### **APNIC EC Meeting Minutes**

### Online meeting

Monday, 6 December 2021, 11:10 – 16:00 (UTC +10) Tuesday, 7 December 2021, 11:05 – 17:06 (UTC +10) Thursday, 9 December 2021, 11:00 – 15:45 (UTC +10)

### Meeting started at 11:10 (UTC +10), Monday, 6 December 2021

#### **Present**

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

Connie Chan, Strategic Executive Assistant (minutes)
Craig Ng, General Counsel
Nathan Harvey, Finance Director
Jeremy Harrison, Legal Counsel
Anton Strydom, Product Development Director
Che-Hoo Cheng, Infrastructure and Development Director
Duncan Macintosh, CEO, APNIC Foundation
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. EC Chair update
- 4. Secretariat report
- 5. HR report
- 6. Risk register
- 7. APNIC Foundation update
- 8. APIDT update
- 9. WH&S update
- 10. APNIC 54
- 11. Success measures summary December 2021
- 12. Financial reports
- 13. Discussion of 2022 activity plan
- 14. Discussion of 2022 budget
- 15. Declaration of interests
- 16. Approval of 2022 activity plan and budget
- 17. Review of minutes of last meeting and record of circular resolutions passed since the last meeting

- 18. Matters arising from the last meeting
- 19. NRO NC appointment
- 20. EC satisfaction survey
- 21. APNIC Foundation update (continued)
- 22. APNIC office space
- 23. 2022 Survey planning
- 24. Review of historical resource holders structure
- 25. EC election at APNIC 53
- 26. Any other business
- 27. Next EC meeting

#### **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 11:10 (UTC +10) on Monday, 6 December 2021, and noted that a quorum was present.

### 2. Agenda bashing

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

### 3. EC Chair update

The EC Chair reported on the activities over the past months and his involvement and exchanges with other RIR Boards.

He attended the ARIN meeting in Minneapolis, USA, and discussed the recent developments around AFRINIC with the RIR chairs.

He welcomed this opportunity for the Executive Leadership Team (ELT) to be able to join the three-day EC meeting and give its view on the activity plan for 2022.

He noted that APIDT will be making an offer for a property in Brisbane tomorrow, with the intent of relocating APNIC office within two years.

He suggested that the EC start planning for travels for the second half of 2022. The next ARIN and LACNIC meetings are likely to be held in person.

### 4. Secretariat Report

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

The EC discussed the progress against the activity plan at length, and how the traffic light indicator against each of the success measures in the plan can be enhanced. It was suggested that the Secretariat to make some changes and arrange a follow-up discussion to be had later.

### 5. HR report

Louise Tromp spoke to the HR report presentation.

Meeting adjourned at 13:08 (UTC +10), Monday, 6 December 2021

Meeting resumed at 13:38 (UTC +10), Monday, 6 December 2021

### 6. 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.

Action item 2021-10: The Secretariat to update the risk register.

### 7. APNIC Foundation update

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

### 8. APIDT update

The Director General spoke to the APIDT update presentation.

### 9. WH&S update

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

#### 10. APNIC 54

Blandine Cousin joined the meeting for this agenda item.

Tony Smith presented the APNIC 54 update.

The Chair asked the Events team to continue to monitor the situation closely. The safety and wellbeing of our staff and community remain our number one priority. The EC would consider making a decision during the EC meeting in February 2022.

[Blandine Cousin left the meeting at 15:15 (UTC +10)]

### 11. Success measures summary - December 2021

Following discussions earlier on success measures, Tony Smith presented the document (attached) with a new column for EOY measure where we expect to be at the end of the year.

The EC reviewed and focused the discussion on the projects that would not be completed by the end of the year, and agreed to leave it to the Secretariat to work out what would be the best way to report to the EC.

Meeting adjourned at 16:00 (UTC +10), Monday, 6 December 2021

Meeting resumed at 11:05 (UTC +10), Tuesday, 7 December 2021

Irene Chan joined the meeting for the next three agenda items.

### 12. Financial reports

Andrew McAuley and Patrick Armitage from Credit Suisse joined the meeting for this agenda item.

Patrick Armitage spoke to the APNIC portfolio review presentation (attached).

Andrew McAuley highlighted the performance of the managed investment funds and the financial outlook. He noted the developed equity markets continue to look attractive, leading to an overweight in equities overall. Bond yields are expected to move up further as the economic recovery continues.

There was also a discussion on how to mitigate downside performance. Patrick Armitage noted the diversified multi-asset class portfolio offered very good protection for APNIC's investment portfolio.

The EC would consider a review of APNIC's risk appetite next year, and identify potential changes to the investment policy regarding risk exposure.

[Andrew McAuley and Patrick Armitage left the meeting at 11:40 (UTC +10)]

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

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

The October financial report highlights a net surplus of AUD 4.9M to date, with revenue and expenses tracking at 2.2% and 11.5% respectively under the budget forecast. At the end of October 2021, APNIC had a total of 8,708 Members serving 53 economies.

There was a discussion on the declining membership growth numbers. The EC recommended a review of the membership structure at the next meeting. It was also suggested to conduct an analysis of the Least Developed Countries (LDC) to assess the impacts of LDC graduation on future budgeting.

### 13. Discussions of 2022 Activity Plan

The Director General spoke to the proposed activity plan for 2022 which was framed across five strategic pillars. He then discussed the four thematic areas of focus and the detailed activities for 2022.

[Duncan Macintosh left the meeting at 12:38 (UTC +10)]

Meeting adjourned at 12:38 (UTC +10), Tuesday, 7 December 2021

Meeting resumed at 13:15 (UTC +10), Tuesday, 7 December 2021

The EC discussed the strategic plan at length and provided suggestions on how to improve the success measures on the pursuit of the performance goals.

The EC thanked the DG and the ELT for their work and expressed support for the activity plan 2022.

### Meeting adjourned at 15:00 (UTC +10), Tuesday, 7 December 2021

### Meeting resumed at 15:10 (UTC +10), Tuesday, 7 December 2021

### 14. Discussion of 2022 Budget

Nathan Harvey spoke to the proposed budget presentation for 2022 (attached).

The EC discussed the proposed budget at length.

The EC acknowledged that there was a need for a fee structure review to be done in 2022. There was also a suggestion to use the 2022 Survey to collect opinions around fees.

[Irene Chan left the meeting at 17:06 (UTC +10)]

Meeting adjourned at 17:06 (UTC +10), Tuesday, 7 December 2021

Meeting resumed at 11:00 (UTC +10), Thursday, 9 December 2021

The EC had an in-camera session from 11:00 to 11:52 (UTC +10), Thursday, 9 December 2021.

The formal EC meeting resumed at 11:52 (UTC +10), Thursday, 9 December 2021.

### 15. Declaration of interests

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

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

### 16. Approval of 2022 Activity Plan and Budget

The Director General spoke to the updated activity plan for 2022 based on previous feedback from the ELT (attached).

The EC considered the proposed activity plan and budget for 2022. The EC also noted that the success measures summary was very helpful and recommended this continue to be prepared.

The Director General confirmed that the budget retained provisions for 50% of ordinary travel due to COVID uncertainty and considered this an appropriate estimate should travel be enabled in 2022.

Resolution 2021-26: The EC resolved to approve and adopt the 2022 Budget (as attached) that provides authority to the Director General for a total operational expenditure of AUD 33,764,411 and a total capital expenditure of AUD 1,469,300 for 2022.

Motion proposed by Kenny Huang; seconded by Vincent Achie Atienza. Passed unanimously.

[Anton Strydom, Che-Hoo Cheng, Pablo Hinojosa and Louise Tromp left the meeting at 12:15 (UTC +10)]

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

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

### Resolution 2021-22: The EC resolved, subject to:

- the Australian Securities and Investments Commission consenting to the resignation of Deloitte Private Pty Ltd as APNIC's auditors; and
- Ernst & Young consenting to act as APNIC's auditors,

that Ernst & Young be appointed as auditors of APNIC, on terms substantially similar to those tabled, to hold office from FY2021 for the period of five years, or earlier if it resigns, or if the APNIC EC appoints another auditor in its stead.

Resolution 2021-23: The EC resolved, subject to Ernst & Young consenting to act as APNIC Foundation Limited (Australia)'s auditors, that Ernst & Young be appointed as auditors of APNIC Foundation Limited (Australia), on terms substantially similar to those tabled, to hold office from FY2021 for the period of five years, or earlier if it resigns, or if the APNIC EC appoints another auditor in its stead.

Resolution 2021-24: The EC resolved to adopt the minutes of the EC meeting of 7-8 September 2021.

Resolution 2021-25: The EC resolved to endorse the adoption of the following policy proposals:

- Prop-135: Documentation
- Prop-136: Registration Requirement
- Prop-139: SOR (Second Opinion Request) Not Required
- Prop-140: Update End-Site Definition

### 18. Matters arising from the last meeting

The following matters from the previous meetings were completed:

Action item 2021-06: The DG to contact Nicole Chan to confirm her willingness to accept the NRO NC appointment. (See agenda item 21)

Action item 2021-07: The Secretariat to launch the EC satisfaction survey in October 2021. (See agenda item 18)

Action item 2021-08: The Secretariat to update the risk register. (See agenda item 5)

### 19. NRO NC appointment

The EC agreed to extend Nicole Chan's term for a second term.

Resolution 2021-27: The EC resolved to appoint Nicole Chan to the NRO Number Council/ASO Address Council for a one-year term from 1 January 2022 to 31 December 2022.

Motion proposed by Sumon Ahmed Sabir; seconded by Vincent Achie Atienza.

Kenny Huang abstained from voting.

### 20. EC satisfaction survey

Connie Chan spoke to the results of the EC satisfaction survey.

The EC welcomed the high scores for overall performance in this year's EC satisfaction survey. The EC discussed some of the items from the survey for further improvement, and welcomed the opportunity to further engage with the team in between meetings. The EC agreed that the EC satisfaction survey be conducted annually.

The EC Chair reminded the EC members to complete their annual compliance training.

### 21. APNIC Foundation update (continued)

The EC considered the due diligence on the APNIC Foundation board candidate.

[Confidential information redacted]

### 22. APNIC office space

Craig Ng provided an update on the status of negotiations with the seller of the property that APIDT had made an offer to purchase and that would subsequently be leased to APNIC.

The EC Chair noted the property would be acquired and developed by APIDT, and that the commitment of APNIC would be to lease the newly constructed office space from APIDT. Once the property was settled, APNIC would be looking at the leasing options and how it would be structured. APNIC would also be involved in discussions around the building construction.

The Director General spoke to the property acquisition presentation.

Meeting adjourned at 13:05 (UTC +10), Thursday, 9 December 2021

Meeting resumed at 13:35 (UTC +10), Thursday, 9 December 2021

### 23. 2022 Survey planning

Brenda Mainland from Survey Matters joined the meeting for this agenda item.

Brenda Mainland spoke to the survey proposal presentation (attached).

The EC agreed to proceed with the survey as presented. This approach was consistent with previous years, which would allow for better comparative analysis.

It was noted that the survey questions would be finalized in consultation with the ELT and EC.

[Brenda Mainland left the meeting at 14:21 (UTC +10)]

### 24. Review of historical resource holders structure

Karla Skarda spoke to the historical account holder analysis presentation.

The EC discussed the issue at length and agreed that it was important to follow up with the NRO RSCG and the legal team.

### 25. EC election at APNIC 53

Craig Ng spoke to the EC election timeline (attached).

The EC considered a few candidates for the role of the Election Chair. They would continue discussions on the mailing list, and pass a resolution at the next EC meeting.

### 26. Any other business

The EC Chair called for any other business.

### a. Service Partner

The Director General provided an update on the Service Partner trial.

The EC considered a potential candidate for Service Partner and discussed the matter at length. The EC asked the Secretariat to further explore the case.

[Sanjaya and Karla Skarda left the meeting at 15:32 (UTC +10)]

#### b. Remuneration sub-committee for remuneration

The EC Chair noted that he normally handled the remuneration of the Director General. He recommended this be expanded to a Remuneration sub-committee.

Proposed Resolution 2021-29: The EC resolves to designate a standing Remuneration Sub-Committee of the EC, comprising the chair and treasurer for the time being of the EC, and one other EC member nominated by the chair. The Remuneration Sub-Committee's role is to evaluate the performance of the Director-General on an annual basis, and to make a recommendation to the EC about the annual compensation and bonus payable to the Director-General each year.

Motion proposed by Gaurab Raj Upadhaya; seconded by Vincent Achie Atienza. Passed unanimously.

Paul Wilson abstained from voting.

Gaurab Raj Upadhaya noted that he had designated Yoshinobu Matsuzaki as the other member of the Remuneration Sub-Committee.

### 27. Next EC meeting

The next EC meeting is tentatively scheduled for Monday, 21 February 2022.

Meeting closed at 15:45 (UTC +10), Thursday, 9 December 2021

#### Attachments:

- A. Secretariat report and presentation
- B. [Confidential material redacted]
- C. [Confidential material redacted]
- D. [Confidential material redacted]
- E. APNIC Foundation update presentation
- F. [Confidential material redacted]
- G. [Confidential material redacted]
- H. [Confidential material redacted]
- I. [Confidential material redacted]
- J. Success measures summary Dec 2021
- K. October 2021 Credit Suisse investment report
- L. October 2021 Credit Suisse commentary
- M. November 2021 Credit Suisse investment report
- N. APNIC portfolio review presentation
- O. October 2021 finance presentation
- P. October 2021 monthly financial report
- Q. 2022 activity plan
- R. 2022 budget document and presentation
- S. Register of interests
- T. [Confidential material redacted]
- U. [Confidential material redacted]
- V. [Confidential material redacted]
- W. Survey proposal presentation
- X. [Confidential information redacted]
- Y. APNIC 53 EC election procedures

# Agenda Item 4 Secretariat report

### **APNIC Secretariat Report**

1 January - 31 October 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 6 to 9 December 2021. It provides a summary of activities from 1 January to 31 October 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).
- 377 feedback items were resolved (on conferences, training, staff presentations, website information). The User Feedback Group grew to 478 (target 500) (1A.2).
- 633 new Members joined APNIC (five from Service Partners and 10 from Member referrals). Current total membership stands at 8,708 (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)
- 'Tribe' was selected for the prototype Online Community Platform and was trialled with three communities (1B.2).

### Registry

- APNIC received 8,192 ASNs from IANA (2A.1).
- The percentage of Members holding IPv6 reached 68.05% in July (2A.1).
- Confirmation rate for IRT email validations is 75.4% (2A.2).
- 77 of 293 prefixes identified by the IPv4 reclamation project have been returned to APNIC (2A.3).
- prop-133 was endorsed by the EC following APNIC 51. Following APNIC 52, prop-135, -136, -139, and -140 were sent to the EC for endorsement. (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' 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).
- 25 technical community events were supported, and technical support was provided to eleven online NOG events (3C.1).

- Staff participated in 39 security community events (3C.2).
- A new study about Internet Success Factors was commissioned by APNIC and LACNIC, with Analysys Mason selected. The report will be presented at a townhall workshop at the 2021 IGF in December (3C.3).
- Three workshop proposals were accepted by the IGF, and two workshop proposals were accepted by the APrIGF (3C.4).
- From January to Oct 2021, APNIC recorded 252 engagements (3C.6).
- The APNIC EC initiated and held three 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).
- 85 training courses were delivered to 1,950 attendees, and 17 webinars to 1,074 attendees (3E.2).
- The proportion of Members with ROAs grew from 58.2% to 74.6%. (3E.5).
- A new ROA measurement tool was released to help monitor RPKI deployment (3E.5).
- IPv6 capability in the Asia Pacific reached 32.19% (3E.6).
- Deployment of M-root servers is progressing in 11 locations (3F.3).

### Information

- The Blog averaged 69,369 views per month, 7.1% above 2020's monthly average of 64,778 (4A.1).
- The Internet Directory was renamed Resource Explorer (REx) (4A.2).
- 32 APNIC Labs research articles were published, and 33 research presentations delivered (4B.3).

### Capability

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

### **Budget Performance**

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

Pillar	Workstream		FTE		Expense			Capital		
		Budget	Actual	Variance	Budget	Actual	Variance	Budget	Actual	Variance
	Member Services	8.58	9.63	-12%	1,833,547	1,745,914	-5%	-	7,935	0%
Membership	Membership Products	12.28	8.25	-33%	1,991,892	1,519,352	-24%	-	-	
	Membership Reporting	1.56	1.04	-33%	584,494	493,084	-16%	-	-	
	Registration Services	4.53	5.01	11%	672,589	684,158	2%	-	-	
Registry	Registry Products	9.04	6.21	-31%	2,099,661	1,491,064	-29%	-	-	
	Policy Development	0.64	0.70	10%	320,576	298,831	-7%	-	-	
	APNIC Conferences	5.04	4.92	-2%	1,258,264	766,945	-39%	43,150	4,296	-90%
	Foundation Support	1.58	1.27	-20%	477,032	62,595	-87%	-	-	
Development	Community Engagement	6.38	4.45	-30%	1,483,265	1,141,400	-23%	-	-	
Development	Community Participation	1.52	0.99	-35%	248,943	203,656	-18%	-	-	
	APNIC Academy	10.8	8.19	-24%	1,934,978	1,478,153	-24%	15,000	16,351	9%
	Internet Infrastructure Support	0.76	1.04	36%	474,313	304,892	-36%	60,000	-	
Information	Information Products	5.52	8.87	61%	789,166	606,630	-23%	-	-	
illiorillation	Research and Analysis	1.02	1.03	1%	655,633	934,123	42%	80,000	28,384	-65%
	Internal Technical Infrastructure	6.2	14.52	134%	1,547,921	1,701,445	10%	288,200	271,898	-6%
Capability	Finance and Business Services	10.14	11.16	10%	1,738,136	1,662,501	-4%	30,000	7,362	-75%
Capability	Employee Experience	4.65	5.57	20%	1,564,578	1,587,419	1%	80,000	32,961	-59%
	Governance	2.76	1.85	-33%	919,216	876,427	-5%	-	-	
		93	94.7	2%	20,594,204	17,558,588	-15%	596,350	369,186	-38%

Notes: ■ <= 25% variance ■ > 25% <= 50% variance ■ > 50% variance

**Table 1: Budget performance summary** 

### **Tracking Success Measures**

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

- Completed
- In progress
- At risk

### 1 Membership



### 1A Member Services

### **Operations**

### 1A.1 Member service delivery

### Service requests SLA

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

### Service satisfaction ratings

- 93% of service satisfaction ratings (711/761 requests) were either 'Excellent' or 'Above Average'.
- Follow up of all 'Poor' ratings revealed 13 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, nine requests by Members with additional questions, one because the Member account was overdue for renewal, and one bug report.

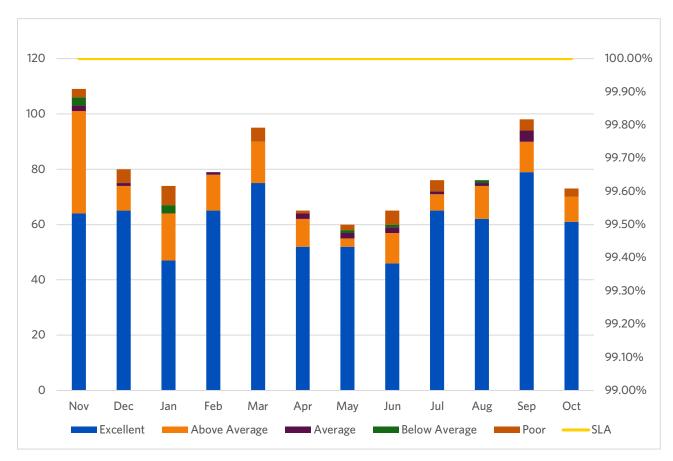


Figure 1: Service SLA and satisfaction

### Member Outreach

 There were 137 Member Services engagements across 42 economies, covering RPKI, resource transfers, technical assistance, awareness of upcoming events, and a security incident involving the APNIC Whois Database.

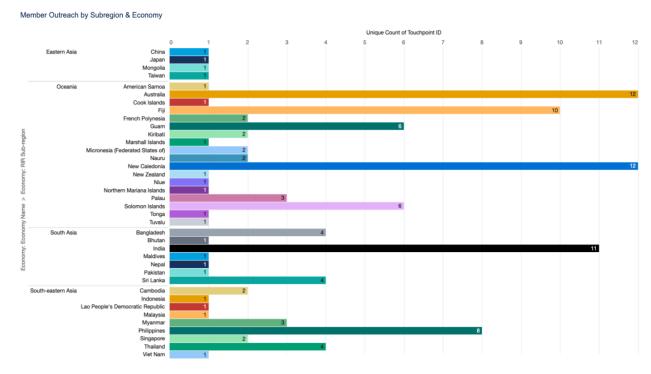


Figure 2: Touchpoints per economy

### Fraud Handling

- Fraud cases remained low, 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.

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

Table 2: Fraud cases

	Success Measures – 1A.1.	Results	Status
1	Maintain Helpdesk SLA of two business day response to enquiries (>99.90%).	100%	•
2	Maintain service satisfaction ratings of at least 93% "excellent and above average" feedback.	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.	42 out of 47	•

### 1A.2 Member experience

### **Feedback**

- Members and the community provided 1,714 feedback items, with 377 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.

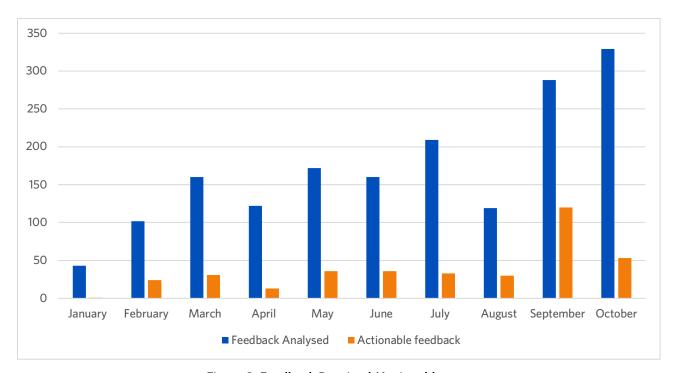


Figure 3: Feedback Received/Actionable

### **User Feedback Group**

- Community members are encouraged to join the voluntary <u>User Feedback Group</u> to provide views on product developments. This group grew to 478 people.
- There have been 32 one-on-one feedback interviews with Members.

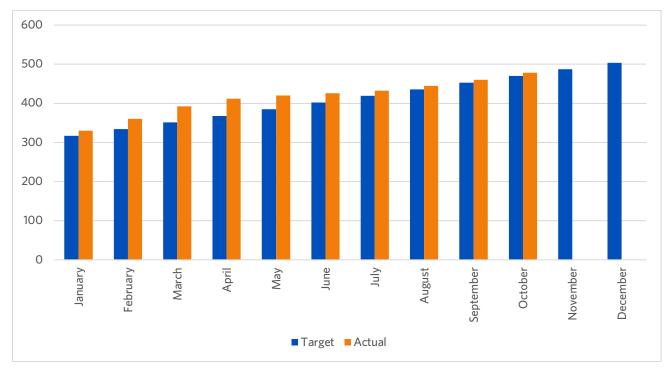


Figure 4: User Feedback Group Growth

### Web accessibility for disabled users

- All 16 critical issues have been resolved.
- 66 high priority issues were identified, with 14 resolved, 19 in progress and the remaining tasks with product teams to resolve by 31 December.

	Success Measures – 1A.2.		Status
1	All improvement suggestions received from all feedback channels are followed up and actioned.	100%	•
2	All critical and high accessibility issues are resolved.	82 issues: 30 fixed, 19 in progress	•
3	Grow product and service user feedback group from 300 to 500 members.	478	•
4	One-on-one feedback sessions with at least 50 Members.	32	•

### 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 633 new Members joined APNIC, five from Service Partners and ten from Member referrals.

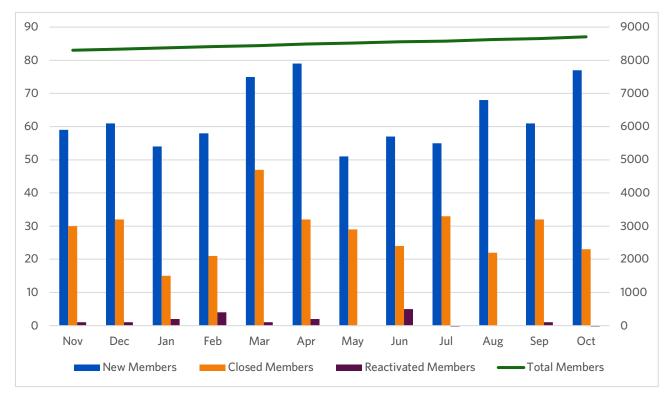


Figure 5: Membership transactions

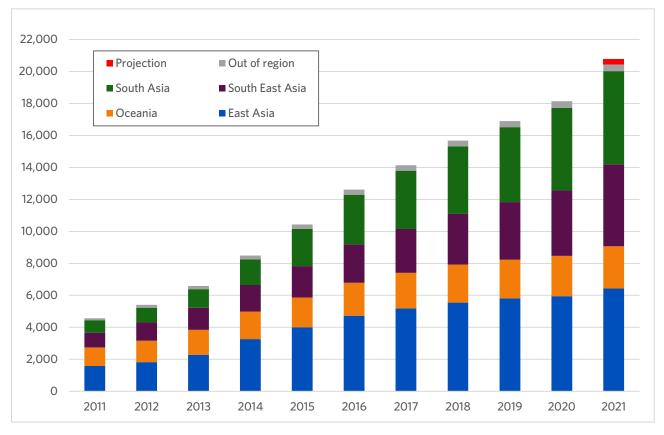


Figure 6: Total membership (APNIC + NIR, by subregion)

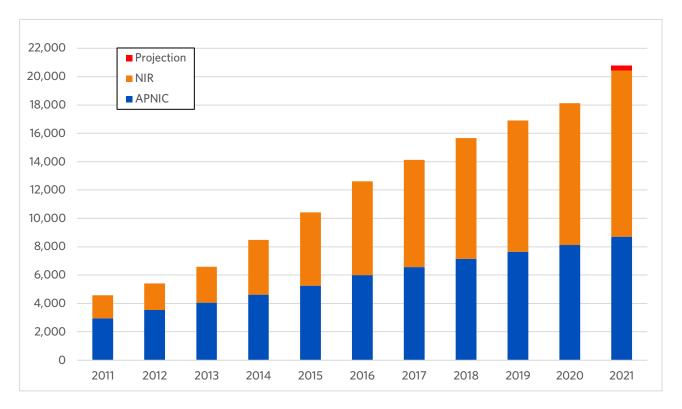


Figure 7: Total membership (APNIC + NIR)

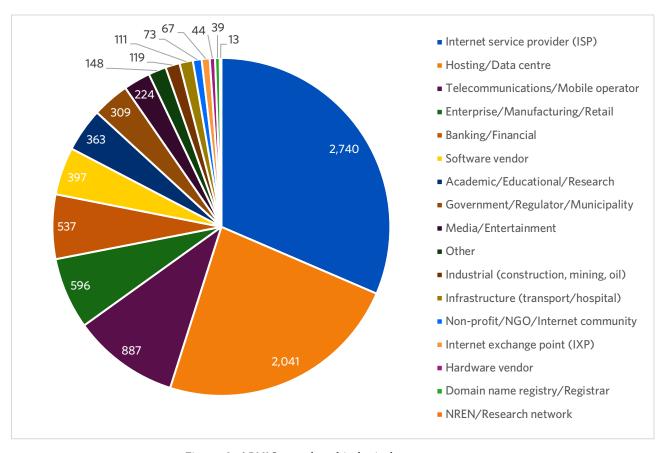


Figure 8: APNIC membership by industry type

	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.	8,708	•

### 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.

#### **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.
- Improvements to the billing section, including advanced invoice management, downloadable receipts, and better billing due date visibility, has been postponed to December.
- 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 in User Acceptance Testing (UAT).
- Baseline metrics for common MyAPNIC tasks were developed to understand task completion and reduce error rates.
- Initiate problem finding on improving the ability of Members to manage their profiles and account contacts.
   The 'task to completion' metric will be used as part of the success measures.
- 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 in 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 December (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.
- Billing surcharges were removed for Members paying annual fees by instalment.
- 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 Q4.
- Work started to improve and automate manual processes required for HRM 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 Q1 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:

- The 'Tribe' platform was selected for testing following the product evaluation process.
- A pilot trial with three communities (SWITCH SEA, APNIC 52 Online Fellows and APNIC Academy) and 110
  users was completed. Findings are being assessed to determine the next steps, including a major platform
  upgrade to Tribe 2.

### 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.

	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.	51/51 achieved	

### 2 Registry

### 2A Registration Services

### **Operations**

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

### Resource pools

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

	Total at 1 Jan 2021	From IANA	Transfers in	Transfers out	Total at 31 Oct 2021	Total delegated	Total reserved	Total available
IPv4 /24s	3,482,617	0	1,952	781	3,483,788	3,462,318	7,302	14,168
IPv6 /32s	1,067,008	0	0	0	1,067,008	97,281	113,718	856,009
ASNs	21,143	8,192	3	4	29,334	25,691	0	3,643

Table 3: Resource pool status

### IPv4 pool status

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

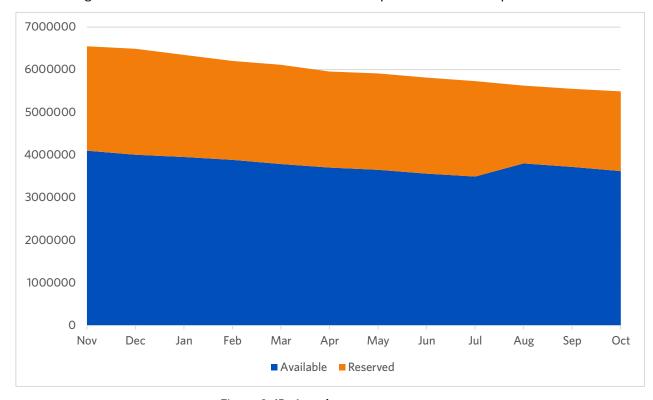


Figure 9: IPv4 pool status

### IPv4, IPv6 and ASN delegations

- The following graphs show the number of delegations for each resource type by sub-region.
- 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.

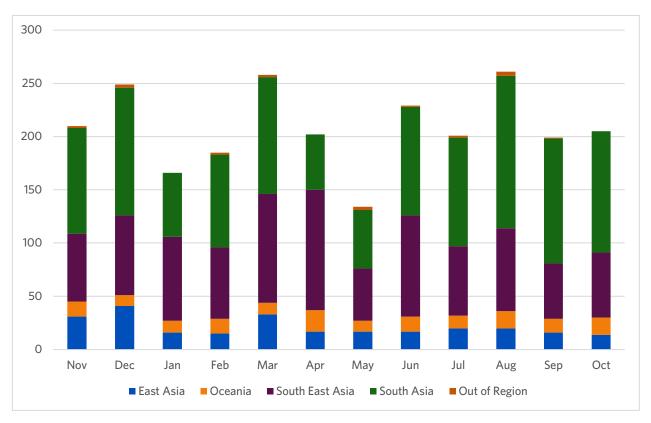


Figure 10: IPv4 delegations by sub-region

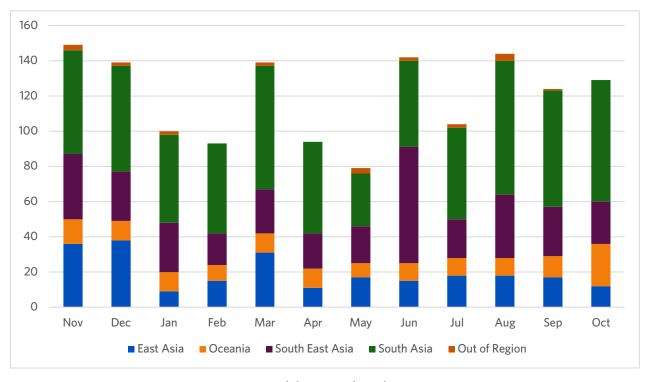


Figure 11: IPv6 delegations by sub-region

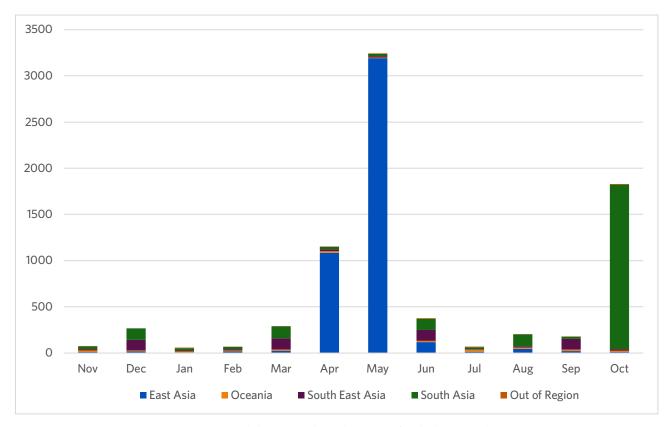


Figure 12: ASN delegations by sub-region (including NIRs)

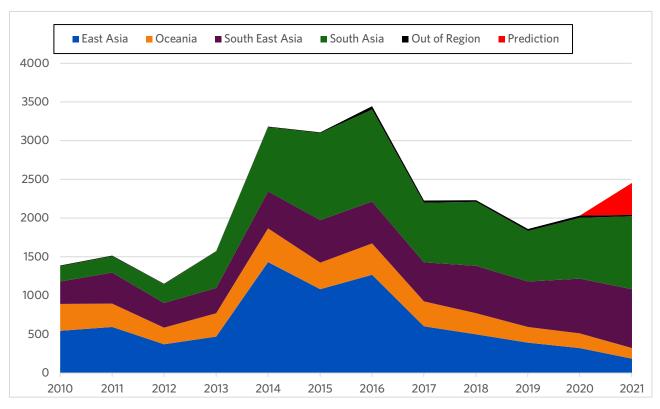


Figure 13: Annual IPv4 delegations

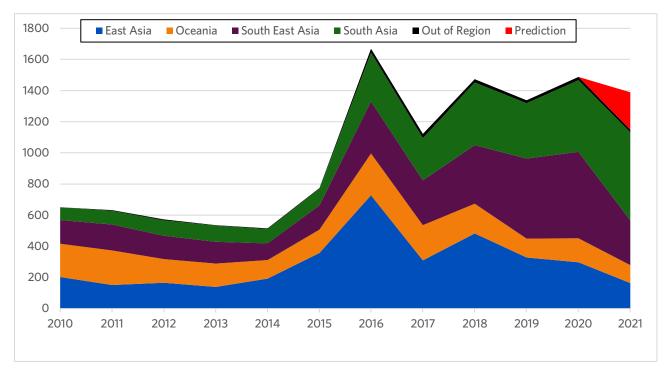


Figure 14: Annual IPv6 delegations

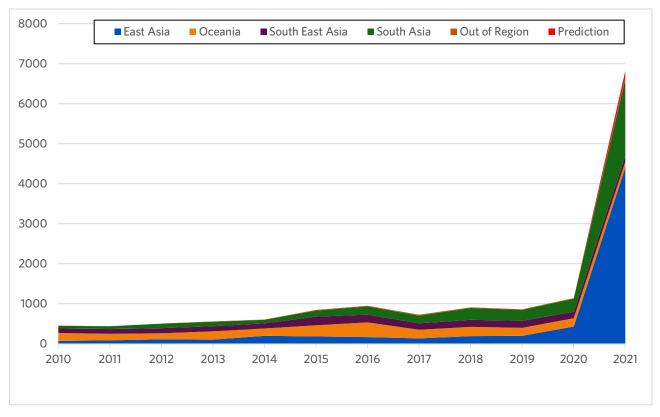


Figure 15: Annual ASN delegations

### Member resource holdings

The proportion of APNIC Members holding specific resource types is as follows. The percentage of Members holding IPv6 reached 68.05% in Oct 2021 (target is 70%).

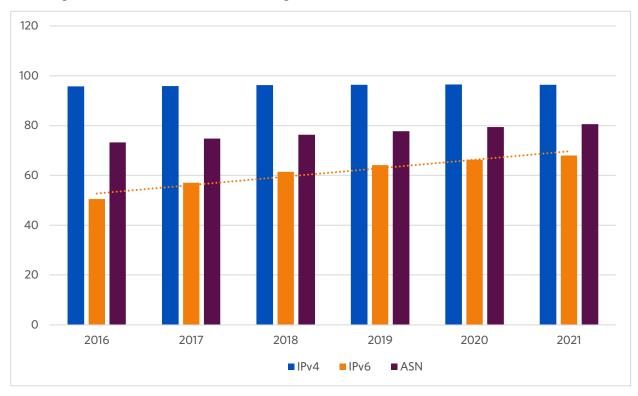


Figure 16: Member resource type holdings

### IPv4 transfers: Mergers/acquisitions and historical

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



Figure 17: M&A and historical transfers

### IPv4 market transfers

- There were several IPv4 transfers by IRINN in January 2021, which drove higher counts in the chart below.
- Large IPv4 transfers from APIDT in June and between Triple T (Thailand) accounts in August drove elevated transfer volumes.

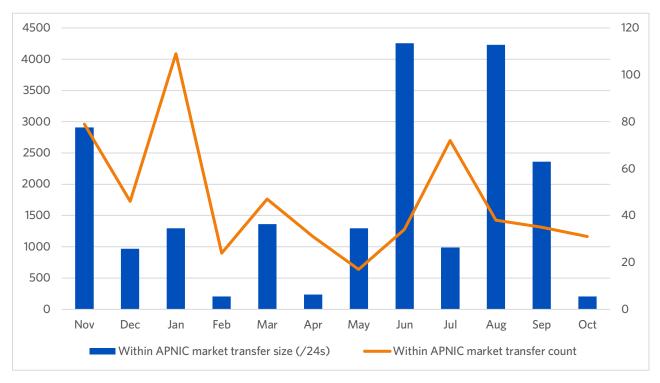


Figure 18: Market transfers within APNIC

#### Market transfers: Inter-RIR

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

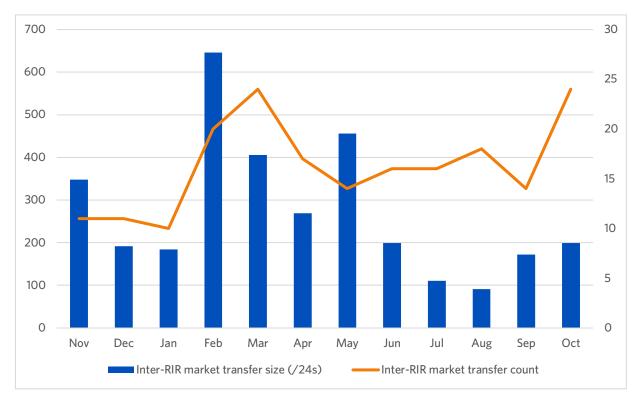


Figure 19: Inter-RIR IPv4 transfers

	Success Measures - 2A.1.	Results	Status
1	Maintain Registration Services SLA of two business day response to enquiries (>99.90%).	100%	•
2	Increase percentage of Members holding IPv6 address space to 70%.	68.05%	•

### 2A.2 Maintain correct and current registry data

- Improvements were made to IRT validation under Prop-125.
  - o Email templates used for IRT validation and Member notifications were simplified.
  - o IRT management in MyAPNIC was improved to help update IRT details and handle validation emails.
  - 18,556 email validation requests have been issued; 13,987 email validation requests were confirmed. The confirmation rate is 75.4%.
- 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.

### o 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'

### o 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'

o Current (to be implemented in 2022)

	Success Measures – 2A.2.	Results	Status
1	Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting.	In progress	•
2	Increase rate of validation by Members of registration records.	75.4% 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 have been identified and contacted to encourage them to claim, transfer or return the resources.
- So far, 487,680 addresses have been returned to APNIC, equal to nearly 1/13, or 1,905/24s, over 77 prefixes; while holders chose to retain 410,624, over 48 prefixes.
- All publicly available information including online company registries, company websites and web searches are being used to identify custodian contacts. Address space for uncontactable custodians, or custodians that do not respond by the end of the year, will be reclaimed by APNIC.

Status	31 Mar	31 Jul	31 Oct	Percentage	Addresses
Yet to contact	60	32	14	4.78%	264,960
Not contactable	51	54	61	20.82%	407,296
No response	66	55	57	19.45%	541,184
Prefixes being claimed by holder	37	31	36	12.29%	273,408
Prefixes retained by holder	29	50	48	16.38%	410,624
Prefixes returned to APNIC	50	71	77	26.28%	487,680
Total number of unrouted prefixes	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.	In progress	•

## 2B Registry Products

## **Operations**

## 2B.1 Internet number registry management

#### **NIR API**

- Implementation began on an NIR API to assist NIR resource administration and registry accuracy.
- Development work is completed and an external test environment established. Release preparation is in progress.

#### **APNIC Registry Management System (ARMS)**

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

#### Registry re-architecture

 A requirements specification is being drafted. This is a multi-year project under APNIC's Next-generation Registry initiative.

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

#### 2B.2 Registry product management

#### **RPKI**

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

#### **RDAP**

- The finalised 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.

Results Status	Success Measures – 2B.2.
----------------	--------------------------

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.	In progress	•
4	Implement the NIR KPI monitor for RPKI.	Scheduled for Q4	•

## 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:
  - o prop-133: Clarification on Sub-Assignments
- A second proposal was discussed but did not reach consensus and was abandoned:
  - o 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:
  - o prop-135: Documentation
  - o prop-136: Registration Requirements
  - o prop-139: SOR not required
  - o prop-140: Update End-Site Definition
- The following proposal reached consensus but was returned to the author for clarification:
  - o <u>prop-137</u>: IPv6 assignment for associate members
- The following policy proposal did not reach consensus and was returned to the mailing list:
  - o 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:
  - o prop-138: Restricting AS-ID in ROA
- Following the meeting, the comment period for prop-135, -136, -139 and -140 closed with no objections and the proposals were sent to the APNIC EC for endorsement.

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

## **2C.2** Policy implementation

 Policy text changes resulting from prop-133 were implemented and published as apnic-127-v009. A policy implementation report was presented at APNIC 52.

	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, with four accepted for discussion at the OPM.

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

## 3 Development

## **Operations**

## 3A APNIC Conferences

#### 3A.1 APNIC conferences

#### APRICOT 2021 / APNIC 51

APRICOT 2021 was held online from 22 February to 4 March 2021.

Conference statistics	
Total number of remote participants (Zoom)	852
Economies represented	61
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.

## 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

Ongoing discussion with the Pakistan community for PKNOG setup.

Month	Event	Location	Sponsorship	Committee /PC	Talk/Panel discussion	Training	Tech / Zoom Support
Jan	MMNOG 4	South East Asia		<b>√</b>			✓
Jan	SANOG 36	South Asia		✓		✓	✓
Jan	JANOG 47	East Asia	✓				
Jan	TWNOG	East Asia	✓				✓
Feb	APAN 51	Asia Pacific		✓	✓	✓	$\checkmark$
Feb	MANRS Tech Talk	Oceania			✓		
Feb	APIX	Asia Pacific					✓
Feb	APRICOT 2021	Asia Pacific		✓	✓	✓	✓
Mar	Crikey Con VII	Oceania	✓				
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	✓	<b>√</b>		✓	<b>√</b>
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	Threat Con 2021	South Asia	✓		✓		
Sep	APNIC52	East Asia				✓	
Sep	VNIX-NOG	South East Asia	✓		✓	✓	✓
Oct	btNOG8	South Asia	✓	✓	✓	✓	✓
Oct	mnNOG3	East Asia	✓	✓	✓	✓	✓
Oct	Y4IT2021	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

<sup>\*</sup> Sponsorship of PeeringDB, IXPDB and IXP Manager is provided by the APNIC Foundation.

	Success Measures - 3C.1.	Results	Status
1	Sponsor/participate in 30 technical community events including NOGs, Peering Forums, and Research & Education events.	25 events	•
2	Support 20 NOGs to conduct online events if physical events are not possible.	11 NOGs	•
3	Facilitate and support two new/revived NOGs in two sub-regions.	1 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, Threat Con 2021.
- Training:
  - Delivered Linux Forensics for System Administrator training in collaboration with BtCIRT.
  - o 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.
  - o KRCERT/CC APISC Training 2021.

#### **Security Community Support**

#### Presentations:

 APECTEL 62 Security and Prosperity Working Group meeting, ASEAN-JAPAN Cyber Security Seminar, Cybersecurity Asia 2021 Conference, Philippine International Cybersecurity Conference 2021, UMS Cybersecurity Awareness Seminar, Pacific IGF, ITU Global Cyberdrill 2021, KRCERT/CC APISC Training 2021.

#### Training:

- o Security sessions at the 2nd ICANN APAC-TWNIC Engagement Forum.
- Three workshops for Cyber Safety Pasifika.
- o 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.
- o Tutorial on Security Monitoring with Elasticsearch at the Samoa Cyber Week.

#### Participation:

- 6th INTERPOL Global Cyber Crime Expert Group meeting and the INTERPOL Forum on Ransomware,
   FIRST CTI Summit 2021, BrisSEC21, ISCR 2021, HackintheBox (SIN) 2021, VBLocalhost 2021, Suricon 2021,
   and OSDFCon, CrikeyCon VII, AusCERT 2021, ASEAN Cyber Security Forum (Cydes 2021) (as a panellist).
- APNIC staff participated in the program committee for AusCERT 2021 and the FIRST Annual Security Conference 2021.

#### Other:

- o Provided sponsorship support to CrikeyCon VII, Threat Con 2021.
- Supported the FIRST Annual Security Conference 2021 as session Chair.

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.	39 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.
- Two drafts were produced, with the final report due in Q4. The report is scheduled to be presented at a townhall session during the 2021 IGF in December.
- Participated in nine NRO EC meetings and 14 NRO coordination group meetings (PACG (5), ECG (2), PSCG (3) 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 35<sup>th</sup> TWNIC OPM, and the 36<sup>th</sup> 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 17 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 eight Policy Network for Environment and Digitalization (PNE) Multistakeholder Working Group (MWG) meetings; coordination and planning of the BP workstream on Environmental Data including four workstream meetings.

- Participated in the Cybersecurity Best Practices Forum coordination and report development.
- Three workshop proposals for the 2021 IGF program were accepted. Topics are Learning Resiliency, Supply Chain IoT, and a Townhall to present the results of the Internet Study on Technical Success Factors. 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 13 IGF Support Association (IGFSA) Executive Committee Meetings and two follow-up meetings with the IGFSA Secretariat. Assisted IGFSA with communication improvements.

#### **APrIGF**

- Participated in 17 APrIGF Multistakeholder Steering Group (MSG) meetings, 21 PC meetings, and seven
   Drafting 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 prior to the event.
- Participated in seven Steering Committee meetings for NetThing (AU).
- Participated in the HKIGF webinar on Internet censorship, India IGF pre-event webinar and sponsored and participated in Youth IGF Bangladesh.

#### Other Internet Governance events and communities

- Presented the opening remarks at bdSIG.
- 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.
- Participated in five meetings of the Program and the Organizational Committees of the Asia Pacific School of Internet Governance (APSIG). APSIG will take place in Colombo, Sri Lanka in December.

	Success Measures - 3C.4.	Results	Status
1	Sponsor and participate in APrIGF and IGF with workshop proposals, MSG/MAG participation, and speaking roles.	3 proposals to IGF 2 proposals to APrIGF Sponsoring APrIGF	•

2	Participate in at least three national Internet governance initiatives.	2/3	
3	Sponsor and participate in at least two schools of Internet governance.	2/2	•

## 3C.5 Government engagement

#### Intergovernmental forums

#### ITU

- Participated in, or monitored, 15 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 21<sup>st</sup> Global Symposium for Regulators (GSR-21), ITU Telecom World, ITU Telecommunication Development Advisory Group (TDAG) and ITU Telecommunication Standardization Advisory Group (TSAG).
- Training and technical assistance support to the Mongolian government's Digital Nation (e-Mongolia) initiative.
- o Held four coordination meetings with the ITU Regional Office in Asia and the Pacific.
- o Presented at the ITU Regional Preparatory Meeting for Asia Pacific and ITU Emerging Technology Week.

#### APT

- Met with APT Secretary General and APT Secretariat to coordinate on regional initiatives (three meetings).
- o Delivered six online tutorials to Myanmar, Laos, Philippines, Tuvalu, and China.
- o Monitored discussions at the APT preparatory meetings for WTDC-21.
- Participated in the 1<sup>st</sup> Preparatory Meeting for PP-22 (APT PP22-1).

#### OECD

o Contributed to an OECD paper on routing security and monitored discussions at five OECD meetings.

#### APEC TEL

o 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 (three meetings).
- Presented at the Executive Cybersecurity Workshop organized by the Daniel K. Inouye Asia Pacific Center for Security Studies.

#### Law Enforcement and Public Safety

Met with AFP representatives from Cyber Safety Pasifika to organize LEA training for 2021-2022.

- Delivered three workshops for 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).

	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.	5	•

## **3C.6** External relations coordination

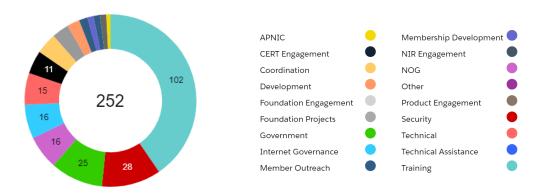
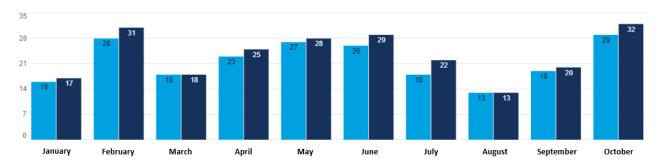


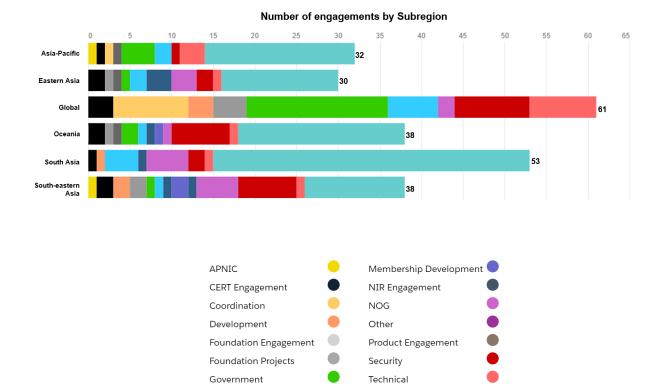
Figure 20: Engagements summary by type



\*Not including APNIC Academy webinar numbers.

Events Engagements

Figure 21: Engagement summary by month



Technical Assistance

Training

Figure 22: Engagement summary by subregion/type



Internet Governance Member Outreach

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

<sup>\*</sup>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.

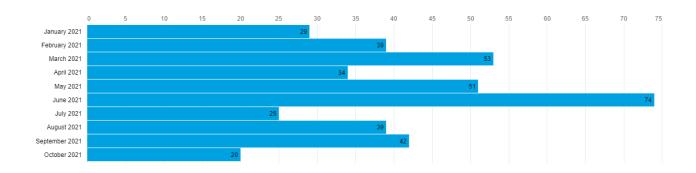


\*Global collaboration is for events dedicated and engaged outside the Asia Pacific region. Asia Pacific refers to events delivered for the AP region or regional events that are not economy specific.

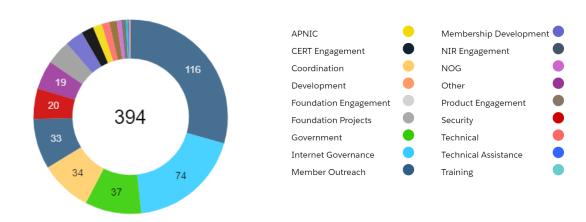
\*South East Asia, South Asia, East Asia and Oceania now each have an 'Open Economy (OP1, OP2, OP3, OP4'" to capture delivery of events targeted to a specific subregion and not others, to avoid diluting the stats for Asia Pacific.

Figure 23: Engagement detail by economy

## Touchpoints by month



## Touchpoints by engagement types



## Unique contacts in touchpoints by subregion

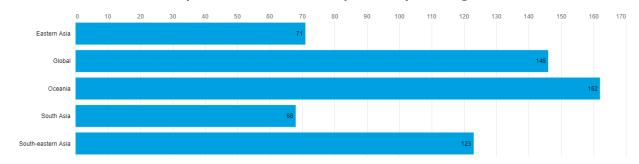


Figure 24: Touchpoints summary

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

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

Succe	ss Measures – 3C.6.	Results	Status
-------	---------------------	---------	--------

1	Facilitate one External Relations coordination retreat.	Completed	•
2	Facilitate 10 External Relations team coordination meetings.	8/10	•

## 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.
  - o Di Ma was elected unopposed to the NRO NC for a two-year term starting 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 and 1 October. 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.
- The meetings will continue to be held quarterly to provide an opportunity to share information between community representatives, the EC, and the Secretariat.

	Success Measures - 3D.1.	Results	Status
1	Achieve 800 online SIG participants across two conferences.	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, India, China, Australia, and Japan.

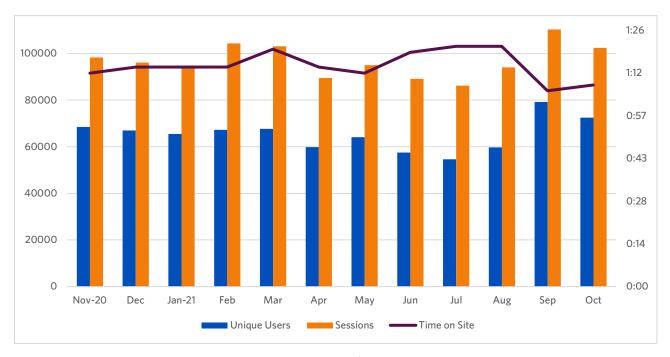


Figure 25: apnic.net website visits

Economy	Total Sessions	Unique Users
United States	354,427	337,458
India	99,602	62,106
China	81,738	53,919
Australia	71,940	42,928
Japan	51,852	34,510
Canada	27,616	26,227
Bangladesh	49,071	24,504
Brazil	22,826	20,978
Singapore	24,278	16,974
Indonesia	27,930	16,117

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	Total
Facebook	Darah	FF0 (7)	245 249	222.000	(70.042	2 945 077
Facebook	Reach	550,676	345,248	232,089	678,962	2,865,077
	Likes	36,292	38,367	40,465	42,205	42,025
Twitter	Followers	12,896	13,009	13,188	13,479	13,479
	Engagement	50,931	98,301	29,091	4,268	234,929
YouTube	Views	2,195	2,274	6,004	2,362	31,782
	Hours	210.4	205.5	892.3	195.7	3,635.9
Slideshare	Views	9,795	10,093	10,201	11,818	106,611
LinkedIn	Reach	18,311	78,248	90,647	18,311	298,258
	Followers	6,221	6,345	6,474	6,595	6,595

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.	3.3 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.	2.8 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 194 new blog subscribers, 1,379 new Twitter followers, and 1,184 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.	194 new subscribers (total 1,194)	•
3	Grow Twitter followers from 12,100 to 13,250.	13,479	•

## 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.

	Success Measures - 3E.1.	Results	Status
1	Migrate legacy training site information to APNIC Academy and decommission previous site.	Scheduled Q4	•
2	Develop a comprehensive curriculum of blended learning for future certification.	To be completed in 2022	•

#### 3E.2 Instructor-led Training

- APNIC remains unable to deliver face-to-face training due to COVID-19 restrictions (all training is remote).
   Testing of 'hybrid mode' training events (where participants gather at a common venue and instructors deliver content remotely) has begun with assistance from local hosts/partners.
- Completed development of the Network Management and Monitoring (NMM) course. Configuration management module in progress.

- Completion of the Network Automation course is due in Q4
- 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 deprecation of the RIPE validator and maintenance ceasing on OctoRPKI.

January to October 2021	APNIC Instructor-led training
Courses (by topic)	85 courses delivered/1,950 attendees
Webinars	17 webinars (8 external/guest speakers)/1,074 attendees

Table 13: Instructor-led training

	Success Measures - 3E.2.	Results	Status
1	Develop two new/updated courses for instructor-led tutorials/workshops.	1 new course completed 3 courses updated with 7 new modules	•
2	Conduct 70 instructor-led tutorials/workshops across four subregions.	85 tutorials/workshops delivered	•
3	Conduct 18 live webinars.	17 webinars delivered	•

## 3E.3 Self-paced training

January to October 2021	APNIC Academy
Courses (by topic)	1,395 completions; 2,704 hours contact
Virtual Labs	4,698 labs launched; 4,662 hours completed
Students	4,445 new accounts (16,035 in total)
Locations	47 economies

Table 14: APNIC Academy training

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

#### 3E.4 Technical Assistance

#### **RPKI**

 Proactive outreach and support to 18 network operators in 7 economies (PH, PK, AU, BT, IN, FJ and NP), to reduce invalid routes.

#### IPv6

Ongoing discussion with NKN (IN) on their IPv6 deployment in 1,633 campuses, and E-bone (PK).

#### **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.
- Ongoing work with 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. Waiting for legal entity and IX location to be confirmed.

	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), 14 RPKI training events were delivered.
- 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-three RPKI-tagged posts have been published on the APNIC Blog, including six in support of the Internet Society's 'RPKI Week' promotion.
- The proportion of Members with ROAs grew from 58.2% to 74.6%.
- 12 economies achieved 90%+ ROA coverage VU (92%), TW (92%), TO (93%), LK (93%), MN (98%), BT 99%, PK (97%), MV (98.9%), TO (95%), NP (92%), NR (100%), MH (100%).
- 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: <a href="https://stats.labs.apnic.net/roa">https://stats.labs.apnic.net/roa</a>

# ROV: <a href="https://stats.labs.apnic.net/rpki">https://stats.labs.apnic.net/rpki</a>



Figure 26: RPKI usage

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

## 3E.6 IPv6 awareness and deployment support

- APNIC delivered 14 IPv6 deployment focused training events.
- Published 23 IPv6-tagged posts on the APNIC Blog.
- Published one new IPv6 deployment success story on China Telecom, bringing the total number of IPv6 deployment stories on the APNIC website to 40.
- IPv6 capability for the Asia Pacific region was 32.19% as measured by APNIC Labs.

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

#### Investments

## 3E.7 Platform and curriculum development

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

#### Status:

- Extended translation support to APNIC Academy online video-based courses.
- Integration of Salesforce's event management system and training event registration began.
- Launched the Technical Assistance (TA) platform on the APNIC Academy.
- Began migration of 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-six Community Trainers from 14 economies were engaged for 59 instructor-led online training events.
- A new Community Trainers model (CT retainer program) for dedicated on-the-ground local support to the community was announced.

#### 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, with the deadline to receive vendor proposals closing 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.
- 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 National CERTs and the ShadowServer Foundation.
- 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 dataset.
- 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 Guam, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta,
   Ulaanbaatar, Kathmandu, Mumbai and Singapore are progressing but equipment delivery delay is slowing deployment.

## 4 Information

## **Operations**



## **4A** Information Products

## 4A.1 APNIC Blog

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	YTD	All time
ſ	Views	62,057	56,903	74,376	72,576	71,578	73,289	82,163	75,850	55,237	69,658	693,687	3,332,622
	Posts	27	30	38	27	28	27	31	28	39	35	310	2,710

Table 15: APNIC Blog activity

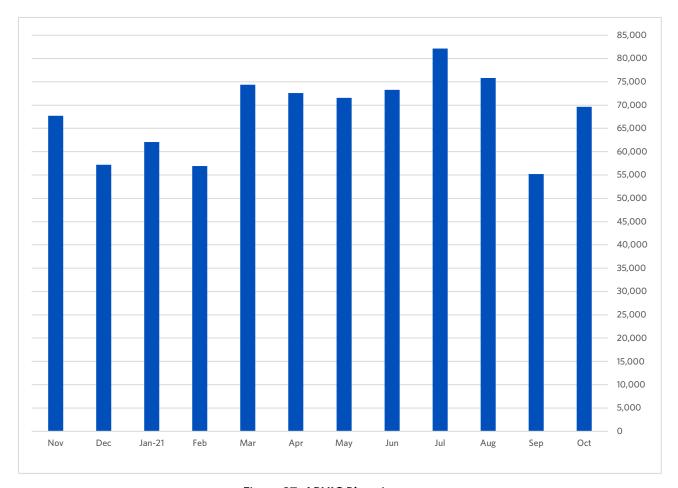


Figure 27: APNIC Blog views

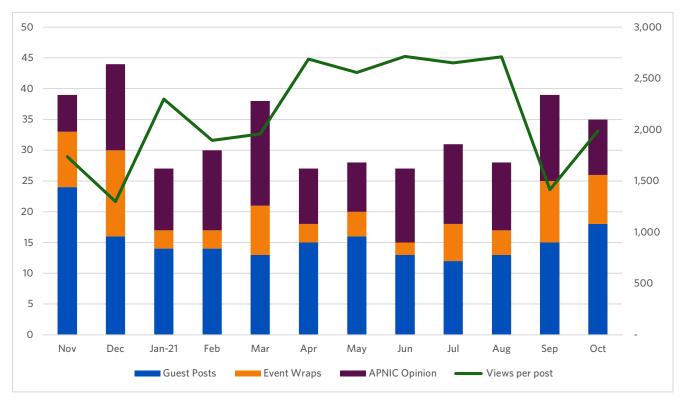


Figure 28: APNIC Blog posts

- The Blog averaged 69,369 views per month, an 7.1% 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 143 Guest Posts in 2021, representing 55% of total opinion posts (down 1% on 2020).
- Popular new posts included:
  - o <u>A Brief History of Router Architecture</u>, a Guest Post by Tony Li.
  - o BGP in 2020 The BGP Table by Geoff Huston.
  - o <u>How Chromium Reduced Root DNS Traffic</u>, a Guest Post by Duane Wessels.
  - o <u>TCP Fast Open? Not so fast!</u>, a Guest Post by Otto Moerbeek.
  - o 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 the first episode featuring Geoff Huston discussing the high-profile Facebook DNS outage. 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.	3.3 million	•
2	Average 64,000 Blog views per month.	69,369 views/month	•
3	Maintain Blog Guest Post ratio between 45-65%.	55%	•

## 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 Q4 deployment.
- Improvements to the backend architecture are being 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 December.
- Stability and performance improvements have been deployed in the backend.

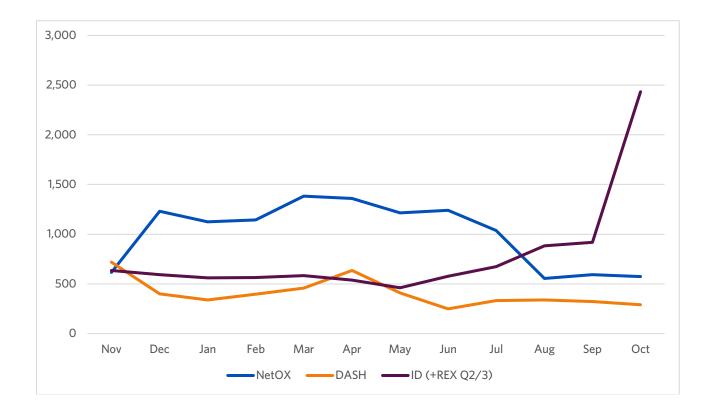


Figure 29: Monthly number of users

	Success Measures - 4A.2.	Results	Status
1	Reach an average of 400 users per month to NetOX and DASH, and of 700 users per month to REx.	1,005 NetOX 407 DASH 785 REx	•
2	Achieve a net promoter score (NPS) of 80+ for all products.	67 NetOX 75 DASH 47 REx	•
3	Achieve a usability score of at least 4.5/5 for all products.	4.5 NetOX 4.4 DASH 4.1 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 32 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.	32 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 33 presentations at community and industry events.

	Success Measures - 4B.3.	Results	Status
1	Ten research presentations delivered.	33 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 begun work on a shared development process to identify commonalities between each team.

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

#### **5A.2** Network and infrastructure operations

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

	Success Measures - 5A.2.	Results	Status
1	Complete quarterly data centre failover tests.	3/4 completed	•
2	Upgrade internal infrastructure NOC from overnight 'on-call' to full 24x7 operation.	In progress	•
3	Maintain availability of 99.99% for critical APNIC services and 99.95% for less-critical services.	99.99% and 99.98%	•

## **5A.3** System and platform operations

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

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

#### 5A.4 Internal security operations

- Rapid7 has been selected and deployed on workstations, servers and network equipment for vulnerability scanning and Security Information and Event Management (SIEM).
- Through our public Vulnerability Reporting Program, APNIC received 43 unique and verified vulnerability reports from external security researchers in 2021. Thirty-five vulnerabilities were resolved, with two still in progress within the 90-day period.
- Unresolved vulnerability reports outside of 90 days include:
  - o 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.
- 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. An ISO 27001 gap analysis is planned for November.

	Success Measures - 5A.4.	Results	Status
1	Achieve readiness for ISO27001 certification.	Preparation of documents for gap analysis in Nov well in progress	•
2	Track and resolve all vulnerability reports within 90 days.	25/34 reports resolved (7 in progress)	•

### 5A.5 Enterprise application management

- All EC members have now migrated to Okta SSO for authentication to APNIC systems.
- The migration of Confluence and JIRA (Atlassian products) to Atlassian Cloud is in progress.
- The Legacy Application roadmap to migrate from certificate-based auth for internal applications is progressing to scheduled completion in Q4.
- Implemented next generation backup solution for the CRM.
- The initial implementation of DocuSign for contract management was completed.
- Successfully rolled out Zoom Room technology to office meeting rooms and completed migration of telephone system to Zoom Phone.
- Enrolment of workstations to device management is 90% completed.

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

#### Investments

## 5A.6 Product platform development

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

#### Status:

- A new Single Sign-On (SSO) architecture was developed and the existing SSO service is expected to be replaced in March 2022.
- An instance of the replacement SSO system was created in the product testing environment. Product testing
  is nearing completion, with all product teams engaged in configuring and testing applications and services.
- Centralized product build tooling has been deployed to select products.

## 5B Finance and Business Services

## **Operations**

#### 5B.1 Internal knowledge management

- The staff intranet is being migrated from Foswiki to Confluence and SharePoint, with hub sites created for all departments.
- A July user satisfaction survey of current tools received 61 staff responses. The results will inform any changes to system usage policies.
- A consultant has been engaged for migration, integration, and creation of a global landing page (APNIC Concierge page).

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

#### **5B.2** Financial services

- The 2021 Activity Plan and Budget was implemented into the APNIC accounts in January. A monthly forecast process has 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 is scheduled for December.

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

## 5B.4 Data governance and business intelligence

- Reporting functions in APNIC's legacy business intelligence system (O3) have been replicated into a new system. O3 will be decommissioned at the end of the year.
- A team focused on 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.
- An agreed data model has been applied to improve the integration of core registry and customer support systems, delivering an increase in data quality.

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

## 5C Employee Experience

## **Operations**

## 5C.1 Organizational development

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

	Success Measures - 5C.1.	Results	Status
1	Strategic goals clearly cascade to individual performance measures in performance management system in 2021.	Complete	•
2	Deploy agile work practices across the organization.	70% complete	•

## 5C.2 Work environment management

- With COVID-19 restrictions changing regularly, a hybrid environment of office access and work from home arrangements continues with the APNIC office open for staff when allowed.
- The impact of COVID restrictions on staff and operations continues to be monitored; to date there has been no measured effect on productivity.
- A Travel Health policy is being 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.	2 incidents	•

#### **5C.3** Talent attraction and retention

- Nineteen permanent roles (including two new Directors for the Services and Finance areas) and two casual roles have been filled, with four contractors and five 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%.	4.9% turnover*	•
2	Training budget is 100% allocated and distributed across the organization.	50% spent	•

<sup>\*</sup> Includes one staff member who moved from APNIC to APIDT

#### **5C.4** People operations management

- Hybrid Working Principles have been 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 have been supported during quarantine and while working remotely.
- Emergency leave was introduced for staff to access when childcare has been impacted by COVID restrictions, and for COVID testing and vaccinations.

	Success Measures - 5C.4.	Results	Status
1	All HR policies, in particular, hybrid work, parental leave and travel safety policies, reflect best practice.	In progress	•

#### Investments

#### 5C.5 Agile APNIC

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

#### Status:

• Fourteen of twenty teams have adopted appropriate Agile practices for the management of their work. Most of the remaining teams will be completed by end Q4.

#### 5C.6 People management portal

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

#### Status:

- Implementation of the Sage People human resources portal is in progress.
- The Core HR module was launched in September. Performance, Recruitment and Compensation Management modules are undergoing UAT, to be ready for completion in December.

#### 5C.7 APNIC workspace remodelling

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

#### Status:

- An architectural and structural review of the office facility was completed. The outcome indicated the current accommodation can be extended to seat 140 staff, but at significant cost.
- A consultancy has 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.
- Three EC meetings have been held (Meeting 1: 22 February and 4 March; Meeting 2: 21 to 22 June; Meeting 3: 7-8 September).
- 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

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

	Success Measures - 5D.2.	Results	Status
1	Quarterly Strategic Risk Register updated and reviewed.	3/4 complete	•

#### **Events/Activities in 2021**

Start Month ↑	Event Name	City	Economy
Jan	Webinar: Practical Threat Information Sharing	Online	AP
	Live eTutorial: Segment Routing	Online for TWNOG	TW
	Focus Group Discussion on Capital Mobilisation	Online	AP
	MMNOG 4 (2021)	Online	MM
	CWG-Internet Open Consultation	Online	СН
	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	СН
	2021 TPRE (Trans-Pacific RandE) Virtual Meeting	Online	US
	SANOG: Securing Internet Routing tutorial (RPKI/ROV implementation)	Online	NP
	Outreach/TA - TashiCell	Online	ВТ
	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	СН
	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	СН
	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

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PacNOG 28 bdNOG - NMM live eTutorial bdNOG - NMM live eTutorial Live eTutorial : OpenFlow PacNOG: Routing Fundamentals eTutorial Online OP1 PacNOG: Routing Fundamentals eTutorial Online BD Securing Internet Routing with RPKI live eTutorial Online OP1 Live eTutorial: IPv6 Security Online OP4 PacSON Community Security Webinar APNIC Routing Security SIG Online AP APNIC Routing Security SIG Online AP APONet MOU signing ceremony Online AP Live eTutorial: Introduction to Suricata Intrusion Detection System bdNOG - Segment Routing live eTutorial Online BD GSMA Mobile World Congress 2021 APNIC EC Meeting June 2021 Brisbane AU ITU 21st Global Symposium for Regulators (GSR-21) Online US Fluxxcon 2021 CH NANOG 82 Fluxxcon 2021 Chive eTutorial: Securing Internet Routing with RPKI Online US Flux eTutorial: Securing Internet Routing with RPKI Online Online OF3 Webinar: Hosted vs. Delegated RPKI Webinar: Automating and Securing Route Servers with IXP Manager Administrators Youth IGF Bangladesh 2021 Online OF4 Administrators Youth IGF Bangladesh 2021 Online DF ATXSG (CommunicAsia) Live eTutorial: Information Security for System Administrators Youth IGF Bangladesh 2021 Online CH Consultation: RPKI Consultation and Technical Assistance for PH community INTERPOL Forum on Ransomware Online FR Live eTutorial: NMM: Network Documentation with NetBox SANOG 37  TI. Security Community Engagement Online FR Live eTutorial: NMM: Model Driven Programmability - SANOG 37		APNG Webinar #1	Online	AP
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SANOG 37		-	Online	FR
			Online	LK
		ITU Emerging Technology Week	Online	СН

	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	ТО
	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	Al3/SOI Asia Joint Meeting	Online	JP
. 0	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
	HackintheBox (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	СН
	ITU CWG-Internet Open Consultation	Online	СН
	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	СН
	VBLocalhost 2021	Online	US
	Suricon2021	Online	US
	8th Meeting of the ITU Telecommunication Standardization Advisory Group (TSAG)	ONLINE	СН
	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	СО
	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	ВТ
OSDFCon	Hybrid	US

Table 16: Events attended

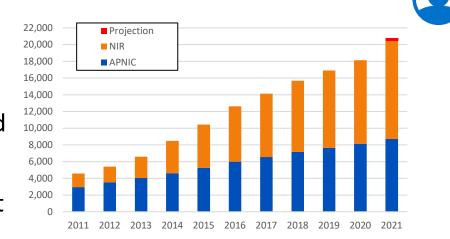
# **APNIC Secretariat Report**

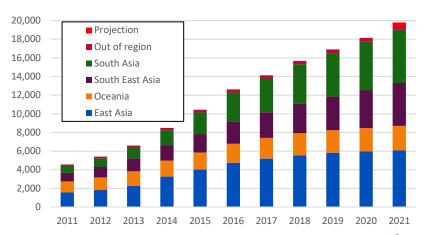
EC Meeting
6-9 December 2021
Online



### **Member Services**

- Total APNIC Members 8,708
- Service satisfaction 93% 'excellent' and 'above average' (711/761)
- Helpdesk response time SLA 100% met
- Detecting av. 2.5 fraud cases/month
- 478 User Feedback Group participants
- 377 feedback items resolved



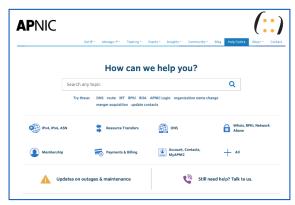




## **Membership Products**



- Help Centre deployed
- Community Platform pilot with 'Tribe' for 110 users
- MyAPNIC billing improvements: invoice management, downloadable receipts
- Voting system updates for elections at APNIC 52
- Code migration of MyAPNIC management functions underway, from Perl to Java
- New testing infrastructure used for election system and membership application form
- Non-Member application form in development

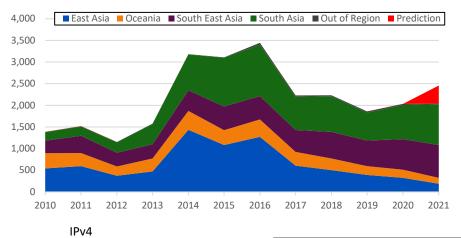


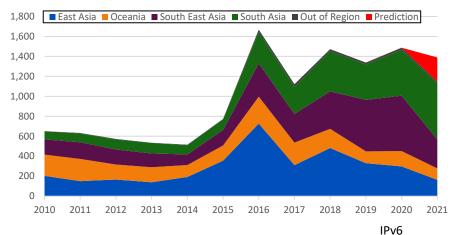


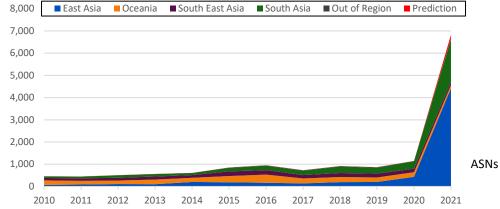


## **Resource Delegations**







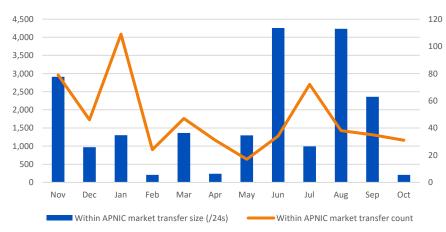




### **APNIC Transfers**











### **Registry Accuracy**



- IRT email validation rate 75.4%
- Worked started on measuring NRO ITHI data
  - Comprehensive and Correct (below)
  - Current (coming in 2022)

Comprehensive	Records	Score	% of total
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%

Correct	Records	Score	% of total
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%



## **Reclaiming Unused IPv4**



Status	31 Mar	31 Jul	31 Oct	% of total	Addresses	Prefix
Yet to contact	60	32	14	4.78%	264,960	/13.98
Not contactable	51	54	61	20.82%	407,296	/13.36
No response	66	55	57	19.45%	541,184	/12.95
Prefixes being claimed by holder	37	31	36	12.29%	273,408	/13.94
Prefixes retained by holder	29	50	48	16.38%	410,624	/13.35
Prefixes returned to APNIC	50	71	77	26.28%	487,680	/13.10
Total number of unrouted prefixes	293	293	293	100%	2,385,152	/10.81

## **Registry Products**



- NIR API implementation in progress (Completed Q4)
- Significant performance improvement to ARMS (5-10x)
- Next generation registry design work ongoing
- RPKI repository made entirely atomic to ensure consistency
- Updates to MyAPNIC to improve route management
- NRO RDAP profile published in IANA RDAP registry
- MyAPNIC users can manage BYOIP attributes directly



## **Policy Development**



- prop-133: Clarification on Sub-Assignments
  - Reached consensus at APNIC 51 and implemented
- Policy SIG Community Consultation in March
  - Policy Document Review Working Group formed with 44 participants
- 7 policy proposals discussed at APNIC 52 OPM
  - 4 reached consensus and endorsed by EC (prop-135, 136, 139, 140)
  - 1 sent back to the author (prop-137)
  - 1 did not reach consensus (prop-141)
  - 1 was accepted as a guideline only (prop-138)



### **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









## **Fellowships**



- 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
  - 27 fellows met with 25 community mentors
  - Graduation at APNIC 52

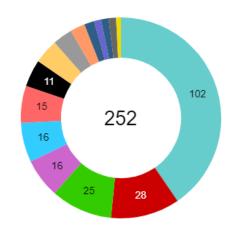






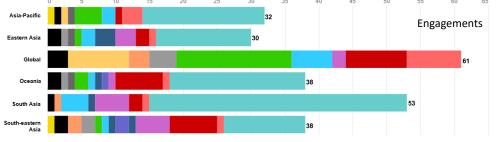
## **Community Engagement**

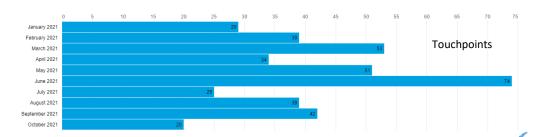














## **Technical Community Support**



- Participated in 25 technical community events
  - Including supporting 11 NOG events in the region
- Sponsored 39 security community events + Peering DB, IXP Manager, MANRS Fellowship Program
  - Sponsorship of PeeringDB, IXPDB and IXP Manager is being moved to the APNIC Foundation with funding from APIDT
- 16 security training sessions and 10 presentations at security events, plus 8 Honeynet project engagements



## **Internet Organization Cooperation**



#### Internet organization cooperation

- Study on Internet Technical Success Factors
  - Joint project with LACNIC
  - Report drafted, to be presented at 2021 IGF
- RIR meetings (all online)
- NRO EC and CGs
- ITCG (Internet Tech Community)
- ICANN 70, 71, and 72, ICANN DNS Symposium 2021, IETF 110 and 111
- ICANN Root Service Governance WG; Root Zone Evolution WG; SSAC

#### Internet governance

- IGF: Three session proposals accepted for IGF; attended 17 MAG meetings (Joyce Chen), 13 IGFSA Executive Committee Meetings; 8 PNE MWG meetings
- APrIGF: Two workshop proposals accepted for APrIGF; participated in 17 MSG meetings and 21 PC meetings
- IGF regional: 7 Pacific IGF meetings; 7 NetThing (AU) SC meetings, 8 calls for APIGA (contributed to 3 sessions and 2 open consultation meetings); 5 PC meetings for APSIG
- IGF national: HKIGF; sponsored/participated at bdSIG
- IGF other: RightsCon 2021; YouthPolicyMakers IG Workshop; Asia Pacific Youth 2021
- UN: 3 Paris Call WG4 meetings, WG3 meeting, WSIS Forum 2021, UN Digital Cooperation and Connectivity meeting



### **Governmental Engagement**



- ITU: 15 meetings, including regional prep meetings for WTDC-22
- APT: Six online tutorials MM, LA, TV, CN and PH; 1<sup>st</sup> prep meeting for APT PP22-1
- OECD: Contributed to routing security paper
- APEC TEL: Presented at APEC TEL 62 and 63
- Security: Cyber Safety Pasifika (held 3 workshops and presented summary to PICP PPTAG), 6<sup>th</sup> INTERPOL Global Cyber Crime Expert Group, INTERPOL Forum on Ransomware, Daniel K. Inouye Asia Pacific Center for Security Studies Executive Cybersecurity Workshop
- Other: Participated in the GFCE events, GSMA Mobile World Congress Ministerial Summit and World Internet Conference 2021

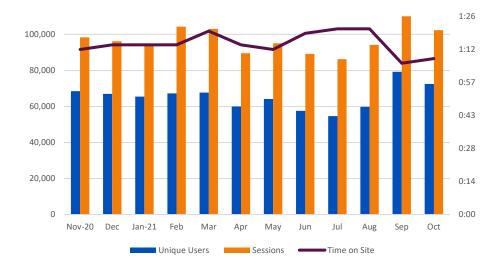


### **Online Participation**



#### • SIGs

- 950 meeting participants + 183 at four online consultations
- Updated SIG Guidelines agreed and active
- 40% SIG leadership roles now held by women
- Quarterly Elected Leaders meetings
  - April, July and October
- Encouraging newcomers
  - 578 conference newcomers
  - 194 new Blog subscribers
  - 4,445 new Academy users
  - 1,379 new Twitter followers
  - 1,184 new LinkedIn followers



apnic.net visits



### **APNIC Academy**



- Online training due to COVID-19 restrictions
- 30 Community Trainers, with 26 engaged for 59 events
  - New Community Trainer model (retained) announced
- New content: Network Management and Monitoring;
   Network Automation; three courses updated; six new virtual labs
- Extended translation to online video-based courses
- Migrating APNIC training website content to Academy
- TA support for 27 Members on RPKI, network design, IPv6 and IXPs
  - Online TA platform launched
- IPGO game in development
  - MVP scheduled for mid-2022

	Instructor-led	Self-paced
Courses	85	1,395 completions; 2,704 hrs contact
Students	1,950	4,445 new (16,035 in total)
Locations		47 economies
Virtual Labs		4,698 labs 4,662 hours
Webinars	17 webinars 1,074 attendees	



### **Internet Infrastructure Support**



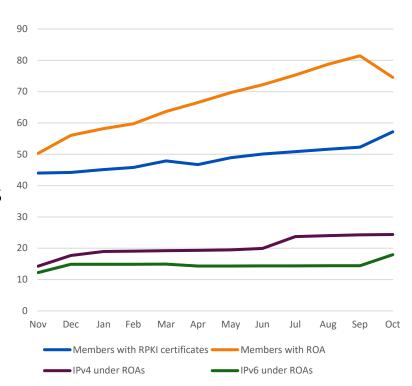
- IXPs
  - Fiji IX upgraded
  - Pakistan IX (Lahore) deployed
  - Bhutan IX implemented ROV
  - Working with MISPA (MN) IX to implement ROV
- Root servers
  - One M-root deployed in Hanoi; and 11 in progress in Guam, Kaohsiung, Manila, Dhaka,
     Kuala Lumpur, Bangkok, Jakarta, Ulaanbaatar, Kathmandu, Mumbai and Singapore
  - Equipment supply issues delaying deployment
- Community Honeynet and Security Threat Sharing Platform
  - 5 new Community Honeynet partners (15 total)
- RIPE Atlas
  - Working with seven disconnected Anchor hosts to restore service



### **RPK**



- ROA adoption
  - 74.6% with ROAs (up from 58.2%)
  - 57.2% with RPKI certificates (45.1%)
  - 12 economies reached 90+% ROA coverage
- Five RPKI deployment success stories published; 33 RPKI tagged blog posts (6 for ISOC's 'RPKI Week')
- 14 RPKI training events
- New Labs ROA measurement tool: <u>https://stats.labs.apnic.net/roa</u>

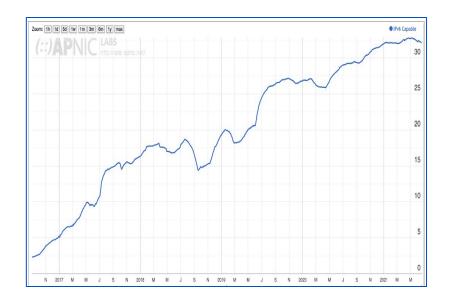




### IPv6



- 14 online IPv6 tutorials
  - AU x7, PK, VU, CN x2, LK, TH, TL
- China Telecom IPv6 deployment story
  - 40 deployment stories now online
- 32.19% IPv6 capability for AP region



## **APNIC Blog**





- 69,369 views/month (1 7.1% on 2020)
- New Podcast launched: PING





### **Information Products**



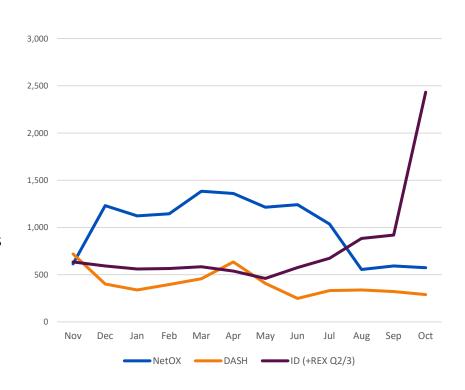
- Resource Explorer (REx)
  - Formerly Internet Directory
  - Better support for new users, new information architecture
  - NPS 47, Usability 4.1, 89% returning users

#### DASH

- Recurring reports feature released
- Alert functionality in development
- DASH webinar to 45 attendees from 20 economies
- NPS 75, Usability 4.4, 98% returning users

#### NetOX

- New 'Experimental' tab
- Comparison feature in development
- NPS 67, Usability 4.5, 398% returning users



Monthly users



### **Research and Analysis**







- 33 presentations at RIRs, NOGs, IETF
- 32 blog posts in 2021
- 3 podcasts
- Projects
  - IPv6 capability
  - Advertised, unadvertised and reserved pools analysis
  - BGP growth and anomaly detection
  - RPKI ROA monitor developed
  - DNS research DOH usage, large responses
  - QUIC measurements
  - ECN and RSA 2048-bit keys in DNSSEC
- Cooperation
  - Routing data for MANRS
  - ITHI measurement framework
  - Cloudflare collaboration



### **Internal Technical Infrastructure**



Architecture and technical coordination	<ul> <li>Use of OpenAPI to describe internal APIs now standard practice</li> <li>Rust now a supported language for APNIC product development</li> <li>End-to-end testing practices in place for Membership and Academy product teams</li> </ul>
Network and infrastructure operations	<ul> <li>Shared POP deployment in SG for critical services and M-root in progress</li> <li>Signed up to NextDC carbon offset program</li> <li>Brisbane to HKIX connectivity via PCCW completed</li> </ul>
System and platform operations	<ul> <li>Deployed two new high-performance storage arrays in two data centres</li> <li>Migrated DNSSEC signer from Secure64 to Knot</li> <li>Deployed RDNS anycast nodes in HK, MX, CA, UK</li> <li>Deployed whois node in KDDI data centre</li> <li>Completed migration of APNIC Academy to use Cloudflare</li> <li>RRPD upgraded and deployment in Google Cloud in Virginia and SG progressing</li> </ul>
Internal security operations	<ul> <li>43 vulnerability reports received; 35 solved within 90 days, 2 in progress</li> <li>Cyber fraud awareness training completed with Services and Finance teams</li> <li>Policies and procedures updated to align with ISO 27001</li> <li>HackerOne selected to triage vulnerabilities and provide continuous penetration testing</li> </ul>
Enterprise application management	<ul> <li>Implemented upgraded backup solution for CRM</li> <li>Initial implementation of DocuSign completed</li> <li>Zoom room technology and Zoom phone rolled out</li> <li>Enrolment of workstations to device management 90% completed</li> </ul>
Service availability	99.99% critical services; 99.98% non-critical services

## Finance and Employee Experience



- External surveillance audit for ISO9001:2016 QMS completed
- 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
- 14/20 non-technical teams adopted Agile working processes
- 19 permanent/casual roles successfully filled
  - Two new directors appointed (Services and Finance)
- Workspace review 2-year future needs
  - Prior to planned relocation



### **THANKS!**



# Agenda Item 7 APNIC Foundation update



# Foundation Update

EC meeting (On-line)

6 Dec 2021

**Duncan Macintosh** 

Foundation CEO

## **Key Points**

- 1 New Board candidate proposed
- Board meets to finalise strategic plan
- 3 Funding update
- 4 2022 projects finalised









#### **Strategic Planning Board Meeting**

- Saturday, 27 November:
  - Full Board meeting (both AFA and AFHK):
  - Danish Lakhani was Chair
- Agenda:
  - Approved new 3-year strategic plan
  - Board discussed and agreed to increased Foundation oversight/engagement. Four meetings a year.
  - Board-managed performance review process for CEO.
    Requested CEO KPIs.



### Strategic Plan

#### **VISION**

A global, open, stable and secure internet that is affordable and accessible to the entire Asia Pacific community.

#### **MISSION**

To increase investment in Internet development in the Asia Pacific region, through engaging with partnerships to impact education and training, human capacity building, community development, research, and related projects and activities.

#### **IDENTITY**

A dedicated team of experts passionate about the opportunity to build capacity (both people & infrastructure) to foster an open, stable and secure Internet, accessible to all.

#### **VALUES**

- Passion
- Trust
- Curiosity
- Accountability
- Inclusion



# **Strategic Plan**

Strategic Pillar	Workstreams	
1. TRANSFORMATIONAL ENGAGEMENT & PARTNERSHIPS	A. Build and support targeted communities so they sustainably grow and develop independently	
OBJECTIVE: Raise awareness of Foundation	B. Collaborate in programme design and project delivery to ensure meaningful impact, shared value and ongoing improvement	
activities through engagement & collaboration. Foster productive	C. Engage with the Internet development community to promote key issues and priorities	
partnerships to support Internet development	D. Increase and diversify the Foundation's funding and resources by engaging with existing and new partners/investors in support of Internet development	
	E. Expand the Foundation's profile/influence/reputation and capabilities/expertise through proactive communications and networking opportunities	
2. MEANINGFUL IMPACT	A. Infrastructure: Strengthen and support the deployment of Internet infrastructure and deploy tools for operational infrastructure security and monitoring	
OBJECTIVE: Enhance levels of knowledge, infrastructure development and	B. Inclusion: Support/enable the Asia Pacific Internet community in providing meaningful and efficient access to the Internet, from a technical and operational perspective	
inclusion within the Asia Pacific technical community	C. Knowledge (training): Enhance technical and operational knowledge contributing to an informed and collaborative community	
3. HIGH PERFORMANCE	A. Strengthen programme quality and evidence base	
OBJECTIVE:	B. Implement equitable, accurate and efficient process and systems	
Deliver best practice people, finance and business systems that support	C. Provide efficient and robust governance, finance and business services	
the Foundation's operations.	D. Deliver an engaged employee lifecycle experience	



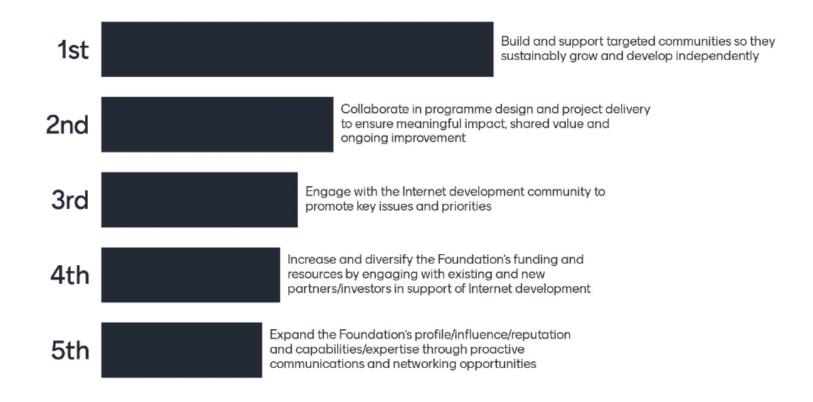
#### Meaningful Impact: Workstream priorities



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# Transformational Engagement and Partnerships: Workstream priorities



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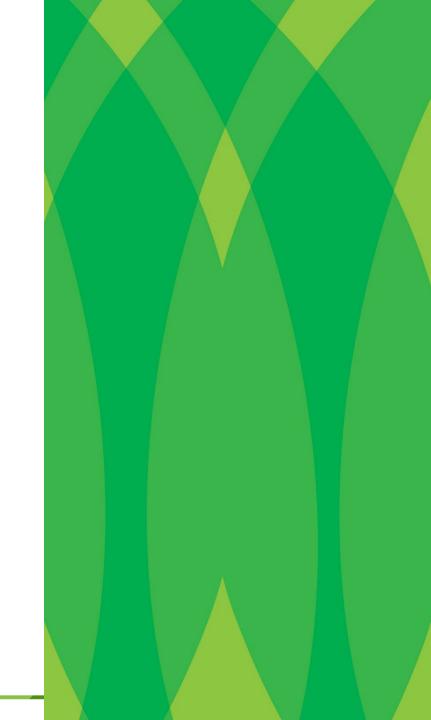
### **Meaningful Impact: High Performance**



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# 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	9,222,383	6,678,047
Total	12,130,426	8,902,342











# Projects under development

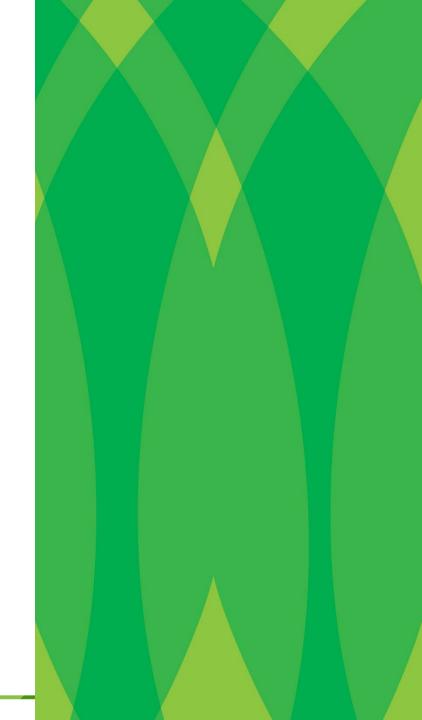


### Project and funding development - ongoing

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



# **Questions?**





Agenda Item 11 Success measures summary - December 2021

#### **Success Measures Summary – Dec 2021**

#### 1. Membership

	Success Measures – 1A.1.	Results	Oct	EOY
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.	42 out of 47	•	•

	Success Measures – 1A.2.		Oct	EOY
1	All improvement suggestions received from all feedback channels are followed up and actioned.	100%	•	•
2	All critical and high accessibility issues are resolved.	82 issues: 30 fixed, 19 in progress	•	•
3	Grow product and service user feedback group from 300 to 500 members.	478	•	•
4	One-on-one feedback sessions with at least 50 Members.	32	•	•

	Success Measures – 1A.3.	Results	Oct	EOY
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.	8,708	•	•

	Success Measures – 1B.1.	Results	Oct	EOY
1	Member Help Centre deployed.	Completed	•	•
2	Migrate 100% of APNIC Logins to a new identity management system.	Deferred to Q1 2022	•	•
3	Establish comprehensive testing infrastructure for membership product applications.	Completed	•	•
4	Deliver problem-free EC, NRO, IANA and SIG Elections via BigPulse.	Completed	•	•

	Success Measures – 1C.1.	Results	Oct	EOY
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.	51/51 achieved	•	•

#### 2. Registry

	Success Measures – 2A.1.		Results	Oct	EOY
1	Maintain Registration Services response to enquiries (>99.90%	•	100%	•	•
	Increase percentage of Membe 70%.	ers holding IPv6 address space to	68.05%	•	•

	Success Measures – 2A.2.	Results	Oct	EOY
1	Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting.	In progress	•	•
2	Increase rate of validation by Members of registration records.	75.4% validation	•	•

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

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

	Success Measures – 2B.2.	Results	Oct	EOY
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.	In progress	•	•
4	Implement the NIR KPI monitor for RPKI.	Scheduled for Q4	•	•

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

	Success Measures – 2C.2.	Results	Oct	EOY
1	Meet 100% of implementation timelines.	100%	•	•

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

#### 3. Development

	Success Measures – 3A.1.	Results	Oct	EOY
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	•	•

	Success Measures – 3C.1.	Results	Oct	EOY
1	Sponsor/participate in 30 technical community events including NOGs, Peering Forums, and Research & Education events.	25 events	•	•
2	Support 20 NOGs to conduct online events if physical events are not possible.	11 NOGs	•	•
3	Facilitate and support two new/revived NOGs in two subregions.	1 in progress	•	•

	Success Measures – 3C.2.	Results	Oct	EOY
1	Sponsor or participate in 10 security community events.	39 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	•	•

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

	Success Measures – 3C.4.	Results	Oct	EOY
1	Sponsor and participate in APrIGF and IGF with workshop proposals, MSG/MAG participation, and speaking roles.	3 proposals to IGF 2 proposals to APrIGF	•	•

		Sponsoring APrIGF		
2	Participate in at least three national Internet governance initiatives.	2/3	•	•
3	Sponsor and participate in at least two schools of Internet governance.	2/2	•	•

	Success Measures – 3C.5.	Results	Oct	EOY
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.	5	•	•

	Success Measures – 3C.6.	Results	Oct	EOY
1	Facilitate one External Relations coordination retreat.	Completed	•	•
2	Facilitate 10 External Relations team coordination meetings.	8/10	•	•

	Success Measures – 3D.1.	Results	Oct	EOY
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	•	•

	Success Measures – 3D.2.	Results	Oct	EOY
1	Grow all-time Blog views from 2.6 million to 3.4 million.	3.3 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.	2.8 million	•	•

Success Measures – 3D.3.	Results	Oct	EOY	
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1	Attract 400 newcomers to APNIC conferences.	578 newcomers	•	•
2	Attract 125 new Blog email subscribers to reach 1,125 total.	194 new subscribers (total 1,194)	•	•
3	Grow Twitter followers from 12,100 to 13,250.	13,479	•	•

	Success Measures – 3E.1.	Results	Oct	EOY
1	Migrate legacy training site information to APNIC Academy and decommission previous site.	Scheduled Q4	•	•
2	Develop a comprehensive curriculum of blended learning for future certification.	To be completed in 2022	•	•

	Success Measures – 3E.2.	Results	Oct	EOY
1	Develop two new/updated courses for instructor-led tutorials/workshops.	1 new course completed 3 courses updated with 7 new modules	•	•
2	Conduct 70 instructor-led tutorials/workshops across four subregions.	85 tutorials/workshops delivered	•	•
3	Conduct 18 live webinars.	17 webinars delivered	•	•

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

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

	Success Measures – 3E.5.	Results	Oct	EOY
1	Conduct eight RPKI/ROV focused instructor-led tutorials/workshops spread equally across sub-regions.	14 completed	•	•

2	Achieve 90% ROA coverage for four additional economies.	Completed	•	•	
3	Publish four RPKI/ROA/ROV deployment case studies.	5 published	•	•	

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

	Success Measures – 3F.1.	Results	Oct	EOY
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	•	•

	Success Measures – 3F.2.	Results	Oct	EOY
1	Increase Community Honeynet partners from 10 to 15.	15 partners	•	

#### 4. Information

	Success Measures – 4A.1.	Results	Oct	EOY
1	Grow all-time Blog views from 2.6 million to 3.4 million.	3.3 million	•	•
2	Average 64,000 Blog views per month.	69,369 views/month	•	•
3	Maintain Blog Guest Post ratio between 45-65%.	55%	•	•

	Success Measures – 4A.2.	Results	Oct	EOY
1	Reach an average of 400 users per month to NetOX and DASH, and of 700 users per month to REx.	1,005 NetOX 407 DASH 785 REx	•	•
2	Achieve a net promoter score (NPS) of 80+ for all products.	67 NetOX 75 DASH 47 REx	•	•
3	Achieve a usability score of at least 4.5/5 for all products.	4.5 NetOX 4.4 DASH 4.1 REx	•	•

	Success Measures – 4B.1.	Results	Oct	EOY
1	Twelve research articles and reports published.	32 articles	•	•

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

	Success Measures – 4B.3.	Results	Oct	EOY
1	Ten research presentations delivered.	33 presentations	•	
2	At least two research presentations at APNIC conferences.	6 presentations	•	•

#### 5. Capability

	Success Measures – 5A.1.	Results	Oct	EOY
1	Complete review of testing environment and practices.	In progress	•	•

	Success Measures – 5A.2.	Results	Oct	EOY
1	Complete quarterly data centre failover tests.	3/4 completed	•	•
2	Upgrade internal infrastructure NOC from overnight 'on-call' to full 24x7 operation.	In progress	•	•
3	Maintain availability of 99.99% for critical APNIC services and 99.95% for less-critical services.	99.99% and 99.98%	•	•

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

	Success Measures – 5A.4.	Results	Oct	EOY
1	Achieve readiness for ISO27001 certification.	Preparation of documents for gap analysis in Nov well in progress	•	•
2	Track and resolve all vulnerability reports within 90 days.	25/34 reports resolved (7 in progress)	•	•

	Success Measures – 5A.5.	Results	Oct	EOY
1	CRM roadmap established.	In progress	•	•

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

	Success Measures – 5B.2.	Results	Oct	EOY
1	Achieve a successful audit of APNIC's annual financial accounts.	Completed	•	•
	Success Measures – 5B.3.	Results	Oct	EOY
1	Complete annual ISO Quality management compliance audit successfully.	Completed	•	•
2	Undertake quarterly BCP scenario testing.	Scheduled	•	•
	Success Measures – 5B.4.	Results	Oct	EOY
1	Complete APNIC-wide data model and data dictionary.	In progress	•	•
2	Generate all Secretariat report data/charts from BI system.	In progress		•
	Success Measures – 5C.1.	Results	Oct	EOY
1	Strategic goals clearly cascade to individual performance measures in performance management system in 2021.	Complete	•	•
2	Deploy agile work practices across the organization.	70% complete		•
	Success Measures – 5C.2.	Results	Oct	EOY
1	No WHS incidents caused by APNIC's local or remote work environments — zero fault incident reports.	2 incidents	•	•
	Success Measures – 5C.3.	Results	Oct	EOY
1	Maintain staff turnover rate within acceptable benchmarks of 5-15%.	4.9% turnover*	•	•
2	Training budget is 100% allocated and distributed across the organization.	50% spent		•
			1	
	Success Measures – 5C.4.	Results	Oct	EOY
1	All HR policies, in particular, hybrid work, parental leave and travel safety policies, reflect best practice.	In progress	•	

	Success Measures – 5D.1.	Results	Oct	EOY
1	Achieve a high level of satisfaction from a survey of EC members.	Completed	•	•

	Success Measures – 5D.2.	Results	Oct	EOY
1	Quarterly Strategic Risk Register updated and reviewed.	3/4 complete	•	•

# Agenda Item 12 Financial reports

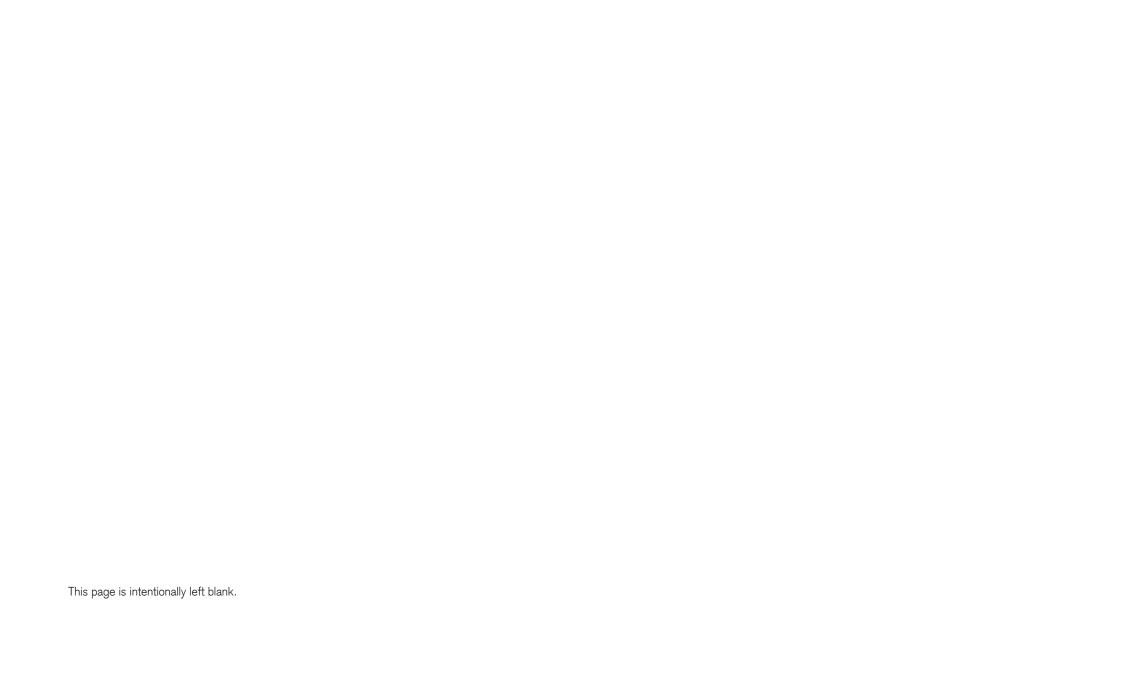


Private Banking

Investment Report 1.10.2021 - 31.10.2021

#### **APNIC PTY LTD**

Portfolio Group: 3000039





### Private Banking

## Investment Report 1.10.2021 - 31.10.2021

Portfolio Group 3000039

In the Name of APNIC PTY LTD

Produced on 1.11.2021 Reporting Currency AUD

Relationship Manager Patrick Armitage
Phone +61 2 8205 4451

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#### **CREDIT SUISSE AG**

 Level 31, Gateway
 Phone
 +612 8205 4888

 1 Macquarie Place
 Fax
 +612 8205 4889

 Sydney
 ABN
 17 061 700 712

 NSW 2000
 AFSL
 226896

 Australia
 226896

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



Investment Report 1.10.2021 – 31.10.2021 APNIC PTY LTD Portfolio Group: 3000039 Reporting Currency: AUD

# Scope of Analysis as of 31.10.2021

Components	Portfolio	Asset Value in AUD	Discretionary Mandate	Opened	Closed	Performance Activation	Performance Deactivation
Portfolio Group: 3000039							
Investment related Positions							
AUD Portfolio	3000039-10	0		16.08.2013		31.12.2013	
AUD Portfolio	3000039-70	36,186,239	Yes	16.08.2013		31.12.2013	
Total Investments		36,186,239					
Total Wealth		36,186,239					



### Overview

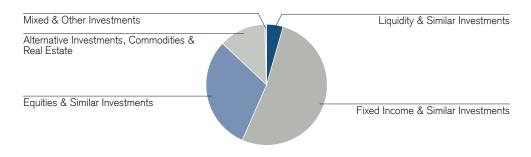
#### **Asset Allocation**

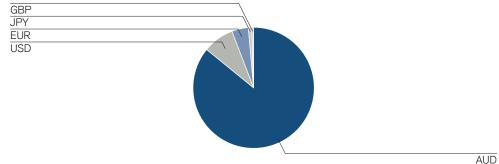
# Asset Allocation by Asset Category Period 1.10.2021 - 31.10.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ Liquidity & Similar Investments	1,783,747	-181,966	1,601,780	4.43%
Fixed Income & Similar Investments	18,264,806	689,206	18,954,012	52.38%
Equities & Similar Investments	10,078,123	972,910	11,051,033	30.54%
Alternative Investments, Commodities & Real Estate	4,339,663	198,956	4,538,619	12.54%
Mixed & Other Investments	0	40,795	40,795	0.11%
Total Investments	34,466,339		36,186,239	100.00%

## Asset Allocation by Currency Period 1.10.2021 - 31.10.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
AUD - Australian Dollar	29,713,759	1,420,712	31,134,472	86.04%
USD - US Dollar	3,061,119	-52,744	3,008,375	8.31%
EUR - Euro	1,245,457	351,670	1,597,127	4.41%
JPY - Japan Yen	332,231	-7,062	325,169	0.90%
■ GBP - Pound Sterling	113,773	7,324	121,097	0.33%
Total Investments	34,466,339		36,186,239	100.00%





Investments in % Investments in %

1. Overview / 1.1. Asset Allocation 3/25



### Income and Activity

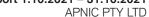
Income Summary
Period 1.10.2021 - 31.10.2021

	Current Period in AUD	Year to Date in AUD
Cash Dividend	112,148	748,165
Coupon Received/Paid	1,108	857
Interest Earned	0	1
Interest Paid	0	0
Net Income	113,256	749,024

**Activity Summary** Period 1.10.2021 - 31.10.2021

	Current Period in AUD	Year to Date in AUD
Asset Inflows	4,000,000	7,000,000
Asset Outflows	-2,000,000	-3,000,000
Net Investment Asset Flows	2,000,000	4,000,000
Net Non-Investment Flows	0	0

1. Overview / 1.2. Income and Activity 4/25





#### 1.3. Performance

#### Performance Summary

Period 1.10.2021 - 31.10.2021

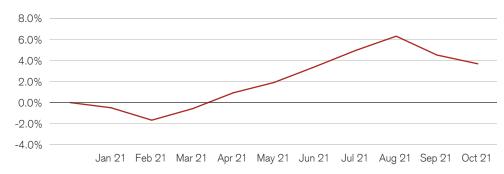
	Asset Value in AUD	Asset Value in AUD
Ending Market Value		36,186,239
Beginning Market Value		34,466,339
Asset Flows including		2,000,000
Inflows	4,000,000	
Outflows	-2,000,000	
Net Non-Investment Flows	0	
Taxes	0	
Flow Adjusted Value Change		-280,100
Cumulative Portfolio Return – net		-0.79%

#### Performance Year-to-date

Period 1.1.2021 - 31.10.2021

	Asset Value	A 137.1
	in AUD	Asset Value in AUD
Ending Market Value		36,186,239
Beginning Market Value		31,057,596
Asset Flows including		3,986,894
Inflows	7,000,000	
Outflows	-3,000,000	
Net Non-Investment Flows	0	
Taxes	-13,106	
Flow Adjusted Value Change		1,141,749
Cumulative Portfolio Return – net		3.69%





Cumulative Portfolio Return

— Cumulative Portfolio Return

1. Overview / 1.3. Performance 5/25





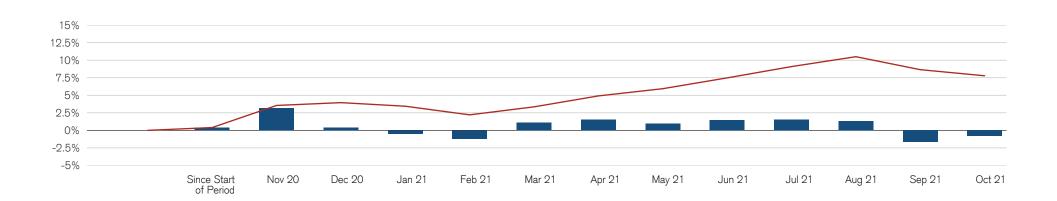
## 2. Analyses

#### 2.1. Performance

#### **Performance Details**

Period 1.10.2020 - 31.10.2021

	Since Start of Period	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21
Ending Market Value	30,001,462	30,942,055	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,450	33,118,147	33,615,833	35,060,134	34,466,339	36,186,239
Beginning Market Value	29,881,906	30,001,462	30,942,055	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,450	33,118,147	33,615,833	35,060,134	34,466,339
Asset Flows including	0	0	-4,128	0	0	-4,216	0	0	995,730	0	1,000,000	-4,620	2,000,000
Inflows	0	0	0	0	0	0	0	0	1,000,000	0	2,000,000	0	4,000,000
Outflows	0	0	0	0	0	0	0	0	0	0	-1,000,000	0	-2,000,000
Net Non-Investment Flows	0	0	0	0	0	0	0	0	0	0	0	0	0
Taxes	0	0	-4,128	0	0	-4,216	0	0	-4,270	0	0	-4,620	0
Flow Adjusted Value Change	119,556	940,593	119,668	-152,455	-367,553	339,806	468,835	305,438	474,966	497,686	444,301	-589,175	-280,100
■ Portfolio Return – net	0.40%	3.14%	0.39%	-0.49%	-1.19%	1.11%	1.52%	0.97%	1.45%	1.50%	1.29%	-1.68%	-0.79%
Cumulative Portfolio Return	0.40%	3.55%	3.95%	3.44%	2.21%	3.35%	4.91%	5.94%	7.48%	9.09%	10.50%	8.65%	7.78%



2. Analyses / 2.1. Performance 6/25



#### 2.2. Contribution Analysis

#### Multi-Period Contribution by Asset Category in %

as of 31.10.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
Liquidity & Similar Investments	-0.01	-0.01	-0.30	-0.50	-0.01
Fixed Income & Similar Investments	-0.92	-0.92	-1.38	-0.76	-0.92
Equities & Similar Investments	0.05	0.05	3.88	6.37	0.05
Alternative Investments, Commodities & Real Estate	0.08	0.08	1.49	2.25	0.08
Total - net ***	-0.79	-0.79	3.69	7.35	-0.79

### Multi-Period Contribution by Currency in %

as of 31.10.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
AUD - Australian Dollar	-0.81	-0.81	1.11	3.97	-0.81
EUR - Euro	0.11	0.11	0.67	0.91	0.11
JPY - Japan Yen	-0.07	-0.07	-0.04	0.05	-0.07
USD - US Dollar	-0.03	-0.03	1.91	2.38	-0.03
GBP - Pound Sterling	-	-	0.04	0.05	-
Total - net ***	-0.79	-0.79	3.69	7.35	-0.79

2. Analyses / 2.2. Contribution Analysis

001970938 012 058

<sup>\*\*\*</sup> 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.

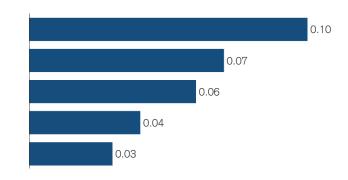


#### 2.3. Contribution - Top Contributors & Detractors

#### Top Contributors in %

as of 31.10.2021

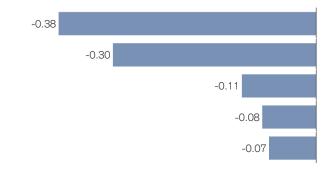
	Total Return	Average Weight	Contribution
ACCUM SHS -1C- USD XTRACKERS(IE)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF	4.02	2.40	0.10
SHS -I AUD HEDGED- AXA WORLD FUNDS SICAV - GLOBAL INFLATION BONDS DISTRIBUTION	3.01	2.53	0.07
UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE	2.65	2.31	0.06
ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND	2.69	1.40	0.04
REGISTERED SHS NEWCREST MINING LTD	9.88	0.30	0.03
Total - net ***		8.94	0.30



### Top Detractors in %

as of 31.10.2021

	Total Return	Average Weight	Contribution
UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A-	-2.05	18.55	-0.38
UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	-2.79	10.65	-0.30
UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND	-2.51	4.21	-0.11
SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION	-5.05	1.47	-0.08
UNITS NEXT FUNDS NIKKEI 225 EXCHANGE TRADED FUND	-7.67	0.91	-0.07
Total - net ***		35.78	-0.94



<sup>\*\*\*</sup> 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 31.10.2021

Numbe	er/ Nominal	Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> 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 %
Liquid	lity & Similar Investr unts	nents						
AUD	1,601,780.48	Current Account -20300003970945 AUD Portfolio: 3000039-70		1.0000		1,601,780 4.43%		
Total I	Liquidity & Similar Ir	vestments				1,601,780 0 4.43%		
	Income & Similar In Income & Similar In							
AUD	1,499,518.71	UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND AUD Portfolio: 3000039-70	AU60BGL01056 2244170	1.0417	1.0118 NAV 28.10.2021	1,517,191 4.19%	-44,856 -44,856	-2.87% -2.87%
AUD	4,239,921.09220	UNITS PERPETUAL ACTIVE FIXED INTEREST FUND AUD Portfolio: 3000039-70	AU60PER02627 35661784	1.0550	1.0153 NAV 28.10.2021	4,304,707 11.90%	-168,488 -168,488	-3.77% -3.77%
AUD	5,356,965.8417	UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A- AUD Portfolio: 3000039-70	AU60SSB01221 2248336	1.2581	1.2529 NAV 27.10.2021	6,711,743 18.55%	-27,788 -27,788	-0.41% -0.41%
AUD	442,410.68	UNITS VANGUARD AUSTRALIAN FIXED INTEREST INDEX FUND AUD Portfolio: 3000039-70	AU60VAN00014 1653500	1.1484	1.1273 NAV 28.10.2021	498,730 1.38%	-9,354 -9,354	-1.84% -1.84%



Number/ No	minal	Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> Price Exchange Rate	<b>Current Valuation</b> 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	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	10.5400 NAV 28.10.2021	523,606 1.45%	-4,406 -4,406	-0.83% -0.83%
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	10.6300 NAV 28.10.2021	1,235,706 3.41%	-15,728 -15,728	-1.26% -1.26%
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	3.1795 NAV 28.10.2021	1,075,342 2.97%	33,002 33,002	3.17% 3.17%
AUD	5,425	UNITS SHS HEDGED AUD MUZINICH FUNDS - MUZINICH EMERGING MARKET CORPORATE DEBT FUND AUD Portfolio: 3000039-70	IE00BNC55647 110844223	100.3753	98.3300 NAV 29.10.2021	533,440 1.47%	-11,096 -11,096	-2.04% -2.04%
AUD	7,688	SHS -I AUD HEDGED- AXA WORLD FUNDS SICAV - GLOBAL INFLATION BONDS DISTRIBUTION AUD Portfolio: 3000039-70	LU1774150491 40510321	114.8854	121.9800 NAV 28.10.2021	937,782 2.59%	54,543 54,543	6.18% 6.18%
AUD	5,938	SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION AUD Portfolio: 3000039-70	LU2128492191 52867287	94.9706	88.0500 NAV 28.10.2021	522,841 1.44%	-41,094 -41,094	-7.29% -7.29%



Number/ Nom	inal	Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> Price Exchange Rate	<b>Current Valuation</b> Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/I Unreal. in % Instr. in % FX in %
AUD	11,116	SHS -CH- ROBECO CAPITAL GROWTH FUNDS SICAV - ROBECOSAM GLOBAL SDG CREDITS	LU2207422291 56320962	99.0605	98.3200 NAV 28.10.2021	1,092,925	-8,232 -8,232	-0.75% -0.75%
		DISTRIBUTION AUD Portfolio: 3000039-70	30320902		20.10.2021	3.02%	-0,232	-0.7376
Total Fixed In	ncome & Sim	ilar Investments				18,954,012 0 52.38%		
Equities & Si Equities & Si								
AUD	6,126	ZEALAND BANKING GROUP LTD	AU000000ANZ3 640139	28.2539	28.1400 CLO 29.10.2021	172,386	-698 -698	-0.40% -0.40%
		AUD Portfolio: 3000039-70	ANZ.AX			0.48%		
AUD	33,641	REGISTERED SHS ALUMINA LTD	AU000000AWC3	1.9144	1.9900 CLO	66,946	2,544	3.95%
		AUD Portfolio: 3000039-70	1526402 AWC.AX		29.10.2021	0.19%	2,544	3.95%
AUD	34,858	REGISTERED SHS AURIZON HOLDINGS LTD	AU000000AZJ1	4.5903	3.3700 CLO	117,471	-42,537	-26.58%
		AUD Portfolio: 3000039-70	20175896 AZJ.AX		29.10.2021	0.32%	-42,537	-26.58%
AUD	8,636	REGISTERED SHS BHP GROUP LTD	AU000000BHP4	32.1085	36.5800 CLO	315,905	38,616	13.93%
		AUD Portfolio: 3000039-70	640390 BHP.AX		29.10.2021	0.87%	38,616	13.93%
AUD	2,799	REGISTERED SHS CARSALES.COM LTD	AU000000CAR3	16.4680	24.6600 CLO	69,023	22,929	49.74%
		AUD Portfolio: 3000039-70	10476764 CAR.AX		29.10.2021	0.19%	22,929	49.74%



Number/ Nominal		Description	<b>Identification</b> ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	<b>Current Valuation</b> Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
AUD	3,345	REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA	AU000000CBA7 646758	81.5356	104.6800 CLO 29.10.2021	350,155	77,418 77,418	28.39% 28.39%
		AUD Portfolio: 3000039-70	CBA.AX			0.97%		
AUD	6,140	REGISTERED SHS COMPUTERSHARE LTD	AU00000CPU5	16.0032	18.7600 CLO	115,186	16,927	17.23%
		AUD Portfolio: 3000039-70	241285 CPU.AX		29.10.2021	0.32%	16,927	17.23%
AUD	1,173	REGISTERED SHS CSL LTD AUD Portfolio: 3000039-70	AU000000CSL8 241548	178.5819	300.4900 CLO 29.10.2021	352,475	142,998 142,998	68.26% 68.26%
			CSL.AX			0.97%	,	
AUD	2,504	REGISTERED SHS FLIGHT CENTRE TRAVEL	AU000000FLT9	19.0671	19.9900 CLO	50,055	2,311	4.84%
		GROUP LTD AUD Portfolio: 3000039-70	90307 FLT.AX		29.10.2021	0.14%	2,311	4.84%
AUD	2,510	CHESS UNITS OF FOREIGN SECURITIES	AU000000JHX1	27.0838	51.6500 CLO	129,642	61,661	90.70%
		JAMES HARDIE INDUSTRIES PLC AUD Portfolio: 3000039-70	1303670 JHX.AX		29.10.2021	0.36%	61,661	90.70%
AUD	2,074	REGISTERED SHS MAGELLAN FINANCIAL	AU00000MFG4	40.4746	34.6700 CLO	71,906	-12,039	-14.34%
		GROUP LTD AUD Portfolio: 3000039-70	2807450 MFG.AX		29.10.2021	0.20%	-12,039	-14.34%
AUD	330	REGISTERED SHS MACQUARIE GROUP LTD	AU000000MQG1	85.9818	211.0000 BID	69,630	41,256	145.40%
		AUD Portfolio: 3000039-70	3422370 MQG.AX		29.10.2021	0.19%	41,256	145.40%
AUD	9,455	REGISTERED SHS NATIONAL AUSTRALIA	AU000000NAB4	24.5148	28.7100 CLO	271,453	39,666	17.11%
		BANK LTD AUD Portfolio: 3000039-70	641643 NAB.AX		29.10.2021	0.75%	39,666	17.11%



Number/ Nominal		Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> 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	4,479	REGISTERED SHS NEWCREST MINING LTD AUD Portfolio: 3000039-70	AU000000NCM7 650853	27.6429	24.8900 CLO 29.10.2021	111,482	-12,330 -12,330	-9.96% -9.96%
			NCM.AX			0.31%		
AUD	19,096	REGISTERED SHS NINE ENTERTAINMENT CO.	AU00000NEC4	2.8159	2.7600 CLO	52,705	-1,067	-1.98%
	,	HOLDINGS LTD	22858707		29.10.2021	,	-1,067	-1.98%
		AUD Portfolio: 3000039-70	NEC.AX			0.15%		
AUD	9,661	REGISTERED SHS ORIGIN ENERGY LTD	AU000000RG5	7.5195	5.0500 CLO	48,788	-23,858	-32.84%
		AUD Portfolio: 3000039-70	1051439		29.10.2021		-23,858	-32.84%
			ORG.AX			0.13%		
AUD	2,275	REGISTERED SHS OZ MINERALS LTD	AU000000ZL8	10.7556	25.1300 CLO	57,171	32,702	133.64%
		AUD Portfolio: 3000039-70	4334812		29.10.2021		32,702	133.64%
			OZL.AX			0.16%		
AUD	17,180	REGISTERED SHS QANTAS AIRWAYS LTD	AU000000AN2	5.6657	5.3500 CLO	91,913	-5,423	-5.57%
		AUD Portfolio: 3000039-70	390413		29.10.2021		-5,423	-5.57%
			QAN.AX			0.25%		
AUD	6,689	REGISTERED SHS QBE INSURANCE GROUP	AU000000QBE9	11.5695	11.8300 CLO	79,131	1,742	2.25%
		LTD	641857		29.10.2021		1,742	2.25%
		AUD Portfolio: 3000039-70	QBE.AX			0.22%		
AUD	1,646	REGISTERED SHS RIO TINTO LTD	AU000000RIO1	76.5155	90.2900 CLO	148,617	22,673	18.00%
		AUD Portfolio: 3000039-70	603520		29.10.2021		22,673	18.00%
			RIO.AX			0.41%		
AUD	1,509	SHS RESMED INC CHESS DEPOSITORY	AU00000RMD6	16.5785	37.1700 CLO	56,090	31,073	124.21%
		INTERESTS REPR 1/10 SH	1058638		29.10.2021		31,073	124.21%
		AUD Portfolio: 3000039-70	RMD.AX			0.16%		



Number/ Nominal		Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> 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	19,650	REGISTERED SHS SOUTH32 LTD AUD Portfolio: 3000039-70	AU000000S320 27547963 S32.AX	2.6985	3.5700 CLO 29.10.2021	70,151 0.19%	17,124 17,124	32.29% 32.29%
			302.AV			0.1970		
AUD	76,774	UNITS SPDR S&P/ASX 200 LISTED PROPERTY	AU000000SLF1	12.5989	13.3300 CLO	1,023,397	56,130	5.80%
		FUND EXCHANGE TRADED FUND	1377855		29.10.2021		56,130	5.80%
		AUD Portfolio: 3000039-70	SLF.AX			2.83%		
AUD	8,245	UNITS SPDR S&P/ASX 200 FUND ETF	AU00000STW9	58.8197	67.6800 CLO	558,022	73,053	15.06%
		AUSTRALIAN EQUITY EXCHANGE TRADED	1285707		29.10.2021		73,053	15.06%
		FUNDS	STW.AX			1.54%		
		AUD Portfolio: 3000039-70						
AUD	14,246	REGISTERED SHS TELSTRA CORPORATION	AU000000TLS2	4.5550	3.8200 CLO	54,420	-10,471	-16.14%
		LTD	720464		29.10.2021		-10,471	-16.14%
		AUD Portfolio: 3000039-70	TLS.AX			0.15%		
AUD	3,230	SHS VANGUARD MSCI AUSTRALIAN SMALL	AU00000VSO2	60.3498	71.9900 CLO	232,528	37,598	19.29%
		COMPANIES INDEX ETF EXCHANGE TRADED	13053435		29.10.2021	0.040/	37,598	19.29%
		FUND AUD Portfolio: 3000039-70	VSO.AX			0.64%		
		AUD Portiolio: 3000039-70						
AUD	13,277	REGISTERED SHS WESTPAC BANKING CORP	AU00000WBC1	26.9089	25.6700 CLO	340,821	-16,450	-4.60%
		AUD Portfolio: 3000039-70	642372		29.10.2021		-16,450	-4.60%
			WBC.AX			0.94%		
AUD	1,031	REGISTERED SHS WESFARMERS LTD	AU00000WES1	34.0342	57.2500 CLO	59,025	23,936	68.21%
		AUD Portfolio: 3000039-70	642397		29.10.2021		23,936	68.21%
			WES.AX			0.16%		
AUD	3,629	REGISTERED SHS WOOLWORTHS GROUP	AU000000WOW2	34.1257	38.0800 CLO	138,192	14,350	11.59%
		LTD	81350		29.10.2021		14,350	11.59%
		AUD Portfolio: 3000039-70	WOW.AX			0.38%		



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AUD	4,372	REGISTERED SHS WOODSIDE PETROLEUM LTD	AU000000WPL2 642429	27.6704	23.2600 CLO 29.10.2021	101,693	-19,282 -19,282	-15.94% -15.94%
		AUD Portfolio: 3000039-70	WPL.AX			0.28%		
AUD	8,724	REGISTERED SHS COLES GROUP LTD	AU0000030678	16.9597	17.1400 CLO	149,529	1,573	1.06%
		AUD Portfolio: 3000039-70	44059594 COL.AX		29.10.2021	0.41%	1,573	1.06%
AUD	1,983	UNITS VANGUARD ETHICALLY CONSCIOUS	AU0000103533	60.1201	61.5400 CLO	122,034	2,816	2.36%
		AUST ETF EXCHANGE TRADED FUND AUD Portfolio: 3000039-70	57145371 VETH.AX		29.10.2021	0.34%	2,816	2.36%
AUD	4,018	REGISTERED SHS ENDEAVOUR GROUP LTD	AU0000154833	0.5888	6.8000 CLO	27,322	24,957	>999.99%
		AUD Portfolio: 3000039-70	111541385 EDV.AX		29.10.2021	0.08%	24,957	>999.99%
AUD	119,980.46	UNITS WHEB SUSTAINABLE IMPACT FUND	AU60HHA00072	1.5473	1.6633 BID	199,564	13,913	7.49%
		AUD Portfolio: 3000039-70	4431395		28.10.2021	0.55%	13,913	7.49%
AUD	31,964.7915	UNITS EIGER AUSTRALIAN SMALL COMPANIES FUND	AU60HOW29675 112847137	1.7717	1.7379 NAV 28.10.2021	55,552	-1,080 -1,080	-1.91% -1.91%
		AUD Portfolio: 3000039-70	112047137		20.10.2021	0.15%	-1,000	-1.9170
AUD	15,118.5215	UNITS PERENNIAL BETTER FUTURE TRUST	AU60WPC56007	1.5031	1.4733 NAV	22,274	-451	-1.99%
		AUD Portfolio: 3000039-70	112127492		28.10.2021	0.06%	-451	-1.99%
AUD	56,332	PENDING SUCCESSFUL SUBSCRIPTION OF UNITS PARTNERS GROUP GLOBAL VALUE		1.0000	1.0000 MID 25.08.2016	56,332		
		FUND (AUD) WHOLESALE AUD Portfolio: 3000039-70			20.00.2010	0.16%		
Total Equ	ıities & Similar In	vestments AUD				6,008,983		
						16.61%		



Number/ Nomina	ıl	Description	<b>Identification</b> 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 & Simi	lar Investn	nents EUR						
EUR	8,999	SHS EUR ISHARES II PLC - ISHARES CORE	IE00B1YZSC51	25.9541	29.2800 CLO	407,748	40,455	11.01%
		MSCI EUROPE UCITS ETF	3246398	1.5726 EUR/AUD	29.10.2021		46,316	12.81%
		AUD Portfolio: 3000039-70	IQQY.DE			1.13%	-5,860	-1.80%
EUR	7,210	ACCUM.PTG.SHS WELLINGTON	IE00B9DPD161	15.8682	22.8831 NAV	255,315	79,449	45.18%
		MANAGEMENT FUNDS (IRELAND) PLC -	20938626	1.5372 EUR/AUD	28.10.2021		78,268	44.21%
		WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR AUD Portfolio: 3000039-70				0.71%	1,181	0.97%
EUR	19,607	ACCUM SHS -1C- USD XTRACKERS(IE)PLC -	IE00BZ02LR44	26.4280	30.7850 CLO	934,064	128,468	15.95%
		XTRACKERS MSCI WORLD ESG UCITS ETF	41359963	1.5547 EUR/AUD	29.10.2021		132,199	16.49%
		AUD Portfolio: 3000039-70	XZW0.DE			2.58%	-3,731	-0.54%
Total Equities &	Similar In	vestments EUR				1,597,127		
						0		
						4.41%		
Equities & Simi	lar Investn	nents GBP						
GBP	528	ACCUM SHS GBP ISHARES VII PLC - ISHARES CORE FTSE 100 UCITS ETF GBP (ACC)	IE00B53HP851 10737489	114.1264 1.7812 GBP/AUD	125.4400 CLO 29.10.2021	121,097	13,762 10.922	12.82% 9.91%
		AUD Portfolio: 3000039-70	CUKX.L			0.33%	2,840	2.91%
Total Equities 8	Similar In	vestments GBP				121,097		
						0		
						0.33%		



Number/ Nominal		Description	<b>Identification</b> 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 & Simila	ar Investn	nents 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	29,840.0000 CLO 29.10.2021	325,169 0.90%	44,478 57,234 -12,756	15.85% 21.36% -5.52%
Total Equities &	Similar In	vestments JPY				325,169 0 0.90%		
Equities & Simila	ar Investn	nents USD						
USD	168	ACCUM.PTG.SHS ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD AUD Portfolio: 3000039-70	IE00B53SZB19 10737617 CSNDX.S	348.3821 0.7807 AUD/USD	889.4000 CLO 29.10.2021	198,267 0.55%	123,300 120,605 2,695	164.47% 155.29% 9.18%
USD	5,550	ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF AUD Portfolio: 3000039-70	IE00BJ0KDR00 24268896 XD9U.L	96.2694 0.7155 AUD/USD	130.8000 CLO 29.10.2021	963,264 2.66%	216,571 254,297 -37,726	29.00% 35.87% -6.86%
USD	19,007	SHS -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	20.4900 NAV 28.10.2021	516,774 1.43%	77,751 101,216 -23,465	17.71% 24.36% -6.65%
USD	643	SHS -C- SCHRODER INTERNATIONAL SELECTION FUND SICAV - GLOBAL ENERGY TRANSITION CAPITALISATION AUD Portfolio: 3000039-70	LU2016063229 48843442	222.0619 0.7719 AUD/USD	225.2217 NAV 29.10.2021	192,161 0.53%	7,192 2,696 4,496	3.89% 1.42% 2.47%



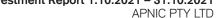
Number/ N	ominal	Description	<b>Identification</b> ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
USD	140	SHS -EBP- CS INVESTMENT FUNDS 2 SICAV - CREDIT SUISSE (LUX) THEMATIC	LU2269158932 58758856	1,007.7109 0.7719 AUD/USD	1,025.5600 NAV 28.10.2021	190,517	7,757 3,316	4.24% 1.77%
		OPPORTUNITIES EQUITY FUND CAPITALISATION AUD Portfolio: 3000039-70				0.53%	4,442	2.47%
USD	6,273	SHS ISHARES ESG AWARE MSCI EM ETF	US46434G8630	43.6753	41.8700 CLO	348,516	-19,562	-5.31%
		AUD Portfolio: 3000039-70	33080862	0.7443 AUD/USD	29.10.2021		-15,027	-4.13%
			ESGE.OQ			0.96%	-4,535	-1.18%
USD	566	TRUST UNITS SPDR S&P 500 ETF TRUST	US78462F1030	265.5437	459.2500 CLO	344,914	145,678	73.12%
		AUD Portfolio: 3000039-70	45088	0.7544 AUD/USD	29.10.2021		145,481	72.95%
			SPY.P			0.95%	198	0.17%
USD	4,572	SHS FINANCIAL SELECT SECTOR SPDR FUND	US81369Y6059	33.2190	40.2600 CLO	244,244	48,354	24.68%
		AUD Portfolio: 3000039-70	986018 XLF.P	0.7753 AUD/USD	29.10.2021	0.67%	42,715 5,638	21.20% 3.49%
Total Equi	ties & Similar In	vestments USD				2,998,658		
						0 8.29%		
Total Foui	ties & Similar In	vestments				11,051,033		
rotal Equi						0		
A14 45	- 1	One and the orange of the oran				30.54%		
Hedge Fu		Commodities & Real Estate						
AUD	694,630.01	UNITS BLACKROCK GLOBAL ALLOCATION	AU60MAL00181	1.2351	1.2298 NAV	854,234	-3,726	-0.43%
		FUND (AUST) CLASS -D- WHOLESALE	3379478		28.10.2021		-3,726	-0.43%
		AUD Portfolio: 3000039-70				2.36%		



Number/ N	ominal	Description	<b>Identification</b> 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	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	114.0000 NAV 28.10.2021	518,928 1.43%	39,717 39,717	8.29% 8.29%
AUD	6,625.333	ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES FUND AUD Portfolio: 3000039-70	IE00BMPRT797 56741323	102.5318	104.8497 NAV 30.09.2021	694,664 1.92%	15,357 15,357	2.26% 2.26%
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	IE00BYY0ZZ17 28828240	103.6336	114.1100 NAV 28.10.2021	584,586 1.62%	53,671 53,671	10.11% 10.11%
USD	8.222	RED.PTG.SHS -A- CS RENAISSANCE ALTERNATIVE ACCESS FUND LTD USD AUD Portfolio: 3000039-70	KYG258511099 34032546	1,133.2802 0.7185 AUD/USD	890.6578 EST 22.10.2021	9,717 0.03%	-3,252 -2,647 -605	-25.08% -21.41% -3.67%
Total Hed	ge Funds					2,662,128 0 7.36%		
Private Ed	quity							
AUD	258,333.27	UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE AUD Portfolio: 3000039-70	AU60ETL02762 26607292	2.0960	3.1193 NAV 31.08.2021	805,819 2.23%	264,365 264,365	48.82% 48.82%
Total Priva	ate Equity					805,819 0 2.23%		



Number/ Nomi	inal	Description	<b>Identification</b> ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	<b>Current Valuation</b> Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/ Unreal. in 9 Instr. in 9 FX in 9
Real Estate								
AUD	26,976	STAPLED SECS DEXUS PROPERTY TRUST CONS OF 1 SH + 1 TR UT DEXUS OPER AUD Portfolio: 3000039-70	AU000000DXS1 112275620 DXS.AX	11.1013	10.8700 CLO 29.10.2021	293,229 0.81%	-6,240 -6,240	-2.08% -2.08%
AUD	28,086	STAPLED SECURITY GOODMAN GROUP AUD Portfolio: 3000039-70	AU000000GMG2 18079202 GMG.AX	11.0006	21.9000 CLO 29.10.2021	615,083 1.70%	306,121 306,121	99.08% 99.08%
AUD	57,574	STAPLED SECURITY MIRVAC GROUP AUD Portfolio: 3000039-70	AU000000MGR9 821911 MGR.AX	2.0391	2.8200 CLO 29.10.2021	162,359 0.45%	44,959 44,959	38.30% 38.30%
Total Real Es	tate					1,070,671 0 2.96%		
Total Alternat	tive Investme	ents, Commodities & Real Estate				4,538,619 0		
Mixed & Othe	er Investmen	ts				12.54%		
AUD	40,795	PENDING SUCCESSFUL SUBSCRIPTION OF ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES FUND AUD Portfolio: 3000039-70		1.0000	1.0000 MID 28.10.2020	40,795 0.11%		
Total Mixed &	Other Inves	tments				40,795 0 0.11%		
Total Investm	nents					36,186,239 100.00%		
of which Acc	rued Interest	t .				0		





## **Appendix**

#### **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.

21/25 4. Appendix / 4.1. Explanations

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#### **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

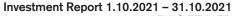
The contribution figure refers to the contribution of an individual asset category and/or currency to the overall performance on a portfolio level. The figure is calculated based on investment related positions using the TWR Daily method (Time Weighted Rate of Return), the return is computed by aggregating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

4. Appendix / 4.1. Explanations 22/25



APNIC PTY LTD

Portfolio Group: 3000039 Reporting Currency: AUD



#### **Abbreviations**

BID = Bid Price CLO = Closing Price

EST =

MID = Average Price NAV = Net Asset Value

#### Rounding logic

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

#### Large Numbers

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

#### Conversion Rates as of 31.10.2021

AUD 1.0000 = JPY 85.6193

AUD 1.0000 = USD 0.7536

EUR 1.0000 = AUD 1.5475

GBP 1.0000 = AUD 1.8284

4. Appendix / 4.1. Explanations 23/25



#### 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 custodised 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.

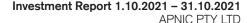
Please note that financial institutions are preparing to transition away from Interbank Offered Rates (IBORs) to alternative reference rates (ARRs). This may affect products issued by Credit Suisse or third parties in your portfolio. Please refer to our Credit Suisse IBOR website www.credit-suisse.com/IBOR 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.

4. Appendix / 4.2. Legal Information





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.

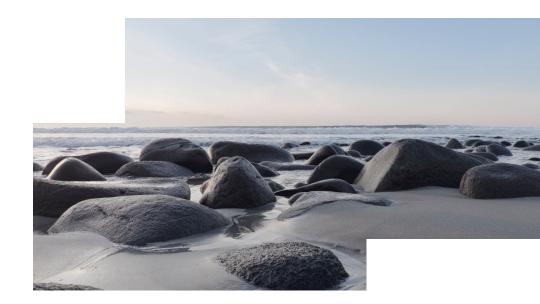
An individual who is an account holder of an Individual or Joint Account with RMB Services opened and maintained with the Bank's Hong Kong branch is requested to notify the Bank immediately if there is any change to such individual's status in terms of holding a HK Identity Card or not.

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

4. Appendix / 4.2. Legal Information



# **APNIC Monthly Reporting**



#### Summary

- The APNIC portfolio was indicatively down 1.25% in October.
- Global equities ex-Australia advanced 0.95% in AUD terms although developed emerging markets diverged.
- Australian equities fell -0.09%.
- Bond markets fell as rising inflation expectations upwards pressure on global yields.

#### **Market Commentary**

In October, rising inflationary pressures and the reaction by central banks and market participants to this data was a major driver for both equity and bond markets. Bond markets were especially volatile with several central banks signalling a more hawkish tone which pushed yields upwards globally, resulting in lower bond prices. Australian bonds fell by 3.55% over the month. Equities were a mixed bag with developed markets outperforming emerging markets. In AUD terms, US and European equities rallied 2.76% and 0.23%, respectively, while Australian and emerging markets equities fell 0.20% and 3.02%, respectively.

Australian economic data pointed to a robust recovery as lockdown restrictions lifted sooner than expected in some parts of the country. Retail sales returned to growth in September, advancing 0.4% compared to a contraction of 1.7% in the prior month and the NAB measure of Business Confidence improved over the same month. However, the major news was inflation data with the Australian trimmed mean CPI for the September quarter coming in at 2.1% YoY, falling within the RBA target range of 2% to 3% for the first time in years. This prompted the central bank to abandon guidance of no rate increases until 2024 in its November monetary policy statement. Bond market participants reacted strongly by pricing in rate hikes as early as 2023.

In the US, the economic recovery resumed with both the ISM Manufacturing and Services recording strongly expansionary signals in October of 60.8 and 66.7

respectively. The labour market improved in October with 531k new jobs added to the economy, up from 194k in the month prior which helped drive down the unemployment rate from 4.8% to 4.6%. September inflation of 5.4% CPI YoY increased from the previous month and beat expectations. The Fed noted the improved economic outlook and announced the intention to commence tapering their asset purchase program in November, but also indicated that further improvement to the labour market would be required before raising interest rates.

The economic recovery in Europe continued in October with the composite PMI recording further expansion at 54.2 with both manufacturing and services sectors continuing to expand. Conforming to the global trend, the European inflation and GDP readings were both stronger, including a September CPI YoY print of 3.4% and 3Q21 GDP YoY of 3.7%. This elicited some moderately hawkish comments from the ECB, noting a possible end to the pandemic emergency purchase program as soon as March 2022.

Chinese economic growth has slowed in October with 3Q21 GDP falling to 4.9% from 7.9% on the back of a resurgence in COVID-19 cases across the country and property sector specific concerns. September CPI YoY of 0.7% was 0.1%, lower than the previous month and reflected a much different inflation story compared to the rest of the world that are experiencing inflationary pressures. The October composite PMI of 51.5 represents a very minor expansion and further reflects the slowdown in growth that the country is facing.

#### Market Value as at 30 October 2021

	Market Value
APNIC Portfolio	A\$36,030,556

#### Performance as of 30 October 2021

APNIC Portfolio							
	Portfolio	Benchmark	Relative	CPI + 2.5%			
Month	-1.25%	-1.24%	-0.01%	0.46%			
3 Months	-1.63%	-1.53%	-0.09%	1.45%			
Year To Date	3.24%	3.51%	-0.27%	3.74%			
1 Year	6.89%	7.19%	-0.30%	4.60%			
3 Years pa	6.39%	6.69%	-0.30%	4.04%			
Since Inception pa	5.39%	5.64%	-0.24%	4.31%			

<sup>\*</sup> Performance is after fees but before franking

#### **Asset Allocation**

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

#### Significant Recent Portfolio Changes

Position	Comments
Eiger Australian Small Companies Fund / Perennial Better Future Trust	Bought / Bought: Increasing exposure to small-cap equities by introducing two new active managers with strong track records and capacity for further inflows.
Commonwealth Bank / National Australia Bank	Decreased / Decreased: The economic recovery and strong capital position of these banks now fully priced by the market.
Amundi MSCI Emerging Markets ETF / iShares EM ESG ETF / Goldman Sachs EM Fund	Decreased / Bought / Increased: Amid recent volatility in emerging markets equities, rotated exposure away from index-tracking Amundi ETF and into actively managed GS fund and an ESG-aware ETF to increase company quality.
Nomura Nikkei 225 ETF	Increased: Reallocating some exposure from emerging markets to Japanese equities, which are favoured due to an improved corporate earnings picture, attractive valuation, and an expected pick-up in macroeconomic activity.
Alumina	Increased: Beneficiary of rising alumina commodity prices and higher energy input costs.

#### Outlook

At the beginning of October, the GIC moved to an overweight equities position. Having taken profits in shares earlier in the year, the GIC has been waiting to take advantage of a dip in markets which presented itself at the end of September. We see equities as attractive relative to the low returns on offer in cash and bonds. Global GDP growth in 2022 will be lower than 2021 but still elevated at 4.4% as the world returns to normal. This should support company earnings. The risk to this view is unexpectedly high inflation. Moderate inflation is good for markets. Our research shows that inflation between 2% and 5% has seen good returns on equities since 1926. However, inflation above 5%, and the consequent monetary tightening by central banks crimps equity returns.

Currently elevated inflation rates in developed economies are unlikely to persist once transitory factors (essentially higher prices for energy and some goods) ease. However, average inflation is likely to remain higher in most economies than it has been over the last decade. In that context, central banks will likely normalise monetary policy. In developed economies, the Bank of England will likely be the first of the major central banks to raise its policy

rate in 2022, then the US Federal Reserve, probably closely followed by the RBA. Interest rate hikes in the Eurozone, Japan and Switzerland are unlikely for the time being. Inflation is also likely to be more volatile. Demand and particularly supply for services remain constrained by social distancing measures (e.g. restaurants, hotels) or other restrictions (international flights). Governments regularly update these rules, depending on the evolution of the pandemic, which can affect prices and wages.

#### **Data Sources**

Credit Suisse, unless otherwise specified.

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Private Banking Australia

1 Macquarie Place Sydney NSW 2000

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Private Banking

Investment Report 1.11.2021 - 30.11.2021

**APNIC PTY LTD** 

Portfolio: 3000039-70





### Private Banking

## Investment Report 1.11.2021 - 30.11.2021

Portfolio 3000039-70

In the Name of APNIC PTY LTD

Produced on 1.12.2021 Reporting Currency AUD

Relationship Manager Patrick Armitage
Phone +61 2 8205 4451

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#### **CREDIT SUISSE AG**

 Level 31, Gateway
 Phone
 +612 8205 4888

 1 Macquarie Place
 Fax
 +612 8205 4889

 Sydney
 ABN
 17 061 700 712

 NSW 2000
 AFSL
 226896

 Australia
 226896

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





# Scope of Analysis as of 30.11.2021

Components	Portfolio	Asset Value in AUD	Discretionary Mandate	Opened	Closed	Performance Activation	Performance Deactivation
Investment related Positions							
AUD Portfolio	3000039-70	36,451,913	Yes	16.08.2013		31.12.2013	
Total Wealth		36,451,913					



### Overview

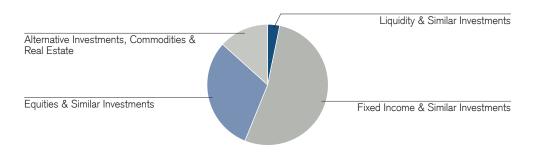
#### **Asset Allocation**

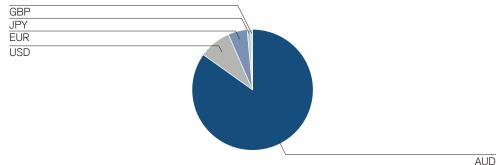
# Asset Allocation by Asset Category Period 1.11.2021 - 30.11.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
■ Liquidity & Similar Investments	1,602,612	-425,770	1,176,842	3.23%
■ Fixed Income & Similar Investments	18,769,900	509,158	19,279,058	52.89%
Equities & Similar Investments	11,042,748	93,569	11,136,317	30.55%
Alternative Investments, Commodities & Real Estate	4,614,331	245,365	4,859,696	13.33%
Total Investments	36,029,591		36,451,913	100.00%

## Asset Allocation by Currency Period 1.11.2021 - 30.11.2021

	Beginning Market Value in AUD	Change	Ending Market Value in AUD	Ending Market Value Prop.
AUD - Australian Dollar	30,981,236	13,190	30,994,425	85.03%
USD - US Dollar	3,004,508	133,214	3,137,723	8.61%
■ EUR - Euro	1,597,581	260,048	1,857,630	5.10%
JPY - Japan Yen	325,169	14,733	339,901	0.93%
■ GBP - Pound Sterling	121,097	1,137	122,234	0.34%
Total Investments	36,029,591		36,451,913	100.00%





Investments in % Investments in %

1. Overview / 1.1. Asset Allocation 3/25



### Income and Activity

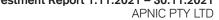
Income Summary
Period 1.11.2021 - 30.11.2021

	Current Period in AUD	Year to Date in AUD
Cash Dividend	24,443	773,465
Coupon Received/Paid	0	857
Interest Earned	0	1
Interest Paid	0	0
Net Income	24,443	774,324

**Activity Summary** Period 1.11.2021 - 30.11.2021

Current Period in AUD	Year to Date in AUD
0	4,000,000
0	0
0	4,000,000
0	0
	in AUD 0 0

4/25 1. Overview / 1.2. Income and Activity





#### 1.3. Performance

#### Performance Summary

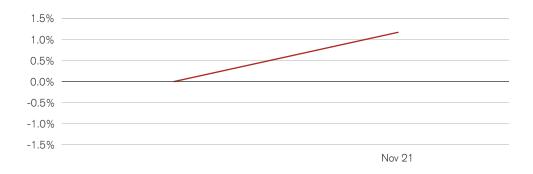
Period 1.11.2021 - 30.11.2021

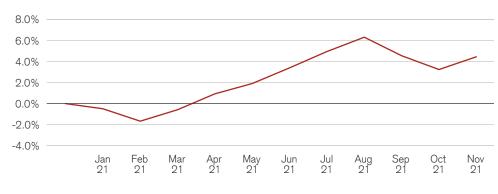
	Asset Value in AUD	Asset Value in AUD
Ending Market Value		36,451,913
Beginning Market Value		36,029,591
Asset Flows including		0
Inflows	0	
Outflows	0	
Net Non-Investment Flows	0	
Taxes	0	
Flow Adjusted Value Change		422,322
Cumulative Portfolio Return – net		1.17%

#### Performance Year-to-date

Period 1.1.2021 - 30.11.2021

	Asset Value in AUD	Asset Value in AUD
Ending Market Value		36,451,913
Beginning Market Value		31,057,596
Asset Flows including		3,986,894
Inflows	4,000,000	
Outflows	0	
Net Non-Investment Flows	0	
Taxes	-13,106	
Flow Adjusted Value Change		1,407,423
Cumulative Portfolio Return – net		4.45%





Cumulative Portfolio Return

Cumulative Portfolio Return

1. Overview / 1.3. Performance 5/25



#### 2. Analyses

#### 2.1. Performance

#### **Performance Details**

Period 1.11.2020 - 30.11.2021

	Since Start of Period	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21
Ending Market Value	30,942,055	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,450	33,118,149	33,615,837	35,060,140	34,475,026	36,029,591	36,451,913
Beginning Market Value	30,001,462	30,942,055	31,057,596	30,905,140	30,537,588	30,873,178	31,342,012	31,647,450	33,118,149	33,615,837	35,060,140	34,475,026	36,029,591
Asset Flows including	0	-4,128	0	0	-4,216	0	0	995,730	0	1,000,000	-4,620	2,000,000	0
Inflows	0	0	0	0	0	0	0	1,000,000	0	1,000,000	0	2,000,000	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	-4,128	0	0	-4,216	0	0	-4,270	0	0	-4,620	0	0
Flow Adjusted Value Change	940,593	119,668	-152,455	-367,553	339,806	468,835	305,438	474,968	497,688	444,303	-580,493	-445,435	422,322
Portfolio Return – net	3.14%	0.39%	-0.49%	-1.19%	1.11%	1.52%	0.97%	1.45%	1.50%	1.30%	-1.66%	-1.25%	1.17%
Cumulative Portfolio Return	3.14%	3.53%	3.03%	1.80%	2.93%	4.50%	5.51%	7.05%	8.66%	10.07%	8.25%	6.89%	8.14%



2. Analyses / 2.1. Performance 6/25



#### 2.2. Contribution Analysis

#### Multi-Period Contribution by Asset Category in %

as of 30.11.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
Liquidity & Similar Investments	0.01	-	-0.29	-0.46	0.01
Fixed Income & Similar Investments	0.55	-0.89	-1.35	-1.22	0.55
Equities & Similar Investments	0.44	0.48	4.34	4.61	0.44
Alternative Investments, Commodities & Real Estate	0.18	0.31	1.76	1.93	0.18
Total - net ***	1.17	-0.09	4.45	4.86	1.17

#### Multi-Period Contribution by Currency in %

as of 30.11.2021

	Month To Date	Quarter To Date	Year To Date	1 Year	Current Period
AUD - Australian Dollar	0.62	-0.64	1.31	1.64	0.62
USD - US Dollar	0.37	0.33	2.29	2.34	0.37
EUR - Euro	0.14	0.25	0.81	0.82	0.14
JPY - Japan Yen	0.04	-0.03	-	-	0.04
GBP - Pound Sterling	-	-	0.05	0.05	_
Total - net ***	1.17	-0.09	4.45	4.86	1.17

2. Analyses / 2.2. Contribution Analysis

001970938 012 058

<sup>\*\*\*</sup> 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.

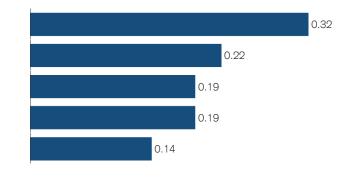


#### 2.3. Contribution - Top Contributors & Detractors

#### Top Contributors in %

as of 30.11.2021

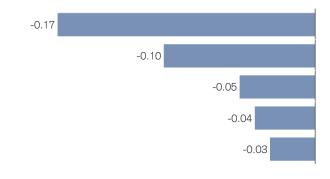
	Total Return	Average Weight	Contribution
UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A-	1.75	18.61	0.32
STAPLED SECURITY GOODMAN GROUP	12.74	1.84	0.22
ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF	7.15	2.77	0.19
UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	1.60	11.82	0.19
UNITS SPDR S&P/ASX 200 LISTED PROPERTY FUND EXCHANGE TRADED FUND	5.08	2.90	0.14
Total – net ***		37.93	1.06



#### Top Detractors in %

as of 30.11.2021

	Total Return	Average Weight	Contribution
REGISTERED SHS WESTPAC BANKING CORP	-20.04	0.68	-0.17
REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA	-10.97	0.94	-0.10
SHS -I- AUD NEUBERGER BERMAN INVESTMENT FUNDS PLC - NEUBERGER BERMAN EMERGING MARKET DEBT - HARD CURRENCY FUND	-3.61	1.42	-0.05
REGISTERED SHS NATIONAL AUSTRALIA BANK LTD	-4.91	0.75	-0.04
PTG.SHS LEGG MASON GLOBAL FUNDS PLC - LEGG MASON WESTERN ASSET MACRO OPPORTUNITIES BOND FUND PREMIER CLASS DISTRIBUTING (S) HEDGED AUD	-1.99	1.59	-0.03
Total – net ***		5.37	-0.39



<sup>\*\*\*</sup> 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 30.11.2021

Numbe	er/ Nominal	Description	<b>Identification</b> 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 %
Liquid Accou	ity & Similar Investr	nents						
AUD	1,095,278.38	Current Account -20300003970945		1.0000		1,095,278		
						3.00%		
EUR	1,305.75	Current Account -20300003970056		1.0000 1.5545 EUR/AUD		2,080	50	2.48%
						0.01%	50	2.48%
USD	56,495.13	Current Account -20300003970780		1.0000 0.7290 AUD/USD		79,484	1,991	2.57%
						0.22%	1,991	2.57%
Total I	iquidity & Similar Ir	nvestments				1,176,842		
						3.23%		
	Income & Similar In Income & Similar In							
AUD	1,623,101.85	UNITS -D- ISHARES AUSTRALIAN BOND INDEX FUND	AU60BGL01056 2244170	1.0395	1.0184 NAV 29.11.2021	1,653,016	-34,140 -34,140	-2.02% -2.02%
						4.53%		
AUD	4,240,269.83410	UNITS PERPETUAL ACTIVE FIXED INTEREST FUND	AU60PER02627 35661784	1.0550	1.0201 NAV 26.11.2021	4,325,355	-148,194 -148,194	-3.31% -3.31%
						11.87%		
AUD	5,540,931.6647	UNITS WESTERN ASSET AUSTRALIAN BOND FUND CLASS -A-	AU60SSB01221 2248336	1.2577	1.2522 NAV 26.11.2021	6,938,133	-30,508 -30,508	-0.44% -0.44%
						19.03%		



Number/ N	Nominal	Description	<b>Identification</b> 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	1.1346 NAV 29.11.2021	501,959	-6,124 -6,124	-1.21% -1.21%
AUD	49,678	SHS -I- AUD NEUBERGER BERMAN INVESTMENT FUNDS PLC - NEUBERGER BERMAN EMERGING MARKET DEBT - HARD CURRENCY FUND	IE00B986FB81 53616359	10.6287	10.1500 NAV 29.11.2021	504,232	-23,781 -23,781	-4.50% -4.50%
AUD	116,247	SHS PIMCO FUNDS: GLOBAL INVESTORS SERIES PLC - GLOBAL INVESTMENT GRADE CREDIT FUND INSTITUTIONAL CLASS AUD (HEDGED)	IE00BL0BLL78 3752613	10.7653	10.6100 NAV 29.11.2021	1,233,381 3.38%	-18,053 -18,053	-1.44% -1.44%
AUD	338,211	SHS -L3- HEDGED AUD FEDERATED HERMES INVESTMENT FUNDS PLC - FEDERATED HERMES GLOBAL HIGH YIELD CREDIT FUND	IE00BMZ15N91 57259812	3.0819	3.1491 NAV 26.11.2021	1,065,060 2.92%	22,720 22,720	2.18% 2.18%
AUD	5,425	UNITS SHS HEDGED AUD MUZINICH FUNDS - MUZINICH EMERGING MARKET CORPORATE DEBT FUND	IE00BNC55647 110844223	100.3753	96.4100 NAV 29.11.2021	523,024 1.43%	-21,512 -21,512	-3.95% -3.95%
AUD	5,938	SHS -RA- GAM MULTIBOND SICAV - LOCAL EMERGING BOND DISTRIBUTION	LU2128492191 52867287	94.9706	89.5800 NAV 29.11.2021	531,926	-32,009 -32,009	-5.68% -5.68%
AUD	11,116	SHS -CH- ROBECO CAPITAL GROWTH FUNDS SICAV - ROBECOSAM GLOBAL SDG CREDITS DISTRIBUTION	LU2207422291 56320962	99.0605	97.9400 NAV 29.11.2021	1,088,701 2.99%	-12,456 -12,456	-1.13% -1.13%
AUD	9,119	SHS -EAH- CS INVESTMENT FUNDS 1 SICAV - CREDIT SUISSE (LUX) GLOBAL INFLATION LINKED BOND FUND DISTRIBUTION	LU2407926216 114771252	100.0000	100.2600 NAV 26.11.2021	914,271 2.51%	2,371 2,371	0.26% 0.26%
Total Fixe	d Income & Sim	ilar Investments				19,279,058 0 52.89%		



Number/ Nor	minal	Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> 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 %
•	Similar Investn Similar Investn							
AUD	6,126	REGISTERED SHS AUSTRALIA & NEW ZEALAND BANKING GROUP LTD	AU000000ANZ3 640139 ANZ.AX	28.2539	26.7000 CLO 30.11.2021	163,564 0.45%	-9,519 -9,519	-5.50% -5.50%
AUD	33,641	REGISTERED SHS ALUMINA LTD	AU000000AWC3 1526402 AWC.AX	1.9144	1.7950 CLO 30.11.2021	60,386 0.17%	-4,016 -4,016	-6.24% -6.24%
AUD	34,858	REGISTERED SHS AURIZON HOLDINGS LTD	AU000000AZJ1 20175896 AZJ.AX	4.5903	3.3700 CLO 30.11.2021	117,471 0.32%	-42,537 -42,537	-26.58% -26.58%
AUD	8,636	REGISTERED SHS BHP GROUP LTD	AU000000BHP4 640390 BHP.AX	32.1085	39.3700 CLO 30.11.2021	339,999 0.93%	62,710 62,710	22.62% 22.62%
AUD	2,799	REGISTERED SHS CARSALES.COM LTD	AU000000CAR3 10476764 CAR.AX	16.4680	25.2100 CLO 30.11.2021	70,563 0.19%	24,469 24,469	53.08% 53.08%
AUD	3,217	REGISTERED SHS COMMONWEALTH BANK OF AUSTRALIA	AU000000CBA7 646758 CBA.AX	81.5356	93.1800 CLO 30.11.2021	299,760 0.82%	37,460 37,460	14.28% 14.28%
AUD	6,140	REGISTERED SHS COMPUTERSHARE LTD	AU000000CPU5 241285 CPU.AX	16.0032	19.0900 CLO 30.11.2021	117,213 0.32%	18,953 18,953	19.29% 19.29%



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AUD	1,173	REGISTERED SHS CSL LTD	AU000000CSL8 241548 CSL.AX	178.5819	306.7900 CLO 30.11.2021	359,865 0.99%	150,388 150,388	71.79% 71.79%
AUD	2,504	REGISTERED SHS FLIGHT CENTRE TRAVEL GROUP LTD	AU000000FLT9 90307 FLT.AX	19.0671	17.7500 CLO 30.11.2021	44,446 0.12%	-3,298 -3,298	-6.91% -6.91%
AUD	2,510	CHESS UNITS OF FOREIGN SECURITIES JAMES HARDIE INDUSTRIES PLC	AU000000JHX1 1303670 JHX.AX	27.0838	55.6700 CLO 30.11.2021	139,732 0.38%	71,751 71,751	105.55% 105.55%
AUD	2,074	REGISTERED SHS MAGELLAN FINANCIAL GROUP LTD	AU000000MFG4 2807450 MFG.AX	40.4746	33.1600 CLO 30.11.2021	68,774 0.19%	-15,170 -15,170	-18.07% -18.07%
AUD	330	REGISTERED SHS MACQUARIE GROUP LTD	AU000000MQG1 3422370 MQG.AX	85.9818	196.7400 CLO 30.11.2021	64,924 0.18%	36,550 36,550	128.82% 128.82%
AUD	9,455	REGISTERED SHS NATIONAL AUSTRALIA BANK LTD	AU000000NAB4 641643 NAB.AX	24.5148	27.3000 CLO 30.11.2021	258,122 0.71%	26,334 26,334	11.36% 11.36%
AUD	4,479	REGISTERED SHS NEWCREST MINING LTD	AU000000NCM7 650853 NCM.AX	27.6429	23.6200 CLO 30.11.2021	105,794 0.29%	-18,019 -18,019	-14.55% -14.55%
AUD	19,096	REGISTERED SHS NINE ENTERTAINMENT CO. HOLDINGS LTD	AU000000NEC4 22858707 NEC.AX	2.8159	2.9400 CLO 30.11.2021	56,142 0.15%	2,370 2,370	4.41% 4.41%



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AUD	9,661	REGISTERED SHS ORIGIN ENERGY LTD	AU000000RG5 1051439	7.5195	4.8000 CLO 30.11.2021	46,373	-26,273 -26,273	-36.17% -36.17%
			ORG.AX			0.13%		
AUD	2,275	REGISTERED SHS OZ MINERALS LTD	AU000000ZL8	10.7556	25.9900 CLO	59,127	34,658	141.64%
			4334812 OZL.AX		30.11.2021	0.16%	34,658	141.64%
AUD	17,180	REGISTERED SHS QANTAS AIRWAYS LTD	AU000000QAN2 390413	5.6657	5.0600 CLO 30.11.2021	86,931	-10,405 -10,405	-10.69% -10.69%
			QAN.AX		30.11.2021	0.24%	-10,400	-10.09 /6
AUD	6,689	REGISTERED SHS QBE INSURANCE GROUP	AU000000QBE9	11.5695	11.6200 CLO	77,726	338	0.44%
		LTD	641857 QBE.AX		30.11.2021	0.21%	338	0.44%
AUD	1,646	REGISTERED SHS RIO TINTO LTD	AU000000RIO1 603520	76.5155	93.5000 CLO 30.11.2021	153,901	27,957 27,957	22.20% 22.20%
			RIO.AX		30.11.2021	0.42%	21,901	22.2070
AUD	2,133	SHS RESMED INC CHESS DEPOSITORY	AU000000RMD6	22.0567	36.2800 CLO	77,385	30,338	64.49%
		INTERESTS REPR 1/10 SH	1058638 RMD.AX		30.11.2021	0.21%	30,338	64.49%
AUD	19,650	REGISTERED SHS SOUTH32 LTD	AU000000S320	2.6985	3.5300 CLO	69,365	16,338	30.81%
			27547963 S32.AX		30.11.2021	0.19%	16,338	30.81%
AUD	76,774	UNITS SPDR S&P/ASX 200 LISTED PROPERTY	AU000000SLF1	12.5989	13.9500 CLO	1,070,997	103,729	10.72%
		FUND EXCHANGE TRADED FUND	1377855 SLF.AX		30.11.2021	2.94%	103,729	10.72%



Number/ Nominal		Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> 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	8,245	UNITS SPDR S&P/ASX 200 FUND ETF AUSTRALIAN EQUITY EXCHANGE TRADED FUNDS	AU000000STW9 1285707 STW.AX	58.8197	67.5000 CLO 30.11.2021	556,538 1.53%	71,569 71,569	14.76% 14.76%
		TONDS	STW.AX			1.55 /6		
AUD	14,246	REGISTERED SHS TELSTRA CORPORATION LTD	AU000000TLS2 720464	4.5550	4.0700 CLO 30.11.2021	57,981	-6,910 -6,910	-10.65% -10.65%
			TLS.AX			0.16%		
AUD	3,230	SHS VANGUARD MSCI AUSTRALIAN SMALL COMPANIES INDEX ETF EXCHANGE TRADED	AU000000VSO2 13053435	60.3498	72.3100 CLO 30.11.2021	233,561	38,631 38,631	19.82% 19.82%
		FUND	VSO.AX		00.11.2021	0.64%	33,33	10.02 /0
AUD	9,974	REGISTERED SHS WESTPAC BANKING CORP	AU000000WBC1 642372	26.9089	20.5200 CLO 30.11.2021	204,666	-63,723 -63,723	-23.74% -23.74%
			WBC.AX			0.56%		
AUD	1,031	REGISTERED SHS WESFARMERS LTD	AU000000WES1 642397	34.0342	56.8600 CLO 30.11.2021	58,623	23,533 23,533	67.07% 67.07%
			WES.AX		00.11.2021	0.16%	20,000	01.0170
AUD	3,055	REGISTERED SHS WOOLWORTHS GROUP	AU000000WOW2	34.1257	40.8200 CLO	124,705	20,451	19.62%
		LTD	81350 WOW.AX		30.11.2021	0.34%	20,451	19.62%
AUD	4,372	REGISTERED SHS WOODSIDE PETROLEUM LTD	AU000000WPL2 642429	27.6704	21.4300 CLO 30.11.2021	93,692	-27,283 -27,283	-22.55% -22.55%
			WPL.AX			0.26%		
AUD	8,724	REGISTERED SHS COLES GROUP LTD	AU0000030678	16.9597	18.0200 CLO	157,206	9,250	6.25%
			44059594 COL.AX		30.11.2021	0.43%	9,250	6.25%



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AUD	1,983	UNITS VANGUARD ETHICALLY CONSCIOUS AUST ETF EXCHANGE TRADED FUND	AU0000103533 57145371	60.1201	59.8600 CLO 30.11.2021	118,702	-516 -516	-0.43% -0.43%
			VETH.AX			0.33%		
AUD	4,018	REGISTERED SHS ENDEAVOUR GROUP LTD	AU0000154833	0.5888	6.8500 CLO	27,523	25,158	>999.99%
			111541385 EDV.AX		30.11.2021	0.08%	25,158	>999.99%
AUD	119,980.46	UNITS WHEB SUSTAINABLE IMPACT FUND	AU60HHA00072	1.5473	1.7235 BID	206,786	21,136	11.38%
			4431395		26.11.2021	0.57%	21,136	11.38%
AUD	46,633.0241	UNITS EIGER AUSTRALIAN SMALL	AU60HOW29675	1.7712	1.7313 NAV	80,736	-1,859	-2.25%
		COMPANIES FUND	112847137		26.11.2021	0.22%	-1,859	-2.25%
AUD	29,657.9379	UNITS PERENNIAL BETTER FUTURE TRUST	AU60WPC56007	1.5041	1.4483 NAV	42,954	-1,655	-3.71%
			112127492		29.11.2021	0.12%	-1,655	-3.71%
AUD	50,832	PENDING SUCCESSFUL SUBSCRIPTION OF		1.0000	1.0000 MID	50,832		
		UNITS PARTNERS GROUP GLOBAL VALUE FUND (AUD) WHOLESALE			25.08.2016	0.14%		
AUD	29,292	PENDING SUCCESSFUL SUBSCRIPTION OF		1.0000	1.0000 MID	29,292		
		UNITS EIGER AUSTRALIAN SMALL COMPANIES FUND			03.09.2021	0.08%		
Total Equ	ities & Similar In	vestments AUD				5,952,357 0		
						16.33%		
Equities	& Similar Investn	nents EUR						
EUR	8,999	SHS EUR ISHARES II PLC - ISHARES CORE	IE00B1YZSC51	25.9541	28.6450 CLO	410,669	43,376	11.81%
		MSCI EUROPE UCITS ETF	3246398 IQQY.DE	1.5726 EUR/AUD	29.11.2021	1.13%	38,578 4,798	10.37% 1.44%



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EUR	7,210	ACCUM.PTG.SHS WELLINGTON	IE00B9DPD161	15.8682	22.2350 NAV	255,400	79,533	45.22%
		MANAGEMENT FUNDS (IRELAND) PLC - WELLINGTON STRATEGIC EUROPEAN EQUITY FUND CLASS -N- UNHEDGED EUR	20938626	1.5372 EUR/AUD	26.11.2021	0.70%	73,132 6,402	40.12% 5.10%
EUR	23,900	ACCUM SHS -1C- USD XTRACKERS(IE)PLC - XTRACKERS MSCI WORLD ESG UCITS ETF	IE00BZ02LR44 41359963	27.3164 1.5576 EUR/AUD	31.2400 SET 29.11.2021	1,189,481	172,585 149,392	16.97% 14.36%
			XZW0.DE			3.26%	23,193	2.61%
Total Equitie	es & Similar In	vestments EUR				1,855,549 0 5.09%		
Equities & S	Similar Investm	nents GBP						
GBP	528	ACCUM SHS GBP ISHARES VII PLC - ISHARES CORE FTSE 100 UCITS ETF GBP (ACC)	IE00B53HP851 10737489	114.1264 1.7812 GBP/AUD	123.5200 CLO 29.11.2021	122,234	14,899 9,296	13.88%
			CUKX.L			0.34%	5,603	5.65%
Total Equitie	es & Similar In	vestments GBP				122,234		
						0 0.34%		
Equities & S	Similar Investm	nents JPY						
JPY	933	UNITS NEXT FUNDS NIKKEI 225 EXCHANGE TRADED FUND	JP3027650005 1264151	24,587.7931 81.7284 AUD/JPY	29,300.0000 CLO 30.11.2021	339,901	59,210 54,665	21.09% 19.16%
			1321.T	01.12017.005/011	00.11.2021	0.93%	4,545	1.93%
Total Equitie	es & Similar In	vestments JPY				339,901		
						0 0.93%		



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Equities & Simila	ır Investn	nents USD						
USD	168	ACCUM.PTG.SHS ISHARES VII PLC - ISHARES NASDAQ 100 UCITS ETF USD	IE00B53SZB19 10737617 CSNDX.S	348.3821 0.7807 AUD/USD	920.6000 CLO 29.11.2021	217,595	142,627 135,250 7,377	190.25% 164.25% 26.00%
			CSINDA.3			0.00 /6	7,377	20.00 /0
USD	5,550	ACCUM SHS -1C- USD XTRACKERS (IE) PLC - XTRACKERS MSCI USA UCITS ETF	IE00BJ0KDR00 24268896	96.2694 0.7155 AUD/USD	132.1800 CLO 29.11.2021	1,032,111	285,418 280,404	38.22% 37.30%
			XD9U.L			2.83%	5,015	0.92%
USD	19,007	SHS -R (ACC.)- GOLDMAN SACHS FUNDS SICAV - GOLDMAN SACHS EMERGING	LU0830622741 19578737	16.4768 0.7133 AUD/USD	19.4900 NAV 29.11.2021	521,187	82,164 80,577	18.72% 18.29%
		MARKETS EQUITY PORTFOLIO CAPITALISATION				1.43%	1,588	0.43%
USD	323	SHS -C- SCHRODER INTERNATIONAL	LU2016063229	222.0619	212.2443 NAV	96,451	3,535	3.80%
		SELECTION FUND SICAV - GLOBAL ENERGY TRANSITION CAPITALISATION	48843442	0.7719 AUD/USD	29.11.2021	0.26%	-4,461 7,996	-4.42% 8.23%
USD	71	SHS -EBP- CS INVESTMENT FUNDS 2 SICAV - CREDIT SUISSE (LUX) THEMATIC	LU2269158932 58758856	1,007.7108 0.7719 AUD/USD	968.3000 NAV 26.11.2021	96,724	4,039 -3,937	4.36% -3.91%
		OPPORTUNITIES EQUITY FUND CAPITALISATION	30730000	0.7719 AUD/USD	20.11.2021	0.27%	-3,937 7,976	8.27%
USD	6,273	SHS ISHARES ESG AWARE MSCI EM ETF	US46434G8630	43.6753	40.1200 CLO	354,082	-13,996	-3.80%
			33080862 ESGE.OQ	0.7443 AUD/USD	29.11.2021	0.97%	-31,378 17,381	-8.14% 4.34%
USD	3,161	SHS ISHARES ESG AWARE MSCI USA	US46435U6635	41.6890	40.0600 CLO	178,157	-2,727	-1.51%
		SMALL-CAP ETF	41349509 ESML.Z	0.7285 AUD/USD	29.11.2021	0.49%	-7,245 4,517	-3.91% 2.40%
			EOIVIL.Z			0.49%	4,517	2.40%



	ominal	Description	<b>Identification</b> ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/I Unreal. in % Instr. in % FX in %
USD	566	TRUST UNITS SPDR S&P 500 ETF TRUST	US78462F1030	265.5437	464.6000 CLO	369,967	170,732	85.69%
			45088	0.7544 AUD/USD	29.11.2021		158,511	74.96%
			SPY.P			1.01%	12,221	10.73%
Total Equi	ties & Similar In	vestments USD				2,866,275		
						0		
						7.86%		
Total Equi	ties & Similar In	vestments				11,136,317		
						0		
						30.55%		
Alternative Hedge Fu	•	Commodities & Real Estate						
riougo i u								
AUD	694,630.01	UNITS BLACKROCK GLOBAL ALLOCATION	AU60MAL00181	1.2351	1.2199 NAV	847,374	-10,586	-1.23%
	694,630.01	UNITS BLACKROCK GLOBAL ALLOCATION FUND (AUST) CLASS -D- WHOLESALE	AU60MAL00181 3379478	1.2351	1.2199 NAV 29.11.2021	,	-10,586 -10,586	-1.23% -1.23%
AUD	,			1.2351		2.32%	-10,586	
	,	FUND (AUST) CLASS -D- WHOLESALE	3379478		29.11.2021	,		-1.23%
AUD	,	FUND (AUST) CLASS -D- WHOLESALE  ACCUM SHS -I- HEDGED AUD PGIM FUNDS	3379478 IE00BKV41X02		29.11.2021 112.3790 NAV	2.32%	-10,586 32,338	-1.23% 6.75%
AUD	4,552	FUND (AUST) CLASS -D- WHOLESALE  ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC	3379478 IE00BKV41X02		29.11.2021 112.3790 NAV	2.32% 511,549 1.40%	-10,586 32,338	-1.23% 6.75%
AUD	4,552	FUND (AUST) CLASS -D- WHOLESALE  ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND	3379478 IE00BKV41X02 54282717	105.2748	29.11.2021 112.3790 NAV 26.11.2021	2.32% 511,549	-10,586 32,338 32,338	-1.23% 6.75% 6.75% 4.94%
AUD	4,552	FUND (AUST) CLASS -D- WHOLESALE  ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND  ACCUM SHS -A- AUD MARSHALL WACE	3379478  IE00BKV41X02 54282717  IE00BMPRT797	105.2748	29.11.2021 112.3790 NAV 26.11.2021 107.9630 NAV	2.32% 511,549 1.40%	-10,586 32,338 32,338 35,664	-1.23% 6.75% 6.75% 4.94%
AUD AUD	4,552 7,022.55	FUND (AUST) CLASS -D- WHOLESALE  ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM OMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND  ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES	3379478  IE00BKV41X02 54282717  IE00BMPRT797	105.2748	29.11.2021 112.3790 NAV 26.11.2021 107.9630 NAV	2.32% 511,549 1.40% 758,176	-10,586 32,338 32,338 35,664	-1.23% 6.75% 6.75%
AUD	4,552 7,022.55	FUND (AUST) CLASS -D- WHOLESALE  ACCUM SHS -I- HEDGED AUD PGIM FUNDS PLC - PGIM QMAW KEYNES SYSTEMATIC ABSOLUTE RETURN FUND  ACCUM SHS -A- AUD MARSHALL WACE FUNDS PLC - MW GLOBAL OPPORTUNITIES FUND	3379478  IE00BKV41X02 54282717  IE00BMPRT797 56741323	105.2748 102.8845	29.11.2021 112.3790 NAV 26.11.2021 107.9630 NAV 29.10.2021	2.32% 511,549 1.40% 758,176 2.08%	-10,586 32,338 32,338 35,664 35,664	-1.23% 6.75% 6.75% 4.94% 4.94%



Number/ No	minal	Description	<b>Identification</b> ISIN Valoren Number Ticker	Cost Valuation Price Exchange Rate	Current Valuation Price/ Type Date	Value in AUD of which Accrued Interest Proportion in %	Profit/ Loss Unrealized in AUD of which Instrument of which Forex	P/L Unreal. in % Instr. in % FX in %
USD	8.222	RED.PTG.SHS -A- CS RENAISSANCE ALTERNATIVE ACCESS FUND LTD USD	KYG258511099 34032546	1,133.2802 0.7185 AUD/USD	884.8544 EST 19.11.2021	10,236	-2,733 -2,874	-21.08% -21.92%
						0.03%	140	0.84%
Total Hedge	e Funds					2,701,571		
						7.41%		
Private Equ	ity					1111,0		
AUD	260,082	UNITS PARTNERS GROUP GLOBAL VALUE	AU60ETL02762	2.1031	3.1412 NAV	816,970	270,002	49.36%
		FUND (AUD) WHOLESALE	26607292		31.10.2021	2.24%	270,002	49.36%
Total Privat	e Equity					816,970		
						0		
						2.24%		
Commoditi	es & Precious	Metals						
USD	108	UBS ETC UBS AG, LONDON BRANCH 2007-	CH0031794263	1,222.7004	1,196.0000 CLO	181,728	470	0.26%
		OPEN END ON UBS BLOOMBER CMCI COMPOSITE TOTAL RETURN	3179426 TCMCI.S	0.7285 AUD/USD	29.11.2021	0.50%	-4,057 4,527	-2.18% 2.44%
		COMI COME TOTAL NETONIN	TOMOI.O			0.00 /0	4,027	2.44/0
Total Comn	nodities & Pred	cious Metals				181,728		
						0 0.50%		
Real Estate	1					0.30 /6		
AUD	26,976	STAPLED SECS DEXUS PROPERTY TRUST	AU00000DXS1	11.1013	11.1700 CLO	301,322	1,853	0.62%
		CONS OF 1 SH + 1 TR UT DEXUS OPER	112275620		30.11.2021		1,853	0.62%
			DXS.AX			0.83%		
AUD	28,086	STAPLED SECURITY GOODMAN GROUP	AU00000GMG2	11.0006	24.6900 CLO	693,443	384,481	124.44%
			18079202		30.11.2021	1 000/	384,481	124.44%
			GMG.AX			1.90%		





Number/ Non	ninal	Description	<b>Identification</b> ISIN Valoren Number Ticker	<b>Cost Valuation</b> 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	57,574	STAPLED SECURITY MIRVAC GROUP	AU000000MGR9 821911	2.0391	2.8600 CLO 30.11.2021	164,662	47,262 47,262	40.26% 40.26%
			MGR.AX			0.45%		
Total Real E	state					1,159,427 0 3.18%		
Total Alterna	ative Investme	ents, Commodities & Real Estate				4,859,696 0 13.33%		
Total Investr	ments					36,451,913 100.00%		
of which Ac	crued Interes	t				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.

4. Appendix / 4.1. Explanations 21/25

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#### **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.

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#### **Abbreviations**

BID = Bid Price CLO = Closing Price

EST =

MID = Average Price
NAV = Net Asset Value
SET = Settlement Price

#### Rounding logic

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

#### Large Numbers

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

#### Conversion Rates as of 30.11.2021

AUD 1.0000 = JPY 80.4260

AUD 1.0000 = USD 0.7108

EUR 1.0000 = AUD 1.5931

GBP 1.0000 = AUD 1.8742

4. Appendix / 4.1. Explanations 23/25



#### 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 custodised 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.

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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.

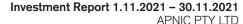
Please note that financial institutions are preparing to transition away from Interbank Offered Rates (IBORs) to alternative reference rates (ARRs). This may affect products issued by Credit Suisse or third parties in your portfolio. Please refer to our Credit Suisse IBOR website www.credit-suisse.com/IBOR 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.

4. Appendix / 4.2. Legal Information





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4. Appendix / 4.2. Legal Information

# APNIC Portfolio Review



December 2021

Credit Suisse AG Private Banking Australia

Confidential



### Key Highlights - Market Commentary

### Period Ending 31/10/2021

- October saw rising inflationary pressures with the reaction by central banks and market participants to this data being a major driver for both equity and bond markets. Bond markets were especially volatile with several central banks signalling a more hawkish tone which pushed yields upwards globally, resulting in lower bond prices. Equities were a mixed bag with developed markets outperforming emerging markets.
- Australian economic data points to a robust recovery as lockdown restrictions lifted sooner than expected in some parts of the country. Retail sales returned to growth in September, advancing 0.4% compared to a contraction of 1.7% in the prior month and the NAB measure of Business Confidence improved over the same month. However, the major news was inflation data with the Australian trimmed mean Consumer Price Index (CPI) for the September quarter coming in at 2.1% Year on Year (YoY), falling within the Reserve Bank of Australia (RBA) target range of 2% to 3% for the first time in years. This prompted the central bank to abandon guidance of no rate increases until 2024 in its November monetary policy statement. Bond market participants reacted strongly by pricing in rate hikes as early as 2023.
- In the US, the economic recovery resumed with both the Institute of Supply Management (ISM) Manufacturing and Services recording strongly expansionary signals in October of 60.8 and 66.7 respectively. The labour market improved in October with 531k new jobs added to the economy, up from 194k in the month prior which helped drive down the unemployment rate from 4.8% to 4.6%. September inflation of 5.4% CPI YoY increased from the previous month and beat expectations. The US Federal Reserve noted the improved economic outlook and announced the intention to commence tapering their asset purchase program in November, but also indicated that further improvement to the labour market would be required before raising interest rates.
- The economic recovery in Europe continued in October with the composite Purchasing Managers Index (PMI) recording further expansion at 54.2 with both manufacturing and services sectors continuing to expand. Conforming to the global trend, the European inflation and Gross Domestic Product (GDP) readings were both stronger, including a September CPI YoY print of 3.4% and 3021 GDP YoY of 3.7%. This elicited some moderately hawkish comments from the European Central Bank (ECB), noting a possible end to the pandemic emergency purchase program as soon as March 2022.
- Chinese economic growth has slowed in October with 3021 GDP falling to 4.9% from 7.9% on the back of a resurgence in COVID-19 cases across the country and property sector specific concerns. September CPI YoY of 0.7% was 0.1%, lower than the previous month and reflected a much different inflation story compared to the rest of the world that are experiencing inflationary pressures. The October composite PMI of 51.5 represents a very minor expansion and further reflects the slowdown in growth that the country is facing.

### **Asset Allocation**

### Period Ending 30/11/2021

- The portfolio is currently underweight cash, underweight bonds, overweight equities and slightly overweight alternatives.
- The Global Investment Committee tactically increased allocations to equities from neutral to overweight during October. We reflected this change during October by reallocating capital from cash into international equities, in particular Developed Market international equities.

#### **Current Asset Allocation Benchmark Asset Allocation** 3.1% 5.0% 15.7% 15.0% ■ Cash ■ Cash ■ Fixed Income ■ Fixed Income 14.9% 13.25% Australian Equities Australian Equities ■ International Equities International Equities 52.9% 53.5% ■ Alternative Investments ■ Alternative Investments 13.4% 13.25%

### **Performance Statistics**

### Period as at 30/11/2021

#### **Yield Strategy**

Portfolio Value as at 30 November 2021 AUD \$36,451,913

APNIC Portfolio	Portfolio¹	Benchmark	Relative Performance	CPI + 2.5%	Relative Performance
November*	1.17%	1.32%	-0.15%	0.46%	+0.71%
3 Months	-1.75%	-1.42%	-0.34%	1.38%	-3.13%
Calendar Year 2021 to date	4.45%	4.82%	-0.37%	4.21%	+0.24%
One Year	4.84%	5.35%	-0.50%	4.80%	+0.04%
3 Years p.a.	7.06%	7.34%	-0.29%	4.07%	+2.98%
Since Inception <sup>2</sup> p.a.	5.49%	5.75%	-0.26%	4.33%	+1.16%

<sup>&</sup>lt;sup>1</sup> Performance is after fees but before franking

<sup>&</sup>lt;sup>2</sup> Inception September 2013

<sup>\*</sup> Indicative numbers for November month to date

### Outlook

- At the beginning of October, the Global Investment Committee (GIC) moved to an overweight equities position. Having taken profits in shares earlier in the year, the GIC has been waiting to take advantage of a dip in markets which presented itself at the end of September.
- We see equities as attractive relative to the low returns on offer in cash and bonds. Global GDP growth in 2022 will be lower than 2021 but still elevated at 4.4% as the world returns to normal. This should support company earnings. The risk to this view is unexpectedly high inflation. Moderate inflation is good for markets. Our research shows that inflation between 2% and 5% has seen good returns on equities since 1926. However, inflation above 5%, and the consequent monetary tightening by central banks crimps equity returns.
- Currently, elevated inflation rates in developed economies are unlikely to persist once transitory factors (essentially higher prices for energy and some goods) ease. However, average inflation is likely to remain higher in most economies than it has been over the last decade. In that context, central banks will likely normalise monetary policy.
- In developed economies, the Bank of England will likely be the first of the major central banks to raise its policy rate in 2022, then the US Federal Reserve, probably closely followed by the RBA. Interest rate hikes in the Eurozone, Japan and Switzerland are unlikely for the time being. Inflation is also likely to be more volatile. Demand and particularly supply for services remain constrained by social distancing measures (e.g. restaurants, hotels) or other restrictions (international flights). Governments regularly update these rules, depending on the evolution of the pandemic, which can affect prices and wages.

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# **Finance Presentation**

APNIC EC Meeting

December 2021



# **Finance Performance**

Year to date Oct 2021

All amounts are in Australian Dollars (AUD)



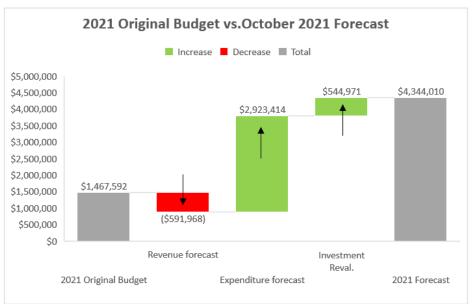
# October 2021 YTD Financial Highlights

#### **Key themes**

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

#### **Highlights**

- Revenue forecast \$592k below budget
- Expenses forecast \$2.9m below budget
- Investment revaluation \$545k not budgeted
- 2021 Operating surplus forecast at \$4.3m
- 2021 Equity Position has increased by 15%
- YTD decrease in cash flow of \$279k however, \$4m was transferred to investment portfolio.





# **Statement of Financial Position**

		Th	nis year vs last year	This year vs last
Amount (AUD)	2021 (YTD)	2020	(\$)	year (%)
ASSETS				
Total Current Assets	\$13,365,265	\$13,204,960	\$160,306	1.2%
Total Non-Current Assets	\$43,064,058	\$38,091,979	\$4,972,079	13.1%
TOTAL ASSETS	\$56,429,323	\$51,296,939	\$5,132,385	10.0%
LIABILITIES				
Total Current Liabilities	\$15,660,243	\$15,474,451	\$185,792	1.2%
Total Non-Current Liabilities	\$1,619,253	\$1,645,605	(\$26,352)	-1.6%
TOTAL LIABILITIES	\$17,279,496	\$17,120,056	\$159,440	0.9%
NET ASSETS / TOTAL EQUITY	\$39,149,828	\$34,176,883	\$4,972,945	14.6%

#### **Observations:**

- Current Assets increased by 1.2% (\$160k)
  - Decrease in cash of \$279k
  - Membership renewals have increased receivables by \$205k
  - Prepaid expenses have increased by \$234k
- Non-Current Assets increased by 13.1% (\$5.0m)
  - \$4m transferred to the Investment Portfolio
  - \$545k investment revaluation
  - \$605k investment income after mgmt. fees.

- Current Liabilities increased by 1.2% (\$186k)
  - Decrease in Accounts Payable of \$729k
  - Increase in Staff leave provisions of \$386k
  - Increase in Unearned revenue of \$529k
- Net Equity position increased by 14.6% (\$5.0m)

# **Financial Stability Measure**

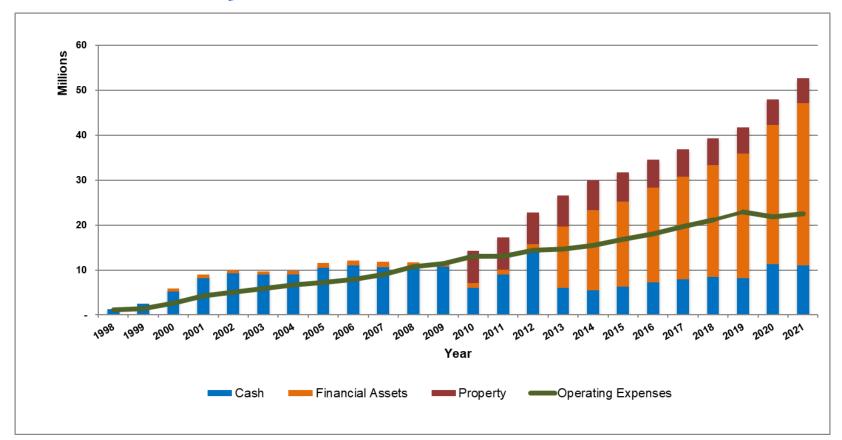
#### **Analysis of Reserves**

Analysis of Reserves	2021 Forecast	*YTD 2021	Actual 2020	Actual 2019	Actual 2018
Total Equity (AUD)	\$38,520,893	\$39,149,828	\$34,176,883	\$30,724,702	\$28,820,985
% Equity Covered By Cash/ Cash Equivalents	123%	121%	124%	117%	116%
Daily Operating Expenses (AUD) *	\$69,873	\$69,873	\$66,374	\$62,944	\$58,122
Number of Months of expenses covered by Equity*	18.12	18.42	16.88	16.05	16.30



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

# **APNIC Capital Reserve**





# **Statement of Income - Surplus**

			This year vs			Forecast vs
Revenue and Expenses (AUD)	2021 (YTD)	2020 (YTD)	last year (%)	Forecast (full year)	Budget (full FY)	Budget (%)
Total Revenue	\$21,986,563	\$20,748,536	6.0%	\$26,379,281	\$26,971,249	-2.2%
Total Expenses	\$17,558,588	\$17,005,531	3.3%	\$22,580,242	\$25,503,657	-11.5%
Operating Surplus / (Deficit)	\$4,427,974	\$3,743,006	18.3%	\$3,799,039	\$1,467,592	158.9%
Revaluation of Financial Asset	\$544,971	(\$393,891)	-238.4%	\$544,971	\$0	0.0%
Surplus / (Deficit)	\$4,972,945	\$3,349,115	48.5%	\$4,344,010	\$1,467,592	196.0%



## **Statement of Income - Revenue**

			This year vs			Forecast vs
Revenue	2021 (YTD)	2020 (YTD)	last year (%)	Forecast (full year)	Budget (full FY)	Budget (%)
Membership Fees	\$20,169,631	\$18,784,915	7.4%	\$24,244,412	\$24,300,595	-0.2%
Non-Member Fees Income	\$214,234	\$217,205	-1.4%	\$257,699	\$264,392	-2.5%
Reactivation Fees	\$16,700	\$15,200	9.9%	\$22,200	\$18,091	22.7%
Sign-Up Fee	\$251,750	\$294,000	-14.4%	\$301,700	\$343,000	-12.0%
Transfer Fees	\$180,196	\$175,567	2.6%	\$214,011	\$210,000	1.9%
Sundry Income	\$372,287	\$401,335	-7.2%	\$492,615	\$1,072,960	-54.1%
Operating Revenue	\$21,204,798	\$19,888,222	6.6%	\$25,532,637	\$26,209,038	-2.6%
Investment Income	\$781,765	\$860,314	-9.1%	\$846,644	\$762,211	11.1%
Total Revenue	\$21,986,563	\$20,748,536	6.0%	\$26,379,281	\$26,971,249	-2.2%

- Membership fees forecast to be in line with budget expectation.
- Actual average fees per member \$1,438 vs budget \$1,451
- 633 new members vs. 670 budget year to date.
- 275 member closures vs. 200 budget year to date.
- 32% of new members from LDCs compared to Budget 27.5%

<b>Historical Member</b>					2021
Growth	2017	2018	2019	2020	Forecast
Total Members	6,547	7,162	7,776	8,341	8,781
New & Reactivated	849	825	838	833	770
Closures	- 296 -	210 -	224 -	268	- 330
Net Change	553	615	614	565	440
Average Monthly	46.08	51.25	51.17	47.08	36.70
Annual Growth %	9.2%	9.4%	8.6%	7.3%	5.3%

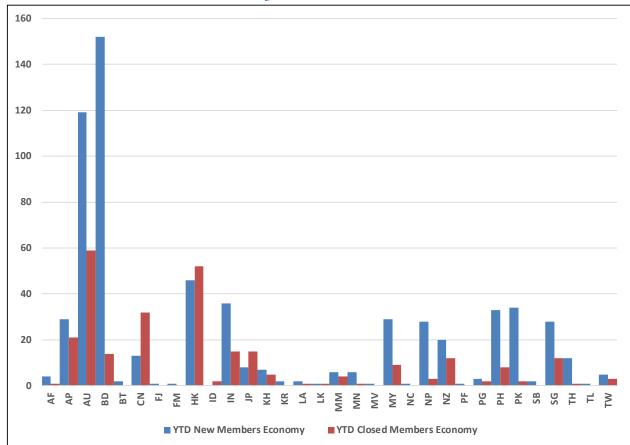




# **Membership Tracking**

Membership	Total	YTD New	Reactivation	YTD Closed	YTD Size Change	Total	% Total
	Dec 2020	Oct-21	Adjustment	Oct-21	Oct-21	Oct-21	
Extra Large	26	0		0	0	26	0%
Very Large	48	0		0	1	49	1%
Large	143	0		0	8	151	2%
Medium	521	6		-7	27	547	6%
Small	3,685	157	4	-128	21	3,739	43%
Very Small	3,778	455	5	-114	-67	4,057	47%
Associate	140	15		-26	10	139	2%
TOTAL	8,341	633	9	-275	0	8,708	100%

# **Membership Growth**



#### **Top 3 New Member Economies**

- Bangladesh
- Australia
- Hong Kong

#### **Top 3 Closed Member Economies**

- Australia
- Hong Kong
- Mainland China



# **Membership Tracking - Closures by Economy**

Economy	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		3		1	5		7	5	21	12	6	12
AU	2	8		14	10	2	22	1	59	56	10	27
BD		5		1	6	1	1		14	11	5	13
CN	4	7		2	11	3	5		32	76	15	19
HK	7	10		5	23	1	4	2	52	126	17	23
ID							2		2	1	0	1
IN	1		2		1	6	5		15	31	3	12
JP		2	2	5	3	1	2		15	9	1	1
KH					3		2		5	18	3	5
LA					1				1	4	1	1
LK						1			1	1		1
MM				1	3				4	9	1	3
MN				1					1			
MY		1		2	3		3		9	20	4	4
NP					2		1		3	1	1	3
NZ		3		5	1		3		12	4	3	9
PG				1	1				2			
PH		1			4	1	2		8	22	3	7
PK		1			1				2	2	1	1
SG		1		2	3		6		12	21	3	10
TH					1				1	2	0	2
TW		1		1			1		3		0	
Grand Total	14	43	4	41	82	17	66	8	275	434	78	155



## **Membership Tracking - Closures by Year Joined**

	•								
Year Joined	Deregistere d/ Breach of Agreement	Market transfer	Membership transfer to NIR	Merger & Acquisition	Non Payment [Uncontactable]	Non Payment [Contactable]	Voluntary member closure	Transfer to Other RIR	Grand Total
1998				1			1		2
2000				1					1
2001		1							1
2003		1		1					2
2004					1		1		2
2005		1		3					4
2006		1		1			2		4
2007					1		1		2
2008				1	2		1		4
2009		2		4			1		7
2010		1		1		1	1		4
2011		2	1	2		1	6		12
2012	1	2		7	5	1	5		21
2013	3	4		5	3	1	6		22
2014	2	2	1	3	8	2	4	1	23
2015	5	11		6	13	1	7	3	46
2016	2	15	1	4	5		7	3	37
2017				1	8	1	6		16
2018	1				16	4	3		24
2019					10	2	8	1	21
2020			1		10	3	6		20
Grand Total	14	43	4	41	82	17	66	8	275



# **Statement of Income - Expenses**

			This year vs			Forecast vs
Expenses	2021 (YTD)	2020 (YTD)	last year (%)	Forecast (full year)	Budget (full FY)	Budget (%)
Bank Service Fees	\$216,299	\$201,300	7.5%	\$257,671	\$251,212	2.6%
Communication Expenses	\$533,441	\$569,113	-6.3%	\$651,988	\$1,019,592	-36.1%
Computer Expenses	\$1,191,453	\$1,016,818	17.2%	\$1,496,864	\$1,743,227	-14.1%
Contribution to APNIC Foundation	\$0	\$547,577	-100.0%	\$0	\$565,518	-100.0%
Depreciation Expenses	\$545,375	\$596,033	-8.5%	\$673,949	\$770,942	-12.6%
Doubtful Debt Expenses	\$830	(\$6,136)	-113.5%	\$20,000	\$20,000	0.0%
ICANN Contract Fees	\$164,596	\$183,352	-10.2%	\$197,515	\$240,000	-17.7%
Insurance Expenses	\$190,692	\$193,570	-1.5%	\$225,211	\$231,833	-2.9%
Meeting and Training Expenses	\$45,392	\$104,106	-56.4%	\$95,149	\$485,000	-80.4%
Membership Fees Expenses	\$50,632	\$54,224	-6.6%	\$60,829	\$60,040	1.3%
Office Operating Expenses	\$271,330	\$235,735	15.1%	\$380,072	\$385,430	-1.4%
Postage & Delivery	\$11,191	\$23,212	-51.8%	\$15,508	\$37,500	-58.6%
Printing & Photocopy	\$18,855	\$28,655	-34.2%	\$22,855	\$39,500	-42.1%
Professional Fees	\$1,717,003	\$1,313,258	30.7%	\$2,170,927	\$2,519,399	-13.8%
Recruitment Expense	\$215,627	\$144,008	49.7%	\$373,199	\$223,200	67.2%
Salaries and Personnel Expenses	\$12,004,743	\$10,976,768	9.4%	\$15,297,000	\$14,994,013	2.0%
Sponsorship and Publicity Expense	\$196,882	\$317,216	-37.9%	\$343,747	\$554,400	-38.0%
Staff Training Expense	\$109,270	\$181,575	-39.8%	\$213,350	\$264,650	-19.4%
Translation Expense	\$22,867	\$3,007	660.4%	\$22,867	\$20,000	14.3%
Travel Expenses	\$52,111	\$322,140	-83.8%	\$61,541	\$1,078,200	-94.3%
Total Expenses	\$17,558,588	\$17,005,531	3.3%	\$22,580,242	\$25,503,657	-11.5%

# Statement of Income - Expenses

- COVID-19 impacts (Forecast \$1.6m below budget against travel and travel related expenditure categories)
  - ✓ Border closures and ongoing travel restrictions
  - ✓ No face-to-face meeting and training opportunities
  - ✓ Limited sponsorship expenses
- Communication expense (Forecast \$368k below budget)
  - ✓ Capacity issues and delay in setting up 24-hours network operation center, installation of root servers overseas and deployment of network expenses
  - ✓ 533k YTD vs. 1m Budget vs. 652k Forecast
- Contribution to APNIC Foundation (Forecast to be \$566k below budget)
  - ✓ Contingent provision not utilized due to funding from Trust
- Professional fees (Forecast \$348k below budget)
  - ✓ Reallocation of expenses for Developers to Salary & personnel costs, rather than contractors
  - ✓ 1.7m YTD vs 2.5m budget vs 2.2m forecast



# **Capital Expenditure**

Capital Expenditure	2021 (YTD)	2020 (YTD)	This year vs last year (%)	Forecast (full year)	Budget (full FY)	Forecast vs Budget (%)
Equipment & Software						
Equipment & Software	\$361,824	\$293,374	23.3%	\$561,910	\$711,350	-21.0%
Office Furniture & Fittings	\$7,362	\$14,408	-48.9%	\$196,000	\$2,030,000	-90.3%
Total Capital Expenditure	\$369,186	\$307,782	20.0%	\$757,910	\$2,741,350	-72.4%

#### **Equipment & Software**

- Full year forecast is expected to be lower than budget.
  - ✓ HRIS implementation project underway, \$93k carried over to continue next year.
  - ✓ IXP and Root server/equipment \$60k no longer required this year
  - ✓ Juniper router & switch replacement \$33k carried over to next year as a result of the global chips shortage

#### **Office Furniture & Fittings**

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

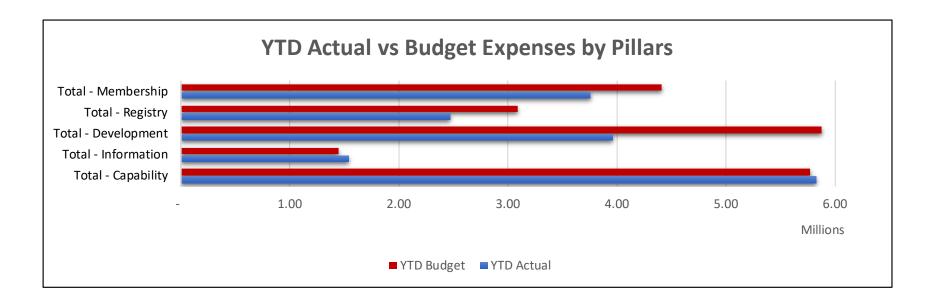


## Oct 2021 YTD Cash Flow

Amount (AUD)	YTD Oct 2021
Total Operating Activities	
YTD Net Income	4,972,945
Total Adjustments to Profit/(Loss)	
Receivables	-434,212
Other Current Asset	-4,964
Accounts Payable	-268,788
Sales Tax Payable	105,825
Other Current Liability	348,755
Total Adjustments to Profit/(Loss)	-253,384
Total Operating Activities	4,719,561
Total Investing Activities	
Fixed Asset	177,752
Other Asset	-5,149,831
Total Investing Activities	-4,972,079
Total Financing Activities	
Long Term Liability	-26,352
Equity	0
Total Financing Activities	-26,352
Net Change in Cash for Period	-278,870
Cash at Beginning of Period	11,281,050
Cash at End of Period	11,002,180



# Oct 2021 YTD Expenses by Pillars





# Oct 2021 YTD Expenses by Pillars & Works Street August 1970 Actual 1970 Budget 1970 Market 1970 Market

EXPENSES (AUD)	Oct 2021	Oct 2021	Variance \$	Variance %
Member services	1,745,914	1,833,547	-87,633	-5%
Membership products	1,519,352	1,991,892	-472,540	-24%
Membership reporting	493,084	584,494	-91,410	-16%
Total - Membership	3,758,351	4,409,933	-651,582	-15%
Registration Services	684,158	672,589	11,569	2%
Registry products	1,491,064	2,099,661	-608,597	-29%
Policy development	298,831	320,576	-21,745	-7%
Total - Registry	2,474,053	3,092,826	-618,773	-20%
APNIC conferences	766,945	1,258,264	-491,319	-39%
Foundation support	62,595	477,032	-414,437	-87%
Community engagement	1,141,400	1,483,265	-341,865	-23%
Community participation	203,656	248,943	-45,287	-18%
APNIC academy	1,478,153	1,934,978	-456,826	-24%
Internet infrastructure support	304,892	474,313	-169,421	-36%
Total - Development	3,957,641	5,876,795	-1,919,154	-33%
Information products	606,630	789,166	-182,536	-23%
Research and analysis	934,123	655,633	278,490	42%
Total - Information	1,540,753	1,444,799	95,954	7%
Internal technical infrastructure	1,701,445	1,547,921	153,523	10%
Finance and business services	1,662,501	1,738,136	-75,635	-4%
Employee experience	1,587,419	1,564,578	22,841	1%
Governance	876,427	919,216	-42,789	-5%
Total - Capability	5,827,791	5,769,851	57,940	1%
Total - Expenses	17,558,588	20,594,204	-3,035,616	-15%



## Oct 2021 YTD Capex by Pillars & Workstreams

CAPITAL (AUD)	YTD Actual Oct 2021	YTD Budget Oct 2021	Variance %	Budget 2021	Forecast 2021	Budget Variance %
Member services	7,935		0%		7,935	0%
Total - Membership	7,935	0	0%	0	7,935	0%
APNIC conferences	4,296	43,150	-90%	43,150	10,372	-76%
APNIC academy	16,351	15,000	9%	15,000	16,351	9%
Internet infrastructure support		60,000	-100%	60,000	20,000	-67%
Total - Development	20,647	118,150	-83%	118,150	46,723	-60%
Research and analysis	28,384	80,000	-65%	80,000	79,926	-0%
Total - Information	28,384	80,000	-65%	80,000	79,926	0%
Internal technical infrastructure	271,898	288,200	-6%	353,200	455,497	29%
Finance and business services	7,362	30,000	-75%	30,000	33,069	10%
Employee experience	32,961	80,000	-59%	2,160,000	328,038	-85%
Total - Capability	312,220	398,200	-22%	2,543,200	816,604	-68%
Total - Capital Expenses	369,186	596,350	-38%	2,741,350	951,188	-65%



# **Questions?**



Monthly Financial Report (in AUD)

October 2021





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## 1 Executive Summary

#### Overview

For the period ended 31 October 2021, APNIC's year to date operating surplus is \$4,427,974. The year to date net surplus after revaluation of the investment portfolio is \$4,972,945. APNIC holds net assets of \$39,149,828 which is a year-to-date increase of 15%.

APNIC forecasts a full year operating surplus of \$3,799,039 vs. budgeted operating surplus of \$1,467,592. The full year forecast net surplus after revaluation of the investment portfolio is \$4,344,010. The charts and commentary below explain the key drivers to the variances between forecast and budget performance.

The full year forecast net surplus reported in the September 2021 monthly financial report was \$4,422,977. The decrease in forecast full year net surplus for the year is due to decreases in forecast operating expenditure and investment valuation as shown below:

2021 Forecast annual net surplus as of September	\$4,422,977
Increase in revenue forecast:	\$66,715
Decrease in operating expenditure forecast	\$252,689
Decrease in valuation of investment portfolio	(\$398,371)
2021 Forecast annual net surplus as of October	\$4,344,010

#### The Statement of Financial Position (Table 1)

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

Equity has increased by 15% or \$5.0m since the end of 2020. Key drivers are outlined in Section 2.1 – Notes to Financial Position.

#### The Statement of Income (Table 2)

The Statement of Income compares APNIC's year to date 2021 income and expenditure against the comparative period for 2020, the full year budget and the full year forecast.

The full year forecast net surplus after fair value gain on financial assets is \$4.34m vs original budget operating surplus of \$1.46m. Figure 1 below highlights key variances between budget and forecast and the accompanying commentary provides detailed explanations.

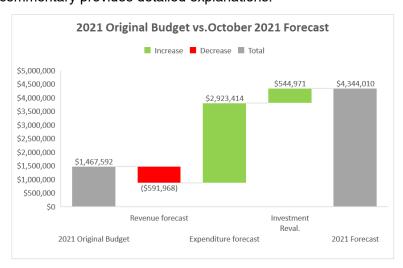


Figure 1: Original Budget vs. Forecast

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#### 2 Statement of Financial Position

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

Amount (AUD)	31/10/2021	Year End 2020	% Change
CURRENT ASSETS			
Cash/ Term Deposits	11,002,180	11,281,050	-2%
Receivables	1,335,582	1,130,303	18%
Others	1,027,504	793,606	29%
TOTAL CURRENT ASSETS	13,365,265	13,204,960	1%
NON-CURRENT ASSETS			
Other Financial Assets	36,186,239	31,036,408	17%
Property, plant and equipment	6,770,942	6,948,694	-3%
Deferred Tax Assets	106,877	106,877	0%
TOTAL NON-CURRENT ASSETS	43,064,058	38,091,979	13%
TOTAL ASSETS	56,429,324	51,296,939	10%
CURRENT LIABILITIES			
Payables	626,705	1,355,679	-54%
Provisions	2,619,220	2,233,396	17%
Unearned Revenue	12,414,318	11,885,376	4%
TOTAL CURRENT LIABILITES	15,660,243	15,474,451	1%
NON - CURRENT LIABILITIES			
Deferred Tax Liabilities	1,238,861	1,238,861	0%
Total Provisions	380,392	406,744	-6%
TOTAL NON-CURRENT LIABILITIES	1,619,253	1,645,605	-2%
TOTAL LIABILITIES	17,279,495	17,120,056	1%
NET ASSETS	39,149,828	34,176,883	15%
EQUITY			0%
Share Capital	1	1	0%
Retained earnings	34,176,882	30,724,701	11%
Net Income	4,972,945	3,452,181	44%
TOTAL EQUITY	39,149,828	34,176,883	15%

#### 2.1 Notes to Financial Position

The Statement of Financial Position shows that APNIC's net equity position increased by 15% or \$5.0m since the end of 2020. The key driver is an increase in the investment portfolio value by 17% or \$5.1m arising from:

- \$4m of cash injection derived from APNIC's year to date surplus; and
- \$545k year to date increase in portfolio valuation.
- \$605k investment income after management fees.

Issue date: November 2021 Page 4 of 17

## 3 Statement of Income

The Statement of Income compares APNIC's year to date 2021 income and expenditure against the comparative period for 2020. It also compares the full year budget against the full year forecast for 2021.

Amount (AUD)	YTD Actual	YTD Actual	Variance %	Budget	Forecast	Budget
Amount (AOD)	Oct 2021	Oct 2020	Variance /6	2021	2021	Variance %
Membership fees	20,169,631	18,784,915	7%	24,300,595	24,244,412	-0%
Non-members fees	214,234	217,205	-1%	264,392	257,699	-3%
Reactivation fees	16,700	15,200	10%	18,091	22,200	23%
Sign-Up fees	251,750	294,000	-14%	343,000	301,700	-12%
Transfer fees	180,196	175,567	3%	210,000	214,011	2%
Sundry income	372,287	401,335	-7%	1,072,960	492,615	-54%
Operating Revenue	21,204,798	19,888,222	7%	26,209,038	25,532,637	-3%
Investment income	781,765	860,314	-9%	762,211	846,644	11%
TOTAL REVENUE	21,986,563	20,748,536	6%	26,971,249	26,379,281	-2%
Bank service fees	216,299	201,300	7%	251,212	257,671	3%
Communication expenses	533,441	569,113	-6%	1,019,592	651,988	-36%
Computer expenses	1,191,453	1,016,818	17%	1,743,227	1,496,864	-14%
Contribution to APNIC Foundation	0	547,577	-100%	565,518	0	0%
Depreciation expense	545,375	596,033	-8%	770,942	673,949	-13%
Doubtful debt expenses	830	-6,136	-114%	20,000	20,000	0%
ICANN contract fee	164,596	183,352	-10%	240,000	197,515	-18%
Insurance expense	190,692	193,570	-1%	231,833	225,211	-3%
Meeting and training expenses	45,392	104,106	-56%	485,000	95,149	-80%
Membership fees expenses	50,632	54,224	-7%	60,040	60,829	1%
Office operating expenses	271,330	235,735	15%	385,430	380,072	-1%
Postage & delivery	11,191	23,212	-52%	37,500	15,508	-59%
Printing & photocopy	18,855	28,655	-34%	39,500	22,855	-42%
Professional fees	1,717,003	1,313,258	31%	2,519,399	2,170,927	-14%
Recruitment expense	215,627	144,008	50%	223,200	373,199	67%
Salaries and personnel expenses	12,004,743	10,976,768	9%	14,994,013	15,297,000	2%
Sponsorship and Publicity expenses	196,882	317,216	-38%	554,400	343,747	-38%
Staff training/ Conference expenses	109,270	181,575	-40%	264,650	213,350	-19%
Translation expenses	22,867	3,007	660%	20,000	22,867	14%
Travel expenses	52,111	322,140	-84%	1,078,200	61,541	-94%
TOTAL EXPENSES	17,558,588	17,005,531	3%	25,503,657	22,580,242	-11%
Operating Surplus/ (Deficit)	4,427,974	3,743,006	18%	1,467,592	3,799,039	159%
Fair value gain/ (loss) on financial assets	544,971	-393,891	-238%	0	544,971	0%
SURPLUS/ (DEFICIT)	4,972,945	3,349,115	48%	1,467,592	4,344,010	196%

#### 3.1 Notes to Statement of Income – Revenue

Revenue is forecast to be \$592k or 2% below budget at the end of 2021.

• **Membership and Sign-Up fees:** Membership fees are forecast to be in line with budget expectation for the full year. Sign-up fees are forecast to be \$41k or 12% below budget for the full year.

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- Net membership growth (new & re-activated members less closures) is 4.4% YTD for 2021 vs 6.51% same time last year (See Figure 2: Net Membership Growth YTD).
- Year to date new member growth is 633 vs. budget of 670. Year to date account closures is 275 vs. budget of 200.
- Year to date, the average annual fee for closed accounts is \$1,843, compared to the budget assumption of \$1,892. Average fees for new members is \$1,438, compared to budget assumption of \$1,451. For 2021 year to date, 31.8% of all new members are eligible for the LDC discount, compared to the budget assumption of 27.5%.

	2021 YTD	2020 YTD
New Members	633	707
Reactivated Members	9	9
Closure	-275	-210
Net Change	367	506
As at 1 Jan	8,341	7,776
Net Change	367	506
As at 31 October	8,708	8,282
Year to Date Growth %	4.40%	6.51%

- **Sundry income** Includes Foundation income, Meeting and Training/Workshop Registrations, Sponsorship and funding for Labs research activities.
  - Foundation receipts is forecast to continue tracking below budget due to the ongoing COVID-19 travel restrictions which has impacted the delivery of face-to-face training programs.
  - COVID-19 travel restrictions also continue to impact heavily on budgeted revenue for sponsorship and registration fees from training and conference events.
  - The not-for-profit business stimulus package of \$100k received from the Australian Government as part of the response to the impact of COVID-19 has been voluntarily repaid and is reflected in the forecast.
- **Investment income**The full year forecast is estimated to be slightly higher than budget due to additional cash injections into the portfolio, despite lower cash deposit rates.

#### 3.2 Notes to Statement of Income – Expenditure

Expenses are forecast to be \$2.9m or 11% below budget at the end of 2021. Border closures and ongoing travel restrictions continue to create savings against the budget estimates across many expense categories. Major variances include:

- Communication expenses: The full year budget is not expected to be exhausted due to capacity issues and delays in setting up the 24-hour network operation centre, installation of root servers overseas as well as deployment of other network expenses. The deferral has seen a further reduction in expenses in the latest forecast (\$368k below budget).
- Computer expenses: The full year forecast is expected to be lower than budget due to a decision to
  defer the online community platform and source code vulnerability scanner projects to 2022 in the
  latest forecast. Part year effect of implementing SSO APNIC login, managed vulnerability reporting
  program as well as security information and event management has seen a further reduction in
  forecast expenditure (\$246k below budget).
- Contribution to APNIC Foundation: The contingency provision is not expected to be used due to sufficient funding received by the Foundation from APIDT (\$566k below budget).
- **Meeting and training expenses:** All training and APNIC conference events are being delivered online due to ongoing travel restrictions (\$390k below budget).

- **Professional fees**: The full year budget is forecast not to be exhausted due to the recruitment of FTE employees originally budgeted as contractors. A corresponding increase in salary & personnel costs has been recognized in the forecast. (\$348k below budget).
- **Travel expenses**: Forecast to be below budget by around \$1m due to border closures and ongoing travel restrictions in 2021.

#### 3.3 Notes to Statement of Income – Fair Value Gain on financial assets

- The value of APNIC's investment portfolio has increased by \$545k year-to-date vs a devaluation of \$394k for the same period last year. APNIC does not budget for increases or decreases in the investment portfolio due to the volatility of markets. Therefore, this \$545k revaluation increases the variance between the budget and forecast surplus.
- In October 2021, the fair-value of the investment portfolio decreased by \$398k for the month due to a downturn in the market. This continues the decrease in the investment portfolio valuation recorded in September 2021.

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## 4 Capital Expenditure

The table below provides overview of current capital expenditure as of October 2021.

CAPITAL (AUD)	YTD Actual Oct 2021	YTD Actual Oct 2020	Variance %	Budget 2021	Forecast 2021	Budget Variance %
Equipment & Software	361,824	293,373	23%	711,350	561,910	-21%
Office Furniture & Fittings	7,362	14,408	-49%	2,030,000	196,000	-90%
Total - Capital Expenditure	369,186	307,782	20%	2,741,350	757,910	-72%

#### 4.1 Notes to Capital Expenditure

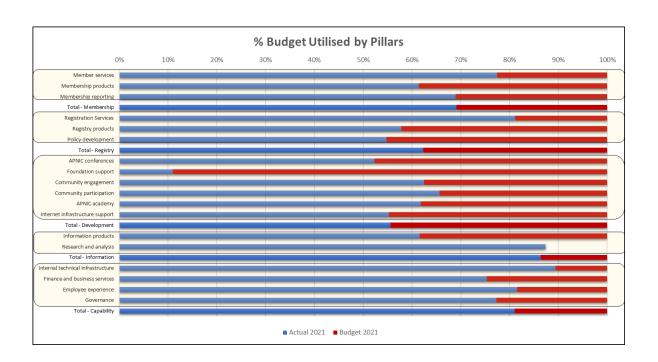
- Equipment & Software The following equipment cost budget will be carried over to 2022
  - ➤ Juniper router and switch replacement The global chips shortage has resulted in a delay in order delivery (\$33k reduction in forecast to be carried over to next year budget).
  - ➤ HRIS implementation is underway and some implementation work is expected to continue next year (\$93k reduction in forecast to be carried over to next year budget).
- Office Furniture & Fittings The comprehensive renovation of 6 Cordelia Street provisioned for in the budget proved unfeasible. A smaller scale project is underway to improve amenity and transition to hybrid working models ahead of an anticipated office relocation in the next 2 3 years.

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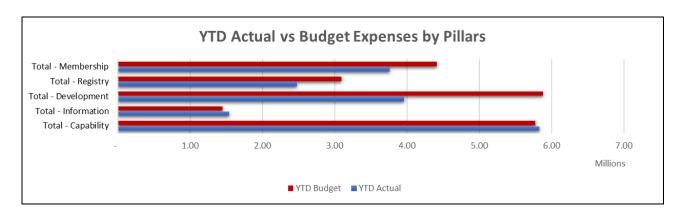
## 5 Activity Reporting

#### 5.1 Expense by Activity Pillars and Workstreams

EVENICES (ALID)	YTD Actual	YTD Budget	Variance 6	Variance %	
EXPENSES (AUD)	Oct 2021	Oct 2021	Variance \$		
Member services	1,745,914	1,833,547	-87,633	-5%	
Membership products	1,519,352	1,991,892	-472,540	-24%	
Membership reporting	493,084	584,494	-91,410	-16%	
Total - Membership	3,758,351	4,409,933	-651,582	-15%	
Registration Services	684,158	672,589	11,569	2%	
Registry products	1,491,064	2,099,661	-608,597	-29%	
Policy development	298,831	320,576	-21,745	-7%	
Total - Registry	2,474,053	3,092,826	-618,773	-20%	
APNIC conferences	766,945	1,258,264	-491,319	-39%	
Foundation support	62,595	477,032	-414,437	-87%	
Community engagement	1,141,400	1,483,265	-341,865	-23%	
Community participation	203,656	248,943	-45,287	-18%	
APNIC academy	1,478,153	1,934,978	-456,826	-24%	
Internet infrastructure support	304,892	474,313	-169,421	-36%	
Total - Development	3,957,641	5,876,795	-1,919,154	-33%	
Information products	606,630	789,166	-182,536	-23%	
Research and analysis	934,123	655,633	278,490	42%	
Total - Information	1,540,753	1,444,799	95,954	7%	
Internal technical infrastructure	1,701,445	1,547,921	153,523	10%	
Finance and business services	1,662,501	1,738,136	-75,635	-4%	
Employee experience	1,587,419	1,564,578	22,841	1%	
Governance	876,427	919,216	-42,789	-5%	
Total - Capability	5,827,791	5,769,851	57,940	1%	
Total - Expenses	17,558,588	20,594,204	-3,035,616	-15%	



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#### 5.2 Notes to Activity Reporting

This report includes the activity grouping into pillars and workstreams as outlined in the Activity Plan for 2021. At the end of October:

- Member and Registry Pillars are tracking 15% and 20% behind budget, respectively.
- Development is \$1.9m or 33% below budget in large part due to ongoing travel restrictions and the provision for support of the APNIC Foundation that will not be needed.
- Information services is on track to meet budget.
- · Capability is tracking close to budget.

#### 5.3 Capital Expenditure by Pillars and Workstreams

CAPITAL EXPENSES (AUD)	YTD Actual Oct 2021	YTD Budget Oct 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		60,000	-60,000	-100%
Total - Development	20,647	118,150	-97,503	-83%
Research and analysis	28,384	80,000	-51,616	-65%
Total - Information	28,384	80,000	-51,616	-65%
Internal technical infrastructure	271,898	288,200	-16,302	-6%
Finance and business services	7,362	30,000	-22,638	-75%
Employee experience	32,961	80,000	-47,039	-59%
Total - Capability	312,220	398,200	-85,980	-22%
Total - Capital Expenses	369,186	596,350	-227,164	-38%

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#### 6 APNIC Reserve

#### 6.1 Cash Flow Statement

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

Period end cash position has remained relatively stable as compared to the beginning of the year. APNIC has generated \$4.7m year to date cashflow from operating activities, out of which, \$4m was injected into the investment portfolio.

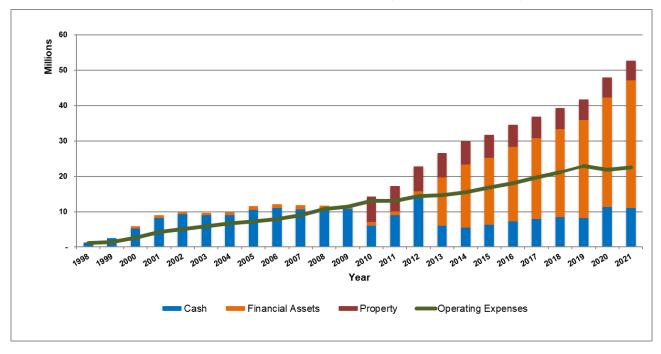
Amount (AUD)	YTD Oct 2021
Total Operating Activities	
YTD Net Income	4,972,945
Total Adjustments to Profit/(Loss)	
Receivables	-434,212
Other Current Asset	-4,964
Accounts Payable	-268,788
Sales Tax Payable	105,825
Other Current Liability	348,755
Total Adjustments to Profit/(Loss)	-253,384
Total Operating Activities	4,719,561
Total Investing Activities	
Fixed Asset	177,752
Other Asset	-5,149,831
Total Investing Activities	-4,972,079
Total Financing Activities	
Long Term Liability	-26,352
Equity	0
Total Financing Activities	-26,352
Net Change in Cash for Period	-278,870
Cash at Beginning of Period	11,281,050
Cash at End of Period	11,002,180

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#### 6.2 Capital Reserve

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

At the end of October, APNIC maintained \$11m in cash reserves, \$36.2m has been invested in the investment portfolio and \$5.5m is invested in Property. Figure 5 below tracks the value and the allocation of these reserves over time and tracks the operating expenses for each year for comparison:



#### 6.3 APNIC's Equity and Reserves

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

	*2021 Forecast	*YTD 2021	Actual 2020	Actual 2019	Actual 2018
Total Equity (AUD)	\$38,520,893	\$39,149,828	\$34,176,883	30,724,702	28,820,985
% Equity Covered By Cash/ Cash Equivalents	123%	121%	124%	117%	116%
Daily Operating Expenses (AUD) *	\$69,873	\$69,873	\$66,374	62,944	58,122
Number of Months of expenses covered by Equity*	18.12	18.42	16.88	16.05	16.30

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

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## 7 Membership

#### 7.1 Membership by Category

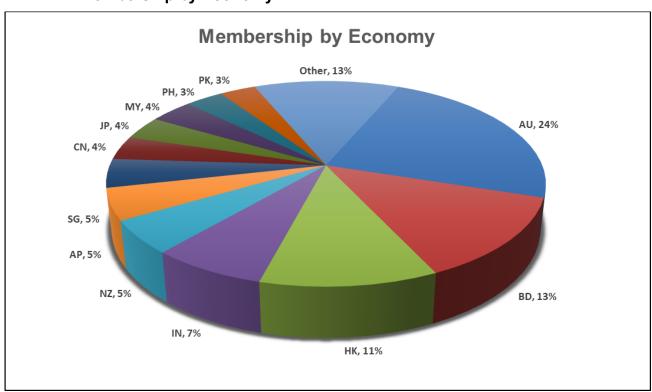
There were 74 new members and 23 account closures in October 2021. Overall net membership growth was 51 members. Year to date there have been:

- 633 new members vs. 670 budgeted new members
- 275 closures vs. 200 budgeted account closures.

As at the end of October 2021, APNIC had a total of 8,708 Members serving 53 economies.

Membership	Total	YTD New	Reactivation	YTD Closed	YTD Size Change	Total	% Total	
·	Dec 2020	Oct-21	Adjustment	Oct-21	Oct-21	Oct-21		
Extra Large	26	0		0	0	26	0%	
Very Large	48	0		0	1	49	1%	
Large	143	0		0	8	151	2%	
Medium	521	6		-7	27	547	6%	
Small	3,685	157	4	-128	21	3,739	43%	
Very Small	3,778	455	5	-114	-67	4,057	47%	
Associate	140	15		-26	10	139	2%	
TOTAL	8,341	633	9	-275	0	8,708	100%	

#### 7.2 Membership by Economy



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#### 7.3 Membership Growth

APNIC membership monthly movements are illustrated at Figure 7 below.

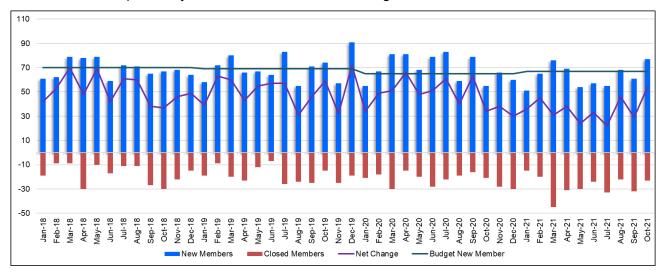
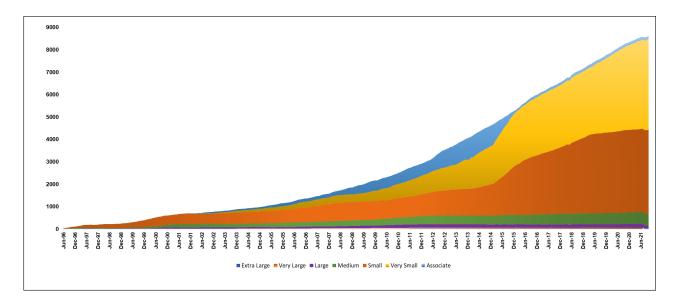


Figure 8 below illustrates Membership growth by membership tier:

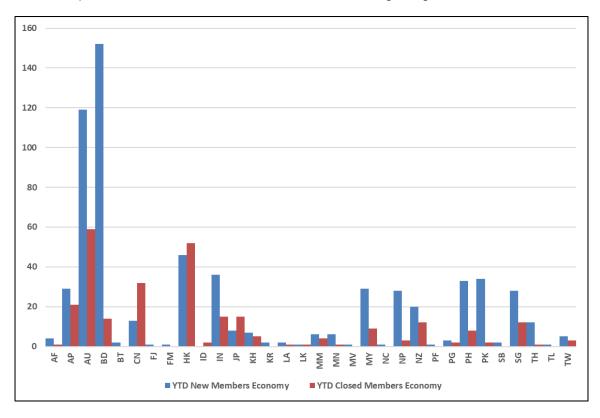


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#### 7.4 Year-to-Date Membership Movement by Economy

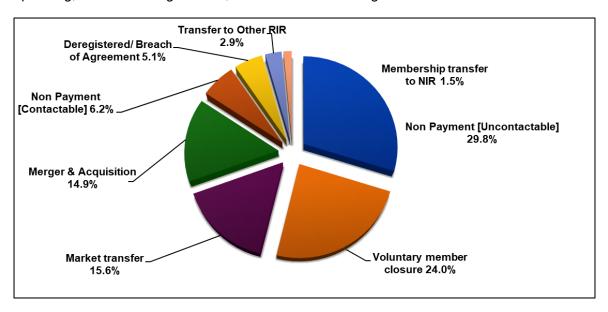
Figure 9 below shows new and closed membership movement by economy as at end of October 2021. Consistent with previous month, year to date:

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



#### 7.5 Membership Closures Analysis

Figure 10 below provides an analysis of Membership account closures as at the end of October. 65% 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.



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## 7.6 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
1998				1			1		2
2000				1					1
2001		1							1
2003		1		1					2
2004					1		1		2
2005		1		3					4
2006		1		1			2		4
2007					1		1		2
2008				1	2		1		4
2009		2		4			1		7
2010		1		1		1	1		4
2011		2	1	2		1	6		12
2012	1	2		7	5	1	5		21
2013	3	4		5	3	1	6		22
2014	2	2	1	3	8	2	4	1	23
2015	5	11		6	13	1	7	3	46
2016	2	15	1	4	5		7	3	37
2017				1	8	1	6		16
2018	1				16	4	3		24
2019					10	2	8	1	21
2020			1		10	3	6		20
Grand Total	14	43	4	41	82	17	66	8	275

Table 9. Membership Closure by Year Joined

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#### 7.7 Membership Closures by Economy

In October there has been – 4 breach of agreement (deregistered organisation), 3 market transfers, 3 members Merger & Acquisitions, 7 non-payment members closures (contactable & uncontactable), 4 voluntary members closures and 2 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		3		1	5		7	5	21	12	6	12
AU	2	8		14	10	2	22	1	59	56	10	27
BD		5		1	6	1	1		14	11	5	13
CN	4	7		2	11	3	5		32	76	15	19
HK	7	10		5	23	1	4	2	52	126	17	23
ID							2		2	1	0	1
IN	1		2		1	6	5		15	31	3	12
JP		2	2	5	3	1	2		15	9	1	1
KH					3		2		5	18	3	5
LA					1				1	4	1	1
LK						1			1	1		1
MM				1	3				4	9	1	3
MN				1					1			
MY		1		2	3		3		9	20	4	4
NP					2		1		3	1	1	3
NZ		3		5	1		3		12	4	3	9
PG				1	1				2			
PH		1			4	1	2		8	22	3	7
PK		1			1				2	2	1	1
SG		1		2	3		6		12	21	3	10
TH					1				1	2	0	2
TW		1		1			1		3		0	
Grand Total	14	43	4	41	82	17	66	8	275	434	78	155

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## Agenda Item 15 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 **6 December 2021**.

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

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

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

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

Kenny Huang declared that he currently holds the following positions:

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

Yoshinobu Matsuzaki declared that he currently holds the following positions:

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

Feng Leng declared that he currently holds the following position:

• Employee of CNNIC as Director of Operation Management Department

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

• Employee of Globe Telecom

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

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

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

Paul Wilson declared that he currently holds the following position:

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

## Agenda Item 16 Approval of 2022 activity plan and budget

## 2022 Activity Plan and Budget

DRAFT v1.1





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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:

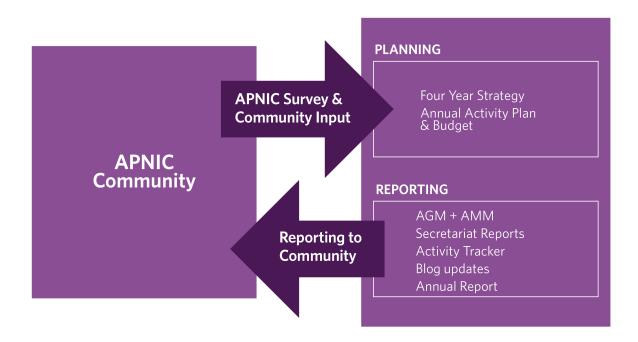
- Membership
- Registry
- Development
- Information
- Capability

The 2022 Activity Plan and Budget describes activities according to the same structure; and provides under each workstream, the activities which 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).

#### **APNIC 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.

#### 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

#### 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

#### 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

#### Information

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

#### 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 Activities**

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

### 1. Membership

#### 1A. Member Services

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

#### 1B. <u>Membership Products</u>

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

### 1C. <u>Membership Reporting</u>

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

#### 2. Registry

#### 2A. Registration Services

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

### 2B. Registry Products

o 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

o Provide operational support to ensure the success of the APNIC Foundation.

#### 3C. Community Engagement

o 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

o 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. <u>Internal Technical Infrastructure</u>

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

### 5B. Finance and Business Services

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

#### 5C. <u>Employee Experience</u>

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

### 5D. Governance

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

### 2022 Focus Areas

APNIC's 'Focus Areas' are defined each year in response to emerging needs and priorities which 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 focussed 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 organisational 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**

# **Activity Summary**

The following table and chart provide a breakdown of APNIC's 2022 budget by pillar and workstream. Activities funded by the APNIC Foundation are detailed in Appendix D.

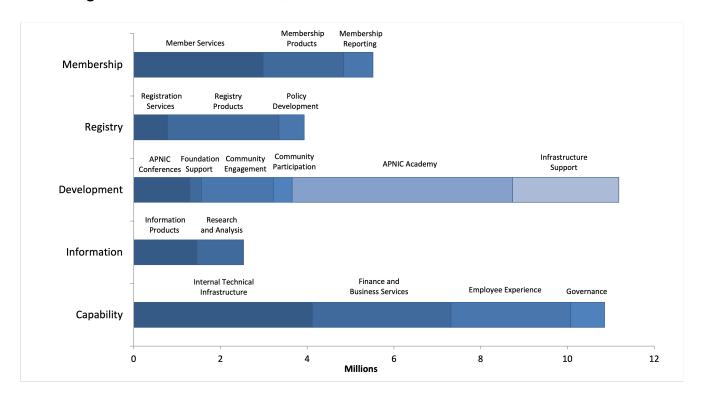
# 2022 Activity Budget (AUD)

Pillar	PY	%	OPEX (AUD)	%	CAPEX (AUD)	%
Membership	24.98	20%	5,517,224	16%	-	0%
Registry	15.21	12%	3,930,525	12%	230,000	16%
Development	34.43	28%	11,183,917	33%	128,000	9%
Information	9.74	8%	2,535,680	8%	123,000	8%
Capability	37.85	31%	10,597,066	31%	988,300	67%
Total	122.21	100%	33,764,411	100%	1,469,300	100%

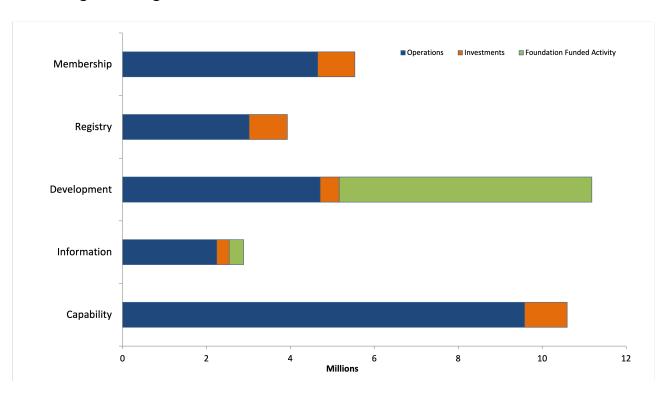
# 2022 Activity Budget - OPEX Breakdown (AUD)

Pillar	Operations (AUD)	Investments (AUD)	Total OPEX
Membership	4,650,917	866,307	5,517,224
Registry	3,019,018	911,507	3,930,525
Development	7,857,208	3,326,709	11,183,917
Information	2,246,293	289,387	2,535,680
Capability	9,581,656	1,015,409	10,597,066
Total	27,355,092	6,409,319	33,764,411

# 2022 Budget OPEX Distribution (AUD)



# 2022 Budget Funding Distribution (AUD)



#### **Notes on Activities**

APNIC's activities are described 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 re-architecture" is the  $4^{th}$  activity in the  $2^{nd}$  workstream (2B. Registry Products) of the  $2^{nd}$  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 which 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.

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).

- **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 an 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 BB. Person Year Distribution.
- **OPEX:** Refers to all operational costs directly incurred by the activity (in AUD).
- CAPEX: Provides the provision for capital expenditure required by the activity (in AUD).

Please refer to the online APNIC Glossary for further explanation of terms used in this document.

# **APNIC 2022 Activity Plan**

### 1. Membership

The objectives of the Membership pillar are:

- 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

The workstreams within the Membership pillar include:

- 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.

Member Services	PY	OPEX	CAPEX
Operations	12.17	2,778,994	ı
Investments	2.50	210,130	-
Workstream total	14.67	2,989,124	-

Objective	Activities	Success Indicators			
1A.1. Member Service Delivery					
Deliver excellence in service to APNIC Members.	Provide proactive and reactive support to Members (including NIRs) using APNIC products and services,	1. Increase Member outreach touchpoints by at least 20% from xx in 2021.			
	including maintaining an accessible Helpdesk.	<ol><li>Maintain Helpdesk SLA of two business day response to enquiries.</li></ol>			
	Regular engagement with NIRs for alignment of service delivery and registry consistency.	3. Maintain Member Service satisfaction of at least 93% "excellent and above average".			
		4. Proactive Member service engagement in at least 47 economies.			
		5. Conduct quarterly meetings with all NIRs.			
1A.2. Member Experience		·			

Members and the community enjoy a positive user experience and can easily provide feedback across all APNIC products and services.	Capture, analyse and action feedback provided by Members and the community on APNIC products and services, including maintaining a User Feedback Group.  Conduct user research and testing to identify potential online usability improvements.	<ol> <li>2.</li> <li>3.</li> </ol>	100% of improvement suggestions are assessed and followed up. Increase engagement with User Feedback group by at least 20% from xx in 2021.  Achieve online System Usability Scale (SUS) score of 68/100.
1A.3. Membership Developme			
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.	1.	At least eight membership development activities in target economies. Achieve at least 492 net new members in 2022.
Update understanding of Member and community needs, and how APNIC can best serve them.	Conduct the APNIC Member and stakeholder survey in 2022, to gather important information on issues affecting Members and the wider community.  In 2022, the survey model will be expanded to try to reach those who engage less often with APNIC.	1.	Increase total survey response by at least 10% from 1,624 in 2020. Achieve at least 10% of responses by new survey participants.

1A.5. Historical Resources Transition				
Prepare for transition to new fee structure for Historical Resources, from 1 Jan 2023.	Identify and contact historical resource holders and migrate them to APNIC account	1.	Attempt contact with all 1,900 historical resource holders.	
	holders.	2.	All 3,778 historical resource objects are	
	Deregister resources of uncontactable historical holders.		either registered to a current APNIC account, or deregistered.	
	Complete processing of unused historical resources as per prop-017.	3.	All remaining unused resources are claimed, transferred, or returned to APNIC.	

# 1B. Membership Products

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

Membership Products	PY	OPEX	CAPEX
Operations	6.53	1,196,472	-
Investments	2.92	656,177	1
Workstream total	9.45	1,852,649	-

# **Operations**

Objective	Activities	Success Indicators			
1B.1. Membership Product Management					
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, Member help and support systems.	<ol> <li>Maintain MyAPNIC availability of at least 99.99%.</li> <li>Achieve Membership Products satisfaction of at least 80%.</li> </ol>			
	Complete SSO migration to Okta.				

Objective	Activities	Success Indicators			
1B.2. Membership Product De	1B.2. Membership Product Development				
Develop and improve products and services that make it easier for APNIC Members to manage their accounts.	Ongoing development of Membership Products according to APNIC's Product Management framework.	Achieve all 2022 goals, according to the Membership Products Roadmap.			
decounts.		<ul> <li>Roadmap goals</li> <li>Develop a new nonmember application form and workflow</li> <li>Improve the "Report invalid whois contact" form and workflow.</li> <li>Overhaul MyAPNIC contact management, information architecture and dashboard.</li> <li>Improve MyAPNIC audit and activity logs for corporate contacts.</li> </ul>			

# 1C. Membership Reporting

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

Membership Reporting	PY	OPEX	CAPEX
Operations	0.87	675,471	-
Investments	-	-	-
Workstream total	0.87	675,451	-

Objective	Activities	Success Indicators				
1C.1. Planning and Reporting	1C.1. Planning and Reporting					
Ensure that APNIC remains fully accountable to its	Develop and publish APNIC's 2022 Activity Plan and	1. Publish required reports on the day of the APNIC				
Members by providing timely, complete and accurate information about all	Budget, 2021 Annual Report, and other reports to the community, as required.	Member Meetings.  2. Publish EC Minutes within two months of each EC				
activities.		meeting.				

# 2. Registry

The objectives of the Registry pillar are:

- 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

The workstreams within the Registry pillar include:

**2A.** Registration Services

**2B.** Registry Products

**2C.** Policy Development

### 2A. Registration Services

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

Registration Services	PY	OPEX	CAPEX
Operations	5.16	779,998	-
Investments	-	-	-
Workstream total	5.16	779,998	-

Objective	Activities	Success Indicators			
2A.1. IPv4, IPv6 and ASN delegation and registration services					
Provide IPv4, IPv6 and ASN delegation and registration services to APNIC members	Provide delegation and registration services for Internet numbers according to current policies.  In 2021, APNIC processed <final 2021="" number=""> resource delegations and transfer requests. It is assumed that this activity will continue at a similar level in 2022.</final>	<ol> <li>Maintain Registration         Services SLA of two         business day response to         enquiries.</li> <li>Increase percentage of         Members holding IPv6         address space to at least         70% from 68%.</li> </ol>			
2A.2. Maintain correct and cu	rrent registry data				
Ensure registry data is comprehensive, current and correct.	Encourage Members to improve and maintain accuracy and currency of their registry data.	<ol> <li>Comply with ITHI reporting requirements.</li> <li>Increase validation of registration records to at leasrt 85% from 76%.</li> </ol>			

Implement NRO-defined	
Identifier Technology Health	
Indicators (ITHI) reporting.	

# 2B. Registry Products

Maintain an accurate number registry and reliable registry services.

Registry Products	PY	OPEX	CAPEX
Operations	4.55	1,658,139	1
Investments	4.75	911,507	230,000
Workstream total	9.30	2,569,646	230,000

# **Operations**

Objective	Activities	Success Indicators		
2B.1. Internet Number Registry Management				
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 Manag	ement			
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.  This includes participation in related IETF standardization work.	<ol> <li>Maintain whois, RDAP, RPKI, RDNS and IRR availability of at least 99.99%.</li> <li>Update APNIC RDAP to comply with the RIR RDAP profile.</li> <li>Migrate RDNS API to CentOS 7.</li> </ol>		

Objective	Activities	Success Indicators
2B.3. Registry Product Develo	pment	
Develop and improve essential registry products and services.	Ongoing development of Registry Products according to APNIC's Product Management framework.	Achieve all 2022 goals, according to the Registry Products Roadmap.
		<ul> <li>Roadmap goals</li> <li>Pre-validate all RPKI changes to avoid errors.</li> <li>Update authorisation mechanisms for Whois.</li> </ul>

		<ul> <li>Improve ASN delegation identity in Whois and MyAPNIC</li> <li>Improve ROA deletion and recreation process.</li> </ul>
2B.4. Registry re-architecture		
Improve security, reliability, and efficiency of the APNIC registry, and facilitate easier development of future registry services and functions required by the community.	Re-architect 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.	<ol> <li>Progress development of a Member API to 50%.</li> <li>Progress reimplementation of the internal registry in Java to 50%.</li> <li>For more information, see Registry Products Roadmap.</li> </ol>
2B.5. Readiness for Five-9s Av	vailability for Highly Critical Ser	rvices
Define 'highly critical services' and prepare for 99.999% availability for these services.	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.	1. Achieve readiness to implement by end of 2022.

# 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 processes and community expectations.

Policy Development	PY	OPEX	CAPEX
Operations	0.75	580,881	-
Investments	-	-	-
Workstream total	0.75	580,881	-

Objective	Activities	Success Indicators	
2C.1. Policy Development			
Ensure resource policies in the APNIC region are developed in line with the community-agreed Policy Development Process (PDP).	PDP facilitation including support for:  • Two Policy SIG meetings, inter-sessional policy meetings, mailing lists and APNIC's online collaboration spaces	<ol> <li>Achieve SIG Chair Support satisfaction of at least 6/7.</li> <li>Achieve PDP satisfaction of at least 5.75/7 in the APNIC Survey.</li> </ol>	

2C.2. Policy Implementation	<ul> <li>Exchange of policy-related information with other RIRs</li> <li>Support ASO Address Council Members and processes in the APNIC region</li> <li>Engage and cooperate with NIRs on policy matters.</li> </ul>	3.	Participate in all NIR OPMs.
Implement APNIC resource policies in a neutral manner consistent with agreed processes, timings and community expectations.  2C.3. Policy Analysis	Initiate and coordinate the implementation of approved resource policies to agreed community deadlines.	1.	Meet 100% of policy implementation timelines.
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 OPM.

# 3. Development

The objectives of the Development pillar are:

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

The workstreams within the Development pillar include:

- 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.

APNIC Conferences	PY	OPEX	CAPEX
Operations	4.20	1,297,350	43,000
Investments	-	-	1
Workstream total	4.20	1,297,350	43,000

Objective	Activities	Success Indicators			
3A.1. APNIC Conferences					
Provide two conferences Provide two conferences each year for the APNIC community to learn, share ideas and experience, build relationships, and develop Internet policy.  • APRICOT 2022 is scheduled for 21 February – 3 March 2022.  • APNIC 54 is scheduled for 7 – 15 September 2022.	Deliver well-organized, high-quality conferences with consistently interesting and relevant program content.  Due to COVID restrictions, APRICOT 2022 will be a virtual event while APNIC 54 may include a face-to-face element.  An 'online-first' approach will be taken for both conferences to ensure an inclusive user experience. The conference	<ol> <li>Achieve total attendance of at least 1,200 (face-toface and online) across two conferences.</li> <li>Achieve participant satisfaction of at least 90% at each conference.</li> <li>Achieve Net Promoter Score of at least 50 at each conference.</li> </ol>			
	website infrastructure will be refreshed.				

# 3B. Foundation Support

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

Foundation Support	PY	OPEX	CAPEX
Operations	-	-	-
Investments	1.31	264,777	-
Workstream total	1.31	264,777	-

### Investments

Objective	Activities	Success Indicators
3B.1. Foundation support		
Provide support to the Foundation, in accordance with the AoC of 2018, as its operations mature and evolve.	Provide administrative and operational support including:  • 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

# 3C. Community Engagement

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

Community Engagement	PY	OPEX	CAPEX
Operations	4.49	1,656,671	-
Investments	-	-	-
Workstream total	4.49	1,656,671	-

Objective	Activities	Success Indicators			
3C.1. Technical Community Su	3C.1. Technical Community Support				
Participate in, and encourage the development of, a healthy Asia-Pacific technical community.	Support NOGs, IXPs, Peering Forums and REN community activities, through participation, content and/or sponsorship.  Support NOGs to conduct online events if physical events are not possible.	<ol> <li>Support at least 30 technical community events (opportunity permitting).</li> <li>Support at least one new/revived NOGs in two sub-regions (if required).</li> </ol>			
3C.2. Security Community Support					

Increase collaboration and build trust with the security community, and increase awareness around relevant security issues.	Support security community events, through participation, content and/or sponsorship.  Support CERTs/CSIRTs with technical assistance.  Host high quality security content at APNIC conferences.	<ol> <li>2.</li> <li>3.</li> </ol>	at least four new or existing CERTs/CSIRTs (if needed).
3C.3. Internet Organisation Co	ooperation		
Seek opportunities to strengthen collaboration with other regional and global Internet organizations.	Participate in meetings and joint initiatives with Internet organizations including the NRO, RIRs, ICANN, IETF, ISOC and others.  In 2022, undertake responsibilities as Chair of the NRO EC and coordination groups, and represent the NRO as necessary.	2.	Ensure APNIC is represented in all NRO EC and 'I-star' coordination meetings. Participate in all RIR Open Policy Meetings.
3C.4. Internet Governance Pa	rticipation		
Engage the community to strengthen open, multistakeholder, bottom-up and transparent Internet governance processes.	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.  Represent the NRO, in the capacity of NRO Chair, as needed in Internet governance events.	1.	Organise at least three workshop proposals at APrIGF 2022. Support at least five national or sub-regional Internet governance events.
3C.5. Government Engagemen		1	
Build and maintain meaningful relationships between APNIC and government and public safety agencies in the region.	Participate in intergovernmental forums such as ITU, APT and APECTEL, and engage with other relevant government and public safety agencies in the region.	2.	Participate in at least 12 governmental or intergovernmental engagements. Support at least three governmental capacity
	Follow global ITLI		building events.

Follow global ITU conferences: WTSA, WTDC

	and Plenipotentiary, as well as their regional preparatory	
	processes.	
3C.6. External Relations Coor	dination	
Build institutional knowledge of APNIC's relationships with Members and other stakeholders, and improve value and outcomes of engagement activities.	Coordinate APNIC's External Relations (ER) activities across all stakeholder segments and sub-regions.  Maintain APNIC CRM including records of ER contacts, touchpoints, events and engagements.	<ol> <li>Increase ER touchpoints by at least 5% from xx in 2021.</li> <li>Achieve at least 250 APNIC engagements in 2022.</li> </ol>
	Support the APNIC ER team with administration, systems, and professional development.	

# 3D. Community Participation

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

Community Participation	PY	OPEX	CAPEX
Operations	1.45	289,666	-
Investments	0.50	146,651	-
Workstream total	1.95	436,317	-

Objective	Activities	Success Indicators			
3D.1. Community-led Processes					
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.5).	<ol> <li>Achieve at least 850 online SIG participants across two conferences.</li> <li>Achieve at least 120 online participants across at least four intersessional SIG meetings.</li> <li>Achieve SIG satisfaction of at least 5.8/7 in the APNIC Survey.</li> </ol>			
3D.2. Online Participation					
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 –	1. Achieve at least 500 registered users of the APNIC community platform.			

	to increase awareness, encourage greater usage and	
	online participation.	
3D.3. Encouraging Newcomer	s and Diversity	
Encourage new and continuing participants from diverse backgrounds in the APNIC community – both	Create and highlight opportunities for new and diverse participants to take part in APNIC community	<ol> <li>Attract at least 400         newcomers to APNIC         conferences.</li> <li>Achieve at least 50%</li> </ol>
online and face-to-face - particularly the next generation of network	activities.  Provide a six month	female and 30% youth participation in 2022 Fellowships.
engineers.	fellowship program to build understanding of APNIC and core operational concepts, professional networking, and	<ul><li>3. Achieve a fellowship graduation rate of at least 80%.</li><li>4. Achieve a fellowship</li></ul>
	ongoing participation in community activities.	program Net Promoter Score of at least 80.

Objective	Activities	Success Indicators
3D.4. Online Community Plati	form	
Encourage an active, connected, APNIC community engaging on an integrated online community platform.	Finalise the technology platform and functionality of the online community platform.	1. Achieve at least 500 registered users of the platform.
	Launch a minimum viable product (MVP), including integration of APNIC mailing lists.	

# 3E. APNIC Academy

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

APNIC Academy	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

Objective	Activities	Success Indicators
3E.1. Academy Product Manag	gement [Foundation funded (page 1) general [Foundation funded (page 2) gental [Foundation funded (page 2) general [Foundation funded (page	artial) - see Appendix D]

Maintain high-quality training assets to build capacity in the region.	Maintain APNIC Academy curriculum (both instructorled and self-paced content) and the online learning platform.	1.	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	-
Increase knowledge and skills	Deliver instructor-led training	1.	Conduct at least 100
in the community via	around the APNIC region		instructor-led
instructor-led training.	(face-to-face, online or		tutorials/workshops.
	hybrid) focused on real world	2.	Conduct at least 18 live
	deployment and best		webinars.
	practices.	3.	Achieve average training
			survey rating of 4/5.
	ındation funded (partial) – see		
Increase knowledge and skills	Provide on-demand, self-	1.	Increase total self-paced
in the community via self-	paced online courses and		online course usage by at
paced online training.	virtual labs via the APNIC		least 30% from xx hours
	Academy online platform.	2	in 2021.
	Raise awareness to increase	۷.	Increase total virtual lab
	usage in the region.		usage by at least 20% from xx hours in 2021.
		3	Increase registered users
		٥.	of the APNIC Academy by
			at least 25% from xx in
			2021.
3E.4. Community Trainers Ne	twork [Foundation funded - sec	e Ar	ppendix D]
Expand the scope and	Recruit, retain and develop	1.	Recruit at least 12 new
effectiveness of APNIC	more Community Trainers		retained CTs.
Academy training to help	(CTs) locally and on the	2.	Recruit at least 10 new
meet increasing community	ground to deliver training		volunteering CTs
demand for technical skills	across the region and remain		
development.	active in their local NOGs and		
	technical community.		
	oundation funded (partial) - se		
Assist Members on adoption	Provide technical assistance	1.	Respond to all technical
of best practices when	and advice to Members both		assistance requests within
implementing networking	online via the APNIC		7 days.
technologies.	Academy platform and face		
3E 6 DDVI Awaranasa and Da	to face (travel permitting).		
3E.6. RPKI Awareness and De Increase adoption of RPKI and	Provide training and technical	1.	Conduct at least 2
routing security in the APNIC	assistance on RPKI and ROV	'-	instructor-led RPKI/ROV
region.	deployment, raise awareness		tutorials/workshops per
1.0010111	and share best practice via		sub-region.
	presentations at relevant	2.	Achieve at least 90%
	events, blog posts and online		ROA coverage for at least
	information.		

		3.	one additional economy per sub-region. Publish at least three RPKI/ROV deployment case studies.
3E.7. IPv6 Awareness and De	ployment Support		
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.	1.	Conduct at least two instructor-led IPv6 deployment tutorials/workshops per sub-region. Publish at least two IPv6 deployment case studies.

Objective	Activities	Success Indicators	
3E.8. Academy Product Development [Foundation funded - see Appendix D]			
		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.	
		<ul> <li>Recruit a Certification         Project Officer to initiate the design of a new APNIC Certification         Program.     </li> </ul>	

3E.9. Curriculum for Non-Technical Audiences [Foundation funded – see Appendix D]			
Demystify how the Internet	Continue development of a	1. Release phase 1 of IPGO	
works to encourage active	digital educational game	by June 2022.	
participation of non-technical	(IPGO) that teaches Internet		
audiences in Internet	fundamentals through to first		
governance.	phase release.		

# 3F. Internet Infrastructure Support

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

Internet Infrastructure Support	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

# **Operations**

Objective	Activities	Success Indicators	
3F.1. Internet Infrastructure Deployment [Foundation funded (partial) - see Appendix D]			
Improve the resilience and performance of the Internet in the region by expanding critical infrastructure deployment.	Support the deployment and management of IXPs, DNS anycast rootservers and ROV support, and deployment of anchors and probes for the RIPE Atlas program.	<ol> <li>Support deployment of at least two new or upgraded IXPs.</li> <li>Support at least four IXPs to deploy ROV.</li> <li>Deploy at least 4 root servers per sub-region, including M-Root servers (see 3F.3).</li> <li>Deploy or upgrade at least one RIPE Atlas anchor per sub region.</li> </ol>	
3F.2. Community Honeynet at (partial) - see Appendix D]	nd Security Threat Sharing Platf	orm [Foundation funded	
Increase visibility of security threats and vulnerabilities relevant to Members and the community and encourage information sharing to understand and manage threats.	Maintain and grow the APNIC Community Honeynet and Security Threat Sharing Platform, including engaging with partners to host sensors for the project.  Provide data feeds to DASH and share research findings via events and the Blog.	<ol> <li>Increase the number of honeypot sensors by at least 60% from 60 in 2021.</li> <li>Increase Community Honeynet &amp; Threat Sharing Platform Partners by at least 30% from 15 in 2021.</li> </ol>	

Objective	Activities	Success Indicators
3F.3. M-Root Deployment Support [Foundation funded - see Appendix D]		
Faster and more reliable DNS	Deploy M-Root anycast	1. Complete 10 M-Root
service in the APNIC region.	instances, working in	server deployments
	partnership with the WIDE	commenced in 2021.
	Project and JPRS.	2. Identify and prepare at
		least 15 additional M-Root
	High-volume or underserved	server sites.
	locations will be preferred.	

### 4. Information

The objective of the Information pillar is:

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

The workstreams within the Information pillar include:

**4A.** Information Products

**4B.** Research and Analysis

#### 4A. Information Products

Provide meaningful information services to the communities APNIC serves.

Information Products	PY	OPEX	CAPEX
Operations	7.12	1,169,695	-
Investments	1.75	289,387	-
Workstream total	8.87	1,459,082	-

Objective	Activities	Success Indicators			
4A.1. APNIC Blog and Podcast	4A.1. APNIC Blog and Podcast				
Keep Members and the community informed with the latest news, opinions and research from APNIC and the wider community.	Maintain and grow the Blog's readership with engaging and informative content.  Produce a fortnightly podcast ('PING') on the latest Internet research and trends.	<ol> <li>Achieve average of at least 70,000 Blog views per month.</li> <li>Maintain Blog Guest Post ratio between 45-65%.</li> <li>Achieve at least 4,000 podcast listens.</li> <li>Achieve a Blog satisfaction rating of at least 5.95/7 in the APNIC Survey.</li> </ol>			
4A.2. Information Product Ma	nagement				
Provide meaningful and useful information services to Members and the community.	Operate and maintain APNIC Information Products: REx, NetOX and DASH.	<ol> <li>Maintain Information         Product availability of at         least 99.95%.</li> <li>Reach an average of 500         users per month of DASH,         and 1,000 users per         month of REx and NetOX.</li> <li>Achieve a net promoter         score (NPS) of 80+ for all         products.</li> </ol>			

4. Maintain a usability score
of at least 4.5/5 for all
products.

Objective	Activities	Success Indicators
4A.3. Information Product De	velopment	
Develop meaningful and useful information services for Members and the community.	Ongoing development of Information Products according to APNIC's Product Management framework.	Achieve all 2022 goals, according to the Information Products Roadmap.      Roadmap.
		<ul> <li>Roadmap goals</li> <li>Complete a joint APIX survey around a benchmarking service.</li> <li>Develop a common API and backend system to provide notifications as a service for APNIC products.</li> </ul>

# 4B. Research and Analysis

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

Research and Analysis	PY	OPEX	CAPEX
Operations	0.87	1,076,598	123,000
Investments	-	1	ı
Workstream total	0.87	1,076,598	123,000

Objective	Activities	Success Indicators
4B.1. Conducting research and	d measurements	
Gain a greater understanding of technical issues, trends,	Conduct research experiments on topics	N/A
and how the Internet operates.	including IP addressing, routing, DNS and other	
	critical Internet infrastructure matters.	
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.
4B.3. Sharing Research Outco	mes		
Help Members make better informed decisions on their network operations.	Share research insights online and at selected events to raise awareness of issues and trends which may impact Internet operations and assist policy discussions.	1.	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

The objectives of the Capability pillar are:

- 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

The workstreams within the Capability pillar include:

**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.

Internal Technical Infrastructure	PY	OPEX	CAPEX
Operations	14.93	3,514,560	550,800
Investments	1.95	606,144	10,000
Workstream total	16.88	4,120,704	560,800

Objective	Activities	Success Indicators	
5A.1. Architecture and Technical Coordination			
Build efficiencies and reduce costs through use of a coordinated common infrastructure by multiple product teams.	Manage and improve APNIC's systems architecture for better integration and coordination of systems and business processes.	<ol> <li>Review technology recommendations once per quarter</li> <li>Report quarterly on architectural decisions and directions</li> </ol>	
	Manage processes for technology selection, testing and deployment.		
	Establish code repository health metrics to assess conformance with development policies		
	Update data model to document product team		

	ownership of business entities to establish roles and responsibilities of APNIC datasets.		
	Conduct architectural review of all new projects or major system changes.		
5A.2. Network and Infrastruct			
Ensure high availability of APNIC's infrastructure.	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.	1. 2. 3.	incidents within 20 minutes.
5A.3. System and Platform Op			5 1 100
Support APNIC's public service delivery with reliable, secure and high-performance systems.	Replace the RPKI Hardware Security Module (HSM) and deploy more redundant HSMs.  Prepare migration plan for CentOS.  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.	<ol> <li>2.</li> <li>3.</li> </ol>	Deploy additional Hardware Security Module (HSM) to High Availability (HA) group in multiple data centres. Complete CentOS migration plan. Deploy redundant load balancers.
5A.4. Internal Security Operat	ions		
Maintain strong internal security operations to appropriate standards of best practice in order to avoid service disruption and data loss	Strengthen APNIC CSIRT to serve all incident response coordination needs.  Implement effective vulnerability triage, mitigation and resolution relating to all APNIC systems and services.	1.	Achieve ISO27001 certification. Mitigate all critical vulnerability reports within 7 days and resolve within 30 days.

		1
	Implement measures	
	including penetration	
	testing, security drills, and	
	other standard practices to	
	strengthen security	
	protection and management.	
5A.5. Enterprise Applications	and IT Support	
Provide secure and reliable	Provide all required IT	1. Meet SLA of two business
enterprise technologies to	systems and platform	day response for internal IT
support Secretariat	support to all APNIC staff.	support.
operations.		
	Decommission remaining	
	legacy systems,	
	authentication and access	
	methods.	

Objective	Activities	Success Indicators
5A.6. Security Infrastructure	Jpgrades	
Harden APNIC systems and security infrastructure to reduce security risks and protect Member information.	Improve infrastructure security and resilience of APNIC systems across areas including:  Email security  Server patch management  Privileged server access management  Server backup protection  Password management  Zero-trust Network / Server access.	<ol> <li>Complete automation of patch management.</li> <li>Complete email business rule deployment using standard best practice.</li> <li>Implement improved user authentication system.</li> </ol>

### 5B. Finance and Business Services

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

Finance and Business Services	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

Objective	Activities	Success Indicators
5B.1. Internal Knowledge Management		

Maintain effective methods, structures and tools to retain and retrieve corporate information within APNIC.	Complete implementation of new intranet and knowledge management systems.  Develop and implement maintenance responsibilities and processes.	1.	Complete migration during Q1 2022.	
5B.2. Financial Services		1		
Transparent and efficient management and reporting of APNIC's financial affairs.	Review banking arrangements, payment platforms and investment policy.	1.	Achieve a successful audit of APNIC's annual financial accounts.	
	Renewal of APNIC's special tax ruling on mutuality of member funds			
5B.3. Business Services				
Effectively support Secretariat operations and travel.	Manage office facilities and administration to support an agile and eco-friendly working environment.	1.	Maintain all Office facilities to established annual schedule. Audit travel requests and expense transactions for	
	Effectively manage travel processes to ensure travel is safe, efficient and economic.		policy alignment.	
5B.4. Business Intelligence and Data Analytics				
Improved decision making from the increased availability and accessibility of relevant, cross-system information sources.	Establish a comprehensive business intelligence facility that integrates data from a range of systems to produce better analysis and consistent reporting.	1.	100% automation of monthly Secretariat reporting data/charts from BI system.	

Objective	Activities	Success Indicators
5B.5. Data Management and	Governance	
Ensure availability of quality and accurate data to support decision-making.	Develop and maintain organisation-wide data model and data governance structure.	Data model and governance are documented and implemented.
	Build a vendor neutral repository (data warehouse) of current and historical critical business data from registry, membership, Salesforce and NetSuite.	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.

Employee Experience	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

Objective	Activities	Success Indicators	
5C.1. Organisational Development			
Optimise internal capability, including improved processes, effective communication, and adaptation to organizational challenges.	Complete the implementation of APNIC's Agile framework across all APNIC teams.  Establish a dedicated Internal Communications function.  Implement new employee engagement survey techniques.	<ol> <li>Complete Agile adoption by end of Q2 2022.</li> <li>Staff satisfaction ratings meet or exceed external benchmarks in 2022.</li> <li>An internal communications specialist is appointed by end of Q2 2022.</li> </ol>	
5C.2. Work Environment Man	1		
Ensure all places of work and workplace practices for APNIC staff (both the office and remote locations) are fit for purpose.	Assess office and remote/home working sites ensure WHS compliance.  Implement a Travel Health framework in response to pandemic risks.  All staff complete annual compliance training.	<ol> <li>Zero WHS incidents due to APNIC-controlled environmental factors.</li> <li>All travellers meet travel safety requirements as per Travel Health policy.</li> </ol>	
5C.3. Talent Attraction and Re			
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.  Develop an in-house learning and development program to provide all staff with opportunities to develop skills.	<ol> <li>Maintain staff turnover rate within benchmark of 5-15%.</li> <li>Fill all open roles within 90 days from advertisement</li> <li>Every advertised vacancy has a minimum of four simultaneous candidate sources.</li> </ol>	
5C.4. People Operations Management			

Ensure the employee value	Launch a comprehensive new	1.	Complete deployment of
proposition and experience	people management portal.		all selected modules of
supports the attraction and			Sage People system.
retention of diverse and	Review the current payroll	2.	Demonstrate reduced
talented team members, and	system and process and		cost of HR administration
that policies and practices	implement improvements.		platforms.
meet global standards.		3.	Payroll review completed
	Maintain and enhance		by end of Q3 2022.
	workforce diversity and		-
	inclusion.		

Objective	Activities	Success Indicators						
5C.5. APNIC workspace improvement								
Enhance collaborative working at the APNIC office and for remote employees.	Remodel Cordelia St premises to accommodate an increased workforce and better integrate with remote working and hybrid work practices.	1. Complete all budgeted facility upgrades by end of Q3 2022.						
	Deploy upgraded Zoom facilities to all meeting rooms.							
	Replace traditional desk seating with multi-functional work hubs.							
	Prepare for likely Secretariat relocation during 2024.							

### 5D. Governance

Provide the legal, economic and governance framework and professional services to support APNIC's operations to minimise risk, ensure compliance and continuity, and remain a socially and environmentally responsible organization.

Governance	PY	OPEX	CAPEX
Operations	1.68	780,240	-
Investments	-	1	-
Workstream total	1.68	780,240	-

Objective	Activities	Success Indicators
5D.1. Executive Council (EC)	Support	

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.
5D.2. Corporate Governance a		1	Lladata Ctuatania Dial.
Mitigate legal risk in all APNIC activities.	Manage legal and organizational risk, contracts, provide corporate governance guidance, and legal cooperation with other organizations.  A new business contract management system will be implemented in 2022, ensuring that all business contracts and contract renewals are fully managed.		Update Strategic Risk Register quarterly. Achieve full ISO9001 quality management system recertification. Undertake quarterly BCP scenario testing.
5D.3. Corporate Social Respon	nsibility		
Enhance APNIC's position as an environmentally and socially responsible organisation.	Develop a structured program to coordinate APNIC's contributions to environmental and social causes.	1.	CSR Program developed and approved.

# **Appendices**

# A. 2022 Budget Summary

Activity	PY	%	OPEX (AUD)	%	CAPEX (AUD)	%
Membership	24.98	20%	5,517,224	16%	1	1
Member Services	14.67	12%	2,989,124	9%	-	-
Membership Products	9.45	8%	1,852,649	5%	-	-
Membership Reporting	0.87	1%	675,451	2%	-	-
Registry	15.21	12%	3,930,525	12%	230,000	16%
Registration Services	5.16	4%	779,998	2%	-	-
Registry Products	9.30	8%	2,569,646	8%	230,000	16%
Policy Development	0.75	1%	580,881	2%	-	-
Development	34.43	28%	11,183,917	33%	128,000	9%
APNIC Conferences	4.20	3%	1,297,350	4%	43,000	3%
Foundation Support	1.31	1%	264,777	1%	-	-
Community Engagement	4.49	4%	1,656,671	5%	-	-
Community Participation	1.95	2%	436,317	1%	-	-
APNIC Academy	19.58	16%	5,079,961	15%	25,000	2%
Internet Infrastructure Support	2.90	2%	2,448,842	7%	60,000	4%
Information	9.74	8%	2,535,680	8%	123,000	8%
Information Products	8.87	7%	1,459,082	4%	-	-
Research and Analysis	0.87	1%	1,076,598	3%	123,000	8%
Capability	37.85	31%	10,597,066	31%	988,300	67%
Internal Technical Infrastructure	16.88	14%	4,120,704	12%	560,800	38%
Finance and Business Services	12.09	10%	2,935,176	9%	40,000	3%
Employee Experience	7.19	6%	2,760,946	8%	387,500	26%
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.

# B. Person Year Distribution

Activity	Total PY	Comm	DG	Fin	I&D	P&P	Prod Dev	Srvcs	SE
Membership	24.98	0.58	0.71	2.26	0.33	0.00	8.89	12.11	0.10
Member Services	14.67	0.19	0.16	2.24	1	ı	0.50	11.49	0.10
Membership Products	9.45	0.04	0.06	1	0.33	0.00	8.40	0.62	-
Membership Reporting	0.87	0.35	0.49	0.02	-	-	-	0.01	-
Registry	15.21	0.99	0.56	-	1.26	-	6.90	5.51	-
Registration Services	5.16	0.50	-	1	1	ı	1	4.66	-
Registry Products	9.30	0.04	0.50	1	1.26	1	6.90	0.61	-
Policy Development	0.75	0.45	0.06	1	1	1	ı	0.24	-
Development	34.43	4.18	0.78	0.46	22.97	0.66	1.75	0.73	2.90
APNIC Conferences	4.20	2.57	-	-	0.38	0.03	1.00	0.06	0.15
Foundation Support	1.31	0.05	0.46	0.45	0.17	0.14	0.05	1	-
Community Engagement	4.49	0.10	0.28	0.01	0.69	0.02	0.30	0.64	2.45
Community Participation	1.95	1.46	0.02	-	0.05	-	0.40	0.02	-
APNIC Academy	19.58	-	0.02	-	18.77	0.47	1	0.01	0.30
Internet Infrastructure Support	2.90	-	-	-	2.90	-	-	-	-
Information	9.74	2.24	0.88	-	0.33	0.40	5.85	0.04	-
Information Products	8.87	2.24	0.01	-	0.33	0.40	5.85	0.04	-
Research and Analysis	0.87	-	0.87	-	-	-	-	-	-
Capability	37.85	0.47	3.06	7.79	12.39	8.68	4.85	0.61	-
Internal Technical Infrastructure	16.88	-	-	0.18	11.74	0.01	4.85	0.11	-
Finance and Business Services	12.09	-	1.85	6.71	0.00	3.32	1	0.20	-
Employee Experience	7.19	0.47	0.12	0.33	0.65	5.34	-	0.30	-
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.

# C. Investments by Workstream (APNIC and APNIC Foundation Funded)

Pillar	Workstream	Investment Activity	PY	OPEX	CAPEX
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	-
Registry Products	2B. Registry Products	2B.3. Registry Product Development	2.00	369,299	-
	2B. Registry Products	2B.4. Registry re- architecture	1.50	239,474	-
	2B. Registry Products	2B.5. Readiness for Five- 9s Availability for Highly Critical Services	1.25	302,733	230,000
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	-
Information	4A. Information Products	4A.3. Information Product Development	1.75	289,387	-
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 remodelling	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.

### D. APNIC Foundation Funded Activity (Operations and Investments)

Workstream	Activity	PY	OPEX	CAPEX
3E. APNIC Academy	3E.1. Academy Product	2.00	731,506	-
	Management			
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	2.80	919,042	-
	Network			
3E. APNIC Academy	3E.8. Academy Product	1.50	582,192	-
	Development			
3E. APNIC Academy	3E.9. Curriculum for Non-	-	418,082	-
	Technical Audiences			
3F. Internet	3F.1. Internet infrastructure	-	164,383	-
Infrastructure	development			
Support				
3F. Internet	3F.2. Community Honeynet and	-	77,000	-
Infrastructure	Security Threat Sharing Platform			
Support				
3F. Internet	3F.3. M-Root Deployment	1.90	1,871,231	-
Infrastructure	Support			
Support				
4B. Research and	4B.1. Conducting research and	-	343,000	-
Analysis	measurements			
TOTAL		14.70	6,362,600	-

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.

# **APNIC Budget 2022**





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### 1 Executive Summary

This document contains the APNIC budget submission for the financial year from January to December 2022. The budget submission includes revenue, expense, and capital expenditure projections based on the planned activities for the APNIC Secretariat for 2022.

The purpose of this budget submission is to allow the APNIC Executive Council to approve an expenditure level for 2022, in the manner as described in the APNIC By-laws:

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

The proposed budget includes expenditure of AUD \$33,764,411 and projected revenue of AUD \$32,962,915 providing an operating deficit of AUD \$801,496 for 2022. While APNIC is forecasting an operational deficit for 2022, it is important to highlight that \$6,409,319 of expenditure is related to investments in new initiatives across key focus areas of:

- Security, Integrity and Resilience
- Next Generation Registry
- Connected Online Community
- Capacity for Development

APNIC's ongoing operational budget, before investments, is projected to deliver a \$1,930,089 surplus in 2022 as outlined in Table 2.1 in Section 2 of this budget submission.

Also included in APNIC's 2022 budget is \$6,362,600 of APNIC Foundation funded project expenditure. This expenditure is fully offset by an equivalent amount of APNIC Foundation funding revenue, such that APNIC is fully re-imbursed for these project costs.

APNIC's 2022 capital expenditure requirements for 2022 are \$1,469,300.

All values in this document are expressed in Australian Dollars (AUD) unless otherwise indicated.

## 2 Budget Summary

The 2022 budget for revenue and expenses and capital expenditure are included in the table below:

REVENUE (AUD)	Budget 2021	Forecast 2021
Membership fees	24,300,595	24,244,412
Non-members fees	264,392	257,699
Reactivation fees	18,091	22,200
Sign-Up fees	343,000	301,700
Transfer fees	210,000	214,011
Sundry income	124,960	4,449
Foundation receipts	948,000	488,166
Operating Revenue	26,209,038	25,532,637
Investment income	762,211	846,644
TOTAL REVENUE	26,971,249	26,379,281
EXPENSES (AUD)		
Bank service fees	251,212	257,671
Communication expenses	1,019,592	651,988
Computer expenses	1,743,227	1,496,864
Contribution to APNIC Foundation	565,518	0
Foundation funded project expenses		
Depreciation expense	770,942	673,949
Doubtful debt expenses	20,000	20,000
ICANN contract fee	240,000	197,515
Insurance expense	231,833	225,211
Meeting and training expenses	485,000	95,149
Membership fees expenses	60,040	60,829
Office operating expenses	385,430	380,072
Postage & delivery	37,500	15,508
Printing & photocopy	39,500	22,855
Professional fees	2,519,399	2,170,927
Recruitment expense	223,200	373,199
Salaries and personnel expenses	14,994,013	15,297,000
Sponsorship and Publicity expenses	554,400	343,747
Staff training/ Conference expenses	264,650	213,350
Translation expenses	20,000	22,867
Travel expenses	1,078,200	61,541
TOTAL EXPENSES	25,503,657	22,580,242
OPERATING SURPLUS / (DEFICIT)	1,467,592	3,799,039

Operational Activities 2022	Investment Activities 2022	Budget 2022
Activides 2022	Activities 2022	2022
24,799,617		24,799,617
263,209		263,209
22,644		22,644
315,985		315,985
220,431		220,431
172,200		172,200
3,491,095	2,871,505	6,362,600
29,285,181	2,871,505	32,156,686
0	806,229	806,229
29,285,181	3,677,734	32,962,915
261,000		261,000
623,600	65,000	688,600
1,869,755	426,000	2,295,755
0		0
3,491,095	2,871,505	6,362,600
839,869		839,869
20,000		20,000
225,600		225,600
231,600		231,600
553,500		553,500
81,010		81,010
445,440	10,200	455,640
48,000		48,000
29,000		29,000
1,404,480	420,000	1,824,480
306,000		306,000
14,972,663	2,604,614	17,577,277
553,780		553,780
314,000		314,000
30,000		30,000
1,054,700	12,000	1,066,700
27,355,092	6,409,319	33,764,411
1,930,089	-2,731,585	-801,496

Table 2.1 2022 Budget summary

CAPITAL (AUD)	Budget 2021	Forecast 2021
Equipment & Software	711,350	561,910
Office Furniture & Fittings	2,030,000	196,000
TOTAL CAPITAL EXPENDITURE	2,741,350	757,910

Operational Activities 2022	Investment Activities 2022	Budget 2022
901,800	240,000	1,141,800
40,000	287,500	327,500
941.800	527.500	1,469,300

**Table 2.2 2022 Capital Expenditure** 

### 3 Budget Preparation Notes

The budget is developed on a zero-based methodology and involves extensive consultation across the organization. There are a range of key inputs which are included in the budget process, including but not limited to the following:

- The 2020 APNIC Survey
- The 2022 APNIC Activity Plan
- 2022 priorities as established through the operational planning process
- The APNIC organization structure, HR cost analysis and recruitment plans
- Membership projections, derived from analysis of historical membership growth and recent trends
- Investment return forecasts provided by APNIC's investment advisors
- The asset register and quantity survey reports, forming the basis of depreciation and capital allowance forecast
- Activities funded by and undertaken on behalf of the APNIC Foundation.

#### 3.1 Projection techniques

Projections for membership fees are calculated by analysing recent trends in membership activity. A linear projection of membership growth and account closure is used to estimate the incremental growth in revenue for membership fees in 2022. The following emerging drivers have impacted the membership fees budget for 2022:

- New membership growth has decreased and membership closures have increased in 2021 as a result of impacts from the COVID-19 pandemic. While these trends may reverse in future years, the 2021 trend will impact membership fees for at least the 2022 budget year.
- The share of APNIC membership from Least Developed Countries (LDC's) is increasing, with higher growth coming from South Asia economies in particular. As fees payable by members from LDC's is discounted by 50%, the average membership fee from new members is decreasing.

2022 membership revenue budgets are calculated based on the current (2020) fee schedule.

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

APNIC's ERP system allows for the verification of all current approved spending commitments. This data is combined with new planned expenditure in 2022.

A headline Consumer Price Index (CPI) inflation rate of 3.0% was recorded for the 12 months ending September 2021 and has been used throughout this submission where there is cost uncertainty for 2022. Reference – <a href="https://www.qgso.qld.gov.au/issues/3441/consumer-price-index-202109.pdf">https://www.qgso.qld.gov.au/issues/3441/consumer-price-index-202109.pdf</a>

#### 3.2 APNIC's Taxation Status

APNIC's taxation status as a "Mutual Organisation" by way of a Private Ruling from the Australian Taxation Office was re-confirmed in November 2017 for a further five years ending June 2022. Work on renewal of the Private Ruling to ensure continuity of APNIC's existing mutuality status will commence in the first quarter of 2022 with support from APNIC's external taxation advisors, KPMG.

#### 4 Revenue

The table below tracks APNIC's revenue from 2015 through to the forecast for 2021 and the budget submission for 2022.

REVENUE (AUD)	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Forecast	Budget	Change to
REVENUE (AUD)	2015	2016	2017	2018	2019	2020	2021	2021	2022	2021 Budget
Membership fees	16,933,413	18,354,898	19,310,962	20,213,860	21,061,318	22,766,728	24,300,595	24,244,412	24,799,617	2.1%
Non-members fees	243,049	243,923	260,010	251,054	255,751	260,483	264,392	257,699	263,209	-0.4%
Reactivation fees	37,600	37,700	27,200	22,000	16,900	18,400	18,091	22,200	22,644	25.2%
Sign-Up fees	437,625	465,000	373,250	330,000	345,500	347,250	343,000	301,700	315,985	-7.9%
Transfer fees	77,943	130,139	127,440	164,145	173,831	216,016	210,000	214,011	220,431	5.0%
Sundry income	252,764	193,829	207,131	416,937	327,769	314,749	124,960	4,449	172,200	37.8%
Foundation receipts			2,670	31,002	103,095	147,110	948,000	488,166	6,362,600	571.2%
Operating Revenue	17,982,394	19,425,489	20,308,663	21,428,997	22,284,164	24,070,736	26,209,038	25,532,637	32,156,686	22.7%
Investment income	792,041	890,951	841,080	872,034	981,871	924,590	762,211	846,644	806,229	5.8%
TOTAL REVENUE	18,774,435	20,316,440	21,149,743	22,301,032	23,266,035	24,995,326	26,971,249	26,379,281	32,962,915	22.2%
Change		8.2%	4.1%	5.4%	4.3%	7.4%	7.9%	-2.2%	22.2%	

2022 revenue budget growth % excluding impacts of receipts from APNIC Foundation is 2.7% (2021: 3.0%)

Table 4.1 Revenue over time

#### 4.1 Investment Income

The value of APNIC's investments continue to increase as excess funds are transferred from the operating account to the Investment Fund. Investment returns are reinvested in line with the Investment Policy and the investment income projections are based on advice from APNIC's investment advisors. Interest on cash deposits not held in the fund are forecast to achieve 0.5% in 2022, down from 0.8% included in previous year budget submission.

#### 4.2 Membership Fees

#### 4.2.1 Membership growth

The 2022 membership budget has been built using modelling techniques adopted in previous budget cycles. Projections for membership fees are calculated by analysing recent trends in membership activity. A linear projection of membership growth and account closure is used to estimate the incremental growth in revenue for membership fees in 2022.

#### COVID-19 Impacts

As of October 2021, APNIC is forecast to deliver annualized net membership growth (new & reactivated members less closures) of 5.3% vs 7.3% in 2020. The decline in net membership growth is being driven both by a decrease in new member growth and an increase in account closures.

Membership growth trends have been impacted, in part at least, by the COVID-19 pandemic. While these trends may reverse in future years, the 2021 member growth rate has a direct impact on the membership fee budget for 2022.

#### Historic membership growth

The table below shows membership growth since 2013:

Member Tier	2013	2014	2015	2016	2017	2018	2019	2020	F'Cast 2021	Budget 2022
Extra Large	20	21	22	22	23	24	24	26	26	26
Very Large	44	40	44	43	41	44	46	48	49	50
Large	146	142	137	138	138	143	143	143	151	161
Medium	391	402	431	449	473	483	493	521	553	580
Small	1194	1388	2165	2643	2971	3376	3601	3685	3837	3884
Very Small	1291	1701	2336	2590	2769	2967	3334	3778	4020	4422
Associate	965	924	133	109	132	125	135	140	145	150
Total Members	4051	4618	5268	5994	6547	7162	7776	8341	8781	9273
New & Reactivated	813	805	968	1048	849	825	838	833	770	804
Closed	-296	-238	-318	-322	-296	-210	-224	-268	-330	-312
Net Growth	517	567	650	726	553	615	614	565	440	492
Average Net Monthly Growth	43	47	54	61	46	51	51	47	37	41

Table 4.2 Membership growth over time

#### **LDC Membership Share**

The share of APNIC membership from LDC's is increasing, with higher growth coming from South Asia economies. For 2021 year to date, 30% of all new members are eligible for the LDC discount, compared to the budget assumption of 27.5%. As fees payable by members from LDC's is discounted by 50%, the average membership fee from new members is decreasing. In 2021, average fees for new members is \$1,438, compared to the budget assumption of \$1,451. The increasing LDC membership share will have an ongoing impact on average fees per member and the membership fees budget for 2022.

#### 4.2.2 Membership and Sign-Up fee revenue – sensitivity analysis

The table below illustrates the potential impact on membership revenue if the actual growth of membership in 2022 varies from the assumptions included in the budget. The average annual fee a new Member will pay is estimated at \$1,435 which accounts for allocations from the last /8 and the IANA reclaimed pool, and for discounts applied to new Members from LDC's.

New Members		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		Total
LDC		20		20		20		20		20		20		20		20		20		20		20		20		240
Nan LDC		47		47		47		47		47		47		47		47		47		47		47		47	<u> </u>	564
Total New		67		67		67		67		67		67		67		67		67		67		67		67		804
Membership Fees from new Members		Jan		Feb		Mar		Apr		Mav		Jun		Jul		Aug		Sep		Oct		Nov		Dec		Total
impact of 30% More new Members	Ś	2,404	\$	4,807	Ś	7,211	e.		Ś		\$		Ś		Ś	19,229			Ś	24.036	Ś	26.439	Ś		_	187,479
Impact of 20% More new Members	\$	1.602	\$	3,205	ŝ	4,807	\$	.,	Ś		\$		\$		•			14,421	•	16.024	ŝ	17.626	\$	19,229	-	124.986
Impact of 10% More new Members	\$	801	· ·	1.602	Ś	2,404	ŝ	3,205	2	4.006	ş.	4,807	2		\$		\$		\$	8.012	3	8,813	\$	9.614	-	62,493
Membership Fees from new Members	\$	8.012	Ś	16.024	Ś	24.036	Ś	32.048	è	40.060	\$	48.071	è	-,	ş Ś		•	72.107	Ś	80.119	\$	88.131	è	96,143	_	624.929
Impact of 10% Less new Members	5	(801)		(1,602)		(2,404)	Υ.		\$	(4,006)	Υ.		\$	/	\$	(6,410)		(7,211)	Υ	(8,012)	\$	(8,813)	\$	(9,614)		(62,493
impact of 20% Less new Members	S	(1,602)	s	(3,205)	•	(4,807)		(6,410)	ŝ	(8,012)	_		-		•	(12,819)		(14,A21)		(16.024)	-		•			(02,433 124,986
Impact of 30% Less new Members	S	(2,404)	-	(4,807)	_	(7,211)								(16,825)						<u>, , , , , , , , , , , , , , , , , , , </u>	•		_		- •	
impact or sow itess new meanings	10	12,404)	9	[~c,007]	,	12,211	,	13,014)	,	122,010)	9	LANCE	-	(20,02.3)	,	(13,223)	~	إعدسيم	-	is-sent)	10	120/433/	,	len'ana)	71	107,473
Sign-Up Fees from new Members				-																0.1						
. Fault an		Jan		Feb		Mar		Apr		May		Jun	_	Jul		Aug		Sep	_	Oct		Nov		Dec		Total
impact of 30% More new Members Impact of 20% More new Members	\$	8,550 5,700	\$	8,550 5,700	\$	8,550 5,700	_	-,	\$	8,550	\$		\$		\$	8,550 5,700	•	8,550 5,700		8,550	\$	8,550	\$	8,550 5,700		102,600
Impact of 10% More new Members	\$	2.850	-	2.850	\$	2.850	\$	5,700 2.850	\$	5,700 2.850	\$		\$	-,	\$	2,850	<u> </u>	_	\$	5,700 2.850	ŝ	5,700 2,850	\$	2.850	-	68,400
Sign-Up Fees from new Members	\$	28,500	_	28,500	Ś	28,500	\$	28.500	\$	28,500	\$	_,	\$		\$	28,500	_	28.500	\$	28,500	\$	28,500	\$	28,500		34,200 342,000
Impact of 10% Less new Members	9	(2,850)	_	(2,850)	٠	(2,850)	•	/	\$	(2,850)		/	\$	/	\$	(2,850)	_	(2,850)	_	(2,850)		(2,850)		(2,850)	_	(34,200
Impact of 10% Less new Members	5	(5,700)		(5,700)	_		•	(5,700)	Š	(5,700)	_		\$		5	(5,700)		(5,700)		(5,700)	-	(5,700)	<u> </u>	(5,700)	-	(68,400
Impact of 30% Less new Members	S	(8,550)	5	(8,550)		(8,550)	•	(8,550)	ŝ	(8,550)	٥	1	\$	(8,550)	e e	(8,550)	•	(8,550)		(8,550)	5	(8,550)	-		-	102,600
impact or 30% tiess from meanings	9	(a,u)	Q.	(a,J.A)	9	(D,J.Juj	v	(a,u)	2	(D,JJU)	v	(0,3.30)	P	(a,u)	ø	(a,.xu)	9	(a,J.M)	,	(a,J.A)	0	(a,J.Juj	v	(a,u)	21	102,000
Total Fees from new Members																										
		Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		Total
Impact of 30% More new Members	\$	10,954	•	13,357	\$		_	18,164	\$	20,568	\$		\$		•	27,779			\$	32,586	\$	34,989	\$	37,393		290,079
impact of 20% More new Members	\$	7,302	-	8,905	\$		\$	12,110	\$	13,712	\$	-	\$		\$	18,519	•	_	\$	21,724	\$	23,326	\$	24,929	\$ 1	193,386
Impact of 10% More new Members			Ś	4,452	Ś	5.254	Ś	6.055	\$	6,856	\$	7,657	\$	8,458	\$	-,	_		\$	10,862	\$	11,663	\$	12,464		96,693
•	\$	3,651	_				_																			
Fees from new Members	\$	3,651 36,512	_	44,524	\$	52,536	\$	60,548	\$	68,560	\$	76,571	\$	84,583	\$	92,595	\$ 1	100,607	\$	108,619	\$	116,631	\$	124,643	\$ :	966,929
Fees from new Members Impact of 10% Less new Members	\$		\$	44,524 (4,452)	\$	(5,254)		(6,055)	\$ \$	(6,856)	\$	(7,657)	\$	(8,458)	5	(9,260)	5	(10,061)	\$	(10,862)	\$	(11,663)	\$	(12,464)	\$	966,929 <b>(96,69</b> 3
Fees from new Members	\$	36,512	\$	44,524 (4,452)	\$	/	\$	(6,055)	\$	(6,856)	\$	(7,657)	\$ \$	(8,458)	\$	_	s	(10,061)	s s	(10,862)	\$	(11,663)	\$	(12,464)	\$	/

Table 4.3 Sensitivity analysis - membership growth

Based on analysis of recent trends, it is forecast that 804 new Members will join APNIC in 2021 (67 per month). The average value of closed accounts is estimated at \$1,769 and on average, 26 account closures are expected each month. In 75% of cases, resources are returned to APNIC. The table below illustrates the impact on Membership revenue if the actual number of membership closures in 2022 varies from the assumptions included in the budget.

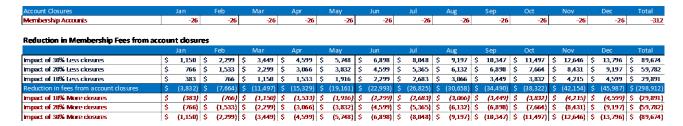


Table 4.4 Sensitivity analysis - membership closures

#### 4.3 Non-Members Fees

Fees from Non-Member account holders continue to be very stable and it is anticipated that in 2022 that there will be minimal change to this revenue for this item.

#### 4.4 Reactivation Fees

Reactivation Fees are charged to Members to reactivate their accounts after closure. The revenue for this item is expected to be in line with 2021.

#### 4.5 Sign-Up Fees

Sign-Up fees are directly related to membership growth as outlined in table 4.2 above. The fee is \$500 and is discounted by 50% for LDC economies currently making up 30% of new members. The effect of a variance to the budget assumptions for membership growth for this revenue item is outlined above in 4.2.2.

#### 4.6 Transfer Fees

Transfer activity is expected to track in line with 2021 activity.

#### 4.7 Sundry Income

Sundry income includes revenue for sources such as:

- Meeting receipts registration Members/Non-Members
- Meeting receipts Sponsorship
- External training receipts Members/Non-Members
- Research funding cooperative research with organisations such as ICANN, ISOC and other key partners.
- Foreign exchange gains/losses
  - The budget for exchange rate variances has been set as zero; it is not possible to forecast the
    total gain or loss on APNIC transactions. APNIC has a low exposure to currency variations as all
    fees from members and the majority of expenses in running APNIC's operations are paid in
    Australian dollars.

#### 4.8 Foundation Receipts

Foundation receipts includes all funds received from the APNIC Foundation in respect of projects to be delivered by APNIC. Foundation receipts are offset by a corresponding expenditure budget line 'Foundation funded project expenses'.

This presentation represents a change from previous years, whereby:

- Only Training Academy receipts were recognised as income, under 'Sundry Income'.
- All other APNIC Foundation receipts were directly offset against the corresponding expenditure.
- APNIC Foundation expenditure that was not offset was disbursed throughout the APNIC Income Statement.

The new presentation methodology is designed to provide more transparency over the activities of APNIC that are funded by the APNIC Foundation.

The activities to be funded by the APNIC Foundation are outlined below in Section 7.

#### 5 Expenses

The tables below set out APNIC's expenses since 2015, with more detail of the major expenses included below:

EVDENSES (AUD)	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Forecast	Budget	Change to
EXPENSES (AUD)	2015	2016	2017	2018	2019	2020	2021	2021	2022	2021 Budget
Bank service fees	156,496	167,917	177,670	193,762	207,759	241,477	251,212	257,671	261,000	3.9%
Communication expenses	591,885	532,212	561,271	542,895	570,832	697,060	1,019,592	651,988	688,600	-32.5%
Computer expenses	520,784	533,628	647,453	817,599	1,067,957	1,216,809	1,743,227	1,496,864	2,295,755	31.7%
Contribution to APNIC Foundation	0	18,003	665,058	732,710	762,179	760,890	565,518	0	0	-100.0%
Foundation funded project expenses	0	0	0	0	0	0	0	0	6,362,600	0.0%
Depreciation expense	764,145	785,218	807,596	856,029	862,055	707,658	770,942	673,949	839,869	8.9%
Doubtful debt expenses	-54,293	-6,225	14,653	-1,445	24,302	-733	20,000	20,000	20,000	0.0%
ICANN contract fee	284,161	243,026	244,657	278,866	263,386	223,432	240,000	197,515	225,600	-6.0%
Insurance expense	131,550	128,793	173,610	189,738	206,523	229,242	231,833	225,211	231,600	-0.1%
Meeting and training expenses	350,313	363,343	389,922	396,545	425,704	135,335	485,000	95,149	553,500	14.1%
Membership fees expenses	49,532	48,971	52,296	48,309	58,241	62,381	60,040	60,829	81,010	34.9%
Office operating expenses	315,608	324,948	337,207	342,458	342,806	290,543	385,430	380,072	455,640	18.2%
Postage & delivery	51,029	41,893	40,610	42,808	35,060	26,198	37,500	15,508	48,000	28.0%
Printing & photocopy	33,807	38,165	29,311	35,605	36,145	32,428	39,500	22,855	29,000	-26.6%
Professional fees	1,195,494	1,409,430	1,304,343	1,458,389	1,820,443	1,932,613	2,519,399	2,170,927	1,824,480	-27.6%
Recruitment expense	119,077	94,307	134,793	185,554	95,357	165,662	223,200	373,199	306,000	37.1%
Salaries and personnel expenses	9,586,575	10,459,153	11,096,470	11,962,294	12,789,661	14,070,813	14,994,013	15,297,000	17,577,277	17.2%
Sponsorship and Publicity expenses	575,775	624,179	681,342	759,741	627,766	437,724	554,400	343,747	553,780	-0.1%
Staff training/ Conference expenses	169,122	164,441	148,603	199,349	381,567	218,474	264,650	213,350	314,000	18.6%
Translation expenses	2,883	11,147	9,027	7,855	6,668	3,007	20,000	22,867	30,000	50.0%
Travel expenses	1,961,551	2,085,745	2,161,034	2,165,459	2,390,238	331,259	1,078,200	61,541	1,066,700	-1.1%
TOTAL EXPENSES	16,805,493	18,068,294	19,676,928	21,214,519	22,974,649	21,782,270	25,503,657	22,580,242	33,764,411	32.4%
Change		7.5%	8.9%	7.8%	8.3%	-5.2%	17.1%	-11.5%	32.4%	

2022 expense budget growth % excluding impacts of receipts from APNIC Foundation is 21.4% (2021: 3.6%)

Table 5.1 Expenses over time

#### 5.2 Salary and Personnel Expenses

Salary and personnel expenses will increase by 15% in 2022 when compared to the forecast expenditure for the 2021 year and 17% compared to the 2021 budget. The assumptions included in the budget are:

- Existing headcount commitments continue from 2021. There are 9 new staff positions included in the 2022 budget submission for APNIC, Of these:
  - 4 roles are classified as new investment expenditure:
    - 2 x Full Stack Developers Next Gen Registry
    - Security DevOps Next Gen Registry
    - Site Reliability Engineer 99.999% Preparation
  - 5 roles are classified as operational expenditure:
    - Senior Communications Officer Internal Communications
    - Accounts Finance Officer Foundation Support & HRM
    - Internal Security Specialist Replacement of existing role with return of travel
    - IT Support Engineer Organisational growth
    - HR Generalist Organisational growth
- Employee superannuation contributions will increase from 10.0% to 10.5% in July 2022
- All permanent staff will take 3.5 weeks of annual leave
- The overall allowance for salary increases resulting from role changes and annual performance reviews will be set at 3.5%
- Rollout of telecommunications allowance to all staff to support remote and hybrid working

For completeness, Table 5.2 and 5.3 below show the APNIC and APNIC Foundation headcounts. Only the APNIC headcount is relevant for this budget submission.

Table 5.2 below shows a forecast headcount as at 31 December 2021 for both APNIC and APNIC Foundation.

Note 1 – Of the 97 permanent contracts, 5 were transferred from contractor arrangements in 2021

Note 2 – Leave cover = maternity or other long term leave arrangements

#### Table 5.2 2021 Employees

Table 5.3 below shows the 2021 headcount forecast and additional roles included in the 2022 budget for both APNIC and APNIC Foundation.

2022 Employees	Notes	APNIC	APNIC Foundation / NRO	TOTAL Workforce
2021 Total Workforce		106	9	115
New roles - operational		5		5
New roles - investment	1	4	7	11
New roles - casual	2	4	-	4
2022 Budget Workforce		119	16	135

Note 1 – Roles directly attributable to investments outlined in the Activity Plan

Note 2 – Roles related to the HRM project

#### Table 5.3 2022 Employee headcount

Table 5.4 below shows the reconciliation of salary and wages expenditure from 2021 forecast to 2022 budget (APNIC only).

2021 vs 2022 Reconciliation	ı	Amount	% of 2021 Baseline	
2021 Forecast Salary & Personnel Costs	\$ 1	5,297,000		
Increases, bonuses and statutory oncharges in 2022	\$	118,429	0.8%	
New roles - committed 2021	\$	572,258	3.7%	
New roles - operational	\$	507,079	3.3%	
New roles - investment	\$	493,764	3.2%	
Casual Employees	\$	577,325	3.8%	
Ancilliary Costs	\$	11,423	0.1%	
TOTAL	\$ 1	17,577,277	14.9%	

Table 5.4 2021 forecast vs. 2022 budget reconciliation

#### 5.3 Travel Expenses

The outlook for travel remains unclear, both in terms of cost and frequency of travel vs. online engagement. Ancillary costs of travel such as PCR testing, hotel quarantine, unforeseen changes and cancellations will all need to be considered as part of the return to travel. The safety of APNIC staff and members remains the key priority in all travel related decisions. As part of its travel risk assessment, APNIC are:

- Undertaking Country specific risk assessments that include potential COVID-19 related impacts.
- Working with its insurers to ensure COVID-19 related medical costs are covered under existing insurance policies before travel takes place.

APNIC has set aside an initial budget provision of \$1M for travel during 2022. The appropriateness of the provision will continue to be assessed throughout the year. The travel budget anticipates costs for international traveller support, corporate travel agency fees and an allowance for a carbon offset program.

#### 5.4 Professional fees

Professional Fees includes all contractor and consultant services and advisory. APNIC's conversion of key personnel from contractor to employee in 2021 has contributed to an overall decrease in professional fees of 28% in 2022.

The total 2022 budget provision for professional fees is \$1,824,480 (Budget 2021: \$2,519,399). Major professional fees expenditure in 2022 includes:

Budget Description	Budget 2022
DGE-4B-Professional Lab research consultancy	225,000
BE-5B-Professional Investment consultant service	200,000
HE-5C-Professional Productivity coaching (i)	180,000
PE-1B-Professional Salesforce Developer	160,000
CE-1C-Professional iTank design consultancy	125,130
DGE-5B-Professional Registry knowledge graph	120,000
CE-1A-Professional Survey expenses	93,000
DGE-5D-Professional Legal fees	90,000
STE-3C-Professional IGF/ICANN/ITU consultants	80,000
HE-5C-Professional Leadership consulting	60,000
BE-5B-Professional Financial and tax advice	50,500
DGE-5B-Professional Data Warehouse consultancy	50,000
HE-5C-Professional HR consulting	50,000
BE-5B-Professional Audit fees	47,000
STE-1A-Professional Benchmarking consultancy	42,500
IDE-5A-Professional ISO27001 Consulting/ Audit/ Certification	40,000

### 5.5 Computer Expenses

Computer expenses include all non-capital purchases of equipment, consumables, license and support fees for hardware and software. APNIC's ongoing commitment to cloud services has contributed to an increase to computer expenses in recent years. In 2022, the focus on security, integrity and resilience has further added to computer expenses. Overall, computer expenses are budgeted to increase by 32% in 2022.

The total 2022 budget provision for computer expenses is \$2,295,755 (Budget 2021: \$1,743,227). Major planned expenditure includes:

Budget Description	Budget 2022
IDE-1C-Computer NetSuite license	187,320
IDE-1A-Computer Salesforce licence	165,300
IDE-2B-Computer Cloud infrastructure	120,000
IDE-5A-Computer HackerOne VRP & BBP program	105,000
DGE-4B-Computer Research cloud computing	82,200
IDE-5A-Computer Secure Network/ Server Access	80,000
IDE-5A-Computer Server Backup Protection	80,000
IDE-5A-Computer CentOS upgrade path	70,000
IDE-2B-Computer Firewall & intrusion detection/ prevention	70,000
HE-5C-Computer HRIS Licences	65,000
IDE-1B-Computer Cloudflare Licence	63,000
IDE-3A-Computer Zoom video conferencing licence	63,000
IDE-1B-Computer SSO APNIC Login	61,000
PE-3D-Computer Online Community Platform	60,000
IDE-5A-Computer APNIC Archive Permanent Storage Solution	50,000
IDE-5A-Computer Vmware licence	46,000
IDE-5A-Computer SSO LifeCycle Okta	45,000
IDE-5A-Computer HackerOne Rapid7 license & Support	45,000
IDE-1A-Computer Pardot licence	44,000
IDE-1A-Computer Salesforce premium support	42,000
IDE-5A-Computer Source code vulnerability scanner	42,000

#### 5.6 Depreciation Expenses

Depreciation expenses are budgeted based on analysis of the existing depreciation and capital allowance schedules; including anticipated depreciation based on Capital Expenditure planned for 2022. The amounts budgeted for 2022 are:

Equipment depreciation \$715,199

Capital works allowances - 6 Cordelia Street \$124,670

### 5.7 Sponsorship and Publicity Expenses

Sponsorship and Publicity expenses include APNIC contributions to the NRO expenses, and sponsorship of NOG's and other community events.

The total 2022 budget provision for computer expenses is \$553,780 (Budget 2021: \$554,400). Major planned expenditure includes:

Budget Description	Budget 2022
DGE-2C-Publicity NRO expenses	178,000
IDE-3C-Publicity Sponsorships for NOGs/ IXPs/ Peering	80,000
CE-3A-Publicity APNIC conference fellowships (i)	70,000
CE-1A-Publicity Google PPC advertising	65,000
STE-3C-Publicity Community/ non-technical sponsorship	64,500
BE-1A-Publicity General promotional item	24,000

Budget Description	Budget 2022
CE-1A-Publicity Facebook advertising/ Sponsored posts	13,500
SE-1A-Publicity APNIC lounge gifts and promotion T-shirts	10,000
PE-2B-Publicity Sponsorship for OpenBSD Foundation	10,000

#### 5.8 Communication Expenses

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

The total 2022 budget provision for computer expenses is \$688,600 (Budget 2021: \$1,019,592). Major planned expenditure includes:

Budget Description	Budget 2022
IDE-2B-Communication Data centre rack hire & cross connects	200,000
IDE-2B-Communication Transit/ Peering/ Virtual interconnections	200,000
IDE-2B-Communication Network equipment support & maintenance	126,000
IDE-2B-Communication DNS anycast & regional whois cloud hosting	76,100
IDE-2B-Communication Data network/ service monitoring & alerting	65,000
IDE-3F-Communication Root server peering & cross connect & virtual interconnect	10,000

#### 5.9 Foundation funded project expenditure

APNIC Foundation funded project expenditure is fully offset by an equivalent amount of APNIC Foundation funding revenue, such that APNIC is fully re-imbursed for these project costs. Project costs include both materials and labour costs of employees assigned to APNIC Foundation funded projects.

Projects that will be funded by the APNIC Foundation in 2022 are:

Workstream	Activity	Expenses
3E. APNIC Academy	3E.1. Academy Product Management	731,506
3E. APNIC Academy	3E.2. Instructor-Led Training	968,493
3E. APNIC Academy	3E.3. Self-Paced Training	287,671
3E. APNIC Academy	3E.4. Community Trainers Network	919,042
3E. APNIC Academy	3E.8. Academy Product Development	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	1,871,231
4B. Research and Analysis	4B.1. Conducting research and measurements	343,000
	Total	6,362,600

### 5.10 Meeting and Training Expenses

Meeting and Training expenses include all the costs incurred in running the meetings including APNIC conferences and other meeting/training events. This expense category includes venue and equipment hire, catering and social events.

The major contributors to this expense are the APNIC conferences. For budgeting purposes, it has been assumed that APNIC53 will be a virtual conference and APNIC54 will be a Face-to-Face meeting.

The total 2022 budget provision for computer expenses is \$553,500 (Budget 2021: \$485,000). Major planned expenditure includes:

Budget Description	Budget 2022
HE-5C-Meeting Staff Conference	150,000
CE-3A-Meeting APNIC Conference week venue hire and catering	90,000
CE-3A-Meeting APNIC Conference Workshop week venue hire and catering	50,000
CE-3A-Meeting APNIC Conference AV rental	40,000
CE-3A-Meeting APNIC Conference Opening reception	30,000
CE-3A-Meeting APNIC Conference Closing dinner	20,000
BE-5C-Meeting Xmas and Mid Year Staff events	20,000
IDE-3C-Meeting Communities gathering post training/ events	12,000
CE-3A-Meeting APNIC Conference Workshop week closing dinner	10,000
CE-3A-Meeting APNIC Conference signage	10,000
CE-3A-Meeting APNIC Conference APIX event	10,000
CE-3A-Meeting APNIC Conference Hackathon	10,000

### **5.11 Office Operating Expenses**

The major costs in this item include electricity, land tax, council and water rates, cleaning and rubbish removal, air-conditioning and security.

The total 2022 budget provision for computer expenses is \$455,640 (Budget 2021: \$385,430). Major planned expenditure includes:

Budget Description	Budget 2022
BE-5B-Office Cleaning	70,000
BE-5B-Office Electricity	60,000
BE-5C-Office Kitchen supplies and catering	55,000
BE-5B-Office Land tax	50,000
BE-5B-Office BCC rates	42,000
BE-5B-Office General maintenance and repairs	26,700
HE-5C-Office Health & Ergonomics	22,000
HE-5C-Office ECO APNIC	20,000
SE-1A-Office Customer services books periodical subscription	10,200
IDE-5B-Office Building security service	10,000
BE-5B-Office Misc furniture & decoration	10,000
BE-5B-Office Electrical repairs & testing	10,000

### 6 Capital Expenditure

Capital expenditure comprises equipment & software and office equipment. For the 2022 budget submission capital expenditure provision is \$1,469,300. Of this amount, \$1,141,800 relates to Equipment & Software, and \$327,500 relates to Office Furniture & Fittings as set out in the table below:

CAPITAL (AUD)	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Forecast	Budget	Change to
	2015	2016	2017	2018	2019	2020	2021	2021	2022	2021 Budget
Equipment & Software	671,551	809,626	572,206	510,658	552,713	502,865	711,350	561,910	1,141,800	60.5%
Office Furniture & Fittings	36,731	12,136	110,211	91,273	87,098	14,408	2,030,000	196,000	327,500	-83.9%
Total - Capital Expenditure	708,282	821,762	682,417	601,930	639,811	517,273	2,741,350	757,910	1,469,300	-46.4%
Change		16.0%	-17.0%	-11.8%	6.3%	-19.2%	430.0%	-72.4%	-46.4%	

Table 6.1 Capital Expenditure over time

The capital expenditure budget includes a provision of \$237,500 for short-term office remodelling to support ongoing hybrid work arrangements ahead of a planned office relocation in 2023 – 2024. Other areas of capital expenditure includes: cyclical renewal of internal IT equipment, RKPI HSM replacement and redundancy, renewal of network hardware, and HRIS implementation.

Provisions for Capital Expenditure in 2022 include:

Budget Description	Budget 2022
BA-5C-Fittings Workspace remodeling (i)	287,500
IDA-2B-Capital RPKI HSM additional redundancy	170,000
IDA-5A-Capital Staff Laptops	160,600
DGA-4B-Capital Labs servers	123,000
HA-5C-Capital HRIS Implementation (i)	100,000
IDA-5A-Capital RPKI HSM replacement	90,000
IDA-5A-Capital IT office/ Projectors/ TVs equipment	65,000
IDA-3F-Capital IXP and Root server development	60,000
IDA-5A-Capital APNIC Archive Permanent Storage Solution	50,000
IDA-2B-Capital Network Time Server	50,000
IDA-5A Capital Network - Router/ Switch & server for Singapore Pop	50,000
IDA-5A-Capital Network storage disk upgrade	48,000
IDA-3A-Capital Conference WIFI replacement/ Network case and AV accessories	43,000
IDA-5A-Capital Office wired and wireless network upgrade	31,000
IDA-3E-Capital Training Labs server/ equipment	25,000
HA-5B-Fittings Aircon new compressors	25,000
IDA-5A-Capital NexDC and Interactive switch replacement	21,200
IDA-5A-Capital Juniper Edge Router	20,000
IDA-5A-Capital Conference Laptops	15,000
IDA-2B-Capital Dell server running proxy/ loadbalancers	10,000
IDA-5B- Fittings Office improvements/ Lighting/ Security cameras	10,000
IDA-5A-Capital Secure Network/ Server Access	10,000
BA-5B- Fittings Office furniture	5,000

## 7 APNIC Foundation Funded Activity

APNIC Foundation receipts and project expenditure are outlined below.

	Budget	Forecast	Budget
REVENUE (AUD)	2021	2021	2022
Foundation Reseints	2021	2021	2022
Foundation Receipts	022.000	202.000	C 2C2 C00
Foundation Receipts	932,000	392,889	6,362,600
TOTAL REVENUE	932,000	392,889	6,362,600
EXPENSES (AUD)			
Communication expenses			
3F.3. M-Root Deployment Support	-	-	273,972
Total Communication expenses	-	-	273,972
Computer expenses			
3E.1. Academy Product Management	286,000	-	226,027
3E.2. Instructor-Led Training	-	-	47,945
3E.3. Self-Paced Training	_	-	205,479
3E.9. Curriculum for Non-Technical Audiences	7,000	3,853	2,692
3F.1. Internet infrastructure development	-	-	143,835
3F.2. Community Honeynet and Security Threat Sharing Plat	-	-	77,000
3F.3. M-Root Deployment Support	457,000	92,701	638,356
4B.1. Conducting research and measurements	-	-	343,000
Total Computer expenses	750,000	96,554	1,684,334
Meeting and training expenses			
3E.10. Focused Training for Targeted Economies	-	-	=
3E.2. Instructor-Led Training	106,000	3,047	68,493
Total Meeting and training expenses	106,000	3,047	68,493
Professional fees	200,000	3,0	00,100
3E.1. Academy Product Management	_	_	205,479
3E.10. Focused Training for Targeted Economies	_	_	203,173
3E.3. Self-Paced Training for Targeted Economies			82,192
3E.4. Community Trainers Network	608,000	96,110	589,042
3E.7 Platform and Curriculum Development	357,000	152,400	-
3E.8. Academy Product Development	337,000	132,400	280,822
3E.9. Curriculum for Non-Technical Audiences	707,000	228,448	415,390
3F.3. M-Root Deployment Support	707,000	220,440	410,958
Total Professional fees	1,672,000	476,958	1,983,883
Salaries and personnel expenses	1,072,000	470,938	1,303,003
3E.1. Academy Product Management	429,000	247,462	300,000
3E.2. Instructor-Led Training	603.000	361,270	824,658
3E.4. Community Trainers Network	250,000	120,636	330,000
3E.8. Academy Product Development	214,000	120,030	301,370
3F.3. M-Root Deployment Support	643,000	107,048	410,959
Total Salaries and personnel expenses	2,139,000	836,416	2,166,987
Travel expenses	2,133,000	030,410	2,100,307
3E.2. Instructor-Led Training	_	_	27,397
3F.1. Internet infrastructure development	-		20,548
3F.3. M-Root Deployment Support	<del>-</del>	_	136,986
Total Travel expenses	-	-	184,931
TOTAL EXPENSES	4,667,000	1 412 075	
TOTAL EXPENSES	4,007,000	1,412,975	6,362,600
COLINDATION EXPENSE OFFSET	(2.725.000)	(1 020 090)	
FOUNDATION EXPENSE OFFSET	(3,735,000)	(1,020,086)	-
TOTAL SUPPLIES // DECICIT)			
TOTAL SURPLUS/(DEFICIT)	-	-	-

**Table 7.1 APNIC Foundation Funded Activity** 

# **APNIC Budget 2022**

**EC** Meeting

6 – 9 December 2021



## **Contents**

- Budget outlook and observations
- Summary budget 2022
- Operational activities vs. Investment activities
- Revenue 2022
- Expenses 2022
- Key statistics



APNIC Budget 2022

# **BUDGET OUTLOOK**



## **Budget outlook – Revenue**

- Membership growth has slowed in 2021 (5.3% vs. 7.3% LY) and LDC % has increased (30% vs 27.5% LY).
  - 2022: 804 new and 312 closures = net growth of 492 members
  - 2022: Avg fee per new member \$1,435; Avg fees per closed member \$1,769
- Investment revenue:
  - Budget investment portfolio performance returns of 4.8%
  - Returns on cash deposits will remain low. Deposits maturing from 0.8% are being reinvested at 0.5%
- Foundation receipts includes all funds from APNIC Foundation for projects delivered by APNIC.
  - Foundation receipts are offset by a corresponding expenditure budget line 'Foundation funded project expenses'.
  - Previously Foundation receipts were recognized as part of Sundry Income.



## **Budget outlook – Expenses**

- Increases in expenditure are concentrated on key investments and focus areas
  - Focus on security, integrity and resilience has added to communication and computer expenses.
  - Increased use of cloud see computer and comms expenses rise as CAPEX falls
- The outlook for travel remains unclear, both in terms of cost and the blend of travel vs. online engagement
  - The budget assumes a gradual return to international travel
  - An 'online-first' approach to APNIC events
- Staff levels increased to support key investments and growth in Foundation activity
  - Operating expenses per member will revert to pre-covid levels
  - Headcount increase for investments in security, next gen registry, HRM project and essential support
- From 2022, Foundation related project expenditure is separated
  - \$6.36m in 2022 vs. \$1.4m in 2021
- AUD remains steady at USD 0.73 ~ USD 0.75



## **Budget outlook – Capital Expenditure**

- Provision for office maintenance
  - short-term (2-year) re-modelling to support staff growth
  - hybrid work arrangements until relocation to a new premises
- Cyclical renewal of internal IT equipment
- Network hardware replacement
  - servers, switches and routers
- Provision for ongoing HRIS implementation



## **Budget outlook – Beyond 2022**

### Membership

- HRM Project being initiated in 2022 (potential \$492k revenue impact in 2023)
- LDC Graduations upcoming:
  - Bhutan 2023 (scheduled)
  - Solomon Islands 2024 (scheduled)
  - Bangladesh, Lao People's Democratic Republic & Nepal 2026

#### Selected focus areas

- Security, Integrity and Resilience (continuing investment)
- Next Generation Registry (continuing investment)

#### Internet Growth

- South Asia is the 2<sup>nd</sup> fastest growing Internet (by usage) region globally
- 5 of the 10 most disconnected economies by population lie in APNIC region



APNIC Budget 2022

# **BUDGET 2022**



## **Budget 2022 – Key budget inputs**

- The 2020 APNIC Survey
- The 2022 APNIC Activity Plan
- 2022 priorities as established through the operational planning process
- The APNIC organization structure, HR cost analysis and recruitment plans
- Membership projections, derived from analysis of historical membership growth and recent trends
- Investment return forecasts provided by APNIC's investment advisors
- The asset register and quantity survey reports, forming the basis of depreciation and capital allowance forecast
- Activities funded by and undertaken on behalf of the APNIC Foundation



## **Budget 2022 – Projection techniques**

#### Revenue

- Membership fees are calculated using recent trends in membership activity
- Interest income based on cash deposits, interest rates and maturity dates
- Investment income based on forecasts provided by APNIC investment advisors

### Expenses

- APNIC's ERP system allows for the verification of all current approved spending commitments. This data is combined with new planned expenditure in 2022
- Consumer Price Index (CPI) inflation rate of 3.0% for 12 months to Sep 2021

#### Taxation Status

- APNIC's taxation status as a "Mutual Organisation" by way of a Private Ruling from the Australian Taxation Office ends in June 2022
- Work on renewal of the Private Ruling will commence in the first quarter of 2022
- The budget assumes continuity of APNIC's status as a Mutual Organisation



## **Budget 2022 - Revenue**

REVENUE (AUD)	Budget 2021	Forecast 2021
Membership fees	24,300,595	24,244,412
Non-members fees	264,392	257,699
Reactivation fees	18,091	22,200
Sign-Up fees	343,000	301,700
Transfer fees	210,000	214,011
Sundry income	124,960	4,449
Foundation receipts	948,000	488,166
Operating Revenue	26,209,038	25,532,637
Investment income	762,211	846,644
TOTAL REVENUE	26,971,249	26,379,281

Operational Activities 2022	Investment Activities 2022	Budget 2022
24,799,617		24,799,617
263,209		263,209
22,644		22,644
315,985		315,985
220,431		220,431
172,200		172,200
3,491,095	2,871,505	6,362,600
29,285,181	2,871,505	32,156,686
0	806,229	806,229
29,285,181	3,677,734	32,962,915



# **Budget 2022 - Expenses**

EXPENSES (AUD)	Budget 2021	Forecast 2021
Bank service fees	251,212	257,671
Communication expenses	1,019,592	651,988
Computer expenses	1,743,227	1,496,864
Contribution to APNIC Foundation	565,518	0
Foundation funded project expenses		
Depreciation expense	770,942	673,949
Doubtful debt expenses	20,000	20,000
ICANN contract fee	240,000	197,515
Insurance expense	231,833	225,211
Meeting and training expenses	485,000	95,149
Membership fees expenses	60,040	60,829
Office operating expenses	385,430	380,072
Postage & delivery	37,500	15,508
Printing & photocopy	39,500	22,855
Professional fees	2,519,399	2,170,927
Recruitment expense	223,200	373,199
Salaries and personnel expenses	14,994,013	15,297,000
Sponsorship and Publicity expenses	554,400	343,747
Staff training/ Conference expenses	264,650	213,350
Translation expenses	20,000	22,867
Travel expenses	1,078,200	61,541
TOTAL EXPENSES	25,503,657	22,580,242

Operational Activities 2022	Investment Activities 2022	Budget 2022
261,000		261,000
623,600	65,000	688,600
1,869,755	426,000	2,295,755
0		0
3,491,095	2,871,505	6,362,600
839,869		839,869
20,000		20,000
225,600		225,600
231,600		231,600
553,500		553,500
81,010		81,010
445,440	10,200	455,640
48,000		48,000
29,000		29,000
1,404,480	420,000	1,824,480
306,000		306,000
14,972,663	2,604,614	17,577,277
553,780		553,780
314,000		314,000
30,000		30,000
1,054,700	12,000	1,066,700
27,355,092	6,409,319	33,764,411

## **Budget 2022 - Summary**

FINANCIAL PERFORMANCE (AUD)	Budget 2021	Forecast 2021
Operating Revenue	26,209,038	25,532,637
Less: Operating Expenses	24,040,541	21,486,072
OPERATING SURPLUS / (DEFICIT)	2,168,497	4,046,564
Investment income	762,211	846,644
Less: Investment Activities Expenditure	1,463,116	1,094,170
SURPLUS/ (DEFICIT) AFTER INVESTMENTS	1,467,592	3,799,039

Operational Activities 2022	Investment Activities 2022	Budget 2022
29,285,181	2,871,505	32,156,686
27,355,092	0	27,355,092
1,930,089	2,871,505	4,801,594
0	806,229	806,229
0	6,409,319	6,409,319
1,930,089	-2,731,585	-801,496



## **Budget 2022 – Capital Expenditure**

CAPITAL (AUD)	Budget 2021	Forecast 2021
Equipment & Software	711,350	561,910
Office Furniture & Fittings	2,030,000	196,000
TOTAL CAPITAL EXPENDITURE	2,741,350	757,910

Operational Activities 2022	Investment Activities 2022	Budget 2022
901,800	240,000	1,141,800
40,000	287,500	327,500
941,800	527,500	1,469,300



APNIC Budget 2022

# OPERATIONAL ACTIVITIES VS INVESTMENT ACTIVITIES



## **Operational vs Investment Activities**

## Operational Activities

- All routine APNIC activities
- Core member and registry services
- Additional services as established and expected
- Regular "continuous improvement" activities

### Investment Activities

- New products and services
- Substantial services improvements and upgrades
- Internal systems and process upgrades
- Multi-year project expenses
- Usually, not "mandatory"



## **APNIC Funded Investment Activities 2022**

Workstream	Investment Activity	Expenses	Capex
1A. Member Services	1A.5. Historical Resources Transition	210,130	
1B. Membership Products	1B.2. Membership Product Development	656,177	
2B. Registry Products	2B.3. Registry Product Development	369,299	
2B. Registry Products	2B.4. Registry re-architecture	239,474	
2B. Registry Products	2B.5. Readiness for Five-9s Availability for Highly Critical Service	302,733	230,000
3B. Foundation Support	3B.1. Foundation support	264,777	
3D. Community Participation	3D.5. Online Community Platform	146,651	
3E. APNIC Academy	3E.9. Curriculum for Non-Technical Audiences	43,776	
4A. Information Products	4A.3. Information Product Development	289,387	
5A. Internal Technical Infrastructure	5A.6. Security Infrastructure Upgrades	477,664	
5B. Finance and Business Services	5B.6. Data Management and Governance	314,226	
5C. Employee Experience	5C.5. APNIC workspace remodelling	95,039	287,500
	Total	3,537,814	527,500



#### **APNIC Foundation Funded Activities 2022**

#### Foundation funded investment activities

Workstream	Investment Activity	Expenses
3E. APNIC Academy	3E.8. Academy Product Development	582,192
3E. APNIC Academy	3E.9. Curriculum for Non-Technical Audiences	418,082
3F. Internet Infrastructure Support	3F.3. M-Root Deployment Support	1,871,231
	Total	2,871,505

#### Foundation funded operational activities

Workstream	Activity	Expenses
3E. APNIC Academy	3E.1. Academy Product Management	731,506
3E. APNIC Academy	3E.2. Instructor-Led Training	968,493
3E. APNIC Academy	3E.3. Self-Paced Training	287,671
3E. APNIC Academy	3E.4. Community Trainers Network	919,042
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
4B. Research and Analysis	4B.1. Conducting research and measurements	343,000
	Total	3,491,095



### **Operational vs Investment Activities**

REVENUE (AUD)	Budget 2021	Forecast 2021
Membership fees	24,300,595	24,244,412
Non-members fees	264,392	257,699
Reactivation fees	18,091	22,200
Sign-Up fees	343,000	301,700
Transfer fees	210,000	214,011
Sundry income	124,960	4,449
Foundation receipts	948,000	488,166
Operating Revenue	26,209,038	25,532,637
Investment income	762,211	846,644
TOTAL REVENUE	26,971,249	26,379,281
EXPENSES (AUD)		
Bank service fees	251,212	257,671
Communication expenses	1,019,592	651,988
Computer expenses	1,743,227	1,496,864
Contribution to APNIC Foundation	565,518	0
Foundation funded project expenses		
Depreciation expense	770,942	673,949
Doubtful debt expenses	20,000	20,000
ICANN contract fee	240,000	197,515
Insurance expense	231,833	225,211
Meeting and training expenses	485,000	95,149
Membership fees expenses	60,040	60,829
Office operating expenses	385,430	380,072
Postage & delivery	37,500	15,508
Printing & photocopy	39,500	22,855
Professional fees	2,519,399	2,170,927
Recruitment expense	223,200	373,199
Salaries and personnel expenses	14,994,013	15,297,000
Sponsorship and Publicity expenses	554,400	343,747
Staff training/ Conference expenses	264,650	213,350
Translation expenses	20,000	22,867
Travel expenses	1,078,200	61,541
TOTAL EXPENSES	25,503,657	22,580,242
OPERATING SURPLUS / (DEFICIT)	1,467,592	3,799,039

Operational Activities 2022	Investment Activities 2022	Budget 2022
24,799,617		24,799,617
263,209		263,209
22,644		22,644
315,985		315,985
220,431		220,431
172,200		172,200
3,491,095	2,871,505	6,362,600
29,285,181	2,871,505	32,156,686
0	806,229	806,229
29,285,181	3,677,734	32,962,915
261,000		261,000
623,600	65,000	688,600
1,869,755	426,000	2,295,755
0		0
3,491,095	2,871,505	6,362,600
839,869		839,869
20,000		20,000
225,600		225,600
231,600		231,600
553,500		553,500
81,010		81,010
445,440	10,200	455,640
48,000		48,000
29,000		29,000
1,404,480	420,000	1,824,480
306,000		306,000
14,972,663	2,604,614	17,577,277
553,780		553,780
314,000		314,000
30,000		30,000
1,054,700	12,000	1,066,700
27,355,092	6,409,319	33,764,411
1.930.089	-2.731.585	-801.496

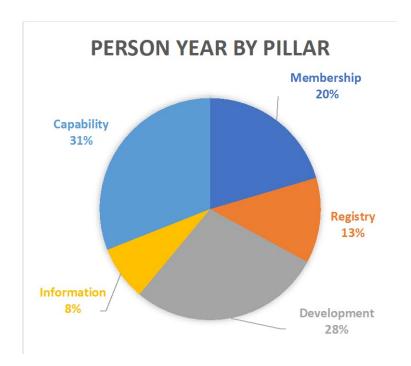


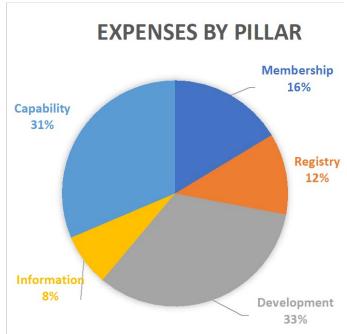
## **Activity Plan 2022**

Pillar/Workstream	PY	%	Expenses (AUD)	%	Capex (AUD)	%
Membership	24.98	20%	5,517,224	16%	-	0%
Member services	14.67	12%	2,989,124	9%	-	0%
Membership products	9.45	8%	1,852,649	5%	-	0%
Membership reporting	0.87	1%	675,451	2%	-	0%
Registry	15.21	12%	3,930,525	12%	230,000	16%
Registration service	5.16	4%	779,998	2%	-	0%
Registry products	9.30	8%	2,569,646	8%	230,000	16%
Policy development	0.75	1%	580,881	2%	-	0%
Development	34.43	28%	11,183,917	33%	128,000	9%
APNIC conferences	4.20	3%	1,297,350	4%	43,000	3%
Foundation support	1.31	1%	2 <b>64,777</b>	1%	-	0%
Community engagement	4.49	4%	1,656,671	5%	-	0%
Community participation	1.95	2%	436,317	1%	-	0%
APNIC academy	19.58	16%	5,079,961	15%	25,000	2%
Internet infrastructure support	2.90	2%	2,448,842	7%	60,000	4%
Information	9.74	8%	2,535,680	8%	123,000	8%
Information products	8.87	7%	1,459,082	4%	-	0%
Research and analysis	0.87	1%	1,076,598	3%	123,000	8%
Capability	37.85	31%	10,597,066	31%	988,300	67%
Internal technical infrastructure	16.88	14%	4,120,704	12%	560,800	38%
Finance and business services	12.09	10%	2,935,176	9%	40,000	3%
Employee experience	7.19	6%	2,760,946	8%	387,500	26%
Governance	1.68	1%	780,240	2%	-	0%
Total	122.21	100%	33,764,411	100%	1,469,300	100%



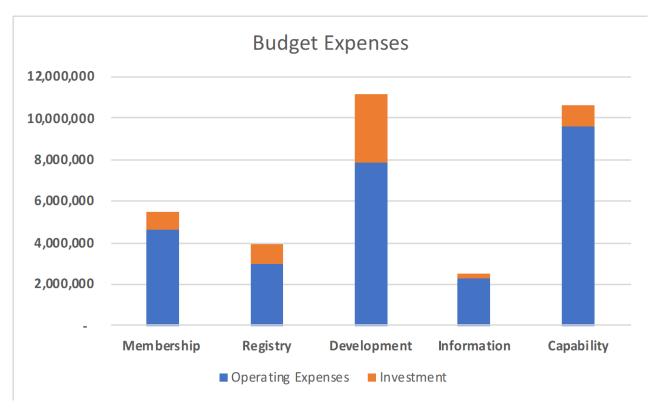
### **Activity Plan 2022**







# Operational vs Investment Activities By Pillar





APNIC Budget 2022

# **REVENUE 2022**



#### Revenue

REVENUE (AUD)	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Forecast	Budget	Change to
REVENUE (AUD)	2015	2016	2017	2018	2019	2020	2021	2021	2022	2021 Budget
Membership fees	16,933,413	18,354,898	19,310,962	20,213,860	21,061,318	22,766,728	24,300,595	24,244,412	24,799,617	2.1%
Non-members fees	243,049	243,923	260,010	251,054	255,751	260,483	264,392	257,699	263,209	-0.4%
Reactivation fees	37,600	37,700	27,200	22,000	16,900	18,400	18,091	22,200	22,644	25.2%
Sign-Up fees	437,625	465,000	373,250	330,000	345,500	347,250	343,000	301,700	315,985	-7.9%
Transfer fees	77,943	130,139	127,440	164,145	173,831	216,016	210,000	214,011	220,431	5.0%
Sundry income	252,764	193,829	207,131	416,937	327,769	314,749	124,960	4,449	172,200	37.8%
Foundation receipts			2,670	31,002	103,095	147,110	948,000	488,166	6,362,600	571.2%
Operating Revenue	17,982,394	19,425,489	20,308,663	21,428,997	22,284,164	24,070,736	26,209,038	25,532,637	32,156,686	22.7%
Investment income	792,04°	890,951	841,080	872,034	981,871	924,590	762,211	846,644	806,229	5.8%
TOTAL REVENUE	18,774,43	20,316,440	21,149,743	22,301,032	23,266,035	24,995,326	26,971,249	26,379,281	32,962,915	22.2%
	Change	8.2%	4.1%	5.4%	4.3%	7.4%	7.9%	-2.2%	22.2%	

2022 revenue budget growth % excluding impacts of receipts from APNIC Foundation is 2.7% (2021: 3.0%)



### Revenue – Membership growth

#### New members

- 804 new members in 2022 (67 per month)
- Average annual new member fee is estimated at \$1,435 which accounts for allocations from the last /8 and the IANA reclaimed pool, and for discounts applied to new members from LDC's
- 30% of new members are in LDC economies (prior year 27.5%)

#### Account closures

- 312 account closures in 2022 (26 per month)
- Average value of account closures is \$1,769



### Revenue – Membership growth

Member Tier	2013	2014	2015	2016	2017	2018	2019	2020	F'Cast 2021	Budget 2022
Extra Large	20	21	22	22	23	24	24	26	26	26
Very Large	44	40	44	43	41	44	46	48	49	50
Large	146	142	137	138	138	143	143	143	151	161
Medium	391	402	431	449	473	483	493	521	553	580
Small	1194	1388	2165	2643	2971	3376	3601	3685	3837	3884
Very Small	1291	1701	2336	2590	2769	2967	3334	3778	4020	4422
Associate	965	924	133	109	132	125	135	140	145	150
Total Members	4051	4618	5268	5994	6547	7162	7776	8341	8781	9273
New & Reactivated	813	805	968	1048	849	825	838	833	770	804
Closed	-296	-238	-318	-322	-296	-210	-224	-268	-330	-312
Net Growth	517	567	650	726	553	615	614	565	440	492
Average Net Monthly Growth	43	47	54	61	46	51	51	47	37	41



#### Revenue – Membership

#### Non-Members Fees

 Fees from non-member account holders continues to be stable and it is anticipated that in 2022 there will be minimal change to revenue for this item

#### Reactivation Fees

 Reactivation fees are charge to Members to reactivate their accounts after closure. The revenue for this item is expected to be consistent with 2021

#### Sign-Up Fees

 Sign-up fees are directly related to membership growth. The fee is \$500 and is discounted by 50% for LDC economies currently making up 30% of new members. Sign-up fees are calculated using the new members assumptions outlined above

#### Transfer Fees

Transfer activity is expected to be consistent with 2021



#### Revenue – All Other Revenue

#### Sundry Income

- Meeting receipts registration Members/Non-Members
- Meeting receipts Sponsorship
- External training receipts Members/Non-Members
- Research funding cooperative research with organisations such as ICANN, ISOC and other key partners
- Foreign exchange gains/losses (budgeted at zero)

#### Foundation Receipts

- All funds received from the APNIC Foundation in respect of projects to be delivered by APNIC
- Foundation receipts are offset by a corresponding expenditure budget line 'Foundation funded project expenses'

#### Investment Income

- The value APNIC's investments continue to increase as excess funds are transferred from the operating account to the Investment Fund and investment returns are reinvested in line with the Investment Policy
- Investment income projections are based on advice from APNIC's investment advisors (approximately 4.8%)
- Interest on cash deposits not held in the fund are forecast to achieve around 0.5% in 2022



APNIC Budget 2022

# **EXPENSES 2022**



# **Expenses**

EXPENSES (AUD)	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Forecast	Budget	Change to
EXPENSES (AUD)	2015	2016	2017	2018	2019	2020	2021	2021	2022	2021 Budget
Bank service fees	156,496	167,917	177,670	193,762	207,759	241,477	251,212	257,671	261,000	3.9%
Communication expenses	591,885	532,212	561,271	542,895	570,832	697,060	1,019,592	651,988	688,600	-32.5%
Computer expenses	520,784	533,628	647,453	817,599	1,067,957	1,216,809	1,743,227	1,496,864	2,295,755	31.7%
Contribution to APNIC Foundation	0	18,003	665,058	732,710	762,179	760,890	565,518	0	0	-100.0%
Foundation funded project expenses	0	0	0	0	0	0	0	0	6,362,600	0.0%
Depreciation expense	764,145	785,218	807,596	856,029	862,055	707,658	770,942	673,949	839,869	8.9%
Doubtful debt expenses	-54,293	-6,225	14,653	-1,445	24,302	-733	20,000	20,000	20,000	0.0%
ICANN contract fee	284,161	243,026	244,657	278,866	263,386	223,432	240,000	197,515	225,600	-6.0%
Insurance expense	131,550	128,793	173,610	189,738	206,523	229,242	231,833	225,211	231,600	-0.1%
Meeting and training expenses	350,313	363,343	389,922	396,545	425,704	135,335	485,000	95,149	553,500	14.1%
Membership fees expenses	49,532	48,971	52,296	48,309	58,241	62,381	60,040	60,829	81,010	34.9%
Office operating expenses	315,608	324,948	337,207	342,458	342,806	290,543	385,430	380,072	455,640	18.2%
Postage & delivery	51,029	41,893	40,610	42,808	35,060	26,198	37,500	15,508	48,000	28.0%
Printing & photocopy	33,807	38,165	29,311	35,605	36,145	32,428	39,500	22,855	29,000	-26.6%
Professional fees	1,195,494	1,409,430	1,304,343	1,458,389	1,820,443	1,932,613	2,519,399	2,170,927	1,824,480	-27.6%
Recruitment expense	119,077	94,307	134,793	185,554	95,357	165,662	223,200	373,199	306,000	37.1%
Salaries and personnel expenses	9,586,575	10,459,153	11,096,470	11,962,294	12,789,661	14,070,813	14,994,013	15,297,000	17,577,277	17.2%
Sponsorship and Publicity expenses	575,775	624,179	681,342	759,741	627,766	437,724	554,400	343,747	553,780	-0.1%
Staff training/ Conference expenses	169,122	164,441	148,603	199,349	381,567	218,474	264,650	213,350	314,000	18.6%
Translation expenses	2,883	11,147	9,027	7,855	6,668	3,007	20,000	22,867	30,000	50.0%
Travel expenses	1,961,551	2,085,745	2,161,034	2,165,459	2,390,238	331,259	1,078,200	61,541	1,066,700	-1.1%
TOTAL EXPENSES	16,805,493	18,068,294	19,676,928	21,214,519	22,974,649	21,782,270	25,503,657	22,580,242	33,764,411	32.4%
Change		7.5%	8.9%	7.8%	8.3%	-5.2%	17.1%	-11.5%	32,4%	

2022 expense budget growth % excluding impacts of receipts from APNIC Foundation is 21.4% (2021: 3.6%)



### **Expenses – Salary and Personnel**

- Budget assumptions:
  - Existing headcount commitments continue from 2021
  - 9 new staff positions in 2022 budget submission:
    - Investment Activities 2x Full Stack Dev, Security DevOps, Site Reliability Engineer
    - Operational Activities Senior Communications Officer, Finance Officer, HR Officer, IT Support Engineer, Internal Security Specialist
  - Employee superannuation contributions rise from 10.0% to 10.5% in July
  - All permanent staff will take 3.5 weeks of annual leave
  - Allowance for salary increases between 2021 and 2022 set at 3.5%
  - Rollout of telecommunications allowance for remote and hybrid working
- Salary and personnel expenses to rise by 15% in 2022 compared to the 2021 forecast



#### **Expenses – Salary and Personnel (cont)**

#### Forecast headcount at December 2021 for APNIC and APNIC Foundation:

2021 Employees	Notes	APNIC	APNIC Foundation / NRO	TOTAL Workforce
2021 Permanent Contract	1	97	9	106
Leave Cover	2	5	-	5
2021 Casual		4	-	4
2021 Total Workforce		106	9	115

Note 1 – Of the 97 permanent contracts, 5 were transferred from contractor arrangements in 2021

Note 2 – Leave cover = maternity or other long term leave arrangements

#### 2022 budget headcount for APNIC and APNIC Foundation:

2022 Employees	Notes	APNIC	APNIC Foundation / NRO	TOTAL Workforce
2021 Total Workforce		106	9	115
New roles - operational		5		5
New roles - investment	1	4	7	11
New roles - casual	2	4	-	4
2022 Budget Workforce		119	16	135

Note 1 – Roles directly attributable to investments outlined in the Activity Plan



#### **Expenses – Travel**

- Travel plans remain unclear for 2022
  - Costs and frequency are unknown
- Budget provision of \$1M for travel during 2022
  - Including traveller support, agency fees, carbon offset
  - to be assessed throughout the year
- Ancillary costs to be considered
  - PCR testing, hotel quarantine, unforeseen changes and cancellations
- Working with insurers to ensure COVID-19 medical costs are covered, before travel takes place



#### **Expenses – Professional Fees**

- Professional fees includes all contractor, consulting and advisory services
- The conversion of 5 key personnel from contractor to employee in 2021 has contributed to an overall decrease in professional fees of 28% in 2022
- Total 2022 budget provision of \$1,824,480 (Budget 2021: \$2,519,399).
   Major planned expenditure includes:

Budget Description	Budget 2022
DGE-4B-Professional Lab research consultancy	225,000
BE-5B-Professional Investment consultant service	200,000
HE-5C-Professional Productivity coaching (i)	180,000
PE-1B-Professional Salesforce Developer	160,000
CE-1C-Professional iTank design consultancy	125,130
DGE-5B-Professional Registry knowledge graph	120,000
CE-1A-Professional Survey expenses	93,000
DGE-5D-Professional Legal fees	90,000
STE-3C-Professional IGF/ICANN/ITU consultants	80,000
HE-5C-Professional Leadership consulting	60,000
BE-5B-Professional Financial and tax advice	50,500
DGE-5B-Professional Data Warehouse consultancy	50,000
HE-5C-Professional HR consulting	50,000
BE-5B-Professional Audit fees	47,000
STE-1A-Professional Benchmarking consultancy	42,500
IDE-5A-Professional ISO27001 Consulting/ Audit/ Certification	40,000



### **Expenses – Computer expenses**

- Computer expenses include all noncapital purchases of equipment, consumables, license and support fees for hardware and software.
- APNIC's ongoing commitment to cloud services has contributed to an increase to computer expenses in recent years. In 2022, the focus on security, integrity and resilience has further added to computer expenses.
- Total 2022 budget provision of \$2,295,755 (Budget 2021: \$1,743,227). Major planned expenditure includes:

Budget Description	Budget 2022
IDE-1C-Computer NetSuite license	187,320
IDE-1A-Computer Salesforce licence	165,300
IDE-2B-Computer Cloud infrastructure	120,000
IDE-5A-Computer HackerOne VRP & BBP program	105,000
DGE-4B-Computer Research cloud computing	82,200
IDE-5A-Computer Secure Network/ Server Access	80,000
IDE-5A-Computer Server Backup Protection	80,000
IDE-5A-Computer CentOS upgrade path	70,000
IDE-2B-Computer Firewall & intrusion detection/ prevention	70,000
HE-5C-Computer HRIS Licences	65,000
IDE-1B-Computer Cloudflare Licence	63,000
IDE-3A-Computer Zoom video conferencing licence	63,000
IDE-1B-Computer SSO APNIC Login	61,000
PE-3D-Computer Online Community Platform	60,000
IDE-5A-Computer APNIC Archive Permanent Storage Solution	50,000
IDE-5A-Computer Vmware licence	46,000
IDE-5A-Computer SSO LifeCycle Okta	45,000
IDE-5A-Computer HackerOne Rapid7 license & Support	45,000
IDE-1A-Computer Pardot licence	44,000
IDE-1A-Computer Salesforce premium support	42,000
IDE-5A-Computer Source code vulnerability scanner	42,000



### **Expenses – Depreciation**

- Depreciation budget is based on existing depreciation and capital allowance schedules; including anticipated capital purchases planned for 2022.
- The depreciation amounts budgeted for 2022 are:
  - Equipment depreciation \$715,199
  - Capital works provision 6 Cordelia Street \$124,670



#### Expenses – Sponsorship and publicity

- Sponsorship and Publicity expenses include APNIC contributions to the NRO, and sponsorship of NOGs and other community events.
- Total 2022 budget provision of \$553,780 (Budget 2021: \$554,400).
- Major planned expenditure includes:

Budget Description	Budget 2022
DGE-2C-Publicity NRO expenses	178,000
IDE-3C-Publicity Sponsorships for NOGs/ IXPs/ Peering	80,000
CE-3A-Publicity APNIC conference fellowships (i)	70,000
CE-1A-Publicity Google PPC advertising	65,000
STE-3C-Publicity Community/ non-technical sponsorship	64,500
BE-1A-Publicity General promotional item	24,000
CE-1A-Publicity Facebook advertising/ Sponsored posts	13,500
SE-1A-Publicity APNIC lounge gifts and promotion T-shirts	10,000
PE-2B-Publicity Sponsorship for OpenBSD Foundation	10,000



### **Expenses – Communication expenses**

- Communication expenses include data network expenses, internet connectivity expenses, telephony and mobile phone expenses.
- The major contributors to costs are the ongoing cost of network connections and the cost of rack-space in the co-locations that are critical to APNIC's network resilience.
- Total 2022 budget provision of \$688,600 (Budget 2021: \$1,019,592).
- Major planned expenditure includes:

Budget Description	Budget 2022
IDE-2B-Communication Data centre rack hire & cross connects	200,000
IDE-2B-Communication Transit/ Peering/ Virtual interconnections	200,000
IDE-2B-Communication Network equipment support & maintenance	126,000
IDE-2B-Communication DNS anycast & regional whois cloud hosting	76,100
IDE-2B-Communication Data network/ service monitoring & alerting	65,000
IDE-3F-Communication Root server peering & cross connect & virtual interconnect	10,000



#### **Expenses – Foundation Funded Projects**

Workstream	Activity	Expenses
3E. APNIC Academy	3E.1. Academy Product Management	731,506
3E. APNIC Academy	3E.2. Instructor-Led Training	968,493
3E. APNIC Academy	3E.3. Self-Paced Training	287,671
3E. APNIC Academy	3E.4. Community Trainers Network	919,042
3E. APNIC Academy	3E.8. Academy Product Development	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	1,871,231
4B. Research and Analysis	4B.1. Conducting research and measurements	343,000
	Total	6,362,600



### **Expenses – Meeting and Training**

- Meeting and Training expenses include all the costs incurred in running the meetings including APNIC conferences and other meeting/training events
- APNIC53 will be a virtual conference. It is not certain at the time of budgeting whether APNIC54 will be a face-to-face or virtual meeting
- Total 2022 budget provision of \$553,500 (Budget 2021: \$485,000). Major planned expenditure includes:

Budget Description	Budget 2022
HE-5C-Meeting Staff Conference	150,000
CE-3A-Meeting APNIC Conference week venue hire and catering	90,000
CE-3A-Meeting APNIC Conference Workshop week venue hire and catering	50,000
CE-3A-Meeting APNIC Conference AV rental	40,000
CE-3A-Meeting APNIC Conference Opening reception	30,000
CE-3A-Meeting APNIC Conference Closing dinner	20,000
BE-5C-Meeting Xmas and Mid Year Staff events	20,000
IDE-3C-Meeting Communities gathering post training/ events	12,000
CE-3A-Meeting APNIC Conference Workshop week closing dinner	10,000
CE-3A-Meeting APNIC Conference signage	10,000
CE-3A-Meeting APNIC Conference APIX event	10,000
CE-3A-Meeting APNIC Conference Hackathon	10,000



### **Expenses – Office Operating**

- The major costs in this item include electricity, land tax, council and water rates, cleaning and rubbish removal, air-conditioning and security.
- Total 2022 budget provision of \$455,640 (Budget 2021: \$385,430).
   Major planned expenditure includes:

Budget Description	Budget 2022
BE-5B-Office Cleaning	70,000
BE-5B-Office Electricity	60,000
BE-5C-Office Kitchen supplies and catering	55,000
BE-5B-Office Land tax	50,000
BE-5B-Office BCC rates	42,000
BE-5B-Office General maintenance and repairs	26,700
HE-5C-Office Health & Ergonomics	22,000
HE-5C-Office ECO APNIC	20,000
SE-1A-Office Customer services books periodical subscription	10,200
IDE-5B-Office Building security service	10,000
BE-5B-Office Misc furniture & decoration	10,000
BE-5B-Office Electrical repairs & testing	10,000



### **Capital Expenditure**

- Provisions for office maintenance & short-term re-modelling to support hybrid work until relocation to new premises (expected in 2 years)
- Cyclical renewal of internal IT equipment
- Network hardware replacement (servers, switches and routers)
- Provision for ongoing HRIS implementation

Budget Description	Budget 2022
BA-5C-Fittings Workspace remodeling (i)	287,500
IDA-2B-Capital RPKI HSM additional redundancy	170,000
IDA-5A-Capital Staff Laptops	160,600
DGA-4B-Capital Labs servers	123,000
HA-5C-Capital HRIS Implementation (i)	100,000
IDA-5A-Capital RPKI HSM replacement	90,000
IDA-5A-Capital IT office/ Projectors/ TVs equipment	65,000
IDA-3F-Capital IXP and Root server development	60,000
IDA-5A-Capital APNIC Archive Permanent Storage Solution	50,000
IDA-2B-Capital Network Time Server	50,000
IDA-5A Capital Network - Router/ Switch & server for Singapore Pop	50,000
IDA-5A-Capital Network storage disk upgrade	48,000
IDA-3A-Capital Conference WIFI replacement/ Network case and AV accessories	43,000
IDA-5A-Capital Office wired and wireless network upgrade	31,000
IDA-3E-Capital Training Labs server/ equipment	25,000
HA-5B-Fittings Aircon new compressors	25,000
IDA-5A-Capital NexDC and Interactive switch replacement	21,200
IDA-5A-Capital Juniper Edge Router	20,000
IDA-5A-Capital Conference Laptops	15,000
IDA-2B-Capital Dell server running proxy/ loadbalancers	10,000
IDA-5B- Fittings Office improvements/ Lighting/ Security cameras	10,000
IDA-5A-Capital Secure Network/ Server Access	10,000
BA-5B- Fittings Office furniture	5,000

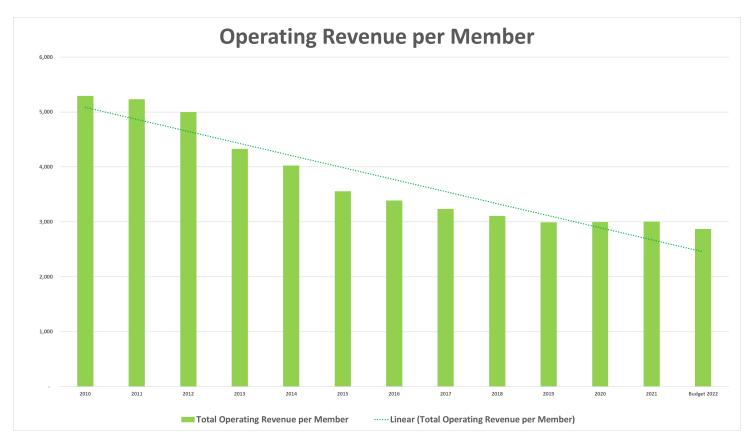


APNIC Budget 2022

# **KEY STATISTICS**

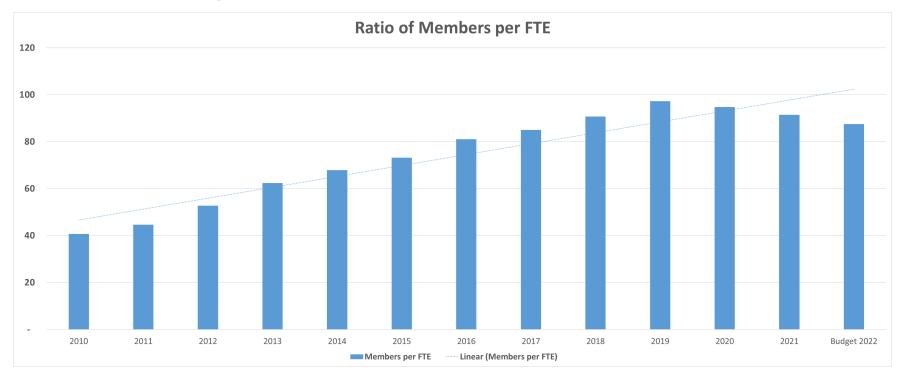


### **Revenue Analysis**





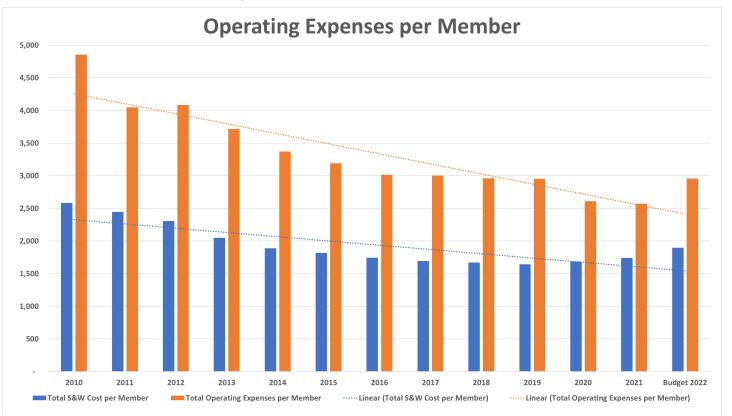
## **Efficiency Measures**



	2011	2012	2013	2014	2015	2016	2017		2019	2020	F'Cast 2021	Budget 2022
FTE	66	67	65	68	72	74	77	79	80	88	96	106
APNIC Members	2,947	3,534	4,051	4,618	5,268	5,994	6,547	7,162	7,776	8,341	8,781	9,273
Members/FTE	45	53	62	68	73	81	85	91	97	95	91	87

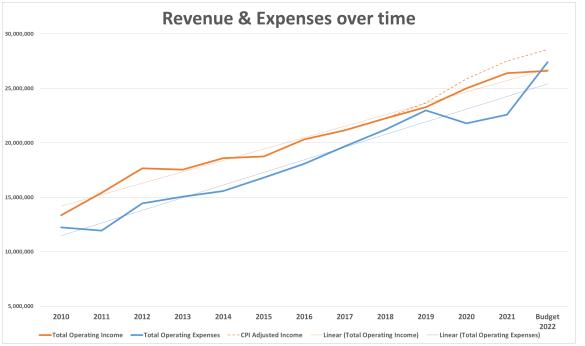


### **Expense Analysis**





### **Expenses analysis**

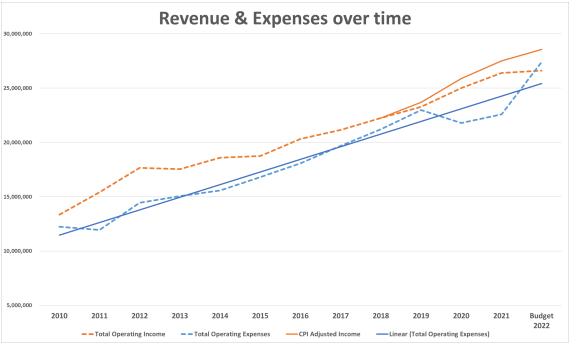


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	F'Cast 2021	Budget 2022
Operating Revenue	15,416,664	17,658,361	17,531,861	18,592,038	18,743,639	20,309,305	21,158,128	22,243,077	23,266,002	24,995,326	26,379,281	26,600,315
Operating Expenses	11,932,004	14,434,258	15,058,033	15,568,431	16,805,493	18,068,294	19,676,928	21,214,519	22,974,649	21,782,270	22,580,242	27,401,811
Surplus/(Deficit)	3,484,660	3,224,102	2,473,828	3,023,607	1,938,145	2,241,011	1,481,199	1,028,557	291,353	3,213,056	3,799,039	(801,496)
CPI Adjusted Revenue									23,684,790	25,871,568	27,500,823	28,553,513
CPI Adjusted Surplus/(Deficit)									710,141	4,089,298	4,920,581	1,151,702





## **Expenses analysis**



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	F'Cast 2021	Budget 2022
Operating Revenue	15,416,664	17,658,361	17,531,861	18,592,038	18,743,639	20,309,305	21,158,128	22,243,077	23,266,002	24,995,326	26,379,281	26,600,315
Operating Expenses	11,932,004	14,434,258	15,058,033	15,568,431	16,805,493	18,068,294	19,676,928	21,214,519	22,974,649	21,782,270	22,580,242	27,401,811
Surplus/(Deficit)	3,484,660	3,224,102	2,473,828	3,023,607	1,938,145	2,241,011	1,481,199	1,028,557	291,353	3,213,056	3,799,039	(801,496)
CPI Adjusted Revenue									23,684,790	25,871,568	27,500,823	28,553,513
CPI Adjusted Surplus/(Deficit)									710,141	4,089,298	4,920,581	1,151,702





APNIC Budget 2022

# QUESTIONS & DISCUSSION



#### Agenda Item 23 2022 Survey planning



#### 2022 MEMBER RESEARCH PROJECT

#### RECOMMENDED APPROACH & PROCESS

Prepared by Survey Matters – December 2021



#### **AGENDA**

#### Introduction

Quantitative Methodology Review

Sampling

Analysis

Supplementary Survey - Reaching non-respondents

Recommendations

Suggested approach and timeframes

Conclusion



#### INTRODUCTION

Survey Matters has been working with APNIC on the biennial Member Survey since 2016. To ensure continuous improvement, APNIC and Survey Matters have once again reviewed previous approaches and outcomes, to determine where improvements can be made without impact to the intent and purpose of the program.

#### **Qualitative process**

- In 2020, largely as a result of COVID-19, qualitative In-Depth Interviews (IDIs) were conducted with Members and key stakeholders across selected locations, with interviews conducted by video conference or telephone.
- · A total of 41 interviews were conducted across 24 economies, and for the first time all NIR Members participated
- This approach had benefits and limitations:
  - More economies could be consulted than previously, providing a greater spread of opinion. Therefore, a wider range of issues and views
    were raised
  - Fewer Members from the same economy were asked to provide their opinions, and therefore the individual views expressed were not able to be tested across a wider audience for validation
- To capitalize on the benefits, and as some mitigation for its limitations, we are recommending we use the APRICOT 2022 conference to identify and/or interview some participants



## QUANTITATIVE METHODOLOGY REVIEW

- Historically, the APNIC Survey has been conducted as a census, using an online survey distributed to all Members and stakeholders in the region.
- While this approach offers the advantage that all Members are invited to participate and provide their feedback to APNIC, there is concern that only the most 'engaged' Members take part, so the results may not be representative of the membership
- This is true of most research. Where respondents have the option not to participate there is always an element of self selection bias respondents who are either more interested in the topic (in this case APNIC performance and issues facing Members), or more involved with APNIC, or more dissatisfied are more likely to participate.
- · This does not mean that the results are necessarily always more positive as a result of this. The reverse can also be true.
- To address this, Survey Matters and APNIC have undertaken a review of the methodology used historically, including the following:
  - Representation Can you achieve a representative sample?
  - Sample Considerations Who are you trying to reach? Who can answer the questions you are asking?
  - Sample Adjustments and Analysis How can sample discrepancies be corrected for?



### REPRESENTATIVE SAMPLE

Representation in terms of a research sample indicates the degree to which the respondents in a sample accurately reflects the characteristics of the larger population.

- There can be many characteristics that could be considered in determining how representative a sample is. To ensure a research sample is representative, the underlying number of people in each group within the overall population must be known.
- For example, a sample of the Australian population can be representative by location, age and gender, because the number of people in each of these categories as a proportion of the entire Australian population is known.
- For the APNIC Survey, representation could be considered on the basis of:
  - Economy
  - Classification
  - Firm Type / Size
  - Contact Type / Contact Role

#### Self Selection Bias

- Where respondents have the option not to participate, there is always an element of self selection bias. Encouraging those who are not interested or know little about APNIC to participate is difficult, and is often not possible without significant cost.
- While ideally the Survey sample would include a mix of engaged and disengaged Members, a Member's 'engagement profile' is not something that can be included in the sample design, because it is impossible to know who is engaged member, and conversely who is disengaged.



## **SURVEY ANALYSIS**

#### **Data Weighting**

Where it is not possible to obtain a representative sample, an alternative approach is to weight the survey data at the conclusion of the survey.

- This assigns a weight to each response based on the proportion of the overall population that respondent's characteristics represent to ensure that total figures are more closely representative of the population.
- We would recommend that the data be weighted based on economy.
- There is potential to also include other variables in weighting criteria if the relevant population proportions are known by APNIC
- It is not possible to weight the data based on whether respondents are engaged, or less engaged, so weighting cannot correct for engagement status.

#### **Cross-Tabulation Analysis**

Another option is to cross tabulate or filter the survey responses to delve more deeply into the attitudes, experiences and opinions of different groups of respondents.

- If there is a sufficient sample size for these groups, it is thereby possible to understand the needs of different groups:
  - Different economies
  - Different types of firms
  - Different roles or positions within organisations
- Significance testing can be performed to ensure only 'real' differences are highlighted.
- We recommend this be undertaken across multiple categories, such as membership contact type, organisation type / size and respondent role, to provide a new lens on the survey data and provide deeper insight into what matters to different membership cohorts.



## SUPPLEMENTARY PROGRAM

### **REACHING NON-RESPONDING MEMBERS**

We recommend that APNIC consider a supplementary project, where a survey is sent or contact is made to a selection of Members who have not completed the online survey.

- Provides a way of 'classifying' Members as and allows APNIC to field a set of different questions that investigate what they know about APNIC, why they have not engaged and what services may be of value to them.
- Provides additional insight into a APNIC Members who have less involvement with APNIC.
- Suggest that a personal email approach from the APNIC Director General is made to leverage relationships with membership organisations and contacts who may traditionally have less involvement with APNIC.
- This group will be much more difficult to reach, as they have already opted not to complete the survey. As a result, due to likely lower engagement of these Members, obtaining responses may take longer than a traditional survey process and so results would be available in a supplementary survey report.
- Results to this process would provide an additional source of insight about those Members who have less knowledge of, or engagement with, APNIC. They are also likely to offer a different perspective than provided by predominantly technical contacts.



### **RECOMMENDATIONS – 2022 MEMBER SURVEY PROJECT**

### **QUALITATIVE INTERVIEWS**

- Commence the process earlier, and allow APRICOT conference attendees the opportunity to register their willingness to take part in a video-conference
- Those who register will be contacted to arrange a convenient time for the interview to take place.
- Continue to include interviews with all seven NIR Members, as in 2020
- Recommend 40 45 interviews conducted across selected economies (same as in 2020)

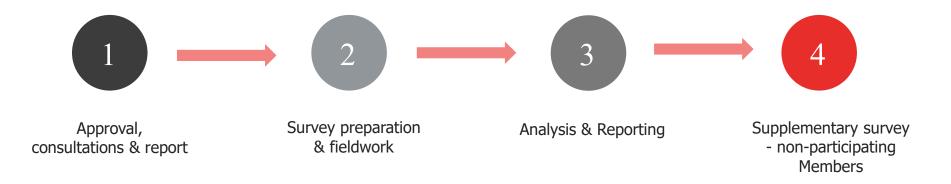
### **QUANTITATIVE SURVEY**

- Continue conducting the survey using a census approach
- Maintain an online methodology for the quantitative member survey
- Weight survey data to reflect the distribution of Members by economy and region to provide 'overall' results that are more 'representative' by region.
- To provide deeper insight into Member needs, opinions and engagement, additional analysis of survey data be undertaken by firm type, firm size, respondent role and relationship with APNIC
- Implement a new process that targets 'less engaged' Members with
  a supplementary survey to non-respondents, to provide insight into
  the thoughts, needs and opinions of those Members with less
  involvement with APNIC.

# survey matters.

## **APPROACH**

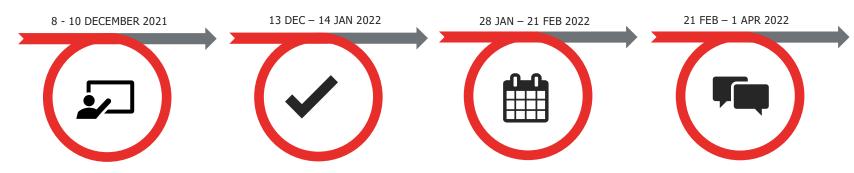
In formulating the optimum approach for APNIC for the 2022 program we have based the process around the following stages, with each phase designed to feed into the next.



Timelines for each phase are outlined in the following slides. It is worth noting that the survey preparation and fieldwork, and analysis and reporting phases are time-critical because of the complexities with language translations, and the additional analysis to be done (i.e. weighting, additional cross-tabulations and significance testing).

## 1. CONSULTATION PROCESS





#### PRESENT APPROACH & APPROVAL

Survey Matters presents recommended approach to the EC for review and discussion.

APNIC EC approves approach.

#### **LOCATION ANALYSIS & APPROVAL**

Registration process commences for interviews.

Survey Matters completes analysis and makes a recommendation to APNIC and the EC around the locations and Member types (e.g. ISP, Telco etc.) for interview.

APNIC and the EC review and amend as required and provide approval to proceed.

#### **DISCUSSION GUIDE & SCHEDULING**

Write discussion guides in collaboration with APNIC.

Review interview registrations, identify gaps in locations or Member types.

Identify participants to approach, including contact details.

Schedule interviews

#### **CONDUCT INTERVIEWS & REPORT**

Conduct interviews with NIRs, APNIC Members and other stakeholders.

Compile report with findings for use in the quantitative survey.

NB: We have allowed six weeks for this activity, as it depends on participant availability etc.

Please note all dates are estimated

## 2. SURVEY PREPARATION & FIELDWORK





#### QUESTIONNAIRE DESIGN

Using the outputs from the consultations, draft the survey questionnaire, ensuring tracking questions are included for benchmarking.

Submit to APNIC for review and further refinement.

APNIC EC provide final approval.



19 - 29 APRIL 2022

#### **PROGRAM & TEST**

Program the approved questionnaire in the software and conduct internal testing.

Provide links to APNIC for end-user testing and approval.

Upon approval, survey is placed in lock down to prevent any changes during language translations.

No changes can be made to the questionnaire after this date.



2 - 20 MAY 2022

#### LANGUAGE TRANSLATIONS

Establish the languages other than English for translation, and complete translation in survey software.

Provide links and instructions to APNIC translators to review and edit survey for accuracy.



23 MAY - 17 JUN 2022

#### **SURVEY LAUNCH**

Provide survey link to APNIC for distribution.

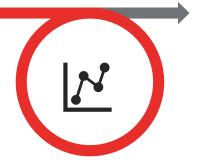
Submit weekly reports on completions, including by economy, region and language used.

Please note all dates are estimated

## 3. ANALYSIS AND REPORTING PROCESS







#### **DATA WEIGHTING & ANALYSIS**

Weight data by economy (and other segments depending on known parameters).

Examine impacts on the data compared to 2020 results.

Determine whether weighted or actual data is used for reporting.

20 JUNE - 8 JULY 2022



#### **CROSS-TABULATION ANALYSIS**

Provides deeper understanding of attitudes and opinions

Examine responses for each question by organisations type & size, respondent role or other parameters where sufficient sample is obtained.

Perform significance testing. Determine differences between segments and the extent to which these apply across the whole sample.

#### 20 JUNE - 8 JULY 2022



#### LANGUAGE CONVERSION

Convert the free text comments in other languages to English using Google translate.

Provide to APNIC for checking and editing is necessary.

#### 8 – 29 JULY 2022



#### **REPORT PREPARATION & APPROVAL**

Prepare and write draft report and submit to APNIC for review and feedback.

Incorporate feedback and provide final report, including appendices, to APNIC for publication.

Please note all dates are estimated



### PRESENT MEMBER RESEARCH FINDINGS

The findings from the Member survey will be presented at APNIC 54 in September 2021

## **SUPPLEMENTARY SURVEY (NON-PARTICIPATING MEMBERS)**

- · This will be a shorter survey, testing why a selection of Members did not participate in the Member survey
- As a guide, it will take approximately the same amount of time as the activities in Items 2 and 3 above.
- The process can start while the Member survey is in the field, with questionnaire design, programming and language translations occurring during this time
- The survey can be launched once the Member survey is closed, when we have clarity of who has not responded.

## CONCLUSION





- The approach allows the continuation of the survey process, and ensures consistency across survey waves
- Additional analysis, including data weighting and analysis by broader segments will provide a richer understanding of the thoughts, opinions and expectations of different types of Members, and provide more depth
- Conducting a supplementary, shorter survey with a selection of those who did not participate in the Member survey understanding of the reasons they don't take part, and why they have lower involvement with APNIC



## 2022 MEMBER RESEARCH PROJECT

## RECOMMENDED APPROACH & PROCESS

Prepared by Survey Matters – December 2021



## **SAMPLING METHODS**

There are two main sampling methods that could be used - a census or random sample approach.

- Historically, the APNIC Survey has used a census approach and we would recommend that this continues so that the goodwill that comes from asking for opinions is spread throughout the APNIC membership base.
- Further, using a random sampling approach also does not overcome the main concern, as even when distributed randomly, self selection bias is still likely to be present. There are also no cost advantages that would accrue from using a random sampling approach

Approach	Benefits	Disadvantages
Survey is sent to whole membership base	The goodwill that comes from asking for opinions is spread throughout the member base  Cheaper and easier to administer	Potential for self selection bias, and that only engaged Members will complete the survey. As a result, does not guarantee a representative sample     More expensive when the marginal cost of each response is greater than zero.
Survey is sent to a randomly selected subset of the membership population.      This could be a stratified random sample, so that that the distribution list includes a representative number of Members from different groups (such as economy)	Reduced cost, when the marginal cost of each response is greater than zero.      While not all Members are invited to participate, all Members have an equal chance of being included in the target group.	<ul> <li>Potential for self selection bias, and that only engaged Members will complete the survey. As a result, does not guarantee a representative sample.</li> <li>Introduces sampling error, which makes the overall results less reliable than a census method because it compounds on the non-response bias.</li> <li>Increased complexity, and cost to administer</li> <li>Need to ensure population is large enough to obtain adequate sample sizes in each group.</li> <li>Some groups within the random target group may be more difficult to contact, reducing effectiveness.</li> </ul>

## **DISTRIBUTION METHODS**

Historically, all APNIC Members have been invited to participate in an online survey with personalised invitations being sent by APNIC. Links to the survey are also posted on the website, in newsletters and social media.

- Considerations when assessing the most appropriate distribution method are outlined below.
- We recommend that APNIC continue with using online surveys, due to the cost and complexity of conducting telephone surveys across many countries and in multiple languages.

Approach	Benefits	Disadvantages
Can include personal email invitations, links in newsletters or posts on social media or website.	<ul> <li>Cheapest method</li> <li>Easier to administer, particularly in multiple languages</li> <li>Allows participants to choose a convenient completion time</li> <li>More commonly used and accepted method in many countries</li> <li>Recent APNIC Languages survey indicates respondents find it easiest to communicate with APNIC by email</li> </ul>	Easier for respondents to 'ignore' email invitations or embedded links
Can be assisted completion with a live operator, or IVR self completion.	<ul> <li>Potentially higher response rate</li> <li>May provide a way to reach less engaged Members, who may be more likely to opt to complete a phone interview</li> <li>If assisted completion, enables interviewer to ensure respondent understands the question</li> </ul>	Significantly more expensive. Effectively imposes a marginal cost per response     Not in widespread use or culturally suitable in many countries     Need to be conducted in multiple languages, adds to complexity and cost     Recent APNIC Languages survey indicates respondents find it hardest to communicate with APNIC via telephone or video-conference

# Agenda Item 25 EC election at APNIC 53

# **APNIC Executive Council (EC) Election 2022**

**APNIC 53** 

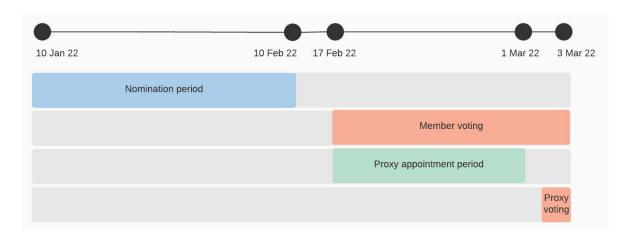


# **APNIC EC Election 2022**

- 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 dulyappointed 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 14:30 (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**

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

Similar format as the EC election during APNIC 51

Results generated by BigPulse Online Voting



## **Election Chair**

## XXX

- 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 <u>no later</u> 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 <u>election-chair@apnic.net</u>
- The Election Chair shall resolve the dispute at his discretion



# **Thanks**

