	Deliver problem-free EC, NRO, IANA and SIG Elections via BigPulse.	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:

- To validate the potential of a community platform to help community members share knowledge and experience, various platforms were assessed for trial.
- ‘Tribe’ was selected to pilot as a community discussion platform over five months, with a total of 110 users, and several test groups (SWITCH SEA, APNIC 52 Online Fellows and APNIC Academy).
- The trial findings included the requirement for the integration of mailing lists and a community manager to coordinate to overall operation of the platform. These findings and other lessons of the trial period are being assessed to determine next steps, with deployment of an operational product scheduled in 2022.

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 to replace the previous ‘Survey Tracker’ webpage.
- The 2022 Activity Plan and Budget was approved by the EC in December.

	Success Measures – 1C.1.	Results	Status
1	Publishing of required reports on the day of the APNIC Member Meetings.	Completed	●
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.	67 out of 67 achieved	●

2 Registry



2A Registration Services

Operations

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

Resource pools

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

	Total at 1 Jan 2021	From IANA	Transfers in	Transfers out	Total at 31 Dec 2021	Total delegated	Total reserved	Total available
IPv4 /24s	3,482,617	0	2,410	1,095	3,483,932	3,463,031	6,986	13,915
IPv6 /32s	1,067,008	0	0	0	1,067,008	98,392	113,746	854,870
ASNs	21,143	8,192	5	4	29,336	26,118	0	3,218

Table 3: Resource pool status

IPv4 pool status

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

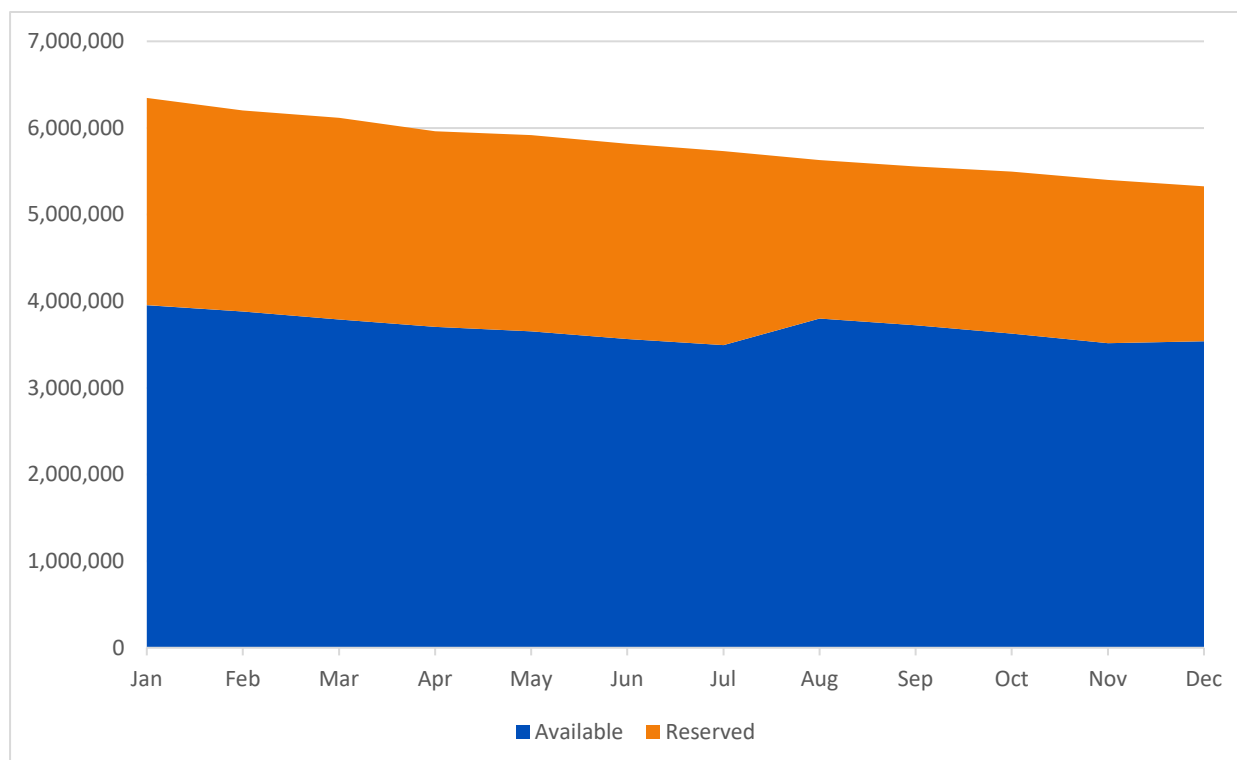


Figure 11: IPv4 pool status

IPv4, IPv6 and ASN delegations

- The following graphs show the number of delegations for each resource type by sub-region.
- In Figure 12, the peaks in ASN delegations in April, May and October were due to allocations to large networks in China and India. APNIC received an additional 8,192 ASNs from IANA in 2021 to meet those large requests.

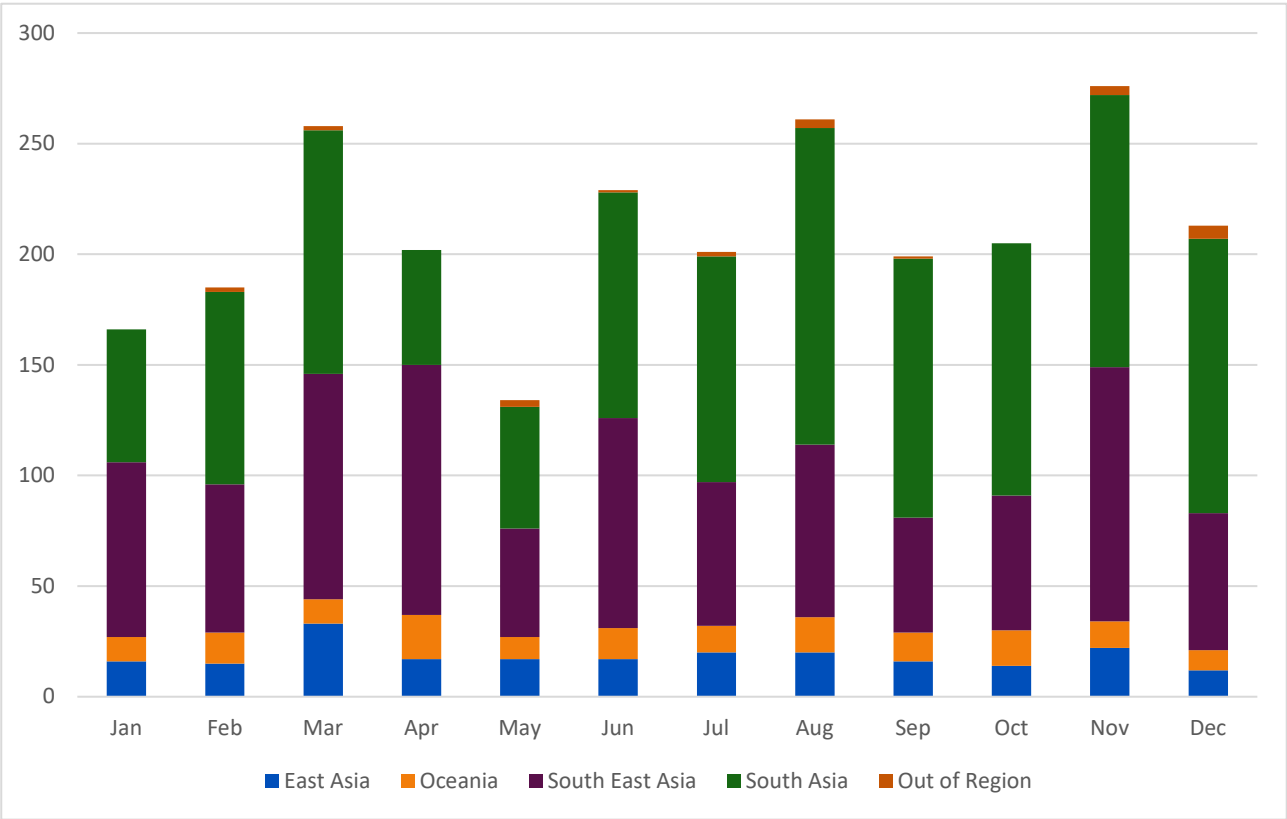


Figure 12: IPv4 delegations by sub-region

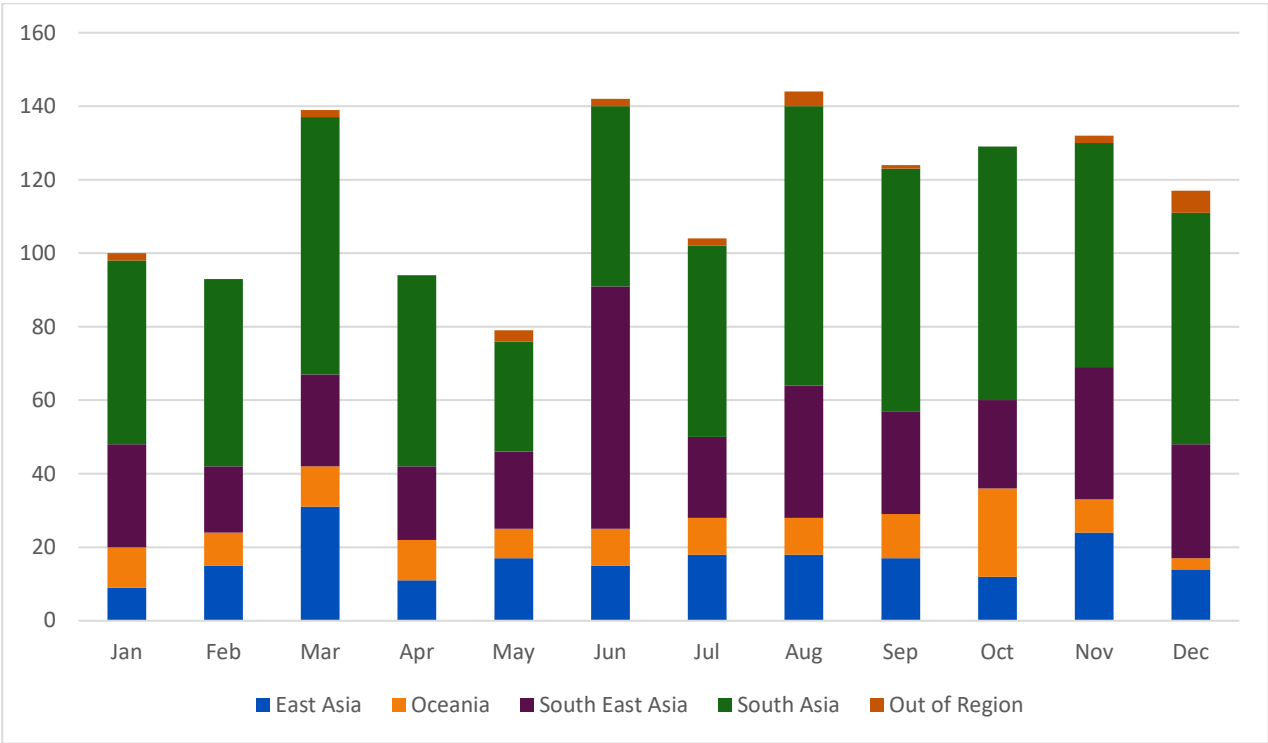


Figure 13: IPv6 delegations by sub-region

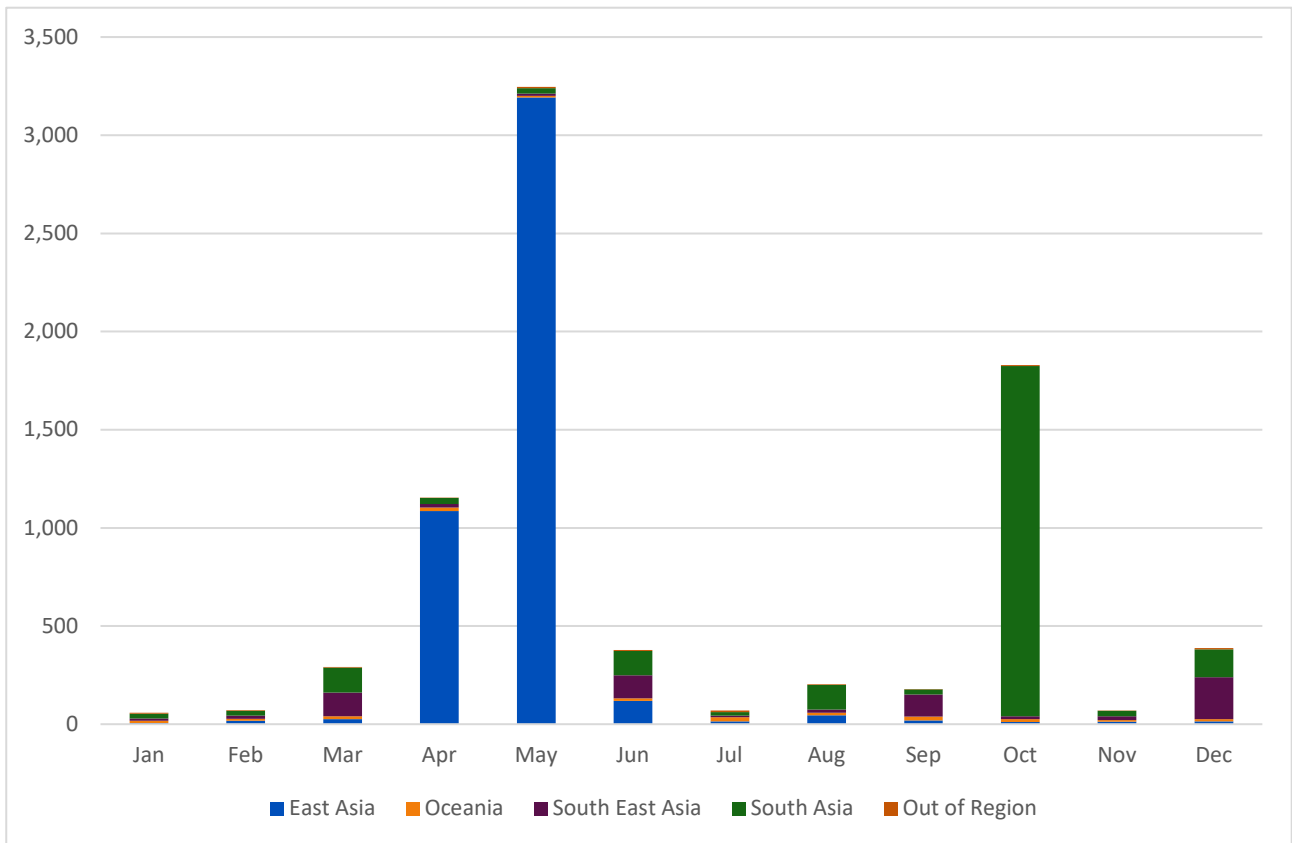


Figure 14: ASN delegations by sub-region (including NIRs)

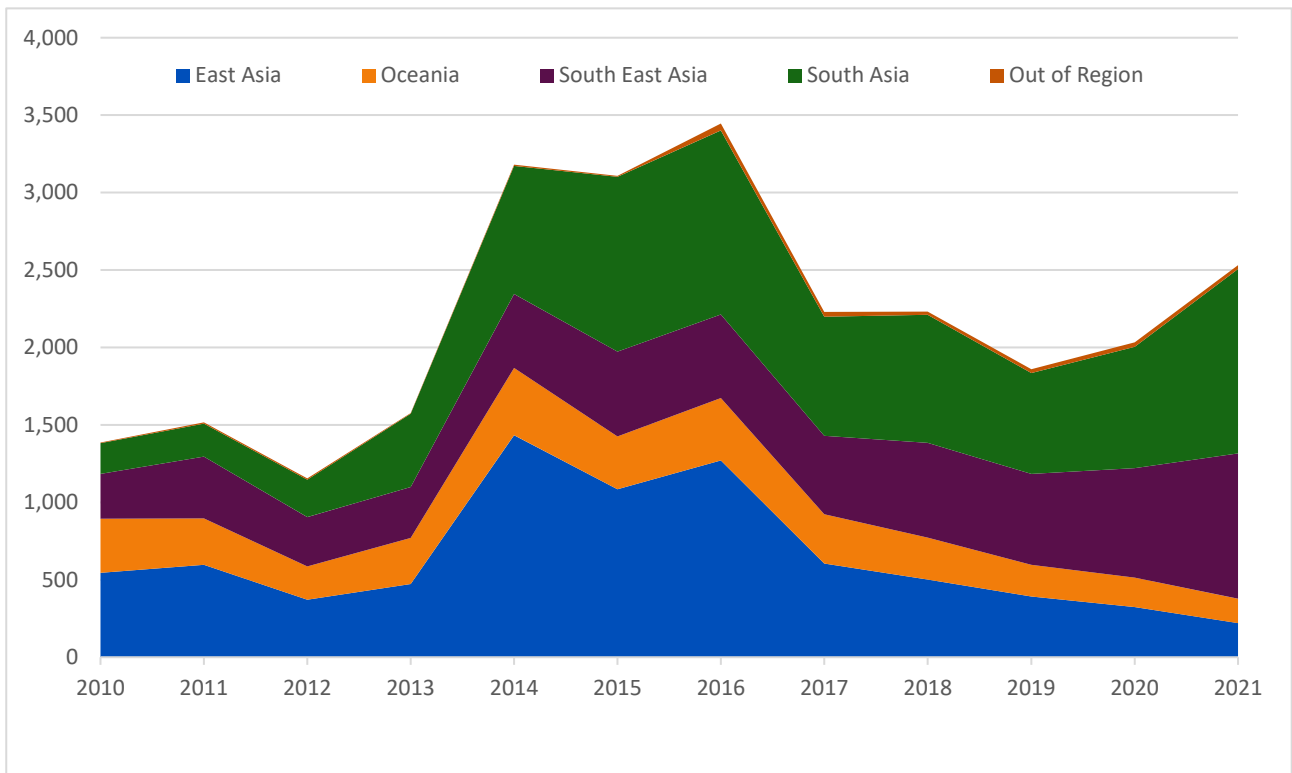


Figure 15: Annual IPv4 delegations

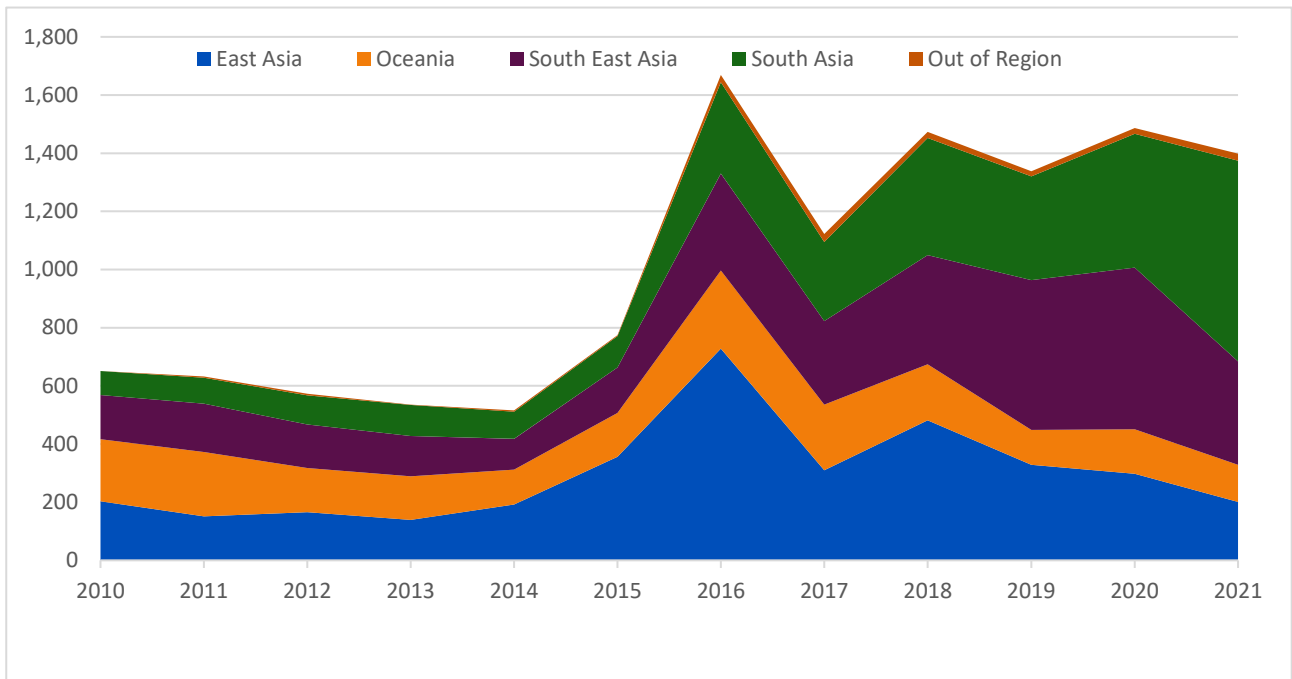


Figure 16: Annual IPv6 delegations

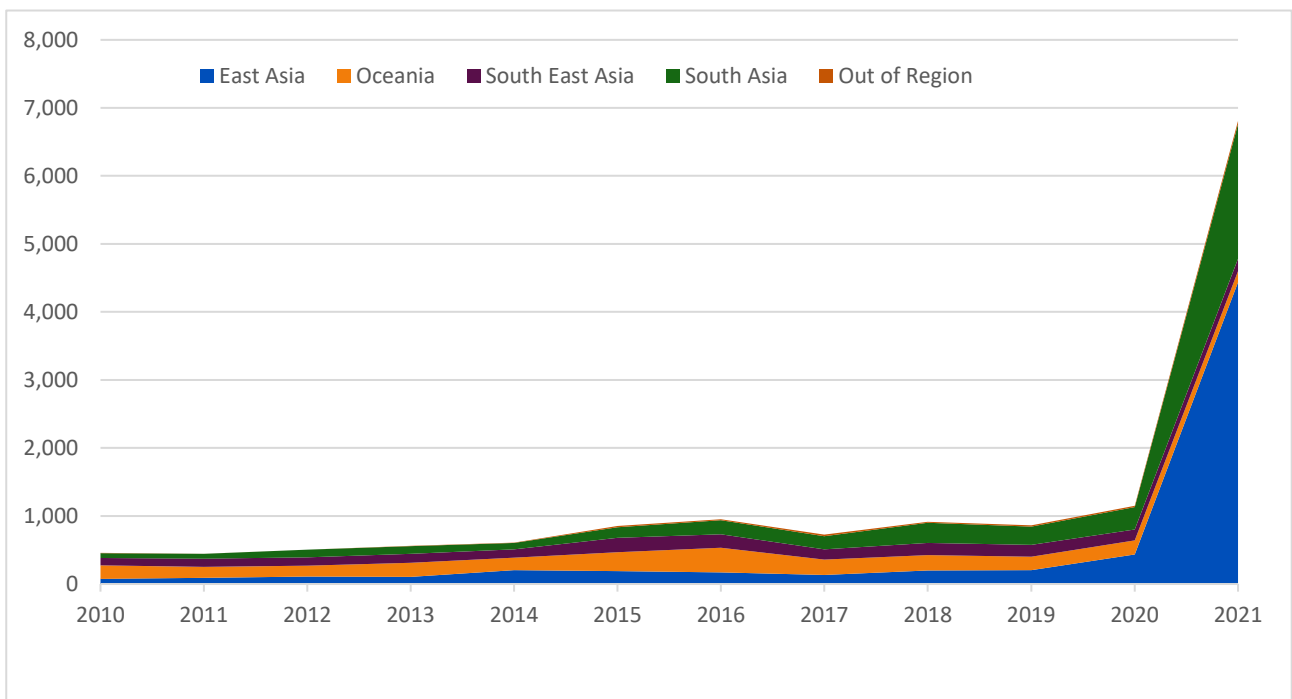


Figure 17: Annual ASN delegations

Member resource holdings

- The percentage of Members holding IPv6 reached 68.43% (from 66.32%) on 31 December 2021. The proportion of APNIC Members holding specific resource types is illustrated below.

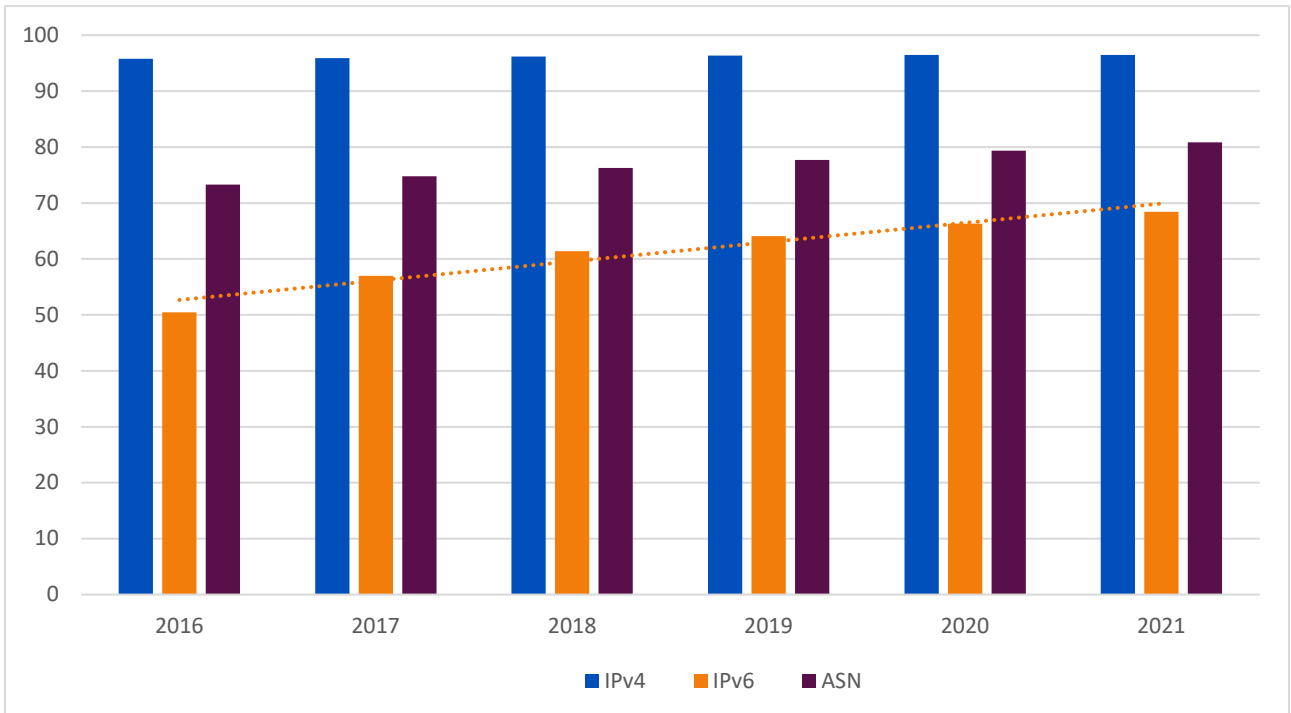


Figure 18: Member resource type holdings

IPv4 transfers: Mergers/acquisitions and historical

- M&A transfer activity increased in March, mostly due to transfers in NIRs.
- A large transfer occurred within TWNIC in September.

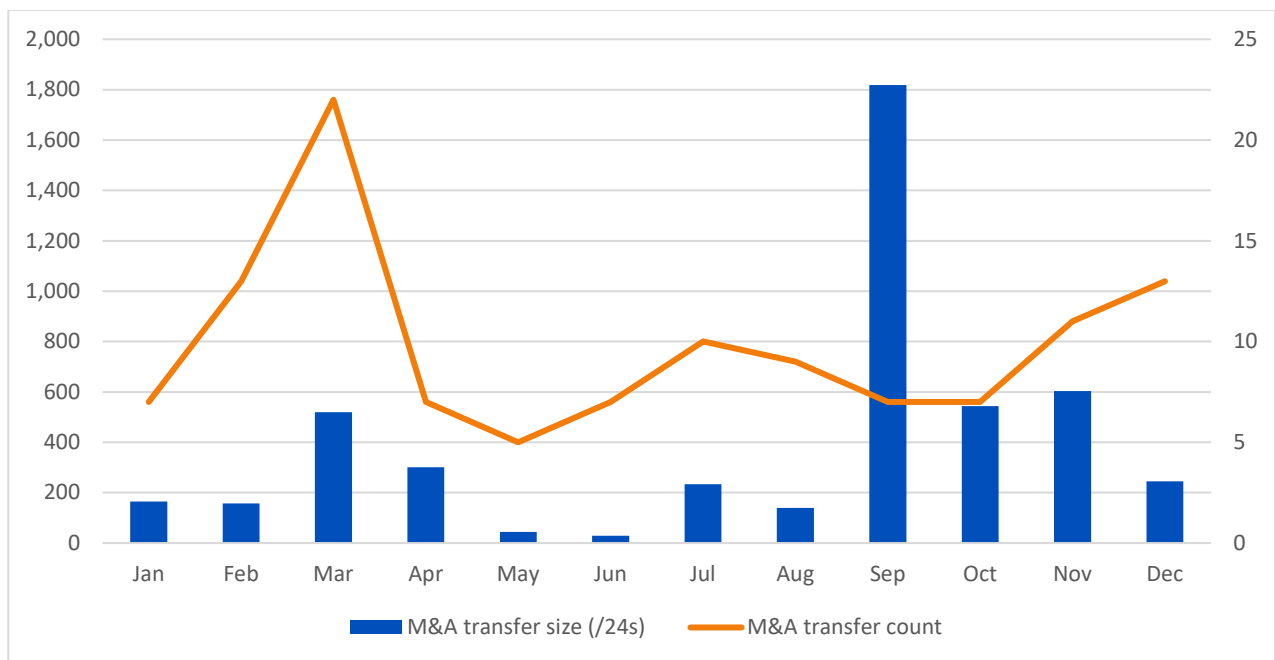


Figure 19: M&A and historical transfers

IPv4 market transfers

- There were several IPv4 transfers by IRINN in January, which drove higher counts in the chart below.

- Large IPv4 transfers from APIDT in June and November, between Triple T (Thailand) accounts in August, and between Tencent accounts in December, drove elevated transfer volumes.

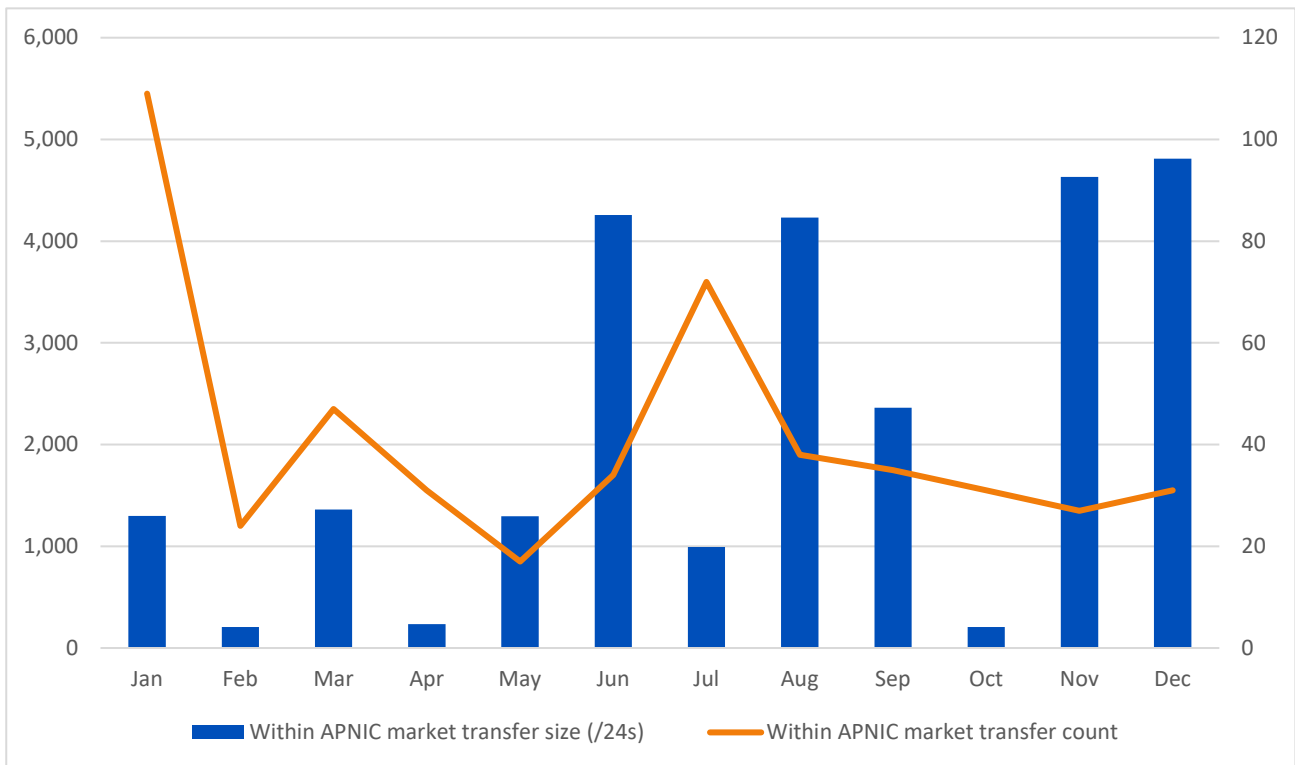


Figure 20: Market transfers within APNIC

Market transfers: Inter-RIR

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

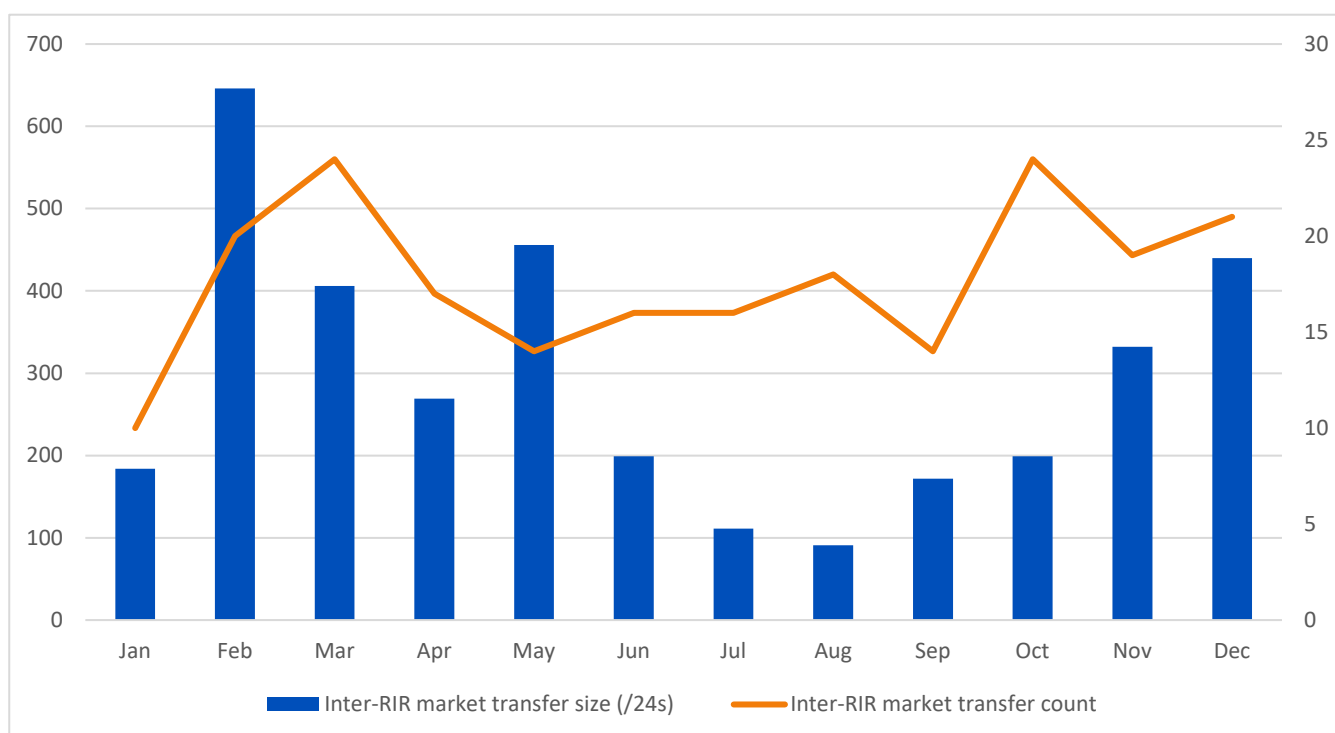


Figure 21: Inter-RIR IPv4 transfers

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%.	68.43%	●

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.
 - 13,826 email validation requests have been issued; 10,277 email validation requests were confirmed. The confirmation rate is 74.3%.
- Identifier Technical Health Indicators (ITHI) measurement
 - The NRO has developed a proposal for ITHI risk identification in response to an ICANN initiative. For the purposes of measuring the state of the data, accuracy has been defined as ‘Comprehensive, Correct, and Current’. The following are the measurements for Internet number resources (INRs) managed by APNIC. INRs managed by NIRs are not included in this report.
 - Comprehensive:
 1. INRs administered by APNIC are accounted for in the NRO extended delegation statistics: 100%.
 2. INRs administered by APNIC are not duplicated in the NRO extended delegation statistics: 100%.

3. INRs registration/holdership data is available for all INRs accounted for in the NRO extended delegation statistics:
- Legal name (org object) (weight 25%)
 - Legal address (org object) (weight 25%)
 - Point of contact (IRT) (weight 50%)

Type of Record	Number of Records	Score	% of total records
Have a parent block with org object and IRT	36,912	100	89.5%
Have no org object and no IRT	3,153	0	7.6%
Have IRT but no org object	1,189	50	2.9%
Have org object but no IRT	2	50	.0004%

Table 4: ITHI measurement: 'Comprehensive'

- Correct:
 - Measurement 1: Member has confirmed their details as correct and created an org object (50%).
 - Measurement 2: Validated the IRT within the last 12 months (50%).

Type of Record	Number of Records	Score	% of total records
Have a parent block with org object and validated IRT	30,217	100	73%
Have org object but no validated IRT	6,697	50	16%
Have no org object and no validated IRT	3,950	0	10%
Have validated IRT but no org object	392	50	1%

Table 5: ITHI measurement: 'Correct'

- Current (to be implemented in 2022)

	Success Measures – 2A.2.	Results	Status
1	Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting.	2 out of 3 measures	●
2	Increase rate of validation by Members of registration records.	74.3% validation	●


2A.3 Reclaiming unused IPv4 address space

- Around 2.3 million unrouted historical IPv4 addresses (more than a /11, over 293 prefixes) were identified under prop-017. Custodians were identified and contacted to encourage them to claim, transfer or return the resources.

- 488,704 addresses were returned to APNIC, equal to nearly one /13, or 1,909 /24s (over 81 prefixes); while holders chose to retain 411,136 addresses (over 50 prefixes).
- All publicly available information including online company registries, company websites and web searches were used to identify custodian contacts. Address space for uncontactable custodians, or custodians that did not respond, will be reclaimed by APNIC.

Status	31 Mar	31 Jul	31 Oct	31 Dec	Percentage	Addresses
Yet to contact	60	32	14	0	0%	0
Not contactable	51	54	61	65	22.18%	669,696
No response	66	55	57	58	19.80%	476,160
Prefixes being claimed by holder	37	31	36	39	13.31%	339,456
Prefixes retained by holder	29	50	48	50	17.06%	411,136
Prefixes returned to APNIC	50	71	77	81	27.65%	488,704
Total number of unrouted prefixes	293	293	293	293	100%	2,385,152

Table 6: 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.	Completed	

2B Registry Products

Operations

2B.1 Internet number registry management

NIR API

- An API to assist NIR resource administration and registry accuracy was developed, with an external test environment established. Deployment is planned for early 2022.

APNIC Registry Management System (ARMS)

- Significant performance improvements were made to the core registry service to make the registry management system more usable (now 5-10 times faster for typical requests).

Registry rearchitecture

- A requirements specification has been completed. This is a multi-year project under APNIC's Next-generation Registry initiative. Reimplementation of the internal registry in Java will commence per the product roadmap with a completion target of 2023.

	Success Measures – 2B.1.	Results	Status
1	Implement the NIR API and operate in conjunction with the NIRs.	Completed for 2022 deployment	●
2	Create initial design documentation for the 'Next-generation Registry' by the end of Q4.	Completed	●

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

- The finalized NRO RDAP profile was published in the IANA RDAP registry.
- APNIC is preparing to achieve full compliance with the profile in Q1 2022.

Whois

- BYOIP attributes can now be managed directly by end users in MyAPNIC.

APIs

- A public specification of a general Member registry API was completed. The aim is to share a prototype at APRICOT 2022.

	Success Measures – 2B.2.	Results	Status
1	Implement a bulk update method to improve usability of the MyAPNIC Routing Management feature.	General Member API implementation in 2022	●
2	Improved support for 'BYO IP' services in MyAPNIC.	Completed	●
3	Create a public specification of a general Member registry API.	Completed	●
4	Implement the NIR KPI monitor for RPKI.	Completed	●

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

- Seven policy proposals were considered at the APNIC 52 OPM. Four proposals reached consensus at the OPM and AMM:
 - [prop-135](#): Documentation
 - [prop-136](#): Registration Requirements
 - [prop-139](#): SOR not required
 - [prop-140](#): Update End-Site Definition
- The following proposal reached consensus but was returned to the author for clarification:
 - [prop-137](#): IPv6 assignment for associate members
- The following policy proposal did not reach consensus and was returned to the mailing list:
 - [prop-141](#): Change maximum delegation size of IPv4 address from 512 (/23) to 768 (/23+/24) addresses
- The following policy proposal was accepted as a guideline only:
 - [prop-138](#): Restricting AS-ID in ROA
- Following the meeting, the comment period for prop-135, -136, -139 and -140 closed with no objections raised and the policies were endorsed by the APNIC EC for adoption.

	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.	6.7/7	●

2C.2 Policy implementation

- Policy text changes resulting from prop-133, -135, -136, -139, and-140 were implemented and published.
- Prop-138 was published as a [guideline](#).

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

2C.3 Policy analysis

- Impact assessments of the nine policy proposals discussed at APNIC 51 and 52 were conducted and shared with the Policy SIG. The APNIC 52 policy assessment was not presented due to time constraints.
- An update on the Policy Document Review was presented at APNIC 51. An additional Policy SIG Community Consultation meeting was held online on 19 March, with 40 attendees.
- A community Working Group (WG) was formed to review the Policy Document Review Report and develop proposals for discussion at APNIC 52. The WG submitted nine proposals to the Policy SIG Chairs for APNIC 52; four were accepted for discussion at the OPM and all four reached consensus.

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



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
Remote viewers – YouTube	3,855 views; 832.04 hours
#apricot2021 tweets	266 from 116 users

Table 7: APRICOT 2021 statistics

- APRICOT 2021 was the second 100% online conference managed by APNIC due to the COVID pandemic.
- The 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 week.
- 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 was held online from 13 to 16 September 2021.

Conference statistics	
Total number of remote participants (Zoom)	706
Economies represented	48
Remote viewers – YouTube	3,438 views; 745.88 hours
#apnic52 tweets	276 from 91 users

Table 8: APNIC 52 statistics

- The tutorials (day one) attracted 374 attendees, with 543 attending the conference from 14 to 16 September.
- Technology additions for APNIC 52 included CometChat for delegate chat and networking, and Otter.ai for automatic transcription. Improvements to the conference login process were also made.
- Other Internet community events held at APNIC 52 included the APIX meeting, AP* Retreat, and an APNG Seminar on e-health.
- The delegate survey gave APNIC 52 a Net Promoter Score (NPS) of 62.

	Success Measures – 3A.1.	Results	Status
1	Achieve total attendance of 1,000 delegates across two conferences.	1,558 attendees	●
2	Achieve 6,000 remote conference session views.	8,145 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.	Completed	●

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 11 technical, policy and Internet governance presentations over five months; pairing fellows with industry mentors; APNIC Academy training; and guidance during APNIC 52.
- 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.
- Eleven presentations (780 minutes) were delivered by 14 presenters, with an average overall fellows’ attendance of 86%.
- Fellows completed 136 APNIC Academy self-paced courses and attended an additional 26 Academy webinars.
- Twelve mentoring sessions were held in August to September between 27 fellows and 25 volunteer mentors from the APNIC community.
- The program achieved an NPS of 92 from Fellows in the participant survey.

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 were seconded from APNIC, and one position (Comms) was 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 cover both APNIC support and Foundation funding for APNIC activities.

3C Community Engagement

Operations

3C.1 Technical community support

NOGs and other technical community events

- Discussion with the Pakistan community (held during IXP TA and RPKI training events) continued for PKNOG setup.

Month	Event	Location	Sponsorship	Committee/ PC	Talk/Panel discussion	Training	Tech / Zoom Support
Jan	MMNOG 4	South East Asia		✓			✓
Jan	SANOG 36	South Asia		✓		✓	✓
Jan	JANOG 47	East Asia	✓				
Jan	TWNOG	East Asia				✓	
Feb	APAN 51	Asia Pacific		✓	✓	✓	✓
Feb	MANRS Tech Talk	Oceania			✓		
Mar	APIX	Asia Pacific					✓
Apr	PCTA e-Tech Show	South East Asia			✓	✓	
May	ThaiNOG 3	South East Asia	✓		✓	✓	✓
May	BKNIX Peering Forum	Southeast Asia	✓				
Jun	BdNOG 13	South Asia	✓		✓	✓	
Jun	PacNOG 28	Oceania		✓		✓	
Jul	LKNOG 5/SANOG 37	South Asia	✓	✓		✓	✓
Jul	vPhNOG 2.0	South East Asia	✓	✓	✓	✓	✓
Jul	JANOG 48	East Asia	✓				
Jul	SGNOG 8	South East Asia	✓	✓			✓
Jul	SecTalks – TWB Series	Oceania				✓	
Aug	APAN52	South East Asia	✓	✓	✓	✓	✓
Sep	HKNOG	East Asia	✓	✓	✓		✓
Sep	APIX	Asia Pacific					✓
Sep	VNIX-NOG	South East Asia	✓		✓	✓	✓
Oct	btNOG8	South Asia	✓	✓	✓	✓	✓
Oct	mnNOG3	East Asia	✓	✓	✓	✓	✓
Oct	Y4IT2021	South East Asia			✓		
Nov	Peering Asia 2021v	Asia Pacific		✓	✓		✓
Nov	PacNOG	Oceania		✓		✓	

Month	Event	Location	Sponsorship	Committee/PC	Talk/Panel discussion	Training	Tech / Zoom Support
Dec	KHNOG 3	South East Asia	✓	✓	✓		✓
Dec	Ph Peering Forum	South East Asia		✓	✓		

Table 9: NOG and technical community event participation

Other technical community sponsorships

Recipient	Sponsorship	Amount	Duration
Peering DB	*Peering DB	USD 10,000	12 months
Island Bridge Network	*IXP Manager	EUR 25,000	12 months
IXPDB	*IXPDB	EUR 15,000	12 months
Internet Society	MANRS Ambassadors and Fellowship Program Sponsor	USD 4,000	9 months

Table 10: Other sponsorships

* Sponsorship of PeeringDB, IXPDB and IXP Manager is provided by the APNIC Foundation with funding from APIDT.

	Success Measures – 3C.1.	Results	Status
1	Sponsor/participate in 30 technical community events including NOGs, Peering Forums, and Research & Education events.	28 events	●
2	Support 20 NOGs to conduct online events if physical events are not possible.	14 NOGs	●
3	Facilitate and support two new/revived NOGs in two sub-regions.	One in progress	●

3C.2 Security community support

CERT/CSIRT Support

- Presentations:
 - FIRST Regional Lightning Talk session (APNIC Community Honeynet Project), APCERT AGM 2021, 2021 CNCERT International Partnership Conference, Cambodia CERT Seminar, ASEAN-Japan Cyber Security Seminar, Threat Con 2021, FIRST & AfricaCERT Virtual Symposium 2021, Bhutan Cyber Security Week 2021.
- Training:
 - Delivered Linux Forensics for System Administrator training in collaboration with BtCIRT.

- Conducted a Tabletop Exercise for the FIRST Fellowship teams.
- Delivered a hands-on tutorial for the PacSON Community.
- Two workshops for Cyber Safety Pasifika in collaboration with ACSC.
- Collaborated with Timor-Leste CERT to organize a workshop on incident response, and with CERT Tonga to deliver a honeypot hands-on workshop.
- KRCERT/CC APISC Training 2021.
- Provided training content and delivery support for a tutorial on Network Monitoring and Packet Analysis for Sri Lanka CERT.
- Delivered a Network Security tutorial, Web Application Security workshop and participated at the ‘Capture the Flag’ webinar at Bhutan Cyber Security Week 2021.

Security Community Support

- Presentations:
 - APECTEL 62 Security and Prosperity Working Group meeting, Cybersecurity Asia 2021 Conference, Philippine International Cybersecurity Conference 2021, UMS Cybersecurity Awareness Seminar, Pacific IGF, ITU Global CyberDrill 2021, IGF Preparatory Session on Trust, Security and Stability.
- Training:
 - Security sessions at the 2nd ICANN APAC-TWNIC Engagement Forum.
 - Three workshops for LEAs in Oceania as part of Cyber Safety Pasifika.
 - Four sessions at the National University of Samoa’s Security Workshop.
 - Six security sessions with the Fiji technical community.
 - Security tutorial on Practical Intrusion Detection System at IBCAST 2021 in Pakistan.
 - Security tutorial on Practical Incident Response at the 3rd International Cyber Resilience Conference in Malaysia.
 - Tutorial on Security Monitoring with Elasticsearch at the Samoa Cyber Week.
 - Two security tutorials for APT covering Laos, Myanmar, and the Philippines.
- Participation:
 - 6th INTERPOL Global Cyber Crime Expert Group meeting and the INTERPOL Forum on Ransomware, FIRST CTI Summit 2021, BrisSEC21, ISCR 2021, Hack In The Box (SIN) 2021, VBLocalhost 2021, SuriCon 2021, OSDFCon, CrikeyCon VII, AusCERT 2021, ASEAN Cyber Security Forum (Cydes 2021) (as a panellist), ID Honeynet Project Webinar.
 - APNIC staff participated in the program committee for AusCERT 2021 and the FIRST Annual Security Conference 2021.
- Others:
 - Provided sponsorship support to CrikeyCon VII, Threat Con 2021.
 - Supported the FIRST Annual Conference and 2021 as session Chair.
 - Organized the FIRST-APNIC Security session at the APNIC 52 Conference.

Note that sponsorship of Shadowserver is being moved to the APNIC Foundation with funding from APIDT.

Success Measures – 3C.2.	Results	Status

1	Sponsor or participate in 10 security community events.	43 events	●
2	Support targeted development of four new/existing CERTs/CSIRTs.	6 CERTs/CSIRTs	●
3	Deliver six presentations/training sessions on the Security Threat Sharing Platform.	10 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.
 - The final report was published and presented at a townhall session during the 2021 IGF in December.
- Participated in nine NRO EC meetings and 15 NRO coordination group meetings (PACG (5), ECG (2), PSCG (4) and CCG (4)).
- Supported proposed revisions to the NRO MoU and proposed review of the NRO Strategic Plan.
 - The NRO EC entered into an agreement with LeaderShape Consulting to develop an NRO Strategic Plan for 2022.
- Supported LACNIC's recruitment of a new Strategic Engagement Manager.
- Provided advice and support to AFRINIC around ongoing legal proceedings.
- Participated in ARIN 47 and 48, LACNIC 35 and 36, RIPE 82 and AIS'21 (AFRINIC).

I* (ICANN, IETF, ISOC, ITAC)

- Participated in 10 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, 71 and 72, 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, and the KRNIC Policy team.
- Participated in the ICANN-TWNIC Engagement Forum held with the 35th TWNIC OPM, and the 36th TWNIC OPM.
- Provided a training session for IRINN Hostmaster and Helpdesk teams on IRM, IPv6, the PDP and routing.

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 19 IGF Multistakeholder Advisory Group (MAG) meetings; eight MAG Working Group-Strategy meetings; five IGF MAG Issues Teams meetings; and the Road to IGF webinar in Ethics in Technology & Internet.
- Participated in nine Policy Network for Environment and Digitalization (PNE) Multistakeholder Working Group (MWG) meetings; coordination and planning of the BP workstream on Environmental Data including seven workstream meetings.
- Participated in the Cybersecurity Best Practices Forum coordination and report development.
- Participated in IGF 2021 and conducted three sessions: Learning Resiliency, Supply Chain IoT, and a Townhall to present the results of the Internet Study on Technical Success Factors. Also participated in the preparatory and engagement phase of the 2021 IGF and the Townhall.
- Provided input to the UN open consultation on the proposed Multistakeholder High Level Body under the IGF+ model.
- Participated in 14 IGF Support Association (IGFSA) Executive Committee Meetings and two follow-up meetings with the IGFSA Secretariat. Participated in the IGFSA General Assembly at IGF 2021. Assisted IGFSA with communication improvements.

APrIGF

- Participated in 19 APrIGF Multistakeholder Steering Group (MSG) meetings, 23 Program Committee meetings, eight Drafting Committee meetings, six Fellowship Committee meetings, and four Event Committee meetings.
- Conducted two sessions at the 2021 APrIGF: Interoperable Internet infrastructure with ISOC; and the Internet study on Technical Success Factors.

Sub-regional and economy-level IGFs

- Participated in the SEA-IGF and preparatory meetings, including the Open Consultation and three meetings of the SEA-IGF Steering Committee. One workshop proposal with ISOC on international connectivity was accepted.
- Participated in the Pacific IGF and seven planning meetings before the event.
- Participated in eight Steering Committee meetings for NetThing (AU). Participated in NetThing 2021 and provided Zoom meeting support.
- Participated in the HKIGF webinar on Internet censorship, India IGF pre-event webinar, India IGF 2021, and sponsored and participated in Youth IGF Bangladesh.

Other Internet Governance events and communities

- Participated, sponsored, and presented at bdSIG, Youth IGF Vietnam, Youth IGF India, inSIG, Youth IGF Bangladesh and provided content to APSIG.
- Participated in five meetings of the Program and Organizational Committees of the Asia Pacific School of Internet Governance (APSIG), Youth IGF India Advisory Committee meetings, inSIG planning meetings and Youth IGF Bangladesh Advisory Committee meeting.
- Participated in three 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, YouthxPolicyMakers Internet Governance Workshop and the Asia Pacific Youth IGF 2021.
- Participated in eight program planning meetings and two session coordination meetings for the Asia Pacific Internet Governance Academy (APIGA). Contributed to three APIGA sessions and two open consultation meetings.

	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.	3 out of 3	●
3	Sponsor and participate in at least two schools of Internet governance.	2 out of 2	●

3C.5 Government engagement

Intergovernmental forums

- ITU
 - Participated in, or monitored, 19 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 meetings, ITU-T/ITU-D meetings, the 21st Global Symposium for Regulators (GSR-21), ITU Telecom World, ITU Telecommunication Development Advisory Group (TDAG) and ITU Telecommunication Standardization Advisory Group (TSAG), ITU WTPF-21.
 - 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 (four meetings).
 - Delivered six online tutorials to Myanmar, Laos, Philippines, Tuvalu, and China.
 - Monitored discussions at the APT preparatory meetings for WTDC-21 and WTS-20.
 - Participated in the 1st Preparatory Meeting for PP-22 (APT PP22-1).
- OECD
 - Contributed to an OECD paper on routing security and monitored discussions at five OECD meetings.
- APEC TEL
 - Participated and presented in APEC TEL 62 and 63.
- 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, a consultation about GFCE presence in the Pacific region, the GFCE's first South East Asian Regional Meeting, and the World Internet Conference 2021 (Wuzhen).

Bilateral government engagement

- Provided advice to the Australian government ahead of ITU and APT meetings (four meetings).
- Presented at the Executive Cybersecurity Workshop organized by the Daniel K. Inouye Asia Pacific Center for Security Studies.
- Presented at the Marshall Center's International Program on Cyber Security Studies (iPCSS) 2021 on Internet governance.

Law Enforcement and Public Safety

- Met with AFP representatives from Cyber Safety Pasifika to organize LEA training for 2021-2022.
- Delivered three workshops for LEAs in Oceania as part of Cyber Safety Pasifika.
- Participated at the 6th INTERPOL Global Cyber Crime Expert Group meeting and the INTERPOL Forum on Ransomware.
- Presented a summary of APNIC's involvement with Cyber Safety Pasifika to the Pacific Islands Chiefs of Police (PICP) Pacific Police Training Advisory Group (PPTAG).
- Delivered a hands-on workshop for five Law Enforcement and related organizations in Taiwan.

	Success Measures – 3C.5.	Results	Status
1	Participate in at least 12 engagements with governments/intergovernmental organizations.	25	●
2	Participate in at least three capacity building partnerships with governments/intergovernmental organizations.	Completed	●
3	Participate in six engagements with the Public Safety community.	6 out of 6	●

3C.6 External relations coordination

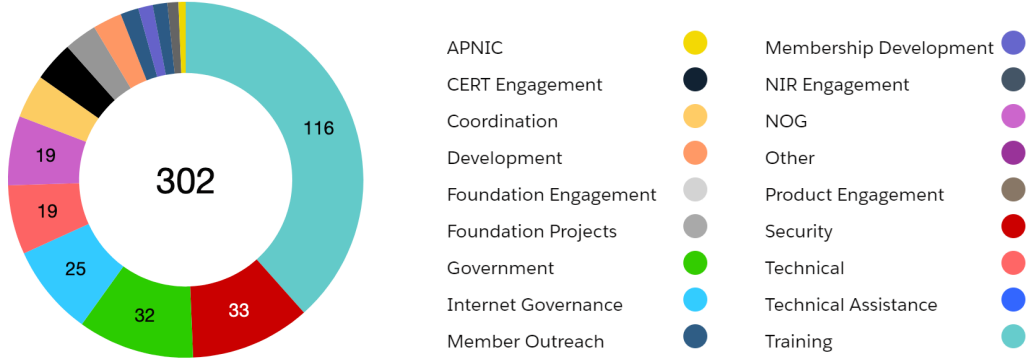
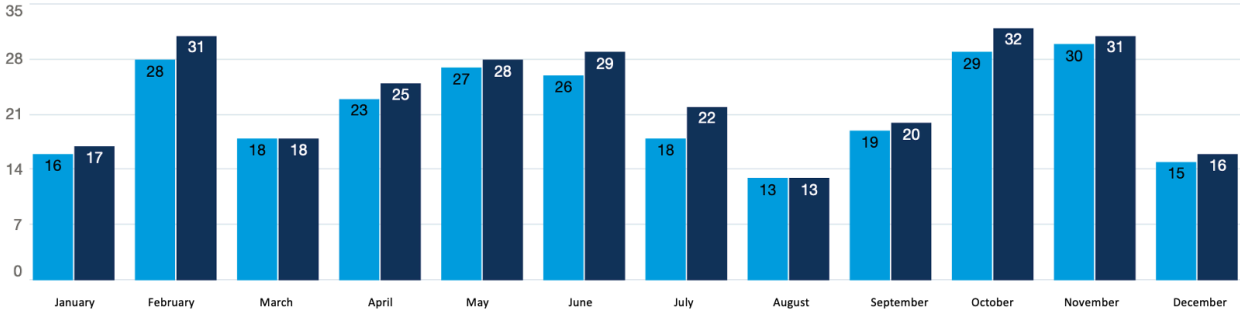


Figure 22: Engagements summary by type



*Not including APNIC Academy webinar numbers.

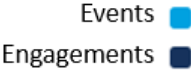
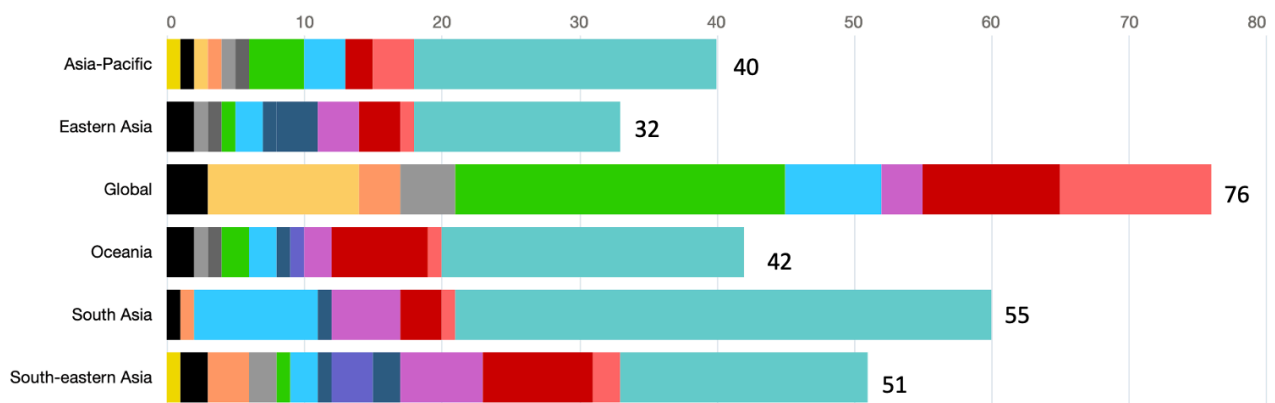


Figure 23: Engagement summary by month



**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 24: Engagement summary by subregion/type

Legend

- Complete
- Planned
- Foundation Supported
- Remote

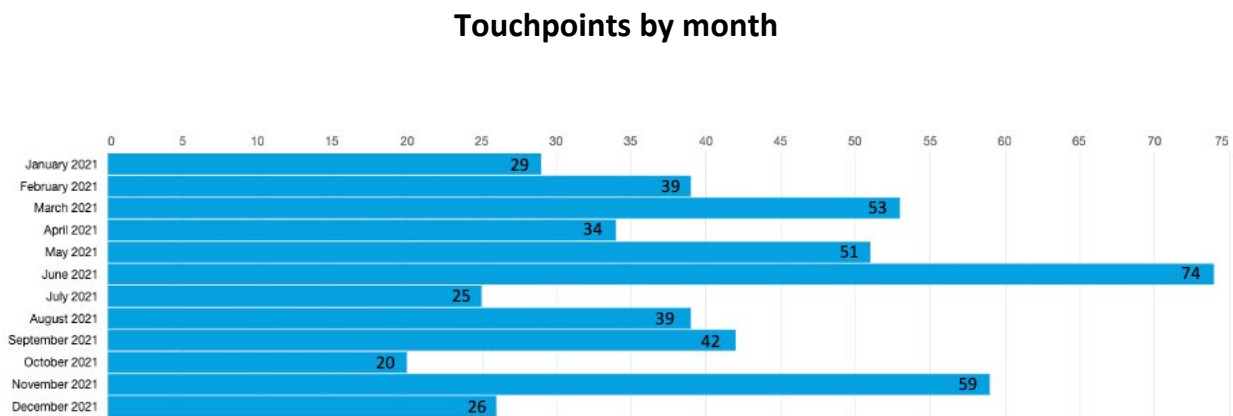
APNIC	●	Membership Development	●
CERT Engagement	●	NIR Engagement	●
Coordination	●	NOG	●
Development	●	Other	●
Foundation Engagement	●	Product Engagement	●
Foundation Projects	●	Security	●
Government	●	Technical	●
Internet Governance	●	Technical Assistance	●
Member Outreach	●	Training	●

South Asia	Oceania
- AF	Australia and New Zealand
- BD	- AU
- BT	- CC
- IN	- CX
- IO	- NF
- LK	- NZ
- MV	Melanesia
- NP	- FJ
- OP4	- NC
- PK	- PG
South-eastern Asia	- SB
- BN	- VU
- CC	Micronesia
- CX	- FM
- ID	- GU
- KH	- KI
- LA	- MH
- MM	- MP
- MY	- NR
- OP3	- PW
- PH	Open
- SG	- OP1
- TH	Polynesia
- TL	- AS
- VN	- CK
Eastern Asia	- NU
- CN	- PF
- HK	- PN
- JP	- TK
- KP	- TO
- KR	- TV
- MN	- WF
- MO	- WS
- OP2	Southern Africa
- TW	- TF
Asia-Pacific	Global collaboration
- AP	

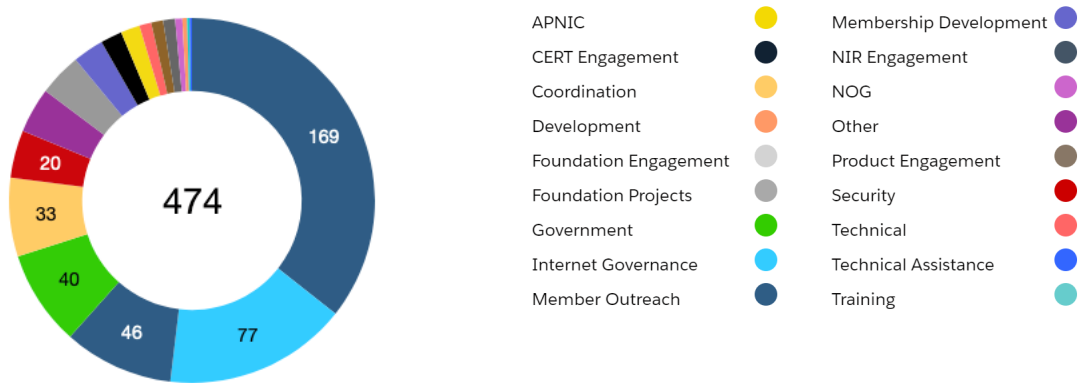
**Global collaboration is for events dedicated and engaged outside the Asia Pacific region. Asia Pacific refers to events delivered for the AP region or regional events that are not economy specific.*

**South East Asia, South Asia, East Asia and Oceania now each have an 'Open Economy (OP1, OP2, OP3, OP4' to capture delivery of events targeted to a specific subregion and not others, to avoid diluting the stats for Asia Pacific.*

Figure 25: Engagement detail by economy



Touchpoints by engagement types



Unique contacts in touchpoints by subregion

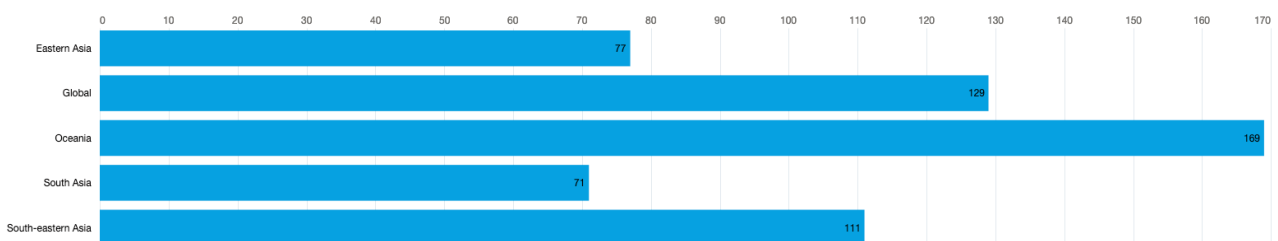


Figure 26: Touchpoints summary

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.
- Ten 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.	10 out of 10	●

3D Community Participation

Operations

3D.1 Community-led processes

- 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.
- Four ‘intersessional’ online SIG meetings were held outside of APNIC conferences, attracting 183 participants, including:
 - 40 people joining the Policy SIG Chairs’ online community consultation for the Policy Document Review in March, leading to the creation of the Policy Document Review WG.
 - The Routing Security SIG held an online community forum in June for 47 participants and a second discussion in October for 67 participants.
 - A policy readout webinar in October attracted 29 participants.
- Elections for several community positions were completed at APNIC 52:
 - Joy Chan was re-elected Chair of the Cooperation SIG for a two-year term.
 - Oanh Nguyen was elected Chair of the NIR SIG for a two-year term.
 - Bertrand Cherrier was elected Chair of the Policy SIG and Shaila Sharmin was elected Co-Chair, both for two-year terms.
 - Afifa Abbas was elected Co-Chair of the Routing Security SIG for a two-year term.
 - Ching-Heng Ku was elected to the IANA RC for a two-year term.
 - Di Ma was elected unopposed to the NRO NC for a two-year term starting 1 January 2022. Nicole Chen was reappointed by the EC to the second NRO NC seat for a one-year term beginning 1 January 2022.

Community Elected Leaders discussions

- 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, 5 July, 1 October, and 22 November. The discussions covered community feedback on APNIC conferences, the online conference format, election procedures and information, the use of Confer at OPMs, and the Online Community Platform trial.

Success Measures – 3D.1.		Results	Status
1	Achieve 800 online SIG participants across two conferences.	950 participants	●
2	Grow SIG mailing lists subscribers from 1,268 to 1,325.	1,333 subscribers	●
3	Achieve 6,000 remote conference session views.	8,145 views	●
4	Achieve attendance of 1,000 conference delegates across two conferences.	1,558 attendees	●

3D.2 Online participation

apnic.net

- Visitor numbers to apnic.net peaked in September, with time on site at its highest point in July and August. The top five visitor economies were the United States, Hong Kong, India, China, and Australia.

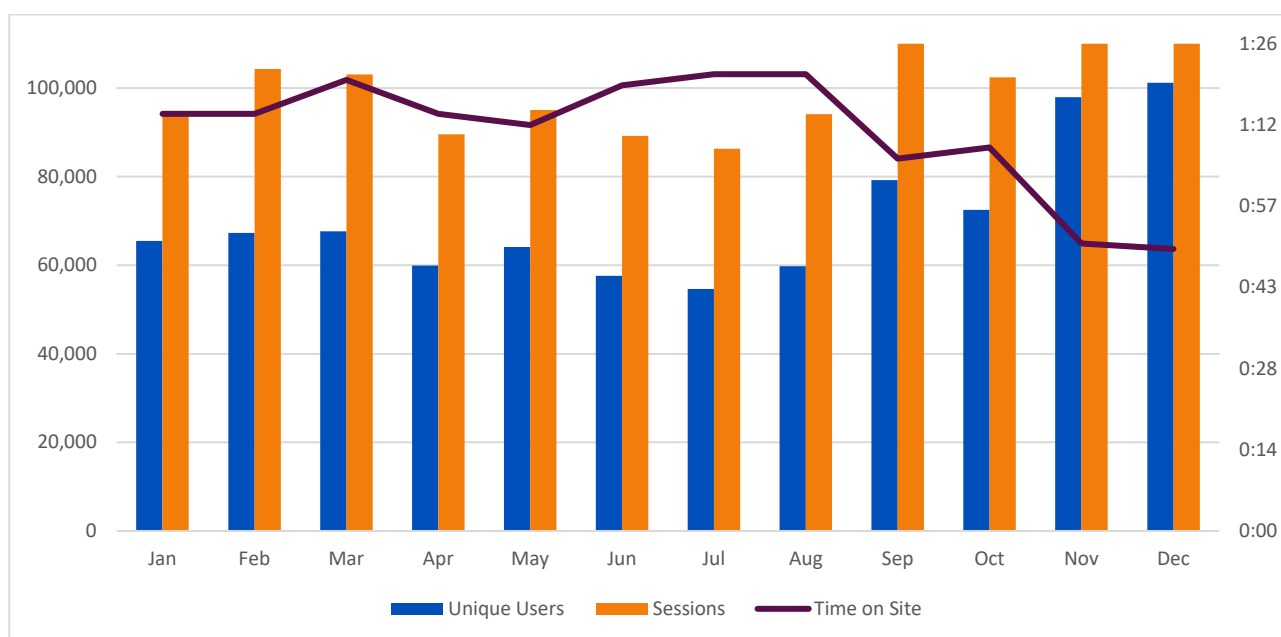


Figure 27: apnic.net website visits

Economy	Total Sessions	Unique Users
United States	453,815	438,181
Hong Kong	127,627	17,669
India	114,857	70,030
China	99,882	66,382
Australia	99,375	65,578
Japan	62,151	41,111
Bangladesh	58,403	27,931
Philippines	38,250	15,898
New Zealand	33,129	27,467
Indonesia	33,078	18,832

Table 11: Top 10 economies - apnic.net website sessions and visitors

Social Media

		2020 Mthly Avg	Jan	Feb	Mar	Apr	May	Jun
Facebook	Reach	282,214	292,708	54,236	124,381	161,845	142,426	282,506
	Likes	N/A	30,330	30,354	30,367	30,313	30,319	32,833
Twitter	Followers	N/A	12,290	12,393	12,505	12,593	12,697	12,805
	Engagement	5,312	4,199	4,661	4,244	4,737	4,280	30,217
YouTube	Views	3,600	2,217	2,778	6,814	2,523	2,253	2,362
	Hours	392.1	184.9	348.6	988.1	207.0	207.4	196.0
Slideshare	Views	13,117	10,790	11,960	11,234	10,327	11,528	8,865
LinkedIn	Reach	11,820	19,683	20,431	17,185	15,253	20,189	15,424
	Followers	N/A	5,517	5,630	5,760	5,861	5,970	6,124

		Jul	Aug	Sep	Oct	Nov	Dec	Total
Facebook	Reach	550,676	345,248	232,089	678,962	489,428	51,241	3,405,746
	Likes	36,292	38,367	40,465	42,205	42,212	42,070	42,070
Twitter	Followers	12,896	13,009	13,188	13,479	13,658	13,763	13,763
	Engagement	50,931	98,301	29,091	4,268	5,798	4,610	245,337
YouTube	Views	2,195	2,274	6,004	2,362	1,856	1,971	35,609
	Hours	210.4	205.5	892.3	195.7	171.3	206.6	4,013.8
Slideshare	Views	9,795	10,093	10,201	11,818	13,684	14,618	134,913
LinkedIn	Reach	18,311	78,248	90,647	18,311	19,706	17,817	351,205
	Followers	6,221	6,345	6,474	6,595	6,679	6,825	6,825

Table 12: Social Media reach

	Success Measures – 3D.2.	Results	Status
1	Grow all-time Blog views from 2.6 million to 3.4 million.	3.46 million	●
2	Increase 12-month tweet engagements from 60,000 to 62,000.	234,929	●
3	Increase annual Facebook posts reach from 3 million to 3.2 million.	3.4 million	●

3D.3 Encouraging newcomers and diversity

- APNIC presented and participated in the Diversity in Tech Panel session at APRICOT 2021/APNIC 51 and the Women in ICT session at APNIC 52. A NextGen Careers BoF was also held at APNIC 52.
- Following the elections at APNIC 52, two of the four SIG Chair positions are occupied by females and two of the six Co-Chair positions are held by females (at the start of 2021, only one SIG leadership role was held by a female).
- 37% of APNIC conference attendees (578) were newcomers.
- Achieved 235 new blog subscribers, 1,548 new Twitter followers, and 1,414 new LinkedIn followers.
- A community survey on language understanding and translation was commissioned with Survey Matters and launched in August. The survey was provided in 11 languages and received 489 completed responses (357 from APNIC Members). Services identified by respondents as having the highest value if available in local language were training, conferences, and policy information. The full report was presented to the Secretariat leadership team for consideration in future planning.

	Success Measures – 3D.3.	Results	Status
1	Attract 400 newcomers to APNIC conferences.	578 newcomers	●
2	Attract 125 new Blog email subscribers to reach 1,125 total.	235 new subscribers (total 1,235)	●
3	Grow Twitter followers from 12,100 to 13,250.	13,763	●

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.
- Launched the remote Technical Assistance (TA) platform on the APNIC Academy as a pilot.
- Merged the legacy training site information to the APNIC Academy.

	Success Measures – 3E.1.	Results	Status
1	Migrate legacy training site information to APNIC Academy and decommission previous site.	Completed	●
2	Develop a comprehensive curriculum of blended learning for future certification.	Commencing in 2022	●

3E.2 Instructor-led Training

- APNIC remained unable to deliver face-to-face training due to COVID-19 restrictions (all but one instructor-led trainings were remote). The remote instructor-led trainings were delivered as a mix of hybrid, online, open tutorials, and targeted events.
- Completed development of the Network Management and Monitoring (NMM) course. The configuration management module is in progress.
- Completed development of the Network Automation course.
- Completed updating content for the following existing courses:
 - 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 the 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.
 - Updated the RPKI/ROV lab guides with two new validators (rpki-prover & rpki-client), following the deprecation of the RIPE validator and maintenance ceasing on OctoRPKI.

January to December 2021	APNIC Instructor-led training
Courses (by topic)	96 courses delivered/2,382 attendees
Webinars	20 webinars (9 external/guest speakers)/1,202 attendees

Table 13: Instructor-led training

	Success Measures – 3E.2.	Results	Status
1	Develop two new/updated courses for instructor-led tutorials/workshops.	2 new courses completed 3 courses updated with 7 new modules	●
2	Conduct 70 instructor-led tutorials/workshops across four sub-regions.	96 tutorials/workshops delivered	●
3	Conduct 18 live webinars.	20 webinars delivered	●

3E.3 Self-paced training

January to December 2021	APNIC Academy
Courses (by topic)	1,735 completions; 3,340 hours contact
Virtual Labs	6,070 labs launched; 6,902 hours completed
Students	5,428 new accounts (17,018 in total)
Locations	48 economies

Table 14: APNIC Academy training

	Success Measures – 3E.3.	Results	Status
1	Publish four new/revised self-paced online courses.	2 new courses completed 2 courses revised	●
2	Publish five new self-paced Virtual Labs (associated with multiple courses).	6 new labs delivered	●

3E.4 Technical Assistance

DNS/DNSSEC

- Helped CSL (Samoa) identify an issue with its DNSSEC deployment that was causing email delivery issues for their customers.
- Helped Education Services Australia with its DNS resolution issues with certain TLDs, for example, .dev.

RPKI

- Proactive outreach and support to 18 network operators in 7 economies (PH, PK, AU, BT, IN, FJ and NP), to reduce invalid routes.
- In August helped analyse and identify RPKI RTR causing BGP route refresh (on Cisco IOS/IOS-XE) for USP-FJ to its eBGP peers, resulting in high CPU on peer routers (in collaboration with AARNET and Telstra).

IPv6

- Ongoing discussion with NKN (IN) on its IPv6 deployment in 1,633 campuses, and E-bone (PK).
- Helped review SLT (LK)'s IPv6 roadmap and hosted a training session on IPv6 address planning.
- Helped RACQ (AU) with its IPv6 address plan.

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).
- Ongoing network redesign and renumbering work for Tenicom WiFi/Moel (Kiribati).
- Network consolidation discussions with UNN Brunei to migrate from three active ASNs to two ASN networks (transit and access ASN concept).
- Helped Vodafone Fiji and Vanuatu with as-set for the IRR filtering issue with GGC.
- Helped two Australian ISPs on multihoming and network redesign.

IXPs

- PKIX (Lahore): Training and IX setup and configuration completed in September.
- Fiji IX: Passive network rework is ongoing.
- MV IX: Initial discussion on the operating principles and high-level design (with three local operators) completed. Legal entity and IX location have now been confirmed. Waiting for IX equipment to be purchased.

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

3E.5 RPKI awareness and deployment support

- In addition to direct RPKI support provided to 18 Members (3E.4), APNIC delivered 18 RPKI training events.
- Five RPKI deployment case studies covering Mongolia and Pakistan's nationwide efforts; Australian ISP, Vocus; transit service provider, Hurricane Electric; and the RIPE NCC's ROV deployment were published. Thirty-six 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 IPv4 address holders with ROAs grew from 24.4% to 36.1%; IPv6 address holders with ROAs increased from 17.3% to 22.3%.
- The amount of IPv4 addresses covered by ROAs grew from 21.4% to 28.8%, with IPv6 address space covered by ROAs increasing from 24.0% to 31.7%.
- 11 economies achieved 90%+ IPv4 ROA coverage — VU (92%), TO (96%), LK (94%), MN (99%), BT (96%), MV (99%), TO (95%), NP (94%), NU (100%), NR (92%), MH (90%).
- 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>

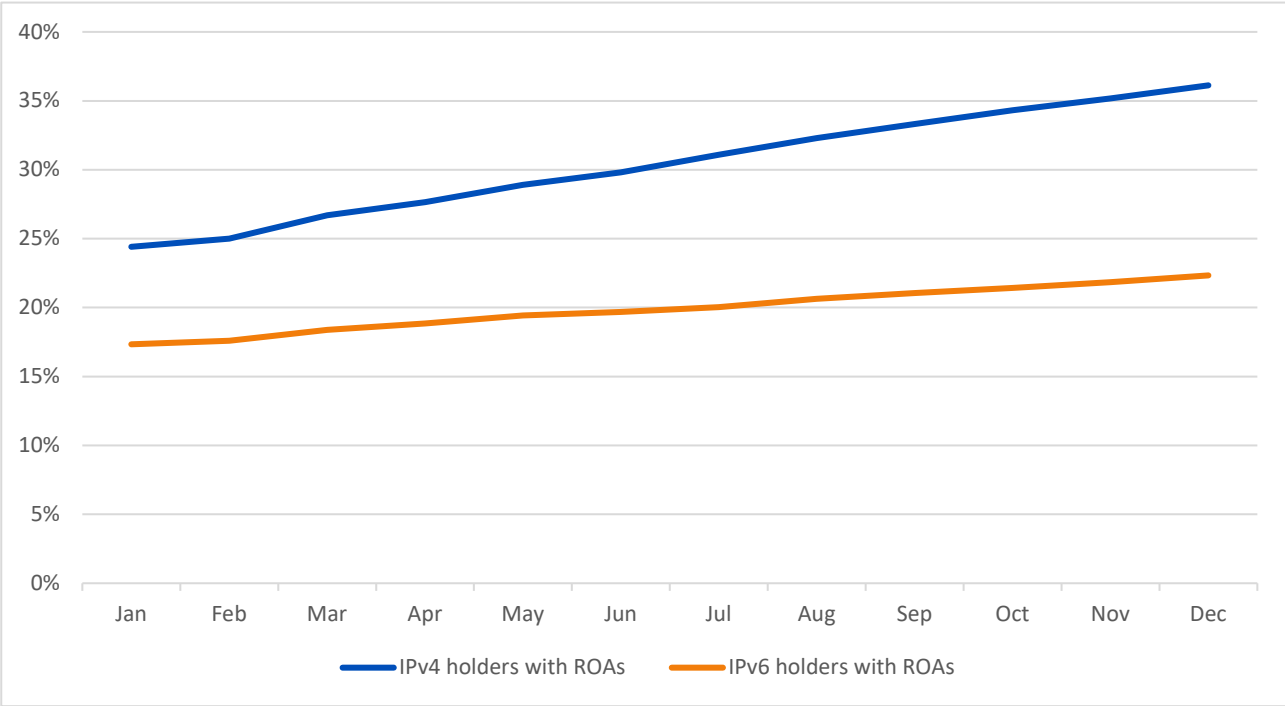


Figure 28: Address holders with ROAs

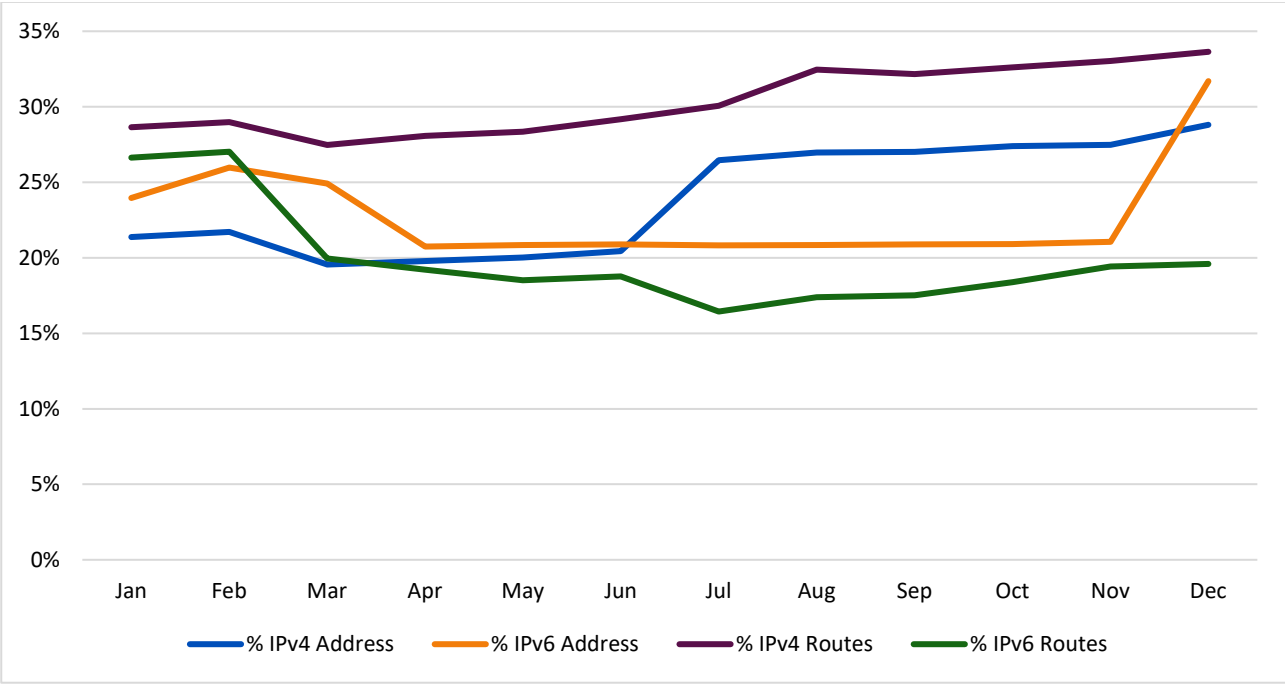


Figure 29: Addresses and routes covered by ROAs

	Success Measures – 3E.5.	Results	Status
1	Conduct eight RPKI/ROV focused instructor-led tutorials/workshops spread equally across sub-regions.	18 completed	●
2	Achieve 90% ROA coverage for four additional economies.	Completed	●
3	Publish four RPKI/ROA/ROV deployment case studies.	5 published	●

3E.6 IPv6 awareness and deployment support

- APNIC delivered 17 IPv6 deployment focused training events.
- Published 23 IPv6-tagged posts on the APNIC Blog.
- Published three IPv6 deployment success stories on China Telecom, Akamai and Sprint, bringing the total number of IPv6 deployment stories on the APNIC website to 42.
- IPv6 capability for the Asia Pacific region was 37.65% 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.	17 done	●
2	Publish three IPv6 deployment case studies.	3 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:

- Extended translation support to APNIC Academy online video-based courses.
- Commenced integration of Salesforce’s event management and training event registration systems.
- Launched the Technical Assistance (TA) platform.
- Migrated training content on apnic.net to the APNIC Academy website.

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 30 active Community Trainers.

- Twenty-eight Community Trainers from 14 economies were engaged for 68 instructor-led online training events.
- Recruitment for the new Retained Community Trainers model (CT retainer program) commenced.

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 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.
- A procurement process was established to select a Game Designer. A tender process was launched. The deadline to receive vendor proposals closed in November.
- Conducted three workshops and four consultations with target audience groups.
- An MVP is scheduled to be delivered mid-2022.

3F Internet Infrastructure Support

Operations

3F.1 Internet infrastructure deployment

IXPs

- Fiji IX upgrade: Passive network work ongoing. Active network configuration will follow once the passive work is completed.
- Pakistan IX (Lahore): Training and IX setup and configuration completed in September.
- MV IX: Operating principles and high-level design (with three local operators) completed. Legal entity and IX location have now been confirmed. Waiting for IX equipment to be purchased to start the build.
- Bhutan IX: Implemented ROV on their route server.
- Discussions with MISPA IX to implement ROV are ongoing.

RIPE Atlas anchors

- Seven disconnected anchor hosts were contacted, and they all preferred hardware replacements. RIPE NCC indicated hardware replacements could be an issue. APNIC will test software anchors on mini servers as an alternative.

Root Servers

- Root server deployment is focused on the M-root project (see 3F.3).
- Equipment delivery delays have impacted deployment.

	Success Measures – 3F.1.	Results	Status
1	Support deployment of two new or upgraded IXPs.	1 deployed 1 in progress	●
2	Support four additional IXPs to deploy RPKI/ROV on their route servers.	1 deployed 1 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.	1 deployed 11 in progress	●

3F.2 Community Honeynet and Security Threat Sharing Platform

- Delivered two webinars on Practical Threat Hunting for the APNIC Academy.
- Feeds from the honeynet datasets were created for consumption by instances of the MISP threat sharing platform. The relevant feeds are shared with various National CERTs, the ShadowServer Foundation and APNIC's DASH.
- Eight security engagements were held with communities in Bhutan, Mongolia, Taiwan, Nepal, Timor Leste, Tonga, and Fiji on honeynet and threat sharing.
- Content for the Introduction to Suricata Intrusion Detection System course was developed based on the honeynet datasets.
- Enhanced the system backend to include a sandbox for processing Linux/Unix malware.
- Supported 13 requests for additional insights on potentially malicious traffic from DASH users.
- Hosted an intern from Griffith University (Masters in Cybersecurity program) to assist in honeynet data analysis.
- Recruited five new partners including three from the APNIC region (Tonga, Bangladesh, and the Philippines).

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

- Completed deployment of M-root in Hanoi.
- Deployment of M-root servers in 11 locations (Guam, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta, Ulaanbaatar, Kathmandu, Mumbai, and Singapore) progressed but equipment delivery delays prevented progress. Deployment in these locations will be completed in 2022 upon equipment delivery.

4 Information



Operations

4A Information Products

4A.1 APNIC Blog

	Jan	Feb	Mar	Apr	May	Jun	Jul
Views	62,057	56,903	74,376	72,576	71,578	73,289	82,163
Posts	27	30	38	27	28	27	31

	Aug	Sep	Oct	Nov	Dec	2021	All time
Views	75,850	55,237	69,658	69,652	61,312	824,651	3,463,586
Posts	28	39	35	38	38	386	2,786

Table 15: APNIC Blog activity

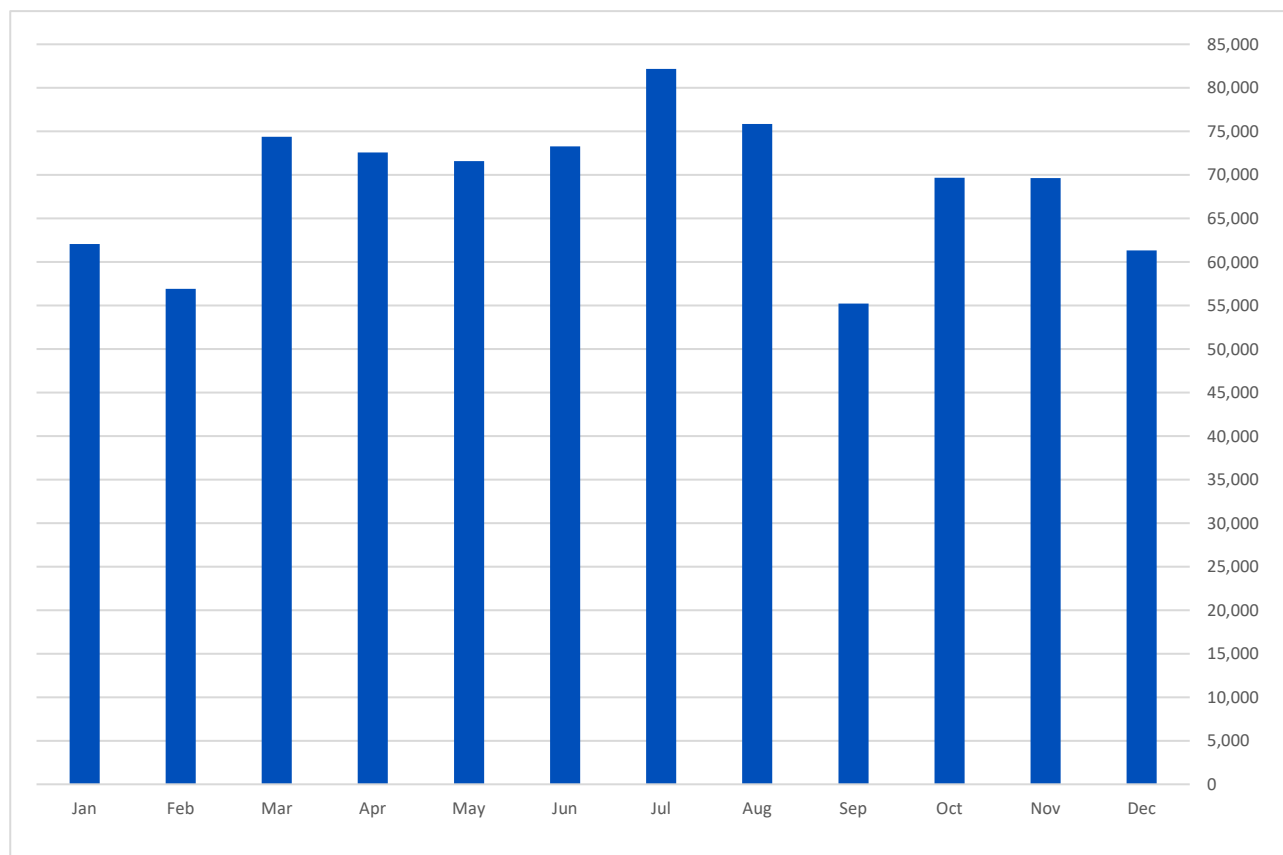


Figure 30: APNIC Blog views

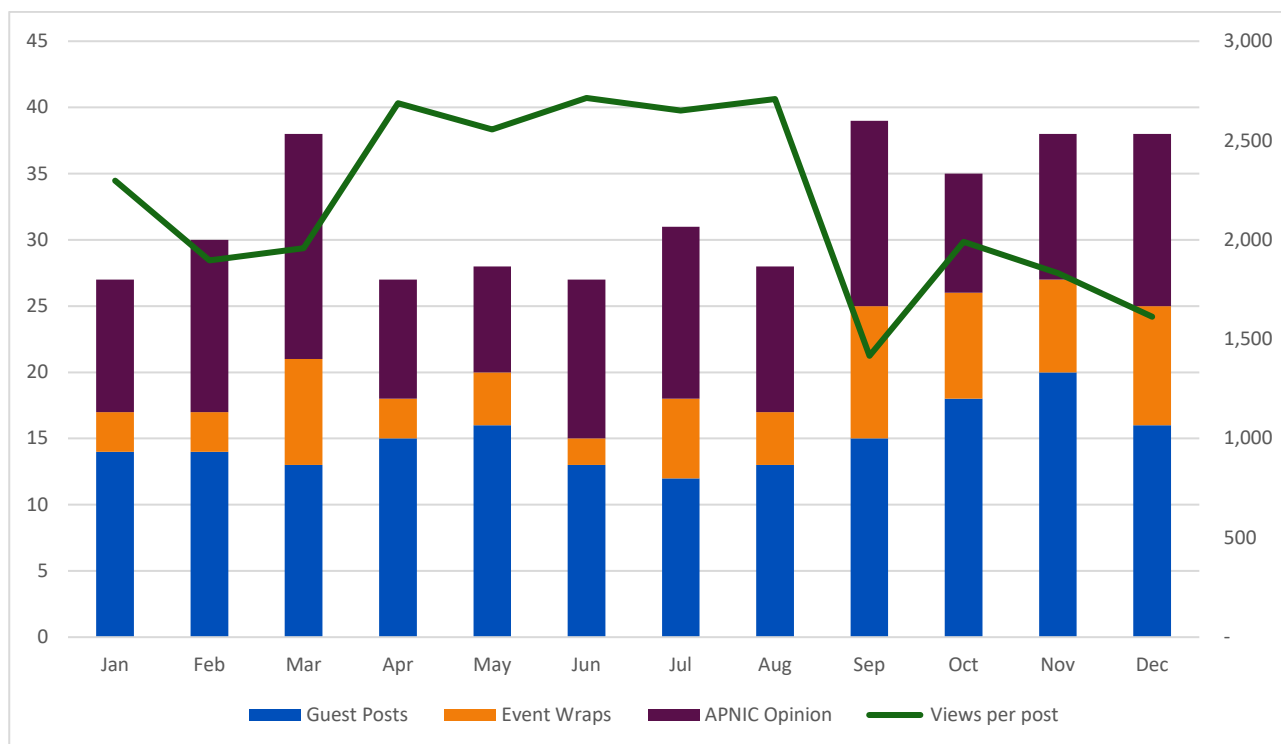


Figure 31: APNIC Blog posts

- The Blog averaged 68,721 views per month, an 6.1% 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 179 Guest Posts in 2021, representing 56% of total opinion posts (in line with 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.
 - [What every IT person needs to know about OpenBSD, Part 1](#), a Guest Post by Peter Hansteen.
- ‘Related articles’ functionality was added to the Blog in June.
- A new APNIC podcast, ‘PING’, was launched in October, with five episodes published, attracting 648 downloads. PING will focus on Internet research and interview researchers and experts from around the world, with episodes to be published fortnightly.

Success Measures – 4A.1.		Results	Status
1	Grow all-time Blog views from 2.6 million to 3.4 million.	3.46 million	●
2	Average 64,000 Blog views per month.	68,721 views/month	●
3	Maintain Blog Guest Post ratio between 45-65%.	56%	●

4A.2 Information product management

REx

- The Internet Directory was converted to Resource Explorer (REx). It includes better support for new users, new information architecture, and other UX improvements. The old interface, available on-demand, will be withdrawn in 2022 subject to any visible user dependency.
- Work was completed to improve tablet and mobile device user experience.
- An awareness campaign in October generated a significant increase in traffic. Further experiments in product promotion using paid search will continue in 2021 and 2022.

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 for bad traffic is in development and scheduled for deployment in Q1 2022.
- Improvements to the backend architecture have been deployed 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 'comparison' feature has also been designed for deployment in Q1 2022.
- Stability and performance improvements have been deployed in the backend.

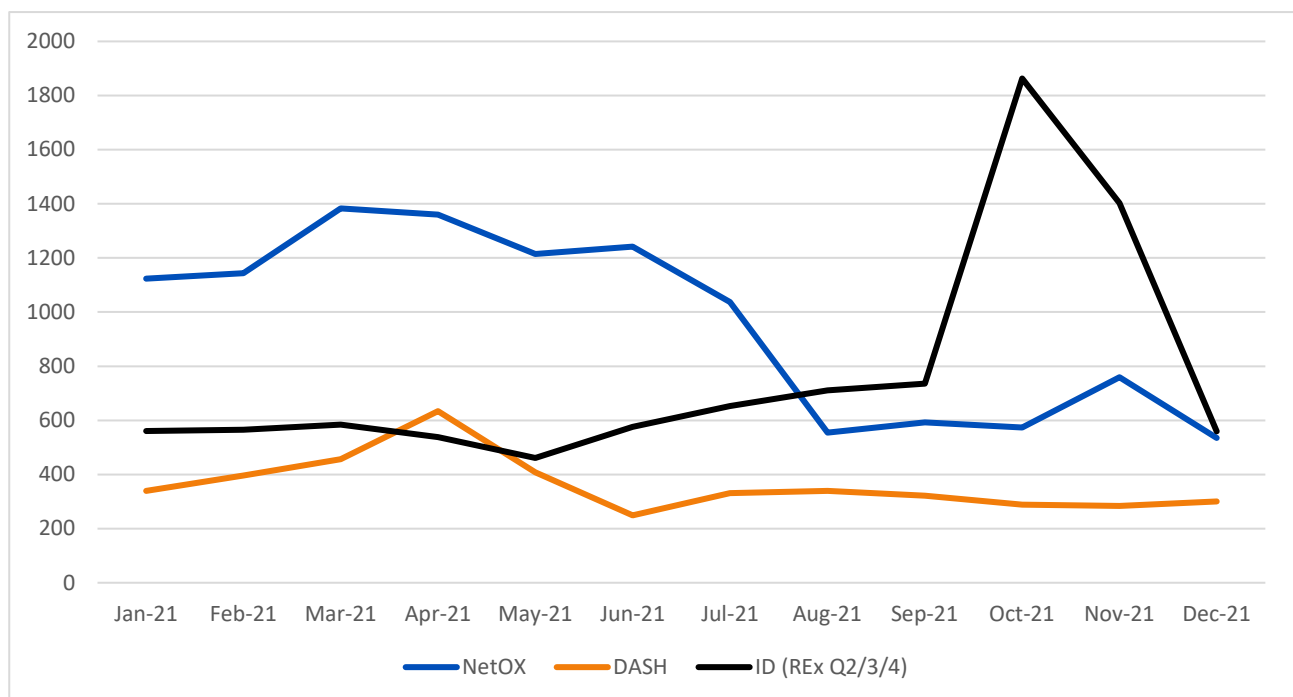


Figure 32: Monthly number of users

	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 REx.	980 NetOX 365 DASH 826 REx	●
2	Achieve a net promoter score (NPS) of 80%+ for all products. <i>(80% is above industry norms, which consider 60% + as a good outcome.)</i>	68 NetOX 68 DASH 59 REx	●
3	Achieve a usability score of at least 4.5/5 for all products.	4.4 NetOX 4.5 DASH 4.4 REx	●

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 43 blog articles, including research findings, analysis of trust infrastructure, a commentary on new Internet technologies, and three podcasts recorded.

	Success Measures – 4B.1.	Results	Status
1	Twelve research articles and reports published.	43 articles	●

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 41 presentations at community and industry events.

	Success Measures – 4B.3.	Results	Status
1	Ten research presentations delivered.	41 presentations	●
2	At least two research presentations at APNIC conferences.	6 presentations	●

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. Rust is now a supported language for APNIC product development.
- 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.
- Product teams have agreed on a draft development process document, covering design, testing, development, and deployment practices.

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

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 has been completed.
- The emergency number is now available on the Contact APNIC webpage for emergency incidents related to APNIC's critical services.
- A new APNIC service status webpage, using the Site24x7 service, was launched to display the real-time operational status of APNIC's services.

	Success Measures – 5A.2.	Results	Status
1	Complete quarterly data centre failover tests.	4 out of 4 completed	●
2	Upgrade internal infrastructure NOC from overnight 'on-call' to full 24x7 operation.	Completed	●
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 new Hardware Security Module (HSM) has been 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 nodes in Hong Kong, Mexico, Toronto, and London.
- Deployed a whois node in the KDDI data centre in Tokyo.
- Completed an upgrade of the secured centralized logging system to an open-source log collector for each host to send logs via secure TLS channels.
- RRPD service throughput has been upgraded, and deployment in the Google Cloud in Virginia and Singapore is progressing.
- Upgraded the community mailing list interface to Mailman 3 to support all external mailing list services.
- A draft strategy for cloud and interconnection has been developed and internal consultation is in progress.

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


5A.4 Internal security operations

- Rapid7 has been selected and deployed on workstations, servers and network equipment for vulnerability scanning and Security Information and Event Management (SIEM).
- The Vulnerability Reporting Program generated 52 unique and verified vulnerability reports from external security researchers in 2021. Forty vulnerabilities were resolved, with seven still in progress within the 90-day period.
- Unresolved vulnerability reports outside of 90 days include:
 - Low-medium vulnerabilities related to login.apnic.net are on hold, pending the new SSO replacement.
 - Medium severity vulnerabilities in stats.labs.apnic.net and cgi.apnic.net are being addressed as part of a server-wide remediation of the root cause.
- HackerOne has been selected to perform triage of newly reported vulnerabilities under APNIC's public Vulnerability Reporting Program. HackerOne will also provide continuous penetration testing to replace the single annual tests commissioned in previous years.
- Completed cyber fraud awareness training for finance and services staff, with regular security awareness updates to all staff.
- The Acceptable Use and Bring Your Own Device policies were reviewed and updated in consultation with staff.
- Policies and procedures that align with ISO 27001 were updated. A gap analysis conducted in November indicated APNIC is ready to seek certification in 2022.

	Success Measures – 5A.4.	Results	Status
1	Achieve readiness for ISO27001 certification.	Gap analysis completed	
2	Track and resolve all vulnerability reports within 90 days.	40 out of 52 reports resolved (7 in progress, 5 missed target)	

5A.5 Enterprise application management

- All EC members have now migrated to Okta SSO for authentication to APNIC systems.
- The migration of JIRA to Atlassian Cloud was completed.
- The Legacy Application roadmap to migrate from certificate-based auth to Okta is still in progress. This will be completed in 2022.
- Implemented next generation backup solution for the CRM.
- The initial implementation of DocuSign for contract management was completed.
- Successfully rolled out Zoom Room technology to office meeting rooms and completed migration of telephone system to Zoom Phone.
- Completed enrolment of workstations to device management.

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

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 March 2022.
- An instance of the replacement SSO system was created in the product testing environment and replicated to production.
- All products have been tested successfully with the replacement SSO system.
- The Membership team is migrating user self-management applications to the replacement SSO system.
- Centralized product build tooling has been deployed to select products.

5B Finance and Business Services

Operations

5B.1 Internal knowledge management

- The staff intranet main page (APNIC Concierge page) was launched on SharePoint in December, with hub sites for all departments migrated to Confluence and/or SharePoint.

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

5B.2 Financial services

- The 2021 Activity Plan and Budget was implemented into the APNIC accounts in January. A monthly forecast process has tracked income and expenses, and monitored expense variations to budget caused by COVID-19 restrictions.
- Implementation support for the new ERP solution for the APNIC Foundation 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 was completed in August.
- A project to digitize legacy paper membership forms was completed at the end of March to improve access for services and finance teams.
- The final BCP scenario testing for 2021 was held December.

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

5B.4 Data governance and business intelligence

- Reporting functions in APNIC’s legacy business intelligence system (O3) have been replicated into a new system based on Tableau.
- A team focused on information management and analytics was established in July to increase the outcomes of this activity.
- Implementation of additional software platforms to improve production of reports/charts began.
- The APNIC-wide data model and data dictionary is being built but was not completed as planned in 2021 due to resourcing constraints and complexity of the work.

	Success Measures – 5B.4.	Results	Status
1	Complete APNIC-wide data model and data dictionary.	70% complete	●
2	Generate all Secretariat report data/charts from BI system.	20% complete	●

5C Employee Experience

Operations

5C.1 Organizational development

- The Aspire Leadership program 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 was 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.	76% complete	●

5C.2 Work environment management

- With COVID-19 restrictions changing regularly, a hybrid environment of office access and work from home arrangements was established 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 negative impact on productivity.
- A Travel Health policy was developed to prepare for future staff travel, considering COVID health risks and insurance implications.

	Success Measures – 5C.2.	Results	Status
1	No WHS incidents caused by APNIC's local or remote work environments — zero fault incident reports.	3 incidents – none caused by APNIC	●

5C.3 Talent attraction and retention

- Twenty permanent roles (including two new Directors for the Services and Finance areas) and five casual roles were filled, with nine contractors and six Community Trainers engaged.
- Four APNIC Foundation operational staff were also hired.

	Success Measures – 5C.3.	Results	Status
1	Maintain staff turnover rate within acceptable benchmarks of 5-15%.	4.8% turnover*	●
2	Training budget is 100% allocated and distributed across the organization.	50% spent	●

* Includes one staff member who moved from APNIC to APIDT

5C.4 People operations management

- Hybrid Working Principles were developed as guidelines for staff to combine remote and office work and maximize engagement and effectiveness.
- Staff who have had to travel overseas for compassionate reasons were supported during quarantine and while working remotely.
- Emergency leave was introduced for staff to access when childcare was impacted by COVID restrictions, and for COVID testing and vaccinations.

	Success Measures – 5C.4.	Results	Status
1	All HR policies, in particular, hybrid work, parental leave and travel safety policies, reflect best practice.	Completed	●

Investments

5C.5 Agile APNIC

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

Status:

- Seventy-six percent of teams adopted appropriate Agile practices for the management of their work. The remaining teams will complete adoption by end Q1 2022.

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 is in progress, with integrations with Okta, DocuSign and Litmos Learning Management.
- The Core HR module was launched in September and Compensation Management was launched in December. Performance and Recruitment modules are undergoing UAT, to be ready for completion in January 2022.

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 conducted 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. Various options are being considered for minor upgrades to the existing premises in 2022.

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.
- Four EC meetings have been held (Meeting 1: 22 February and 4 March; Meeting 2: 21 to 22 June; Meeting 3: 7-8 September; Meeting 4: 6-7 and 9 December).
- The EC satisfaction survey was launched in October and indicated a high level of satisfaction with the performance of the APNIC Secretariat.

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

5D.2 Corporate governance and legal

- The Strategic Risk Register was maintained and presented to the EC quarterly for review.

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

Events/Activities in 2021

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
Aug	AI3/SOI Asia Joint Meeting	Online	JP
	Webinar: Internet Measurement Tool For the End Users	Online	AP
	Webinar: Internet Transit, Peering and the Variants	Online	AP
	ASEAN-JAPAN Cyber Security Seminar	Online	TH
	Live eTutorial: Introduction to Suricata Intrusion Detection System - APAN	Online	ID
	Asia Peering Forum 2021	Hybrid	AP
	Cambodia CERT Seminar	Online	KH
	Introduction to SDN - Fiji - Pacific Technical Training Project	Online	FJ
	ELT Quarterly Strategic Meeting August 2021	Brisbane	AU

	APAN 52	Online	ID
	APEC TEL 63	ONLINE	NZ
	Live eTutorial - IXP Planning & Deployment - PK	Online	PK
	Hack In The Box (SIN) 2021	Online	SG
	India IGF Pre-Event Webinar	Online	IN
	YouthxPolicyMakers Internet Governance Workshop	Online	DE
	PANDI Meeting 12	Online	ID
	2021 CNCERT International Partnership Conference	Online	CN
Sep	World Internet Conference 2021 (Wuzhen Summit)	Wuzhen	CN
	APrIGF 2021	Kathmandu	NP
	IDNIC Special Meeting/APJII National Meeting 2021	Online	ID
	VNIX-NOG 2021	Online	VN
	ITU Global CyberDrill 2021	Online	CH
	ITU CWG-Internet Open Consultation	Online	CH
	IGF 3rd Open Consultations & MAG Meeting	Katowice	PL
	AP* Retreat 2021	Online	AP
	IGF 2021 Townhall - Hybrid Format in Practice	Online	CH
	APNIC EC Meeting Sept 2021	Brisbane	AU
	Pacific IGF (PacIGF) 2021	Hybrid	FJ
	APNIC 52	Online	SG
	Live eTutorial: IPv6 Protocol Architecture & Address Planning	Online	LK
	Threat Con 2021	Online	NP
	HKNOG 10.0	Hybrid	HK
	Webinar: Using RIPE Atlas for network diagnostics	Online	AP
	Webinar: Network Security for IoT & IIoT Environments	Online	AP
	SEA-IGF 2021	Bali/Hybrid	ID
	Security Workshop National University of Samoa	Online	WS
	APCERT AGM 2021	Online	AP
	6th Meeting of ITU IEG-WTPF-21	Online	CH
	Asia Pacific Youth IGF 2021	Online	AP
	APNIC 52 - NMM live eTutorial	Online	SG
	Live eTutorial: Network Security & Packet Analysis - APT CN	Online	CN
	Network Traffic Measurement and Analysis Conference 2021	Online	US
Oct	Global IPv6 Summit 2021	Guangzhou	CN
	36th TWNIC OPM	Online	TW
	ISCR 2021	Seoul (Hybrid)	KR
	APIGA 2021	HYBRID	KR
	KRCERT/CC APISC Training 2021 (Virtual)	Online	KR

	Cybersecurity Bootcamp for Senior Non-technical Experts	Valencia/Hybrid	ES
	ARIN 48	Hybrid	US
	ICANN 72 (23rd AGM)	Online	US
	CSP Internet Fundamentals Oct 2021	Online	PW
	Securing Internet Routing with RPKI	Canberra	AU
	ITU Telecom World 2021 (Digital World)	Online	CH
	GFCE Southeast Asia Regional Meeting 2021 (SICW)	Online	SG
	Broadband India Forum Session on IPv6	Online	IN
	3rd Interregional Meeting for Preparation of WTSA-20	ONLINE	CH
	VLocalhost 2021	Online	US
	Suricon2021	Online	US
	8th Meeting of the ITU Telecommunication Standardization Advisory Group (TSAG)	ONLINE	CH
	GSMA Mobile 360 Asia Pacific Policy Leaders Forum	Online	AP
	MANRS Community Meeting	Online	US
	UMS Cybersecurity Awareness Seminar	Online	MY
	Live eTutorial: Openflow/SDN	Online	TW
	LACNIC 36/LACNOG 2021	Online	CO
	ISC2 Security Congress	Orlan/Hybrid	US
	Security Sessions with FJ community	Online	FJ
	Cybersecurity Asia 2021 Conference	Online	AP
	IPv6 Protocol, Architecture, Address Planning & Deployment	Online	CN
	PHILIPPINE INTERNATIONAL CYBERSECURITY CONFERENCE 2021	Online	PH
	Live eTutorial - Introduction to SDN	Online	TV
	Live eTutorial - Information Security for System Administrators	Online	OP3
	Y4IT 2021	Online	PH
	btNOG 8	Online	BT
	btNOG: Network Security live eTutorial	Online	BT
	MNNOG: SDN 4-day live eWorkshop	Online	MN
	MNNOG 3	Hybrid	MN
	btNOG: Network Management and Monitoring (NMM) live eTutorial	Online	BT
	OSDFCon	Hybrid	US
Nov	NANOG 83	Online (Toronto)	CA
	PacNOG 29	Online	FJ
	Marshall Center iPCSS 2021	Online	DE
	AFRINIC 34	Online	MU
	RIPE 83	Online	NL

GFCE Annual V-Meeting 2021	Online	NL
IGF Preparatory Session on Trust, Security, Stability	Katowice	PL
PACTRAINING - Dialogue Women in IT and Network operators	Hybrid	VU
Securing Internet Routing with RPKI - VNNIC	Online	VN
Vietnam Youth Internet Governance Forum 2021	Ha Noi	VN
DNS-OARC 36	Online	US
IETF 112	Online	US
DINR	Online	US
NetThing 2021	Online	AU
Securing Internet Routing with RPKI	Perth	AU
IIGF (India Internet Governance Forum)	Online	IN
inSIG 2021	Online	IN
ID Honeynet Project 10th Year Anniversary Webinar	Hybrid	ID
Japan Internet Week 2021	Online	JP
7th Meeting of the ITU IEG-WTPF-21	Online	CH
ITU SG13 Plenary 2021	Online	CH
ITU TDAG-21/2 meeting	Online	CH
Telecoms World Asia 2021	Online	TH
Live eTutorial: Network Management & Monitoring	Online	TL
Live eTutorial: IPv6 Deployment	Online	TL
Live eTutorial: Network Security	Online	TL
Live eTutorial: Internet Routing	Online	TL
Live eTutorial: DNS Fundamentals	Online	TL
PACTRAINING - Dialogue Women in IT and Network operators	ONLINE	TO
Peering Asia 2021v	Online	AP
Community Network Exchange (CNX) 2021	Online	AP
DNS/DNSSEC live eWorkshop	Online	AP
Imagining the Future of Internet Governance Workshop	Online	AP
Webinar: Lightning fast DDoS detection with FastNetMon Community	Online	AP

	Webinar: Lightning fast DDoS detection with FastNetMon Community. (Part 2)	Online	AP
Dec	Securing Internet Routing with RPKI - CNNIC	Online	CN
	Securing Internet Routing with RPKI	Online	FJ
	PKSIG 2021	Online	PK
	Women in Networking Series	Online/Manila	PH
	Ph Peering Forum: Women in Tech session	Online	PH
	IGF 2021	Katowice	PL
	APNIC EC Meeting	Online	AU
	bdIGF 2021	Hybrid	BD
	btCIRT: Network Security Live eTutorial	Online	BT
	Bhutan CyberSecurity Week 2021	Online	BT
	KHNOG 3	Online	KH
	Youth IGF India 2021	Online	IN
	Meetings with APJII/IDNIC	Jakarta	ID
	APSIG 2021	Colombo	LK
	FIRST & AfricaCERT Virtual Symposium 2021	Online	CH
	ITU 2nd Interregional Meeting for WTDC-21	Online	CH
	WTPF 2021 (ITU World Telecommunication/ICT Policy Forum)	ONLINE	CH
	Taiwan LEA Training 2021	Online	TW
	AVAR 2021	Online	AP
Webinar: RPKI: 2021 in review	Online	AP	

Table 16: Events attended



addressing the Internet in the Asia Pacific

2021 Annual Report



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EXECUTIVE COUNCIL



Gaurab Raj Upadhaya, Chair
Head of Global Video Delivery, Prime Video
Amazon



Yoshinobu Matsuzaki
Senior Engineer,
Internet Initiative Japan Inc



Vincent "Achie" Atienza, Secretary
Peering, Interconnection & Strategy,
Globe Telecom



Kam Sze Yeung
Principal Network Architect,
Akamai Technologies



Kenny Huang, PhD, Treasurer
Managing Director and CEO,
TWNIC



Feng Leng
Director of Operation Management Department,
China Internet Network Information Center



Sumon Ahmed Sabir
Chief Technology Officer,
Fibre@Home Limited



Paul Wilson, Ex-officio
Director General,
APNIC



WELCOME FROM THE DIRECTOR GENERAL

For all of us in the Asia Pacific, the COVID pandemic continued to disrupt life in 2021. “Work from home” has been the new normal for millions around the region, proving again the importance of the Internet and of the work of the APNIC community.

At the APNIC Secretariat we continued to adapt and improve our ability to work alongside the pandemic, for as long as necessary. We’re looking forward to the day when we can again meet and work face-to-face as a Secretariat, as we used to. Even more, we look forward to resuming face-to-face conferences and community events, which have now been held online for two years.

Until we can meet face-to-face again, APNIC will continue to service and support Members online, just as we have in 2021. This Annual Report details APNIC’s activities for this past year, but here’s a snapshot of highlights, which I hope will show what a productive year we’ve had.

Encouraging the next generation of Internet leaders.

After fellowships were cancelled in 2020, APNIC was determined to continue the fellowship program, in an online mode. A new, five-month program was designed, with expert presentations, Academy training, and time with community mentors before the APNIC 52 conference. With forty-six fellows participating (52% female), and a Net Promoter Score (NPS) of 92, it was a great success and becomes the new model for 2022 and beyond.

Returning IPv4 addresses to availability.

Our work to reclaim unrouted and unused IPv4 space resulted in the return of 488,704 addresses (almost a /13) to APNIC. With many custodians of unused space either unresponsive or uncontactable – after exhaustive efforts – it is likely that at least another 1 million IPv4 addresses will be reclaimed in future, for the benefit of Members.

Operators taking routing security seriously.

RPKI adoption continued to grow. More than 36% of IPv4 address holders now have ROAs, up from 24% a year ago; the proportion of IPv6 address holders with ROAs reached 22% compared with 17% at the

end of 2020. Eleven economies exceeded 90% ROA coverage – an outstanding achievement!

Demand for training remains strong.

With travel still restricted, all but one of APNIC’s instructor-led training courses were delivered online. Ninety-six tutorials and workshops were delivered to 2,382 participants, and an additional 20 webinars reached another 1,202. At the same time, 5,428 users signed up for self-paced training on the Academy platform, and 1,735 completion certificates were awarded. Online technical assistance was also launched.

An active year in the labs.

Less time on the road equals more time in the labs to conduct experiments. In addition to releasing a new ROA measurement tool, the Labs team analysed BGP, IPv4 and IPv6 address pools, QUIC, and other DNS topics such as DOH and DNS query patterns. This work translated into a record 43 research articles, 41 presentations at industry events, and support for a new podcast, PING, which published five episodes.



WELCOME FROM THE DIRECTOR GENERAL - CONTINUED

Staying connected.

During another year of almost no travel for most of the community, online participation continued to be critical. Webcasting and technical support was provided to 16 technical community events – such as NOGs, peering forums and more – to help them reach online audiences and maintain community engagement. Event support was provided to 17 NOGs and 28 technical events overall, and 1,558 participated in APNIC's two online conferences. In addition, APNIC's pilot of an online community platform with 110 users was completed, as preparations continued for a 2022 full launch.

Improving security.

Security remained a top priority for Members and APNIC itself. The security team supported 43 security events, with 20 security training sessions delivered across nine economies and development support and advice provided to six CERTs. Three new organizations from Tonga, Bangladesh and the Philippines joined the Community Honeynet project taking the total

number of partners to 15. Internally, progress was made towards ISO27001 certification readiness. A great deal was also learned from a security incident APNIC experienced in June; you'll be hearing a lot more on security investments in 2022.

You'll find more information on these and other activities in the report that follows.

Thank you to all Members, and members of the APNIC community, for your continued support and cooperation, especially during such a challenging year for all of us. It is very much appreciated.

Paul Wilson

Director General





WELCOME FROM THE EXECUTIVE COUNCIL CHAIR

On behalf of the Executive Council (EC), welcome to APNIC's 2021 Annual Report.

I'm glad to say that year two of the global COVID-19 pandemic is behind us. It was another challenging year for all industries, APNIC Members, and our community.

Throughout, the demand for Internet Number resources and related information services, training and development assistance continued unabated. As you will see in the following report, it was a busy year for APNIC. It was also an eventful year for the Internet numbering community globally.

As I look back on 2021, there are a couple of notable developments I'd like to highlight.

Welcoming all resources to routing security.

At the EC's February/March meeting, the EC resolved that RPKI services would be made available to all historical resources held by APNIC Members and Non-Members. Improving routing security is critical to the health and stability of the Internet globally and APNIC is committed to supporting RPKI adoption in the region.

As part of these changes, the EC resolved that historical resource holders in the APNIC region would need to become Members or Non-Members by 1 January 2023 to receive registration services. While regular annual fees will be payable, historical resources will NOT be considered in the calculation of those fees.

These decisions by the EC aimed to provide holders of historical address space with access to RPKI services – a known previous source of frustration – while minimizing their ongoing costs.

In 2022, historical resource holders will need to begin the transition to APNIC membership. If your organization falls into this category, you'll hear more from the Secretariat as the year progresses.

Maintaining the integrity of the global registry system.

A dispute between AFRINIC, the RIR for Africa, and one of its Members gained global attention in 2021. The dispute is ongoing, so I will not get into the specifics of the issue.

However, the case gained international attention after an order granted by the Mauritian courts froze AFRINIC's bank accounts, restricting its access to funds. It was an unusual action – that was soon lifted – but at the time it caused some concern among the community, with questions raised about the sustainability of AFRINIC and the RIR system.

These concerns were unfounded. AFRINIC continues to be sustainable and able to do its job. Secondly, the NRO Stability Fund commitments, established in 2018, set aside funding that APNIC and the other RIRs stood ready to provide should it have been required.

On this occasion the Stability Fund did not need to be called upon. The smooth operation of the Internet numbers system has continued while this legal process progresses towards a conclusion.

It is important to understand that while Internet number resources are managed by regional bodies, the RIR system is global, and cooperation between RIRs and cooperation in our global community make it resilient. APNIC and the NRO continue to stand ready as needed to help, for as long as needed.



WELCOME FROM THE EXECUTIVE COUNCIL CHAIR - CONTINUED

I think I speak for many in the community in hoping this legal action comes to a swift conclusion in 2022.

Delivering on the plan.

This was the first year where APNIC publicly tracked progress against its annual plan commitments on its website (replacing the 24-month survey action tracking).

As you'll see in this document, the Secretariat delivered well – despite changing circumstances – and I would like to thank all APNIC staff for their achievements in 2021.

However, there is always room for improvement on setting meaningful commitments; the EC worked closely with the Secretariat on the new measures in place for 2022. We hope these reports, plus the online tracker, provide the membership with an easy and transparent way to assess performance now and into the future.

We need your views.

Looking ahead, 2022 is an APNIC Survey year. While you can always contact the EC, the APNIC Survey offers a wider opportunity for you to provide feedback on APNIC's activities and the issues that matter to your organization. When the Survey is released mid-year, please take the time to share your views – it is much appreciated and helps APNIC serve you better.

Thank you again to all Members and the community for your continued support of APNIC. However long this pandemic takes to end, let's stay in touch and stay connected as a community.

Gaurab Raj Upadhaya





Vision and Mission

APNIC's Four Year Strategic Plan (2020-2023) introduced an updated Vision and Mission, and a new structure for activities under five strategic pillars (detailed on the following page).

VISION

A global, open, stable, and secure Internet.

MISSION

To provide essential services as a Regional Internet Registry, and to support Internet development in the Asia Pacific region.

PURPOSE

To serve our community.

IDENTITY

A not-for-profit trusted authority on Internet infrastructure.

VALUES

Passion
Trust
Curiosity
Accountability
Inclusion

CREDO

We are APNIC.
One team dedicated to making a positive impact.
Our ambition will be achieved by working together.
Trust and respect for each other are not negotiable.
Inclusion and diversity really matter to us.
We take pride and excel in everything we do.
We are curious. We are accountable.
We are APNIC.



Strategic Pillars



1. MEMBERSHIP

Develop and deliver world-class products and services required by APNIC Members.

Engage with Members in building a global, open, stable and secure Internet.

Ensure accountable governance of APNIC as a membership organization.



2. REGISTRY

Develop and deliver world class registry products and services required by the community.

Ensure responsible stewardship of Internet number resources and deliver accurate registry services.



3. DEVELOPMENT

Invest in sustainable development of the regional Internet community, industry and infrastructure.

Build capacity for best-practice Internet operations across the Internet technical community.



4. INFORMATION

Support Internet development with needed network information services, and research outcomes which are of demonstrated value to the community.



5. CAPABILITY

Provide stable and secure technical infrastructure to support APNIC operations and services.

Develop a strong service culture driven by people committed to APNIC's vision and values.

Sustain a healthy and resilient organization.



APNIC Workstreams

The Four Year Strategic Direction (2020-2023) defines 18 workstreams, across the five pillars, as follows. Each workstream includes a number of activities that are described in this plan.



1. MEMBERSHIP

1A. MEMBER SERVICES

Deliver excellence in service and value to Members through active and quality engagement.

1B. MEMBERSHIP PRODUCTS

Apply best practice in development of membership products that meet Members' needs and exceed their expectations.

1C. MEMBERSHIP REPORTING

Ensure that APNIC remains fully accountable to its Members, by providing timely and accurate information about APNIC operations.



2. REGISTRY

2A. REGISTRATION SERVICES

Provide delegation and registration services for Internet numbers (ASNs, IPv4, IPv6) according to community developed policies.

2B. REGISTRY PRODUCTS

Maintain an accurate number registry and reliable registry services.

2C. POLICY DEVELOPMENT

Facilitate the open Policy Development Process to ensure resource policies in the APNIC region are developed and implemented in a neutral manner consistent with agreed rules and community expectations.



3. DEVELOPMENT

3A. APNIC CONFERENCES

Deliver engaging and relevant APNIC conferences for learning, sharing ideas and experience, professional networking, and Internet policy development.

3B. FOUNDATION SUPPORT

Provide financial and operational support to ensure the success of the APNIC Foundation.

3C. COMMUNITY ENGAGEMENT

Build and maintain close and meaningful relationships between APNIC and its various communities.

3D. COMMUNITY PARTICIPATION

Encourage awareness, diversity, participation, and leadership in APNIC processes, events, and activities.

3E. APNIC ACADEMY

Scale up training and technical assistance infrastructure with high-quality training content and curriculum.

3F. INTERNET INFRASTRUCTURE SUPPORT

Promote and support the deployment of critical Internet infrastructure and deploy tools for operational infrastructure monitoring.



4. INFORMATION

4A. INFORMATION PRODUCTS

Provide meaningful information services to the communities APNIC serves.

4B. RESEARCH AND ANALYSIS

Analyse the pressures shaping the evolution and future demands of Internet names and numbers infrastructure, and their impacts.



5. CAPABILITY

3C. INTERNAL TECHNICAL INFRASTRUCTURE

Provide stable and secure technical infrastructure to support APNIC operations and services.

3D. FINANCE AND BUSINESS SERVICES

Provide efficient and robust finance and business services and facilities to effectively support APNIC's operations.

5E. EMPLOYEE EXPERIENCE

Attract, develop and retain talented, service-oriented people to deliver APNIC's mission and exceed organization and community expectations.


5F. GOVERNANCE

Provide the legal, economic and governance framework and professional services to support APNIC's operations to minimize risk and ensure compliance and continuity.



2021 at a Glance

2A.1




IPv6 growth

Members with IPv6 addresses
68.43%

Asia Pacific IPv6 capability
37.65%

3E.5



RPKI

Address holders with ROAs
36.1%

48% up

3A.1

Conferences



852
remote participants from
61 economies

3,855 YouTube views
832.04 hours



52
remote participants from
48 economies

3,438 YouTube views
745.88 hours

2A.1



Available resources

0.40% | **80.12%** | **10.97%**

IPv4 | IPv6 | ASNs

3E.2



Training

Instructor-led training
96 courses

2,382 participants


20 live webinars
1,120 attendees

Self-paced training
1,735 course completions

6,070 labs launched

5,428 new accounts

2A.3




IPv4 reclaimed

488,704

IPv4 addresses were reclaimed

2021

4A.2



Information tools monthly users:

365 | **826** | **980**

DASH | REx | NetOX

4A.1



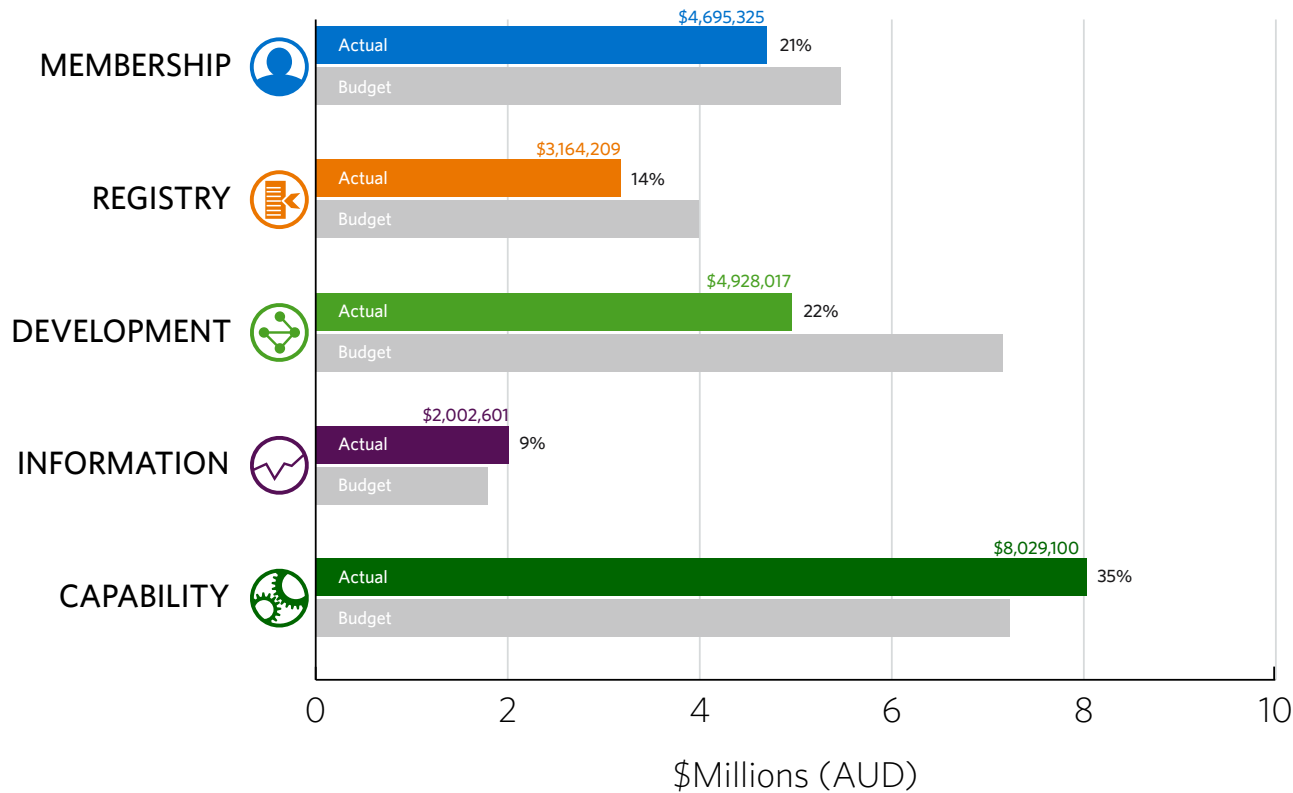
Blog

Record Blog views
824,651



Financial Performance Summary

OPERATING EXPENSES BY OUTCOME AREA



Note: Some numbers presented in this chart may not add up precisely due to rounding.

In addition to standard financial reporting, APNIC also reports activities and expenses under the five pillars and 18 workstreams detailed on page 10.

The chart on this page illustrates 2021's actual operating expenses compared to the budget in the 2021 Activity Plan. The percentage for each area indicates the proportion of the total budget it represents.

For more details on APNIC's 2021 finances, please refer to pages 91-94 to view:

- Financial Report by Activity
- Statement of Financial Position
- Statement of Income
- Cash Flow Statement



Notes on the Activities

APNIC's activities are reported in this document under the 18 workstreams and five pillars described in the previous section:



Membership



Registry



Development



Information



Capability

THE ACTIVITIES

The Activities are described as either 'Operations' or 'Investments'.



'Operations' includes all ongoing activities required for continued provision of APNIC services.



'Investments' are discrete project activities that result in new products, services, or improvements to APNIC services. Where these investments are funded by the APNIC Foundation (not Member funds), it is clearly noted.

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



At least 90% complete



Less than 90% complete

A table summarizes the resources (financial and human) needed to successfully complete the operations and investments in each workstream.

All monetary figures quoted are in Australian Dollars (AUD).

	Budget	Actual
① FTE	22.42	19.88
② Expenses	5,441,868	4,685,680
③ CAPEX	-	7,935

① **FTE:** The number of Full-Time Equivalent employees required for the activity. In all cases FTE figures comprise contributions from multiple employees. For example – an FTE of 1.6 may be made up of four employees who each contribute 40% of their time (0.4 FTE), for a period of one year. The detailed account of these allocations is provided in section 4.2, FTE Distribution.

② **Expenses:** Refers to all operational costs directly incurred by the activity.

③ **CAPEX:** Provides the provision for capital expenditure required by the activity.



1. MEMBERSHIP



OBJECTIVES

Deliver world-class products and services required by APNIC Members.
Engage with Members in building a global, open, stable and secure Internet.
Ensure accountable governance of APNIC as a membership organization.

WORKSTREAMS

- 1A. Member Services
- 1B. Membership Products
- 1C. Membership Reporting

MEMBERSHIP - SUMMARY

	Budget	Actual
FTE	22.42	19.88
Expenses	5,441,868	4,695,325
CAPEX	-	7,935



1A. Member Services

OPERATIONS

1A.1. Member services

The Member Services team handled 12,610 tickets created by Member and community enquiries, 1,869 voice calls (phone and Skype), and 3,287 online chat sessions. In addition, more than 10,733 Member invoices were processed. The APNIC Helpdesk maintained its standing commitment to respond to Member queries within two business days.

Helpdesk service satisfaction remained high at 93% ‘excellent’ and ‘above average’ ratings (830/891 responses). All negative feedback was actively resolved by Member Services staff.

Member services staff proactively contacted 148 Members across 47 economies on topics including RPKI, resource transfers, technical assistance, APNIC conferences and other events, and the APNIC Whois Database.

Twenty-two cases of attempted fraud in new Member applications were detected and prevented.

RESOURCING

	Budget	Actual
FTE	8.58	9.51
Expenses	2,253,270	2,219,361
CAPEX	-	7,935



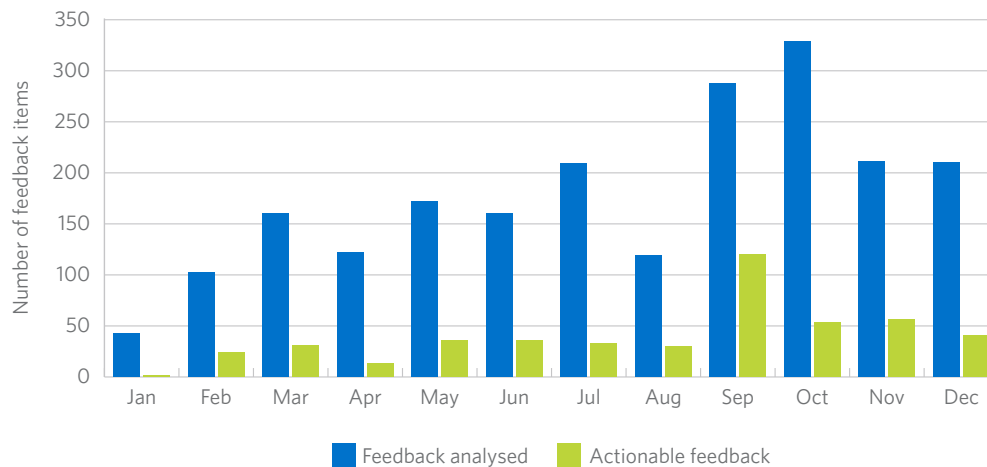
1A. Member Services - continued

OPERATIONS

1A.2. Member experience

Members and the community provided 2,125 feedback items on topics including conference and training content, website improvements and bug fixes. 473 items required action and were resolved.

COMMUNITY FEEDBACK ANALYSIS



Following an independent audit of the website, 81 critical and high issues were identified that could impact accessibility for users with a disability. All issues were resolved.

The voluntary User Feedback Group, where community members can provide feedback on APNIC product development, grew to 526 people. A further 56 one-on-one interviews were held with Members during the year.





1A. Member Services - continued

1A.3. Membership development

New Member outreach was conducted at the PCTA e-Tech Show, PITA Business Forum & Expo 2021, CommunicAsia 2021 and at various NOGs, plus the APNIC conferences.

Two new Service Partners - Lao National Internet Center (LA) and Information Beam Company Limited (MM) - were engaged.

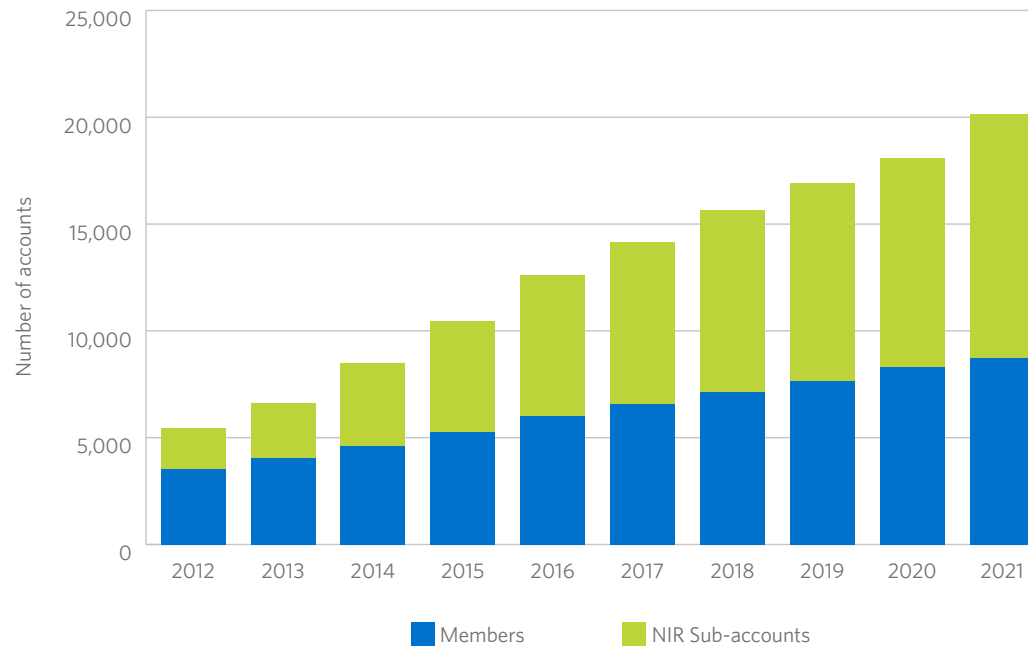
The majority of the 783 new Members joining APNIC in 2021 did so directly, with seven joining via Service Partners and 11 from Member referrals.





1A. Member Services - continued

MEMBERSHIP GROWTH



At the end of 2021, APNIC direct membership stood at 8,768, an increase of 5.1% on 2020. In addition, there were 12,089 NIR sub accounts, after rapid growth of 21.2% in 2021.

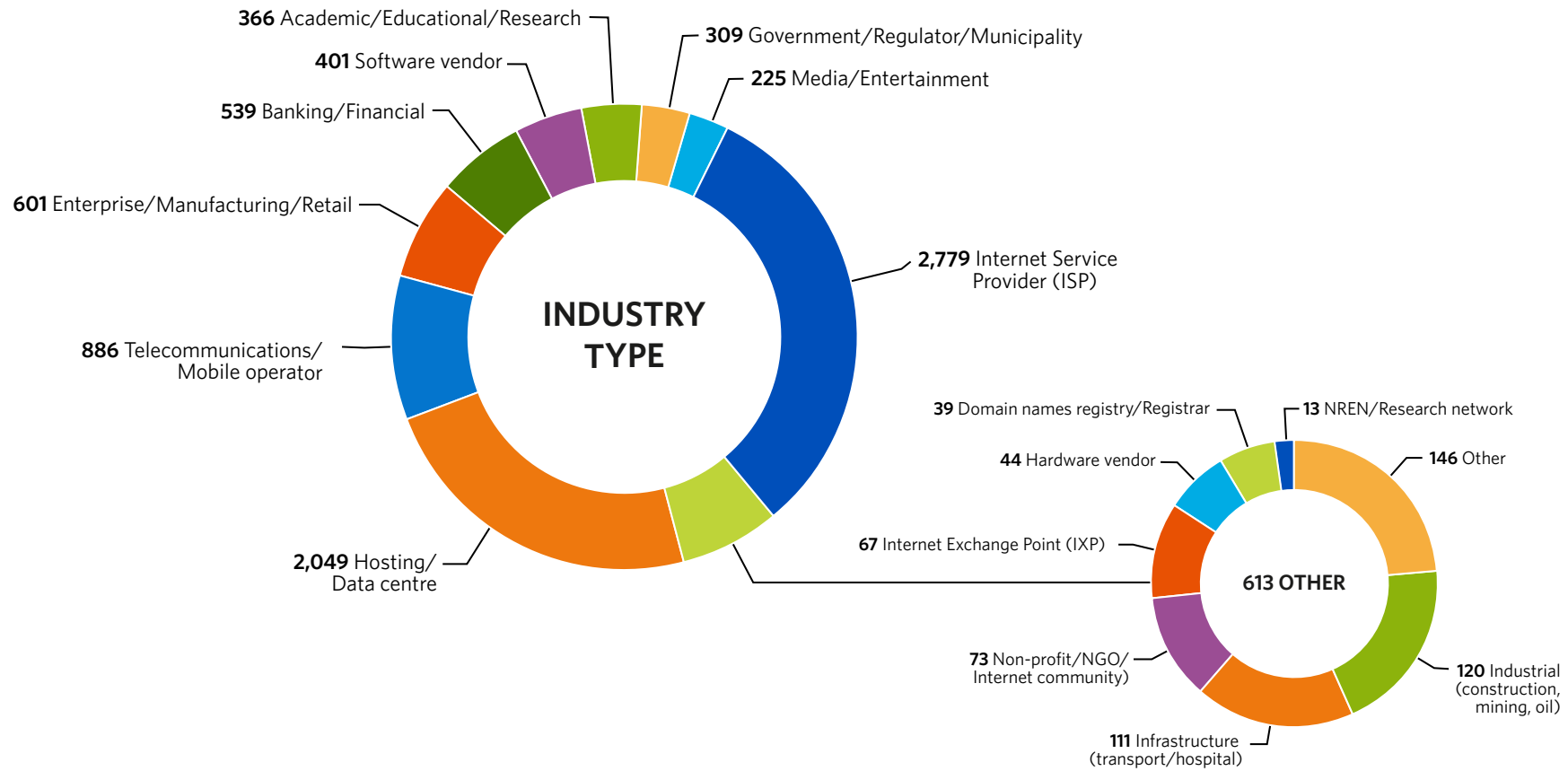
Total combined membership was 20,857.





1A. Member Services - continued

MEMBERSHIP INDUSTRY TYPE





1A. Member Services - continued

SUCCESS MEASURES - 1A

Targets	Results	Status
Maintain helpdesk SLA of 48-hour business day response to enquiries	100%	●
Maintain service satisfaction ratings of at least 93% "excellent and above average" feedback	93%	●
All "poor and below average" feedback is followed up and actioned	100% resolved	●
Proactive Member service engagement in a minimum of 47 economies	47 out of 47	●
All improvement suggestions received from all feedback channels are followed up and actioned	100%	●
All critical and high accessibility issues are resolved	81 issues resolved	●
Grow product and service user feedback group from 300 to 500 members	526	●
One-on-one UX feedback session with at least 50 Members	56	●
At least eight membership development activities, in economies with low membership relative to their Internet growth potential	7 out of 8	●
Total number of Members to match or exceed the 2021 budget assumption of 8,940	8,768	●



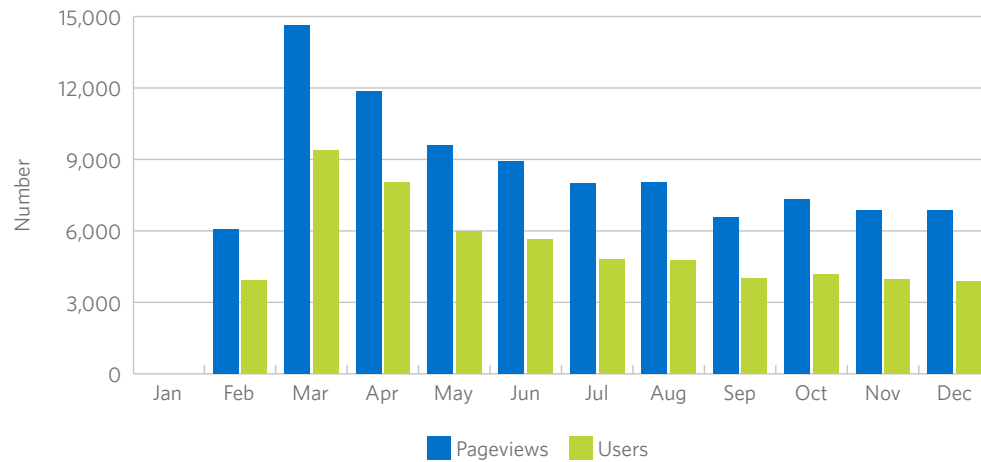
1B. Membership Products

OPERATIONS

1B.1. Membership product management

A new Help Centre, containing FAQ articles and 'how to' information, was deployed in February. Fifty articles across seven categories were published, with an average 'helpful' rating of 74% from users (from 641 ratings received).

HELP CENTRE VISITORS



help.apnic.net

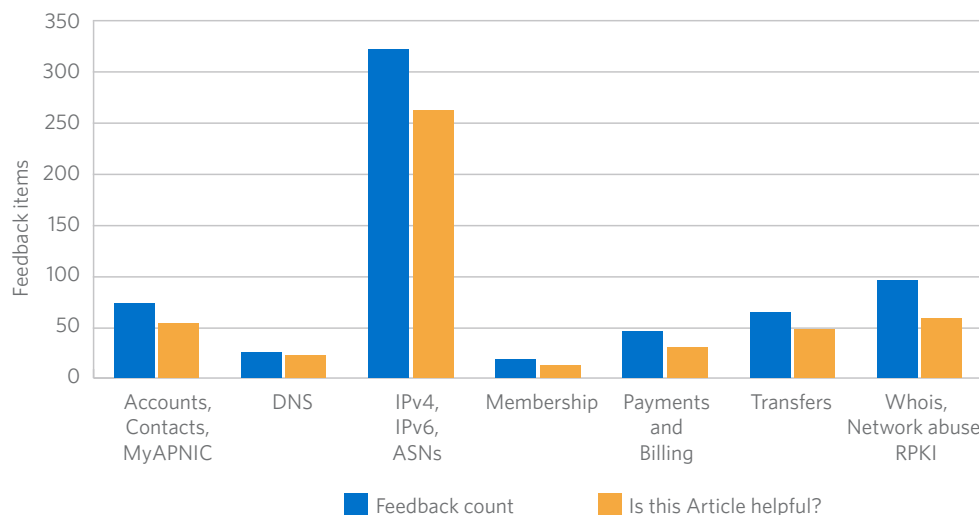
RESOURCING

	Budget	Actual
FTE	12.28	9.25
Expenses	2,473,335	1,856,909
CAPEX	-	-



1B. Membership Products – continued

HELP CENTRE FEEDBACK



Updates to MyAPNIC included:

- Complete architecture conversion from WordPress to Java.
- Improvements to the billing section including new advance invoice management and downloadable receipts.
- Removal of billing surcharges for Members paying annual fees by instalment.
- An improved EC election dashboard to reduce support requirements.
- Web style updates to the MyAPNIC Resource Manager.
- Voting system updates to accommodate the addition of SIG and IANA RC elections (held at APNIC 52).
- Migration of the billing, elections and portal features to a microservice architecture.

Member application referrals were added to the Member application form to allow Members to refer their customers to APNIC for an easier application process.



1B. Membership Products – continued

SUCCESS MEASURES – 1B

Targets	Results	Status
Member Help Centre deployed	Completed	●
Migrate 100% of APNIC Logins to a new identity management system	Deferred to 2022*	●
Establish comprehensive testing infrastructure for membership product applications	Completed	●
Deliver problem-free EC, NRO, IANA and SIG elections via BigPulse	Completed	●

*See 5A.6.



1B. Membership Products – continued

INVESTMENTS

1B.2. Online community platform →

'Tribe' was selected to pilot as a community discussion platform over five months, with a total of 110 users, and several test groups.

The trial findings included the requirement for the integration of mailing lists and a community manager to coordinate to overall operation of the platform. These findings and other lessons of the trial period are being assessed to determine next steps, with deployment of an operational product scheduled in 2022.

2021 Investment	Member Benefit
Online community platform	Network operators can better learn from each other's experience. Replace or augment aging mailing list facilities. Promotes online engagement between the APNIC community.
Status: Ongoing	



1C. Membership Reporting

OPERATIONS

1C.1. Planning and reporting

The 2021 Activity Plan and Budget, and 2020 Annual Report were presented at the 2021 Annual General Meeting in March. The 2022 Activity Plan and Budget was approved by the EC in December.

A public webpage tracking progress against the 2021 activities was published to replace the previous 'Survey Tracker' webpage.

apnic.net/annualreport

RESOURCING

	Budget	Actual
FTE	1.56	1.12
Expenses	715,263	619,054
CAPEX	-	-



1C. Membership Reporting – continued

SUCCESS MEASURES – 1C

Targets	Results	Status
On-time publishing of required reports at the APNIC AGM and at APNIC 50	Completed	●
Publishing of EC Minutes within two months of each EC meeting	100% achieved	●
Event Wraps published for 100% of reportable events within one month of event	67 out of 67 published	●



2. REGISTRY



OBJECTIVES

Develop and deliver world class registry products and services required by the community.

Ensure responsible stewardship of Internet number resources and deliver accurate registry services.

WORKSTREAMS

- 2A. Registration Services
- 2B. Registry Products
- 2C. Policy Development

REGISTRY - SUMMARY

	Budget	Actual
FTE	14.21	11.71
Expenses	3,968,674	3,164,209
CAPEX	-	-



2A. Registration Services

OPERATIONS

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

APNIC processed 1,398 IPv6 delegations, 2,532 IPv4 delegations, 6,808 ASN assignments, 709 IPv4 market transfers (496 within the Asia Pacific region and 213 between APNIC and other RIR regions), and 118 Merger and Acquisition IPv4 transfers. These are illustrated on the following pages.

The proportion of APNIC Members that hold IPv6 resources is 68.43%, up from 66.32% in 2020.

APNIC received eight blocks of ASNs from IANA (8,192 ASNs) to meet large requests from networks in China and India. No additional IPv4 or IPv6 allocations were received from IANA in 2021.

At the end of 2021, APNIC had allocated 99.40% of its total IPv4 number resource pool (leaving 0.60% available), 9.22% of its IPv6 pool (leaving 90.78%) and 89.03% of its ASN pool (leaving 10.97%). The size of the available IPv4 pool increased in 2021 following APNIC's IPv4 reclamation work ([see 2A.3](#)).

The status of APNIC's Internet number resource pools at the end of 2021 is below.

	Total at 1 Jan 2021	From IANA	Transfers in	Transfers out	Total at 31 Dec 2021	Total delegated	Total reserved	Total available
IPv4 (/24s)	3,482,617	0	2,410	1,095	3,483,932	3,463,031	6,986	13,915
IPv6 (/32s)	1,067,008	0	0	0	1,067,008	98,392	113,746	854,870
ASNs	21,143	8,192	5	4	29,336	26,118	0	3,218

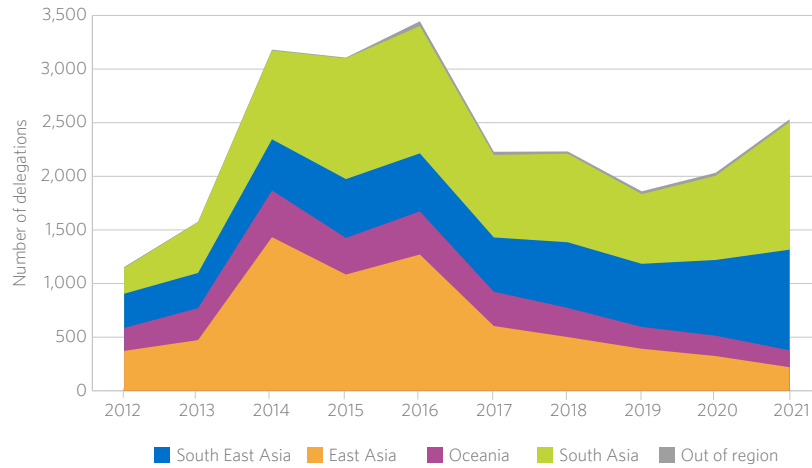
RESOURCING

	Budget	Actual
FTE	4.53	4.89
Expenses	842,899	890,233
CAPEX	-	-

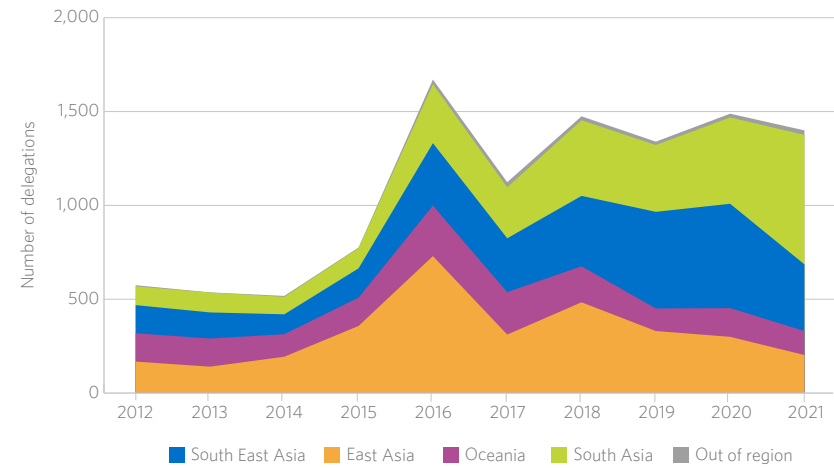


2A. Registration Services – continued

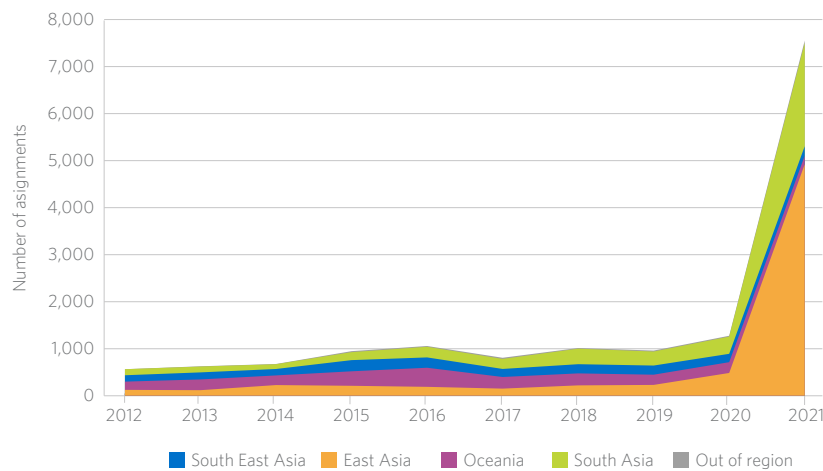
IPv4 DELEGATIONS



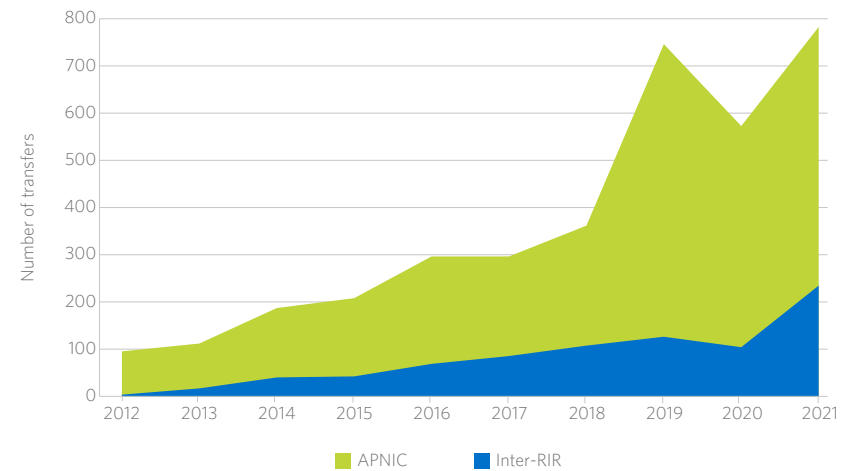
IPv6 DELEGATIONS



ASN ASSIGNMENTS



IPv4 MARKET TRANSFERS



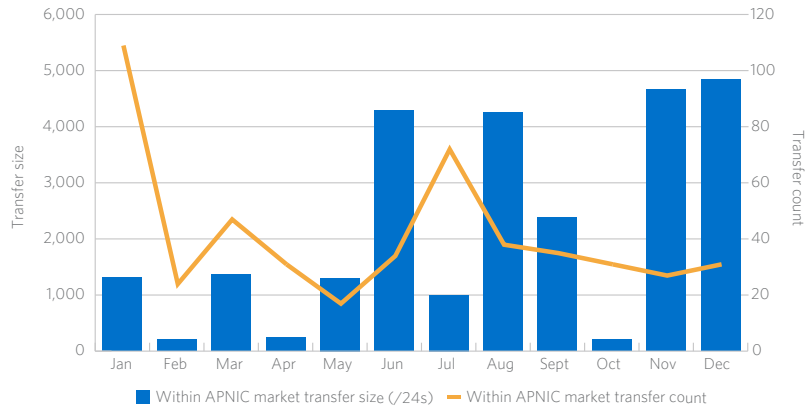
Note: Large requests from networks in China and India account for the significant rise in ASN assignments.



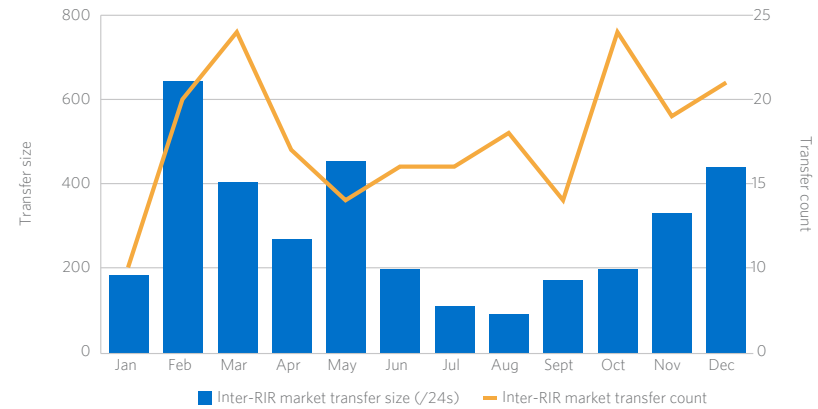


2A. Registration Services – continued

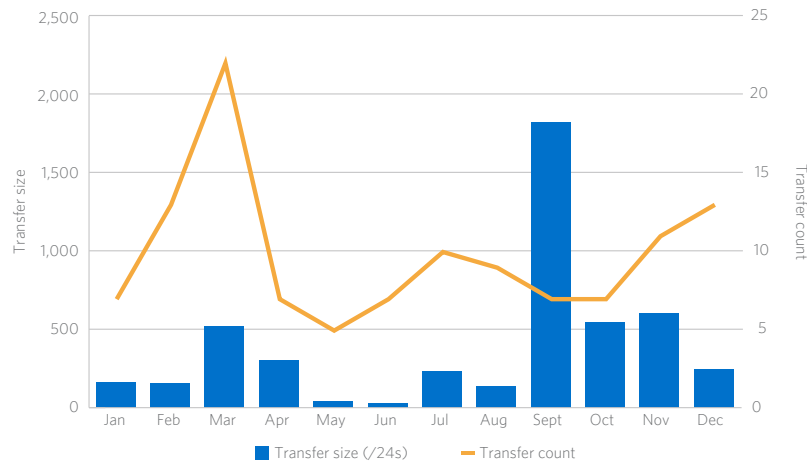
MARKET TRANSFERS



INTER-RIR TRANSFERS



M&A AND HISTORICAL TRANSFERS

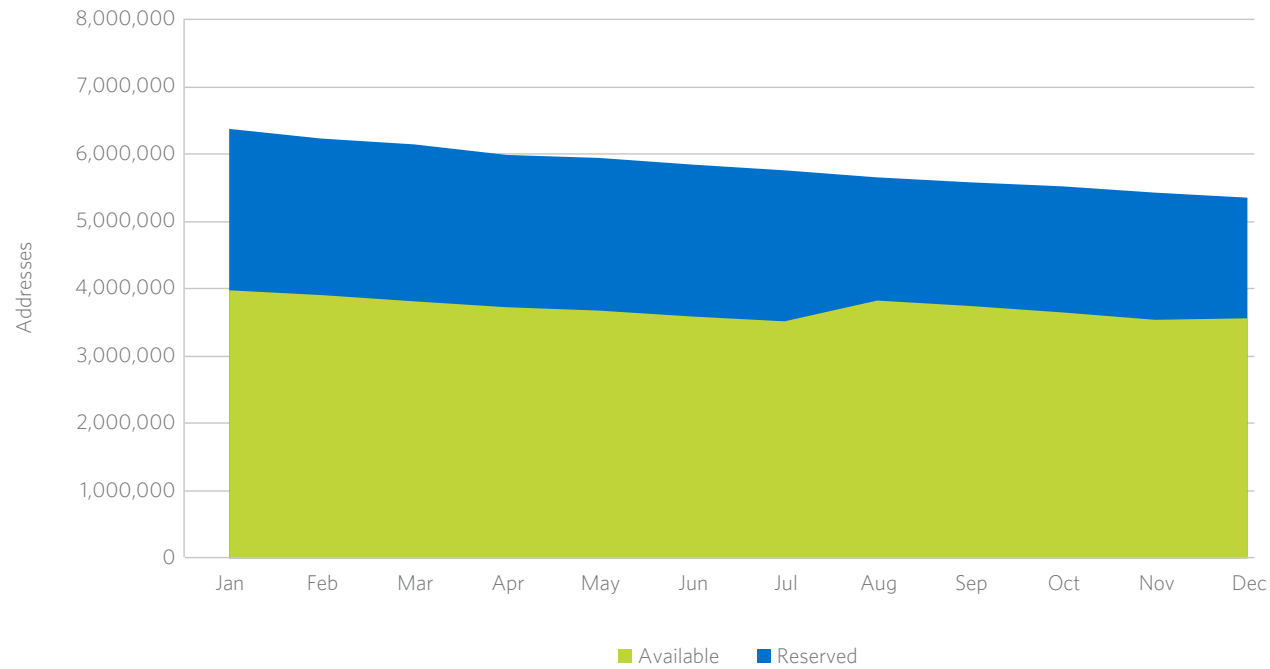


- Large IPv4 transfers from the Asia Pacific Internet Development Trust (APIDT) to various Members occurred in June, August, November, and December.
- A large transfer occurred within TWNIC in September.
- Inter-RIR market transfer activity slightly increased in 2021, albeit on small address volumes.



2A. Registration Services – continued

AVAILABLE IPv4 ADDRESS SPACE



488,704 historical IPv4 addresses were voluntarily returned to the available pool in 2021 as a result of APNIC's IPv4 reclamation efforts.





2A. Registration Services – continued

OPERATIONS

2A.2. Maintain correct and current registry data

Improvements were made to IRT validation under prop-125, including simplification of email and notification templates, and better IRT management functionality in MyAPNIC to help Members update IRT details and handle validation emails.

13,826 email validation requests were issued with 10,277 validation requests confirmed, equalling a confirmation rate of 74.3%.

In response to ICANN's Identifier Technical Health Indicators (ITHI) initiative, the NRO defined the 'accuracy' of Internet number resources data under three dimensions: 'Comprehensive, Correct, and Current'. APNIC deployed measurements for two of the three dimensions, with measurement for 'Current' to be completed in 2022.



2A. Registration Services – continued

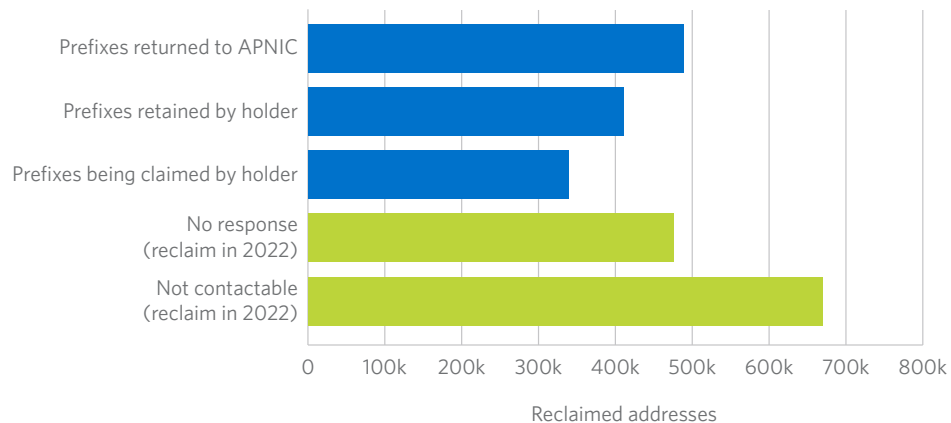
2A.3. Reclaiming unused IPv4 address space

Around 2.3 million unrouted historical IPv4 addresses were identified under prop-017 and 78% of the address custodians were contacted following an exhaustive contacts search using public information such as business registries and web research.

Contacted address custodians retained, or were in the process of claiming, 750,592 addresses while 488,704 addresses were returned to APNIC (equivalent to around 1,909 /24s).

The remaining address space (around 1.1 million addresses) for uncontactable custodians, or custodians that did not respond, will be reclaimed by APNIC in 2022.

STATUS OF RECLAIMED ADDRESS SPACE





2A. Registration Services – continued

SUCCESS MEASURES – 2A

Targets	Results	Status
Maintain Registration Services SLA of two business day response to enquiries (>99.90%)	100%	●
Increase percentage of Members holding IPv6 address space to 70%	68.43%	●
Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting	2 out of 3	●
Increase rate of validation by Members of registration records	74.3%	●
All unrouted historical resource prefixes identified under policy prop-017 are claimed, transferred, or returned to APNIC	Completed	●



2B. Registry Products

OPERATIONS

2B.1. Internet number resource management

Significant performance improvements were made to the core registry service to make the registry management system more usable (now 5-10 times faster for typical requests).

An API to assist NIR resource administration and registry accuracy was developed, with an external test environment established. Deployment is planned for early 2022.

A requirements specification to rearchitect the registry was completed as part of the multi-year 'Next-generation Registry' project.

2B.2. Registry product management

Updates to RPKI included improvements to route management functions in MyAPNIC, and to the Certification Practice Statement (CPS). The repository publication was made entirely atomic to avoid repository inconsistency/invalidity problems.

The finalized NRO RDAP profile was published in the IANA RDAP registry. APNIC will achieve full compliance with the profile in early 2022.

A public specification of a general Member registry API was developed, with the aim to share a prototype at APRICOT 2022.

MyAPNIC users can also now manage 'BYO IP' requirements for their resources by directly updating whois object attributes.

RESOURCING

	Budget	Actual
FTE	9.04	6.18
Expenses	2,580,512	1,831,592
CAPEX	-	-



2B. Registry Products – continued

SUCCESS MEASURES – 2B

Targets	Results	Status
Implement the NIR API and operate in conjunction with the NIRs	Completed for 2022 deployment	●
Create initial design documentation for the 'Next-generation Registry' by the end of Q4	Completed	●
Implement a bulk update method to improve usability of the MyAPNIC Routing Management feature	General Member API implementation in 2022	●
Improved support for 'BYO IP' services in MyAPNIC	Completed	●
Create a public specification of a general Member registry API	Completed	●
Implement the NIR KPI monitor for RPKI	Completed	●



2C. Policy Development

OPERATIONS

2C.1. Policy development

The APNIC Policy SIG considered the following proposals in 2021.

Proposal	Result
prop-130: Modification of transfer policies	Presented at APNIC 51. Did not reach consensus and abandoned.
prop-133: Clarification on Sub-Assignments	Presented at APNIC 51. Reached consensus and endorsed by the EC for adoption.
prop-135: Documentation	Reached consensus and endorsed by the EC for adoption.
prop-136: Registration Requirements	Reached consensus and endorsed by the EC for adoption.
prop-137: IPv6 assignment for Associate Members	Reached consensus but returned to author for clarification.
prop-138: Restricting AS-ID in ROA	Accepted as a guideline only.
prop-139: SOR not required	Reached consensus and endorsed by the EC for adoption.
prop-140: Update End-Site Definition	Reached consensus and endorsed by the EC for adoption.
prop-141: Change maximum delegation size of IPv4 address from 512 (/23) to 768 (/23+/24) addresses	Did not reach consensus and returned to mailing list.

RESOURCING

	Budget	Actual
FTE	0.64	0.64
Expenses	545,263	442,384
CAPEX	-	-



2C. Policy Development – continued

2C.2. Policy implementation

Policy text changes resulting from prop-133, -135, -136, -139, and -140 were implemented and published. Policy prop-138 was published as a guideline.

2C.3. Policy analysis

An update on the Policy Document Review was presented at APNIC 51, with an additional community consultation meeting held online in March, with 40 attendees.

A community Working Group (WG) was formed to review the Policy Document Review report and develop proposals for discussion at APNIC 52. The WG submitted nine proposals to the Policy SIG Chairs for APNIC 52; four were accepted for discussion at the Open Policy Meeting and all four reached consensus.

Impact assessments for the nine policy proposals discussed at APNIC 51 and 52 were conducted and shared with the Policy SIG. The APNIC 52 policy assessment was not presented due to time constraints.

www.apnic.net/policy



2C. Policy Development – continued

SUCCESS MEASURES – 2C

Targets	Results	Status
Achieve minimum overall satisfaction rating of 6/7 from Policy Chairs in annual review of SIG Chair support	6.7 out of 7	
Met 100% of implementation timelines	100%	
Deliver two policy analysis presentations at SIG meetings	1 out of 2 done	
Publish a policy proposals analysis before each Policy SIG meeting	2 out of 2 done	



3. DEVELOPMENT



OBJECTIVES

Invest in sustainable development of the regional Internet community, industry and infrastructure.
 Build capacity for best-practice Internet operations across the Internet technical community.

WORKSTREAMS

- 3A. APNIC Conferences
- 3B. Foundation Support
- 3C. Community Engagement
- 3D. Community Participation
- 3E. APNIC Academy
- 3F. Infrastructure Support

DEVELOPMENT - SUMMARY

	Budget	Actual
FTE	26.08	20.92
Expenses	7,118,088	4,928,017
CAPEX	118,150	21,878



3A. APNIC Conferences

OPERATIONS

3A.1. APNIC conferences

APRICOT 2021 (incorporating APNIC 51) was held online from 22 February to 4 March 2021. This was the first APRICOT conference to be held 100% online, due to the COVID-19 pandemic.

The event welcomed 852 remote attendees (via Zoom) in total, including 416 attendees that attended the tutorial week. There were an additional 3,855 views on YouTube.

An election for three available APNIC EC positions was held at APNIC 51 with Feng Leng (2,612 votes), Yoshinobu Matsuzaki (2,605 votes), and Gaurab Raj Upadhaya (2,567 votes) elected for two-year terms.

APNIC 52, held from 13 to 16 September 2021, was also held wholly online and welcomed 706 remote attendees in total (via Zoom). The tutorials on day one attracted 374 attendees. Technology additions for APNIC 52 included CometChat for delegate chat and networking, and Otter.ai for automatic transcription. Improvements to the conference login process were also made.

Several community meetings were held at the conferences from partner organizations including, DotAsia, APIX, APStar, and APNG.

conference.apnic.net

RESOURCING

	Budget	Actual
FTE	5.04	4.75
Expenses	1,466,163	930,345
CAPEX	43,150	4,296



	APRICOT 2021	APNIC 52
Total number of remote participants (Zoom)	852	706
Economies represented	61	48
YouTube views	3,855	3,438
YouTube hours viewed	832.04	745.88





3A. APNIC Conferences – continued

SUCCESS MEASURES – 3A

Targets	Results	Status
Achieve attendance of 1,000 delegates	1,558 attendees	●
Achieve 4,000 remote conference session views	8,145 views	●
Achieve a minimum average conference participant satisfaction survey rating of 90%	93%	●
Achieve average participant satisfaction of 85% for speakers	96%	●
Select and integrate online meeting technologies to provide a seamless online experience for APNIC 51 and 52	Completed	●



3A. APNIC Conferences – continued

INVESTMENTS

3A.2. Fellowships →

A new online fellowships program was developed, comprising 11 technical, policy and Internet governance presentations over five months; pairing fellows with industry mentors; APNIC Academy training; and guidance during APNIC 52.

Forty-eight fellows were shortlisted from 293 applicants, with 46 accepting (24 female and 22 male; 34 professionals and 12 youth).

The Fellows' average overall attendance was 86%, with 136 APNIC Academy self-paced courses completed and participation in an additional 26 Academy webinars.

Twelve mentoring sessions were held in August to September between 27 fellows and 25 volunteer mentors from the APNIC community.

The program achieved a Net Promoter Score (NPS) of 92 from Fellows in the participant survey.

2021 Investment	Member Benefit
Fellowships	Diversity of participation in APNIC conference. Opportunities for more Members to attend APNIC conferences.
Status: Completed	



3B. Foundation Support

INVESTMENTS

3B.1. Operational and administrative support →

A total of 6.6 APNIC staff (FTE) were assigned to the Foundation, with all direct costs recovered.

APNIC continued to provide hosting and technical support for administrative, project and financial platforms used by the Foundation.

A new Affirmation of Commitments (AoC) was developed to cover both APNIC support and Foundation funding for APNIC activities.

2021 Investment	Member Benefit
Operational and administrative support	A well-run Foundation delivering successful and valuable Internet development activities in the APNIC region.
Status: Completed	

[apnic.foundation](https://www.apnic.net/foundation)

RESOURCING

	Budget	Actual
FTE	1.58	1.24
Expenses	571,518	76,428
CAPEX	-	-



3C. Community Engagement

OPERATIONS

3C.1. Technical community support

APNIC participated in 15 Network Operator Group (NOG) events during 2021 and 13 technical community events, providing sponsorship, speakers, and training (see Appendix for full list of events and economies). Webcasting and technical support was provided to help 16 technical community events proceed online.

Sponsorship of software and services for the technical community, supported by funding from the APNIC Foundation, was provided to PeeringDB, IXP Manager and IXPDB. APNIC also sponsored the Internet Society’s MANRS Fellowship Program.

3C.2. Security community support

APNIC participated at 43 security community events, including presenting at eight events and providing training at seven events (see Appendix for full list of events and economies).

Sponsorship was provided to CrikeyCon VII and Threat Con 2021, with staff also participating in the program committees for AusCERT 2021 and the FIRST Annual Security Conference.

Sponsorship of services for the security community, supported by funding from the APNIC Foundation, was provided to Shawdowserver.

RESOURCING

	Budget	Actual
FTE	6.38	4.46
Expenses	1,826,724	1,410,868
CAPEX	-	-



3C. Community Engagement – continued

3C.3. Internet organization cooperation

APNIC partnered with LACNIC to commission a study from Analysys Mason on the Internet's technical success factors, and supported them in conducting 15 community interviews. The final report was published and presented during the 2021 Internet Governance Forum (IGF) in December.

Collaboration with other RIRs included participation in 34 online meetings with NRO coordination groups, supporting proposed revisions to the NRO MoU, and the proposed review of the NRO Strategic Plan. Staff participated in all RIR, ICANN and IETF meetings.

Staff participated in the Internet Technical Advisory Committee (ITAC) to the OECD, Internet Technical Collaboration Group (ITCG), ICANN Root Service Governance Working Group, the Root Zone Evolution Working Group, and the Security and Stability Advisory Committee.

NIR engagement included meeting with IRINN, NIXI, and the KRNIC Policy team and participating at the TWNIC OPMs and ICANN TWNIC Engagement Forum. Staff also provided training to the IRINN Hostmaster and Helpdesk teams on IRM, IPv6, the PDP and routing.

3C.4. Internet governance participation

Internet governance-related activities included:

- Participating in the 2021 IGF and conducting sessions on Learning Resiliency, Supply Chain IoT, and the results of the Internet Study on Technical Success Factors. Staff also participated in 62 meetings related to the IGF throughout the year including Multistakeholder Advisory Group (MAG) meetings, topic work groups, and the IGF Support Association Executive Committee.



3C. Community Engagement – continued

- Conducting two sessions at the 2021 APriGF: Interoperable Internet infrastructure (with ISOC); and the Internet study on Technical Success Factors. Staff also participated in 60 APriGF preparatory meetings covering event direction, arrangements, program, and fellowships.
- Participating in, and supporting the organization of three economy-level IGFs plus the new sub-regional Southeast Asia IGF (SEA-IGF).
- Sponsoring, presenting and participating at nine Youth IGFs and Schools of Internet Governance (SIG). APNIC also participated in 10 planning meetings for the Asia Pacific Internet Governance Academy (APIGA).
- Participating in six other Internet governance meetings online (see Appendix for full list of events and economies).

3C.5. Government engagement

APNIC engages with governments and inter-governmental organizations as a member of the technical community. Participation in 2021 included:

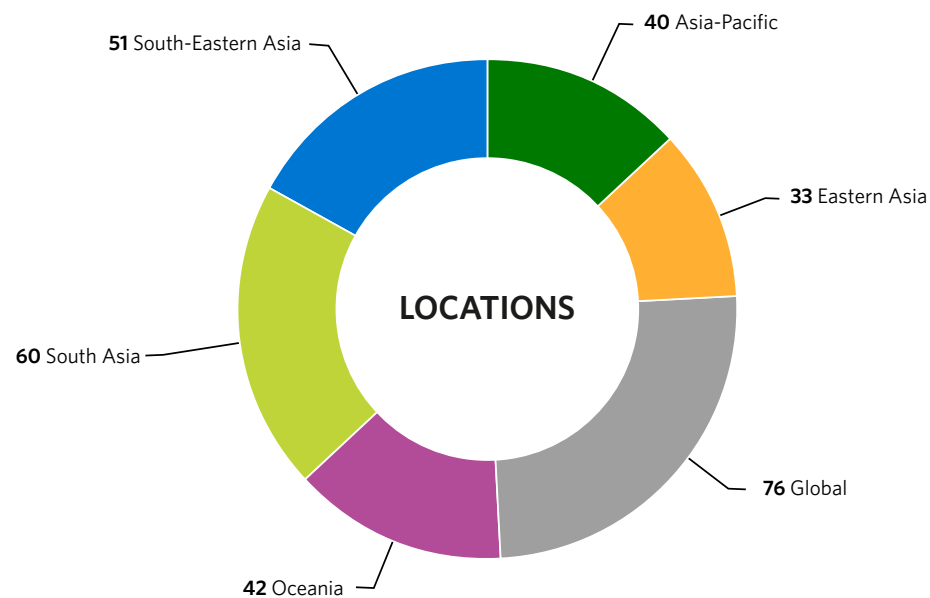
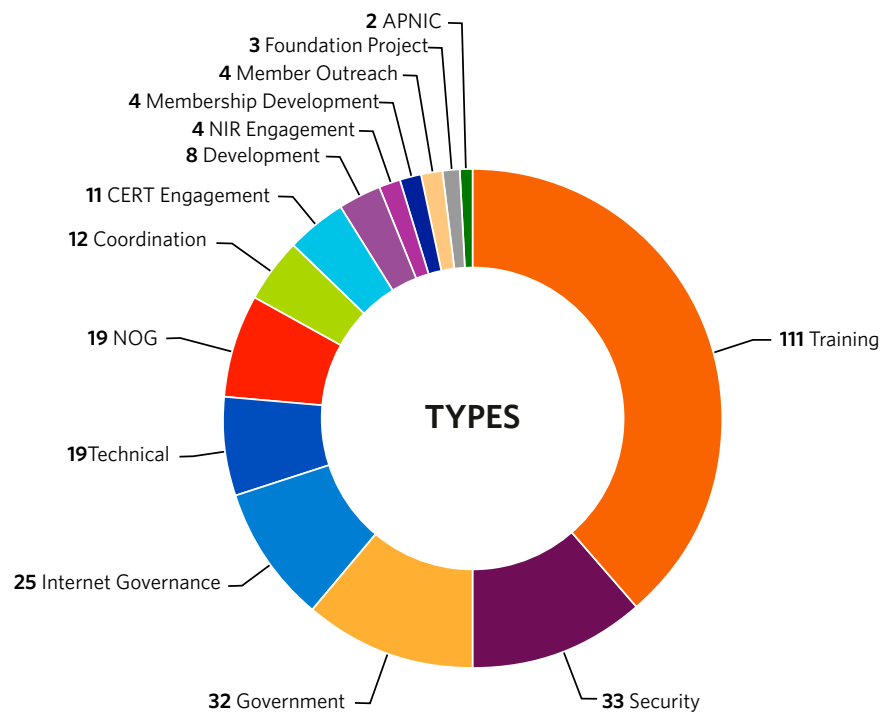
- Joining 25 intergovernmental meetings and consultations, including 19 ITU meetings (see Appendix for full list of events and economies).
- Meeting with the APT Secretary General and Secretariat to coordinate regional initiatives.
- Providing training and technical assistance support to the Mongolian government's Digital Nation (e-Mongolia) initiative.
- Contributing to an OECD draft document on routing and DNS security, and monitored discussions at five OECD meetings.

APNIC also engaged directly with the Law Enforcement Agency (LEA) and Public Safety community, delivering training to LEAs in Oceania as part of Cyber Safety Pasifika, LEAs in Taiwan, and participating at the 6th INTERPOL Global Cyber Crime Expert Group meeting and INTERPOL Forum on Ransomware.



3C. Community Engagement – continued

3C.6. External relations coordination



Engagements are units of measurement for meaningful interactions by APNIC staff with the community through events. There are currently 15 types of engagements in APNIC, as shown on pages 49 and 50.

Due to COVID-19 and related travel restrictions, APNIC’s participation at face-to-face events shifted to wholly online representation.



3C. Community Engagement – continued

SUCCESS MEASURES – 3C

Targets	Results	Status
Sponsor/participate in 30 technical community events including NOGs, Peering Forums and Research & Education community events	28 out of 30	●
Support 20 NOGs to conduct online events if physical events are not possible	14 out of 20	●
Facilitate and support two new/revived NOGs in two sub-regions	One in progress	●
Sponsor or participate in 10 security community events	43 events	●
Support targeted development of four new/existing CERTs/CSIRTs	6 CERTs/CSIRTs	●
Deliver six presentations/training sessions on the Security Threat Sharing Platform	10 presentations	●
Participate in all NRO and I* coordination meetings	100%	●
Participate in all NIR and RIR Open Policy Meetings	100%	●



3C. Community Engagement – continued

SUCCESS MEASURES – 3C CONTINUED

Targets	Results	Status
Sponsor and participate in APrIGF and IGF with workshop proposals, MSG/MAG participation, and speaking roles.	3 proposals to IGF 2 proposals to APrIGF Sponsored APrIGF	●
Participate in at least three national Internet governance initiatives	3 out of 3	●
Sponsor and participate in at least two schools of Internet governance.	2 out of 2	●
Participate in at least 12 engagements with governments/intergovernmental organizations.	25 engagements	●
Participate in at least three capacity building partnerships with governments/intergovernmental organizations.	3 out of 3	●
Participate in six engagements with the Public Safety community.	6 out of 6	●
Facilitate one External Relations coordination retreat.	Completed	●
Facilitate 10 External Relations team coordination meetings.	10 out of 10	●



3D. Community Participation

OPERATIONS

3D.1. Community-led processes

Special Interest Group (SIG) meetings at APNIC conferences attracted 950 participants, with SIG mailing list subscribers increasing 5% from 1,268 to 1,333. Four ‘intersessional’ online SIG meetings (arranged by the Policy SIG and Routing Security SIG) were also held outside of APNIC conferences, attracting 139 participants.

The SIG Guidelines were updated in April following a joint SIGs meeting to discuss and agree proposed changes to SIG elections.

At the elections completed at APNIC 52:

- Joy Chan (TW) was re-elected Chair of the Cooperation SIG for a two-year term.
- Oanh Nguyen (VN) was elected Chair of the NIR SIG for a two-year term.
- Bertrand Cherrier (NC) was elected Chair of the Policy SIG and Shaila Sharmin (BD) was elected Co-Chair, both for two-year terms.
- Afifa Abbas (BD) was elected Co-Chair of the Routing Security SIG for a two-year term.
- Ching-Heng Ku (TW) was elected to the IANA RC for a two-year term.
- Di Ma (CN) was elected unopposed to the NRO NC for a two-year term starting 1 January 2022. Nicole Chen was reappointed by the EC to the second NRO NC seat for a one-year term beginning 1 January 2022.

Quarterly ‘Community Elected Leaders’ meetings were held by the APNIC EC and elected representatives of the SIGs, IANA RC, NRO NC, members of APIX and APNOG, and Secretariat staff. Discussions covered community feedback on APNIC conferences, the online conference format, election procedures, the use of confer at OPMs and the online community platform trial.

apnic.net/sigs

RESOURCING

	Budget	Actual
FTE	1.52	1.37
Expenses	310,076	244,552
CAPEX	-	-



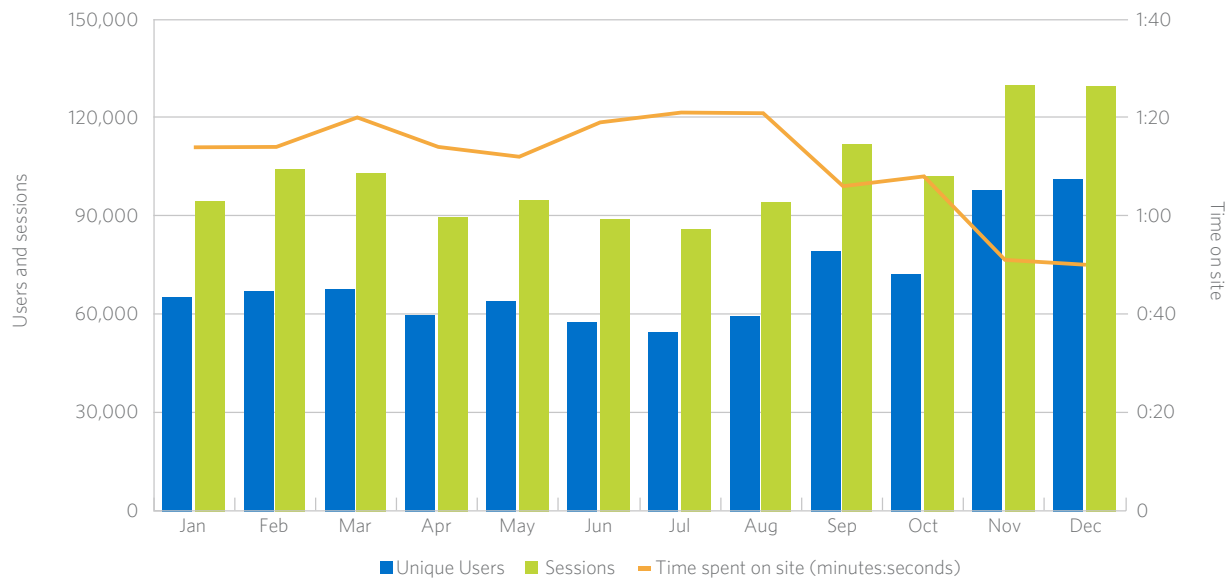
3D. Community Participation – continued

3D.2. Online participation

Visitor numbers to apnic.net peaked in September, with time on site at its highest point in July and August. The top five visitor economies were the United States, Hong Kong, India, China, and Australia.

Users consumed 4,013 hours of video content via APNIC’s YouTube channel. Experimentation with paid information sharing campaigns on Facebook and Twitter helped increase Facebook reach by 13% (from 3 million to 3.4 million), and APNIC tweet engagement by 285% (from 63,749 to 245,337).

APNIC.NET WEBSITE VISITS





3D. Community Participation – continued

3D.3. Encouraging newcomers and diversity

APNIC presented and participated in the Diversity in Tech Panel session at APRICOT 2021/APNIC 51 and the Women in ICT session at APNIC 52. A NextGen Careers BoF was also held at APNIC 52. Thirty-seven percent of APNIC conference attendees were newcomers.

Following the elections at APNIC 52, two of the four SIG Chair positions and two of the six Co-Chair positions were held by females (previously, only one SIG leadership role was held by a female).

APNIC attracted 235 new Blog subscribers, 1,548 new Twitter followers, and 1,414 new LinkedIn followers.

An independent community survey on language understanding and translation was commissioned in August. The survey was provided in 11 languages and received 489 completed responses. Services identified by respondents as having the highest value – if available in local language – were training, conferences, and policy information.



3D. Community Participation – continued

SUCCESS MEASURES – 3D

Targets	Results	Status
Achieve 800 online SIG participants across two conferences	950 participants	●
Grow SIG mailing lists subscribers from 1,268 to 1,325	1,333 subscribers	●
Achieve 6,000 remote conference session views	8,145 views	●
Achieve attendance of 1,000 conference delegates across two conferences	1,558 attendees	●
Grow all-time Blog views from 2.6 million to 3.4 million	3.46 million	●
Increase 12-month tweet engagement from 60,000 to 62,000	234,929	●
Increase annual Facebook posts reach from 3 million to 3.2 million	3.4 million	●
Attract 400 newcomers to APNIC conferences	578 newcomers	●
Attract 125 new Blog email subscribers	235 new subscribers (total 1,235)	●
Grow Twitter followers from 12,100 to 13,250	13,763	●



3E. APNIC Academy

OPERATIONS

3E.1. Product management

The integration of Salesforce event management and training registration systems was completed. Training content on apnic.net was also migrated to the APNIC Academy website.

Note that additional investments in the training platform are covered in 3E.7 below.

3E.2. Instructor-led training

APNIC remained unable to deliver full face-to-face training due to COVID-19 restrictions (all but one instructor-led training session was remote). The training delivery team conducted 96 courses for 2,382 participants in a mix of online and 'hybrid' sessions. Twenty webinars were also delivered to 1,120 participants.

Two new courses on Network Management and Monitoring (NMM) and Network Automation were completed. Updates were also made to existing courses on Internet routing, IPv6 deployment, network security, and the RPKI/ROV lab guides.

RESOURCING

	Budget	Actual
FTE	10.80	8.07
Expenses	2,392,222	1,886,157
CAPEX	15,000	16,351



3E. APNIC Academy – continued

3E.3. Self-paced training

The APNIC Academy added 5,428 new accounts, with 1,735 course completions (3,340 contact hours), and 6,070 labs launched.

A self-paced Routing Fundamentals course, containing 39 new topics and five hours of new learning material, was published to replace the existing Routing Basics course.

New virtual labs were added including Hashing (File Integrity), SSH (Secure Shell), DHCPv6-PD, Linux Basics, PGP (File and Email Security) and Using Suricata to Analyse Packet Captures. The RPKI Lab was updated.

academy.apnic.net/en

3E.4. Technical assistance

Technical assistance was provided to 34 Members across 14 economies, including:

- DNSSEC troubleshooting with a Member in Samoa to solve email delivery issues.
- Proactive outreach and support to 18 network operators in the region to reduce invalid RPKI routes.
- IPv6 deployment support with network operators in India, Pakistan, Sri Lanka and Australia.
- Network design development and discussions with Members in Tonga and Kiribati, plus network consolidation discussions with a Member in Brunei.
- IXP training, setup and configuration for PKIX Lahore.

academy.apnic.net/en/technical-assistance

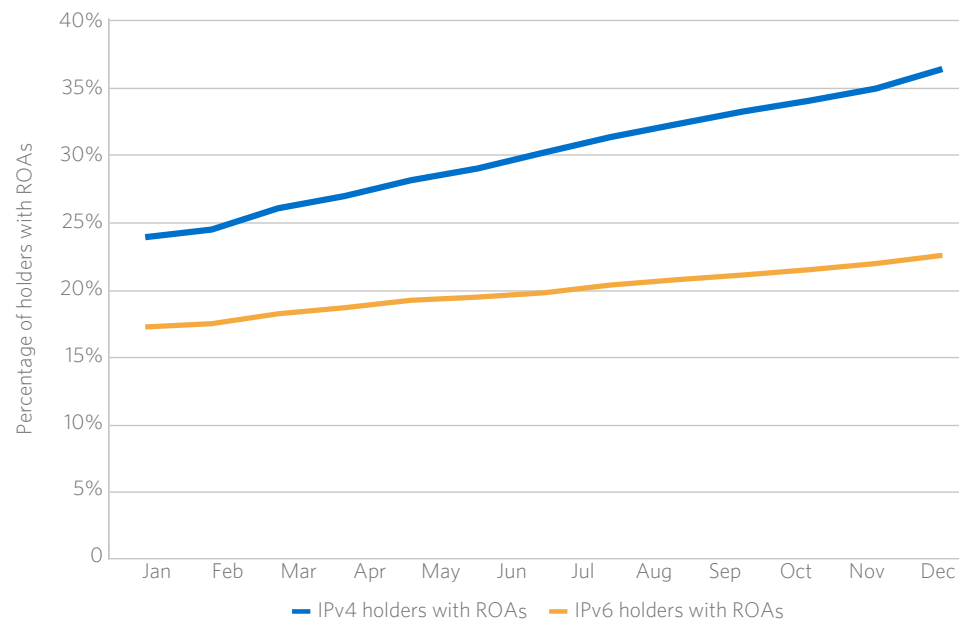


3E. APNIC Academy – continued

3E.5. RPKI awareness and deployment support

RPKI adoption in the APNIC region increased in 2021. The percentage of IPv4 address holders with ROAs grew from 24.4% to 36.1% in 12 months, while IPv6 address holders with ROAs increased from 17.3% to 22.3%.

ADDRESS HOLDERS WITH ROAS



The amount of IPv4 addresses covered by ROAs grew from 21.4% to 28.8%, with IPv6 address space covered by ROAs increasing from 24.0% to 31.7%.

Eleven economies reached 90%+ IPv4 ROA coverage by the end of 2021: VU (92%), TO (96%), LK (94%), MN (99%), BT (96%), MV (99%), TO (95%), NP (94%), NU (100%), NR (92%), MH (90%).



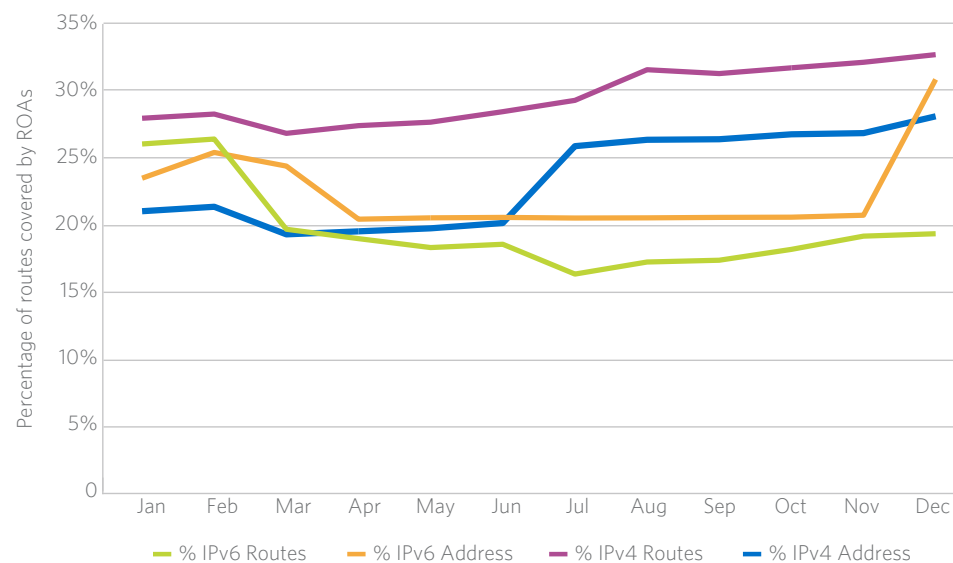
3E. APNIC Academy – continued

In addition to technical assistance provided (see 3E.4), 18 RPKI training events were delivered. Five RPKI deployment case studies and 36 RPKI-tagged posts were published on the APNIC Blog, including six in support of the Internet Society's 'RPKI Week' promotion.

APNIC Labs released a ROA measurement tool (alongside the existing ROV measurement tool) to help monitor the progressive deployment of RPKI across the Internet.

www.apnic.net/rpki
stats.labs.apnic.net/roa
stats.labs.apnic.net/rpki

ADDRESSES AND ROUTES COVERED BY ROAs





3E. APNIC Academy – continued

3E.6. IPv6 awareness and deployment support

IPv6 capability for the Asia Pacific region ended the year at 37.65%, as measured by APNIC Labs.

Seventeen IPv6 deployment focused training events were delivered, with three IPv6 deployment success stories and 23 IPv6 blog posts published.

www.apnic.net/ipv6



3E. APNIC Academy – continued

SUCCESS MEASURES – 3E

Targets	Results	Status
Migrate legacy training site information to APNIC Academy and decommission previous site	Completed	●
Develop a comprehensive curriculum of blended learning for future certification	Commencing in 2022	●
Develop two new/updated courses for instructor-led tutorials/workshops	2 new courses completed 3 courses updated with 7 new modules	●
Conduct 70 instructor-led tutorials/workshops across four sub-regions	96 tutorials/workshops delivered	●
Conduct 18 live webinars	20 webinars delivered	●
Publish four new/revised self-paced online courses	2 new courses completed 2 courses revised	●
Publish five new self-paced virtual labs (associated with multiple courses)	6 new labs delivered	●



3E. APNIC Academy – continued

SUCCESS MEASURES – 3E CONTINUED

Targets	Results	Status
Begin conducting technical assistance via the APNIC Academy online platform	Completed	●
Conduct eight RPKI/ROV focused instructor-led tutorials/workshops spread equally across sub-regions	18 completed	●
Achieve 90% ROA coverage for four additional economies	Completed	●
Publish four RPKI/ROA/ROV deployment case studies	5 published	●
Conduct eight IPv6 deployment focused instructor-led tutorials/workshops spread equally across sub-regions	17 done	●
Publish three IPv6 deployment case studies	3 published	●



3E. APNIC Academy – continued

INVESTMENTS

3E.7. Platform and curriculum development →

APNIC Academy development included extended translation support to online video-based courses, and the launch of the online Technical Assistance platform.

3E.8. Community Trainers network →

The number of active Community Trainers (CTs) was increased to 30. Twenty-eight CTs from 14 economies were engaged for 68 instructor-led online training events.

A new Retained CT model was created to provide dedicated on-the-ground training support, with recruitment begun.

2021 Investment	Member Benefit
APNIC Academy development	Improved access to training and technical assistance.
	Improved technical capacity in the APNIC region.
Status: Ongoing	

Community Trainers network	Local support for APNIC training and technical assistance.
	Increased instructor led APNIC training in targeted economies.
	Options for training in local language and improved translation support for training content.
Status: Ongoing	



3E. APNIC Academy – continued

3E.9. Curriculum for non-technical audiences →

A team of instructional designers was appointed in May to develop an online educational game to help young, non-technical, Internet governance enthusiasts to better understand how the Internet works and inspire their involvement and participation in the Internet ecosystem.

A procurement process was established to select a game developer through a tender process, and three workshops and four consultations with target audience groups were conducted. The game developers are expected to release a minimum viable product in the first half of 2022.

2021 Investment	Member Benefit
Curriculum for non-technical audiences	<p>More informed government decision-making on issues that impact Internet operations.</p> <p>Better prepared fellows for APNIC conference participation.</p> <p>More meaningful engagements with non-technical audiences.</p>
Status: Ongoing	



3F. Internet Infrastructure Deployment

OPERATIONS

3F.1. Internet infrastructure deployment

Training and IXP setup/configuration support was completed for the new Pakistan IX in Lahore in September.

Operating principles and high-level design work was completed with MV IX in the Maldives, with deployment to continue in 2022 when equipment arrives. Support was also provided to the planned upgrade of Fiji IX, and assistance was given to Bhutan IX to implement ROV on their route server.

Challenges in sourcing hardware replacements for seven disconnected RIPE Atlas anchor hosts led to APNIC testing software anchors on mini servers as an alternative. It is hoped this will allow resolution in 2022.

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

RESOURCING

	Budget	Actual
FTE	0.76	1.03
Expenses	551,384	379,668
CAPEX	60,000	1,231



3F. Internet Infrastructure Deployment - continued

3F.2. Community Honeynet and Security Threat Sharing Platform

The Community Honeynet project was expanded with the addition of five new partners, including three from the APNIC region (Tonga, Bangladesh, and the Philippines).

Feeds from the honeynet dataset were created for consumption by instances of the MISP threat sharing platform, and shared with various national CERTs, the ShadowServer Foundation, and APNIC's DASH service.

Eight engagements were held with communities in Bhutan, Mongolia, Taiwan, Nepal, Timor Leste, Tonga and Fiji on honeynet and threat sharing, with two webinars on Practical Threat Hunting delivered via the APNIC Academy.

Content for the 'Introduction to Suricata Intrusion Detection System' training course was also developed based on the honeynet datasets.



3F. Internet Infrastructure Deployment - continued

SUCCESS MEASURES – 3F

Targets	Results	Status
Support deployment of at least two new or upgraded IXPs	1 deployed 1 in progress	●
Support four additional IXPs to deploy RPKI/ROV on their route servers	1 deployed 1 in progress	●
Deploy or upgrade four RIPE Atlas anchors at various networks	0 deployed 7 in progress	●
Deploy 12 new root server instances	1 deployed 11 in progress (see 3F.3)	●
Increase Community Honeynet partners from 10 to 15	15 partners	●



3F. Internet Infrastructure Deployment - continued

INVESTMENTS

3F.3. M-root anycast instance deployment →

Deployment of the M-root instance in Hanoi was completed in collaboration with the WIDE Project and JPRS.

Deployment of servers in 11 locations (Guam, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta, Ulaanbaatar, Kathmandu, Mumbai, and Singapore) progressed, however equipment delivery delays prevented progress. Deployment in these locations will be completed in 2022 upon equipment delivery.

2021 Investment	Member Benefit
M-root anycast instance deployment	Faster and more reliable DNS service.
	Faster and easier deployment of root DNS anycast instances at desirable or underserved locations.
Status: Ongoing	



4. INFORMATION



OBJECTIVE

Support Internet development with needed network information services, and research outcomes which are of demonstrated value to the community.

WORKSTREAMS

- 4A. Information Products
- 4B. Research and Analysis

INFORMATION - SUMMARY

	Budget	Actual
FTE	6.54	10.31
Expenses	1,784,352	2,002,601
CAPEX	80,000	62,532



4A. Information Products

OPERATIONS

4A.1. APNIC Blog

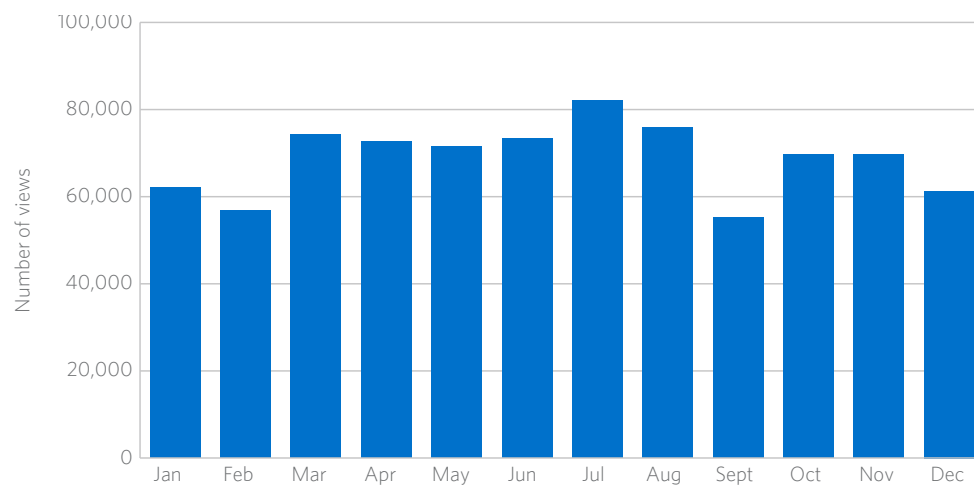
The APNIC Blog averaged 68,721 unique views per month in 2021, a 6.1% increase on 2020's monthly average of 64,778. The Blog passed the milestone of 3 million views (all-time) in June.

There were 179 Guest Posts, representing 56% of total opinion posts (in line 2020). 'Related articles' functionality was added to the Blog in June.

A new APNIC podcast, 'PING', was launched in October, with the first five episodes attracting 648 downloads. PING will focus on Internet research and interview researchers and experts from around the world, with episodes to be published fortnightly.

blog.apnic.net

BLOG VIEWS



RESOURCING

	Budget	Actual
FTE	5.52	9.31
Expenses	985,151	1,254,806
CAPEX	-	-



4A. Information Products – continued

4A.2. Information product management

The Internet Directory was renamed Resource Explorer (REx) and updated with better support for new users, a new information architecture, and other UX improvements. An awareness campaign in October generated a significant increase in usage.

Updates to DASH included a recurring reports feature, to allow users to receive PDF reports by email at their chosen frequency; implementation of new empty states to improve usability; and performance and reliability improvements. An 'Identifying suspicious traffic with DASH' webinar was delivered to 45 attendees from 20 economies to increase community awareness of the product.

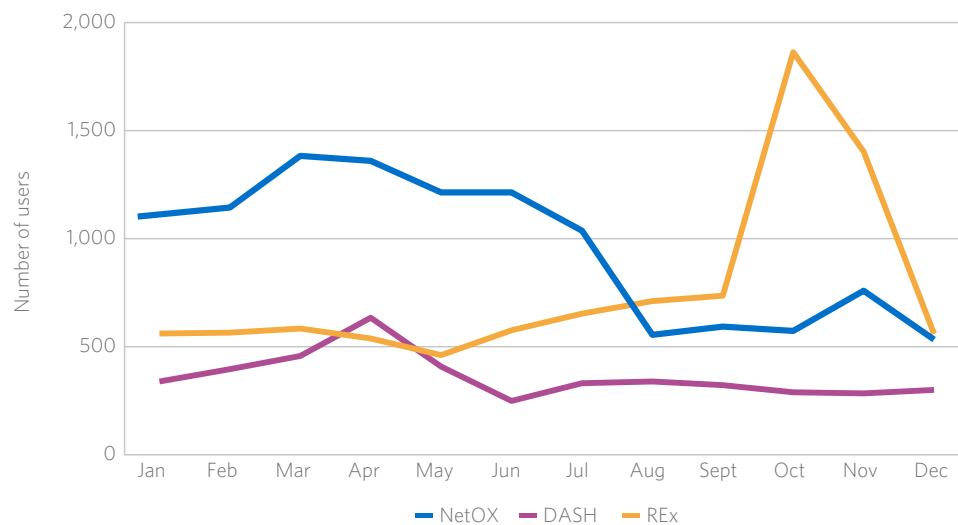
A new 'Experimental' tab for NetOX was created for widgets to allow users to trial new features before they are adopted. Stability and performance improvements were deployed in the backend.

rex.apnic.net

dash.apnic.net

netox.apnic.net

MONTHLY NUMBER OF USERS





4A. Information Products – continued

SUCCESS MEASURES – 4A

Targets	Results	Status
Grow all-time Blog views from 2.6 million to 3.4 million	3.46 million	●
Average 64,000 Blog views per month	68,721 views/month	●
Maintain Blog Guest Post ratio between 45-65%	56%	●
Reach an average of 400 users per month to NetOX and DASH, and of 700 users per month to REx	980 NetOX 365 DASH 826 REx	●
Achieve a net promoter score (NPS) of 80+ for all products	68 NetOX 68 DASH 59 REx	●
Achieve a usability score of at least 4.5/5 for all products	4.4 NetOX 4.5 DASH 4.4 REx	●



4B. Research and Analysis

OPERATIONS

4B.1. Conducting research and measurements

APNIC Labs research activities included:

- New measurements on the use of IPv6 as a transport protocol for the DNS and IPv6 Extension Header handling, including fragmentation.
- Analysis of IPv4 and IPv6 advertised, unadvertised and reserved address pools over time.
- Reporting on the annual state of BGP, and further development of routing bogon and CIDR reports, as input to ISOC MANRS. Work continued on automated BGP anomaly detection.
- Development of an RPKI ROA monitor to help measure progressive deployment of RPKI.
- Research analysing of the handling of large DNS responses, adoption of DOH, and DNS query patterns.
- Measurement of QUIC usage following the release of beta software that adds QUIC support to NGINX servers.
- Publishing 43 blog articles covering research findings, analysis of trust infrastructure, and commentary on new Internet technologies. Three podcasts were also recorded.

labs.apnic.net

RESOURCING

	Budget	Actual
FTE	1.02	1.00
Expenses	799,201	747,795
CAPEX	80,000	62,532



4B. Research and Analysis – continued

4B.2. Cooperative research

APNIC entered into a cooperative research program with ISOC in support of MANRS, providing a feed of routing data. As part of an agreement with ICANN, work continued on the measurement framework for ITHI.

Research collaboration also continued with Cloudflare.

4B.3. Sharing research outcomes

Forty-one presentations on research findings were shared at technical forums globally.



4B. Research and Analysis – continued

SUCCESS MEASURES – 4B

Targets	Results	Status
Twelve research articles and reports published	43 articles	●
Conduct cooperative research with organizations such as CloudFlare, ICANN, RIPE NCC and others	3 collaborative research projects	●
Ten research presentations delivered	41 presentations	●
At least two research presentations at APNIC conferences	6 presentations	●



5. CAPABILITY



OBJECTIVES

Sustain a healthy and resilient organization.
 Develop a strong service culture driven by people committed to APNIC's vision and values.
 Provide stable and secure technical infrastructure to support APNIC operations and services.

WORKSTREAMS

- 5A. Internal Technical Infrastructure
- 5B. Finance and Business Services
- 5C. Employee Experience
- 5D. Governance

CAPABILITY - SUMMARY

	Budget	Actual
FTE	23.75	33.88
Expenses	7,190,675	8,029,100
CAPEX	2,543,200	400,222



5A. Internal Technical Infrastructure

OPERATIONS

5A.1. Architecture and technical coordination

OpenAPI was adopted to describe internal APIs, with dependencies between products and components managed using APIs and architectural documentation.

Dependency management tooling (Dependabot) was deployed to ensure systems remain current, and its use will expand as part of the regular system maintenance cycle.

Rust was adopted as a supported language for APNIC product development. The Information Product team used Rust to achieve lower memory footprint deployments than with Java or Python, with strong static safety checks.

5A.2. Network and infrastructure operations

Connectivity from Brisbane to HKIX (via PCCW) was completed, with a shared Point of Presence (PoP) in the Singapore SG1 data centre established for critical APNIC services and an M-root global anycast node.

APNIC signed up to the NextDC carbon offset program to offset 100% of the carbon emissions generated by the Brisbane data centre.

A new [service status page](#) was also created to display the real-time operational status of APNIC's services.

RESOURCING

	Budget	Actual
FTE	6.20	14.78
Expenses	1,903,032	2,472,811
CAPEX	353,200	390,978



5A. Internal Technical Infrastructure – continued

5A.3. System and platform operations

Initiatives to improve online service performance, stability and availability included:

- Completing the migration of the DNSSEC signer from Secure64 to Knot.
- Updating the APNIC Academy site to use Cloudflare.
- Deploying RDNS anycast nodes in Hong Kong, Mexico, Toronto, and London.
- Deploying a whois node in the KDDI data centre in Tokyo.
- Completing an upgrade of the secured centralized logging system to an open-source log collector for each host to send logs via secure TLS channels.
- Completing the upgrade of the on-premises Kubernetes test cluster, virtual machine environment hosts, and management server.
- Replacing aging network storage with two new high performance storage arrays to two separate data centres.
- Reconfiguring the new Hardware Security Module (HSM) to provide high availability service to RPKI, allowing data centre failover.
- Upgrading the community mailing list interface to Mailman 3 to support all external mailing list services.

Core system uptime		Average data centre bandwidth usage (Mbps)		Average query rates (per second)	
FTP	100%	AU edge inbound	99.3	Whois	430
MyAPNIC	99.99%	AU edge outbound	280	RDAP	92
RDNS	100%	JP edge inbound	21.9	RDNS	18,600
RDNS DNSSEC Validity	100%	JP edge outbound	65	RPKI (RSYNC and RRDP)	99.10
Whois	99.99%			FTP	2.47
RPKI	99.99%			MyAPNIC	0.53
RDAP	99.99%				



5A. Internal Technical Infrastructure – continued

5A.4. Internal security operations

The Vulnerability Reporting Program generated 52 unique and verified vulnerability reports from external security researchers in 2021. Forty vulnerabilities were resolved, with seven still in progress within the 90-day period. Unresolved vulnerabilities outside of the 90 days are being addressed as part of larger upgrade projects.

HackerOne was selected to perform triage of newly reported vulnerabilities and continuous penetration testing to replace single annual tests commissioned in previous years.

Rapid7 was deployed on workstations, servers and network equipment for vulnerability scanning and Security Information and Event Management (SIEM).

The Acceptable Use and Bring Your Own Device policies were reviewed and updated. Online fraud training was completed with finance and services staff.

Policies and procedures that align with ISO 27001 were updated, and a gap analysis conducted in November indicated APNIC is ready to seek certification in 2022.

5A.5. Enterprise application management

New contract management software, device management systems, and CRM backup technology was implemented.

The APNIC office telephone system was migrated to Zoom phone and Zoom Room technology was deployed to meeting rooms.



5A. Internal Technical Infrastructure – continued

SUCCESS MEASURES – 5A

Targets	Results	Status
Complete review of testing environment and practices	Done	●
Complete quarterly data centre failover tests	4 out of 4 completed	●
Maintain availability of 99.99% for critical APNIC services and 99.95% for less-critical services	99.99% and 99.98%	●
Develop strategy for cloud and interconnection	Draft completed	●
Complete service migration to cloud for six services/websites	Completed	●
Achieve readiness for ISO27001 certification	Gap analysis completed	●
Track and resolve all vulnerability reports within 90 days	40 out of 52 reports resolved (7 in progress, 5 missed target)	●
CRM roadmap established	Completed	●



5A. Internal Technical Infrastructure – continued

INVESTMENTS

5A.6. Product platform development →

A new Single Sign-On (SSO) architecture to cover all online services was developed during 2021. Deployment was deferred from December to March 2022 to avoid disruption to APRICOT registration.

2021 Investment	Member Benefit
<p>Further development of infrastructure and services platforms common to APNIC products to streamline product development, integration and consistency</p>	<p>Standardized user experience across products.</p> <p>Faster access to new products and services.</p> <p>Improved maintenance of online infrastructure to reduce operational risk.</p>
<p>Status: Ongoing</p>	



5B. Finance and Business Services

OPERATIONS

5B.1. Knowledge management

A new staff intranet was launched in December.

5B.2. Financial services

Monthly forecasting was initiated to track income and expenses to identify variations to budget caused by COVID-19 restrictions.

New accounting procedures were developed to manage APNIC Foundation-funded projects, with implementation support provided to the Foundation for its new ERP system.

The annual audit of the 2020 financial accounts was completed by Deloitte and presented to the EC at APNIC 51.

5B.3. Business services

An external surveillance audit of APNIC’s ISO9001:2016 quality management system was completed successfully in August.

A project to digitize legacy paper membership forms was completed at the end of March to improve access for services and finance teams.

RESOURCING

	Budget	Actual
FTE	10.14	11.45
Expenses	2,207,847	2,353,479
CAPEX	30,000	9,244



5B. Finance and Business Services – continued

5B.4. Data governance and business intelligence

Reporting functions in APNIC's legacy business intelligence system (O3) were replicated into a new system based on Tableau. Additional software platforms were also implemented to improve the production of charts.

Development of an APNIC-wide data model and data dictionary is underway and scheduled for completion in 2022.

Data warehouse methodologies and tools were investigated and tested, with a priority on scaling and compatibility with industry standards. Basic membership and resource details were loaded into the data warehouse and transformed for Tableau visualizations.



5B. Finance and Business Services – continued

SUCCESS MEASURES – 5B

Targets	Results	Status
Successful implementation of internal knowledge management tools with increased user satisfaction and experience	Completed	●
Achieve a successful audit of APNIC's annual financial accounts	Completed	●
Complete annual ISO Quality management compliance audit successfully	Completed	●
Undertake quarterly BCP scenario testing	Completed	●
Complete APNIC-wide data model and data dictionary	70% complete	●
Generate all Secretariat report data/charts from BI system	20% complete	●



5C. Employee Experience

OPERATIONS

5C.1. Organizational development

The executive and leadership teams participated in a regular leadership webinar program provided by external coaches.

A new goal setting process was established to clearly link individual goals to organizational goals and improve goal progress monitoring.

A monthly agile leaders forum was created for continuous learning and development.

5C.2. Work environment management

With COVID-19 restrictions changing regularly, a hybrid working environment of office access and work from home arrangements was maintained.

An updated travel health policy was developed to encompass COVID health risks and insurance implications.

RESOURCING

	Budget	Actual
FTE	4.65	5.69
Expenses	1,945,989	2,137,539
CAPEX	2,160,000	0

5C. Employee Experience – continued

5C.3. Talent attraction and retention

Twenty permanent roles (including two new Directors for the Services and Finance areas) and five casual roles were filled. Nine contractors and six Community Trainers were also engaged.

Support was provided to recruit four operations staff for the APNIC Foundation.

5C.4. People operations management

Hybrid working principles were developed for staff to combine remote and office work and maximize engagement and effectiveness.

Emergency leave was introduced for staff to access when childcare was impacted by COVID restrictions, and for COVID testing and vaccinations.



5C. Employee Experience – continued

SUCCESS MEASURES – 5C

Targets	Results	Status
Strategic goals clearly cascade to individual performance measures in performance management system in 2021	Completed	●
Deploy agile work practices across the organization	76% complete	●
No WHS incidents caused by APNIC’s local or remote work environments — zero fault incident reports	3 incidents – none caused by APNIC	●
Maintain staff turnover rate within acceptable benchmarks of 5-15%	4.8 % turnover	●
Training budget is 100% allocated and distributed across the organization	50% spent	●
All HR policies, in particular, hybrid work, parental leave and travel safety policies, reflect best practice	Completed	●



5C. Employee Experience – continued

INVESTMENTS

5C.5. Agile APNIC →

Seventy-six percent of teams adopted appropriate Agile practices for the management of their work. The remaining teams will complete adoption by March 2022.

5C.6. People management portal →

Implementation of the Sage People human resources portal is in progress. The Core HR module was launched in September and Compensation Management was launched in December. Performance and Recruitment modules are undergoing UAT, for completion in January 2022.

5C.7. APNIC workspace remodelling →

An architectural and structural review of the current office building in South Brisbane indicated it could be extended to seat 140 staff, but at significant cost. It also concluded that significant capital improvement is not financially viable due to the limited future potential of the building itself.

APNIC staff reviewed several alternative office locations, for a potential relocation within two to three years.

A study of the current workspace use was completed to assist with short-term remodelling that may be undertaken, as well as longer term requirements for alternative office location in future.

2021 Investment	Member Benefit
Agile APNIC	A focus on continuously improving operations and performance.
Status: Ongoing	

People management portal	Improved reporting on HR analytics. Reduced HR administration to focus instead on improvement initiatives.
Status: Ongoing	

APNIC workspace remodelling	Improved organizational flexibility and productivity. Allows full benefits of a distributed workforce.
Status: Ongoing	



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.

Four EC meetings were held. The Annual EC satisfaction survey indicated a high level of satisfaction with the support provided by the APNIC Secretariat.

5D.2. Corporate governance and legal

The Strategic Risk Register was maintained and presented to the EC quarterly for review.

RESOURCING

	Budget	Actual
FTE	2.76	1.96
Expenses	1,133,807	1,065,271
CAPEX	-	-



5D. Governance – continued

SUCCESS MEASURES – 5D

Targets	Results	Status
Achieve a high level of satisfaction from a survey of EC members	Completed	●
Quarterly Strategic Risk Register updated and reviewed	Completed	●



2021 FINANCIAL REPORT BY ACTIVITY

Activity	FTE			CAPEX			OPEX		
	Actual 2021	Budget 2021	Variance	Actual (AUD) 2021	Budget (AUD) 2021	Variance (AUD)	Actual (AUD) 2021	Budget (AUD) 2021	Variance (AUD)
Member Services	9.51	8.58	0.93	7,935	0	7,935	2,219,361	2,253,270	-33,909
Membership Products	9.25	12.28	-3.03	0	0	0	1,856,909	2,473,335	-616,426
Membership Reporting	1.12	1.56	-0.44	0	0	0	619,054	715,263	-96,209
Membership - Total	19.88	22.42	-2.54	7,935	0	7,935	4,695,325	5,441,868	-746,543
Registration Services	4.89	4.53	0.36	0	0	0	890,233	842,899	47,334
Registry Products	6.18	9.04	-2.86	0	0	0	1,831,592	2,580,512	-748,920
Policy Development	0.64	0.64	0.00	0	0	0	442,384	545,263	-102,879
Registry - Total	11.71	14.21	-2.50	0	0	0	3,164,209	3,968,674	-804,465
APNIC Conferences	4.75	5.04	-0.29	4,296	43,150	-38,854	930,345	1,466,163	-535,818
Foundation Support	1.24	1.58	-0.34	0	0	0	76,428	571,518	-495,090
Community Engagement	4.46	6.38	-1.92	0	0	0	1,410,868	1,826,724	-415,856
Community Participation	1.37	1.52	-0.15	0	0	0	244,552	310,076	-65,524
APNIC Academy	8.07	10.80	-2.73	16,351	15,000	1,351	1,886,157	2,392,222	-506,065
Internet Infrastructure Support	1.03	0.76	0.27	1,231	60,000	-58,769	379,668	551,384	-171,717
Development - Total	20.92	26.08	-5.16	21,878	118,150	-96,272	4,928,017	7,118,088	-2,190,071
Information Products	9.31	5.52	3.79	0	0	0	1,254,806	985,151	269,655
Research and Analysis	1.00	1.02	-0.02	62,532	80,000	-17,468	747,795	799,201	-51,405
Information - Total	10.31	6.54	3.77	62,532	80,000	-17,468	2,002,601	1,784,352	218,249
Internal Technical Infrastructure	14.78	6.20	8.58	390,978	353,200	37,778	2,472,811	1,903,032	569,779
Finance and Business Services	11.45	10.14	1.31	9,244	30,000	-20,756	2,353,479	2,207,847	145,632
Employee Experience	5.69	4.65	1.04	0	2,160,000	-2,160,000	2,137,539	1,945,989	191,550
Governance	1.96	2.76	-0.80	0	0	0	1,065,271	1,133,807	-68,536
Capability - Total	33.88	23.75	10.13	400,222	2,543,200	-2,142,978	8,029,100	7,190,675	838,425
Total	96.70	93.00	3.70	492,566	2,741,350	-2,248,784	22,819,252	25,503,657	-2,684,404

Note: Some numbers presented in this chart may not add up precisely to the totals provided due to rounding.



STATEMENT OF FINANCIAL POSITION

For a better understanding of APNIC Pty Ltd's financial position and performance, as represented by the results of its operations for the financial year ended 31 December 2020, the statement of financial position, and statement of income, should be read in conjunction with the annual statutory financial report and the audit report contained therein.

	2021 (AUD)	2020 (AUD)	% change
Assets			
Current assets			
Cash and cash equivalents	7,065,707	7,081,222	0%
Trade and other receivables	5,340,114	5,356,419	0%
Other current assets	973,041	780,654	25%
Total current assets	13,378,862	13,218,295	1%
Non-current assets			
Financial assets	36,728,127	31,036,408	18%
Property, plant and equipment	6,726,988	6,948,694	-3%
Total non-current assets	43,455,115	37,985,102	14%
Total assets	56,833,977	51,203,397	11%

Liabilities

Current liabilities			
Trade and other payables	1,535,635	1,369,013	12%
Employee benefit liabilities	2,700,030	2,233,396	21%
Unearned revenue	12,243,100	11,885,376	3%
Total current liabilities	16,478,765	15,487,785	6%
Non-current liabilities			
Deferred tax liabilities	1,126,296	1,131,984	-1%
Employee benefit liabilities	383,353	406,744	-6%
Total non-current liabilities	1,509,649	1,538,728	-2%
Total liabilities	17,988,414	17,026,513	6%
Net assets	38,845,563	34,176,884	14%

Equity

Contributed equity	1	1	0%
Retained earnings	38,845,562	34,176,883	14%
Total equity	38,845,563	34,176,884	14%



STATEMENT OF INCOME

	2021 (AUD)	2020 (AUD)	% change
Revenue			
Membership fees	24,252,513	22,766,728	7%
Non-member fees	257,209	260,483	-1%
Reactivation fees	22,400	18,400	22%
Sign-Up fees	302,750	347,250	-13%
Transfer fees	244,156	216,016	13%
Sundry income	444,336	534,307	-17%
Foreign exchange gain/ (loss)	32,136	-72,448	-144%
Operating revenue	25,555,500	24,070,736	6%
Investment income	865,457	924,590	-6%
Total revenue	26,420,957	24,995,326	6%
Expenses			
Communication expenses	634,015	697,060	-9%
Computer expenses	1,514,824	1,216,809	24%
Contribution to APNIC Foundation	0	760,890	-100%
Contribution to ICANN	197,515	223,432	-12%
Depreciation expense	652,409	707,658	-8%
Meeting and training expenses	88,786	135,335	-34%
Office operating expenses	367,000	290,543	26%
Professional fees	2,212,253	1,932,613	14%
Salaries and personnel expenses	15,707,940	14,070,813	12%
Sponsorship and publicity expenses	315,397	437,724	-28%
Travel expenses	65,455	331,259	-80%
Other operating expenses	1,063,656	978,134	9%
Total expenses	22,819,250	21,782,270	5%
Operating surplus			
Surplus before tax and fair value gain on financial assets	3,601,707	3,213,056	12%
Fair value gain on financial assets at fair value through profit or loss	1,061,285	650,379	63%
Surplus before income tax	4,662,992	3,863,435	21%
Income tax expense	5,687	-411,255	-101%
Surplus for the year	4,668,679	3,452,180	35%



CASH FLOW STATEMENT

	2021 (AUD)	2020 (AUD)	% change
Cash flows from operating activities			
Receipts from customers	25,549,754	24,574,280	4%
Payments to suppliers and employees	-19,556,837	-19,250,306	11%
Interest received	46,080	70,754	-35%
Net cash inflow from operating activities	4,221,434	5,394,728	-22%
Cash flows from investing activities			
Investment distribution income	828,161	853,836	-3%
Payments for property, plant and equipment	-442,940	-517,273	-14%
Proceeds from sale of property, plant and equipment	8,264	4,811	72%
Purchase of available-for-sale financial assets	-4,630,434	-2,683,188	73%
Net cash /outflow from investing activities	-4,236,949	-2,341,814	81%
Net increase/decrease in cash and cash equivalents	-15,515	3,052,914	-101%
Cash and cash equivalents at the beginning of the year	7,081,222	4,028,308	76%
Cash and cash equivalents at the end of year	7,065,707	7,081,222	0%



Supporters

APNIC acknowledges and thanks the following organizations for their generous support for APNIC conferences and training events.

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TWNIC, Taiwan Network Information Centre

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Appendix: Events attended in 2021

The following is the list of events in which APNIC staff participated. A star (*) indicates events where APNIC provided sponsorship

JANUARY

	Economy	Engagement type
Webinar: Practical Threat Information Sharing	AP	Training
Live eTutorial: Segment Routing	TW	Training
MMNOG 4 (2021)	MM	NOG
CWG-Internet Open Consultation	CH	Internet Governance
Live eTutorial: Network Security	Oceania	Training
Live eTutorial: IPv6 Deployment	South Asia	Training
Live eTutorial: Securing Internet Routing with RPKI	Oceania	Training
Live eTutorial: Network Security	South Asia	Training
JANOG 47 *	JP	NOG
3rd International Cyber Resilience Conference (CRC)	MY	Security
SANOG 36	NP	NOG
3rd Meeting of ITU TDAG WG on WTDC Resolutions	CH	Government
2021 TPPE (Trans-Pacific RandE) Virtual Meeting	US	Development
SANOG: Securing Internet Routing tutorial (RPKI/ROV implementation)	NP	Training
Outreach/TA - TashiCell	BT	Training
IBCAST 2021 Pakistan	PK	Security
Live eTutorial: Securing Internet Routing with RPKI	East Asia	Training
Live eTutorial: IPv6 Deployment	East Asia	Training
PTC '21	US	Development

FEBRUARY

	Economy	Engagement type
APEC TEL 62 DSG Meeting	NZ	Government
1st IGF 2021 Open Consultations and MAG Meeting	CH	Internet Governance
APRICOT 2021/APNIC 51	AP	APNIC, Training
Live eTutorial: Cryptography Fundamentals	East Asia	Training
NDSS Symposium 2021	US	Technical
Live eTutorial: DNS Fundamentals	South East Asia	Training
Samoa Cyber Security Week	WS	Security
Live eWorkshop: Securing Internet Routing with RPKI	PK	Training

MANRS Tech Talk with Tashi Phuntsho	AU	Technical
Live eTutorial: IPv6 Transition Techniques	PK	Training
Live eTutorial: Secure Internet Routing	PK	Training
APAN 51	PK	Development
NANOG 81	US	NOG
Live eTutorial: Securing Internet Routing with RPKI	IN	Training
Outreach/TA - u-blox Lahore Pvt Ltd	PK	Training
Outreach/TA - Bank Alfalah Limited	PK	Training
Outreach/TA - Pakistan Software Export Board	PK	Training
Outreach/TA - Interwood Mobel Pvt Ltd	PK	Training
Outreach/TA - National Telecommunication Corporation	PK	Training
Outreach/TA - i2c inc	PK	Training
Outreach/TA - CubeXS Pvt Ltd	PK	Training
Outreach/TA - IJ Internet Services (PVT.) Limited	PK	Training
Outreach/TA - Pakistan Petroleum Limited	PK	Training
Live eTutorial: DNS Fundamentals	Oceania	Training
Live eTutorial: IS-IS Operations	East Asia	Training
Live eTutorial: OSPF Operations	South Asia	Training
Live eTutorial: IPv6 Architecture & Address Planning	South Asia	Training
Live eTutorial: BGP Fundamentals	South Asia	Training
FIRST Regional Lightning Talk Session	JP	CERT engagement
Live eWorkshop: Introduction to SDN	IN	Training
DNS-OARC 34 Workshop	US	Technical
Live eTutorial: OSPF Operations	South East Asia	Training
Webinar: Single Sign On (SSO) for Remote Workforce	AP	Training
Live eTutorial: Cryptography Fundamentals	Oceania	Training
Live eTutorial: IS-IS Operations	Oceania	Training



Live eTutorial: BGP Fundamentals	East Asia	Training
APT WTDC21-2 Preparatory Meeting	TH	Government
Live eTutorial: IPv6 Architecture & Address Planning	East Asia	Training
Webinar: Internet Resource Management	AP	Training
Informal Experts Group on WTPF-21	CH	Government
APRICOT: Live eTutorial: ROA/RPKI	PH	Training
Root Server System (RSS) Information Sharing	AP	Development
APNIC EC Meeting - 22 Feb 2021	AU	Other
bdNOG Policy Discussion for APNIC 51	BD	Member Outreach

MARCH

	Economy	Engagement type
APEC TEL 62 SPSG Meeting	NZ	Government
Internet & Jurisdiction Policy Network Toolkit Lounge	FR	Internet Governance
BrisSEC21	AU	Security
Live eTutorial: Securing Internet Routing with RPKI	South Asia	Training
CrikeyCon VII ★	AU	Security
ICANN 70	MX	Coordination
IETF 110	CZ	Technical
IPv6 Deployment (Intensive) - Vanuatu - Pacific Technical Training Project	VU	Training
APEC TEL 62 Plenary	NZ	Government
ITU RPM-ASP WTDC-21	TH	Government
Live eTutorial: Securing Internet Routing with RPKI	IN	Training
Live eTutorial: MPLS Fundamentals	South East Asia	Training
Live eTutorial: 464XLAT	South East Asia	Training
Live eTutorial: Packet Analysis	South East Asia	Training
ITU 1st Interregional Meeting for WTDC-21	CH	Government
Live eTutorial: DNSSEC	AU	Training
Live eTutorial: Multihoming	AU	Training
Outreach/TA - Optus	AU	Training
Webinar: Identifying Suspicious Traffic with DASH	AP	Training
ITU-T Study Group 13 Meeting 2021	CH	Government
Live eTutorial: Securing Internet Routing with RPKI	CN	Training
ROA workshop with PH cable operators	PH	Member Outreach
OECD - 3rd Session of the Working Party on Security in the Digital Economy	FR	Government

APRIL

	Economy	Engagement type
Live eTutorial: MPLS Fundamentals	East Asia	Training
Live eTutorial: BGP OpSec BCP	South Asia	Training
Live eTutorial: DNSSEC Fundamentals	South Asia	Training
Live eTutorial: BGP TE Techniques	Oceania	Training
Live eTutorial: 464XLAT	South Asia	Training
Live eTutorial: Packet Analysis	Oceania	Training
bdSIG 2021 ★	BD	Internet Governance
Webinar: OTT - Challenges and Technical Evolution	AP	Training
ARIN 47	US	Coordination
5th Meeting of ITU TDAG WG on WTDC Resolutions	CH	Government
MPLS - Fiji - Pacific Technical Training Project	FJ	Training
Outreach/TA - Globe Telecom	PH	Training
HKIGF 2021 (Internet Censorship)	HK	Internet Governance
SWITCHSEA Welcome Event	AP	Foundation Projects
PITA Exposition & Business Forum	FJ	Membership Development
35th TWNIC IP OPM	TW	NIR Engagement
2nd ICANN APAC-TWNIC Engagement Forum 2021	TW	NIR Engagement
PCTA e-Tech Show (Convention) 2021	PH	Membership Development, Training
Live eTutorial: Introduction to Suricata Intrusion Detection System	South Asia	Training
Webinar: Demystifying ASO	AP	Training
PNG 2021 ICT Summit and Expo	PG	Technical
IPv6 Deployment live eTutorial	CN	Training
Tabletop Exercises for FIRST Fellowship Teams	Global	CERT Engagement
Securing Internet Routing with Resource Key Public Infrastructure (RPKI) - PCTA	PH	Training
Webinar: Datacentre Power Systems and solutions	AP	Training
Talk: Securing the Internet Routing	PH	Security
FIRST Cyber Threat Intelligence (CTI) Summit 2021	US	CERT Engagement
Connectivity Capital Deep Dive: Hybrid Fiber/RF for Creative Deployments	US	Foundation Engagement
Marshall Center APCSS 2021	DE	Government



MAY

	Economy	Engagement type
APNIC 52 Online Fellowships - IPv6 Fundamentals	AU	APNIC, Training
APNIC 52 Online Fellowships - Network Security Fundamentals	AU	APNIC, Training
Webinar: What to Expect in a Cyber Security Assessment	AP	Training
BKNIX Peering Forum 2021 *	TH	Development
APT WTDC21-3 Preparatory Meeting	AP	Government
WSIS Forum 2021	CH	Internet Governance
WTPF 2021 (ITU World Telecommunication/ICT Policy Forum)	CH	Government
ThaiNOG 3 *	TH	NOG, Training
28th Meeting of the ITU Telecommunication Development Advisory Group (TDAG-21)	CH	Government
LACNIC 35	MX	Coordination
RIPE 82	DE	Coordination
NZNOG 2021	NZ	NOG
ITU 2nd Interregional Meeting for WTDC-21	CH	Government
Digital Transformation - Opportunities for The Downs & South West Region (ACS)	AU	Member Outreach
Live eTutorial: BGP TE Techniques (2 Parts)	South Asia	Training
Live eTutorial: IPv6 Security	South Asia	Training
Live eTutorial: BGP OpSec BCP	Oceania	Training
Live eTutorial: TLS/SSL	South Asia	Training
DNS-OARC 35	US	Technical
Telemars Engagement at APNIC	AU	Foundation Projects
5th Meeting of the Informal Experts Group for ITU WTPF-21 (IEG-WTPF-21)	CH	Government
AusCERT 2021 Conference	AU	Security
Live eTutorial: Cyber Security	South East Asia	Training
AIS'21	MU	Coordination
Live eTutorial: OpenFlow	South Asia	Training
ThaiNOG eTutorial: IPv6 Protocol Architecture & Address Planning	TH	NOG, Training
Live eTutorial: Cyber Security	South Asia	Training
NMM - Tonga - Pacific Technical Training Project	TO	Training
Live eTutorial: DNSSEC Fundamentals	South Asia	Training
Conference talk: RPKI status in Thailand	TH	Security
Webinar: Anycast service deployment	AP	Training

Live eTutorial: Securing Internet Routing with RPKI	TW	Training
BTCIRT Community Workshop 2021	BT	CERT Engagement
ICANN DNS Symposium 2021	US	Technical
BTCIRT Community Workshop 2021	BT	CERT Engagement
ICANN DNS Symposium 2021	US	Technical

JUNE

	Economy	Engagement type
CSP Threat Landscape 1	Pacific Islands	Security
CSP Threat Landscape 2	Pacific Islands	Security
UNITAR (MY) Security Talk	MY	Security
GFCE Pacific Consultation Meeting 2021	Oceania	Government
ROW #10	US	Technical
APNIC 52 Online Fellowships - Routing/RPKI Fundamentals	AU	APNIC, Training
Live eTutorial: Packet Analysis	NP	Training
Live eTutorial: Cryptography Fundamentals	NP	Training
FIRST Annual Conference 2021	US	CERT Engagement
APNIC 52 Online Fellowships - Demystifying SDN	AU	APNIC, Training
ICANN 71	NL	Coordination
RightsCon 2021 *	US	Internet Governance
APNG Webinar #1	AP	Technical
ASEAN CyberSecurity Forum	MY	Security
PacNOG 28	FJ	NOG, Training
bdNOG - NMM live eTutorial	BD	NOG, Training
Live eTutorial : OpenFlow	Oceania	Training
PacNOG: Routing Fundamentals eTutorial	FJ	NOG, Training
bdNOG 13 *	BD	NOG
NIXI Webinar: Digital Economy - expanding footprints	IN	Technical
Securing Internet Routing with RPKI live eTutorial	Oceania	Training
Live eTutorial: IPv6 Security	Oceania	Training
Live eTutorial: TLS/SSL	South Asia	Training



JUNE

	Economy	Engagement type
APNIC Routing Security SIG	AP	Technical
APONet MoU signing ceremony	AP	Coordination
Live eTutorial: Introduction to Suricata Intrusion Detection System	South East Asia	Training
bdNOG - Segment Routing live eTutorial	BD	NOG, Training
GSMA Mobile World Congress 2021	ES	Government
ITU 21st Global Symposium for Regulators (GSR-21)	CH	Government
NANOG 82	US	NOG
Fluxxcon 2021	US	Foundation Engagement
Live eTutorial: Securing Internet Routing with RPKI	IN	Training
Webinar: Hosted vs. Delegated RPKI	AP	Training
Webinar: Automating and Securing Route Servers with IXP Manager	AP	Training

JULY

	Economy	Engagement type
6th INTERPOL Global Cybercrime Expert Group (IGCEG)	SG	Security
Live eTutorial - Information Security for System Administrators	South Asia	Training
Youth IGF Bangladesh 2021 *	BD	Internet Governance
Live eTutorial: NMM: Network Documentation with NetBox - SANOG 37	LK	Training
TL Security Community Engagement	TL	CERT Engagement
Consultation: RPKI Consultation and Technical Assistance for PH community	PH	Training
INTERPOL Forum on Ransomware	FR	Security
Live eTutorial: NMM: Model Driven Programmability - SANOG 37	LK	Training
ITU Emerging Technology Week	CH	Government
Live eTutorial: IPv6 Protocol Architecture & Address Planning - SANOG 37	LK	Training, NOG
LKNOG 5 (SANOG 37)	LK	NOG
Live eTutorial: Introduction to Suricata Intrusion Detection System-SecTalks	AU	Training
Honeypots / Threat Sharing Handson - Tonga	TO	CERT Engagement
SGNOG 8 *	SG	NOG

IETF 111	US	Technical
vPhNOG 2.0 *	PH	NOG
JANOG 48 *	JP	NOG
SANOG 37 *	LK	NOG
Live eTutorial: DNS Fundamentals	IN	Training
CommunicAsia 2021	SG	Membership Development
1st Meeting of the APT Preparatory Group for PP-22 (APT PP22-1)	AP	Government
Live eTutorial: Securing Internet Routing with RPKI - phNOG	PH	Training
Webinar: WiFi Security	AP	Training
Webinar: APNIC Policy Framework and Development Process	AP	Training
Live eTutorial: IPv6 Protocol Architecture & Address Planning	East Asia	Training
Outreach/TA - RACQ - IPv6 Deployment	AU	Training

AUGUST

	Economy	Engagement type
A13/SOI Asia Joint Meeting	JP	Foundation Project
Webinar: Internet Measurement Tool For the End Users	AP	Training
Webinar: Internet Transit, Peering and the Variants	AP	Training
ASEAN-JAPAN Cyber Security Seminar	TH	Security
Live eTutorial: Introduction to Suricata Intrusion Detection System - APAN	ID	Training
Asia Peering Forum 2021	AP	Technical
Cambodia CERT Seminar	KH	CERT Engagement
Introduction to SDN - Fiji - Pacific Technical Training Project	FJ	Training
APAN 52 *	ID	Development, Training
APEC TEL 63	NZ	Government
Live eTutorial - IXP Planning & Deployment - PK	PK	Training
Hack In The Box (SIN) 2021	SG	Security
India IGF Pre-Event Webinar	IN	Internet Governance
YouthxPolicyMakers Internet Governance Workshop	DE	Internet Governance
PANDI Meeting 12	ID	Technical
2021 CNCERT International Partnership Conference	CN	CERT Engagement



SEPTEMBER

	Economy	Engagement type
World Internet Conference 2021 (Wuzhen Summit)	CN	Government
APrIGF 2021	NP	Internet Governance
IDNIC Special Meeting/APJII National Meeting 2021 ★	ID	NIR Engagement
VNIX-NOG 2021 ★	VN	NOG
ITU Global CyberDrill 2021	CH	Security
ITU CWG-Internet Open Consultation	CH	Government
IGF 3rd Open Consultations & MAG Meeting	PL	Internet Governance
AP* Retreat 2021	AP	Coordination
IGF 2021 Townhall - Hybrid Format in Practice	CH	Internet Governance
Pacific IGF (PacIGF) 2021 ★	FJ	Internet Governance
APNIC 52	SG	APNIC, Training
Live eTutorial: IPv6 Protocol Architecture & Address Planning	LK	Training
Threat Con 2021 ★	NP	Security
HKNOG 10.0 ★	HK	NOG
Webinar: Using RIPE Atlas for network diagnostics	AP	Training
Webinar: Network Security for IoT & IIoT Environments	AP	Training
SEA-IGF 2021	ID	Internet Governance
Security Workshop National University of Samoa	WS	Security
APCERT AGM 2021	AP	CERT Engagement
6th Meeting of ITU IEG-WTPF-21	CH	Government
Asia Pacific Youth IGF 2021	AP	Internet Governance
APNIC 52 - NMM live eTutorial	SG	APNIC, Training
Live eTutorial: Network Security & Packet Analysis - APT CN	CN	Training
Network Traffic Measurement and Analysis Conference 2021	US	Technical

OCTOBER

	Economy	Engagement type
Global IPv6 Summit 2021	CN	Technical
36th TWNIC OPM	TW	NIR Engagement
ISCR 2021	KR	Security
APIGA 2021	KR	Internet Governance
KRCERT/CC APISC Training 2021 (Virtual)	KR	Security

Cybersecurity Bootcamp for Senior Non-technical Experts	ES	Security
ARIN 48	US	Coordination
ICANN 72 (23rd AGM)	US	Coordination
CSP Internet Fundamentals Oct 2021	PW	Security
Securing Internet Routing with RPKI	AU	Training
ITU Telecom World 2021 (Digital World)	CH	Government
GFCE Southeast Asia Regional Meeting 2021 (SICW)	SG	Government
Broadband India Forum Session on IPv6	IN	Technical
3rd Interregional Meeting for Preparation of WTSA-20	CH	Government
VBLocalhost 2021	US	Security
Suricon2021	US	Security
8th Meeting of the ITU Telecommunication Standardization Advisory Group (TSAG)	CH	Government
GSMA Mobile 360 Asia Pacific Policy Leaders Forum	AP	Technical
MANRS Community Meeting	US	Technical
UMS Cybersecurity Awareness Seminar	MY	Security
Live eTutorial: Openflow/SDN	TW	Training
LACNIC 36/LACNOG 2021	CO	Coordination
ISC2 Security Congress	US	Security
Security Sessions with FJ community	FJ	Security
Cybersecurity Asia 2021 Conference	AP	Security
IPv6 Protocol, Architecture, Address Planning & Deployment	CN	Training
Philippine International Cybersecurity Conference 2021	PH	Security
Live eTutorial - Introduction to SDN	TV	Training
Live eTutorial - Information Security for System Administrators	South East Asia	Training
Y4IT 2021	PH	Technical
btNOG 8 ★	BT	NOG
btNOG: Network Security live eTutorial	BT	NOG, Training
MNNOG: SDN 4-day live eWorkshop	MN	NOG, Training
MNNOG 3 ★	MN	NOG
btNOG: Network Management and Monitoring (NMM) live eTutorial	BT	NOG, Training
OSDFCon	US	Security



NOVEMBER	Economy	Engagement type
NANOG 83	CA	NOG
PacNOG 29	FJ	NOG
Marshall Center iPCSS 2021	DE	Government
AFRINIC 34	MU	Coordination
RIPE 83	NL	Coordination
GFCE Annual V-Meeting 2021	NL	Government
IGF Preparatory Session on Trust, Security, Stability	PL	Internet Governance
Securing Internet Routing with RPKI - VNNIC	VN	Training
Vietnam Youth Internet Governance Forum 2021 ★	VN	Internet Governance
DNS-OARC 36	US	Technical
IETF 112	US	Technical
DINR	US	Technical
NetThing 2021	AU	Internet Governance
Securing Internet Routing with RPKI	AU	Training
IIGF (India Internet Governance Forum)	IN	Internet Governance
inSIG 2021	IN	Internet Governance
ID HoneyNet Project 10th Year Anniversary Webinar	ID	Security
Japan Internet Week 2021 ★	JP	Member Outreach
7th Meeting of the ITU IEG-WTPF-21	CH	Government
ITU SG13 Plenary 2021	CH	Government
ITU TDAG-21/2 meeting	CH	Government
Telecoms World Asia 2021	TH	Membership Development
Live eTutorial: Network Management & Monitoring	TL	Training
Live eTutorial: IPv6 Deployment	TL	Training
Live eTutorial: Network Security	TL	Training
Live eTutorial: Internet Routing	TL	Training
Live eTutorial: DNS Fundamentals	TL	Training
Peering Asia 2021v	AP	Technical
DNS/DNSSEC live eWorkshop	AP	Training
Imagining the Future of Internet Governance Workshop	AP	Training
Webinar: Lightning fast DDoS detection with FastNetMon Community	AP	Training
Webinar: Lightning fast DDoS detection with FastNetMon Community (Part 2)	AP	Training

DECEMBER	Economy	Engagement type
Securing Internet Routing with RPKI - CNNIC	CN	Training
Securing Internet Routing with RPKI	FJ	Training
PKSIG 2021 ★	PK	Internet Governance
Women in Networking Series	PH	Technical
Ph Peering Forum: Women in Tech session	PH	Technical
IGF 2021	PL	Internet Governance
bdIGF 2021 ★	BD	Internet Governance
btCIRT: Network Security Live eTutorial	BT	Training
Bhutan CyberSecurity Week 2021 ★	BT	Security
KHNOG 3 ★	KH	NOG
Youth IGF India 2021	IN	Internet Governance
Meetings with APJII/IDNIC	ID	NIR Engagement
APSIG 2021 ★	LK	Internet Governance
FIRST & AfricaCERT Virtual Symposium 2021	CH	CERT Engagement
ITU 2nd Interregional Meeting for WTDC-21	CH	Government
WTPF 2021 (ITU World Telecommunication/ICT Policy Forum)	CH	Government
Taiwan LEA Training 2021	TW	Security
AVAR 2021	AP	Security
Webinar: RPKI: 2021 in review	AP	Training

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addressing the Internet in the Asia Pacific

2022

Activity Plan and Budget



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Introduction

This document explains APNIC's 2022 Activity Plan and Budget, for the information of APNIC Members and the wider community.

Under the Four Year Strategic Direction (2020-2023), adopted by the APNIC EC on 3 December 2019, activity is structured under five pillars and 18 workstreams, aligned with APNIC's Vision and Mission.

The five pillars are:



Membership



Registry



Development



Information



Capability

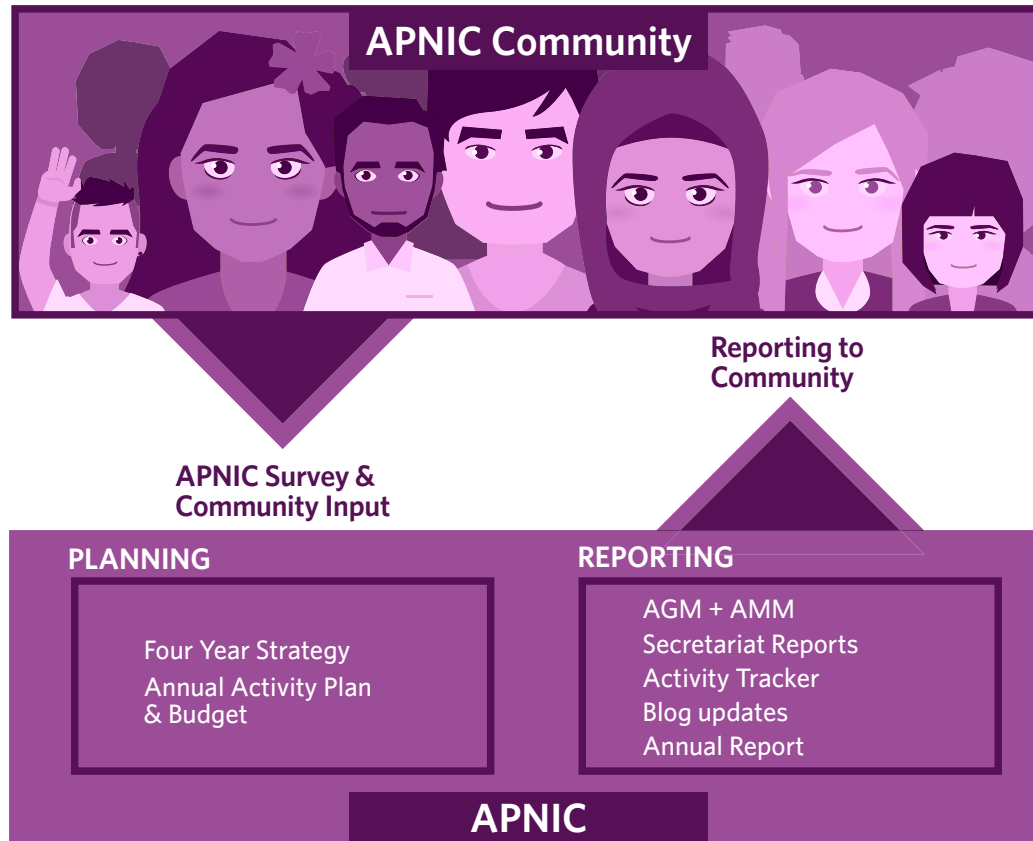
The 2022 Activity Plan and Budget describes activities according to the same structure; and provides under each workstream the activities that are planned for 2022, along with budget allocations.

Feedback on the 2022 Activity Plan and Budget is welcome. If you would like to comment, **[please contact the APNIC Executive Council \(EC\)](#)**.



Annual Planning Process

The APNIC EC and Secretariat receive input from the community through the biennial survey (apnic.net/survey), APNIC conferences, and other interactions. These inputs guide APNIC’s strategy and annual planning, and the Secretariat reports progress on its activities back to the community during the year.





Strategic Pillars

The Four Year Strategic Direction (2020-2023) defines five 'pillars' of APNIC activity.



1. MEMBERSHIP

Develop and deliver world-class products and services required by APNIC Members

Engage with Members in building a global, open, stable and secure Internet

Ensure accountable governance of APNIC as a membership organization



2. REGISTRY

Develop and deliver world class registry products and services required by the community

Ensure responsible stewardship of Internet number resources and deliver accurate registry services



3. DEVELOPMENT

Invest in sustainable development of the regional Internet community, industry and infrastructure

Build capacity for best-practice Internet operations across the Internet technical community



4. INFORMATION

Support Internet development with needed network information services, and research outcomes which are of demonstrated value to the community



5. CAPABILITY

Provide stable and secure technical infrastructure to support APNIC operations and services

Develop a strong service culture driven by people committed to APNIC's vision and values

Sustain a healthy and resilient organization



APNIC Workstreams

The Four Year Strategic Direction (2020-2023) defines 18 workstreams, across the five pillars, as follows. Each workstream includes a number of activities that are described in this plan.



1. MEMBERSHIP

- 1A. MEMBER SERVICES**
Deliver excellence in service and value to Members through active and quality engagement.
- 1B. MEMBERSHIP PRODUCTS**
Apply best practice in development of membership products that meet Members' needs and exceed their expectations.
- 1C. MEMBERSHIP REPORTING**
Ensure that APNIC remains fully accountable to its Members by providing timely and accurate information about APNIC operations.



2. REGISTRY

- 2A. REGISTRATION SERVICES**
Provide delegation and registration services for Internet numbers (ASNs, IPv4, IPv6) according to community developed policies.
- 2B. REGISTRY PRODUCTS**
Maintain an accurate number registry and reliable registry services.
- 2C. POLICY DEVELOPMENT**
Facilitate the open Policy Development Process to ensure resource policies in the APNIC region are developed and implemented in a neutral manner consistent with agreed rules and community expectations.



3. DEVELOPMENT

- 3A. APNIC CONFERENCES**
Deliver engaging and relevant APNIC conferences for learning, sharing ideas and experience, professional networking, and Internet policy development.
- 3B. FOUNDATION SUPPORT**
Provide operational support to ensure the success of the APNIC Foundation.
- 3C. COMMUNITY ENGAGEMENT**
Build and maintain close and meaningful relationships between APNIC and its various communities.
- 3D. COMMUNITY PARTICIPATION**
Encourage awareness, diversity, participation, and leadership in APNIC processes, events, and activities.
- 3E. APNIC ACADEMY**
Scale up training and technical assistance infrastructure with high-quality training content and curriculum.
- 3F. INTERNET INFRASTRUCTURE SUPPORT**
Promote and support the deployment of critical Internet infrastructure and deploy tools for operational infrastructure monitoring.



4. INFORMATION

- 4A. INFORMATION PRODUCTS**
Provide meaningful information services to the communities APNIC serves.
- 4B. RESEARCH AND ANALYSIS**
Analyse the pressures shaping the evolution and future demands of Internet names and numbers infrastructure, and their impacts.



5. CAPABILITY

- 5A. INTERNAL TECHNICAL INFRASTRUCTURE**
Provide stable and secure technical infrastructure to support APNIC operations and services.
- 5B. FINANCE AND BUSINESS SERVICES**
Provide efficient and robust finance and business services and facilities to effectively support APNIC's operations.
- 5C. EMPLOYEE EXPERIENCE**
Attract, develop and retain talented, service-oriented people to deliver APNIC's mission and exceed organization and community expectations.
- 5D. GOVERNANCE**
Provide the legal, economic and governance framework and professional services to support APNIC's operations to minimize risk and ensure compliance and continuity.



2022 Focus Areas

APNIC's 'Focus Areas' are defined each year in response to emerging needs and priorities that require particular efforts in the short term. The Focus Areas do not change the pillars or workstreams of the Four Year Strategic Direction, but they do indicate where focused efforts will be made, normally across multiple workstreams and activities, during the coming year.

SECURITY, INTEGRITY AND RESILIENCE

Improving security processes and hardening systems

Improving systems integration and information integrity

Developing organizational resilience and new ways of working

Strengthening the RIR system

NEXT GENERATION REGISTRY

Redesigning the registry to take advantage of new technologies and service the new requirements of Internet number resource and registry services

Developing APIs for improved integration and automation

Improving RPKI, RDAP and other critical registry products

CONNECTED ONLINE COMMUNITY

Growing connections with Members and the community online via online products and services

Greater uptake of online engagement tools facilitating two-way conversations

Taking an 'online-first' approach for improved participation across the APNIC region

CAPACITY FOR DEVELOPMENT

'Right-sizing' APNIC resources to respond to growing demands for Internet development and capacity building

Designing and delivering services where they are most needed



2022 Activity Summary

The following table and chart provide a breakdown of APNIC's 2022 budget by pillar and OPEX category (Operations or Investments). The chart on the following page illustrates the budget breakdown by workstream. Activities funded by the APNIC Foundation are detailed in Appendix D.

2022 ACTIVITY BUDGET (AUD)

PILLAR	PY	OPEX (AUD)			CAPEX (AUD)			
		Operations	Investments	Total OPEX				
1 Membership	24.93	20%	4,642,934	866,307	5,509,241	16%	-	0%
2 Registry	15.16	12%	3,054,168	911,507	3,965,675	12%	230,000	16%
3 Development	34.60	28%	7,884,106	3,326,709	11,210,815	33%	128,000	9%
4 Information	9.74	8%	2,246,293	289,387	2,535,680	8%	123,000	8%
5 Capability	37.78	31%	9,527,591	1,015,409	10,543,000	31%	988,300	67%
Grand Total	122.21	100%	27,355,092	6,409,319	33,764,411	100%	1,469,300	100%



Membership



Registry



Development

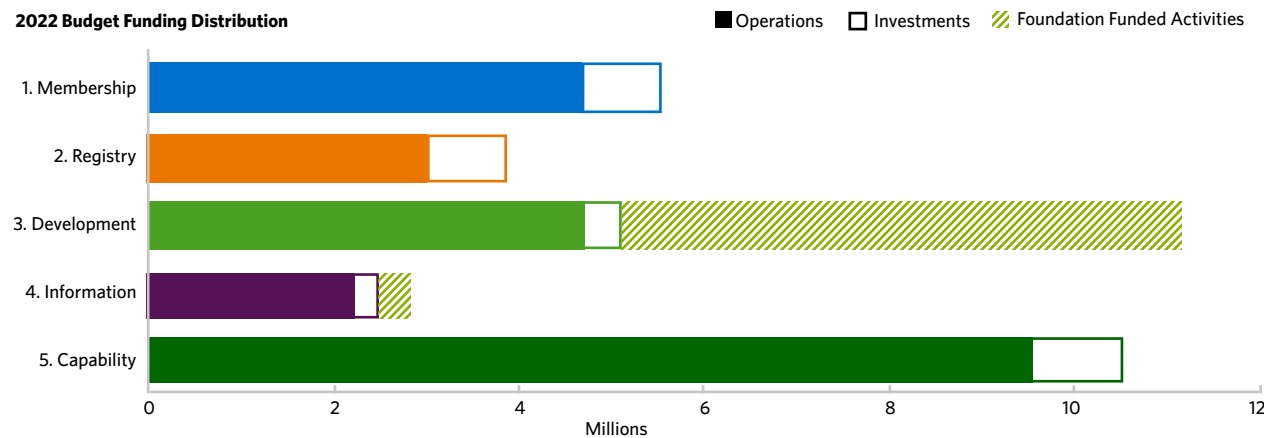


Information



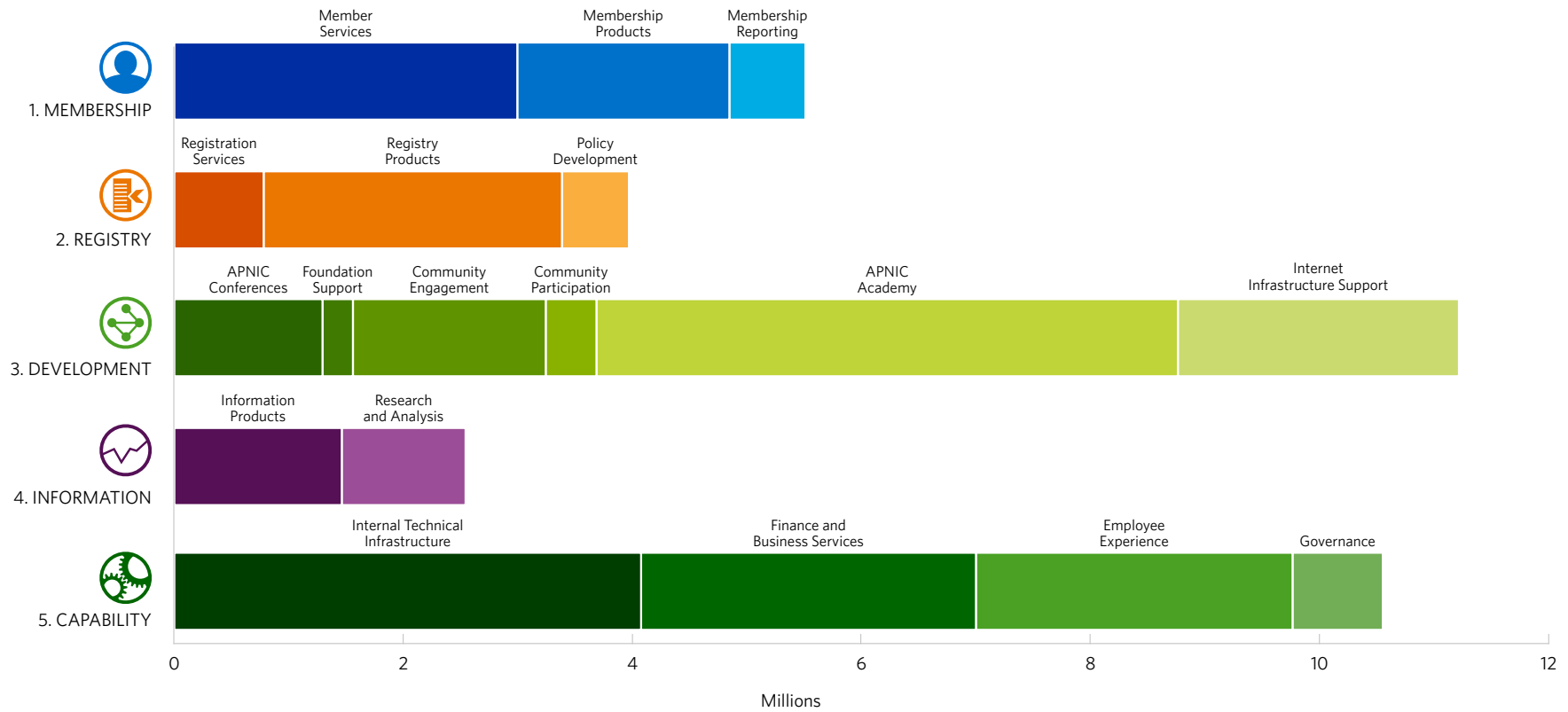
Capability

2022 Budget Funding Distribution





2022 Budget OPEX Distribution (AUD)





Notes on the Activities

APNIC’s activities are outlined in this document under the five pillars and 18 workstreams described in the previous section. Workstreams are numbered within the pillar they belong to, and activities are then numbered within each workstream. For instance, the activity "2B.4 Registry rearchitecture" is the 4th activity in the 2nd workstream (2B. Registry Products) of the 2nd pillar (2. Registry).

The activities are described as either ‘Operations’ or ‘Investments’.



‘Operations’ includes all ongoing activities required for continued provision of current APNIC services.



‘Investments’ are project activities that result in new or improved products or services. In some cases where Investment activities are funded by the APNIC Foundation (rather than Member funds), this is clearly noted.

Please refer to the online [APNIC Glossary](#) for further explanation of terms used in this document.

For each workstream in this report, a table summarizes the resources (financial and human) needed to successfully complete all operational and investment activities. All monetary figures quoted are in Australian Dollars (AUD).

	① PY	② OPEX	③ CAPEX
Operations	12.17	2,778,994	-
Investments	2.50	210,130	-
Workstream total	14.67	2,989,124	-

- ① **PY:** A 'person year', representing the amount of work done by one full-time staff member in one year. Most activities incur a staffing cost, expressed in PY, and in most cases, this comprises contributions from multiple employees. For example: a PY value of 1.6 may be made up of four employees who each contribute 40% of their time for a period of one year (0.4 PY). The detailed account of these allocations is provided in Appendix B 'Person Year Distribution'.
- ② **OPEX:** Refers to all operational costs directly incurred by the activity (in AUD).
- ③ **CAPEX:** Provides the provision for capital expenditure required by the activity (in AUD).



1. MEMBERSHIP

OBJECTIVES

- Develop and deliver world-class products and services required by APNIC Members
- Engage with Members in building a global, open, stable and secure Internet
- Ensure accountable governance of APNIC as a membership organization

WORKSTREAMS

- 1A. Member Services
- 1B. Membership Products
- 1C. Membership Reporting





1A. Member Services

Deliver excellence in service and value to Members through active and quality engagement.

OPERATIONS

1A.1. Member service delivery

Objective	Activities	Success Indicators
<p>Deliver excellence in service to APNIC Members.</p>	<p>Provide proactive and reactive support to Members (including NIRs) using APNIC products and services, including maintaining an accessible Helpdesk.</p> <p>Regular engagement with NIRs for alignment of service delivery and registry consistency.</p>	<ol style="list-style-type: none"> Increase Member outreach touchpoints by at least 20% from 148 in 2021. Maintain Helpdesk SLA of two business day response to enquiries. Maintain Member Service satisfaction of at least 93% "excellent and above average". Proactive Member service engagement in at least 47 economies. Conduct quarterly meetings with all NIRs.

	PY	OPEX	CAPEX
Operations	12.17	2,778,994	-
Investments	2.50	210,130	-
Workstream total	14.67	2,989,124	-



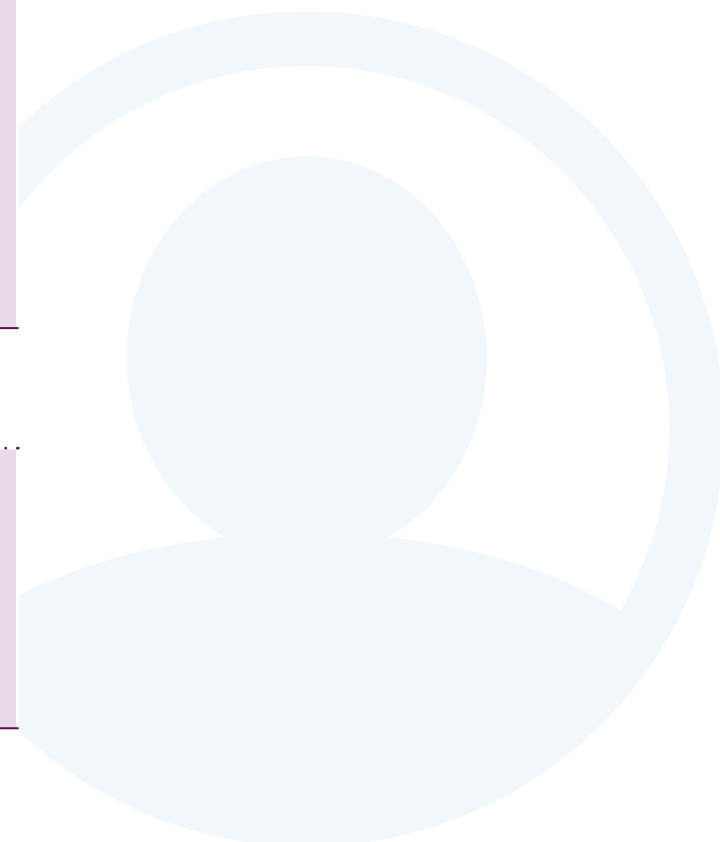
1A. Member Services - continued

1A.2. Member experience

Objective	Activities	Success Indicators
Members and the community enjoy a positive user experience and can easily provide feedback across all APNIC products and services.	<p>Capture, analyse and action feedback provided by Members and the community on APNIC products and services, including maintaining a User Feedback Group.</p> <p>Conduct user research and testing to identify potential online usability improvements.</p>	<ol style="list-style-type: none"> 100% of improvement suggestions are assessed and followed up. Increase engagement with User Feedback Group by at least 20% from 298 in 2021. Achieve online System Usability Scale (SUS) score of 68/100.

1A.3. Membership development

Ensure organizations that may need APNIC products and services can discover and access them easily.	Increase awareness of APNIC membership, products and services in economies with low membership relative to their Internet growth potential.	<ol style="list-style-type: none"> At least eight membership development activities in target economies. Achieve at least 492 new Members (net) in 2022.
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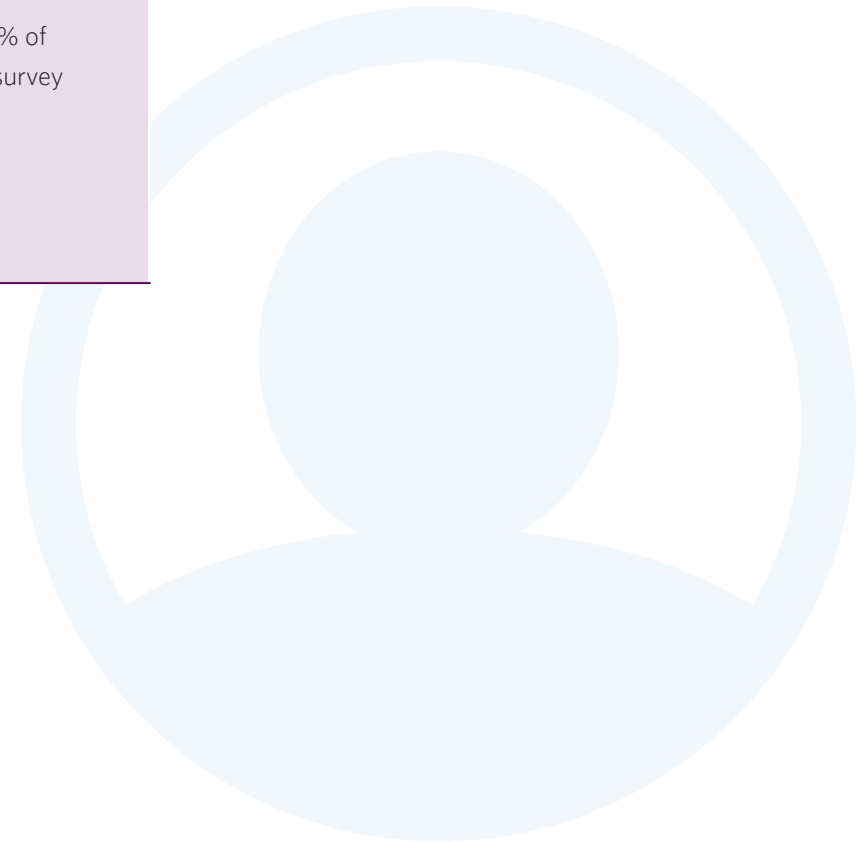




1A. Member Services - continued

1A.4. APNIC Survey

Objective	Activities	Success Indicators
<p>Update understanding of Member and community needs, and how APNIC can best serve them.</p>	<p>Conduct the APNIC Member and stakeholder survey in 2022, to gather important information on issues affecting Members and the wider community.</p> <p>In 2022, the survey model will be expanded to try to reach those who engage less often with APNIC.</p>	<ol style="list-style-type: none"> 1. Increase total survey response by at least 10% from 1,624 in 2020. 2. Achieve at least 10% of responses by new survey participants.



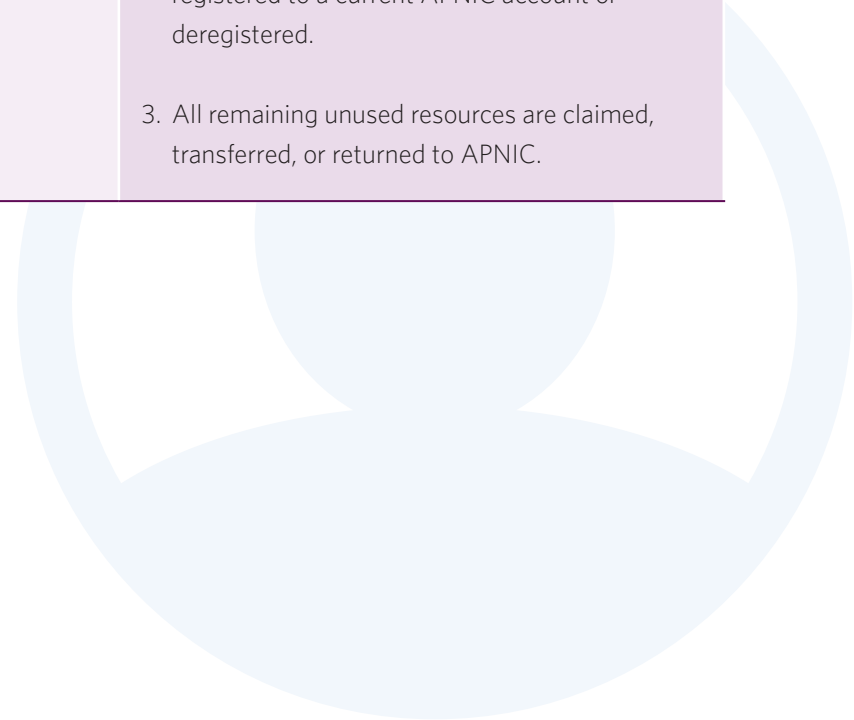


1A. Member Services - continued

INVESTMENTS

1A.5. Historical resources transition

Objective	Activities	Success Indicators
<p>Prepare for transition to new fee structure for Historical Resources from 1 Jan 2023.</p>	<p>Identify and contact historical resource holders and migrate them to APNIC account holders.</p> <p>Deregister resources of uncontactable historical holders.</p> <p>Complete processing of unused historical resources as per <u>prop-017</u>.</p>	<ol style="list-style-type: none"> 1. Attempt contact with all 1,900 historical resource holders. 2. All 3,778 historical resource objects are either registered to a current APNIC account or deregistered. 3. All remaining unused resources are claimed, transferred, or returned to APNIC.





1B. Membership Products

Apply best practice in development of membership products that meet Members' needs and exceed their expectations.

OPERATIONS

1B.1. Membership product management

Objective	Activities	Success Indicators
Provide products and services that make it easier for APNIC Members to manage their accounts.	Operate and maintain APNIC Membership Products, including: MyAPNIC, online forms, online election platform and Member help and support systems. Complete SSO migration to Okta.	<ol style="list-style-type: none"> Maintain MyAPNIC availability of at least 99.99%. Achieve Membership Products satisfaction of at least 80%.

	PY	OPEX	CAPEX
Operations	6.48	1,188,489	-
Investments	2.92	656,177	-
Workstream total	9.40	1,844,666	-



1B. Membership Products – continued

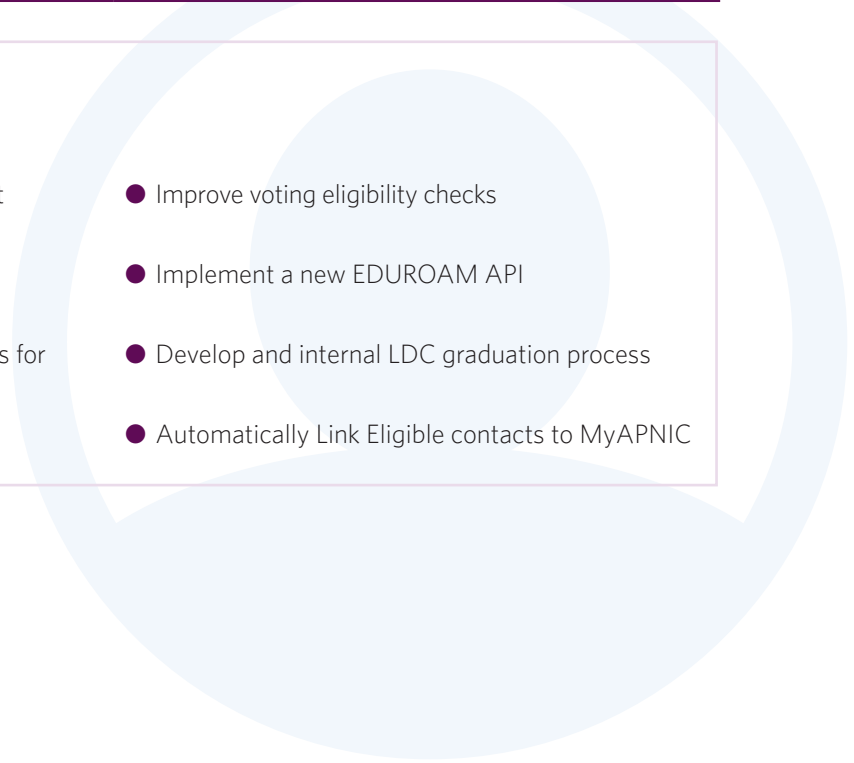
INVESTMENTS

1B.2. Membership product development

Objective	Activities	Success Indicators
<p>Develop and improve products and services that make it easier for APNIC Members to manage their accounts.</p>	<p>Ongoing development of Membership Products according to APNIC’s Product Management framework.</p>	<p>1. Achieve all 2022 goals, according to the Membership Products Roadmap.</p>

Roadmap goals

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> ● Add automated workflow to support the HRM initiative | <ul style="list-style-type: none"> ● Improve MyAPNIC contact management | <ul style="list-style-type: none"> ● Improve voting eligibility checks |
| <ul style="list-style-type: none"> ● Improve the quality and workflow of "Invalid Contact" reports | <ul style="list-style-type: none"> ● Implement a new MyAPNIC dashboard | <ul style="list-style-type: none"> ● Implement a new EDUROAM API |
| <ul style="list-style-type: none"> ● Overhaul MyAPNIC information architecture | <ul style="list-style-type: none"> ● Improve MyAPNIC audit and activity logs for corporate contacts | <ul style="list-style-type: none"> ● Develop and internal LDC graduation process |
| | | <ul style="list-style-type: none"> ● Automatically Link Eligible contacts to MyAPNIC |





1C. Membership Reporting

Ensure that APNIC remains fully accountable to its Members by providing timely and accurate information about APNIC operations.

OPERATIONS

1C.1. Planning and reporting

Objective	Activities	Success Indicators
Ensure that APNIC remains fully accountable to its Members by providing timely, complete and accurate information about all activities.	Develop and publish APNIC's 2022 Activity Plan and Budget, 2021 Annual Report, and other reports to the community, as required.	<ol style="list-style-type: none"> Publish required reports on the day of the APNIC Member Meetings. Publish EC Minutes within two months of each EC meeting.

	PY	OPEX	CAPEX
Operations	0.87	675,471	-
Investments	-	-	-
Workstream total	0.87	675,451	-



2. REGISTRY

OBJECTIVES

- Develop and deliver world class registry products and services required by the community
- Ensure responsible stewardship of Internet number resources and deliver accurate registry services

WORKSTREAMS

- 2A. Registration Services
- 2B. Registry Products
- 2C. Policy Development





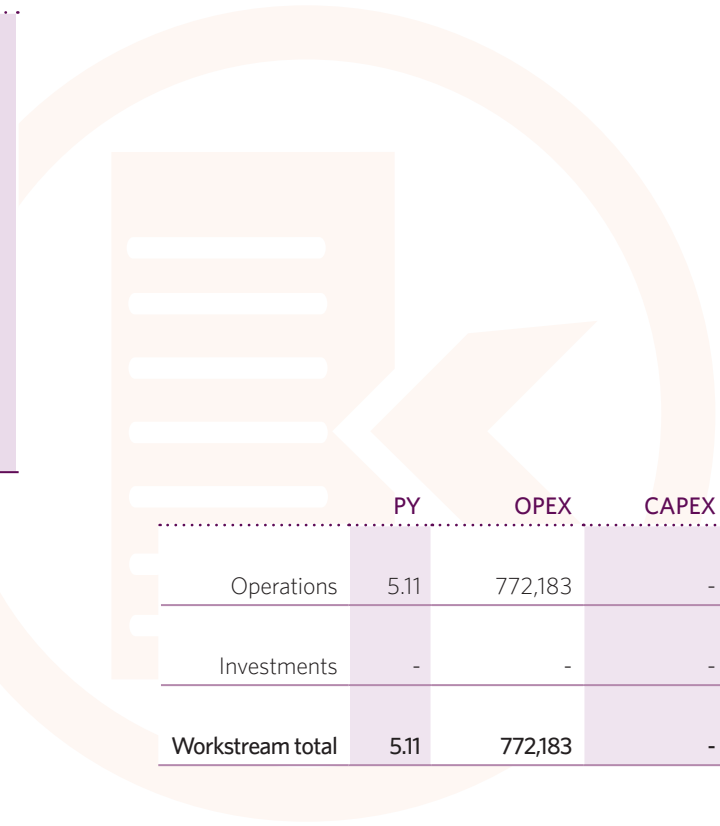
2A. Registration Services

Provide delegation and registration services for Internet numbers (ASNs, IPv4, IPv6) according to the community developed policies.

OPERATIONS

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

Objective	Activities	Success Indicators
Provide IPv4, IPv6 and ASN delegation and registration services to APNIC Members	<p>Provide delegation and registration services for Internet numbers according to current policies.</p> <p>In 2021, APNIC processed 5,662 resource delegations and transfer requests. It is assumed that this activity will continue at a similar level in 2022.</p>	<ol style="list-style-type: none"> Maintain Registration Services SLA of two business day response to enquiries. Increase percentage of Members holding IPv6 address space to at least 70% from 68%.



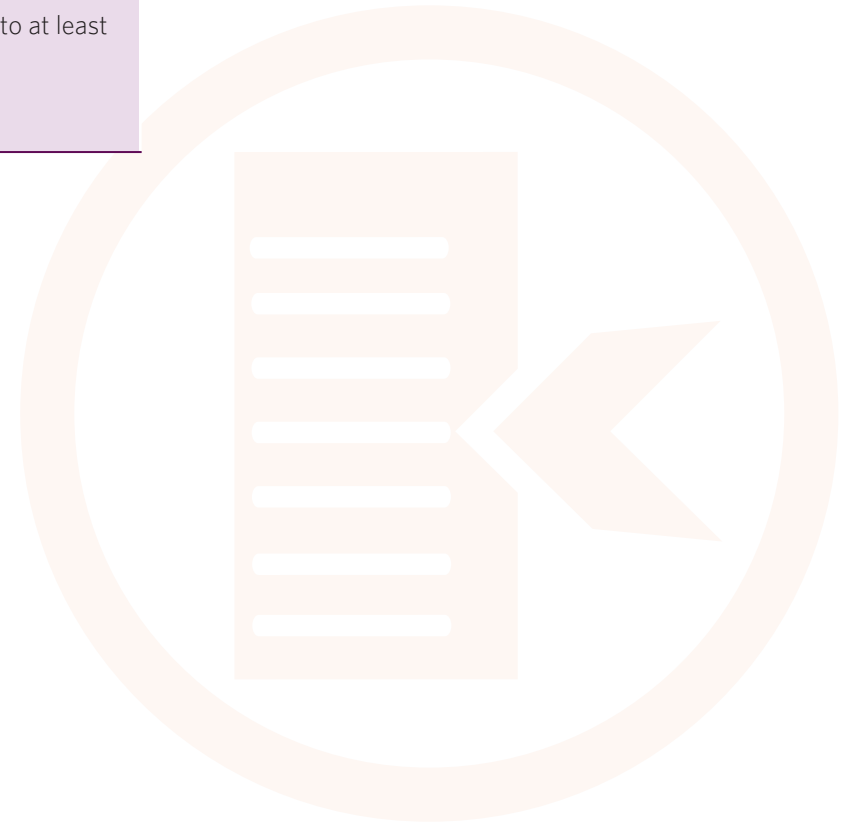
	PY	OPEX	CAPEX
Operations	5.11	772,183	-
Investments	-	-	-
Workstream total	5.11	772,183	-



2A. Registration Services – continued

2A.2. Maintain correct and current registry data

Objective	Activities	Success Indicators
<p>Ensure registry data is comprehensive, current and correct.</p>	<p>Encourage Members to improve and maintain accuracy and currency of their registry data.</p> <p>Implement NRO-defined Identifier Technology Health Indicators (ITHI) reporting.</p>	<ol style="list-style-type: none"> 1. Comply with ITHI reporting requirements. 2. Increase validation of registration records to at least 85% from 76%.





2B. Registry Products

Maintain an accurate number registry and reliable registry services.

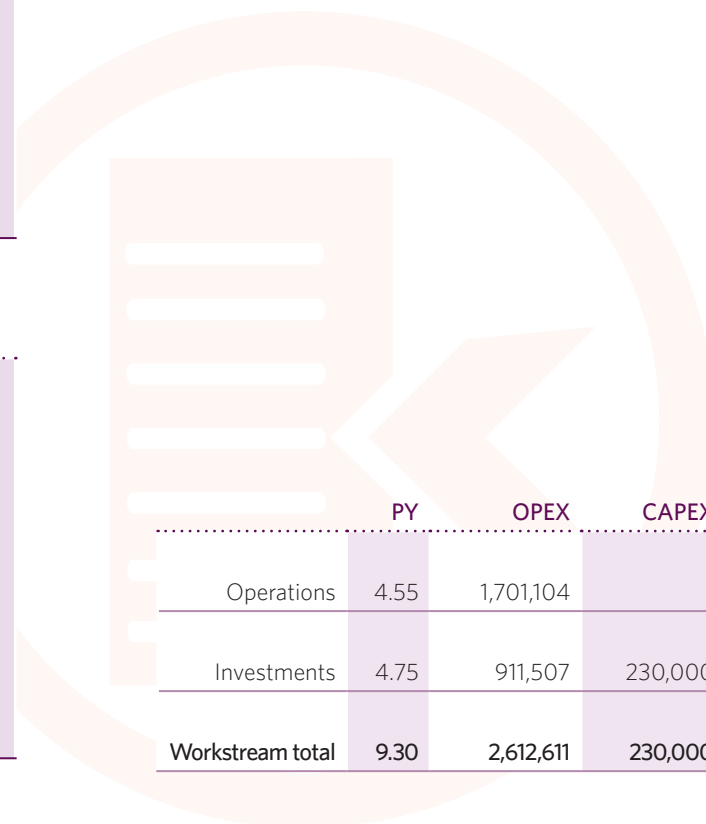
OPERATIONS

2B.1. Internet Number Registry Management

Objective	Activities	Success Indicators
Register address space allocations and assignments to ensure uniqueness and provide information for Internet troubleshooting at all levels.	Operate and manage an accurate and stable public number registry service.	1. Maintain APNIC Registry Management System (ARMS) availability of at least 99.99%.

2B.2. Registry Product Management

Provide essential registry products and services to help network operators maintain a secure, available and stable Internet.	Operate and maintain APNIC Registry Products including whois, RDAP, RPKI, RDNS and IRR.	1. Maintain whois, RDAP, RPKI, RDNS and IRR availability of at least 99.99%. 2. Update APNIC RDAP to comply with the RIR RDAP profile. 3. Migrate RDNS API services to CentOS 7.
	This includes participation in related IETF standardization work.	



	PY	OPEX	CAPEX
Operations	4.55	1,701,104	-
Investments	4.75	911,507	230,000
Workstream total	9.30	2,612,611	230,000



2B. Registry Products – continued

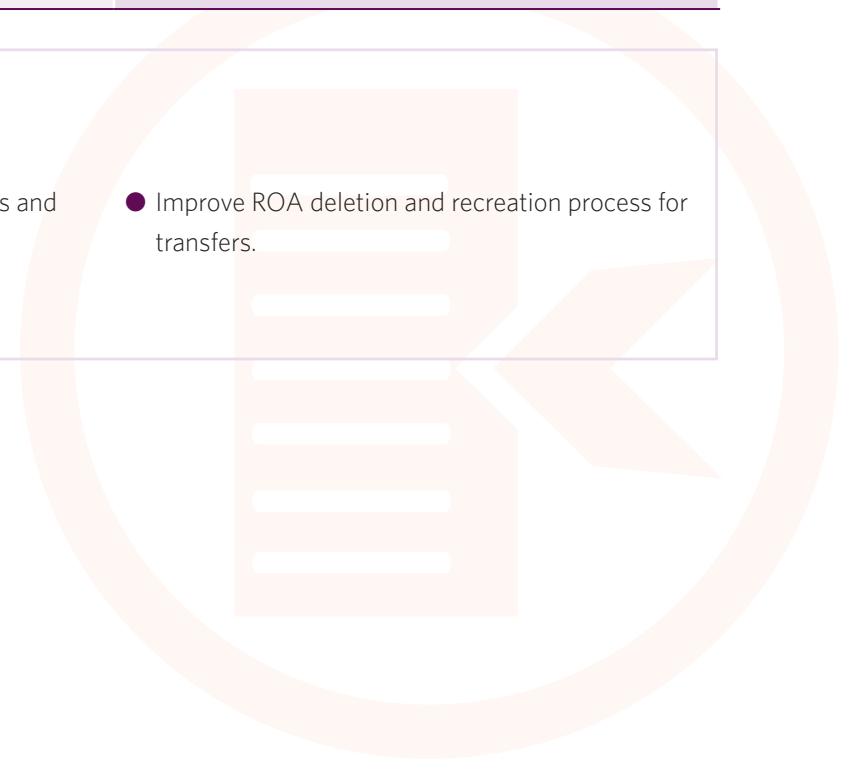
INVESTMENTS

2B.3. Registry product development

Objective	Activities	Success Indicators
Develop and improve essential registry products and services.	Ongoing development of Registry Products according to APNIC’s Product Management framework.	1. Achieve all 2022 goals, according to the <u>Registry Products Roadmap</u> .

Roadmap goals

- Pre-validate all RPKI changes to avoid errors
- Update authorization mechanisms for whois
- Improve ASN delegation identity in whois and MyAPNIC
- Improve ROA deletion and recreation process for transfers.





2B. Registry Products – continued

2B.4. Registry re-architecture

Objective	Activities	Success Indicators
<p>Improve security, reliability, and efficiency of the APNIC registry, and facilitate easier development of future registry services and functions required by the community.</p>	<p>Rearchitect APNIC’s registry database and management systems to increase automation, stability, and support a more diverse range of registry services, including a Member API. This is a multi-year development project.</p>	<ol style="list-style-type: none"> 1. Progress development of a Member API with a completion target of 2023. 2. Progress reimplementing of the internal registry in Java with a completion target of 2023. <p>For more information, see the Registry Products Roadmap.</p>

2B.5. Readiness for Five-9s Availability for Highly Critical Services

<p>Define ‘highly critical services’ and prepare for 99.999% availability for these services.</p>	<p>Perform a gap analysis and develop an implementation plan, including infrastructure and operations upgrades, review of software architecture, and process improvements in software development and IT operations.</p>	<ol style="list-style-type: none"> 1. Achieve readiness to implement by end of 2022.
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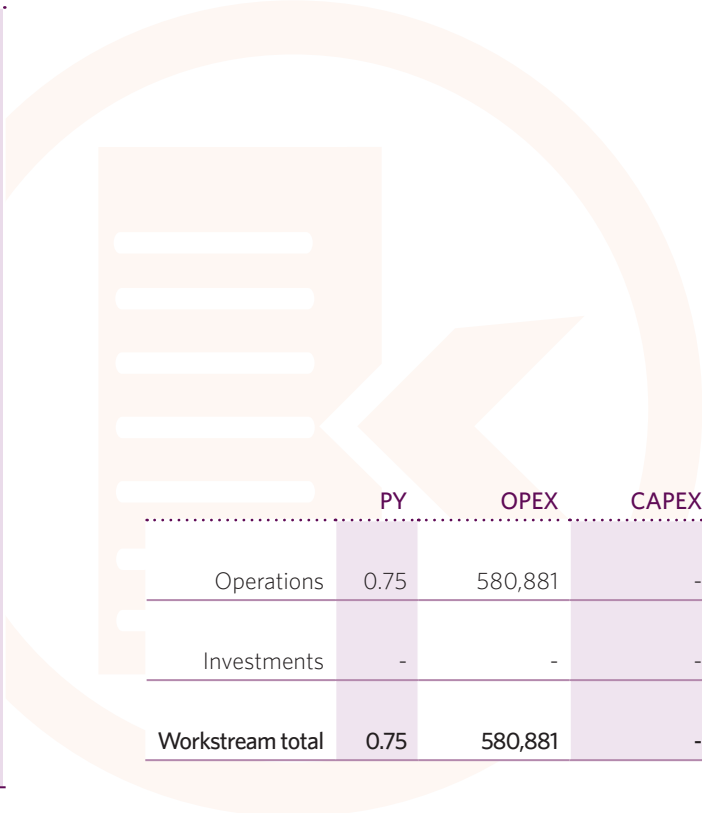
2C. Policy Development

Facilitate the open Policy Development Process (PDP) to ensure resource policies in the APNIC region are developed and implemented in a neutral manner consistent with agreed processes and community expectations.

OPERATIONS

2C.1. Policy development

Objective	Activities	Success Indicators
<p>Ensure resource policies in the APNIC region are developed in line with the community-agreed PDP.</p>	<p>PDP facilitation including support for:</p> <ul style="list-style-type: none"> Two Policy SIG meetings, inter-sessional policy meetings, mailing lists and APNIC's online collaboration spaces Exchange of policy-related information with other RIRs Support ASO Address Council Members and processes in the APNIC region Engage and cooperate with NIRs on policy matters 	<ol style="list-style-type: none"> Achieve SIG Chair Support satisfaction of at least 6/7. Achieve PDP satisfaction of at least 5.75/7 in the APNIC Survey. Participate in all NIR OPMs.



	PY	OPEX	CAPEX
Operations	0.75	580,881	-
Investments	-	-	-
Workstream total	0.75	580,881	-



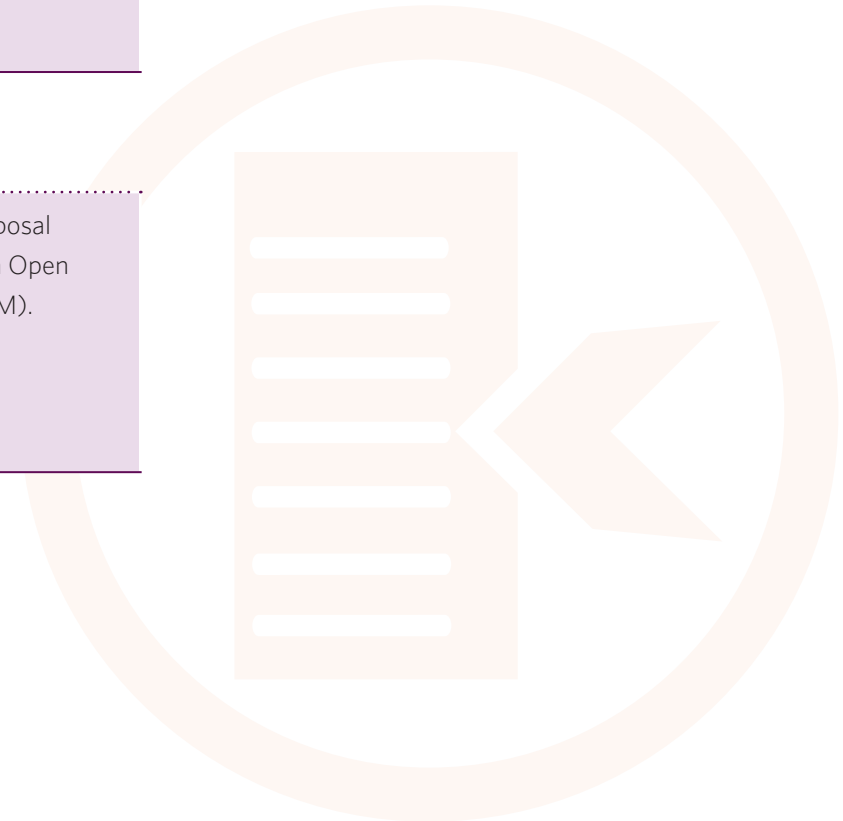
2C. Policy Development - continued

2C.2. Policy implementation

Objective	Activities	Success Indicators
Implement APNIC resource policies in a neutral manner consistent with agreed processes, timings and community expectations.	Initiate and coordinate the implementation of approved resource policies to agreed community deadlines.	1. Meet 100% of policy implementation timelines.

2C.3. Policy analysis

Provide neutral policy advice and impact analysis to help the APNIC community make informed policy decisions.	Analyse the impact of policy proposals on registry operations; identify areas where policy change may be considered; and contribute to policy discussions as appropriate.	1. Publish a policy proposal analysis before each Open Policy Meeting (OPM).
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3. DEVELOPMENT

OBJECTIVES

- Invest in sustainable development of the regional Internet community, industry and infrastructure
- Build capacity for best-practice Internet operations across the Internet technical community

WORKSTREAMS

- 3A. APNIC Conferences
- 3B. Foundation Support
- 3C. Community Engagement
- 3D. Community Participation
- 3E. APNIC Academy
- 3F. Internet Infrastructure Support





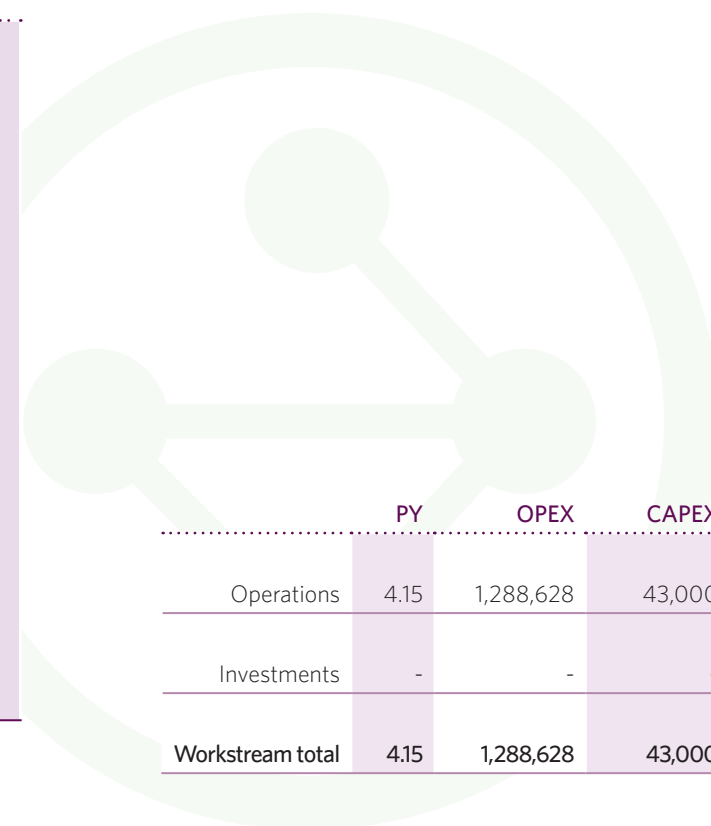
3A. APNIC Conferences

Deliver engaging and relevant APNIC conferences for learning, sharing ideas and experience, professional networking, and Internet policy development.

OPERATIONS

3A.1. APNIC conferences

Objective	Activities	Success Indicators
<p>Provide two conferences each year for the APNIC community to learn, share ideas and experience, build relationships, and develop Internet policy.</p> <ul style="list-style-type: none"> APRICOT 2022 is scheduled for 21 February – 3 March 2022. APNIC 54 is scheduled for 7 – 15 September 2022. 	<p>Deliver well-organized, high-quality conferences with consistently interesting and relevant program content.</p> <p>Due to COVID restrictions, APRICOT 2022 will be a virtual event while APNIC 54 may include a face-to-face element.</p> <p>An 'online-first' approach will be taken for both conferences to ensure an inclusive user experience. The conference website infrastructure will be refreshed.</p>	<ol style="list-style-type: none"> Achieve total attendance of at least 1,200 (face-to-face and online) across two conferences. Achieve participant satisfaction of at least 90% at each conference. Achieve Net Promoter Score of at least 50 at each conference.





3B. Foundation Support

Provide operational support to ensure the success of the APNIC Foundation.

INVESTMENTS

3B.1. Foundation support

Objective	Activities	Success Indicators
Provide support to the Foundation, in accordance with the AoC of 2018, as its operations mature and evolve.	Provide administrative and operational support including: <ul style="list-style-type: none"> Up to a total of 1.31 Person Years in operational support Enterprise systems access and support Office space, equipment and online systems support as required 	N/A

	PY	OPEX	CAPEX
Operations	-	-	-
Investments	1.31	264,777	-
Workstream total	1.31	264,777	-



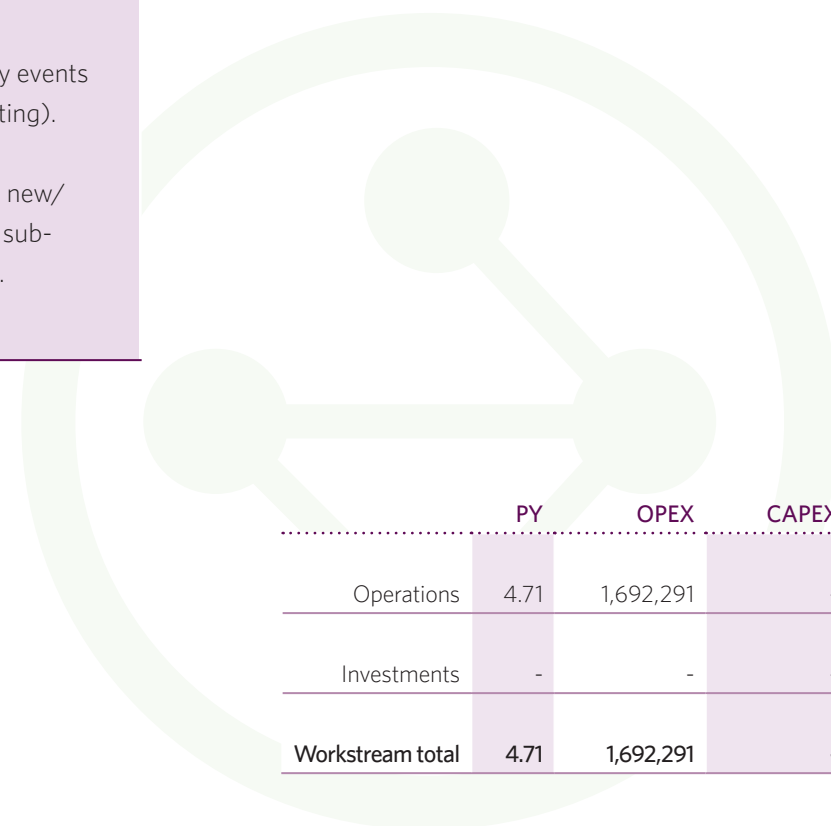
3C. Community Engagement

Build and maintain close and meaningful relationships between APNIC and its various communities.

OPERATIONS

3C.1. Technical community support

Objective	Activities	Success Indicators
Participate in, and encourage the development of, a healthy Asia Pacific technical community.	<p>Support NOGs, IXPs, Peering Forums and REN community activities, through participation, content and/or sponsorship.</p> <p>Support NOGs to conduct online events if physical events are not possible.</p>	<ol style="list-style-type: none"> Support at least 30 technical community events (opportunity permitting). Support at least one new/revived NOG in two sub-regions (if required).



	PY	OPEX	CAPEX
Operations	4.71	1,692,291	-
Investments	-	-	-
Workstream total	4.71	1,692,291	-



3C. Community Engagement – continued

3C.2. Security community support

Objective	Activities	Success Indicators
Increase collaboration and build trust with the security community, and increase awareness around relevant security issues.	<p>Support security community events, through participation, content and/or sponsorship.</p> <p>Support CERTs/CSIRTs with technical assistance.</p> <p>Host high quality security content at APNIC conferences.</p>	<ol style="list-style-type: none"> 1. Support at least 12 security community events (opportunity permitting). 2. Support development of at least four new or existing CERTs/CSIRTs (if needed). 3. Organize quarterly threat sharing community events.

3C.3. Internet organization cooperation

Seek opportunities to strengthen collaboration with other regional and global Internet organizations.	<p>Participate in meetings and joint initiatives with Internet organizations including the NRO, RIRs, ICANN, IETF, ISOC and others.</p> <p>In 2022, undertake responsibilities as Chair of the NRO EC and coordination groups, and represent the NRO as necessary.</p>	<ol style="list-style-type: none"> 1. Ensure APNIC is represented in all NRO EC and 'I-star' coordination meetings. 2. Participate in all RIR Open Policy Meetings.
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3C. Community Engagement – continued

3C.4. Internet governance participation

Objective	Activities	Success Indicators
<p>Engage the community to strengthen open, multistakeholder, bottom-up and transparent Internet governance processes.</p>	<p>Support national, regional and global Internet governance events including the IGF, APrIGF, national IGF and schools of Internet governance, through participation, content and/or sponsorship.</p> <p>Represent the NRO, in the capacity of NRO Chair, as needed in Internet governance events.</p>	<ol style="list-style-type: none"> 1. Organize at least three workshop proposals at APrIGF 2022. 2. Support at least five national or sub-regional Internet governance events.





3C. Community Engagement – continued

3C.5. Government engagement

Objective	Activities	Success Indicators
<p>Build and maintain meaningful relationships between APNIC and government and public safety agencies in the region.</p>	<p>Participate in inter-governmental forums such as the ITU, APT and APEC TEL, and engage with other relevant government and public safety agencies in the region.</p> <p>Follow global ITU conferences: WTSA, WTDC and the Plenipotentiary, as well as their regional preparatory processes.</p>	<ol style="list-style-type: none"> 1. Participate in at least 12 governmental or inter-governmental engagements. 2. Support at least three governmental capacity-building events.



3C. Community Engagement – continued

3C.6. External Relations coordination

Objective	Activities	Success Indicators
<p>Build institutional knowledge of APNIC’s relationships with Members and other stakeholders, and improve value and outcomes of engagement activities.</p>	<p>Coordinate APNIC’s External Relations (ER) activities across all stakeholder segments and sub-regions.</p> <p>Maintain the APNIC CRM including records of ER contacts, touchpoints, events and engagements.</p> <p>Support the ER team with administration, systems, and professional development.</p>	<ol style="list-style-type: none"> 1. Increase ER touchpoints by at least 5% from 456 in 2021. 2. Achieve at least 250 APNIC engagements in 2022.





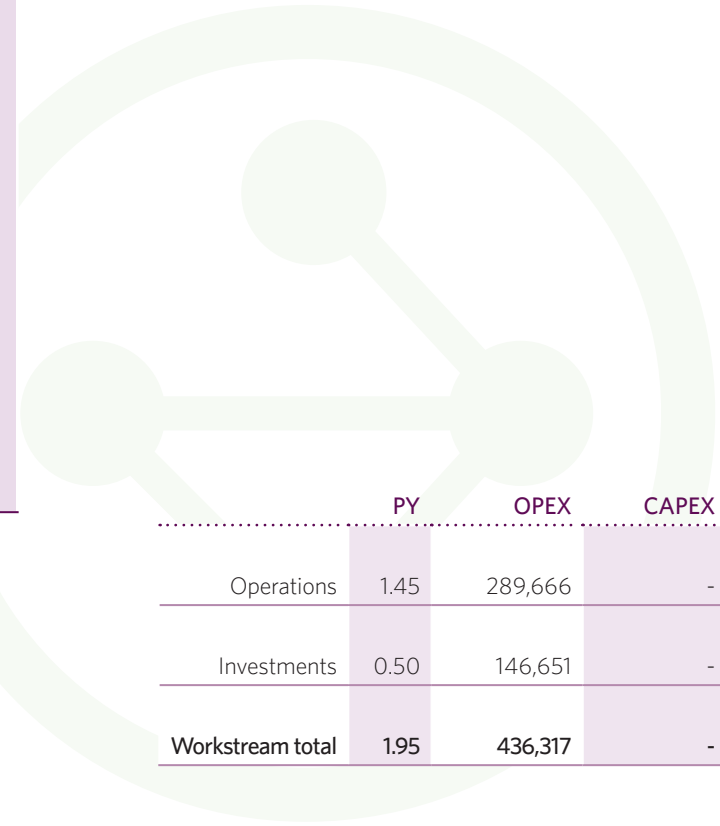
3D. Community Participation

Encourage awareness, diversity, participation, and leadership in APNIC processes, events, and activities.

OPERATIONS

3D.1. Community-led processes

Objective	Activities	Success Indicators
Increase awareness and participation in APNIC community-led processes including the PDP, SIGs (Policy, Cooperation, NIR, Routing Security), Working Groups, and BoFs.	Promote participation in community-led processes via APNIC’s communication channels, community engagement, training and outreach, active facilitation, and supporting development of the community platform (see 3D.4).	<ol style="list-style-type: none"> 1. Achieve at least 850 online SIG participants across two conferences. 2. Achieve at least 120 online participants across at least four inter-sessional SIG meetings. 3. Achieve SIG satisfaction of at least 5.8/7 in the APNIC Survey.



	PY	OPEX	CAPEX
Operations	1.45	289,666	-
Investments	0.50	146,651	-
Workstream total	1.95	436,317	-



3D. Community Participation - continued

3D.2. Online Participation

Objective	Activities	Success Indicators
Encourage community development online and help Members and the community benefit from APNIC's available online resources.	Promote APNIC's online platforms, products, services and activities – via online and offline communication channels and engagements – to increase awareness, encourage greater usage and online participation.	1. Achieve at least 500 registered users of the APNIC community platform.

3D.3. Encouraging newcomers and diversity

Encourage new and continuing participants from diverse backgrounds in the APNIC community – both online and face-to-face – particularly the next generation of network engineers.	<p>Create and highlight opportunities for new and diverse participants to take part in APNIC community activities.</p> <p>Provide a six-month fellowship program to build understanding of APNIC and core operational concepts, professional networking, and ongoing participation in community activities.</p>	<ol style="list-style-type: none"> 1. Attract at least 400 newcomers to APNIC conferences. 2. Achieve at least 50% female and 30% youth participation in 2022 Fellowships. 3. Achieve a fellowship graduation rate of at least 80%. 4. Achieve a fellowship program NPS of at least 80.
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3D. Community Participation - continued

INVESTMENTS

3D.4. Online community platform

Objective	Activities	Success Indicators
<p>Encourage an active, connected APNIC community engaging on an integrated online community platform.</p>	<p>Finalize the technology platform and functionality of the online community platform.</p> <p>Launch a minimum viable product (MVP), including integration of APNIC mailing lists.</p>	<p>1. Achieve at least 500 registered users of the platform.</p>





3E. APNIC Academy

Scale up training and technical assistance infrastructure with high-quality training content and curriculum.

OPERATIONS

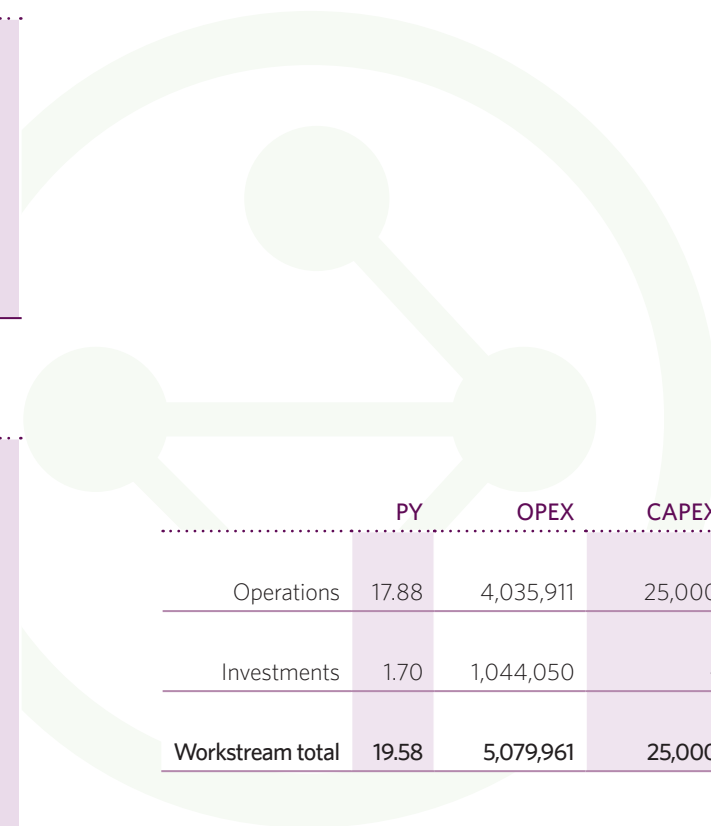
3E.1. Academy product management [Foundation funded (partial) – see Appendix D]

Objective	Activities	Success Indicators
Maintain high-quality training assets to build capacity in the region.	Maintain APNIC Academy curriculum (both instructor-led and self-paced content) and the online learning platform.	<ol style="list-style-type: none"> Maintain Academy platform availability of at least 99.95%. Achieve a rating of at least 6.00 for APNIC training in the APNIC Survey.

3E.2. Instructor-led training [Foundation funded (partial) – see Appendix D]

Increase knowledge and skills in the community via instructor-led training.	Deliver instructor-led training around the APNIC region (face-to-face, online or hybrid) focused on real-world deployment and best practices.	<ol style="list-style-type: none"> Conduct at least 100 instructor-led tutorials/workshops. Conduct at least 18 live webinars. Achieve average training survey rating of 4/5.
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	PY	OPEX	CAPEX
Operations	17.88	4,035,911	25,000
Investments	1.70	1,044,050	-
Workstream total	19.58	5,079,961	25,000





3E. APNIC Academy - continued

3E.3. Self-paced training [Foundation funded (partial) - see Appendix D]

Objective	Activities	Success Indicators
Increase knowledge and skills in the community via self-paced online training.	Provide on-demand, self-paced online courses and virtual labs via the APNIC Academy online platform. Raise awareness to increase usage in the region.	<ol style="list-style-type: none"> 1. Increase total self-paced online course usage by at least 30% from 3,340 hours in 2021. 2. Increase total virtual lab usage by at least 20% from 6,902 hours in 2021. 3. Increase registered users of the APNIC Academy by at least 25% from 17,018 in 2021.

3E.4. Community Trainers network [Foundation funded - see Appendix D]

Expand the scope and effectiveness of APNIC Academy training to help meet increasing community demand for technical skills development.	Recruit, retain and develop more Community Trainers (CTs) locally and on the ground to deliver training across the region and remain active in their local NOGs and technical community.	<ol style="list-style-type: none"> 1. Recruit at least 12 new retained CTs. 2. Recruit at least 10 new volunteering CTs.
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3E. APNIC Academy - continued

3E.5. Technical assistance [Foundation funded (partial) - see Appendix D]


Objective	Activities	Success Indicators
Assist Members on adoption of best practices when implementing networking technologies.	Provide technical assistance and advice to Members both online via the APNIC Academy platform and face-to-face (travel permitting).	1. Respond to all technical assistance requests within seven days.

3E.6. RPKI awareness and deployment support [Foundation funded (partial) - see Appendix D]

Increase adoption of RPKI and routing security in the APNIC region.	Provide training and technical assistance on RPKI and ROV deployment, raise awareness and share best practice via presentations at relevant events, blog posts and online information.	<ol style="list-style-type: none"> 1. Conduct at least two instructor-led RPKI/ROV tutorials/workshops per sub-region. 2. Achieve at least 90% ROA coverage for at least one additional economy per sub-region. 3. Publish at least three RPKI/ROV deployment case studies.
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3E. APNIC Academy - continued

3E.7. IPv6 awareness and deployment support [Foundation funded (partial) 
- see Appendix D]

Objective	Activities	Success Indicators
Encourage increased deployment of IPv6 in the APNIC region.	Provide training and technical assistance, and sharing of IPv6 best practices, information resources and case studies.	<ol style="list-style-type: none"> 1. Conduct at least two instructor-led IPv6 deployment tutorials/ workshops per sub-region. 2. Publish at least two IPv6 deployment case studies.





3E. APNIC Academy - continued

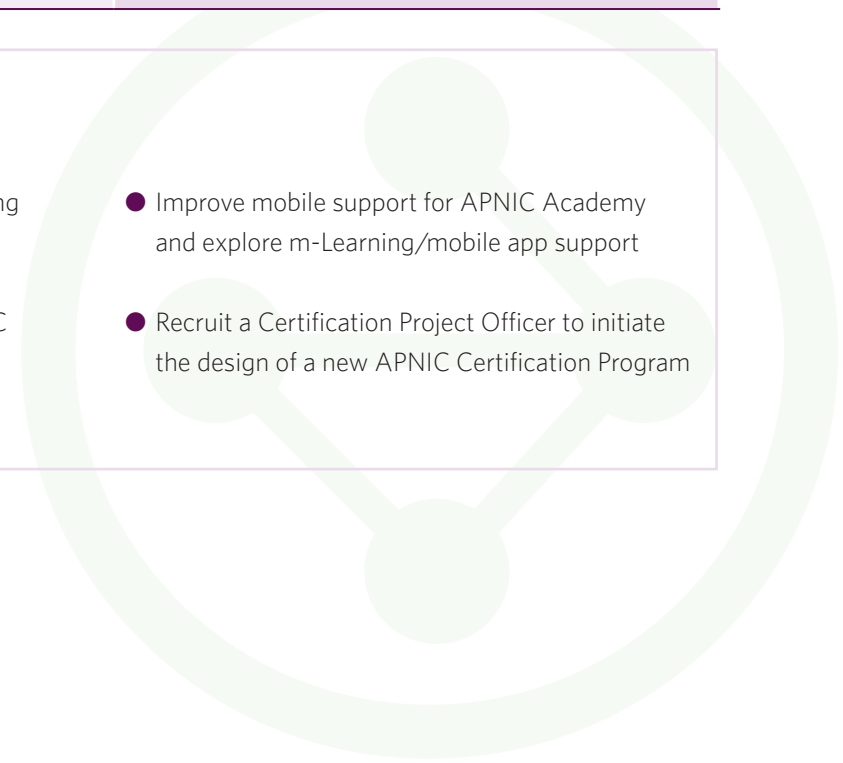
INVESTMENTS

3E.8. Academy product development [Foundation funded – see Appendix D] 

Objective	Activities	Success Indicators
Continue developing high-quality training assets to build capacity in the region.	Ongoing development of Academy Products according to APNIC’s Product Management framework.	1. Achieve all 2022 goals, according to the Academy Products Roadmap.


Roadmap goals

- Integrate with Salesforce for improved registration, case management and reporting
- Integrate with Okta for better account provisioning of eduroam, eduGAIN and social logins
- Establish a central repository of all training materials
- Migrate the Training Wiki into the APNIC Academy platform
- Improve mobile support for APNIC Academy and explore m-Learning/mobile app support
- Recruit a Certification Project Officer to initiate the design of a new APNIC Certification Program





3E. APNIC Academy - continued

3E.9. Curriculum for non-technical audiences [Foundation funded – see Appendix D] 

Objective	Activities	Success Indicators
Demystify how the Internet works to encourage active participation of non-technical audiences in Internet governance.	Continue development of a digital educational game (IPGO) that teaches Internet fundamentals through to first phase release.	1. Release phase 1 of IPGO by June 2022.





3F. Internet Infrastructure Support

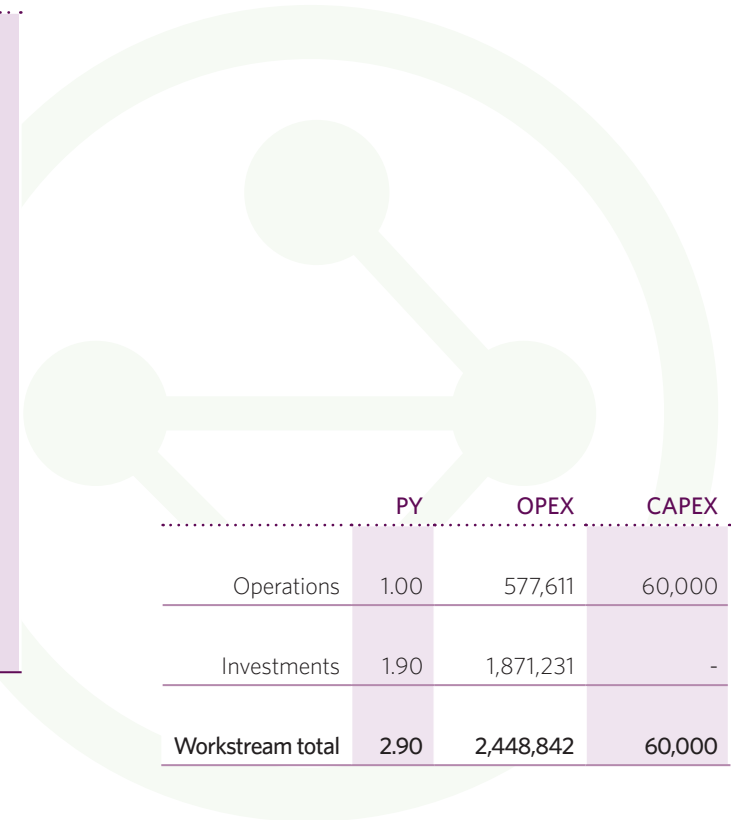
Promote and support the deployment of critical Internet infrastructure and deploy tools for operational infrastructure monitoring.

OPERATIONS

3F.1. Internet infrastructure deployment [Foundation funded (partial) - see Appendix D]


Objective	Activities	Success Indicators
<p>Improve the resilience and performance of the Internet in the region by expanding critical infrastructure deployment.</p>	<p>Support the deployment and management of IXPs, DNS anycast rootservers and ROV support, and deployment of anchors and probes for the RIPE Atlas program.</p>	<ol style="list-style-type: none"> 1. Support deployment of at least two new or upgraded IXPs. 2. Support at least four IXPs to deploy ROV. 3. Deploy at least four root servers per sub-region, including M-Root servers (see 3F.3). 4. Deploy or upgrade at least one RIPE Atlas anchor per sub-region.

	PY	OPEX	CAPEX
Operations	1.00	577,611	60,000
Investments	1.90	1,871,231	-
Workstream total	2.90	2,448,842	60,000





3F. Internet Infrastructure Support - continued

3F.2. Community Honeynet and Security Threat Sharing Platform [Foundation funded  (partial) - see Appendix D]


Objective	Activities	Success Indicators
Increase visibility of security threats and vulnerabilities relevant to Members and the community and encourage information sharing to understand and manage threats.	<p>Maintain and grow the APNIC Community Honeynet and Security Threat Sharing Platform, including engaging with partners to host sensors for the project.</p> <p>Provide data feeds to DASH and share research findings via events and the APNIC Blog.</p>	<ol style="list-style-type: none"> 1. Increase the number of honeypot sensors by at least 60% from 60 in 2021. 2. Increase the Community Honeynet and Security Threat Sharing Platform partners by at least 30% from 15 in 2021.





3F. Internet Infrastructure Support - continued

INVESTMENTS

3F.3. M-Root deployment support [Foundation funded - see Appendix D] 

Objective	Activities	Success Indicators
<p>Faster and more reliable DNS service in the APNIC region.</p>	<p>Deploy M-Root anycast instances, working in partnership with the WIDE Project and JPRS.</p> <p>High-volume or underserved locations will be preferred.</p>	<ol style="list-style-type: none"> 1. Complete 10 M-Root server deployments commenced in 2021. 2. Identify and prepare at least 15 additional M-Root server sites.





4. INFORMATION

OBJECTIVE

- Support Internet development with needed network information services and research outcomes that are of demonstrated value to the community

WORKSTREAMS

- 4A. Information Products
- 4B. Research and Analysis





4A. Information Products

Provide meaningful information services to the communities APNIC serves.

OPERATIONS

4A.1. APNIC Blog and Podcast

Objective	Activities	Success Indicators
Keep Members and the community informed with the latest news, opinions and research from APNIC and the wider community.	<p>Maintain and grow the Blog's readership with engaging and informative content.</p> <p>Produce a fortnightly podcast ('PING') on the latest Internet research and trends.</p>	<ol style="list-style-type: none"> 1. Achieve average of at least 70,000 Blog views per month. 2. Maintain Blog Guest Post ratio between 45-65%. 3. Achieve at least 4,000 podcast listens. 4. Achieve a Blog satisfaction rating of at least 5.95/7 in the APNIC Survey.

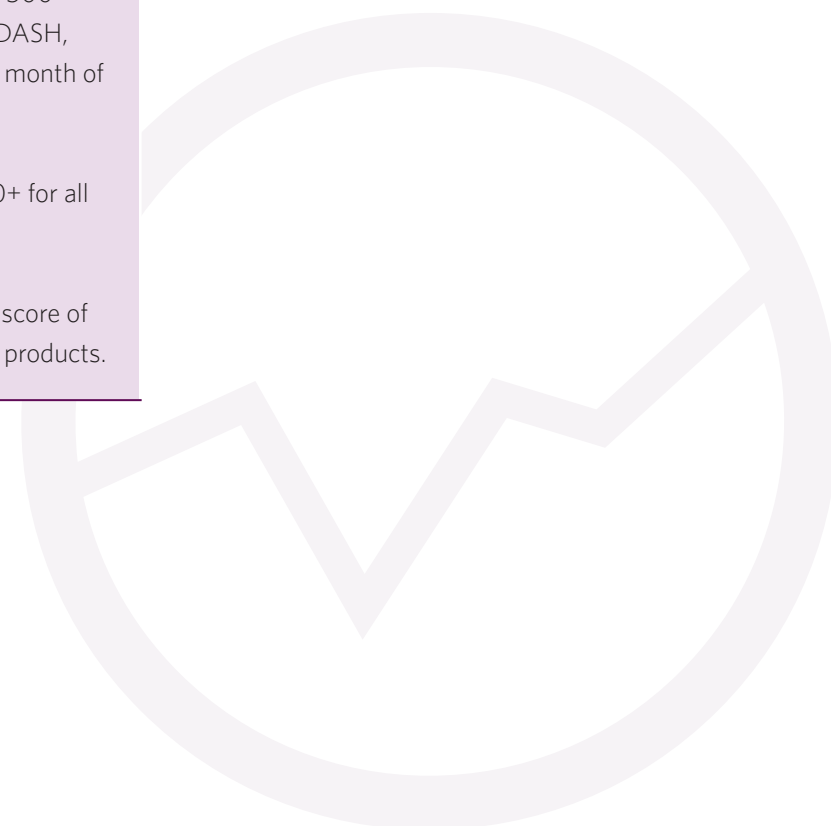
	PY	OPEX	CAPEX
Operations	7.12	1,169,695	-
Investments	1.75	289,387	-
Workstream total	8.87	1,459,082	-



4A. Information Products - continued

4A.2. Information product management

Objective	Activities	Success Indicators
<p>Provide meaningful and useful information services to Members and the community.</p>	<p>Operate and maintain APNIC Information Products: REx, NetOX and DASH.</p>	<ol style="list-style-type: none"> 1. Maintain Information Product availability of at least 99.95%. 2. Reach an average of 500 users per month of DASH, and 1,000 users per month of REx and NetOX. 3. Achieve a NPS of 60+ for all products. 4. Maintain a usability score of at least 4.5/5 for all products.





4A. Information Products - continued

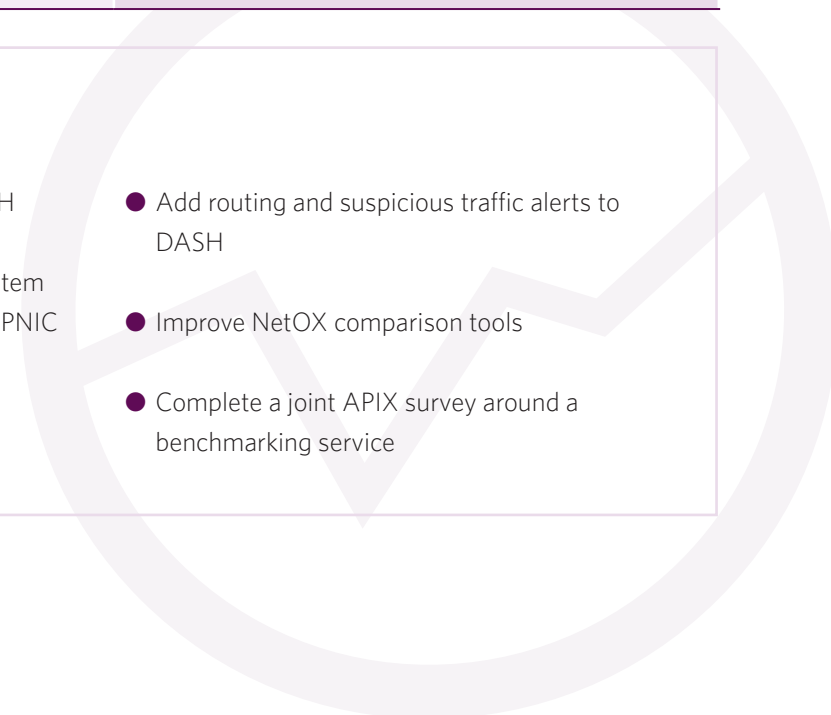
INVESTMENTS

4A.3. Information product development

Objective	Activities	Success Indicators
<p>Develop meaningful and useful information services for Members and the community.</p>	<p>Ongoing development of Information Products according to APNIC's Product Management framework.</p>	<p>1. Achieve all 2022 goals, according to the Information Products Roadmap.</p>

Roadmap goals

- Expand REx to cover global RIR delegation data and global IPv6 data
- Add RPKI and DNSSEC measurement data to REx
- Provide non-ASN holders access to DASH
- Develop a common API and backend system to provide notifications as a service for APNIC products
- Add routing and suspicious traffic alerts to DASH
- Improve NetOX comparison tools
- Complete a joint APIX survey around a benchmarking service





4B. Research and Analysis

Analyse the pressures shaping the evolution and future demands of Internet names and numbers infrastructure, and their impacts.

OPERATIONS

4B.1. Conducting research and measurements

Objective	Activities	Success Indicators
Gain a greater understanding of technical issues, trends, and how the Internet operates.	Conduct research experiments on topics including IP addressing, routing, DNS and other critical Internet infrastructure matters.	1. See 4B.3.

4B.2. Research cooperation

Collaborate and share resources to improve research outcomes and impacts.	Engage in research partnerships with other reputable organization such as Cloudflare, ICANN, RIPE NCC and others.	1. Undertake at least two significant cooperative research activities.
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	PY	OPEX	CAPEX
Operations	0.87	1,076,598	123,000
Investments	-	-	-
Workstream total	0.87	1,076,598	123,000



4B. Research and Analysis - continued

4B.3. Sharing research outcomes

Objective	Activities	Success Indicators
<p>Help Members make better informed decisions on their network operations.</p>	<p>Share research insights online and at selected events to raise awareness of issues and trends that may impact Internet operations and assist policy discussions.</p>	<ol style="list-style-type: none"> Publish at least 12 articles or reports on resource outcomes. Present at least twelve research presentations, including at least two at APNIC conferences.





5. CAPABILITY

OBJECTIVES

- Provide stable and secure technical infrastructure to support APNIC operations and services
- Develop a strong service culture driven by people committed to APNIC's vision and values
- Sustain a healthy and resilient organization

WORKSTREAMS

- 5A. Internal Technical Infrastructure
- 5B. Finance and Business Services
- 5C. Employee Experience
- 5D. Governance





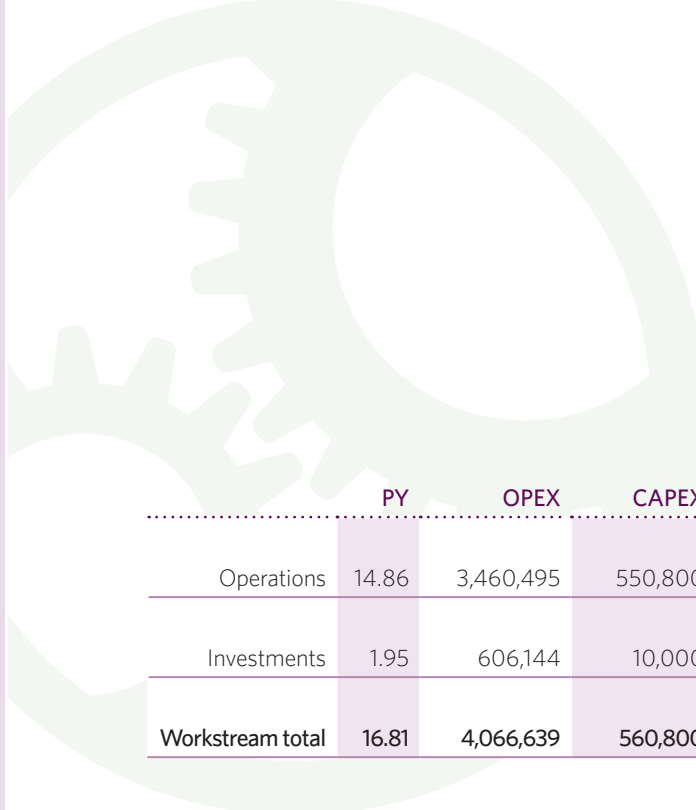
5A. Internal Technical Infrastructure

Provide stable and secure technical infrastructure to support APNIC operations and services.

OPERATIONS

5A.1. Architecture and technical coordination

Objective	Activities	Success Indicators
<p>Build efficiencies and reduce costs through use of a coordinated common infrastructure by multiple product teams.</p>	<p>Manage and improve APNIC’s systems architecture for better integration and coordination of systems and business processes.</p>	<ol style="list-style-type: none"> 1. Review technology recommendations once per quarter. 2. Report quarterly on architectural decisions and directions.
	<p>Manage processes for technology selection, testing and deployment.</p>	
	<p>Establish code repository health metrics to assess conformance with development policies.</p>	
	<p>Update data model to document product team ownership of business entities to establish roles and responsibilities of APNIC datasets.</p>	
	<p>Conduct architectural review of all new projects or major system changes.</p>	

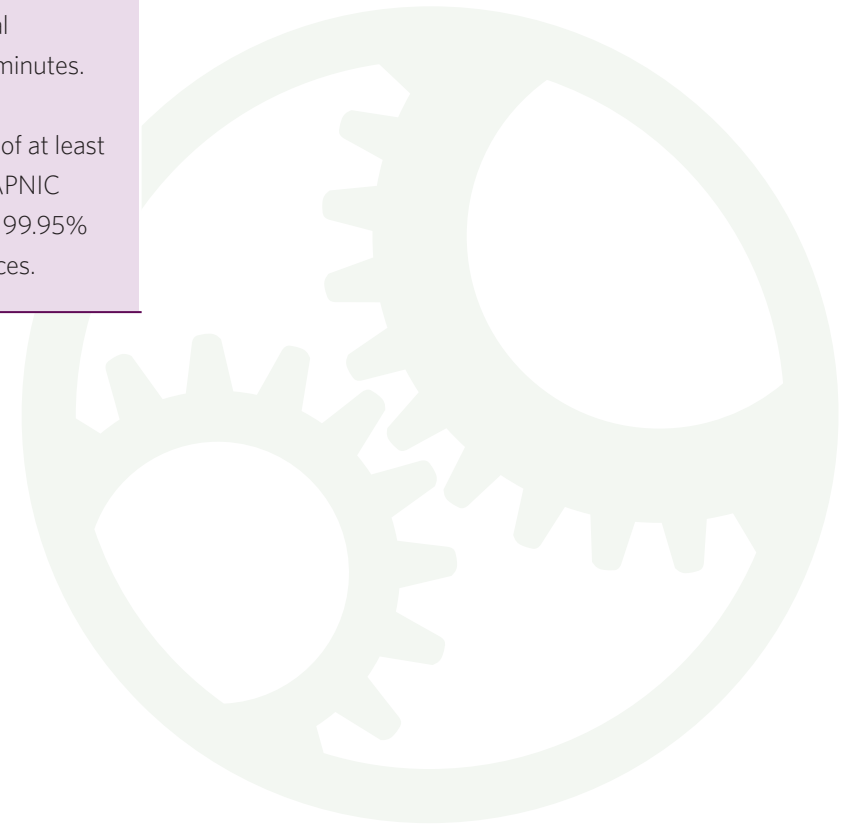


	PY	OPEX	CAPEX
Operations	14.86	3,460,495	550,800
Investments	1.95	606,144	10,000
Workstream total	16.81	4,066,639	560,800

5A. Internal Technical Infrastructure - continued

5A.2. Network and infrastructure operations

Objective	Activities	Success Indicators
<p>Ensure high availability of APNIC's infrastructure.</p>	<p>Manage APNIC's data centre presence in the region, interconnections between the APNIC network and others via peering relationships, and maintain a 24x7 Incident Response Team.</p>	<ol style="list-style-type: none"> 1. Complete quarterly data centre failover and backup recovery tests. 2. Respond to all critical incidents within 20 minutes. 3. Maintain availability of at least 99.99% for critical APNIC services and at least 99.95% for less-critical services.

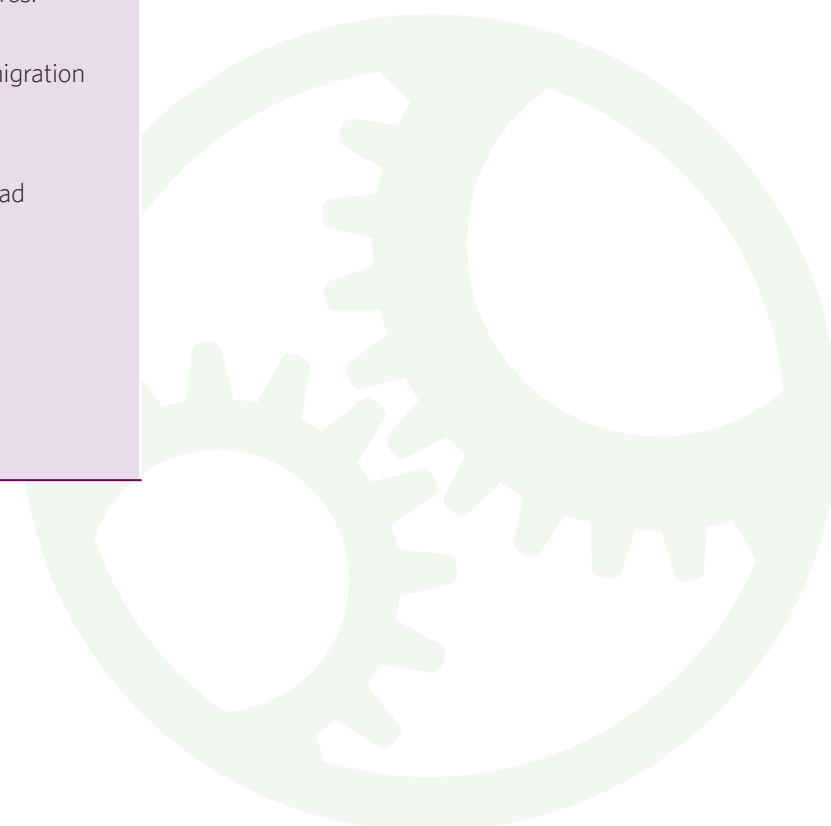




5A. Internal Technical Infrastructure - continued

5A.3. System and platform operations

Objective	Activities	Success Indicators
<p>Support APNIC's public service delivery with reliable, secure and high-performance systems.</p>	<p>Replace the RPKI Hardware Security Module (HSM) and deploy more redundant HSMs.</p> <p>Prepare migration plan for CentOS.</p> <p>Deploy duplicate services behind fully redundant open source load balancers using high availability proxies for automatic application failover between data centres; at APNIC's new Singapore PoP; and on multiple redundant cloud providers.</p>	<ol style="list-style-type: none"> 1. Deploy additional Hardware Security Module (HSM) to High Availability (HA) group in multiple data centres. 2. Complete CentOS migration plan. 3. Deploy redundant load balancers.





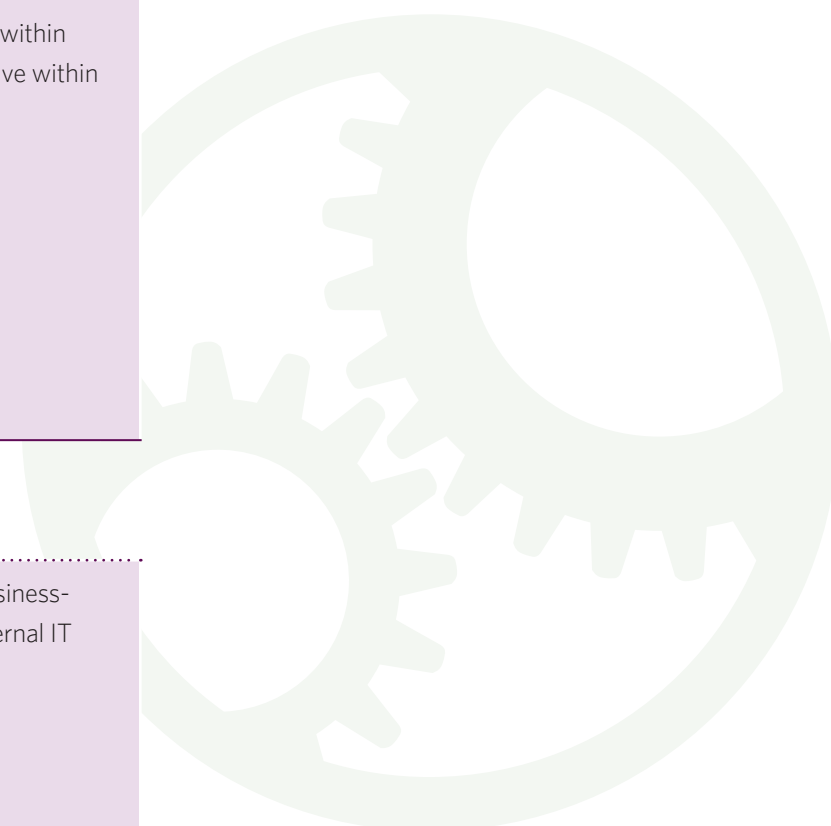
5A. Internal Technical Infrastructure - continued

5A.4. Internal security operations

Objective	Activities	Success Indicators
Maintain strong internal security operations to appropriate standards of best practice in order to avoid service disruption and data loss.	<p>Strengthen APNIC CSIRT to serve all incident response coordination needs.</p> <p>Implement effective vulnerability triage, mitigation and resolution relating to all APNIC systems and services.</p> <p>Implement measures including penetration testing, security drills, and other standard practices to strengthen security protection and management.</p>	<ol style="list-style-type: none"> 1. Achieve ISO27001 certification. 2. Mitigate all critical vulnerability reports within seven days and resolve within 30 days.

5A.5. Enterprise applications and IT support

Provide secure and reliable enterprise technologies to support Secretariat operations.	<p>Provide all required IT systems and platform support to all APNIC staff.</p> <p>Decommission remaining legacy systems, authentication and access methods.</p>	<ol style="list-style-type: none"> 1. Meet SLA of two business-day response for internal IT support.
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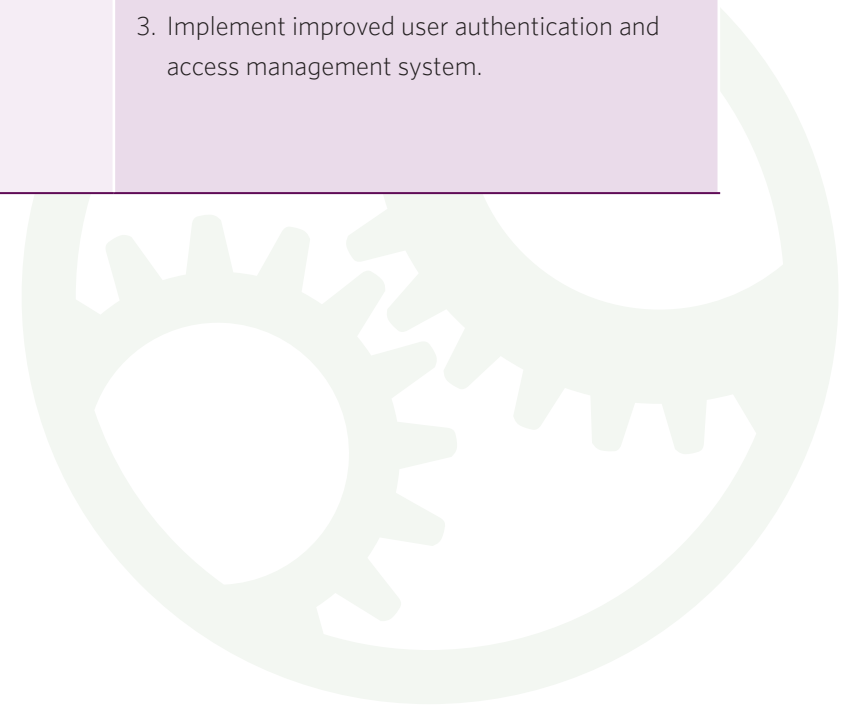


5A. Internal Technical Infrastructure - continued

INVESTMENTS

5A.6. Security infrastructure upgrades

Objective	Activities	Success Indicators
<p>Harden APNIC systems and security infrastructure to reduce security risks and protect Member information.</p>	<p>Improve infrastructure security and resilience of APNIC systems across areas including:</p> <ul style="list-style-type: none"> ▪ Email security ▪ Server patch management ▪ Privileged server access management ▪ Server backup protection ▪ Password management ▪ Zero-trust network/server access. 	<ol style="list-style-type: none"> 1. Complete automation of patch management. 2. Complete email business rule deployment using standard best practice. 3. Implement improved user authentication and access management system.





5B. Finance and Business Services

Provide efficient and robust finance and business services and facilities to effectively support APNIC's operations.

OPERATIONS

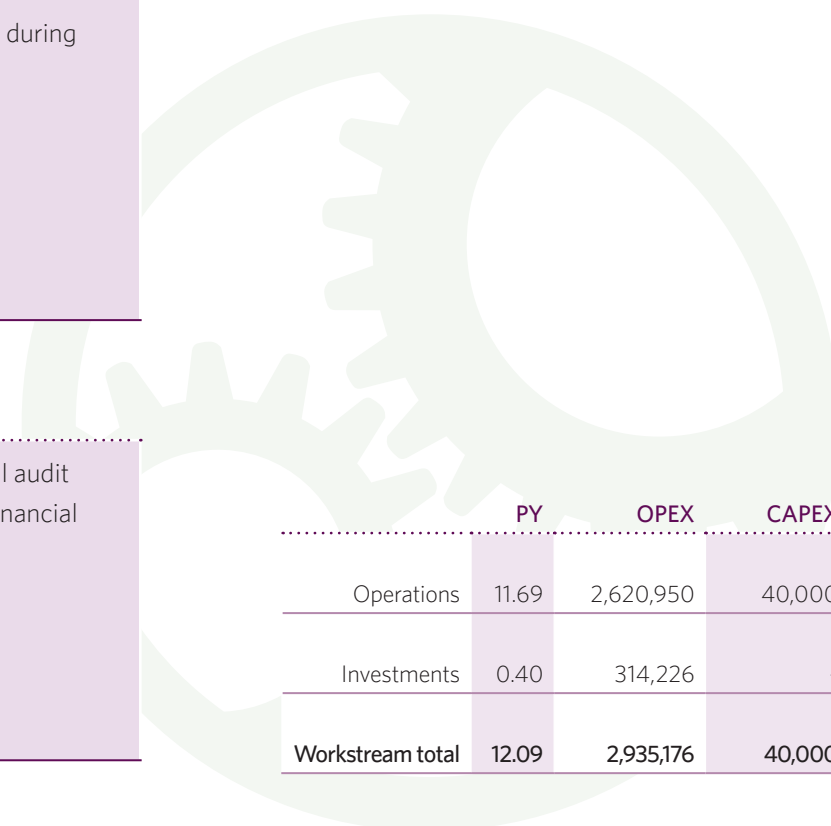
5B.1. Internal knowledge management

Objective	Activities	Success Indicators
Maintain effective methods, structures and tools to retain and retrieve corporate information within APNIC.	<p>Complete implementation of new intranet and knowledge management systems.</p> <p>Develop and implement maintenance responsibilities and processes.</p>	<p>1. Complete migration during Q1 2022.</p>

5B.2. Financial services

Transparent and efficient management and reporting of APNIC's financial affairs.	<p>Review banking arrangements, payment platforms and investment policy.</p> <p>Renewal of APNIC's special tax ruling on mutuality of Member funds.</p>	<p>1. Achieve a successful audit of APNIC's annual financial accounts.</p>
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	PY	OPEX	CAPEX
Operations	11.69	2,620,950	40,000
Investments	0.40	314,226	-
Workstream total	12.09	2,935,176	40,000





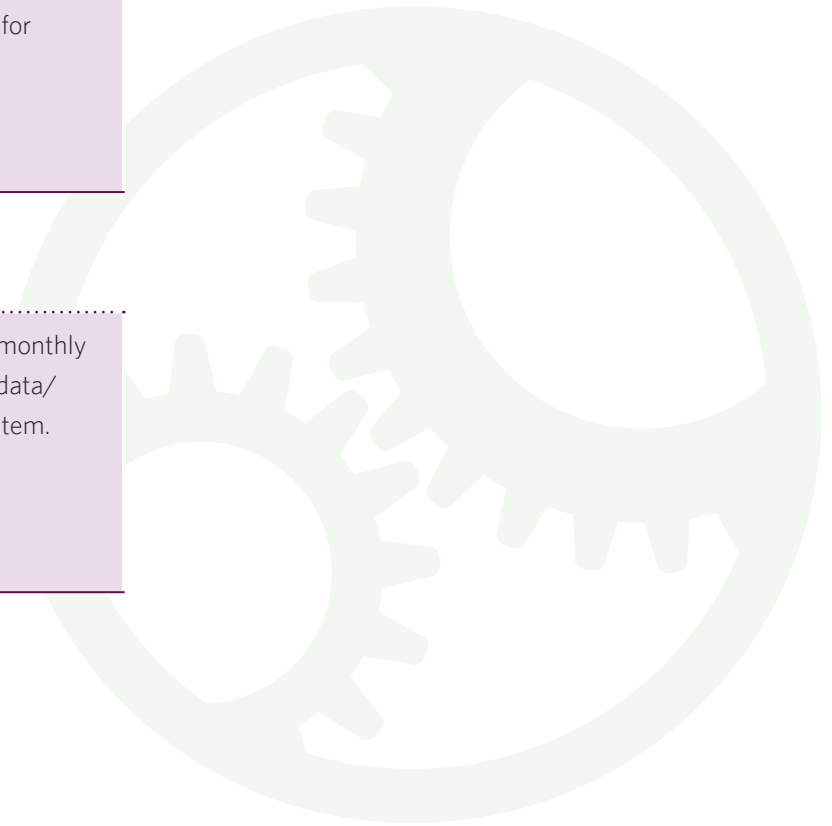
5B. Finance and Business Services - continued

5B.3. Business services

Objective	Activities	Success Indicators
Effectively support Secretariat operations and travel.	<p>Manage office facilities and administration to support an agile and eco-friendly working environment.</p> <p>Effectively manage travel processes to ensure travel is safe, efficient and economic.</p>	<ol style="list-style-type: none"> 1. Maintain all Office facilities to established annual schedule. 2. Audit travel requests and expense transactions for policy alignment.

5B.4. Business intelligence and data analytics

Improved decision making from the increased availability and accessibility of relevant, cross-system information sources.	<p>Establish a comprehensive business intelligence (BI) facility that integrates data from a range of systems to produce better analysis and consistent reporting.</p>	<ol style="list-style-type: none"> 1. 100% automation of monthly Secretariat reporting data/ charts from the BI system.
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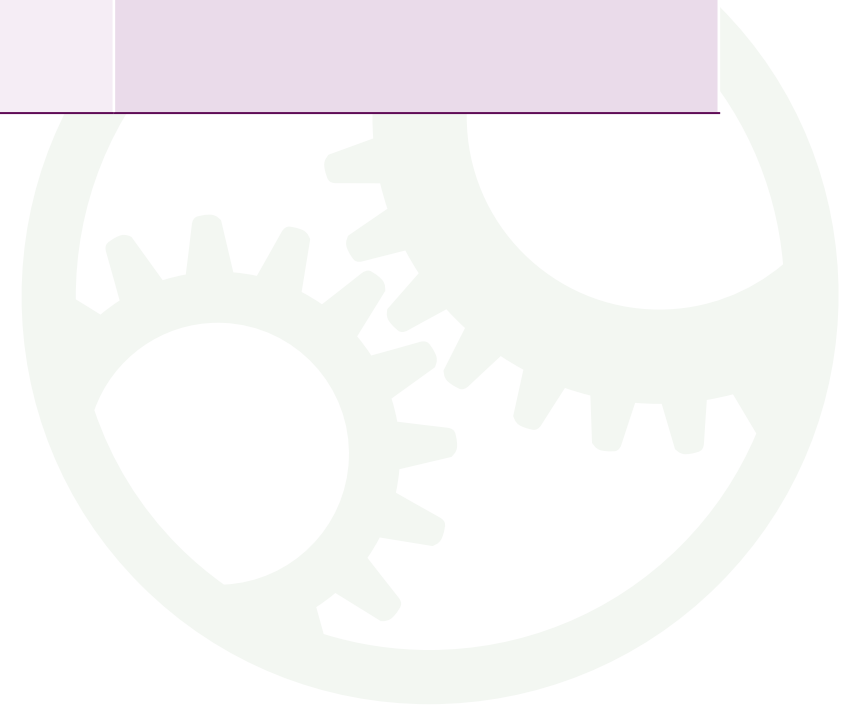


5B. Finance and Business Services - continued

INVESTMENTS

5B.5. Data management and governance

Objective	Activities	Success Indicators
<p>Ensure availability of quality and accurate data to support decision making.</p>	<p>Develop and maintain organization-wide data model and data governance structure.</p> <p>Build a vendor neutral repository (data warehouse) of current and historical critical business data from registry, membership, Salesforce and NetSuite.</p>	<ol style="list-style-type: none"> 1. Data model and governance are documented and implemented. 2. Data ingestion system established and working effectively.





5C. Employee Experience

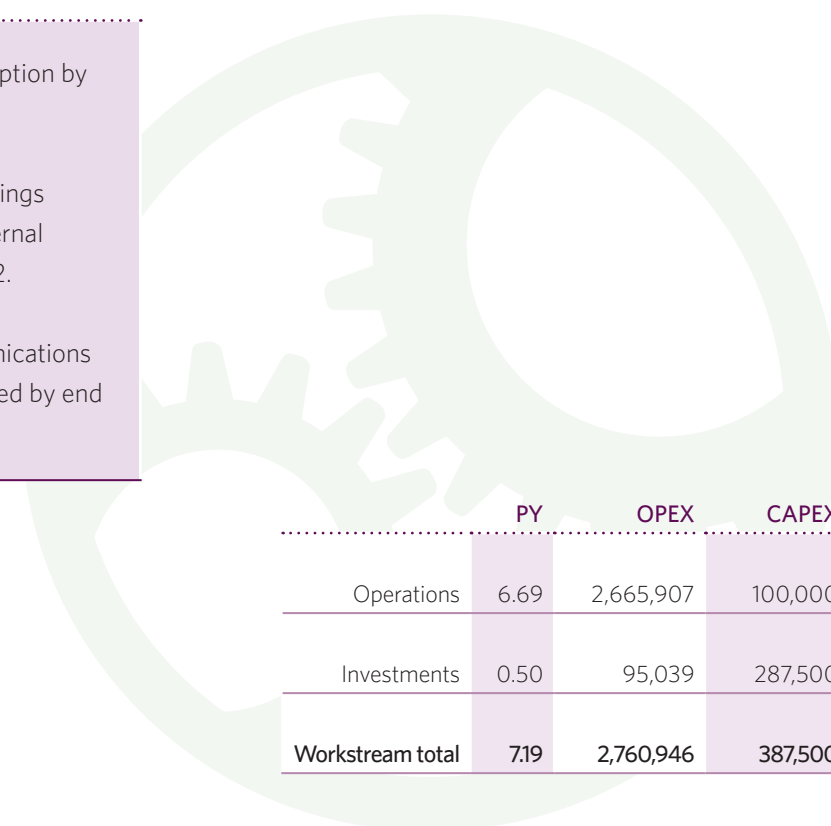
Attract, develop and retain talented, service-oriented people to deliver APNIC's Mission and exceed organization and community expectations.

OPERATIONS

5C.1. Organizational development

Objective	Activities	Success Indicators
Optimize internal capability, including improved processes, effective communication, and adaptation to organizational challenges.	<p>Complete the implementation of APNIC's Agile framework across all APNIC teams.</p> <p>Establish a dedicated Internal Communications function.</p> <p>Implement new employee engagement survey techniques.</p>	<ol style="list-style-type: none"> 1. Complete Agile adoption by end of Q2 2022. 2. Staff satisfaction ratings meet or exceed external benchmarks in 2022. 3. An internal communications specialist is appointed by end of Q2 2022.

	PY	OPEX	CAPEX
Operations	6.69	2,665,907	100,000
Investments	0.50	95,039	287,500
Workstream total	7.19	2,760,946	387,500





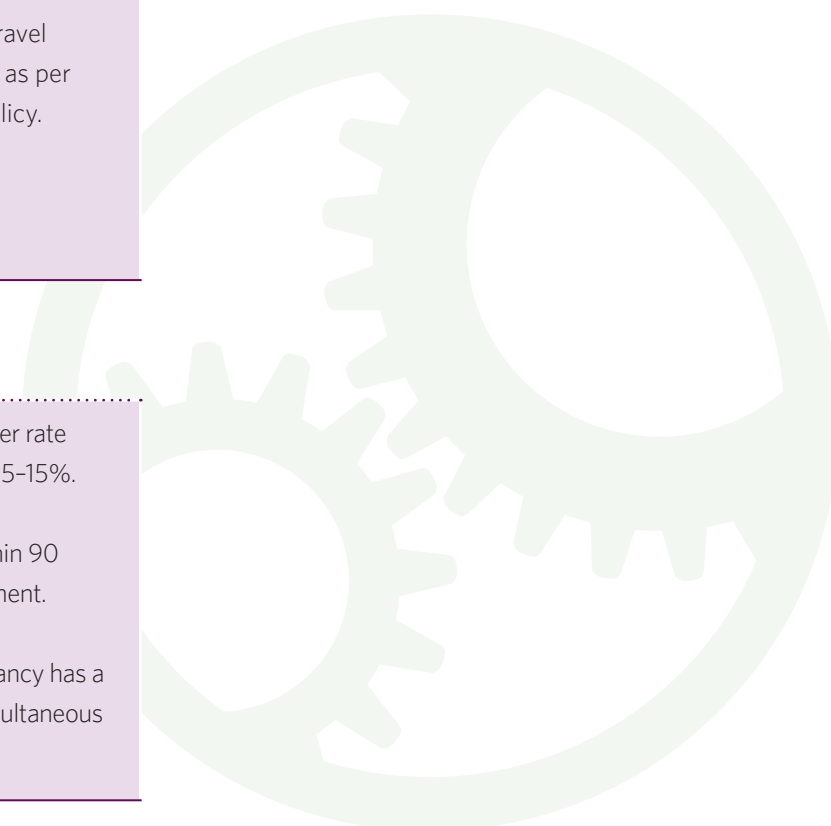
5C. Employee Experience - continued

5C.2. Work environment management

Objective	Activities	Success Indicators
Ensure all places of work and workplace practices for APNIC staff (both the office and remote locations) are fit for purpose.	<p>Assess office and remote/home working sites to ensure WHS compliance.</p> <p>Implement a Travel Health framework in response to pandemic risks.</p> <p>All staff complete annual compliance training.</p>	<ol style="list-style-type: none"> 1. Zero WHS incidents due to APNIC-controlled environmental factors. 2. All travellers meet travel safety requirements as per the Travel Health policy.

5C.3. Talent attraction and retention

Attract and retain the best possible talent to deliver on APNIC's Vision and Mission.	Recruit and onboard staff (throughout the region) to fill vacancies.	<ol style="list-style-type: none"> 1. Maintain staff turnover rate within benchmark of 5-15%. 2. Fill all open roles within 90 days from advertisement. 3. Every advertised vacancy has a minimum of four simultaneous candidate sources.
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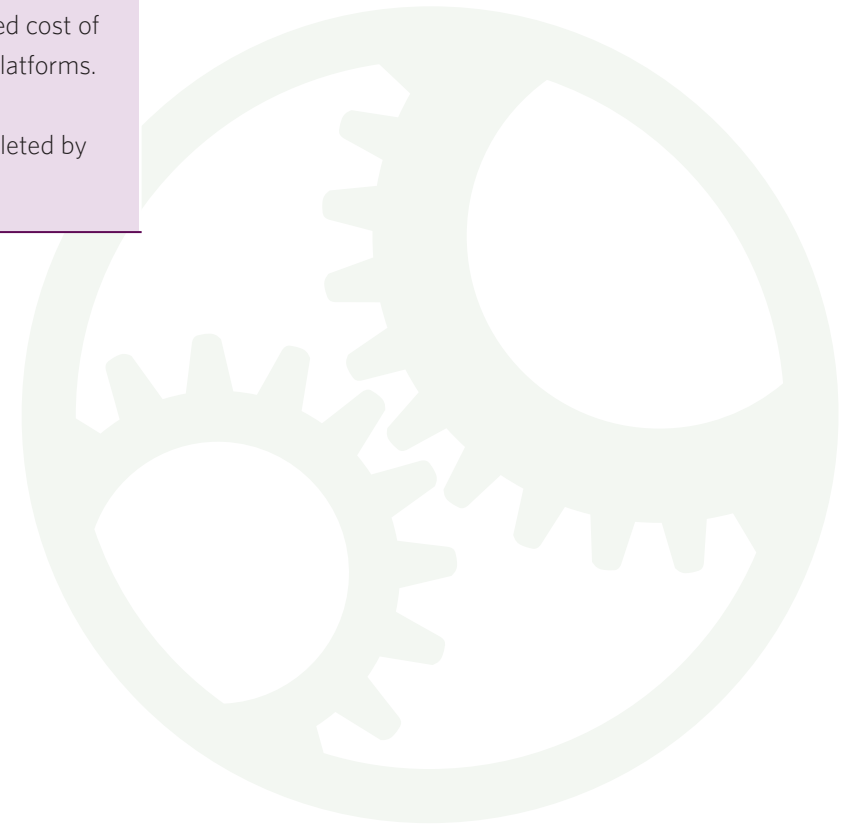




5C. Employee Experience - continued

5C.4. People operations management

Objective	Activities	Success Indicators
<p>Ensure the employee value proposition and experience supports the attraction and retention of diverse and talented team members, and that policies and practices meet global standards.</p>	<p>Launch a comprehensive new people management portal.</p> <p>Review the current payroll system and process and implement improvements.</p> <p>Maintain and enhance workforce diversity and inclusion.</p>	<ol style="list-style-type: none"> 1. Complete deployment of all selected modules of the Sage People system. 2. Demonstrate reduced cost of HR administration platforms. 3. Payroll review completed by end of Q3 2022.



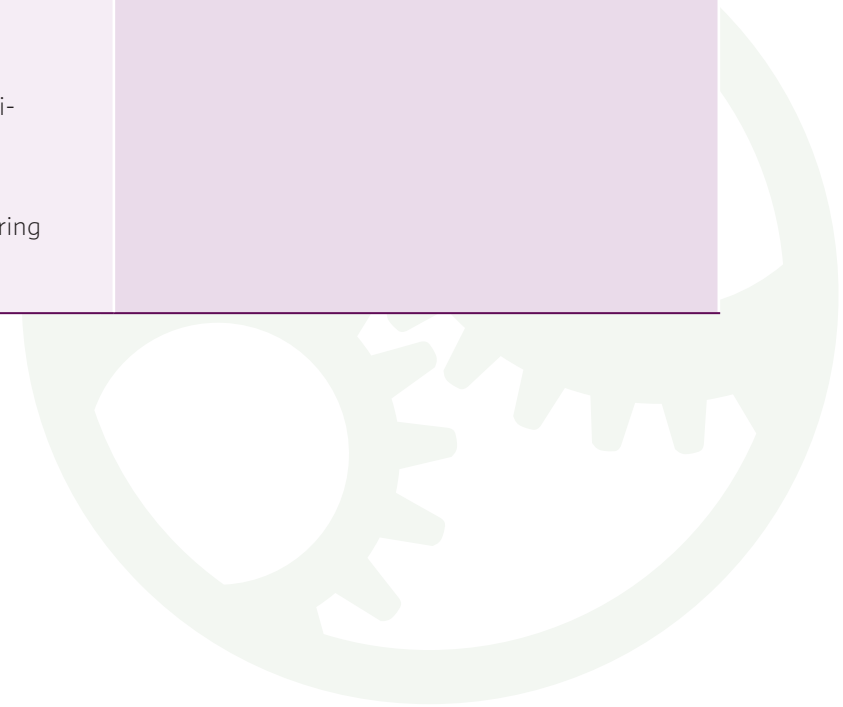


5C. Employee Experience - continued

INVESTMENTS

5C.5. APNIC workspace improvement 

Objective	Activities	Success Indicators
<p>Enhance collaborative working at the APNIC office and for remote employees.</p>	<p>Remodel Cordelia St premises to accommodate an increased workforce and better integrate with remote working and hybrid work practices.</p> <p>Deploy upgraded Zoom facilities to all meeting rooms.</p> <p>Replace traditional desk seating with multi-functional work hubs.</p> <p>Prepare for likely Secretariat relocation during 2024.</p>	<p>1. Complete all budgeted facility upgrades by end of Q3 2022.</p>





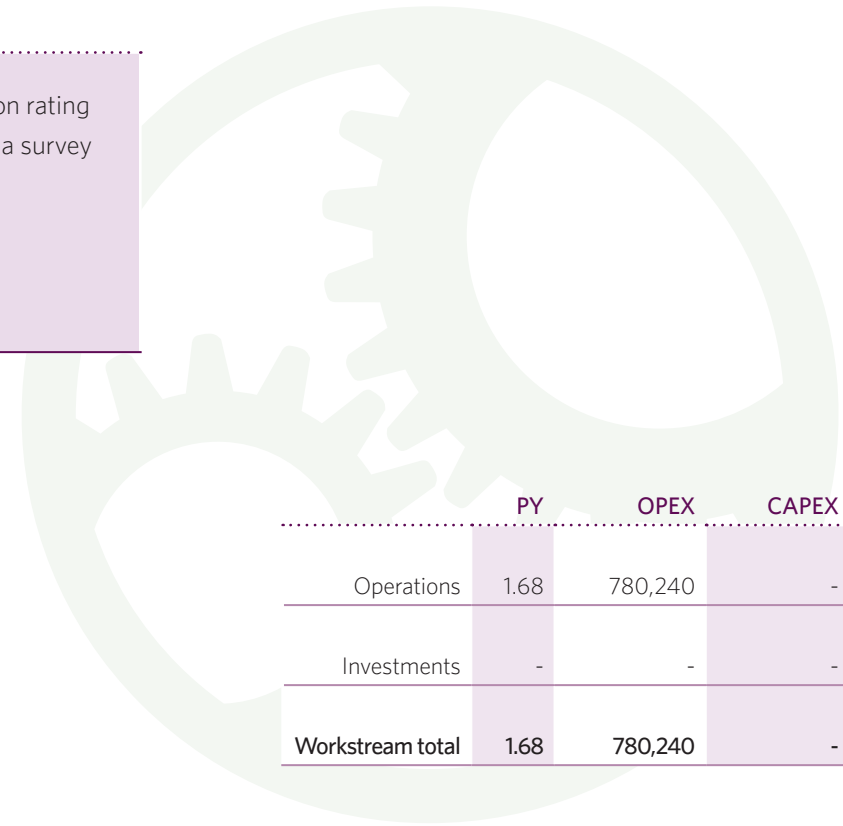
5D. Governance

Provide the legal, economic and governance framework and professional services to support APNIC's operations to minimize risk, ensure compliance and continuity, and remain a socially and environmentally responsible organization.

OPERATIONS

5D.1. Executive Council (EC) support

Objective	Activities	Success Indicators
Facilitate EC processes and activities of the highest integrity.	Assist EC members to perform their roles, including onboarding, meeting support, travel management, administration and providing information as required.	1. Achieve a satisfaction rating of at least 6/7 from a survey of EC members.



	PY	OPEX	CAPEX
Operations	1.68	780,240	-
Investments	-	-	-
Workstream total	1.68	780,240	-



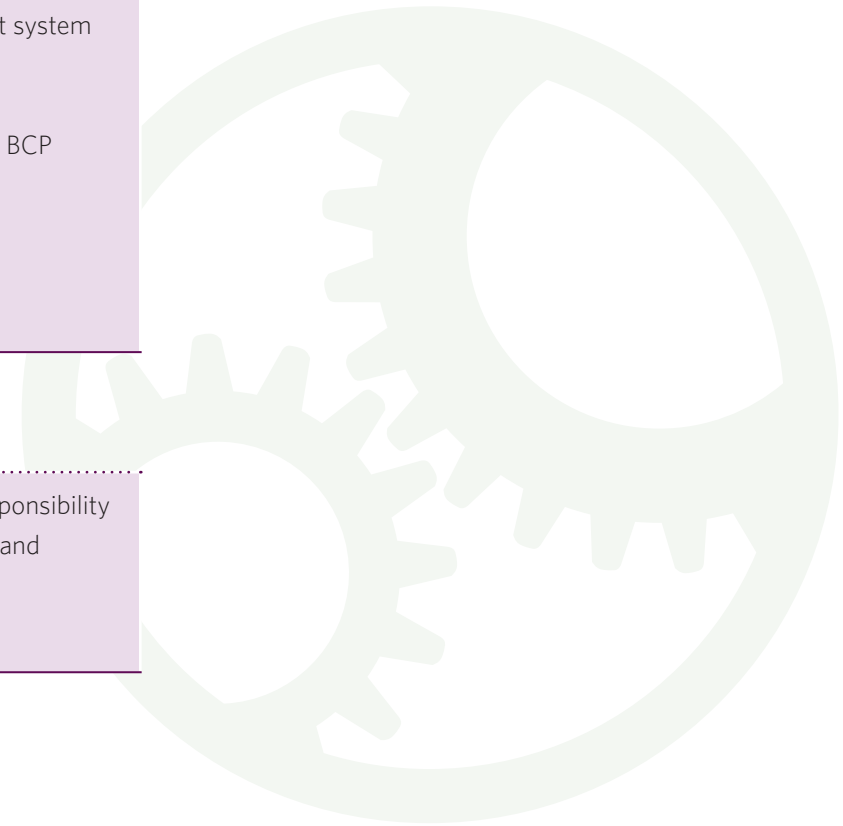
5D. Governance - continued

5D.2. Corporate governance and legal

Objective	Activities	Success Indicators
Mitigate legal risk in all APNIC activities.	<p>Manage legal and organizational risk, contracts, provide corporate governance guidance, and legal cooperation with other organizations.</p> <p>A new business contract management system will be implemented in 2022, ensuring that all business contracts and contract renewals are fully managed.</p>	<ol style="list-style-type: none"> 1. Update Strategic Risk Register quarterly. 2. Achieve full ISO9001 quality management system recertification. 3. Undertake quarterly BCP scenario testing.

5D.3. Corporate social responsibility

Enhance APNIC's position as an environmentally and socially responsible organization.	Develop a structured program to coordinate APNIC's contributions to environmental and social causes.	<ol style="list-style-type: none"> 1. Corporate social responsibility program developed and approved.
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2022 Budget Summary

Activity	PY	%	OPEX (AUD)	%	CAPEX (AUD)	%
1. Membership	24.93	20%	5,509,241	16%	-	-
1A. Member Services	14.67	12%	2,989,124	9%	-	-
1B. Membership Products	9.40	8%	1,844,666	5%	-	-
1C. Membership Reporting	0.87	1%	675,451	2%	-	-
2. Registry	15.16	12%	3,965,675	12%	230,000	16%
2A. Registration Services	5.11	4%	772,183	2%	-	-
2B. Registry Products	9.30	8%	2,612,611	8%	230,000	16%
2C. Policy Development	0.75	1%	580,881	2%	-	-
3. Development	34.60	28%	11,210,815	33%	128,000	9%
3A. APNIC Conferences	4.15	3%	1,288,628	4%	43,000	3%
3B. Foundation Support	1.31	1%	264,777	1%	-	-
3C. Community Engagement	4.71	4%	1,692,291	5%	-	-
3D. Community Participation	1.95	2%	436,317	1%	-	-
3E. APNIC Academy	19.58	16%	5,079,961	15%	25,000	2%
3F. Internet Infrastructure Support	2.90	2%	2,448,842	7%	60,000	4%
4. Information	9.74	8%	2,535,680	8%	123,000	8%
4A. Information Products	8.87	7%	1,459,082	4%	-	-
4B. Research and Analysis	0.87	1%	1,076,598	3%	123,000	8%
5. Capability	37.78	31%	10,543,000	31%	988,300	67%
5A. Internal Technical Infrastructure	16.81	14%	4,066,639	12%	560,800	38%
5B. Finance and Business Services	12.09	10%	2,935,176	9%	40,000	3%
5C. Employee Experience	7.19	6%	2,760,946	8%	387,500	26%
5D. Governance	1.68	1%	780,240	2%	-	-
Total	122.21	100%	33,764,411	100%	1,469,300	100%

Note: Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

Person Year Distribution

Activity	Total PY	Comm	DG	Fin	I&D	P&P	Prod Dev	Srvcs	SE
1. Membership	24.93	0.58	0.71	2.26	0.33	0.00	8.84	12.11	0.10
1A. Member Services	14.67	0.19	0.16	2.24	-	-	0.50	11.49	0.10
1B. Membership Products	9.40	0.04	0.06	-	0.33	0.00	8.35	0.62	-
1C. Membership Reporting	0.87	0.35	0.49	0.02	-	-	-	0.01	-
2. Registry	15.16	0.99	0.56	-	1.26	-	6.90	5.46	-
2A. Registration Services	5.11	0.50	-	-	-	-	-	4.61	-
2B. Registry Products	9.30	0.04	0.50	-	1.26	-	6.90	0.61	-
2C. Policy Development	0.75	0.45	0.06	-	-	-	-	0.24	-
3. Development	34.60	4.18	0.78	0.48	23.02	0.66	1.80	0.78	2.90
3A. APNIC Conferences	4.15	2.52	-	-	0.38	0.03	1.00	0.06	0.15
3B. Foundation Support	1.31	0.05	0.46	0.45	0.17	0.14	0.05	-	-
3C. Community Engagement	4.71	0.15	0.28	0.03	0.74	0.02	0.35	0.69	2.45
3D. Community Participation	1.95	1.46	0.02	-	0.05	-	0.40	0.02	-
3E. APNIC Academy	19.58	-	0.02	-	18.77	0.47	-	0.01	0.30
3F. Internet Infrastructure Support	2.90	-	-	-	2.90	-	-	-	-
4. Information	9.74	2.24	0.88	-	0.33	0.40	5.85	0.04	-
4A. Information Products	8.87	2.24	0.01	-	0.33	0.40	5.85	0.04	-
4B. Research and Analysis	0.87	-	0.87	-	-	-	-	-	-
5. Capability	37.78	0.47	3.06	7.77	12.34	8.68	4.85	0.61	-
5A. Internal Technical Infrastructure	16.81	-	-	0.16	11.69	0.01	4.85	0.11	-
5B. Finance and Business Services	12.09	-	1.85	6.71	0.00	3.32	-	0.20	-
5C. Employee Experience	7.19	0.47	0.12	0.33	0.65	5.34	-	0.30	-
5D. Governance	1.68	-	1.09	0.57	-	0.02	-	-	-
Total	122.21	8.45	6.00	10.51	37.28	9.74	28.24	19.00	3.00

Note: Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

Investments by Workstream (APNIC and APNIC Foundation Funded)

Pillar	Workstream	Investment Activity	PY	OPEX	CAPEX
1. Membership					
	1A. Member Services	1A.5. Historical resources transition	2.50	210,130	-
	1B. Membership Products	1B.2. Membership product development	2.92	656,177	-
2. Registry					
	2B. Registry Products	2B.3. Registry product development	2.00	369,299	-
	2B. Registry Products	2B.4. Registry rearchitecture	1.50	239,474	-
	2B. Registry Products	2B.5. Readiness for Five-9s availability for highly critical services	1.25	302,733	230,000
3. Development					
	3B. Foundation Support	3B.1. Foundation support	1.31	264,777	-
	3D. Community Participation	3D.4. Online community platform	0.50	146,651	-
	3E. APNIC Academy	3E.8. Academy product development	1.50	582,192	-
	3E. APNIC Academy	3E.9. Curriculum for non-technical audiences	0.2	461,858	-
	3F. Internet Infrastructure Support	3F.3. M-Root deployment support	1.90	1,871,231	-
4. Information					
	4A. Information Products	4A.3. Information product development	1.75	289,387	-
5. Capability					
	5A. Internal Technical Infrastructure	5A.6. Security infrastructure upgrades	1.95	606,144	10,000
	5B. Finance and Business Services	5B.6. Data management and governance	0.40	314,226	-
	5C. Employee Experience	5C.5. APNIC workspace improvement	0.50	95,039	287,500
APNIC Investment Total			16.83	3,494,038	527,500
APNIC Foundation Investment Total			3.40	2,871,505	-
GRAND TOTAL			20.23	6,365,543	527,500

APNIC Foundation investments are marked in **green**.

Note: Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

APNIC Foundation Funded Activity (Operations and Investments)

	Activity	PY	OPEX	CAPEX
Workstream				
3E. APNIC Academy	3E.1. Academy product management	2.00	731,506	-
3E. APNIC Academy	3E.2. Instructor-led training	6.50	968,493	-
3E. APNIC Academy	3E.3. Self-paced training	-	287,671	-
3E. APNIC Academy	3E.4. Community Trainers network	2.80	919,042	-
3E. APNIC Academy	3E.8. Academy product development	1.50	582,192	-
3E. APNIC Academy	3E.9. Curriculum for non-technical audiences	-	418,082	-
3F. Internet Infrastructure Support	3F.1. Internet infrastructure development	-	164,383	-
3F. Internet Infrastructure Support	3F.2. Community Honeynet and Security Threat Sharing Platform	-	77,000	-
3F. Internet Infrastructure Support	3F.3. M-Root deployment support	1.90	1,871,231	-
4B. Research and Analysis	4B.1. Conducting research and measurements	-	343,000	-
TOTAL		14.70	6,362,600	-

Partial funding for 3E.5, 3E.6, and 3E.7 is included as part of 3E.2 and 3E.4.

Note: Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

APNIC's 2022 Budget Submission provides more details on the 2022 APNIC Budget and is available with the Minutes of the December 2021 EC meeting.



Helpdesk

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APNIC Annual General Meeting (AGM)

Thursday, 3 March 2022

*Draft agenda – v2.0

Time (UTC +10)	Topic	Speaker
AGM (1): 13:00 – 14:00		
13:00	EC Chair welcome, introductions, and opening remarks	Gaurab Raj Upadhaya
13:10	APNIC EC Election Procedures	Craig Ng
13:20	Introduction of EC Election Nominees	Election Chair
13:30	APNIC Activity Report	Paul Wilson
13:50	Open mic	
14:00 – 14:15	BREAK	
AGM (2): 14:15 – 15:15		
14:15	APNIC Activity Plan	Paul Wilson
14:35	APNIC EC Treasurer Report	Kenny Huang
14:45	APNIC EC Report	Gaurab Raj Upadhaya
14:55	Open mic	
15:00	APIDT Update	Paul Wilson
15:10	Reminder: APNIC EC Voting	Sunny Chendi
15:15 – 16:00	LUNCH	
AGM (3): 16:00 – 17:00		
16:00	Reminder: APNIC EC Voting Close	Sunny Chendi
16:05	Policy SIG Report	Bertrand Cherrier
16:15	Cooperation SIG Report	Joy Chan
16:20	NIR SIG Report	Oanh Nguyen
16:25	Routing Security SIG Report	Aftab Siddiqui
16:30	APIX Report	Katsuyasu Toyama
16:35	APNIC EC Election Results	Election Chair
16:40	Vote of Thanks	Paul Wilson
16:45	Open mic	
16:55	APNIC EC Closing Remarks	Gaurab Raj Upadhaya
17:00	END of AGM	

Agenda Item 14
APNIC Foundation update

Foundation Update

EC meeting (On-line)

21 February 2022

Duncan Macintosh

Foundation CEO

Key Points

1 New Board candidates proposed

2 Board meets to finalise strategic plan

3 Funding update

4 2022 projects finalised

Board nomination process and Foundation Board Q1 meeting

Board changes and nominations

[Confidential information redacted]



Board nominations

[Confidential information redacted]



Q1 Board meeting 29 January

- Concurrent meeting
- All Board members attended except Edward Tian
- Danish chaired

Q1 Board meeting 29 January

Agenda

1. CEO Report
2. 2022 Trust project update and agreement

Resolution:

The board resolved to request and to accept a grant from APIDT in the sum of approximately USD 14,357,603 to deliver the proposed projects tabled at this meeting; and to sign a grant agreement with APIDT in the form, or substantially in the form, of the draft grant agreement shared with the Board by email.

Q1 Board meeting 29 January

Agenda

1. 2022 budget update
2. 2022 Board meeting schedule



AFA update

- ❖ Announced on 24 December, a registered charity as of 1 January 2021 (backdated).
- ❖ AFA considered a large charity and must provide an Information Statement on its activities and audited financial statements annually. Some tax benefits (GST) but no tax deductability on donations.
- ❖ Regulated by the Australian Charities and Not-for-Profits Commission (ACNC) which has a range of governance standards, including responsibilities for Board members.
- ❖ Moving ahead, AFA will be the main operational Foundation.

Funding Update

Total funds received (all donors)

Year	AUD	USD
2017	407,000	309,328
2018	995,896	731,162
2019	329,783	402,207
2020	1,175,364	781,598
2021 (Trust 1 st / 2 nd tranche)	9,222,383	6,678,047
2022 (Trust grant agreement)	20,063,314	14,357,603
Total	32,193,740	23,259,945

ISIF Asia in brief

- **USD 1,820,000 in grants** to support **22 projects across 3 programs (Infrastructure, Inclusion and Knowledge)**
- **3 grant types:**
 - 6 Impact Grants of USD 150,000 each
 - 8 Scale-up Grants of USD 85,000 each
 - 8 Small Grants of USD 30,000 each
- **16 economies supported**, with three supported for the first time (in green): India (4), Australia (3), Malaysia (2), Indonesia (2), Bangladesh, Cambodia, China, **Laos**, Micronesia, Myanmar, New Zealand, **Papua New Guinea**, **Solomon Islands**, Sri Lanka, The Philippines

ISIF Asia – Infrastructure USD 435,000

Distant Curve Remote Area Telecommunications (150,000)	AU	Expand the Central Australian Desert Project to Serve the Indigenous Community of Nitjpurru (Pigeon Hole), Northern Territory
Universiti Kebangsaan Malaysia (85,000)	MY	Hybrid LoRa Network for Underserved Community Internet (LUCI)
The University of Auckland (85,000)	NZ	Field-ready network-coded tunnels for satellite links
PNG University of Technology (85,000)	PNG	Sustainable smart villages in rural Papua New Guinea
The University of Newcastle (30,000)	AU	Securing software defined network architectures

ISIF Asia – Inclusion USD 795,000

Rural Broadband (150,000)	IN	Connectivity Bridges: Reaching remote locations with high speed internet services
Common Room Networks Foundation (150,000)	ID	Local community-based Internet infrastructure development and Internet utilisation
Myanmar Book Aid and Preservation Foundation (150,000)	MM	Equal access to the Information Society
National Institute of Technology Silchar (85,000)	IN	Bamboo towers for low-cost, affordable, and sustainable rural internet connectivity
Boom! Inc. (85,000)	FM	Broadband for All - Yap State Federated States of Micronesia
SATSOL Ltd. (85,000)	SB	OASIS Data Garden Project
Humanity & Inclusion (30,000)	BD	Inclusive and efficient access to internet services and information for persons with disabilities
Makerbox Lao (30,000)	LA	Empowering remote agricultural communities through long-range wide area networks
Davao Medical School Foundation, Inc (30,000)	PH	Internet Connection to 4 Villages in San Isidro, Mindanao, Philippines

ISIF Asia – Knowledge USD 590,000

Tsinghua University (150,000)	CN	Developing a collaborative BGP routing, analyzing and diagnosing platform
Swiss German University (150,000)	ID	Intelligent Honeynet threat sharing platform
TeleMARS (85,000)	AU	Training and knowledge sharing: Network analysis for AI transformation
SCoRe Lab (85,000)	LK	Bug Zero: Bug bounty platform
Passarelles Numeriques (30,000)	KH	Cybersecurity in Cambodia
India Internet Engineering Society (30,000)	IN	IPv6 Knowledge Transfer
Servelots Infotech (30,000)	IN	An inclusive DIY COW (Community Operated Wireless) kit for enabling local communications at remote locations
University of Malaya (30,000)	MY	Design, development and operation of a SDN-based Internet exchange playground for networkers

Projects under discussion

Project and funding development - ongoing

- **USAID Philippines:** (BEACON project underway)
- **USAID Pacific:** Digital Connectivity and Cybersecurity Partnership (USD 24 million over 5 years). Starting in 2023
- Active fundraising in 2022: Disaster recovery; university connectivity

2022 Trust projects (proposed)

[Confidential information redacted]



[Confidential information redacted]



[Confidential information redacted]



PACtraining end of project video

[Foundation - PACTRAINING 2022 - Short.mp4 - All Documents \(sharepoint.com\)](#)

Questions?

Agenda Item 15

APIDT update

APIDT Update

APNIC EC Meeting – February 2022

APIDT Operations

Finalization of stage 3 of the Tender process:

- 25 October – Received final payment for the last tranche of IPv4, \$24,772,608 USD
- Total proceeds from the sale process \$434,132,741 USD

Property Acquisition

- After extensive negotiations over December and January, contracts have been signed and deposit paid for the property, settlement will be March 31, 2022, with a leaseback arrangement for up to 9 months
- Project planning has commenced for the redevelopment project, with construction target of early 2023.

Operations

- Currently the 2021 annual audit is being undertaken by KPMG
- EY providing ongoing financial services and preparing for Statutory Reporting and ACNC annual information statement
- ACNC 2021 reporting due mid February

Property Acquisition



Investments

Investment Advisory Council

- Oki Matsumoto – CEO Monex Group Inc.
- Andrew Page - Senior Private Banker at Westpac Private Bank
- Jun Murai
- Paul Wilson

IAC Activities

- Established a default “Yield” portfolio similar to the APNIC Investment Fund profile for the initial investment but in USD
- IAC sub-committee established to work with Credit Suisse to finalize the APIDT Investment policy statement
- Since the end of April 2021, \$396M USD transferred to the Fund
- Fund Valued at \$405.9M USD at the end of 2021
- The IAC meets Quarterly



Investment Fund Performance 2021



Investment Report 1.12.2021 – 31.12.2021
 APIDTT PTY LTD ATF ASIA PACIFIC
 INTERNET DEVELOPMENT TRUST
 Portfolio: 2003288-70
 Reporting Currency: USD

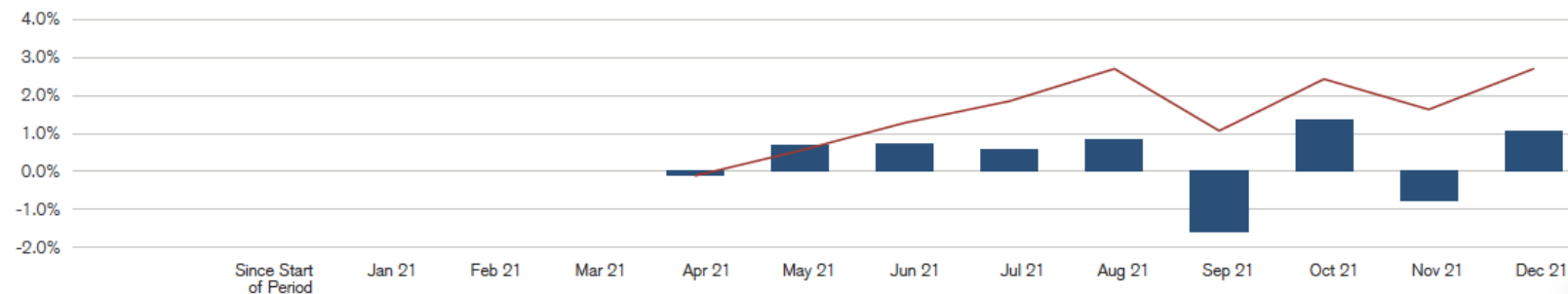
2. Analyses

2.1. Performance

Performance Details

Period 1.12.2020 - 31.12.2021

	Since Start of Period	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21
Ending Market Value					349,612,332	351,944,181	354,459,273	402,592,424	405,932,603	399,459,735	404,845,104	401,682,475	405,886,995
Beginning Market Value					0	349,612,332	351,944,181	354,459,273	402,592,424	405,932,603	399,459,735	404,845,104	401,682,475
Asset Flows including				350,000,100		0	-18,552	46,000,000	0	-26,067	0	0	-26,790
Inflows				350,000,100		0	0	46,000,000	0	0	0	0	0
Outflows					0	0	0	0	0	0	0	0	0
Net Non-Investment Flows					0	0	0	0	0	0	0	0	0
Taxes					0	0	-18,552	0	0	-26,067	0	0	-26,790
Flow Adjusted Value Change					-387,768	2,331,848	2,533,644	2,133,151	3,340,180	-6,446,801	5,385,369	-3,162,629	4,231,309
■ Portfolio Return – net					-0.11%	0.67%	0.72%	0.57%	0.83%	-1.59%	1.35%	-0.78%	1.05%
— Cumulative Portfolio Return					-0.11%	0.55%	1.28%	1.85%	2.70%	1.07%	2.43%	1.63%	2.70%



ARENA-PAC FUNDING

IRU Agreements

- IRU - Tokyo → Guam → Live in April 2021
- IRU - Guam → Singapore → Live in January 2022
- IRU - Guam → Indonesia currently in negotiations, planned for 2022
- IRU - Guam → Philippines currently in negotiations, planned for 2022

Equipment Purchases

- Equipment Purchase - Guam/Philippines/Indonesia orders were finalized in December for delivery in 2022

ARENA-PAC FUNDING

Funding Activities		Total 2021 USD	Budget 2021 USD	2021 Var to Budget	% Variance	Draft Budget 2022 USD	Change to 2021 %
APIDT INFRASTRUCTURE							
ARENA-PAC IRU Funding*	One-Time charges	1,620,872	2,143,928	(523,056)	(24.40%)	5,212,285	200.0%
	O&M fees	105,180	121,779	(16,599)	(13.63%)	325,802	311.8%
	Total	1,726,052	2,265,707	(539,655)	(23.82%)	5,538,087	220.85%
ARENA-PAC Equipment	Upfront	-	2,000,000	(2,000,000)	(100.00%)	1,300,000	(100.00%)
	Ongoing	-	-	-	(100.00%)	-	(100.00%)
	Total	-	2,000,000	(2,000,000)	(100.00%)	1,300,000	(100.00%)
Total ARENA-PAC Funding	One-Time charges	1,620,872	4,143,928	(2,523,056)	(60.89%)	6,512,285	301.78%
	O&M fees	105,180	121,779	(16,599)	(13.63%)	325,802	209.76%
Total Infrastructure Grants		1,726,052	4,265,707	(2,539,655)	(59.54%)	6,838,087	296.17%
* Upfront costs of IRU to be amortised over the life of the agreement		-	-				

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APNIC Foundation Grants

- Total Grant expenditure in 2021 was \$6,646,506 USD
 - Total Grant request 2021 was \$9,162,745
- Foundation Grant request for 2022 – \$14,357,603 USD
 - Tranche 1 - 60% to be paid in Feb/March 2022
 - Tranche 2 - Balance payable based on interim report forecast.

APNIC Foundation Grants

Funding Activities	Total 2021 USD	Budget 2021 USD	2021 Var to Budget	% Variance	Draft Budget 2022 USD	Change to 2021 %
APNIC FOUNDATION GRANTS						
ISIF Asia (Including IPv6 grants)	2,122,782	2,245,000	(122,218)	(5.44%)	2,748,000	29.45%
M-Root Anycast instance deployment support	132,770	770,000	(637,230)	(82.76%)	1,366,000	928.85%
APNIC Academy Platform and Curriculum development	293,195	900,000	(606,805)	(67.42%)	1,170,000	299.05%
Community Trainers Network Expansion	162,565	445,000	(282,435)	(63.47%)	-	(100.00%)
Training Delivery	293,867	652,000	(358,133)	(54.93%)	1,378,000	368.92%
Curriculum development for non-technical audiences	356,233	500,000	(143,767)	(28.75%)	-	(100.00%)
AIS and SOI	2,062,702	2,276,300	(213,598)	(9.38%)	3,782,267	83.36%
Sponsorship and contributions	314,276	250,000	64,276	25.71%	250,000	(20.45%)
Project Grants	-	-	-	-	250,000	n/a
Afganistan Training and Mentoring	-	-	-	-	276,000	n/a
Research	-	-	-	-	250,000	n/a
Cybersecurity (HoneyNet)	-	-	-	-	57,000	n/a
SEA gender and diversity	-	-	-	-	1,096,080	n/a
Overhead	908,116	1,124,445	(216,329)	(19.24%)	1,734,256	90.97%
Total Foundation Grants	6,646,506	9,162,745	(2,516,239)	(27.46%)	14,357,603	116.02%

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Income Statement– Jan to Dec 2021

	Total 2021 USD	Budget 2021 USD Jan - Dec	2021 Var to Budget	% Variance	Draft Budget 2022 USD	Change to 2021 %
Income:						
Investment Income						
Interest Income	32,176	109,568	(77,392)	(70.63%)	66,355	106.22%
Investment Dividend Income	1,220,924	3,559,521	(2,338,597)	(65.70%)	2,517,841	106.22%
Gains/Losses from market value adjustments	9,350,568	10,211,926	(861,358)	(8.43%)	19,283,134	106.22%
Less: Investment Management Fees	(804,086)	(820,000)	15,914	(1.94%)	(1,131,069)	40.67%
Total Investment Income after fees	9,799,582	13,061,015	(3,261,433)	(24.97%)	20,736,260	111.60%
Expenses:						
Funding Expenses						
Grants - APNIC Foundation	6,678,047	9,162,745	(2,484,698)	(27.12%)	14,357,603	115.00%
APIDT Infrastructure - IRU Operating & Management Fees	105,180	142,500	(37,320)	(26.19%)	325,802	209.76%
APIDT Infrastructure - IRU Amortisation of Investments	96,802	122,000	(25,198)	(20.65%)	736,544	660.88%
Depreciation Expenses - ARENA PAC Equipment	-	-	-	-	243,750	n/a
Total Funding Expenses	6,880,029	9,427,245	(2,547,216)	(27.02%)	15,663,699	127.67%
Operating Expenses						
Accounting Fees	85,894	100,000	(14,106)	(14.11%)	107,663	25.34%
Staffing & Professional Fees	161,147	200,000	(38,853)	(19.43%)	287,342	78.31%
Insurance Expenses	11,118	15,000	(3,882)	(25.88%)	15,205	36.76%
Legal Fees	95,203	155,000	(59,797)	(38.58%)	106,950	12.34%
Travel Expenses	-	-	-	-	150,000	n/a
Membership Fees	21,502	16,000	5,502	34.39%	8,244	(61.66%)
Depreciation	-	-	-	-	1,500	n/a
Other Operating Expenses	10,841	9,500	1,341	14.12%	25,000	130.61%
Total Operating Expenses	385,705	495,500	(109,795)	(22.16%)	701,904	81.98%
Total Funding and Operating Expenses	7,265,734	9,922,745	(2,657,011)	(26.78%)	16,365,603	125.24%
Surplus/(Deficit) - Investing, Funding and Operating	2,533,848	3,138,270	(604,422)	(19.26%)	4,370,657	72.49%
Other Expenses						
Loss from market value adjustment	-	-	-	-	-	n/a
Unrealised Foreign Currency Loss	43,094	-	43,094	100.00%	-	-100.00%
Realised Foreign Currency Loss	997	-	997	100.00%	-	-100.00%
Loss on Sale of Intangible Asset	3,198,157	-	3,198,157	100.00%	-	-100.00%
Fair Value adjustment	2,798,387	-	2,798,387	100.00%	-	-100.00%
Total Other Expenses	6,040,635	-	6,040,635	100.00%	-	-100.00%
Total Expenses	13,306,369	9,922,745	3,383,624	34.10%	16,365,603	22.99%
Surplus/(Deficit)	(3,506,787)	3,138,270	(6,645,057)	-211.74%	4,370,657	88.61%

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Financial Reports – Balance Sheet

Consolidated Statement of Financial Position
Asia Pacific Internet Development Trust and its controlled entity
As at 31 December 2021

	31-Dec-21
	USD
Assets	
Bank	
Business One	310,891
Term Deposit	-
Westpac USD	28,604,713
Total Bank	28,915,605
Current Assets	
Cash on Hand	177
Trade and Other Receivables	-
Prepayments	15,361
Intangible Asset - held for sale	-
Total Current Assets	15,538
Non - Current Assets	
Right-of-Use Assets	1,524,070
Loan - APIDT Infrastructure Pty Ltd	-
Shares in APIDT Infrastructure Pty Ltd	-
Investment portfolio	
Investment Portfolio	396,467,705
Market Value Adjustment	9,350,568
Total Investment portfolio	405,818,273
Total Non - Current Assets	407,342,343
Total assets	436,273,486
Liabilities	
Current Liabilities	
Accounts Payable	9,689
Accrued Expenses	107,935
GST	(151,737)
PAYG Withholdings Payable	1,248
Provision for Annual Leave	7,398
Provision for Long Service Leave	910
Superannuation Payable	-
Wages payable	6,297
Total liabilities	(18,261)
Net Assets	436,291,747
Trust Funds	
Capital Contributed	440,716,493
Accumulated Surplus/(Deficit)	(4,424,819)
Settlement Sum	72
Total Trust Funds	436,291,747

Notes:

1. Figures converted into United States Dollar using the following rate:

0.724701 USD United States Dollar per AUD. Rate provided by XE.com on **31 December 2021**.

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- Questions



Agenda Item 16
EC election at APNIC 53

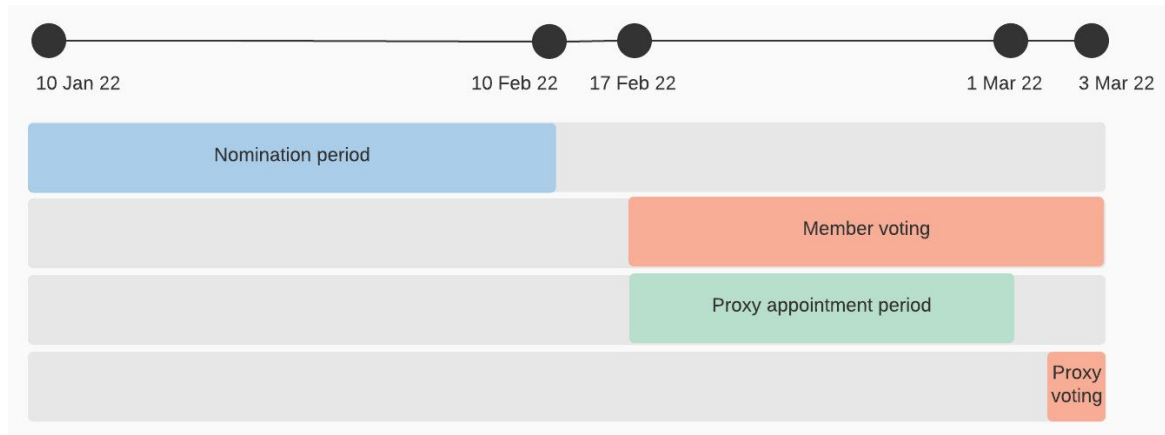
APNIC Executive Council (EC) Election 2022

APNIC 53

APNIC EC Election 2022

- Three APNIC EC members are retiring by rotation after serving a two-year term
 - They are eligible for re-election under the APNIC By-laws
- Three vacant seats on the APNIC EC
 - Two-year term starting from being elected on 3 March 2022
- See: <https://2022.apricot.net/elections/about/>

APNIC EC Election timeline



- Nominations open approximately 8 weeks before AGM day
- Nominations close approximately 2 weeks before AGM day
- Member online voting and proxy appointment open approximately 10 working days before AGM, Thursday, 17 February 2022
- Proxy appointment closes 48 hours before the start of the AGM, 11:00 (UTC +8), Tuesday, 1 March 2022
- Proxy online voting opens at the start of the AGM and closes at 14:00 (UTC +8), Thursday, 3 March 2022
- Member online voting closes at 14:00 (UTC +8), Thursday, 3 March 2022

Voting Entitlement

- APNIC Member Corporate Contacts, Contacts with voting rights and duly-appointed proxies, can vote in APNIC EC election
- The number of votes are determined by the membership tiers

Membership Tier	Votes
Associate	1 vote
Very Small	2 votes
Small	4 votes
Medium	8 votes
Large	16 votes
Very Large	32 votes
Extra Large	64 votes

Online EC Nomination

- Corporate Contacts are required to complete and submit an online nomination form via the APNIC 53 website
- Four-week nomination period
 - Started: Monday, 10 January 2022
 - Ended: 17:30 (UTC +10) Thursday, 10 February 2022

Member Online Voting via MyAPNIC

- Only Corporate Contacts and Contacts with voting rights can vote online using the BigPulse voting system
- Two-week voting period
 - Started: Thursday, 17 February 2022
 - Ends: 14:00 (UTC +8), Thursday, 3 March 2022

Online Proxy Appointment & Voting

- Corporate Contacts can appoint a proxy who can vote on behalf of a Member; if you appoint a proxy, you will lose the right to vote directly for the APNIC EC election
- Proxy appointment via MyAPNIC
 - Started: Thursday, 17 February 2022
 - Ended: 11:00 (UTC +8), Tuesday, 1 March 2022
- Proxy voting on AGM day using the BigPulse voting system
 - Starts: 11:00 (UTC +8), Thursday, 3 March 2022
 - Ends: 14:00 (UTC +8), Thursday, 3 March 2022

Declaration of Result

- At the close of voting, the Election Officers will hold an online meeting with the Scrutineers, download the election results and email the results to the Election Chair in the presence of the Scrutineers
- The election results will be announced at 14:35 (UTC +8) today, 3 March 2022
- The Election Chair will also disclose:
 - Notice of any disputes and resolutions
 - Disclosure of any communication from the Election Scrutineers regarding any anomaly or issue

Declaration of Results (example)

APNIC

- Similar format as the EC election during APNIC 51

Poll Result

APNIC 51

Report date: Thursday 04 March 2021 18:02 AEST

APNIC Executive Council Election 2021

As at Poll close: Thursday 04 March 2021 16:00 AEST

Vote counting method: V1 FPTP (first-past-the-post)

Ranked by votes

Rank	Candidate	Votes
1	Feng Leng	2612
2	Yoshinobu Matsuzaki	2605
3	Gaurab Raj Upadhaya	2567
4	Kenny Huang	1759
5	Md Shuzanur Rahman	755
6	Rob Thomas	202
7	Dewang Goyal	195
	Total votes:	10695

Results generated by [BigPulse Online Voting](#)

Election Chair

- DaeYoung Kim
 - Appointed by the APNIC EC
 - Independent from any APNIC Member, or candidate
 - Has no interest in the election results
- Responsibilities:
 - Oversee the election process
 - Appoint the Election Scrutineers
 - Declare the election results
 - Resolve disputes

Election Officers

- Andre Gelderblom and Connie Chan
 - Appointed by the APNIC EC
 - Selected from APNIC Secretariat staff
- Responsibilities
 - Administer the call for nominations
 - Manage the voting processes
 - Retrieve the online voting results

Election Scrutineers

- Xxx and xxx
 - Appointed by the Election Chair
 - Selected from staff of Internet organizations such as RIRs, ICANN, and ISOC who are present at the meeting
 - Do not vote and must be independent from any APNIC Member, or candidate
- Responsibilities
 - Observe the downloading of election results by the Election Officers
 - Notify the Election Chair in case any anomaly or issue is identified

Notice of Dispute

- Any complaint regarding the conduct of the election must be lodged in writing with the Election Chair and be lodged no later than one hour before the scheduled Declaration of the Election
- Notices may only be lodged by Nominees or Members through their authorized voting representatives by email to election-chair@apnic.net
- The Election Chair shall resolve the dispute at his discretion

Thanks