APNIC

addressing the Internet in the Asia Pacific

2021
Activity Plan and Budget

Contents

Introduction

This document explains APNIC's 2021 Activity Plan and Budget, for the information of APNIC Members and the wider community.

Under the Four Year Strategic Plan (2020-2023), adopted by the APNIC Executive Council (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 2021 Activity Plan and Budget describes activities according to the same structure; and provides under each workstream, the activities that are planned for 2021, along with budget allocations.

Feedback on the 2021 Activity Plan and Budget is welcome. If you would like to comment, please contact the APNIC Executive Council (EC).

Annual Planning Process

The APNIC EC and Secretariat receive input from the community through the biennial survey **(apnic.net/survey)**, APNIC conferences, and other interactions. These inputs guide APNIC's strategy and annual planning, and the Secretariat reports progress on its activities back to the community during the year.

APNIC Community

APNIC Survey & Community Input →

PLANNING

Four Year Strategy

Annual Activity Plan & Budget

Reporting to Community ←

REPORTING

AGM + AMM
Secretariat Reports
Survey Response Tracker
Blog updates
Annual Report
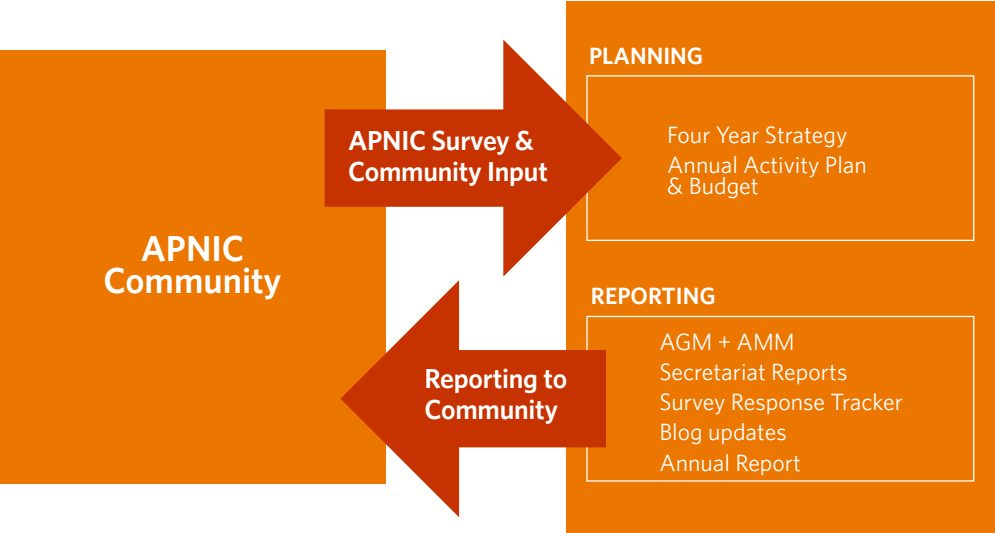
Strategic Pillars

The Four Year Strategic Plan (2020-2023) defines five 'pillars' of APNIC activity.

1. MEMBERSHIP

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

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

Ensure accountable governance of APNIC as a membership organization.

2. REGISTRY

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

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

3. DEVELOPMENT

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

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

4. INFORMATION

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

5. CAPABILITY

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

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

Sustain a healthy and resilient organization.

APNIC Workstreams

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

1. MEMBERSHIP

1A. MEMBER SERVICES
Deliver excellence in service and value to Members through active and quality engagement.

1B. MEMBERSHIP PRODUCTS
Apply best practice in development of membership products that meet Members' needs and exceed their expectations.

1C. MEMBERSHIP REPORTING
Ensure that APNIC remains fully accountable to its Members, by providing timely and accurate information about APNIC operations.

2. REGISTRY

2A. REGISTRATION SERVICES
Provide delegation and registration services for Internet numbers (ASNs, IPv4, IPv6) according to community developed policies.

2B. REGISTRY PRODUCTS
Maintain an accurate number registry and reliable registry services.

2C. POLICY DEVELOPMENT
Facilitate the open Policy Development Process to ensure resource policies in the APNIC region are developed and implemented in a neutral manner consistent with agreed rules and community expectations.

3. DEVELOPMENT

3A. APNIC CONFERENCES
Deliver engaging and relevant APNIC conferences for learning, sharing ideas and experience, professional networking, and Internet policy development.

3B. FOUNDATION SUPPORT
Provide financial and operational support to ensure the success of the APNIC Foundation.

3C. COMMUNITY ENGAGEMENT
Build and maintain close and meaningful relationships between APNIC and its various communities.

3D. COMMUNITY PARTICIPATION
Encourage awareness, diversity, participation, and leadership in APNIC processes, events, and activities.

3E. APNIC ACADEMY
Scale up training and technical assistance infrastructure with high-quality training content and curriculum.

3F. INTERNET INFRASTRUCTURE SUPPORT
Promote and support the deployment of critical Internet infrastructure and deploy tools for operational infrastructure monitoring.

4. INFORMATION

4A. INFORMATION PRODUCTS
Provide meaningful information services to the communities APNIC serves.

4B. RESEARCH AND ANALYSIS
Analyse the pressures shaping the evolution and future demands of Internet names and numbers infrastructure, and their impacts.

5. CAPABILITY

5A. INTERNAL TECHNICAL INFRASTRUCTURE
Provide stable and secure technical infrastructure to support APNIC operations and services.

5B. FINANCE AND BUSINESS SERVICES
Provide efficient and robust finance and business services and facilities to effectively support APNIC's operations.

5C. EMPLOYEE EXPERIENCE
Attract, develop and retain talented, service-oriented people to deliver APNIC's mission and exceed organization and community expectations.

5D. GOVERNANCE
Provide the legal, economic and governance framework and professional services to support APNIC's operations to minimize risk and ensure compliance and continuity.

2021 Activity Summary

The following table and chart provide a breakdown of APNIC's 2021 budget by pillar and workstream. Activities funded by the APNIC Foundation are not included in APNIC's budget below but are detailed in Appendix 4 and illustrated on page 8 for clarity.

Pillar		FTE		Expenses (AUD)		CAPEX (AUD)	
1	Membership	22.42	24%	5,441,868	21%	-	0%
2	Registry	14.21	15%	3,968,674	16%	-	0%
3	Development	26.08	28%	7,118,088	28%	118,150	4%
4	Information	6.54	7%	1,784,352	7%	80,000	3%
5	Capability	23.75	26%	7,190,675	28%	2,543,200	93%
Grand Total		**93.00**	**100%**	**25,503,657**	**100%**	**2,741,350**	**100%**

FTE

93.0

Expenses

25,503,657

CAPEX

2,741,350
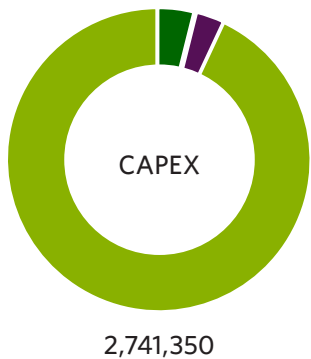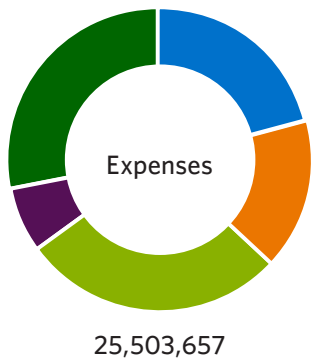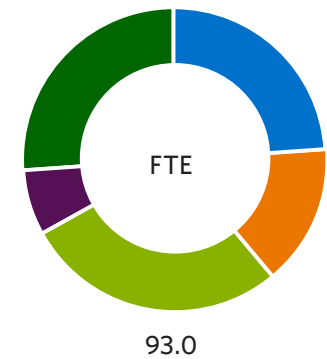
Membership

Registry

Development

Information

Capability

2021 Budget Expense Distribution

Foundation-funded activities are detailed in Appendix 4 (page 57).
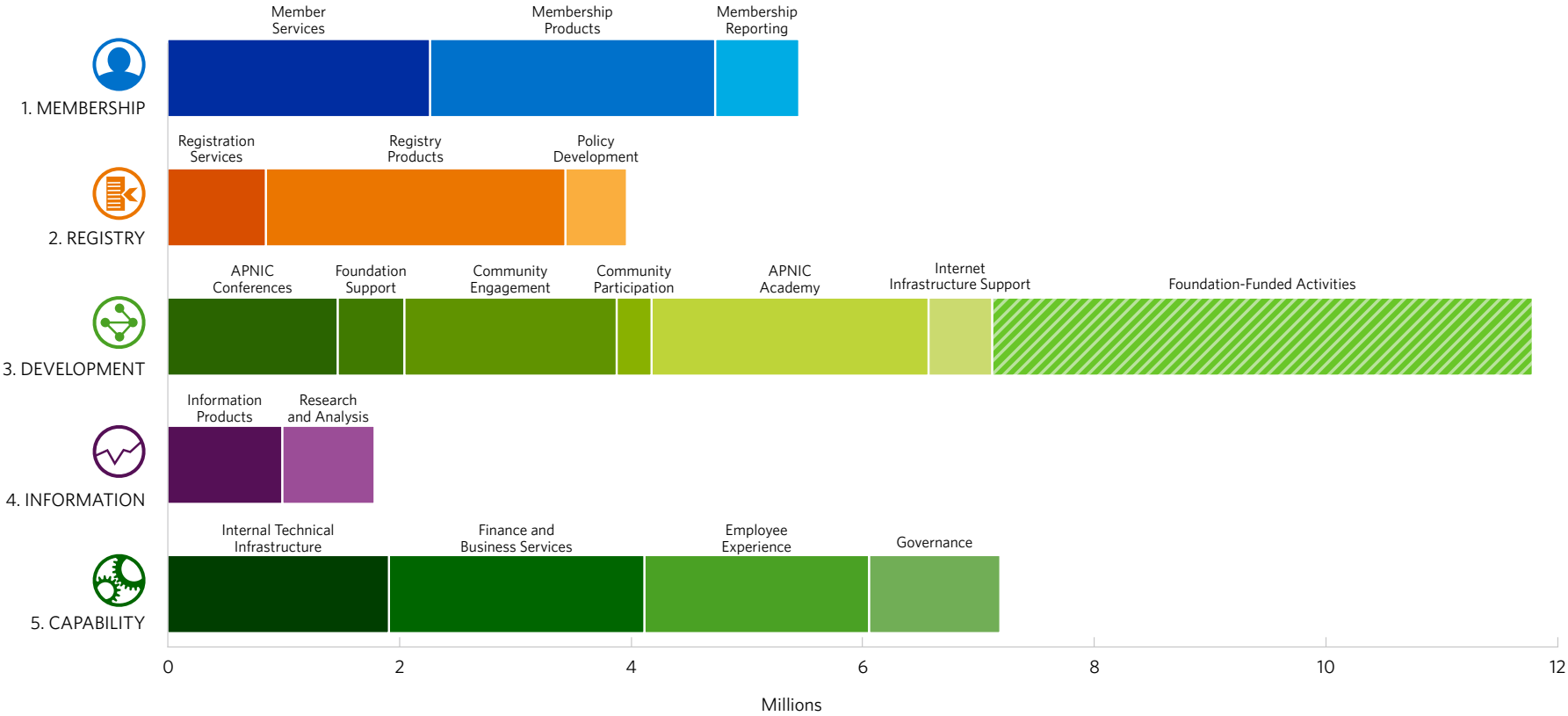
Notes on the Activities

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

Membership	Registry	Development	Information	Capability

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

'Operations' includes all ongoing activities required for continued provision of APNIC services.
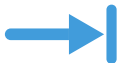
'Investments' are discrete project activities that result in new products, services, or improvements to APNIC services. Where these investments are funded by the APNIC Foundation (not Member funds), it is clearly noted.

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

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

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

	1 FTE	**2** Expenses	**3** CAPEX
Workstream total	1.10	$1,324,458	$395,000
Operations	0.20	$1,147,451	$275,000
Investments	0.90	$177,008	$120,000

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

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

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

1. MEMBERSHIP

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.

OPERATIONS

Activities	Success Measures

1A.1. Member service delivery

Ongoing service to Members in relation to APNIC products and services. In 2020, APNIC handled a quarterly average of more than 7,000 Member requests, 870 online chat sessions, and generated and reconciled more than 10,000 Member invoices.

Helpdesk automation and self-service tools will be deployed this year to manage increased workload from membership growth.

1. Maintain Helpdesk SLA of two business day response to enquiries (>99.90%).

2. Maintain service satisfaction ratings of at least 93% "excellent and above average" feedback.

3. All "poor and below average" feedback is followed-up and actioned.

4. Proactive Member service engagement in a minimum of 47 economies.

RESOURCING

	FTE	Expenses	CAPEX
Operations	8.58	$2,253,270	-
Investments	-	-	-
Workstream total	8.58	$2,253,270	-

1A. **Member Services** – continued

Activities	Success Measures
1A.2. Member experience	
Capture and analysis of Member feedback on APNIC products and services, for quality control and continuous improvement.	1. All improvement suggestions received from all feedback channels are followed up and actioned. 2. All critical and high accessibility issues are resolved. 3. Grow product and service user feedback group from 300 to 500 members. 4. One-on-one feedback sessions with at least 50 Members.
1A.3. Membership development	
Ensure that those organizations that may need APNIC products and services such as ISPs, data centres, banks and financial institutions, government agencies and enterprises can discover and access them.	1. At least eight membership development activities, in economies with low membership relative to their Internet growth potential. 2. Total number of Members to match or exceed the 2021 budget assumption of 8,940.

1B. Membership Products

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

OPERATIONS

Activities	Success Measures
1B.1. Membership product management ⟳	
Operation, development and maintenance of APNIC Membership products, including MyAPNIC, community platforms, online forms and voting systems. A new online Member Help Centre will be deployed in 2021.	1. Member Help Centre deployed. 2. Migrate 100% of APNIC Logins to a new identity management system. 3. Establish comprehensive testing infrastructure for membership product applications. 4. Deliver problem-free EC, NRO and SIG Elections via BigPulse.

RESOURCING

	FTE	Expenses	CAPEX
Operations	10.98	$2,208,861	-
Investments	1.30	$264,474	-
Workstream total	12.28	$2,473,335	-

1B. **Membership Products** – continued

INVESTMENTS

	Objectives	Benefits to Members
1B.2. Online community platform ➜|		
Validate community requirements and prototype an online platform through APNIC Academy for community members to share knowledge and experience, and participate in discussions. Complete further user research to establish if community need exists to expand the platform to other areas in future.	Identify and implement a platform to serve APNIC Academy's user communications needs. Configure and populate the platform for the initial scope of the APNIC Academy. Monitor prototype and research community for potential expansion across other APNIC services if needed.	Network operators can better learn from each other's experience. Allows network operators to find answers to common questions and issues. Replace or augment aging mailing list facilities. Promotes online engagement between the APNIC community.

1C. **Membership Reporting**

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

OPERATIONS

Activities	Success Measures
1C.1. Planning and reporting	
Develop and publish APNIC's 2021 Activity Plan and Budget, Four Year Strategy document, 2020 Annual Report, and other reports to the community at events, as part of APNIC's commitment to transparency and accountability.	1. Publishing of required reports on the day of the APNIC Member Meetings. 2. Publishing of EC Minutes within two months of each EC meeting. 3. Event Wraps published for 100% of reportable events within one month of event.

RESOURCING

	FTE	Expenses	CAPEX
Operations	1.56	$715,263	-
Investments	-	-	-
Workstream total	1.56	$715,263	-

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.

OPERATIONS

Activities	Success Measures

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

Activities	Success Measures
Provide delegation and registration services for Internet numbers according to current policies. In 2020, APNIC processed 5,400 resource delegations and transfer requests. It is assumed that this activity will continue at a similar level in 2021. More efforts will be made to promote and support IPv4 transfers, to those Members who need them.	1. Maintain Registration Services SLA of two business day response to enquiries (>99.90%). 2. Increase percentage of Members holding IPv6 address space to 70%.

RESOURCING

	FTE	Expenses	CAPEX
Operations	4.53	$842,899	-
Investments	-	-	-
Workstream total	4.53	$842,899	-

2A. **Registration Services** – continued

Activities	Success Measures
2A.2. Maintain correct and current registry data	
Encourage Members to improve and maintain accuracy and currency of their registry data.	1. Comply with NRO-defined Identifier Technology Health Indicators (ITHI) reporting. 2. Increase rate of validation by Members of registration records.
2A.3. Reclaiming unused IPv4 address space	
Identify and contact holders of unused IPv4 address space to encourage the return or transfer of unused resources; promote and support IPv4 transfers, from Members holding unused resources.	1. All unrouted historical resource prefixes identified under policy prop-017 are claimed, transferred, or returned to APNIC.

2B. **Registry Products**

Maintain an accurate number registry and reliable registry services.

OPERATIONS

Activities	Success Measures
2B.1. Internet number registry management	
Operate and manage the Internet number registry, identify areas for improvement and development, and implement changes according to needs and priorities.	1. Implement the NIR API and operate in conjunction with the NIRs. 2. Create initial design documentation for the "Next-generation Registry" by the end of Q4.

RESOURCING

	FTE	Expenses	CAPEX
Operations	9.04	$2,580,512	-
Investments	-	-	-
Workstream total	9.04	$2,580,512	-

2B. **Registry Products** – continued

Activities	Success Measures
2B.2. Registry product management ⟳	
Operate, develop and maintain APNIC Registry products including whois, RDAP, RPKI, RDNS and IRR. This includes participation in related IETF standardization work.	1. Implement a bulk update method to improve usability of the MyAPNIC Routing Management feature. 2. Improved support for "BYO IP" services in MyAPNIC. 3. Create a public specification of a general Member registry API. 4. Implement the NIR KPI monitor for RPKI.

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.

OPERATIONS

Activities	Success Measures

2C.1. Policy development

Facilitate the open Policy Development Process to ensure that APNIC resource policies are developed according to agreed rules and community expectations. This includes support for:

● Policy SIG meetings (twice per year) and mailing lists

● Exchange of policy-related information with other RIRs

● ASO Address Council Members and processes in the APNIC region

1. Achieve minimum overall satisfaction rating of 6/7 from Policy Chairs in annual review of SIG Chair support.

RESOURCING

	FTE	Expenses	CAPEX
Operations	0.64	$545,263	-
Investments	-	-	-
Workstream total	0.64	$545,263	-

2C. **Policy Development** - continued

Activities	Success Measures
2C.2. Policy implementation	
Initiate and coordinate the implementation of approved resource policies in a timely and effective manner.	1. Meet 100% of implementation timelines.
2C.3. Policy analysis	
Analyse the impact of policy proposals and inform the community accordingly; identify areas of policy or registry operations where policies may be required, or existing policies clarified by the community; and articulate in policy discussions as appropriate.	1. Deliver two policy analysis presentations at SIG meetings. 2. Publish a policy proposals analysis before each Policy SIG meeting.

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.

OPERATIONS

Activities	Success Measures

3A.1. APNIC conferences

Deliver well-organized, high-quality events for the APNIC community with consistently interesting and relevant program content. Due to ongoing travel restrictions, APRICOT 2021 will be a virtual event and APNIC 52 will likely be held wholly online.

● APRICOT 2021
(22 February – 4 March 2021)

● APNIC 52
(8 – 16 September 2021)

1. Achieve total attendance of 1,000 delegates across two conferences.

2. Achieve 6,000 remote conference session views.

3. Achieve average conference participant satisfaction survey rating of 90%.

4. Achieve average participant satisfaction of 85% for speakers.

5. Select and integrate online meeting technologies to provide a seamless online experience for APNIC 51 and 52.

RESOURCING

	FTE	Expenses	CAPEX
Operations	4.74	$1,352,760	$43,150
Investments	0.30	$113,403	-
Workstream total	5.04	$1,466,163	$43,150

3A. **APNIC Conferences** - continued

INVESTMENTS

	Objectives	Benefits to Members

3A.2. Fellowships ➔

Support participation in APNIC conferences and workshops, including "returning" and "youth" fellowships, with a continued focus on diversity.	Provide support for selected community members from the region's developing economies to attend and participate in APNIC 52. Develop an "online fellowships" program of activity if APNIC 52 becomes online-only due to COVID travel restrictions.	Diversity of participation in APNIC conferences. Opportunities for more Members to attend APNIC conferences.

3B. **Foundation Support**

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

INVESTMENTS

	Objectives	Benefits to Members

3B.1. Operational and administrative support �']

Operational and Administrative Support **Provision for support for Foundation operations and administration, according to APNIC standards and underwritten by APNIC in accordance with the AoC of 2018:** • **Three full time staff seconded to the Foundation** • **Up to a total of 1.58 FTE in operational support** • **Office space, equipment and online systems support as required**	Provide support required for smooth and reliable Foundation operations while it progresses towards self-funding.	A well-run Foundation delivering successful and valuable Internet development activities in the APNIC region.

RESOURCING

	FTE	Expenses	CAPEX
Operations	-	-	-
Investments	1.58	$571,518	-
Workstream total	1.58	$571,518	-

3C. Community Engagement

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

OPERATIONS

Activities	Success Measures
3C.1. Technical community support ↻	
Sponsor and participate in NOGs, IXPs, Peering Forums; and Research & Education activities.	1. Sponsor or participate in 30 technical community events including NOGs, Peering Forums and Research & Education events. 2. Support 20 NOGs to conduct online events if physical events are not possible. 3. Facilitate and support two new/revived NOGs in two sub-regions.

RESOURCING

	FTE	Expenses	CAPEX
Operations	6.38	$1,826,724	-
Investments	-	-	-
Workstream total	6.38	$1,826,724	-

3C. **Community Engagement** – continued

Activities	Success Measures
3C.2. Security community support	
Work with security organizations such as APCERT, FIRST, and local CERTs/CSIRTs; support the development of CERT/CSIRTs, and cybersecurity best practices.	1. Sponsor or participate in 10 security community events. 2. Support targeted development of four new/ existing CERTs/CSIRTs. 3. Deliver six presentations/training sessions on the Security Threat Sharing Platform.
3C.3. Internet organization cooperation	
Play a responsible role in the global Internet ecosystem through active collaboration with other Internet organizations such as the NRO, RIRs, ICANN, IETF, ISOC and others.	1. Participate in all NRO and 'I*' coordination meetings. 2. Participate in all NIR and RIR Open Policy Meetings.

3C. **Community Engagement** – continued

Activities	Success Measures
3C.4. Internet governance participation	
Strengthen global Internet governance by continued support for the IGF and related events at a regional and national level, such as APrIGF, Nethui and others.	1. Sponsor and participate in APrIGF and IGF with workshop proposals, MSG/MAG participation, and speaking roles. 2. Participate in at least three national Internet governance initiatives. 3. Sponsor and participate in at least two schools of Internet governance.
3C.5. Government engagement	
Participate in inter-governmental forums such as ITU, APT and APECTEL, and engage with relevant government and public safety agencies in the region, advocating for APNIC's vision and mission, technical capacity building and adoption of best practices.	1. Participate in at least 12 engagements with governments/intergovernmental organizations. 2. Participate in at least three capacity building partnerships with governments/ intergovernmental organizations. 3. Participate in six engagements with the Public Safety community.

3C. **Community Engagement** – continued

Activities	Success Measures
3C.6. External relations coordination	
Coordination of external relations and sub-regional engagements across all stakeholder segments above.	1. Facilitate one External Relations coordination retreat. 2. Facilitate 10 External Relations team coordination meetings.

3D. Community Participation

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

OPERATIONS

Activities	Success Measures

3D.1. Community-led processes

Increase awareness of, and continuing participation in, community-led APNIC processes including the PDP, SIGs (Policy, Cooperation, NIR, Routing Security), and BoFs. Both online and face-to-face participation is encouraged. Complete the SIG Guidelines review community consultation and implementation.	1. Achieve 800 online SIG participants across two conferences. 2. Grow SIG mailing lists subscribers from 1,268 to 1,325. 3. Achieve 6,000 remote conference session views. 4. Achieve attendance of 1,000 conference delegates across two conferences.

RESOURCING

	FTE	Expenses	CAPEX
Operations	1.52	$310,076	-
Investments	-	-	-
Workstream total	1.52	$310,076	-

3D. **Community Participation** - continued

Activities	Success Measures
3D.2. Online participation	
Use online tools to increase awareness and facilitate participation in APNIC services and initiatives available to benefit APNIC Members and the wider community.	1. Grow all-time Blog views from 2.6 million to 3.4 million. 2. Increase 12-month tweet engagements from 60,000 to 62,000. 3. Increase annual Facebook posts reach from 3 million to 3.2 million.
3D.3. Encouraging newcomers and diversity	
Encourage new and continuing participants from diverse backgrounds in the APNIC community — both online and face-to-face — particularly the next generation of network engineers.	1. Attract 400 newcomers to APNIC conferences. 2. Attract 125 new Blog email subscribers to reach 1,125 total. 3. Grow Twitter followers from 12,100 to 13,250.

3E. **APNIC Academy**

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

OPERATIONS

Activities	Success Measures

3E.1. Product management

Operate and maintain APNIC Academy products and services including the Academy online portal and curriculum for instructor-led and self-paced training.	1. Migrate legacy training site information to APNIC Academy and decommission previous site. 2. Develop a comprehensive curriculum of blended learning for future certification.

3E.2. Instructor-led training [Foundation-funded (partial) – see Appendix 4]

Deliver instructor-led training around the APNIC region (face-to-face, online or hybrid) to increase knowledge and skills in the community. While pandemic travel restrictions persist, this training will be provided remotely.	1. Develop two new/updated courses for instructor-led tutorials/workshops. 2. Conduct 70 instructor-led tutorials/workshops across four sub-regions. 3. Conduct 18 live webinars.

RESOURCING

	FTE	Expenses	CAPEX
Operations	10.04	$2,269,250	$15,000
Investments	0.76	$122,972	-
Workstream total	10.80	$2,392,222	$15,000

3E. **APNIC Academy** - continued

Activities	Success Measures
3E.3. Self-paced training	
Provide on-demand, self-paced online courses and virtual labs to increase knowledge and skills in the community via the APNIC Academy platform.	1. Publish four new/revised self-paced online courses. 2. Publish five new self-paced Virtual Labs (associated with multiple courses).
3E.4. Technical assistance	
Respond where possible to requests from Members for technical assistance, both online via the APNIC Academy platform and face-to-face, on a cost-recovery basis.	1. Begin conducting technical assistance via the APNIC Academy online platform.

3E. **APNIC Academy** - continued

Activities	Success Measures
3E.5. RPKI awareness and deployment support	
Increase adoption of RPKI and routing security through training, technical assistance, presentations at relevant events, online information, and encouraging deployment of RPKI ROV in IXPs.	1. Conduct eight RPKI/ROV focused instructor-led tutorials/workshops spread equally across sub-regions. 2. Achieve 90% ROA coverage for four additional economies. 3. Publish four RPKI/ROA/ROV deployment case studies.
3E.6. IPv6 awareness and deployment support	
Encourage deployment of IPv6 through training and technical assistance, and sharing of IPv6 best practices, information resources and case studies.	1. Conduct eight IPv6 deployment focused instructor-led tutorials/workshops spread equally across sub-regions. 2. Publish three IPv6 deployment case studies.

3E. **APNIC Academy** - continued

INVESTMENTS

Objectives		Benefits to Members

3E.7. Platform and curriculum development [Foundation-funded – see Appendix 4] �»

Develop integrated APNIC Academy online platform to support training and technical assistance and develop a comprehensive curriculum for self-paced and instructor-led training to help meet increasing community demand for technical skills development.	Integrate various training systems (including registration, calendar and training wiki) into the APNIC Academy platform. Establish online technical assistance functionality to connect Members with community experts. Extend multilingual support to more courses. Build a comprehensive Internet infrastructure-focused training curriculum ready for future certification.	Improved access to training and technical assistance. Improved technical capacity in the APNIC region.

3E. **APNIC Academy** - continued

	Objectives	Benefits to Members

3E.8. Community Trainers network [Foundation-funded – see Appendix 4] ➝|

Recruit, retain and develop more Community Trainers to expand the scope and effectiveness of APNIC Academy training to help meet increasing community demand for technical skills development.	Provide relevant, best practice technical training at a local level (and in local language where needed). Develop and maintain a sustainable, scalable model to support the Community Trainers network.	Local support for APNIC training and technical assistance. Increased instructor-led APNIC training in targeted economies. Options for training in local language and improved translation support for training content.

3E.9. Curriculum for non-technical audiences [Foundation-funded – see Appendix 4] ➝|

Build introductory 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.	Develop a digital educational game to increase understanding of Internet fundamentals among newcomers, government representatives and other non-technical audiences.	More informed government decision-making on issues that impact Internet operations. Better prepared fellows for APNIC conference participation. More meaningful engagements with non-technical audiences.

3F. **Internet Infrastructure Support**

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

OPERATIONS

Activities	Success Measures
3F.1. Internet infrastructure development	
Support the deployment and management of IXPs (with technical assistance), DNS anycast rootservers and ROV support, and deployment of anchors and probes for the RIPE Atlas program.	1. Support deployment of two new or upgraded IXPs. 2. Support four additional IXPs to deploy RPKI/ROV on their route servers. 3. Deploy or upgrade four RIPE Atlas anchors at various networks. 4. Deploy 12 new root server instances.
3F.2. Community Honeynet and Security Threat Sharing Platform	
Maintain and grow the APNIC Community Honeynet and Security Threat Sharing Platform to help network operators understand online adversaries.	1. Increase Community Honeynet partners from 10 to 15.

RESOURCING

	FTE	Expenses	CAPEX
Operations	0.63	$530,967	$60,000
Investments	0.13	$20,417	-
Workstream total	0.76	$551,384	$60,000

3F. **Internet Infrastructure Support** - continued

INVESTMENTS

	Objectives	Benefits to Members

3F.3. M-Root anycast instance deployment support [Foundation-funded – see Appendix 4] �

Collaborate with the WIDE Project and JPRS to accelerate anycast deployment of M-Root around the region in order to improve the DNS infrastructure in the region.	Help streamline M-Root deployment and operations by improving process and automation. Deploy new M-Root instances around the region.	Faster and more reliable DNS service. Faster and easier deployment of Root DNS anycast instances at desirable or underserved locations.

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.

OPERATIONS

Activities	Success Measures
4A.1. APNIC Blog	
Maintain the APNIC Blog's position as the Internet operations community's leading daily news and opinion portal in the Asia Pacific and beyond.	1. Grow all-time Blog views from 2.6 million to 3.4 million. 2. Average 64,000 Blog views per month. 3. Maintain Blog Guest Post ratio between 45-65%.
4A.2. Information product management	
Operate, develop and maintain APNIC information products including the Internet Directory, NetOX and DASH to improve value, ease of use, availability and performance for the APNIC community.	1. Reach 400 users per month to NetOX and DASH, and 700 users per month to the Internet Directory. 2. Achieve a net promoter score of 80+ for all products. 3. Achieve a usability score of at least 4.5/5 for all products.

RESOURCING

	FTE	Expenses	CAPEX
Operations	5.52	$985,151	-
Investments	-	-	-
Workstream total	5.52	$985,151	-

4B. **Research and Analysis**

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

OPERATIONS

Activities	Success Measures
4B.1. Conducting research and measurements	
Conduct research experiments on topics including IP addressing, routing, DNS and other critical Internet infrastructure matters.	1. Twelve research articles and reports published.
4B.2. Cooperative research opportunities	
Engage in research partnerships with other reputable organizations.	1. Conduct cooperative research with organizations such as CloudFlare, ICANN, RIPE NCC and others.
4B.3. Sharing research outcomes	
Share research insights online and at selected events to raise awareness of issues and trends that may impact Internet operations and assist policy discussions.	1. Ten research presentations delivered.
	2. At least two research presentations at APNIC conferences.

RESOURCING

	FTE	Expenses	CAPEX
Operations	1.02	$799,201	$80,000
Investments	-	-	-
Workstream total	1.02	$799,201	$80,000

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.

OPERATIONS

Activities	Success Measures
5A.1. Architecture and technical coordination	
Manage and improve APNIC's information architecture for better integration and coordination of systems and business processes.	1. Complete review of testing environment and practices.
5A.2. Network and infrastructure operations	
Manage APNIC data centre presence in the region, interconnections between the APNIC network and peer/upstream networks, appropriate peering relationships, and maintain a 24x7 Incident Response Team.	1. Complete quarterly data centre failover tests. 2. Upgrade internal infrastructure NOC from overnight 'on-call' to full 24x7 operation. 3. Maintain availability of 99.99% for critical APNIC services and 99.95% for less-critical services.

RESOURCING

	FTE	Expenses	CAPEX
Operations	6.00	$1,623,421	$353,200
Investments	0.20	$279,611	-
Workstream total	6.20	$1,903,032	$353,200

5A. **Internal Technical Infrastructure** - continued

Activities	Success Measures
5A.3. System and platform operations	
Migrate suitable services to virtualized and 'cloud' infrastructure to improve online service performance; manage IT assets including maintenance, depreciation, and licensing associated with APNIC systems.	1. Develop strategy for cloud and interconnection. 2. Complete service migration to cloud for six services/websites.
5A.4. Internal security operations	
Maintain strong internal security practices and a CSIRT to strengthen security incident response and management (relating to APNIC systems and services).	1. Achieve readiness for ISO27001 certification. 2. Track and resolve all vulnerability reports within 90 days.
5A.5. Enterprise application management	
Manage and improve enterprise applications supporting APNIC operations. In 2021, APNIC's CRM will be extended to provide the online Member Help Centre.	1. CRM roadmap established.

5A. **Internal Technical Infrastructure** - continued

INVESTMENTS

	Objectives	Benefits to Members
Further development of infrastructure and services platforms common to APNIC products to streamline product development, integration and consistency.	Develop common software services used by multiple APNIC products, including Single Sign-On improvements and event notifications. Improve product development infrastructure and techniques (DevOps) for more effective product deployment.	Standardized user experience across products. Faster access to new products and services. Improved maintenance of online infrastructure to reduce operational risk.

5A.6.   Product platform development ➙|

5B. **Finance and Business Services**

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

OPERATIONS

Activities	Success Measures
5B.1. Internal knowledge management	
Maintain effective methods, structures and tools to retain and retrieve corporate information within APNIC.	1. Successful implementation of internal knowledge management tools with increased user satisfaction and experience.
5B.2. Financial services	
Undertake transparent and efficient management and reporting of APNIC's financial affairs. Start preparations for application for new special tax ruling for 2022/23.	1. Achieve a successful audit of APNIC's annual financial accounts.

RESOURCING

	FTE	Expenses	CAPEX
Operations	10.14	$2,207,847	$30,000
Investments	-	-	-
Workstream total	10.14	$2,207,847	$30,000

5B. **Finance and Business Services** - continued

Activities	Success Measures
5B.3. Business services	
Effectively manage office facilities, administration and travel, and maintain APNIC's adherence to the ISO 9001 quality management system. Continue to undertake regular scenario testing of its Business Continuity Plan (BCP) within the risk management framework.	1. Complete annual ISO Quality management compliance audit successfully. 2. Undertake quarterly BCP scenario testing.
5B.4. Data governance and business intelligence	
Establish a comprehensive business intelligence (BI) facility that integrates data from a range of systems to produce better analysis and consistent reporting.	1. Complete APNIC-wide data model and data dictionary. 2. Generate all Secretariat report data/charts from BI system.

5C. **Employee Experience**

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

OPERATIONS

Activities	Success Measures
5C.1. Organizational development ⟳	
Optimize organizational structure for the achievement of Member-focused objectives, with clear lines of accountability.	1. Strategic goals clearly cascade to individual performance measures in performance management system in 2021. 2. Deploy agile work practices across the organization.
5C.2. Work environment management ⟳	
Ensure all places of work for APNIC staff (both the office and remote locations) are fit for purpose, and safe.	1. No WHS incidents caused by APNIC's local or remote work environments — zero fault incident reports.

RESOURCING

	FTE	Expenses	CAPEX
Operations	4.13	$1,795,224	-
Investments	0.52	$150,765	$2,160,000
Workstream total	4.65	$1,945,989	$2,160,000

5C. **Employee Experience** - continued

Activities	Success Measures
5C.3. Talent attraction and retention ⟳	
Recruit and onboard staff to fill vacancies, and provide all staff with opportunities to develop skills to meet business requirements and aid retention.	1. Maintain staff turnover rate within acceptable benchmarks of 5-15%. 2. Training budget is 100% allocated and distributed across the organization.
5C.4. People operations management ⟳	
Aim to provide policies and benefits that meet current best practice for market competitiveness and employee retention.	1. All HR policies, in particular, flexible work, parental leave and oncall allowance policies, reflect best practice.

5C. **Employee Experience** - continued

INVESTMENTS

	Objectives	Benefits to Members
### 5C.5. Agile APNIC ➡️		
Expand adoption of Agile methodologies to non-technical teams within APNIC.	Enhance collaboration, accountability and efficient workload distribution (in an environment of increased remote working).	A focus on continuously improving operations and performance.
### 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.	Use a comprehensive platform to manage a more distributed workforce including non-employees (Community Trainers, consultants).	Improved reporting on HR analytics. Reduced HR administration to focus instead on improvement initiatives.

5C. **Employee Experience** - continued

	Objectives	Benefits to Members
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 hot-desking practices.	Adapt to changing office usage patterns and staff growth in a cost-effective way that meets all health and safety obligations.	Improved organizational flexibility and productivity. Allows full benefits of a distributed workforce.

5D. **Governance**

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

OPERATIONS

Activities	Success Measures
5D.1. Executive Council (EC) support	
Facilitate EC processes and activities of the highest integrity, in line with the APNIC By-laws and Member expectations, and support EC members to perform their roles.	1. Achieve a high level of satisfaction from a survey of EC members.
5D.2. Corporate governance and legal	
Mitigate legal risk in all APNIC activities through timely legal advice, contract management, corporate governance guidance, organizational risk management and legal cooperation with other organizations.	1. Quarterly Strategic Risk Register updated and reviewed.

RESOURCING

	FTE	Expenses	CAPEX
Operations	2.77	$1,133,807	-
Investments	-	-	-
Workstream total	2.77	$1,133,807	-

Budget Summary

Activity	FTE	%	Expenses (AUD)	%	CAPEX (AUD)	%
1. Membership	**22.42**	**24%**	**5,441,868**	**21%**	**-**	**-**
1A. Member Services	8.58	9%	2,253,270	9%	-	-
1B. Membership Products	12.28	13%	2,473,335	10%	-	-
1C. Membership Reporting	1.56	2%	715,263	3%	-	-
2. Registry	**14.21**	**15%**	**3,968,674**	**16%**	**-**	**-**
2A. Registration Services	4.53	5%	842,899	3%	-	-
2B. Registry Products	9.04	10%	2,580,512	10%	-	-
2C. Policy Development	0.64	1%	545,263	2%	-	-
3. Development	**26.08**	**28%**	**7,118,088**	**28%**	**118,150**	**4%**
3A. APNIC Conferences	5.04	5%	1,466,163	6%	43,150	2%
3B. Foundation Support	1.58	2%	571,518	2%	-	-
3C. Community Engagement	6.38	7%	1,826,724	7%	-	-
3D. Community Participation	1.52	2%	310,076	1%	-	-
3E. APNIC Academy	10.80	12%	2,392,222	9%	15,000	1%
3F. Internet Infrastructure Support	0.76	1%	551,384	2%	60,000	2%
4. Information	**6.54**	**7%**	**1,784,352**	**7%**	**80,000**	**3%**
4A. Information Products	5.52	6%	985,151	4%	-	-
4B. Research and Analysis	1.02	1%	799,201	3%	80,000	3%
5. Capability	**23.75**	**26%**	**7,190,675**	**28%**	**2,543,200**	**36%**
5A. Internal Technical Infrastructure	6.20	7%	1,903,032	7%	353,200	13%
5B. Finance and Business Services	10.14	11%	2,207,847	9%	30,000	1%
5C. Employee Experience	4.65	5%	1,945,989	8%	2,160,000	79%
5D. Governance	2.77	3%	1,133,807	4%	-	-
Total	**93.00**	**100%**	**25,503,657**	**100%**	**2,741,350**	**100%**

Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

FTE Distribution

Strategic Pillar	Total FTE	Bus	Comms	DG	I&D	P&P	Prod Dev	Srvcs	SE
1. Membership	**22.42**								
1A. Member Services	**8.58**	2.44	-	0.43	-	-	0.21	5.35	0.15
1B. Membership Products	**12.28**	0.20	0.10	0.10	1.25	-	9.88	0.75	-
1C. Membership Reporting	**1.56**	0.01	0.40	0.60	-	-	0.50	0.05	-
2. Registry	**14.21**								
2A. Registration Services	**4.53**	-	0.30	0.30	-	-	0.08	3.85	-
2B. Registry Products	**9.04**	-	0.10	-	3.70	-	4.44	0.80	-
2C. Policy Development	**0.64**	-	0.30	0.06	-	-	0.03	0.25	-
3. Development	**26.08**								
3A. APNIC Conferences	**5.04**	0.41	2.85	0.05	0.39	-	1.03	0.15	0.15
3B. Foundation Support	**1.58**	0.37	0.20	0.35	0.06	0.45	0.05	-	0.10
3C. Community Engagement	**6.38**	0.06	0.30	0.31	1.95	-	0.61	1.20	1.95
3D. Community Participation	**1.52**	-	1.05	-	0.10	0.10	0.26	-	-
3E. APNIC Academy	**10.80**	0.12	-	-	9.12	-	1.06	0.25	0.25
3F. Internet Infrastructure Support	**0.76**	-	-	-	0.76	-	-	-	-
4. Information	**6.54**								
4A. Information Products	**5.52**	-	2.20	-	0.25	-	2.96	0.10	-
4B. Research and Analysis	**1.02**	-	-	0.92	-	-	0.10	-	-
5. Capability	**23.75**								
5A. Internal Technical Infrastructure	**6.20**	4.12	-	0.05	1.20	-	0.58	0.05	0.25
5B. Finance and Business Services	**10.14**	9.28	-	-	-	-	0.81	-	-
5C. Employee Experience	**4.65**	0.86	0.20	0.20	0.21	2.45	0.37	0.20	0.15
5D. Governance	**2.77**	0.14	-	2.62	-	-	-	-	-
Total	**93.00**	**18.00**	**8.00**	**6.00**	**19.00**	**3.00**	**23.00**	**13.00**	**3.00**

Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

APNIC-Funded Investments by Workstream

Activity	FTE	%	Expenses (AUD)	%	CAPEX (AUD)	%	Investment
1. Membership	**1.30**	**33%**	**264,474**	**19%**	**-**	**0%**	
1A. Member Services	-		-		-		
1B. Membership Products	1.30	33%	264,474	19%	-		1B.2. Online community platform
1C. Membership Reporting	-		-		-		
2. Registry	**-**	**0%**	**-**	**0%**	**-**	**0%**	
2A. Registration Services	-		-		-		
2B. Registry Products	-		-		-		
2C. Policy Development	-		-		-		
3. Development	**1.88**	**48%**	**684,922**	**49%**	**120,000**	**100%**	
3A. APNIC Conferences	0.3	8%	113,403	8%	-		3A.2. Fellowships
3B. Foundation Support	1.58	41%	571,518	41%	-		3B.1. Operational and administrative support
3C. Community Engagement	-		-		-		
3D. Community Participation	-		-		-		
3E. APNIC Academy	-		-		-		
3F. Internet Infrastructure Support	-		-		-		
4. Information	**-**	**0%**	**-**	**0%**	**-**	**0%**	
4A. Information Products	-		-		-		
4B. Research and Analysis	-		-		-		
5. Capability	**0.72**	**18%**	**370,377**	**30%**	**2,160,000**	**100%**	
5A. Internal Technical Infrastructure	0.2	5%	279,611	20%	-		5A.6. Product platform development
5B. Finance and Business Services	-		-		-		
	-		60,000	4%	-		5C.5. Agile APNIC
5C. Employee Experience	0.25	6%	57,289	4%	160,000	7%	5C.6. People management portal
	0.27	7%	33,477	2%	2,000,000	93%	5C.7. APNIC workspace remodelling
5D. Governance	-		-		-		
Total	**3.90**	**100%**	**1,379,722**	**100%**	**2,160,000**	**100%**	

Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

Foundation-Funded Activities

Investment

	Expenses (AUD)
3E.2. Instructor-led training	931,000
3E.7. Platform and curriculum development	1,286,000
3E.8. Community Trainers network	636,000
3E.9. Curriculum for non-technical audiences	714,000
3F.3. M-Root anycast instance deployment support	1,100,000
Total	**4,667,000**

Some numbers presented in this table may not add up precisely to the totals provided due to rounding.

APNIC's 2021 Budget Submission provides more details on the 2021 APNIC Budget and is available with the minutes of the December 2020 EC meeting.

APNIC

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