

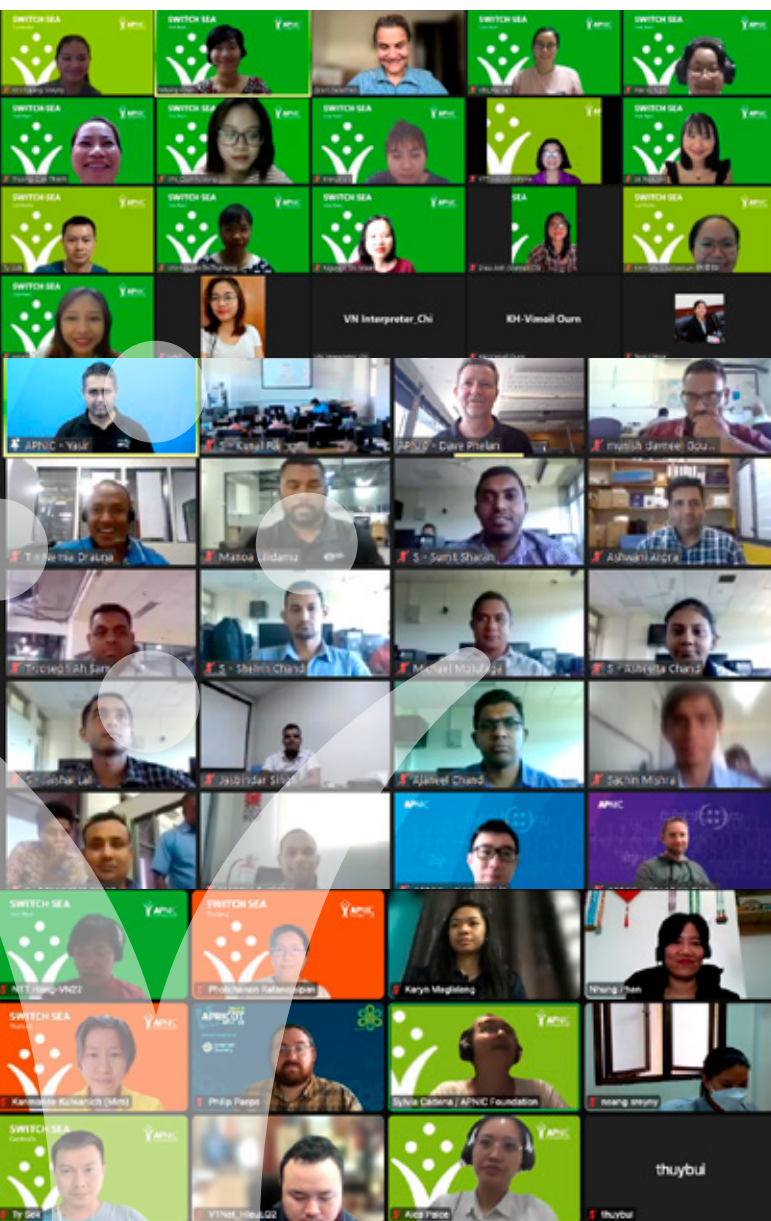


2021 ANNUAL REPORT





Contents



About the APNIC Foundation	3	SWITCH SEA.....	18
Foundation Timeline	5	Inclusion Grants.....	20
Chair’s Report	6	PacTraining Project.....	24
CEO’s Report	7	Supporting the APNIC Community	26
A New Strategy for the Foundation	8	Knowledge Grants	29
TRANSFORMATIONAL ENGAGEMENT AND PARTNERSHIPS.....	9	Foundation Sponsorships.....	32
Our Partners	9	HIGH PERFORMANCE	34
MEANINGFUL IMPACT	11	Strengthening Governance, Delivery and Impact	34
Programs.....	11	Foundation Board	35
Information Society Innovation Fund (ISIF Asia)	12	Foundation Staff.....	37
ISIF Asia Reports Published in 2021.....	13	Financials.....	40
Infrastructure Partnership Projects	15	Abbreviations and Glossary.....	49
Infrastructure Grants.....	16		



About the APNIC Foundation

The APNIC Foundation's vision is a global, open, stable and secure Internet that is affordable and accessible to the entire Asia Pacific community.

To support this vision, the Foundation's mission is to increase investment in education and training, community development, research, and related projects and activities.

In 2021, the Foundation funded 24 projects and activities in 21 economies, including work supporting greater gender and diversity (SWITCH SEA), technical training (PacTraining) and grant funding in the areas of knowledge, infrastructure and inclusion (ISIF Asia).

In addition to its own activities, the Foundation supported a wide range of training activities at APNIC and Keio University in Japan (SOI Asia and AI3). Separately, it sponsored 10 organizations and activities in such areas as cybersecurity and Internet exchange points (IXPs).

PROJECTS

-  SWITCH SEA
-  PacTraining
-  ISIF Asia





PACTRAINING

Economy	Project	Program area	Amount (USD)
Fiji, Samoa, Solomon Islands, Tonga, Vanuatu	PacTraining: Supporting Efficient Connectivity in the Pacific	Knowledge	131,603

SWITCH SEA

Economy	Project	Program area	Amount (USD)
Cambodia, Thailand, Philippines, Viet Nam	SWITCH SEA: Fostering women's technical leadership in the Internet industry in South East Asia	Inclusion	212,977

ISIF ASIA

Economy	Project	Program area	Amount (USD) *
Australia	Expand the Central Australian Desert Project to serve the Nitjipuru indigenous community in Pigeon Hole	Infrastructure	150,000
Papua New Guinea	Sustainable smart villages in rural Papua New Guinea	Infrastructure	85,000
New Zealand	Field-ready network-coded tunnels for satellite links	Infrastructure	85,000
Malaysia	Hybrid Long Range (LoRa) network for underserved community Internet	Infrastructure	85,000
Australia	Securing Software Defined Network architectures	Infrastructure	30,000
India	Connectivity Bridges: Reaching remote locations with high-speed Internet services	Inclusion	150,000
Indonesia	Local community-based Internet infrastructure development and Internet utilization in rural Indonesia	Inclusion	150,000

* Half was disbursed in 2021, the remainder to be disbursed after project milestones.

† Some sponsored organizations are outside the Asia Pacific, but their projects serve Asia Pacific economies.

Myanmar	Equal access to information society in Myanmar	Inclusion	150,000
Federated States of Micronesia	Broadband for all in Yap	Inclusion	85,000
India	Bamboo towers for low-cost and sustainable rural Internet connectivity	Inclusion	85,000
Solomon Islands	Open Accessible Space Information Systems (OASIS) data garden project	Inclusion	85,000
Philippines	Internet connection to four villages in San Isidro, Mindanao	Inclusion	30,000
Bangladesh	Inclusive and efficient access to Internet services and information for persons with disabilities in Bangladesh	Inclusion	30,000
Laos	Empowering remote agricultural communities in Laos through long-range wide area networks	Inclusion	30,000
Indonesia	Intelligent honeynet threat sharing platform	Knowledge	150,000
China	Developing a collaborative Border Gateway Protocol (BGP) routing, analyzing and diagnosing platform	Knowledge	150,000
Australia	Training and knowledge sharing: Network analysis for AI transformation	Knowledge	85,000
Sri Lanka	Bug Zero	Knowledge	85,000
India	Webinar series to support Internet Protocol Version 6 (IPv6) knowledge transfer	Knowledge	30,000
India	DIY COW: An inclusive community operated wireless kit for enabling local communications at remote locations	Knowledge	30,000
Cambodia	Cybersecurity education	Knowledge	30,000
Malaysia	Design, development and operation of a software-defined network (SDN)-based Internet exchange playground for networkers	Knowledge	30,000
22 ISIF Asia projects			
TOTAL:			1,820,000
DISBURSED IN 2021			910,000

‡ Table shows where the implementing organization is based, but the project may involve multiple economies.

§ Additional USD 1,281 to be paid in 2022.

Sponsorships †

Organization economy	Organization	Program area	Amount (USD)
United States	The Shadowserver Foundation	Knowledge	100,000
United States	Cybergreen Institute	Knowledge	100,000
Ireland	Island Bridge Networks Limited (IXP Manager)	Knowledge	29,000
United States	Internet Protocol Journal	Knowledge	25,000
United Kingdom	European Internet Exchange Association IXP database	Knowledge	17,000
Malaysia	University of Technology, Sarawak (Digital inclusion study)	Knowledge	20,000
United States	PeeringDB (database)	Knowledge	10,000
India	Digital Empowerment Foundation (CNXAPAC)	Knowledge	5,900
Thailand	AIT (AP Star Secretariat)	Knowledge	5,000
Thailand	AIT (AINTEC Conference)	Knowledge	1,000

Foundation grants ‡

Organization economy	Organization	Program area	Amount (USD)
Australia	Bond University Law Clinic	Knowledge	12,830\$

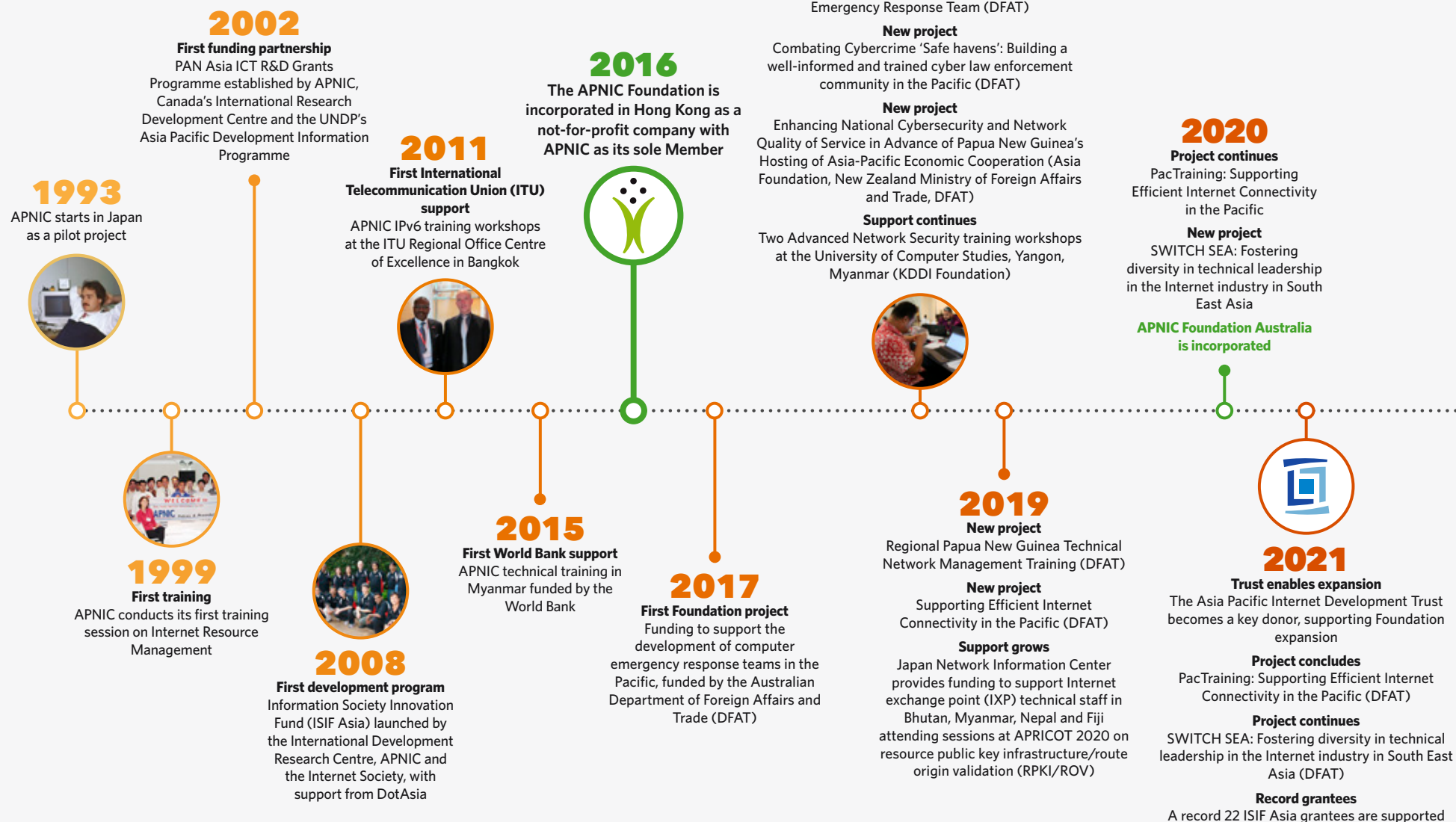
Partner organization project support

Organization economy	Organization	Program area	Amount (USD)
Asia Pacific	APNIC training related projects	Knowledge	885,038
Asia Pacific	Support for M-Root server expansion	Infrastructure	128,380
Asia Pacific	Keio University: School of Internet Asia (SOI) and Asian Internet Initiatives (AI3)	Knowledge and Infrastructure	2,062,702
TOTAL			3,076,120

The figure is the amount from the Foundation. Partner organizations have overhead costs, however, so project implementation expenditure may differ. See included financial report for further information.



Foundation Timeline





Chair's Report

ON BEHALF OF THE BOARD OF THE APNIC FOUNDATION, I AM PLEASED TO PRESENT OUR FIFTH ANNUAL REPORT.

As we emerge into a post-COVID world, the Foundation continues to grow and develop its ability to respond to and support the needs of the Asia Pacific Internet community. While 2021 was another difficult year for many, I hope most will have emerged safer and stronger.

I would like to thank my fellow board members – Efie Sumarlin, Sharad Sanghi, Jun Murai, Edward Tian and Craig Ng – for their support during a particularly challenging year and for honouring me by appointing me Chair at our 2021 Board meeting held in May. Despite the continuing impact of COVID-19, the Board managed to meet virtually twice in 2021.

Our regular annual meeting, held on 15 May, was more important than usual as it was also the first Board meeting of the new APNIC Foundation Australia. This company was registered by APNIC at the end of 2020 to more easily administer projects funded by the Asia Pacific Internet Development Trust, which is itself incorporated in Australia. From this year, the APNIC Foundation therefore comprises two separate corporate entities: the new Australian company, and the first APNIC Foundation entity established in Hong Kong in 2017. We still consider the Foundation as a single unit, with one mission, one strategic plan, one management structure, and one Board (though in fact a union of the Boards of two separate corporate entities).

A second Foundation Board meeting (a joint meeting of both company Boards) was held on 27 November. It took an important strategic decision, approving the Foundation's [first strategic plan](#).

But the most significant development of all for the Foundation

in 2021 was the arrival of an exciting new donor, the [Asia Pacific Internet Development Trust](#). The Trust is not only providing very substantial new support to the Foundation, but it is committed to doing this for the long term. My sincere thanks to the Trust for its support and commitment.

All these significant milestones could not have been achieved without the continuing support of APNIC. I thank APNIC Director General Paul Wilson and his outstanding staff for everything they have done for the Foundation in 2021.

In addition to reporting on the Foundation's busy year, this Annual Report provides the Foundation's full audited accounts for 2021, which were approved by the Board and, I am pleased to note, received an unqualified opinion from the auditors.

The Foundation grew dramatically in 2021, supporting 22 ISIF Asia grants with USD 1.8 million. We also hired new staff to manage the additional workload and enhance our already strong focus on technical training for the Internet community.

Last year marked the end of the PacTraining project, which since 2019 has been contributing to skills development in Fiji, Samoa, Solomon Islands, Tonga and Vanuatu. It was an important project generously supported by Australia's Department of Foreign Affairs and Trade (DFAT). DFAT is also funding the ongoing SWITCH SEA project, which is boosting career development and technical community participation by women and LGBTIQ+ people in Cambodia, the Philippines, Thailand and Vietnam.

These projects with the Trust and DFAT speak to the Foundation's

success in engaging with donors and highlight the path forward for the Foundation to continue its mission to “to increase investment in Internet development in the Asia Pacific region” which, in turn, supports our vision for a “global, open, stable and secure Internet that is affordable and accessible to the entire Asia Pacific community”.

I thank the APNIC Executive Council and its Chair Gaurab Raj Upadhaya, for their continued support. Their vision for the Foundation and the resources they have provided have underpinned our success. APNIC's reputation and its trusted and reliable networks across the Asia Pacific are crucial to the Foundation's success.

Finally, I offer my sincere thanks to the staff of the Foundation for their hard work and support. I would like to recognize and thank the many staff at APNIC who I know have contributed to the success of the Foundation through their own individual efforts.

Most importantly of all, I thank the Foundation's small but growing list of previous and existing donors and, of course, APNIC itself. Thank you for all for your support, vision and leadership. We look forward to working with you well into the future.

Danish A. Lakhani





CEO's Report

THE EVENTS OF 2021 UNDERScoreD THE IMPORTANCE OF THE FOUNDATION MISSION, BUT IT ALSO BROUGHT TO LIGHT THE CHALLENGES.

Despite high hopes in 2020, 2021 ended up being another stressful and challenging year. For the Foundation it was a major turning point in terms of its development and growth. The arrival of a significant and committed new donor allowed the Foundation not only to expand its investment in the Asia Pacific Internet community but also to strengthen its administrative and project management capacity.

The Asia Pacific Internet Development Trust increased the Foundation's funding from USD 780,000 in 2020 to USD 6.6 million in 2021. The support could not have come at a better time, not only for the Foundation, but also for the community it seeks to support.

It is clear now that the pandemic drove many people across the region online, as they were forced to cope with the stresses of lockdowns and the virus. The networks that enabled this massive jump in online activity were managed and operated by the **network engineers** and technical staff that are a key focus of the Foundation's work.

In 2020 we funded four new ISIF Asia grantee projects, but in 2021 we funded 22 without any sacrifice in the rigor of the approvals process or the quality of the projects. We are determined to ensure project quality, so in 2021 we began implementing comprehensive monitoring and evaluation to ensure our projects continue to have strong impact.

These ISIF Asia projects span all three program areas – Infrastructure, Inclusion and Knowledge – and include many exciting initiatives. There are simply too many for me to discuss in detail here, but we are particularly excited to be fostering the development of Border Gateway Protocol capabilities for researchers across numerous Asia Pacific economies. We have more detail on that and the other ISIF Asia projects in this report.

In 2021, with the valuable help of our partners APNIC and Australia's Department of Foreign Affairs of Trade, we were proud to wrap up our **PacTraining project**, which contributed to ongoing skills development in the Pacific, particularly for network security.

Another key milestone this year was the Board's approval of our first **Strategic Plan**, which will not only help guide us in the coming years but also clearly show donors where we are going and what we hope to achieve. To continue to ensure project quality, we began implementing in 2021 more comprehensive monitoring and evaluation, enabling us to safeguard the kind of impact we want to see.

Our ongoing work and transformation would not be possible without the support of our Board. At the annual meeting, Michael Malone stepped down as Chair and Danish Lakhani took his place. I thank Danish for his dedication to the APNIC Foundation, as I do the chairs who preceded him. I also thank the many staff members at APNIC who have pitched in to support the Foundation. Those thanks extend to the ongoing support from Director General Paul Wilson and the leadership team, and to the many staff who have assisted along the way,

with special mention going to Irene Chan and the finance team for their extensive assistance, the training team members who participated in our projects, and the APNIC Academy and the People and Productivity teams with whom we worked closely and effectively.

Finally, I thank APNIC Foundation staff for the time and effort they have put in as we become a larger organization with more project responsibilities. This has demanded an enormous amount of dedication, and I appreciate their efforts in making all this possible.

A handwritten signature in black ink, appearing to read 'D Macintosh'.

Duncan Macintosh





A New Strategy for the Foundation

The Foundation developed and approved its first strategic plan in 2021.

It provides three pillars and 13 workstreams to guide the Foundation between 2021 and 2024. The three pillars are as follow:



TRANSFORMATIONAL ENGAGEMENT

Raise awareness of Foundation activities through engagement and collaboration. Foster productive partnerships to support Internet development.

- A** Build and support targeted communities so they grow and develop sustainably and independently.
- B** Collaborate in program design and project delivery to ensure meaningful impact, shared value and ongoing improvement.
- C** Engage with the Internet development community to promote key issues and priorities.
- D** Increase and diversify the Foundation's funding and resources by engaging with existing and new partners and investors to support Internet development.
- E** Expand the Foundation's profile, influence, reputation, capabilities and expertise through proactive communications and networking opportunities.



MEANINGFUL IMPACT

Enhance levels of knowledge, infrastructure development and inclusion within the Asia Pacific technical community.

- A INFRASTRUCTURE**
Strengthen and support the deployment of Internet infrastructure and deploy tools for operational infrastructure security and monitoring.
- B INCLUSION**
Support the Asia Pacific Internet community and enable it technically and operationally by providing meaningful and efficient access to the Internet.
- C KNOWLEDGE**
Enhance technical and operational knowledge toward contributing to an informed and collaborative community.



HIGH PERFORMANCE

Deliver best practice people, finance and business systems that support the Foundation's operations.

- A** Strengthen program quality and the evidence base.
- B** Implement equitable, accurate and efficient processes and systems.
- C** Provide efficient and robust governance, finance and business services.
- D** Deliver an engaged employee lifecycle experience.



Our Partners



Asia Pacific Network Information Centre (APNIC)

APNIC is an open, membership-based, not-for-profit organization providing Internet addressing services to the Asia Pacific.

The APNIC Foundation works closely with APNIC in many ways, and the relationship goes much deeper than APNIC's key role as the sole founding Member of the Foundation. It is also a key partner when it comes to implementing projects and supporting the Foundation's operations.

APNIC assists the Foundation with human resources, finance and technical support.

The two organizations share expertise and carry out projects together. In 2021, the APNIC Foundation and APNIC wrapped up the PacTraining project, and the APNIC Foundation began to fund the operations of the APNIC Academy, as well as APNIC's Community Trainer project. The APNIC Foundation also funds activities by APNIC's training team and the development of new curricula.



Keio University: School on Internet Asia (SOI Asia)

SOI Asia, established in 2001, is a consortium with 26 partners across 11 economies who work together in the spirit of cooperation and mutual respect.

The goal of the project is to foster and support a collaborative community among universities and research institutions in Asia using evidence-based research to design resilient future societies.

It does this through a focus on education and human resource development across numerous fields, including information technology, security, marine technology, environmental issues, cultural understanding, disaster management, and entrepreneurship.

SOI Asia works with AI3 in connectivity programs and Internet research.

The APNIC Foundation assists SOI Asia in developing initiatives such as the Asia Pacific Internet Engineer (APIE) course and the Evidence-Based Approach (EBA) project. These initiatives aim to boost research and education communities toward leveraging scientific knowledge to benefit a resilient society.



Keio University: Asian Internet Interconnection Initiatives (AI3)

AI3 is a research consortium linking universities and research institutes in Asia with researchers working to develop and deploy leading-edge technologies for the Internet.

The project is developing, for eventual full implementation, resilient satellite connectivity to support research and education infrastructure and collaboration in the Asia Pacific, while at the same time sustaining connectivity during disasters and other emergencies. These objectives are being developed in collaboration with the [Arterial Research and Educational Network in Asia Pacific \(ARENA-PAC\)](#).

The APNIC Foundation and AI3 cooperate to enhance human and infrastructure capacity to ensure a global, open, secure, stable, affordable, accessible and resilient Internet in the region able to support research and education infrastructure for universities and research institutions in South East and South Asia.



Asia Pacific Internet Development Trust

The *Asia Pacific Internet Development Trust* was established to fund Internet development initiatives in the Asia Pacific region, including technical skills development and capacity building, improvements to critical Internet infrastructure, supporting research and development, and improving the community’s capability to build an open, global, stable and secure Internet.

The Trust is a joint initiative of the Widely Integrated Distributed Environment (WIDE) Project and APNIC. The Trust funds a number of Foundation projects to contribute to the shared vision of the two organizations.



Department of Foreign Affairs and Trade (DFAT) Cyber and Critical Tech Cooperation Program (CCTCP)

The CCTCP works across the Indo-Pacific to improve cyber resilience. Established as the Cyber Cooperation Program in 2016, the Program plays an important role in supporting Australia’s international cyber engagement to champion an open, free and secure Internet that protects national security and promotes international stability, while driving global economic growth and sustainable development. In April 2021, the Program was expanded to include cooperation on critical technologies.

The Foundation received funding from DFAT under the CCTCP to support its SWITCH SEA and PacTraining projects in 2021.

Our Grantees and Project Partners

The APNIC Foundation supports through grants and sponsorships the work of many different types of organizations, from small community-based organizations and social enterprises in the non-profit sector, to research centers, universities, and the private sector. These include the ISIF Asia network of grantees and awardees, whose projects cover a wide range of issues, from Internet infrastructure deployment to technical research, as well as initiatives to boost gender diversity and social inclusion. In addition, in Foundation-led projects, the Foundation works with organizations in the targeted economies at the level of project implementation. These grantees and project partners are key to our success. Find out more about who they are and the work they do in the pages of this report.



A team meeting of the SWITCH SEA project. National Coordinator Ty Sok shared a screenshot caring for his baby from another team meeting.



Programs

Under its Meaningful Impact pillar, the Foundation focuses on three key strategic themes. Each of these programs contributes to the Foundation’s vision of a global, open, stable and secure Internet that is affordable and accessible to the entire Asia Pacific community.



Infrastructure
USD 1,145,531*

7 Initiatives

- 5 ISIF Asia grants
- 1 M-Root Infrastructure project with APNIC
- 1 Partnership with AI3



Inclusion
USD 1,007,977*

10 Initiatives

- 9 ISIF Asia grants
- 1 Foundation-led Inclusion project: SWITCH SEA



Knowledge
USD 3,027,859*

25 Initiatives

- 8 ISIF Asia grants
- 1 Pacific training project with APNIC: PacTraining
- 1 Partnership with SOI Asia
- 1 APNIC training delivery program with 105 training activities delivered
- 3 APNIC Academy initiatives
- 10 Foundation sponsorships
- 1 Bond University Law Clinic



*Includes full grant figures for ISIF Asia grants and one Foundation grant, but some funding will be disbursed after 2021 upon completion of project milestones.



Information Society Innovation Fund (ISIF Asia)

ISIF Asia is the Foundation's longest running and most established program. Founded in 2008 before the start of the Foundation, ISIF Asia has sponsored and nurtured entrepreneurs, researchers, community leaders and innovative thinkers that have made important contributions to the Internet's development in the Asia Pacific.

Working with a range of donors and partners, the program has built a unique community of innovators that assist the Asia Pacific community in its ongoing development of the Internet.

In 2021, with the support of the Asia Pacific Internet Development Trust, ISIF Asia funded a record number of grantees, with 22 projects receiving support, well above previous years.

As of December 2021, ISIF Asia has supported **99 grants** and **29 awards** allocating over **USD 5.4 million** to **128 innovative** initiatives across **27 economies**. Projects range dramatically in size from large-scale collaborations across the region, to village connectivity initiatives. Funded projects have strengthened border gateway protocols for research and education networks, AI in cybersecurity, accessibility standards for visually impaired Internet users and diverse participation in Internet development, with a particular focus on gender diversity. They have provided connectivity to remote communities through a range of methods including satellites, bamboo towers and helium balloons.

ISIF Asia has received 1,972 funding applications to date.



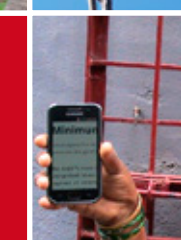
99
GRANTS



29
AWARDS



USD 5.4
MILLION



128
INNOVATIVE
INITIATIVES



27
ECONOMIES





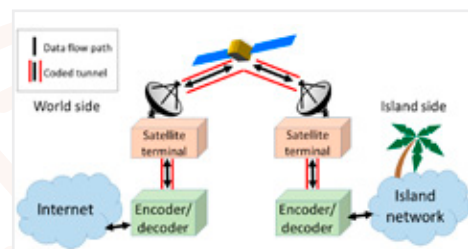
ISIF Asia Reports Published in 2021

In 2021, seven ISIF Asia grantees published technical reports under a Creative Commons license, sharing their lessons learned and research outcomes with the community.

To read the full reports, visit the [ISIF Asia website](#).

Network coding over satellite links: Scheduling redundancy for better goodput

Many Pacific islands rely on satellite Internet, using narrowband links with capacities far below the networks at either end. The satellite networks try to adjust congestion windows to what they think the link capacity is, but the information they use isn't always accurate, resulting in slower transfers. **This project** built upon two previous ISIF Asia grants to install more time-sensitive detection to improve transfers over coded tunnels.



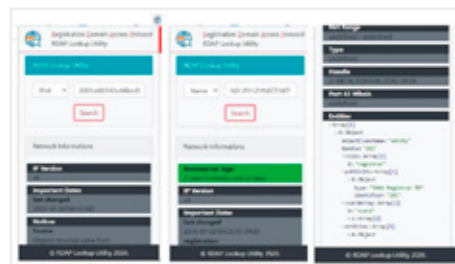
Measuring and detecting network interference in South East Asia

Threats to freedom of expression online appear to be on the rise in South East Asia. **This project** developed tools to monitor network Interference across the region through the publication of online public data collected from a variety of node tests. The data was published at the Online Observatory of Network Interference as well as through RIPE Atlas.



Implementation and utilities of RDAP for wider usability among Internet stakeholders

This project aimed to increase the adoption of the Registration Data Access Protocol (RDAP), which replaces and upgrades the APNIC Whois domain search mechanism, solving several of its problems. RDAP has many new features that include standardized query/response formats, authoritative addresses of the Regional Internet Registries (RIR), authentication and encryption.



Experiment and improve reinforcement learning algorithms to enhance anomalous network behaviour detection

A Network Intrusion Detection System (NIDS) is one barrier to cyber attacks. **This project** used AI to develop even further the cyber attack detection capabilities of NIDS. Part of the research involved comparing and contrasting different Machine Learning models to optimize the technique.





Telemetering the telltale signs of power issues affecting wireless Internet

Providing power to relays and access points in remote, geographically challenging areas is difficult. Backup power systems require “power budgeting”, which means determining how long services can stay up without the usual power supply. Bad guesses can mean high costs from, for example, unnecessary trips to change batteries. **This project** sought to address these constraints by developing an affordable cloud-based power monitoring and alert system that will be able to measure and report on the actual power charging and consumption patterns of each individual relay.



Collaborative honeynet threat sharing platform

A honeynet is a collection of “honeypots” that gather information on malicious traffic. Through previous ISIF Asia grants, this project developed a honeynet system and dashboard. **The 2021 phase of the project** added more types of honeypot sensors, and established new threat categories, threat purposes and threat phases to provide more fine-grained information.



Modelling and identifying IP address space fragmentation pressure points

Despite the ongoing depletion of unallocated Internet Protocol Version 4 (IPv4) addresses, much of the Internet has not yet transitioned to IPv6. Continuing the current practice of dividing address space into ever-smaller allocations while increasingly relying on Network Address Translation (NAT) not only presents challenges for IPv6 diffusion efforts but will increasingly create ‘pressure points’ in economies or regions where allocations are smaller. **This project** is developing a statistical model of the process, allowing countries at greatest risk to develop mitigation strategies and providing clarity to the Internet community.



Infrastructure Partnership Projects

Expanding M-Root anycast instances

Viet Nam

APNIC

USD 128,380

As part of a multi-year project, the Foundation is working with APNIC, the WIDE Project and Japan Registry Services to roll out M-Root instances throughout the Asia Pacific.

At the start of 2020, there were nine M-Root instances located in Japan, South Korea, France and the United States, with only one more in the Asia Pacific. By the end of 2020, an additional M-Root instance had been **deployed in Brisbane**, Australia, as part of the project.

In 2021, an additional M-Root instance was deployed in Hanoi, Viet Nam, with the Vietnam National Internet Exchange (VNIX).

Deploying additional M-Root instances throughout the region helps to improve Domain Name System (DNS) reachability, resilience and response times for Asia Pacific Internet Service Providers (ISPs) and end users. Increased root server distribution provides higher performance DNS lookup, independent of the user's location, as the request can be dealt with by a closer instance of the nameserver.

Asian Internet Interconnection Initiatives (AI3)

Japan - Asia Pacific

Multiple partner institutions across Asia Pacific

USD 582,151*

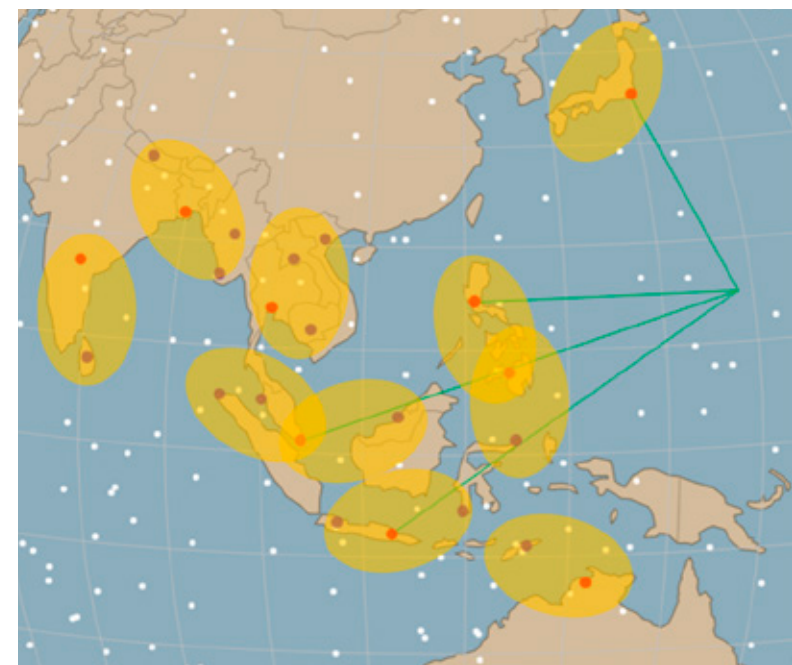
AI3 is working with the Satellite Arterial Research and Education Network in Asia-Pacific (SARENA-PAC), an initiative that aims to use satellites to connect the websites of strategic partner universities.

The SARENA-PAC project will provide services to underserved research and education organizations and will explore ways the network can be used for emergency response during disasters. In addition to these activities, AI3 is researching projects related to the Internet of things, dynamic networking and network slicing on non-terrestrial networks (which is the focus of SARENA-PAC) and, through a separately funded ARENA-PAC project, terrestrial networks.

In 2021, AI3 started assessing and analyzing satellite network providers and related legislation in the economies where partners are located. Once connected, research and education institutions in Asia, including remote or poorly connected sites, will have alternative modes of connectivity for their activities, including network-based experiments.

At the same time, partner institutions will work collaboratively in various network research activities. This will contribute to greater program visibility among Research and Education Networks (REN) communities and other strategic partners, catalyze the development of emergency-ready networks and, hopefully, stimulate collaborative initiatives that will produce results aligned with the Foundation's vision.

*SOI Asia and AI3 also shared 45,997.36 in expenditure on expenses used by both projects.



A map of the planned SARENA-PAC project. The green lines indicate terrestrial submarine cables, which are part of a planned separate ARENA-PAC project. The yellow areas are non-terrestrial planned SARENA-PAC coverage, spreading out from the red nodes.



Infrastructure Grants



Grants
5



Economies
4



Amount
USD 435,000

Sustainable smart villages in rural Papua New Guinea

Papua New Guinea

Papua New Guinea University of Technology

USD 85,000

Over 80% of Papua New Guinea's population lives in rural areas. The government is promoting agriculture and education as key aspects of its development goals but is challenged by limited connectivity caused by unreliable power supply, a lack of appropriate communications technology and a shortage of skilled people to maintain infrastructure and train users.

This scale-up grant will help develop a 'smart village' solution, seeking to address all these challenges, connecting mobile devices to enhance education and provide information in the local language, supported by a reliable power system monitored by sensors and calibrated based on Machine Learning techniques. Data traffic, together with power consumption data, will be used to develop a business model for further scaling up the smart village model.

The project will provide 10 community Wi-Fi sites as sustainable services to rural areas, and aims to cultivate partnerships between industry, community and academic institutions to develop digital literacy packages as a cost-effective way to close the digital divide for diverse user groups in the community.

Field-ready network-coded tunnels for satellite links

New Zealand

The University of Auckland

USD 85,000

This project aims to widen the circle of people able to deploy titrated coded tunnels, create reference systems on actual satellite links in the field, and demonstrate that this technology brings actual performance benefits to real users.

It builds on a previous [ISIF Asia project](#) that researched how coded tunnels over satellite links can accelerate individual packet flows. The current project will take the technology out of the lab and show users that it is ready for wider deployment.

This scale-up grant funds a partnership with Gravity Internet and Te One School on Chatham Island, with Gravity Internet being familiarized with the new technology. They will work with an engineering link to Chatham Island using a satellite link to connect to the school.



Hybrid LoRa Network for underserved community Internet

Universiti Kebangsaan Malaysia
 Malaysia
 USD 85,000

The Chini Lake, Pahang area of Malaysia has challenging terrain with thick foliage. These conditions mean that the 500 indigenous Orang Asli residents, spread across six villages, lack mobile data coverage.

Long range (LoRa) wireless technology has been proposed as a solution. The scale-up grant will help establish a LoRa Wide Area Network (LoRaWAN) gateway on a helium balloon, equipped with readily extendable mesh LoRa architecture that has text and voice messaging capabilities, as well as a cloud-based data management platform.

This will give local residents access to digital materials through a messaging system, accommodating users of all different literacy levels, as well as alerts to respond to flooding and drought situations, and an avenue for promoting local products and services through the cloud-based data management platform.



Securing Software Defined Network architectures

The University of Newcastle
 Australia
 USD 30,000

This project designs and develops techniques for detecting attacks on Software Defined Network (SDN) switches.

SDN has proven useful for handling the growing complexity of networks. It is widely deployed in Enterprise, Cloud, and Internet Service Provider networks. As SDN becomes more common, so do cyberattacks that exploit SDN vulnerabilities. There is a growing need to enhance security in SDN networks. This small grant will implement security techniques to work against different attacks on SDN switches and develop a Switch Security application for SDN controllers to detect attacks on switches.

This photograph, from one of Distant Curve's public service bushfire monitoring cameras, was taken in 2021 from one of the Internet relay sites they installed as part of their previous major project in 2016. That project has since been servicing the Australian desert communities of Engawala and Atitjere, and Distant Curve intends to use lessons learned from the project during the execution of this grant in the small Northern Territory community of Pigeon Hole (Nitjpurru).

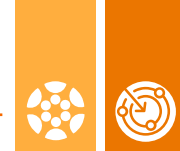
Expand the Central Australian Desert Project to serve the Nitjpurru indigenous community in Pigeon Hole

Distant Curve Remote Area Telecommunications
 Australia
 USD 150,000

Nitjpurru is a community in Australia's Northern Territory of approximately 140 people living 450 kilometres away from the nearest town. Nitjpurru is accessible only by four-wheel-drive vehicle, and access is subject to flooding during the wet season. Telecommunications infrastructure is limited to a single payphone shared by the entire community.

The [Central Australian Desert Project](#) connected the Northern Territory communities of Engawala and Atitjere with an embedded system using solar powered microwave relays. The ISIF Asia grant will fund the development of a similar system for Nitjpurru. The project will also integrate a framework for supervising various systems needed to run the relays, cost-effectively monitor them and ensure they are providing the necessary connectivity.





SWITCH SEA

Supporting Women in IT and Research: South East Asia (SWITCH SEA)



Donors
DFAT / CCTCP



Economies
Cambodia, Thailand, The Philippines and Viet Nam



Amount
USD 212,977 (2021)
Full donor contribution
2020-2022: USD 500,000

70

ACTIVE PARTICIPANTS

175

CERTIFICATIONS ACHIEVED

353

COURSES ENROLLED

57

TRAINING PROVIDERS

266

MENTORING SESSIONS COMPLETED

6

RESEARCH PROJECTS SUPPORTED

The SWITCH SEA project seeks to empower women and LGBTQI+ people who work in Internet technical roles in Cambodia, Thailand, the Philippines and Viet Nam. The goal is for participants to advance their technical skills, enjoy increased professional visibility and be recognized for their contributions.

It does this through personalized training plans in which participants receive the kind of training and professional development support they need. This may involve certified courses in particular skills, such as cybersecurity or network operations, or ongoing mentoring in both niche technical areas and more general professional skills.

Different participants are at every stage of their career. Some are seasoned network engineers and researchers who seek professional development in areas like public speaking and the publication of technical research results. Others are just starting out and seeking assistance in particular technical skills.

The project has a national coordinator for each of the four economies: Cambodia, Thailand, the Philippines and Viet Nam. Each coordinator manages the career development of the participants in that economy.



During 2021, the project had 73 participants, each pursuing their own personalized training plan. But beyond the training plans and mentoring support, the project liaises with human resources departments in each of the economies to help understand how different organizations support the professional development needs of their technical staff, in particular women and LGBTQI+ individuals, to identify better ways for the Foundation to engage.

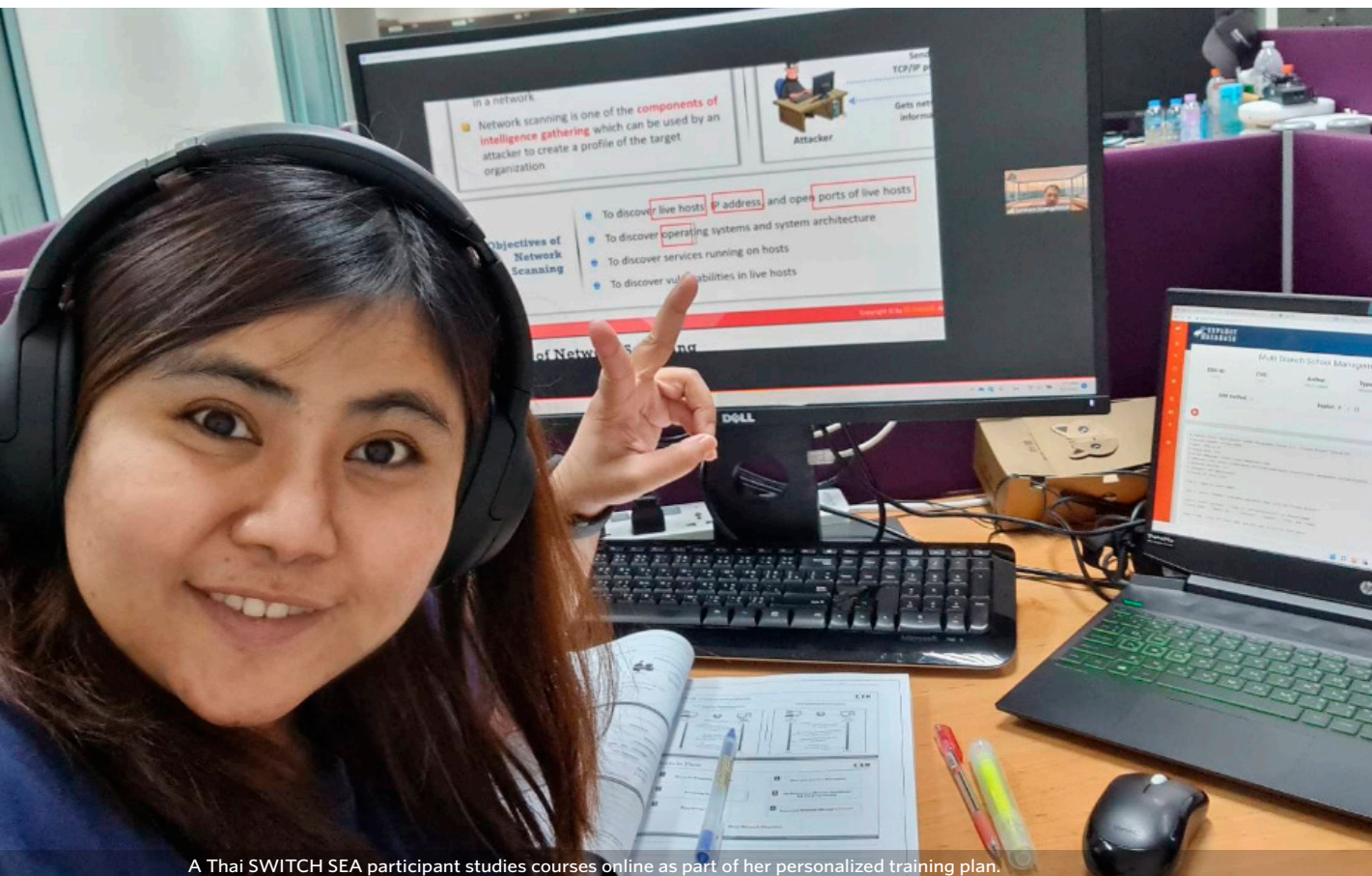
Another focus is to build professional networks and give back to the community, sharing what participants have learned and providing encouragement and advice toward their engagement as speakers at industry events. Researchers also receive support to complete their research projects and publish their results.



The project began in May 2020, but it was in 2021 that the national coordinators were recruited and training began in earnest. By June, participants had started just over half of their courses, and 21% had received certification. This increased to half the participants receiving certification by November, with 175 certificates received.

Completed courses numbered 213: 30% on security issues, 24% on Internet routing and 14% on network operations.

Among 266 mentoring sessions conducted, eight were group mentoring sessions on professional development, and 18 were technical mentoring sessions: One in Cambodia on network operations, four in Thailand on network security conducted in Thai, and 13 in Viet Nam including six group sessions and seven one-on-one mentoring sessions conducted in Vietnamese. Ten participants completed their mentoring programs.



A Thai SWITCH SEA participant studies courses online as part of her personalized training plan.

SUB-THEME: DIGITAL RIGHTS AND SOCIETY

- 01 Establishing a personal data protection standard at the regional level: Learning from the national level and development evolution
- 02 Cyber Norms Operationalization in ASEAN
- 03 Intermediary liability discussion: social media (publisher vs. non publisher) governance in Asia
- 04 Data Governance Accountability in the Pandemic
- 05 SWITCH SEA: Fostering diversity and gender empowerment in technical leadership of the internet industry in Southeast Asia

A session dedicated to the SWITCH SEA project was held at the South East Asia Internet Governance Forum.

Congratulations

The Thailand group held an online graduation ceremony to celebrate the completion of their personalized training plans.



Inclusion Grants



Grants
9



Economies
8



Amount
USD 795,000

Connectivity Bridges: Reaching remote locations with high-speed Internet services

Rural Broadband — AirJaldi

India

USD 150,000

Various Internet infrastructure initiatives have deployed technologies across parts of India using both wired and wireless Internet. However, rural areas are not easily connected, leaving some infrastructure underused, particularly large communication towers.

This impact grant will help create a hybrid 'WiFiber' system that bridges existing infrastructure and adds capability and coverage to reach users in the mostly rural state of Arunachal Pradesh with fast and affordable Internet services.

Local community-based Internet infrastructure development and Internet utilization in rural Indonesia

Common Room

Indonesia

USD 150,000

An existing partnership between Common Room, the Association for Progressive Communications and the United Kingdom's Digital Access Programme has enabled the development of the School for Community Networking in the Kasepuhan Ciptagelar region of Indonesia.

This impact grant will help the school provide necessary infrastructure for a 'build out', to extend Internet deployment and training to indigenous and other rural communities in and around seven locations.

The project will provide towers, wireless equipment, servers and training. It will also support the rollout of community-based Internet, to help demonstrate ways the Internet can benefit these communities.



Equal access to information society in Myanmar

Myanmar Book Aid and Preservation Foundation

Myanmar

USD 150,000

This project will help the Myanmar Book Aid and Preservation Foundation combine and scale up three programs: Mobile Information Literacy, Tech Age Girls Myanmar, and the Business Startup Development Program.

The Beyond Access project has already equipped 210 libraries around Myanmar with Internet, enabling 360,000 people to use a digital device for the first time. Telco Ooredoo Myanmar will invest in an additional 40 community libraries, mostly in underserved or unserved areas.

This impact grant will focus on equipping thousands of participants — primarily youth and women — at these 40 additional community libraries to develop digital literacy skills.

Bamboo towers for low-cost and sustainable rural Internet connectivity

National Institute of Technology Silchar

India

USD 85,000

This project is a collaboration among the Indian Institute of Technology Bombay (IIT Bombay), National Institute of Technology Silchar (NIT Silchar), and the Uravu non-profit collective. It will develop and promote low-cost and sustainable bamboo communication towers to expand access to broadband networks in remote and rural areas of India. The scale-up grant will fund the development of detailed instructions on how to construct bamboo towers — including bamboo selection and treatment, the testing of bamboo culms and their joints, structural design considering connectivity requirements and structural specifications, optimization, foundation design, the erection of the tower, and its maintenance. Towers will be constructed to test the proposed methods, and they will be able to be built in any region. Detailed multimedia manuals will be developed and made available on a dedicated website.

OASIS data garden project

SATSOL

Solomon Islands

USD 85,000

Some communities in Solomon Islands face challenges from a lack of electricity for digital devices and limited means to access money electronically. This means that residents have to travel to a town to collect banknotes.

This scale-up grant will fund the development and proof-of-concept testing of a 'data garden' that will supply affordable connectivity, power, and a digital payment system.

An OASIS data garden can be easily transported to any remote location in the Solomon Islands on a small boat or vehicle and will operate autonomously. The data garden will support individuals, households, businesses, schools and clinics in remote towns and villages.





Internet connection to four villages in San Isidro, Mindanao

Davao Medical School Foundation (DMSF)

Philippines

USD 30,000

This small grant project will connect four villages in the San Isidro municipality of Mindanao via Point-to-Point (P2P) data connections. A P2P connection is a closed network data transport service that traverses the public Internet but is inherently secure with no data encryption needed. A P2P network can also be configured to carry voice, video, Internet and data services together over the same P2P connection. DMSF will partner with local organizations in each village to develop local capacity for maintenance and security.

Inclusive and efficient access to Internet services and information for persons with disabilities in Bangladesh

Humanity & Inclusion

Bangladesh

USD 30,000

This project aims to assist people with visual disabilities in Bangladesh by disseminating standards on accessible web design and screen-reading software.

Around 20% of the population of Bangladesh lives under the poverty line. As Internet adoption rapidly climbs, new opportunities in employment and education are presented through the Internet. However, people with visual disabilities face added challenges to Internet accessibility.

The project, funded with a small grant, will translate visual accessibility standards into the local language and train web developers in these standards. It will also engage in policy dialogue and advocacy for people with disabilities.

Empowering remote agricultural communities in Laos through long-range wide area networks

Makerbox Lao

Laos

USD 30,000

This project leverages the possibilities offered by low-power and long-range Internet of Things solutions to bridge the technological and communication divide between urban centres and remote agricultural communities in Laos.

The small grant will help develop a prototype technology that uses long-range (LoRa) wireless networking to relay agricultural data such as soil, weather and water information from sensors in remote areas to forecasting experts, then relay their forecasts to farmers in a format that supports their work. The design considers local conditions such as the absence of power grid connections by developing solar power support, to which LoRa is ideally suited because of its low power consumption.





Broadband for all in Yap

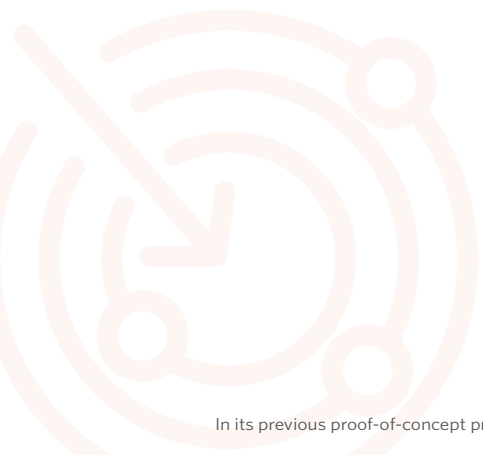
Boom! Inc

Federated States of Micronesia

USD 85,000

This project will establish an island-wide fixed wireless access broadband network on the island of Yap.

In 2017, Yap was connected to the world by high-speed submarine fibre-optic cable. There is still a lot of work to be done before this improved capacity can be used to provide broadband connectivity to island residents. In a recent **proof-of-concept project**, Boom! was able to provide high speed connectivity to a school in Yap, having obtained the necessary licence and wavelength agreements. This scale-up grant will extend coverage to other parts of Yap.



In its previous proof-of-concept project, Boom! provided broadband to Yap Catholic High School



PacTraining Project

PacTraining: Supporting Efficient Internet Connectivity in the Pacific



Donors

DFAT / CCTCP
Partnership with APNIC



Economies

Fiji, Samoa, Solomon Islands, Tonga, Vanuatu



Amount

USD 131,603 (2021)
Full donor contribution
2019-2021: USD 500,000

The Supporting Efficient Connectivity in the Pacific project, or PacTraining, was designed to help boost skills in the technical community in Fiji, Samoa, Solomon Islands, Tonga and Vanuatu. Funded by Australia's Cyber and Critical Technology Cooperation Program, the project ran from September 2019 to November 2021.

Recent submarine cable developments have made technical training more relevant than ever. The goal of the project was to build the skills of network operators in the region through workshops conducted by APNIC, each lasting from three to five days. These were supported by the online technical content available from the APNIC Academy.

A scoping study showed a preference for face-to-face training over online-only training. What participants wanted most of all, though, was a flexible approach that included both elements working together. A blended approach was adopted in which face-to-face classes combined with online training and access to

virtual labs, where participants could test their ideas on a virtual network without risking service interruptions.

Based on the topics that participants said they needed, six areas of study were chosen, all of which could be delivered by trainers using resources from the APNIC Academy: network security, Multi-Protocol Label Switching (MPLS), IPv6, DNS, routing and Network Monitoring and Management (NMM).

These courses were not the end of the learning journey. The project supported APNIC Academy as it developed 'Advanced Learning Pathways' to guide participants on how they can continue to learn.



A hybrid NMM class held in Tonga in May and June.



A hybrid MPLS class held in Fiji in April.



A zoom screenshot from the hybrid MPLS class held in Fiji in April.

4

WORKSHOPS IN 2021
(9 WORKSHOPS THROUGHOUT ENTIRE PROJECT)

242

PARTICIPANTS*

2

WOMEN IN IT EVENTS

123

CERTIFICATES FOR COURSE COMPLETION

6

TOPICS TAUGHT (NETWORK SECURITY, MPLS, IPV6, DNS, ROUTING, NMM)

93

ORGANIZATIONS REPRESENTED

*Completed at least one full day of training



Just as training was about to commence, COVID-19 arrived. Outbreaks closed borders and halted travel, making face-to-face training no longer an option. The training plan had to be changed to a fully online approach.

While the first courses were delivered online, consultations had revealed a preference for face-to-face contact, so a new hybrid approach was developed for some of the courses.

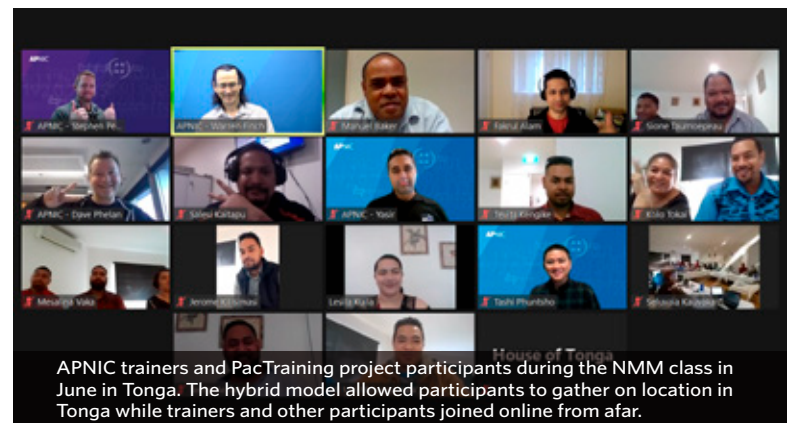
Hybrid classes allowed the participants to get together in groups if they were in the same place in a Pacific island nation, while the trainers delivered the course from Australia. This was useful for group activities and for building connections among network professionals. In one case in Fiji, to accommodate a

bigger geographical area and more participants, there were two classroom locations.

Relatively low representation of women in the Pacific technical community was another challenge faced by the project. In response, it extended learning opportunities to women active in regional groups of women in IT and others who did not attend the original course.

Two discussion events using the hybrid format proved useful to better understand the challenges women face in a male-dominated industry and expand their support networks.

“Some technical topics need labs that are full-scale topology of a typical network. Where all the colleagues are together it helps to collaborate and understand the concepts and workings of the technology better. In these pandemic times, such hybrid training gives an opportunity to meet colleagues with similar areas of interest.”
Participant, Fiji



Early 2020 until late 2021

In 2020, COVID-19 makes its presence felt worldwide. Australian states including Queensland close borders in March. PacTraining planning continues.



Oct-Dec 2019

Four consultation events face to face in, Solomon Island, Tonga, Fiji and Vanuatu.



Oct-Nov 2020

In October and November 2020, five multi-day workshops are taught online. One is on routing with RPKI, the other four are on networking security.



Mar-Nov 2021

A new hybrid approach is developed for 2021. Between March and June, three out of four of the final workshops use this method (IPv6, MPLS and NMM). Participants work face-to-face, while a trainer teachers from afar. The final workshop in August (SDN) is taught online, then two Women in ICT events in November use the hybrid method.

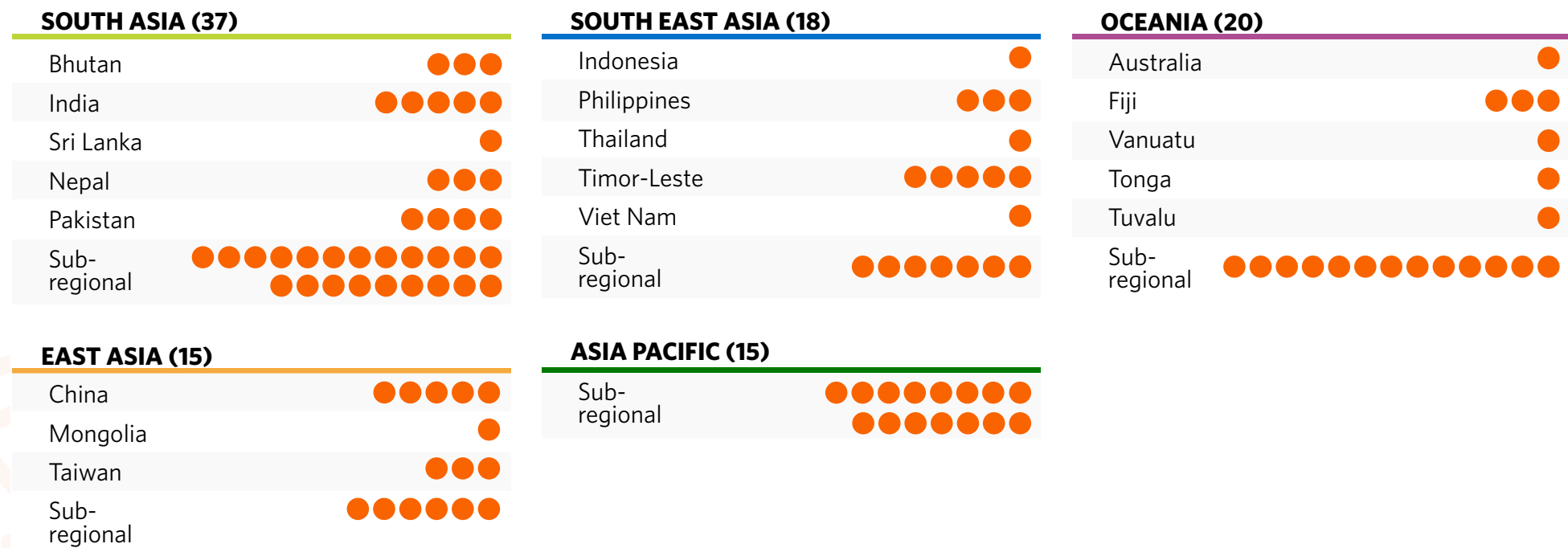


Supporting the APNIC Community

APNIC Training Delivery

APNIC
Asia Pacific
USD 293,867*

The Foundation supports many of APNIC's training activities. Among 105 training activities supported in 2021, 15 were open to the entire Asia Pacific, with the others specific to particular economies or sub-regions.



*The figure is the amount from the Foundation. Partner organizations have overhead costs, however, so project implementation expenditure may differ.

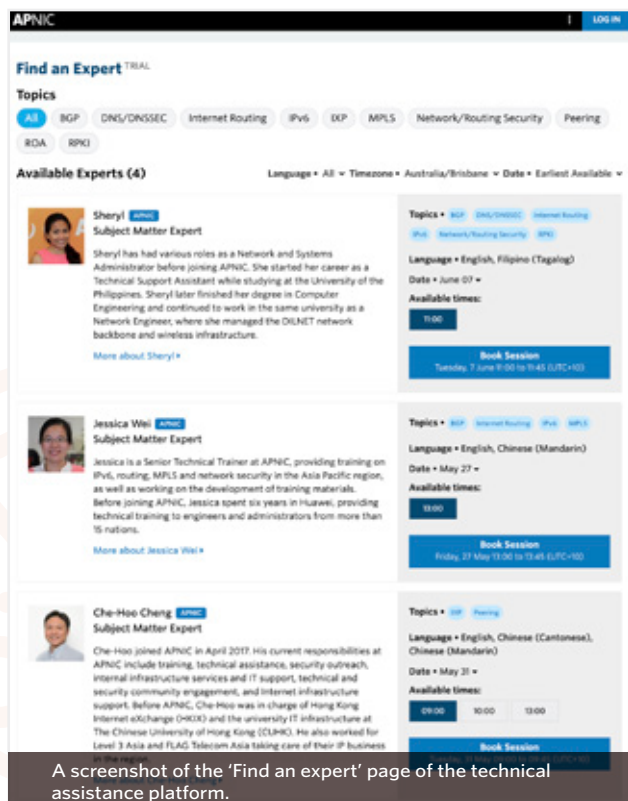


Platform and curriculum development

APNIC
Asia Pacific
USD 282,929*

The APNIC Foundation supported the APNIC Academy in the development and launch of its new technical assistance platform, which provides more personalized support to Asia Pacific organizations with specific technical problems.

This funding also supported translation for online video courses.



A screenshot of the 'Find an expert' page of the technical assistance platform.

Curriculum development for non-technical audiences

APNIC
Asia Pacific
USD 154,214*

The APNIC Foundation is supporting APNIC in its design of curriculum items to help non-technical audiences understand how the Internet works. This is important, not just for people entering the industry, but for groups such as policymakers and university students.

One aspect of this curriculum development has been the design of the IPGO game, which was first developed by APNIC in 2016.

IPGO is a cooperative, interactive and fun card game to explain core Internet concepts, such as packet-switching, interconnection, routing, IP addresses and the Domain Name System (DNS). Players assume the roles of network operators and users to connect 256 devices with one another.

To do that, they must build networks, route packets, assign IP addresses to their devices, test different routing paths, resolve domain names and fill up routing tables. The teaching goal of IPGO is to explore how all these components of the Internet relate to one another.

In 2021, IPGO received support to be transformed from a card game into a digital game. A team of instructional designers was appointed in May, and a procurement process selected a game designer. Workshops were held with target audience groups, and a minimum viable product is scheduled for delivery in 2022.

*The figure is the amount from the Foundation. Partner organizations have overhead costs, however, so project implementation expenditure may differ.



APNIC staff demonstrate IPGO at an Asia Pacific Internet Governance Academy (APIGA) event in 2018.



Supporting APNIC community trainers

APNIC
Asia Pacific
USD 154,028*

In 2021, the APNIC Foundation started funding APNIC’s network of community trainers. Community trainers are active members of the community who receive assistance to help train their peers, primarily in their own economy.

In 2021, the number of community trainers increased to 30. In total, 28 community trainers in 14 economies were engaged for 68 instructor-led online training events.

Work began in 2021 on a retained community trainer network to enable better and more localized training support in the future using a retention model for the trainers.

School on Internet (SOI Asia)

Multiple partner institutions across Asia Pacific
Japan, Asia Pacific
USD 1,094,207**

In 2021, SOI Asia started developing, in collaboration with a number of other leading technical organisations and partners in Japan, Asia Pacific Internet Engineer (APIE) program, which was launched in May 2022. The program consists of self-paced online learning components and hands-on and community building opportunities in face-to-face projects.

SOI Asia uses the methodology employed the evidence-based approach (EBA). Using EBA, SOI Asia develops capacity building programs to help solve emerging issues in Asia.

SOI Asia is also developing a common learning platform among partner institutions to support the capacity building programs described above with a community-based research framework.

EBA was used to test and develop new possibilities for research fieldwork in times of travel restrictions and social distancing. In addition to the regular field trips, the EBA approach helped introduce new online content and virtual reality technology to field work at Minamata. These activities are focused on resolving stigma associated with historical industrial mercury poisoning in the area.



*The figure is the amount from the Foundation. Partner organizations have overhead costs, however, so project implementation expenditure may differ.

** The figure shows project expenditure without organization overhead. SOI Asia and AI3 also shared an additional USD 45,997.36 in expenditure on expenses used by both projects.



Korry Luke (left) and Foundation Board Member Jun Murai (right) are hosts of the APIE course. Luke is a grad student at Keio University.



Knowledge Grants



Grants
8



Economies
7



Amount
USD 590,000

Intelligent honeynet threat sharing platform

Swiss German University
Indonesia
USD 150,000

This project will fully extend the design of the existing [Honeynet Threat Sharing Platform](#) to provide a broader range of honeypot support, with intelligently categorized and correlated threat data enabling organizations to share and exchange the threat information with other organizations in a consistent format.

This impact grant will support a partnership between Swiss German University, Badan Siber & Sandi Negara (Indonesia's National Cyber and Crypto Agency), and the Indonesia Honeynet Project.

A range of economies are participating in the project, including Bangladesh, Brunei, Cambodia, Myanmar, Papua New Guinea, Sri Lanka, Timor Leste and Viet Nam.

Two [previous ISIF Asia grants](#) supported the development of the Honeynet Threat Sharing Platform, to link honeypots together in a honeynet that collects information on malicious Internet traffic for a [public dashboard](#). To facilitate cooperation among participants, the Cyber Security Community Information Sharing and Analysis Center ([CSC-ISAC](#)) was also established.

The project involved four types of honeypot: Cowrie (secure shell protocol honeypots), Dionaea (multi-service honeypots), Elastichoney, and Conpots (industrial control honeypots).

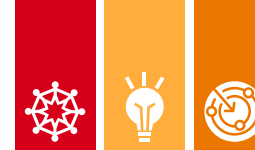
Developing a collaborative BGP routing, analyzing and diagnosing platform

Tsinghua University
China
USD 150,000

This project is a collaboration between National Research and Education Networks (NRENs) and research universities in the Asia Pacific to build Border Gateway Protocol (BGP) capacity and trust in these networks. Currently, national research and education networks in the Asia Pacific have no large-scale cooperative monitoring system to mitigate the risk of BGP routing or any collaborative system for BGP hijacking.

An earlier but ongoing project developed a small-scale looking glass platform and BGP routing collection platform. This impact grant will expand the platform to a system to detect and mitigate BGP hijacking and foster the emerging community overseeing national research and education network operations and security. In addition, the team will analyze the robustness of routing in the Asia Pacific region and suggest how cooperative interconnections could make routing more reliable.

The organizations involved include [CERNET](#) (China), [SingAREN](#) (Singapore), [ThaiREN](#) (Thailand), [BdREN](#) (Bangladesh), [LEARN](#) (Sri Lanka), [AfgREN](#) (Afghanistan), [MYREN](#) (Malaysia), [NREN Nepal](#) (Nepal), [APAN-JP](#) (Japan), [ERNET](#) (India), [DOST-ASTI/PREGINET](#) (Philippines), [HARNET/JUCC](#) (Hong Kong), Gottingen University (Germany), [Surrey University](#) (UK), and [Beijing University of Posts and Telecommunication](#) (China).



Bug Zero

SCoRe Lab

Sri Lanka

USD 85,000

Bug bounties are rewards that organizations offer to those who are the first to report a problem in their software. This helps them stay ahead of emerging security vulnerabilities.

Bug bounty platforms have helped many organizations in advanced economies worldwide, but South Asia has been hesitant to embrace them. That said, SCoRe Lab in Sri Lanka, equipped with empirical research data on published results, has started a bug bounty platform there called [Bug Zero](#).

This scale-up grant will promote bug bounties as effective tools for organizations and as good economic opportunities for youth and will encourage inclusion in an area that has generally been dominated by males.

Training and knowledge sharing: Network analysis for AI transformation

TeleMARS

Australia

USD 85,000

Research funded by a [previous ISIF Asia grant](#) demonstrated that artificial intelligence (AI) techniques can be used to resolve problems when detecting cyberattacks. This scale-up grant will help implement that work on a larger scale. This will involve strengthening knowledge sharing across Network Operator Groups (NOGs) and Computer Emergency Response Teams (CERTs), developing training and mentoring resources, and improving professional capabilities in the areas of diagnosis, monitoring and analysis of historical datasets.

Webinar series to support IPv6 knowledge transfer

India Internet Engineering Society (IIESoc)

India

USD 30,000

This project will continue a series of webinars that have helped enterprises develop IPv6 skills, supported by ISIF Asia through a [2020 grant](#).

It can be difficult to encourage enterprises to adopt IPv6. One issue is a lack of understanding about the technical aspects of IPv6 among some enterprise technicians. Sometimes technicians seek training, but management does not always see the business case for adoption. This small grant will continue and expand a previous series of webinars supported by ISIF Asia that have helped enterprises develop IPv6 skills, in an effort to combat a cycle of misinformation that makes enterprises hesitant to adopt IPv6.





DIY COW: An inclusive community-operated wireless kit to enable local communications at remote locations

Servelots Infotech
India
USD 30,000

Using lessons learned during remote mentoring for young women in COVID-19 lockdowns, this project will create a do-it-yourself (DIY) kit that will allow people with no Internet access to set up a wireless access point with a local access server.

Establishing network connections in remote communities is difficult, and ISPs don't always see a commercial case for establishing Internet services in small areas. This project funds the creation of kits that can be immediately deployed to connect these communities through Community-Owned Wireless (COW) without relying on any existing Internet connection.

This small grant will help develop kits that allow for the rapid establishment of a server capable of hosting applications that can immediately be used by the community. The kit contains all the necessary instruction materials to be set up without an Internet connection. It can then be connected to the Internet if and when an Internet gateway becomes available. Set-up materials can easily be adapted to other languages.



Cybersecurity education

Passerelles Numériques Cambodia
Cambodia
USD 30,000

This project will create fun and accessible online learning content on security issues faced by the public and organizations while navigating the Internet. Cambodia is rapidly digitizing, due in part to the rapid adoption of smartphones. However, with increased Internet adoption comes an increase in cyber threats. The Cambodian government is currently in discussions to establish a cybercrime law.

In the meantime, there is a need for greater cybersecurity awareness. This project is a partnership between NGOs Passerelles Numériques Cambodia and The Foundry. It will develop simple interactive videos and quizzes to test awareness and develop public knowledge about security threats users can encounter in their daily lives. This project, funded with a small grant, focuses on youth and women facing digital literacy challenges.

The DIY COW project will create kits that can make the establishment of Community Owned Wireless (COW) easier. The image is from a [previous COW Mesh project](#) by Servelots Infotech in Karnataka, India.

Design, development and operation of an SDN-based Internet exchange playground for networkers

University of Malaya
Malaysia
USD 30,000

Network operators have access to a variety of technical training programs. Some include the use of simulations, which are useful to put theory into practice but can be limited to simple configurations for experiments.

This small grant will help build on existing training programs by developing an 'Internet exchange playground' using Kubernetes, an open-source system for automating the deployment, scaling and management of containerized applications. A Kubernetes cluster can help introduce SDN-based BGP, RPKI and RDAP knowledge. The Kubernetes nodes will be scattered across different economies, allowing participants to experiment with cross-border network topologies. It will allow for the use of Virtual eXtensible Local Area Network (VXLAN) and SDN controllers in a Wide Area Network (WAN) environment.

To enhance access, there will be four online trainings, tutorials and seminars aimed at fostering participation, particularly among women. The project will encourage participation from Bhutan, Indonesia, Laos, Malaysia, Myanmar, Singapore, Taiwan and Thailand.



Foundation Sponsorships

In 2021, the Foundation continued to sponsor organizations that assist the Asia Pacific Internet community. Some of these organizations were based outside of the Asia Pacific, but their projects directly benefited the Asia Pacific Internet community. A total of USD 312,900 was provided in sponsorships to organizations.

CyberGreen Institute

United States

USD 100,000

Global non-profit and collaborative **organization** conducting activities focused on helping to improve the health of the global cyber ecosystem.

Shadowserver Foundation

United States

USD 100,000

Non-profit security **organization** working globally to make the Internet more secure by collecting threat data, providing free daily remediation reports, and cultivating strong reciprocal relationships with network providers, national governments and law enforcement.

Island Bridge Networks Limited

Ireland

USD 29,000

IXP Manager is helping to build secure, reliable and standards-compliant IXPs globally, providing full stack management platforms.

The Internet Protocol Journal

United States

USD 25,000

Publisher of high-quality research papers produced by academics, engineers and invited contributors on a variety of topics related to Internet Protocol technology.

University of Technology, Sarawak

Malaysia

USD 20,000

This study assisted the **university** with a study into digital inclusion policy.

IXPDB

United Kingdom

USD 17,000

An authoritative, comprehensive and public **source** of global data related to IXPs that collects data directly from IXPs through a recurring automated process.

PeeringDB

United States

USD 10,000

A freely available, user-maintained global **database** of networks, and the go-to location for interconnection data.

Digital Empowerment Foundation

India

USD 5,900

This sponsorship was to support the Community Network Exchange Asia Pacific (**CNXAPAC**) event in India.

Asian Institute of Technology

Thailand

USD 5,000

Sponsorships of the **AP Star** Secretariat for organizing twice yearly meetings of Asia Pacific community Internet organisations, such as the Internet Society (ISOC), the Internet Corporation for Assigned Names and Numbers (ICANN), and APNIC.

AINTEC conference

Thailand

USD 1,000

This sponsorship was to support the 16th Asian Internet Engineering Conference (**AINTEC 2021**).



The Foundation provided a grant to a project to assist network operators throughout the Asia Pacific with legal questions.

Internet Law Clinic

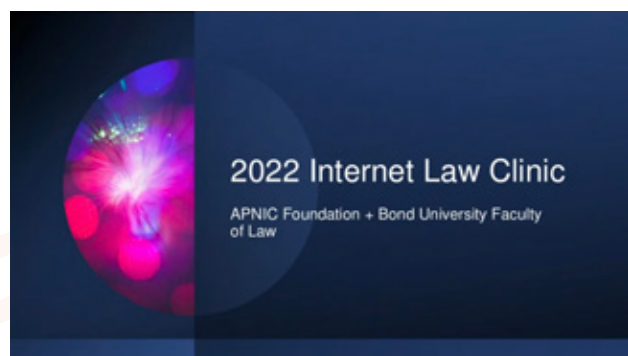
Bond University

Australia, Supporting Asia Pacific

USD 12,830

The APNIC Foundation partnered with the Bond University Faculty of Law to establish the **Internet Law Clinic** and assist network operators in the Asia Pacific, free of charge.

The clinic is assisting two organizations by providing legal research services (not legal advice). The clinic is assisting one organization with inquiries about the regulatory frameworks that apply to satellites in low Earth orbit, and the other with questions about data centre regulations in Laos.





Strengthening Governance, Delivery and Impact

Corporate

The Foundation's first 2021 Board meeting and Hong Kong Annual General Meeting was held virtually on 15 May 2021.

The Board approved the Hong Kong Foundation's audited financial statements, discussed a number of strategic initiatives, reviewed Board membership criteria, elected Danish Lakhani from Pakistan as Chair and appointed Board Members to the Australian Foundation.

The Foundation's second 2021 Board meeting was held virtually on 27 November 2021. It approved the Foundation's first strategic plan.

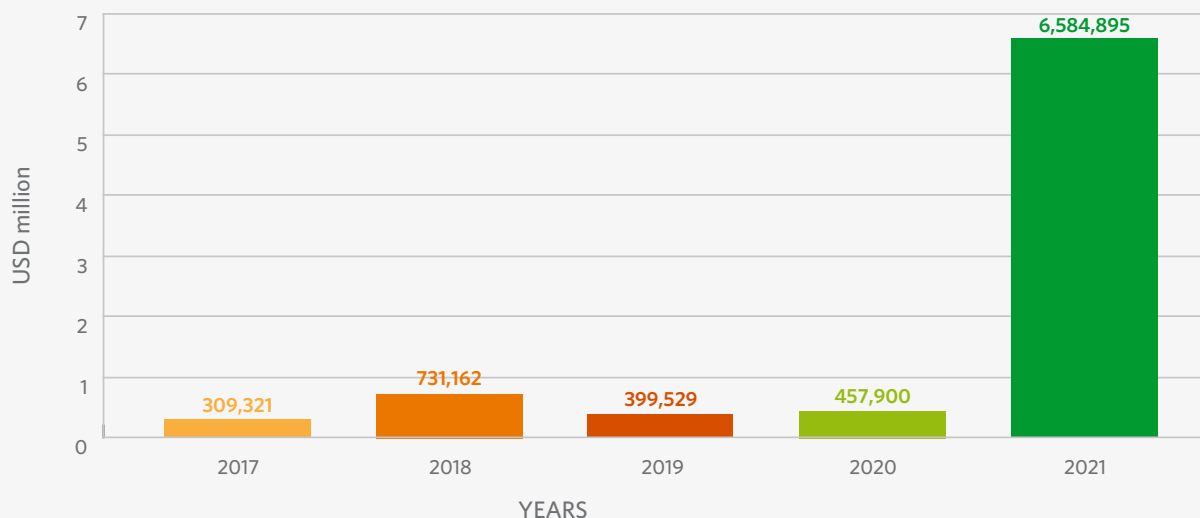
Foundation Expansion

In 2021, in response to increased funding from the Trust (figure below), the Foundation began strengthening its capacity in administration, project delivery, and monitoring and evaluation.

A grants management lead was appointed. The Foundation saw massive growth in the number of ISIF Asia grants being managed in 2021, rising from 4 the previous year to 22.

Positions were filled in finance, monitoring and evaluation, business, human resources and communications. The Foundation took on a full-time staff member based in Japan to better coordinate joint projects funded at Keio University: SOI Asia and AI3.

APNIC Foundation Funding



SWITCH SEA participants together with Photchanan (Paan) Ratanajaipan, the SWITCH SEA National Coordinator for Thailand (seated).



Foundation Board

HK APNIC Foundation Limited (Hong Kong)

AU APNIC Foundation Limited (Australia)



Mr Danish A Lakhani **HK** **AU**

Board Chair (Pakistan)

Mr Danish A. Lakhani is a cofounder and the CEO of Cyber Internet Services Pvt. Ltd. (Cybernet) — a pioneering Internet service provider in Pakistan — as well as of RapidCompute, Pakistan's first public cloud service provider. Over the past decade, Mr. Lakhani has led Cybernet's renewed focus in the enterprise, carrier and consumer market segments while building out the company's low latency, fibre-based metro and access networks in multiple Pakistani cities. In 2014, he oversaw the founding of StormFiber, a fibre broadband provider specifically for domestic consumers, and led the organization's growth to over 1,000 team members.

Mr. Lakhani started his career as a Software Engineer at Cisco Systems in San Jose, USA, where he was part of the ATM development team for the Catalyst 8500 series and, later member of the Dense Wavelength Division Multiplexing (DWDM) engineering team for the Optical Networks and Systems (ONS) platforms 15540 and 15530.

He holds a master's in business administration from Harvard Business School and a master of science in electrical engineering (with specialization in network systems) from Stanford University, as well as a bachelor of science from Brown University.



Ms Sylvia Efie Sumarlin **HK** **AU**

(Indonesia)

Ms Sylvia Sumarlin is Chair of the Federasi Teknologi Informasi Indonesia FTII, Indonesian Information Technology Federation. The FTII represents 14 professional IT associations. In this role, she leads efforts to advise the government on a national ICT roadmap and regulations that encourage the use of ICT, promote local IT industries to other economies in the Asia Pacific, develop cooperation with international partners, and provide education to enhance the knowledge of ICT professionals.

Ms Sumarlin's involvement in the Internet began in 1995 when she established and led Dyviacom Intrabumi (DNET), one of Indonesia's first ISPs. She has founded two other companies specializing in chipset development and defence. She serves as the permanent committee head in the area of ICT infrastructure development for the Indonesia Chamber of Commerce and Industry.

Ms Sumarlin acquired a bachelor of arts in economics from Syracuse University, in the USA in 1986. In 1989, she earned two master of arts degrees, in international relations and economics, from Syracuse University.



Mr Sharad Sanghi **HK** **AU**

(India)

Mr Sharad Sanghi is the managing director and CEO of Netmagic, an organization that he founded in 1998, now a Nippon Telegraph & Telephone (NTT) Communications Company. Mr Sanghi is responsible for growing Netmagic into India's leading managed hosting and cloud service provider, with over 1,100 employees and nine data centres delivering services to over 2,000 enterprise customers across the globe.

Mr Sanghi is a pioneer in the Indian cloud computing space, and his vision has helped propel Netmagic to its leading position in India. On the business side, he led Netmagic through three successful venture capital funding rounds with Nexus Venture Partners, Fidelity, Cisco Systems and Nokia Growth Partners. He led the 2012 acquisition of the company's majority stake by NTT Communication Japan — a first in the Indian data-centre market.

Mr Sanghi is an industry veteran with over 20 years of experience in developing Internet backbone infrastructure and providing Internet services. He is a part-time non-executive director on the Board of Bharat Electronics Limited, appointed by the government of India.



Prof Jun Murai HK AU
(Japan)

Dr Jun Murai is known as the ‘father of the Internet in Japan’. In 1984, he developed the Japan University UNIX Network (JUNET), the nation’s first-ever inter-university network. In 1988, he founded the Widely Integrated Distributed Environment (WIDE) Project, a Japanese Internet research consortium. He is a professor of the Faculty of Environment and Information Studies at Keio University, from which he earned his Ph.D. in computer science in 1987.

In 2013, Prof Murai was inducted into the Internet Hall of Fame (Pioneer category). He has served as president of the Japan Network Information Center (JPNIC) and as vice president of the Japanese Internet Association. He was appointed to the Internet Society’s Board of Trustees from 1997 to 2000, and in 1998 he was appointed as one of nine initial directors of the Internet Corporation for Assigned Names and Numbers (ICANN), serving until June 2003.

He won the 2005 Internet Society’s Jonathan B. Postel Service Award in recognition of his vision and pioneering work, which helped spread the Internet across the Asia Pacific region. He was also honored with the 2011 Institute of Electrical and Electronics Engineers Internet Award.



Mr Tian Suning, (Edward) Ph.D. HK
(China)

Mr Edward Tian is the founder and chairman of China Broadband Capital Partners, LP (CBC). CBC Capital was formed in May 2006. It is a sector-focused private equity fund investing primarily in companies in the telecom, Internet, broadband, media and technology sector in China.

Before Mr Tian founded CBC Capital, he was the vice chairman and CEO of China Netcom Group from 2002 to 2006. He was also the CEO of China Netcom Company Ltd from 1999 to 2002 and vice chairman of PCCW Ltd from 2005 to 2007. Before joining China Netcom, Mr Tian was a co-founder and the CEO of AsialInfo Holding, Inc, the first Internet technology provider in China, which was successfully listed on the NASDAQ exchange in 2001. After AsialInfo privatized in 2014, Mr Tian began serving as the executive chairman of the company, a position he still holds today.

Mr Tian is simultaneously serving as an independent director on several multinational company boards, including the Shanghai Pudong Developing Bank, Lenovo Group Limited and Taikang Life Insurance Company Limited.

Mr Tian holds a Ph.D. in natural resource management from Texas Tech University in the USA.



Mr Craig Ng AU
(Australia)

Mr Craig Ng is the general counsel for APNIC and acts as legal counsel to the Asia Pacific Internet Development Trust. He is a senior lawyer with over 30 years’ experience, having led well-regarded legal teams and practised in leading law firms in Australia and Malaysia.

Prior to his role at APNIC, Mr Ng was a partner with Australian national law firm Maddocks Lawyers, a position he held for over 10 years. He acted for clients including auDA, the ccTLD manager for .au, and played a key role in the development of the framework for the self-regulation of the .au domain name space. He served on the Board of Trustees of the auDA Foundation for over 10 years since its inception, and was a director and honorary secretary of the Internet Society of Australia for a number of years.

Mr Ng holds a bachelor of economics and a bachelor of laws degree from Monash University, Melbourne.



Foundation Staff



Duncan Macintosh

CEO

After three years as APNIC's development director, Duncan was appointed the founding CEO and executive director of the APNIC Foundation in April 2017. As CEO, he leads efforts to support and advance the APNIC Development Program and the Internet's technical development in the Asia Pacific region. The Foundation focuses on supporting professional development in the APNIC community, particularly among the network engineers who are building and running the Internet in the Asia Pacific.

Before joining APNIC in 2014, Duncan spent more than 20 years working in development, technology and media in Asia, including time in Hong Kong, Thailand and the Philippines. He has established and developed foundations in Singapore and Hong Kong and has extensive experience in innovation and global development and capacity building.

At the APNIC Foundation, Duncan leads efforts to engage and collaborate with development agencies, foundations, philanthropists and the private sector. Before joining APNIC, he founded and led foundations for one of Asia's leading research organizations (and an APNIC Member), the International Rice Research Institute.



Sylvia Cadena

Head of Programs and Partnerships

After 10 years managing the Information Society Innovation Fund (ISIF Asia) at APNIC, Sylvia was appointed Head of Programs at the APNIC Foundation in December 2016. Now as head of programs and partnerships, Sylvia works on the management, design and implementation of collaborative programs and projects to expand APNIC Foundation activities in the region, including the ISIF Asia program, one of the region's most established Internet development programs, as well as the Seed Alliance, which supported innovative Internet development across the global south.

Over her 25 years of experience in Internet development in Latin America and the Asia Pacific, Sylvia has focused on the strategic use of the Internet for development, with an emphasis on capacity building and infrastructure deployment.

She has served in many selection committees and working groups, notably the Multistakeholder Advisory Group of the Internet Governance Forum appointed by the UN Secretary General, the ICANN CCWG on new gTLD auction proceeds, the APriGF Multistakeholder Steering Group and the Policy Network on Meaningful Access



Cathlene Corcoran

Senior Project and Business Coordinator

With over 16 years' experience in administration, Cathlene joined APNIC and the APNIC Foundation as business services coordinator role in October 2019. She provides administration and operational support, as well as project management assistance.

Cathlene coordinates training workshops in the Asia Pacific region, liaises with stakeholders to identify requirements for training facilities, provides travel plans, and ensures correct data entry and allocation of costs for donor funding.

Cathlene also handles platform management for the APNIC Foundation and liaises with the external relations team at APNIC to contribute to joint operations between the two organizations.



Hannah Durack

Grants Management Lead

Hannah joined the APNIC Foundation in February 2021. She manages the Information Society Innovation Fund (ISIF Asia), a grants and awards program that seeks to empower communities in the Asia Pacific to research, design and implement Internet-based solutions for their own needs. As one of the region's most established Internet development programs, ISIF Asia places particular emphasis on the positive role the Internet has on social and economic development in the Asia Pacific.

Hannah comes to the APNIC Foundation from the Andrew W. Mellon Foundation, where she led work supporting artists and arts and culture organizations around the United States, with a particular focus on dance, theatre and international cultural exchange. Previously, Hannah worked for Community Partnerships and the Theatre Board at the Australia Council for the Arts. She holds a BA in acting from the University of Southern Queensland, and an executive leadership certificate from the University of Pennsylvania. Hannah credits her time spent in government and private funding in both hemispheres for inspiring her commitment to understanding and evolving the systems of support required to realize a thriving and equitable community for all.



David Vivian

Monitoring and Evaluation Lead

David joined the APNIC Foundation in February 2021. He has worked in the non-profit sector for over 20 years in complex humanitarian environments in over 25 economies, and for three years as a consultant in the humanitarian sector. David is the past owner of Program Management Group Australia, a full-service consulting firm for non-profit organizations and bilateral and multilateral donors.

David previously worked for World Vision International in Australia, Georgia, Jerusalem, the Pacific, and Timor Leste in management and director roles in a humanitarian affairs capacity. He has since worked in Swaziland, Lesotho, Zambia, Afghanistan, Mongolia and Nepal delivering training and evaluating development programs. His work focused on the economic empowerment of women; rural enterprises and producer organizations; agricultural markets and value chains; agricultural policy; program design, management and evaluation; policy analysis and advocacy; research, teaching and training; and coaching and facilitation.

David holds a BA in international relations from Griffith University, an MBA from the University of New England and a graduate diploma in international development from Murdoch University.



David Dawson

Senior Communications Coordinator

David Dawson joined the APNIC Foundation full time in January 2022 after part-time secondment from APNIC in 2021. He previously spent a decade in China, most of that time working as a journalist in Beijing with a particular focus on the development of China's technology sector and nascent startup culture. In addition to freelancing for a range of international publications, he served as deputy managing editor of a magazine and authored book chapters for one of the country's largest publishing houses. He also advised the Chinese Academy of Social Sciences on communications outreach.

In Australia, he worked for the strategic insights team at the national science agency, helping craft key reports including the country's artificial intelligence ethics framework, before joining APNIC early in 2020.

David's approach to communications is simple: Even the most complex ideas can be made accessible to wider audience, if the story is told in a compelling way. At the APNIC Foundation, he puts this into practice through a communications strategy that always focuses on the important work being done to support the people behind the Internet in the Asia Pacific.



Marcos Sadao Maekawa

Research and Education Development Project Officer

Based in Tokyo for more than 25 years, Marcos joined the APNIC Foundation in August 2021. He coordinates and supports (or plays a liaison role) in Schools on Internet (SOI) Asia and the Asian Internet Interconnection Initiatives (AI3) projects at Keio University, Japan.

Marcos has been involved with academia in different positions — from research assistant to faculty — since 2010. His experience includes coordinating global citizenship-related research initiatives, design education programs, and collaborative projects with international organizations and educational institutions. In addition, Marcos has a professional background in graphic design, publishing, and advertising.

Born and raised in São Paulo, Brazil, Marcos holds a BA in architecture and urbanism from the University of São Paulo, with an emphasis on visual communication. He earned his master's and Ph.D. degrees in media design from Keio University.

Marcos looks at design beyond the aesthetic, playing an essential role in social impact. His interests are at the intersection of global society, learning technologies, diversity and inclusion, and media design.



Swati Ghai

Human Resources Business Partner

Swati joined the APNIC Foundation as the HR business partner in August 2021. She comes with extensive, diverse HR experience across a range of industries in a career spanning over 12 years.

She manages all operational and strategic HR aspects for the Foundation including culture-building and staff-engagement initiatives.

Prior to this, Swati worked with various not-for-profit organizations like Anglicare, Western Sydney Community Legal Centre and Arc (University of New South Wales) in the manager and HR business partner capacity.

She has also worked in India across a range of industries like media, manufacturing and IT in various HR roles, where she has been responsible for driving and managing change, developing and implementing organizational development activities, and creating or influencing HR improvements and practices.

Swati holds a master's degree in management with a specialization in HR management from India.



Kee Ren Tan

Finance Officer

Kee Ren joined the APNIC Foundation in November 2021. He is a 3rd year undergraduate student at the University of Queensland studying for a bachelor of advanced finance and economics. The APNIC Foundation is his first experience of working in the non-profit sector, and he continues to seek more work experience and internship opportunities in the industry throughout his undergraduate studies.

Kee Ren is responsible for handling financial transaction processes with a primary focus of administering accounts receivable and payable functions of APNIC Foundation to a standard that meets audit requirements. He is also expected to support tasks and duties of APNIC Foundation's financial operation, including credit card transaction processing, bank reconciliations, intercompany invoicing, intercompany reconciliations, checking supporting documents to comply with audit requirements, ad-hoc tasks and general administrative support.

Kee Ren has strong problem-solving, analytical and evaluative capabilities and uses his background in finance and accounting to ensure APNIC Foundation's financial transactional processes are held to auditing standards.

Report of Board of Directors

The directors submit their report together with the audited financial statements of APNIC Foundation Limited (the "Company") for the year ended 31 December 2021.

Principal activities

The principal activities of the Company are to advance education in technical, operational and policy matters relating to Internet infrastructure, through undertaking or funding activities in the Asia Pacific region.

Business review

No business review is presented for the year ended 31 December 2021 as the Company is able to claim an exemption under section 388(3) of the Hong Kong Companies Ordinance (Cap. 622) since it falls within the reporting exemption.

Results

The results of the Company for the year are set out in the statement of comprehensive income on page 41.

Directors

The directors during the year and up to the date of this report are:

Sylvia Efi Widiantari SUMARLIN
Suning TIAN

Sharad Kumar SANGHI
Danish Ali LAKHANI
Michael Martin MALONE (Resigned on 24 June 2021)
Jun MURAI

Mr. Michael Martin MALONE resigned on 24 June 2021 as a director of the Company due to his other personal commitments. He has confirmed that he has no disagreement with the Board of Directors and nothing relating to the affairs of the Company needed to be brought to the attention of the Member of the Company.

In accordance with Article 62 of the Company's Articles of Association, the directors of the Board shall be elected annually at the Annual General Meeting of the Company so that each director of the Board shall retire at the Annual General Meeting following his or her appointment, but may be eligible for re-election.

Directors' material interests in transactions, arrangements and contracts that are significant in relation to the Company's business

No transactions, arrangements and contracts of significance in relation to the Company's

business to which the Company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

Directors' interests in the shares and debentures of the Company or any specified undertaking of the Company

At no time during the year was the Company a party to any arrangement to enable the directors of the Company to hold any interests in the shares in, or debentures of, the Company or its specified undertakings.

Management contracts

No contracts concerning the management and administration of the whole or any substantial part of the business of the Company were entered into or existed during the year.

Permitted indemnity provisions

In accordance with the Memorandum and Articles of Association of the Company, the directors shall be indemnified out of the assets of the Company against any liabilities incurred by them in relation to the Company in defending any proceedings, whether civil or criminal, in which judgement is given in their favour.

Other than mentioned above, at no time during the financial year and up to the date of this directors' report, is or was there, any permitted indemnity provision being in force for the benefit of any of the directors of the Company (whether made by the Company or otherwise) or an associated company (if made by the Company).

Subsequent events

Details of significant subsequent events are disclosed in note 15 to the financial statements.

Auditor

The financial statements have been audited by PricewaterhouseCoopers, who retire and, being eligible, offer themselves for re-appointment.

On behalf of the Board



Danish Ali LAKHANI
Director

INDEPENDENT AUDITOR'S REPORT TO THE MEMBER OF APNIC FOUNDATION LIMITED

(Incorporated in Hong Kong and limited by guarantee)

Opinion

What we have audited

The financial statements of APNIC Foundation Limited (the "Company"), which set out on pages 40 to 44, comprise:

- the balance sheet as at 31 December 2021;
- the statement of comprehensive income for the year ended 31 December 2021;
- the statement of changes in fund for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

Our opinion

In our opinion, the financial statements give a true and fair view of the financial position of the Company as at 31 December 2021, and of its financial performance and its cash flows for the year ended 31 December 2021 in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

Basis for opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Company in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

Other information

The directors are responsible for the other information. The other information comprises the information included in the directors' report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of directors for the financial statements

The directors are responsible for the preparation of the financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

The responsibility of the directors include overseeing the Company's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, in accordance with Section 405 of the Hong Kong Companies Ordinance and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level

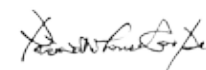
of assurance, but is not a guarantee that an audit conducted in accordance with HKSAAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with HKSAAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether

the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



PricewaterhouseCoopers
Certified Public Accountants
Hong Kong

BALANCE SHEET


(All amounts in United States dollars unless otherwise stated)

Assets	Note	As at 31 December	
		2021	2020
Current assets			
Account receivable	5	57,543	-
Amount due from the sole Member	6	-	4,558
Amount due from a fellow subsidiary	6	898	-
Cash and cash equivalents	7	125,905	542,759
Total assets		184,346	547,317
Fund			
Accumulated fund		14,787	36,442
Total fund		14,787	36,442
Liabilities			
Current liabilities			
Amount due to the sole Member	6	6,369	-
Amount due to a fellow subsidiary	6	27,380	-
Accruals	8	82,046	141,706
Deferred income on specific donations	9	53,764	369,169
Total liabilities		169,559	510,875
Total fund and liabilities		184,346	547,317

The above balance sheet should be read in conjunction with the accompanying notes.

The financial statements on pages 40 to 48 were approved by the Board of Directors and were signed on its behalf.

 **Sylvia Efi Widyantari SUMARLIN**
Director

 **Danish Ali LAKHANI**
Director

STATEMENT OF CHANGES IN FUND

(All amounts in United States dollars unless otherwise stated)

	Accumulated fund
Balance at 1 January 2020	(27,658)
Total comprehensive income	
Surplus for the year	64,100
Other comprehensive income	-
Balances at 31 December 2020 and 1 January 2021	36,442
Total comprehensive income	
Deficit for the year	(21,655)
Other comprehensive income	-
Balance at 31 December 2021	14,787

The above statement of comprehensive income should be read in conjunction with the accompanying notes.

< Back to contents page

STATEMENT OF COMPREHENSIVE INCOME

(All amounts in United States dollars unless otherwise stated)

Revenue	Note	As at 31 December	
		2021	2020
General donation income from the sole Member		25,713	519,641
General donation income from Department of Foreign Affairs and Trade ("DFAT")		57,543	-
Specific donation:			
Donation income from DFAT	9	347,478	225,729
Donation income from the sole Member			
▪ The Information Society Innovation Fund ("ISIF")	9	72,227	117,814
▪ ISIF Asia Program Fund	9	31,914	5,373
Interest income		3	44
Total revenue		534,878	868,601
Expenditure			
Programme expenses		(451,619)	(348,916)
Administrative expenses	10	(83,256)	(519,737)
Net exchange (losses)/gain		(21,658)	64,152
Total expenditure		(556,533)	(804,501)
(Deficit)/surplus for the year		(21,655)	64,100
Other comprehensive income for the year		-	-
Total comprehensive (loss)/income for the year		(21,655)	64,100

The above statement of comprehensive income should be read in conjunction with the accompanying notes.

STATEMENT OF CASH FLOWS

(All amounts in United States dollars unless otherwise stated)

Cash flows from operating activities	Note	Year ended 31 December	
		2021	2020
(Deficit)/surplus for the year		(21,655)	64,100
Change in working capital:			
▪ Accounts receivable		(57,543)	-
▪ Other receivables		-	7,910
▪ Amount due from the sole Member		4,558	60,002
▪ Amount due to the sole Member		6,369	(72,690)
▪ Amount due from a fellow subsidiary		(898)	-
▪ Amount due to a fellow subsidiary		27,380	-
▪ Accruals		(59,660)	52,658
▪ Deferred income on specific donations		(315,405)	88,761
Net cash (outflow)/inflow from operating activities		(416,854)	200,741
Net increase/(decrease) in cash and cash equivalents		(416,854)	200,741
Cash and cash equivalents at beginning of the year		542,759	342,018
Cash and cash equivalents at end of the year	7	125,905	542,759

The above statement of comprehensive income should be read in conjunction with the accompanying notes.

NOTES TO THE FINANCIAL STATEMENTS

(All amounts in United States dollars unless otherwise stated)

1 General information

The principal activities of APNIC Foundation Limited (the “Company”) are to advance education in technical, operational and policy matters relating to Internet infrastructure, through undertaking or funding activities in the Asia Pacific region.

The Company is incorporated under the Hong Kong Companies Ordinance as a company limited by guarantee and not having a share capital. The address of its registered office is 21/F Edinburgh Tower, The Landmark, 15 Queen’s Road Central, Hong Kong.

Under the provisions of the Company’s Memorandum and Articles of Association, every Member shall, in the event of the Company being wound up, contribute to the assets of the Company to the extent of HK\$100. At 31 December 2021, the Company had 1 (2020: 1) Member, APNIC Pty Ltd.

These financial statements are presented in United States dollars unless otherwise stated.

2 Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all of the years presented, unless otherwise stated.

2.1 Basis of preparation

The financial statements of the Company have been prepared in accordance with Hong Kong Financial Reporting Standards (“HKFRS”), which collective term includes all applicable individual HKFRS, Hong Kong Accounting Standards (“HKAS”) and Interpretations issued by the Hong Kong Institute of Certified Public Accountants, accounting principles generally accepted in Hong Kong, and the requirements of the Hong Kong Companies Ordinance. The financial statements have been prepared under the historical cost convention.

The preparation of financial statements in conformity with HKFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company’s accounting policies. In the opinion of the directors, there are no areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements.

(a) New and amended standards and interpretations to existing HKFRS (collectively, the “Amendments”) adopted by the Company

The Company has applied the following Amendments for the first time for its annual reporting period commencing on 1 January 2021:

HKFRS 16 (Amendments)	Covid-19-related Rent Concessions
HKAS 39, HKFRS 4, HKFRS 7, HKFRS 9 and HKFRS 16 (Amendments)	Interest Rate Benchmark Reform

The adoption of the above Amendments did not have any material impact on the amount recognized in the current period or any prior periods and is not likely to affect future periods.

(b) Amendments that are not yet effective and have not been early adopted by the Company

Certain Amendments have been published that are mandatory for the Company’s reporting periods commencing on or after 1 January 2022 and they have not been early adopted in these financial statements.

Annual Improvements Project (Amendments)	Annual Improvements to HKFRS Standards 2018-2020 ¹
Amendments to HKAS 1	Classification of Liabilities as Current or Non-current ²
Amendments to HKAS 16	Property, Plant and Equipment: Proceeds before Intended Use ³

Amendments to HKFRS 3	Reference to the Conceptual Framework ¹
Amendments to HKAS 37	Onerous Contracts – Cost of Fulfilling a Contract ¹
Revised Accounting Guideline 5	Merger Accounting for Common Control Combinations (AG 5) ¹
Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies ²
Amendments to HKAS 8	Definition of Accounting Estimates ²
Amendments to HKAS 12	Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction ²
Amendments to HKFRS 10 and HKAS 28 (2011)	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture ³
HKFRS 17	Insurance Contracts ²
HK Int 5 (2020)	Classification by the Borrower of a Term Loan that Contains a Repayment-on-Demand Clause ²

Notes:

- (1) Effective for annual period beginning on 1 January 2022.
- (2) Effective for annual period beginning on 1 January 2023.
- (3) Effective for financial period beginning on or after a date to be determined.

The Company has already commenced an assessment of the impact of these Amendments. According to the preliminary assessment made by the directors, no significant impact on the financial performance and position of the Company is expected when they become effective.

2.2 Financial assets

(a) Classification

The Company classifies its financial assets as those to be measured at amortized cost. The classification depends on the entity’s business model for managing the financial assets and the contractual terms of the cash flows.

(b) Recognition and derecognition

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

(c) Measurement

At initial recognition, the Company measures a financial asset at its fair value plus transaction costs that are directly attributable to the acquisition of the financial assets.

Assets that are held for collection of contractual cash flows, where those cash flows represent solely payments of principal and interest, are subsequently measured at amortized cost. Interest income from these financial assets is included in other income using the effective interest rate method.

Any gain or loss arising on derecognition is recognized directly in comprehensive income and presented in other gains/ (losses). Impairment losses are presented as separate line items in the statement of comprehensive income.

(d) Impairment

The Company assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Company applies the simplified approach permitted by

HKFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

Impairment of other financial assets at amortized cost is measured as either 12-month expected or lifetime credit loss, depending on whether there has been a significant increase in credit risk since initial recognition.

2.3 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the Company operates (the “functional currency”). The financial statements are presented in United States dollars, which is the Company’s functional and presentation currency.

(b) Transactions and balances

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

2.4 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet where the Company currently has a legally enforceable right to offset the recognized amounts, and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The Company has also entered into arrangements that do not meet the criteria for offsetting but still allow for the related amounts to be set off in certain circumstances, such as bankruptcy or the termination of a contract.

2.5 Receivables

Receivables are amounts due from donors for services performed in the ordinary course of business. If collection of

receivables is expected in one year, they are classified as current assets. If not, they are presented as non-current assets.

Receivables are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at fair value. The Company holds the receivables with the objective to collect the contractual cash flow and therefore measures them subsequently at amortized cost using the effective interest method, less provision for impairment.

2.6 Cash and cash equivalents

Cash and cash equivalents include cash on hand; deposits held at call with financial institutions; other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value; and bank overdrafts, if any.

2.7 Payables

Payables are obligations to pay for goods and services that have been acquired in the ordinary course of business from suppliers. Payables are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

Payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

2.8 Current and deferred income tax

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

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where

the Company operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Company measures its tax balances based on either the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to use those temporary differences and losses.

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

Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

2.9 Employee benefits

(a) Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits and accumulating annual leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service, are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled.

Employee entitlements to sick leave and maternity or paternity leave are not recognized until the time of leave.

(b) Bonus plans

The expected cost of bonus payments is recognized as a liability and an expense when the Company has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made.

Liabilities for bonus plans are expected to be settled within 12 months and are measured at the amounts expected to be paid when they are settled.

2.10 Provisions

Provisions are recognized when the Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount has been reliably estimated. Provisions are not recognized for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

2.11 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. The Company recognizes revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits

will flow to the Company and specific criteria have been met for the Company's activities, as described below.

Donation income for general purpose is recognized as income in profit or loss when received or the right of collection is established.

Donation income for specific purposes is recognized at fair value when there is a reasonable assurance that the Company will comply with the conditions attached to it and that the amount will be received.

Specific donation income relating to costs that it is intended to compensate is deferred and recognized in profit or loss over the period necessary to match these costs.

Interest income is recognized on a time-proportion basis using the effective interest method.

3 Financial risk and fund risk management

3.1 Financial risk factors

The Company's activities expose it to a variety of financial risks factors: foreign exchange risk, credit risk, liquidity risk and cash flow interest rate risk. The Company's overall risk management procedures focus on the unpredictability of financial markets and seek to minimize potential adverse effects on the Company's financial performance.

(a) Foreign exchange risk

Foreign exchange risk arises when future commercial transactions, recognized assets and liabilities are denominated in a currency that is not the Company's functional currency. The Company is exposed to foreign currency exchange fluctuations arising from various currency exposures created in the normal course of business, primarily with respect to Hong Kong and Australian dollars.

As Hong Kong dollar is reasonably stable with the United States dollar under the Linked Exchange Rate System, the directors are of the opinion that the Company does not have significant foreign exchange risk. In addition, the foreign exchange risk arising from Australian dollars is not significant as

the net balance denominated in Australian dollars is minimal. Accordingly, no sensitivity analysis is performed.

(b) Credit risk

Credit risk arises mainly from cash at bank, the amount due from a fellow subsidiary and the account receivable.

The Company applies the HKFRS 9 simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance for all accounts receivable, including amount due from a fellow subsidiary.

The Company's financial assets are subject to the expected credit loss model. While cash and cash equivalents are also subject to the impairment requirements of HKFRS 9, the identified impairment loss was immaterial as they are mainly deposited in a reputable bank in Hong Kong.

Management considers the credit risk for the account receivable and amount due from a fellow subsidiary to be low, taking into account the financial positions of and past payment history.

The maximum exposure to credit risk is represented by the carrying amount of each financial asset.

(c) Liquidity risk

The liquidity of the Company is adequately managed and monitored by maintaining sufficient cash and cash equivalents and obtaining financial support from the sole Member. Accordingly, the directors are of the opinion that the Company does not have significant liquidity risk.

The table below analyses the Company's financial liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

	2021	2019
Less than one year		
Accruals (note 8)	82,046	141,706
Amount due to a fellow subsidiary	27,380	-
Amount due to the sole Member	6,369	-
	<u>115,795</u>	<u>141,706</u>

(d) Cash flow interest rate risk

The Company's interest rate risk arises mainly from the bank balances that carry interest at market interest rates. The directors are of the opinion that the interest income derived from the bank balances is insignificant to the Company's operation and, accordingly, no sensitivity analysis is presented for cash flow interest rate risk.

3.2 Fund risk management

The Company's objectives when managing funds are to safeguard the Company's ability to continue as a going concern and to have sufficient funding for future operations.

The funds of the Company represents its accumulated funds.

3.3 Fair value estimation

No disclosure of fair value measurements by level of fair value hierarchy is required in these financial statements as there are no financial instruments measured on such basis on the balance sheet.

The carrying values less the impairment provision of receivables and payables are a reasonable approximation of their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the Company for similar financial instruments.

3.4 Offsetting financial assets and financial liabilities

No disclosure of the offsetting of financial assets and financial liabilities is made in these financial statements, as there was no netting arrangement in place during the year.

4 Financial instruments by category

The Company holds the following financial instruments:

	2021	2020
Financial assets at amortized cost		
Account receivable (note 5)	57,543	-
Amount due from the sole Member	-	4,558
Amount due from a fellow subsidiary	898	-
Cash and cash equivalents (note 7)	125,905	542,759
	<u>184,346</u>	<u>547,317</u>

Financial liabilities at amortized cost

Amount due to the sole Member	6,369	-
Amount due to a fellow subsidiary	27,380	-
Accruals (note 8)	82,046	141,706
	<u>115,795</u>	<u>141,706</u>

The Company's exposure to various risks associated with the financial instruments is discussed in note 3. The maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of financial assets mentioned above.

5 Account receivable

	2021	2020
Account receivable	57,543	-

The Company applies the HKFRS 9 simplified approach to measure expected credit losses, which uses a lifetime expected loss allowance for the account receivable. To measure the expected credit losses, account receivable has been grouped based on shared credit risk characteristics and the days past due.

As at 31 December 2021, management considered that the expected credit loss for the account receivable was immaterial, thus no loss allowance was made (2020: nil).

The carrying values of the account receivable approximates its fair value at 31 December 2021 is denominated Australian dollars (2020: nil).

6 Amounts due from/(to) group companies

The amounts due are unsecured, interest free and repayable on demand.

As at 31 December 2021 and 2020, the amount due from group companies is not past due or impaired and has no default history.

As at 31 December 2020, the directors considered that the expected credit loss for amount due from the sole Member was immaterial, so no loss allowance was made.

The carrying values of amounts due from/(to) group companies approximate their fair values as at 31 December 2021 and 2020.

The amount due to the group companies is denominated in the following currencies.

7 Cash and cash equivalents

	2021	2020
Hong Kong dollars	-	17,019
Australian dollars	(32,851)	(12,857)
	<u>(32,851)</u>	<u>4,558</u>

The carrying amounts of cash and cash equivalents as at 31 December 2021 and

	2021	2020
Cash at banks, maximum exposure to credit risk	125,905	542,759

2020 are denominated in the following currencies.

	2021	2020
United States dollars	13,128	20,300
Hong Kong dollars	2,026	17,016
Australian dollars	110,751	505,443
	<u>125,905</u>	<u>542,759</u>

8 Accruals

The carrying value of accruals approximates its fair value as at 31 December 2021 and is denominated the following currencies.

	2021	2020
United States dollars	33,946	82,459
Hong Kong dollars	18,697	17,415
Australian dollars	25,713	41,832
Other currencies	3,690	-
	<u>82,046</u>	<u>141,706</u>

9 Deferred income on specific donations

(a) Australian Department of Foreign Affairs and Trade (DFAT)

It represents funds donated by DFAT for the following activities:

- Activities to support for Regional Papua New Guinea Technical Network Management Training;
- Activities to promote a peaceful, secure and stable online environment and improve cyber resilience in Vanuatu, Fiji, Tonga and Solomon Islands; and
- Activities of "Fostering women's technical leadership in Internet industry in South East Asia" to support women engineers in Viet Nam, Thailand, the Philippines and Cambodia with knowledge and skills and opportunities to achieve employment and eventually senior management roles.

	DFAT		The sole Member	
	DFAT (note a)	ISIF (note b)	ISIF Asia Program Fund (note c)	Total
At 1 January 2020	137,879	100,041	42,488	280,408
Donation received	316,151	121,526	-	437,677
Recognized in profit or loss	(225,729)	(117,814)	(5,373)	(348,916)
At 31 December 2020 and 1 January 2021	228,301	103,753	37,115	369,169
Donation received	136,214	-	-	136,214
Recognized in profit or loss	(347,478)	(72,227)	(31,914)	(451,619)
At 31 December 2021	<u>17,037</u>	<u>31,526</u>	<u>5,201</u>	<u>53,764</u>

(b) APNIC Pty Ltd (the sole Member) - The Information Society Innovation Fund (ISIF)

It represents funds donated by the sole Member for the project "Information Society Innovation Fund".

(c) The sole Member: ISIF Asia Program Fund

It represents funds donated by the sole Member for the project "Asia Program Fund".

10 Expenses by nature

	2021	2020
Auditor's remuneration	17,628	17,415
Employee benefit expenses (note 11)	-	445,369
Legal and professional fee	13,772	10,867
Travel expenses	-	5,782
Others	<u>51,856</u>	<u>40,304</u>
Total expenditure	<u>83,256</u>	<u>519,737</u>

11 Employee benefit expense

	2021	2020
Salaries and wages	-	427,899
Bonus	-	17,470
Total employee benefit expenses	<u>-</u>	<u>445,369</u>

All the personnel expenses are borne by APNIC Foundation Limited (Australia), a fellow subsidiary, without recharge in 2021.

12 Benefits and interest of directors

The following disclosures are made pursuant to section 383(1)(a) to (f) of the Hong Kong Companies Ordinance (Cap. 622) and Parts 2 to 4 of the Companies (Disclosure of Information about Benefits of Directors) Regulation (Cap. 622G):

(a) During the year, no emoluments, retirement benefits, payments or benefits in respect of termination of directors' services (also represents key management compensation) were paid or made, directly or indirectly, to the directors; nor are any payable. No consideration was provided to or receivable by third parties for making available directors' services. There are no loans, quasi-loans or other dealings in favour

of the directors, their controlled bodies corporate and connected entities.

All directors are not paid directly by the Company but receive remuneration from the Company's sole Member, in respect of their services to the larger related companies, which include the Company. No apportionment has been made as the qualifying services provided by these directors to the Company are incidental to their responsibilities to the larger related companies.

(b) No director of the Company had a material interest, directly or indirectly, in any significant transactions, arrangements and contracts in relation to the Company's business to which the Company was or is a party that subsisted at the end of the period or at any time during the year.

13 Income tax expense

No provision for Hong Kong profits tax has been made as the Company has no assessable profit for the year (2020: nil).

The tax on the Company's (deficit)/surplus for the year differs from the theoretical amount that would arise as follows:

At 31 December 2021, the Company had no material unprovided deferred income tax. (2020: nil)

	2021	2020
(Deficit)/surplus for the year	(21,655)	64,100
Calculated at a tax rate of 16.5%	(3,573)	10,577
Income not subject to tax	(1)	(10,592)
Expenses not deductible for tax purpose	3,574	-
Tax losses not recognized	-	15
Income tax expense	<u>-</u>	<u>-</u>

14 Related party transactions

Other than disclosed elsewhere in the financial statements, during the year, no transactions were carried out with related parties.

15 Subsequent event

With continuous increase in new infections of COVID-19 globally, and the outbreak of Omicron in Hong Kong since early January 2022, these factors inevitably have an impact on consumption sentiment, travel restrictions and the Company's business. Taking into account the possible derail of recovery due to an unfavorable macro environment and the pandemic impact, the Company will continue assessing the impacts of COVID-19 on the financial performance of the Company and will react proactively to evolving market conditions. The Company's financial statements have been prepared on a going concern basis. However, due to the inherent unpredictable nature and rapid development relating to the epidemic and the measures announced by the government to help businesses, the Company is not able to assess the potential quantified impact. At the date the Board of Directors approved the Company's 2021 financial statements, the Company's management is not aware of any material uncertainties that call into question the Company's ability to continue as a going concern.

Directors' Report

Your directors submit their report on APNIC Foundation Limited (the "Company") for the period ended 31 December 2021.

Directors

The names of the Company's directors in office during the financial period and until the date of this report are set out below. Directors were in office for this entire period unless otherwise stated.

Duncan Ian Macintosh
(Appointed: 16 December 2020)

Danish Ali Lakhani (Appointed: 21 June 2021)

Jun Murai (Appointed: 21 June 2021)

Sharad Kumar Sanghi
(Appointed: 21 June 2021)

Sylvia Efi Widyantari Sumarlin
(Appointed: 21 June 2021)

Craig Eesyn Ng (Appointed: 29 June 2021)

Paul Byron Wilson
(Appointed: 16 December 2020, Resigned: 12 July 2021)

Michael Martin Malone
(Appointed: 16 December 2020, Resigned: 24 June 2021)

Names, qualifications, experience and special responsibilities

Duncan Ian Macintosh, (Chief Executive Officer and Executive Director)

After three years as APNIC's development director, Duncan was appointed the founding CEO and executive director of the APNIC Foundation in December 2020. As CEO, he leads efforts to support and advance the APNIC Development Program and the Internet's technical development in the Asia Pacific region. The Foundation is focused on supporting professional development in the APNIC community, particularly among the network engineers who are building and running the Internet in Asia Pacific.

Before joining APNIC in 2014, Duncan spent more than 20 years working in development, technology and media in Asia, including time in Hong Kong, Thailand and the Philippines. He has developed and established foundations in Singapore and Hong Kong and has extensive experience in innovation and global development and capacity building.

Over the past 10 years, he has worked in the areas of strategic relations, technology and

resource mobilization as well as investment and philanthropy. From 2007 to 2012, he worked on a campaign that raised USD 145 million including USD 4.7 million from Asian investors. Before that, he spent 15 years as a journalist in Australia, Asia and the United Kingdom.

At the APNIC Foundation, Duncan leads efforts to engage and collaborate with development agencies, foundations, philanthropists and the private sector. Before joining APNIC, he founded and led foundations for one of Asia's leading research organizations (and an APNIC Member), the International Rice Research Institute.

Danish Ali Lakhani (Chair)

Mr Danish A. Lakhani is the cofounder and CEO of Cyber Internet Services Pvt. Ltd. ("Cybernet") – a pioneering Internet service provider in Pakistan – as well as of RapidCompute, Pakistan's first public cloud service provider. Over the past decade, Mr. Lakhani has led Cybernet's renewed focus in the enterprise, carrier and consumer market segments while building out the company's low latency, fibre-based metro and access networks in multiple Pakistani cities. In 2014, he oversaw the founding of StormFiber, a fibre broadband provider specifically for domestic consumers, and led the organization's growth to over 1,000 team members serving customers in seven major cities across Pakistan.

Mr. Lakhani started his career as a software engineer at Cisco Systems in San Jose, USA, where he was part of the ATM development team for the Catalyst 8500 series and later as member of the DWDM engineering team for the optical networks and systems (ONS) platforms 15540/15530.

He holds a master's of business administration from Harvard Business School and a master's of science in electrical engineering (with specialization in networked systems) from Stanford University. He earned his bachelor of science (applied mathematics, computer science and business economics) from Brown University where he was elected to the scientific research honours society Sigma Xi.

Mr. Lakhani is a member of the Pakistan chapter of the Young President's Organization and served as the president of the Harvard Business School Club of Pakistan from 2018 to 2021.

Jun Murai (Director)

Dr Jun Murai is known as the 'father of the Internet in Japan'. In 1984, he developed the Japan University UNIX Network (JUNET), the nation's first inter-university network. In 1988, he founded the Widely Integrated Distributed Environment (WIDE) Project, a Japanese Internet research consortium. He is a professor of the Faculty of Environment and Information Studies at Keio University, from which he earned his Ph.D. in computer science in 1987.

In 2013, Prof Murai was inducted into the Internet Hall of Fame (Pioneer category). He also served as president of the Japan Network Information Center (JPNIC) and as vice president of the Japanese Internet Association. He was appointed to the Internet Society's Board of Trustees from 1997 to 2000, and in 1998 as one of nine initial directors of the Internet Corporation for Assigned Names and Numbers (ICANN), serving until June 2003.

He won the 2005 Internet Society's Jonathan B. Postel Service Award in recognition of his vision and pioneering work that helped spread the Internet across the Asia Pacific region. He was also honored with the 2011 Institute of Electrical and Electronics Engineers Internet Award.

Sharad Kumar Sanghi (Director)

Mr Sharad Sanghi is the managing director and CEO of Netmagic, an organization that he founded in 1998 and is now an NTT Communications Company.

Mr Sanghi is responsible for growing Netmagic into India's leading managed hosting and cloud service provider, with over 1,100 employees and nine data centres delivering services to over 2,000 enterprise customers across the globe.

Mr Sanghi is a pioneer in the Indian cloud computing space, and his vision has helped Netmagic achieve leadership in India. On the business side, he led Netmagic through three successful venture capital funding rounds with Nexus Venture Partners, Fidelity, Cisco Systems and Nokia Growth Partners. He also led the 2012 acquisition of the company's majority stake by NTT Communication Japan – a first in the Indian data-centre market.

Mr Sanghi is an industry veteran with over 20 years of extensive experience in developing Internet backbone infrastructure and providing Internet services. He is also a part-

time non-executive director on the Board of Bharat Electronics Limited, appointed by the Government of India.

During a six-year stint in the US, he worked for Unified Network Management Architecture Group at AT&T Bell Labs, the Backbone Engineering Group of NSFNET (ANS) and the Router Systems Development Group of Advantis (IBM Global Network). He has also helped Merrill Lynch and Bankers Trust design and deploy Wide Area Networks.

Mr Sanghi is an Electrical Engineer from IIT Bombay and a master's degree from Columbia University, New York.

Sylvia Efi Widyantari Sumarlin (Director)

Ms Sylvia Sumarlin is Chair of the Federasi Teknologi Informasi Indonesia (FTII, Indonesian Information Technology Federation). The FTII represents 14 professional IT associations. In this role, she leads efforts to advise the government on a national ICT roadmap and regulations that encourage the use of ICT, promote local IT industries to other economies in the Asia Pacific, develop cooperation with international partners, and provide education to enhance the knowledge of ICT professionals.

Ms Sumarlin's involvement in the Internet began in 1995 when she established and led Dyviacom IntraBumi (DNET), one of Indonesia's first ISPs. She has founded two other companies specializing in chipset development and defence. She also she serves as the permanent committee head in the area of ICT infrastructure development for the Indonesia Chamber of Commerce and Industry.

Ms Sumarlin acquired a bachelor of arts (economics) from Syracuse University, USA, in 1986. In 1989, she earned two masters' of arts, in international relations and economics, from Syracuse University.

Craig Eesyn Ng (Director)

Mr Craig Ng is the general counsel for APNIC and also acts as legal counsel to the Asia Pacific Internet Development Trust. He is a senior lawyer with over 30 years' experience, having led well-regarded legal teams and practised in leading law firms in Australia and Malaysia.

Prior to his role at APNIC, Mr Ng was a partner with the Australian national law firm Maddocks Lawyers, a position he held for over

10 years. He acted for clients including auDA, the ccTLD manager for .au, and played a key role in the development of the framework for the self-regulation of the .au domain name space. He served on the Board of Trustees of the auDA Foundation for over 10 years since its inception, and was a director and honorary secretary of the Internet Society of Australia for a number of years.

Mr Ng holds a bachelor of economics degree and a bachelor of laws degree from Monash University, Melbourne.

Paul Byron Wilson (Director)

Mr Paul Wilson has nearly 30 years' involvement with the Internet, including 20 years as the head of APNIC. In this role, he has led APNIC's development as a provider of critical Internet services and as a key contributor to Internet growth and development throughout the Asia Pacific. Paul has worked as an expert and leader across the full range of communities and organizations involved in Internet development, including ISPs and network operators, non-profit organizations, governments and governmental agencies, and many key organizations including RIRs, the Internet Engineering Task Force, ICANN, ISOC, APEC-TEL, and the International Telecommunication Union (ITU).

Previously as technical director and CEO of Pegasus Networks, the first private ISP in Australia, Paul worked with early Internet technologies and helped to establish many early Internet services in developing economies of the region.

In 2000, Mr Wilson was inducted into the Australian Internet Hall of Fame.

Michael Martin Malone (Director)

Mr Malone founded iiNet Limited, an ASX listed telecommunications company, in 1993 and continued as CEO until his retirement in 2014, by which time iiNet had over 2,500 staff, serving over a million Australian households and businesses.

Mr Malone is currently Chair of the Board of ANX-listed Superloop Ltd and Sky and Space Global, as well as a director of nbn Co Limited, Seven West Media, Speedcast International and Axicom. He is also the founder and Chairman of Diamond Cyber Pty Ltd. Mr Malone was previously a founder and Deputy Chair of Autism West.

Mr Malone has received a number of prestigious industry recognitions, including 2012 Australian Entrepreneur of the Year and winner of the Telecommunications Society's Charles Todd medal. He is a fellow of the Australian Institute of Directors, Australian Institute of Management and Australian Computer Society. Mr Malone has a bachelor of science (mathematics) and a post-graduate diploma in education from the University of Western Australia.

Company Secretary

Mr Duncan Ian Macintosh is the Company Secretary and has been since 16 December 2020.

Directors' meetings

The number of meetings of directors (including meetings of committees of directors) held during the period and the number of meetings attended by each director were as follows:

	Number of meetings held	Number of meetings attended
Duncan Ian Macintosh	2	2
Danish Ali Lakhani	2	2
Jun Murai	2	2
Sharad Kumar Sanghi	2	2
Sylvia Efi Widyantari Sumarlin	2	2
Craig Eesyn Ng	2	2
Paul Byron Wilson	2	2
Michael Martin Malone	2	1

The Company is a company limited by guarantee and is without share capital. Dividends are prohibited under its Constitution.

Principal activities

The principal activities of the Company during the period were to raise funds to support and expand Internet development in the Asia Pacific region, through education and training, human capacity building, community development, research, and related projects and activities to build an open global, stable and secure internet that serves the entire Asia Pacific community.

There were no significant changes in the nature of these activities during the period.

Operating results for the period

The net surplus after tax of the Company for the period ended 31 December 2021 was \$208,011.

The COVID-19 pandemic and governments' responses continue to interfere with general activity within the community, the economy and the operations of our business. While we have not seen a significant impact on our business to date, the scale and duration of these developments remain uncertain as at the date of this report and may have an impact on our future earnings, cash flow and financial condition.

Significant changes in the state of affairs

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

Significant events after the reporting period

On 1 January 2022 the Company entered into a grant funding arrangement whereby it will receive grant funds of up to USD 14,357,603 during the 2022 financial year to fund the Company's approved projects.

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

Likely developments and expected results

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

Environmental regulation and performance

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

Indemnification and insurance of directors and officers

During the financial period, APNIC Foundation Limited paid a premium of \$3,600 to insure the directors, officeholders and staff of the Company.

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

Indemnification of auditor

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

Proceedings on behalf of the Company

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

Auditor's independence declaration

The directors have received a declaration from the auditor of APNIC Foundation Limited. This has been included on page 40.

Signed in accordance with a resolution of the directors.



Danish Ali Lakhani
Chair
Pakistan



Sylvia Efi Widiantari Sumarlin
Director
Indonesia

Statement of profit or loss and other comprehensive income

For the period ended 31 December 2021

	Notes	For the period from 16 December 2020 to 31 December 2021 \$
Operating grant revenue		6,701,728
Overhead recoveries		1,010,874
Other income	4.1	356,557
Total income		8,069,159
Grant expenses	4.2	(1,042,555)
Employee benefits expense	4.3	(1,042,555)
Professional fees		(70,733)
Other expenses		(17,438)
Total expenses		(7,861,148)
Surplus before tax		208,011
Income tax expense	2.3	-
Surplus for the period		208,011
Other comprehensive income		-
Total comprehensive income for the period		208,011

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

Statement of cash flows

For the period ended 31 December 2021

	Notes	For the period from 16 December 2020 to 31 December 2021 \$
OPERATING ACTIVITIES		
Receipts of grant income		8,531,406
Payments to suppliers		(5,410,284)
Net cash flows from operating activities		3,121,122
INVESTING ACTIVITIES		
Net cash flows from investing activities		-
FINANCING ACTIVITIES		
Net cash flows from financing activities		-
Net increase in cash and cash equivalents		3,121,122
Cash and cash equivalents at 16 December 2020		-
Cash and cash equivalents at 31 December 2021	5	3,121,122

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

Statement of financial position

As at 31 December 2021

	Notes	2021 \$
ASSETS		
Current assets		
Cash and cash equivalents	5	3,121,122
Trade and other receivables	6	56,500
Prepayments		276,851
Total current assets		3,454,473
Total assets		3,454,473
LIABILITIES AND EQUITY		
Current liabilities		
Trade and other payables	7	1,115,605
Contract liabilities		875,304
Provisions		1,255,553
Total current liabilities		3,246,462
Total liabilities		3,246,462
EQUITY		
Retained earnings		208,011
Total equity		208,011
Total liabilities and equity		3,454,473

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

Statement of changes in equity

For the period ended 31 December 2021

	Retained earnings \$
At 16 December 2020	-
Surplus for the period	208,011
Other comprehensive income	-
Total comprehensive income for the period	208,011
At 31 December 2021	208,011

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

Notes to the financial statements

For the period ended 31 December 2021

1. Corporate information

The financial statements of APNIC Foundation Limited (the Company) for the period ended 31 December 2021 were authorized for issue in accordance with a resolution of the directors on 16 May 2022.

APNIC Foundation Limited is a not-for-profit entity limited by guarantee, incorporated and domiciled in Australia. These financial statements cover the period from the date of incorporation, 16 December 2020, to 31 December 2021 and are the first financial statements prepared by the Company. As such, no comparatives are presented.

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

The nature of the operations and principal activities of the Company are described in the directors' report.

2. Significant accounting policies

2.1 Basis of preparation

The financial statements are general purpose financial statements, which have been prepared in accordance with the requirements of the Australian Charities and Not-for-Profits Commission (ACNC) Act 2012, Australian Accounting Standards - Simplified Disclosures and other authoritative pronouncements of the Australian Accounting Standards Board. Australian Accounting Standards contain requirements specific to not-for-profit entities, including AASB 1058 Income of Not-For-Profit Entities.

These financial statements, for the period ended 31 December 2021, have been prepared in accordance with the Australian Accounting Standards - Simplified Disclosures.

The financial statements have been prepared on an accruals basis and are based on historical costs.

The financial statements are presented in Australian dollars and all values are rounded to the nearest dollar.

2.2 Changes in accounting policies, disclosures, standards and interpretations

The Company adopted all Australian Accounting Standards on incorporation, 16 December 2020. A summary of these policies is included in Note 2.3.

Accounting Standards and Interpretations issued but not yet effective

Other than the early adoption of AASB 1060 General Purpose Financial Statements - Simplified Disclosures for For-Profit and Not-for-Profit Tier 2 Entities, the Company has not early adopted any other standards, interpretations or amendments that have been issued but are not yet effective.

2.3 Summary of significant accounting policies

(a) Going concern

The financial statements have been prepared on a going concern basis, which assumes continuity of normal business activities and the realization of assets and the settlements of liabilities in the ordinary course of business.

The Affirmation of Commitments entered into between APNIC Pty Ltd ("APNIC") and APNIC Foundation Limited on 17 August 2021 states that APNIC commits to ensure that, where alternative sources of funding are not procured or available to APNIC Foundation, APNIC will provide funding including salary and associated costs, operational overheads, mutually agreed project delivery costs and other costs as agreed for a period of up to 10 years.

(b) Current versus non-current classification

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

- expected to be realized or intended to be sold or consumed in the normal operating cycle,
- held primarily for the purpose of trading,
- expected to be realized within 12 months after the reporting period, or

- cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period.

All other assets are classified as non-current.

A liability is current when:

- it is expected to be settled in the normal operating cycle,
- it is held primarily for the purpose of trading,

- it is due to be settled within 12 months after the reporting period, or

- there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period.

The Company classifies all other liabilities as non-current.

(c) Foreign currencies

(i) Functional and presentation currency

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

(ii) Transactions and balance

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

(d) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand and short-term deposits with an original maturity of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

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

(e) Trade and other receivables

A receivable represents the Company's right to an amount of consideration that is unconditional (i.e. only the passage of time is required before payment of the consideration is due). Trade receivables, which generally have 30-90 day terms, are recognized initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognized at fair value. The Company holds the trade receivables with the objective to collect the contractual cash flows and

therefore measures them subsequently at amortized cost using the Effective Interest Rate (EIR) method.

For trade and other receivables, the Company applies a simplified approach in calculating expected credit losses (ECLs). Therefore, the Company does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date.

(f) Trade and other payables

Trade and other payables are carried at amortized cost, and due to their short-term nature they are not discounted. They represent liabilities for goods and services provided to the Company prior to the end of the financial period that are unpaid and arise when the Company becomes obliged to make future payments in respect of the purchase of these goods and services. The amounts are unsecured and are usually paid within 30 days of recognition.

(g) Provisions

General
Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Company expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement as profit or loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

(h) Revenue from operating grants

When the Company receives operating grant revenue, it assesses whether the contract is enforceable and has sufficiently specific performance obligations in accordance to AASB 15 Revenue from Contracts with Customers.

When both these conditions are satisfied, the Company:

- identifies each performance obligation relating to the grant,
- recognizes a contract liability for its obligations under the agreement, and
- recognizes revenue as it satisfies its performance obligations.

Where the contract is not enforceable or does not have sufficiently specific performance obligations, the Company recognizes:

- the asset received in accordance with the recognition requirements of other applicable accounting standards (e.g. AASB 9 Financial Instruments; AASB 16 Leases; AASB 116 Property, Plant and Equipment; and AASB 138 Intangible Assets);
- related amounts (being contributions by owners, lease liability, financial instruments, provisions, revenue or contract liability arising from a contract with a customer); and
- income immediately in profit or loss as the difference between the initial carrying amount of the asset and the related amount.

(i) Overhead recoveries

The Company receives overhead recoveries in relation to its operating expenditure. Overhead recoveries are recognized when the related expenditure is incurred.

(j) Contract liabilities

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

(k) Taxes

The Company is not liable to income tax by virtue of Section 50-B of the Income Tax Assessment Act, 1997.

Goods and services tax (GST)

Revenues, expenses and assets are recognized net of the amount of GST, except:

- when the GST incurred on a sale or purchase of assets or services is not payable to or recoverable from the taxation authority, in

which case the GST is recognized as part of the revenue or the expense item or as part of the cost of acquisition of the asset, as applicable, or

- when receivables and payables are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position. Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the taxation authority.

Cash flows are included in the statement of cash flows on a gross basis. The GST component of cash flows arising from investing and financing activities — which is recoverable from, or payable to, the taxation authority — is classified as part of operating cash flows.

3. Significant accounting judgements, estimates and assumptions

The preparation of the Company's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

There are no estimates and assumptions that have a significant risk of causing a material adjustment to the financial statements within the next financial year.

4. Revenue and expenses

4.1 Other income

	For the period from 16 December 2020 to 31 December 2021 \$
Investment income	526
Realized foreign exchange gain	305,026
Unrealized foreign exchange gain	51,005
Total other income	356,557

4.2 Grant expenses

	For the period from 16 December 2020 to 31 December 2021 \$
ISIF Asia	2,647,838
M-Root anycast	175,987
Academy platform & curriculum development	380,845
Community trainers network expansion	215,682
Training delivery	373,117
Curriculum development	195,802
AI3 and SOI Asia	2,618,972
Sponsorships and contributions	122,179
Total grant expenses	6,730,422

4.3 Employee benefits expense

	For the period from 16 December 2020 to 31 December 2021 \$
Wages and salaries	964,336
Superannuation expense	78,219
Total employee benefits expenses	1,042,555

5. Cash and cash equivalents

	2021 \$
Cash at bank	3,121,122

6. Trade and other receivables

	2021 \$
Current	
Security term deposit	20,000
Related party receivables (note 8)	36,500
Total trade and other receivables	56,500

7. Trade and other payables

	2021 \$
Current	
Trade payables	484,121
Related party payables (note 8)	491,633
Accrued expenses and other payables	72,835
GST payable	67,016
Total trade and other payables	1,115,605

8. Related party disclosures

The table below provides the total amount of transactions that have been entered into with related parties for the relevant financial period.

	Sales to related parties \$	Purchases from related parties \$	Receivable \$	Payable \$
APNIC Foundation Limited (Hong Kong)	117,505	1,162	36,500	1,162
APNIC Pty Ltd	136	2,356,344	-	490,471
Total	117,641	2,357,506	36,500	491,633

Terms and conditions of transactions with related parties

The Sales to and purchases from related parties are made on terms equivalent to those that prevail in arm's length transactions. Outstanding balances at the period end are unsecured and interest free, and settlement occurs in cash. There have been no guarantees provided or received for any related party receivables or payables. For the period ended 31 December 2021, the Company has not recognized any provision for expected credit losses relating to amounts owed by related parties.

Compensation of key management personnel of the Company

	For the period from 16 December 2020 to 31 December 2021 \$
Total compensation paid to key management personnel	569,850

9. Commitments and contingencies

Commitments

There were no commitments as at the reporting date that would have a material effect on the Company's financial statements as at 31 December 2021.

Contingencies

There were no contingencies as at the reporting date that would have a material effect on the Company's financial statements as at 31 December 2021.

10. Auditor's remuneration

The auditor of APNIC Foundation Limited is Ernst & Young (Australia).

	For the period from 16 December 2020 to 31 December 2021 \$
<i>Amounts received or due and receivable by Ernst & Young (Australia) for:</i>	
An audit of the financial report of the entity	20,000
Compilation of financial statements	7,000
Total	27,000

11. Events after the reporting period

On 1 January 2022 the Company entered into a grant funding arrangement whereby it will receive grant funds of up to USD 14,357,603 during the 2022 financial year to fund the Company's approved projects.

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

Directors' declaration

In accordance with a resolution of the directors of APNIC Foundation Limited, I state that, in the opinion of the directors:

(a) the financial statements and notes of APNIC Foundation Limited for the financial period ended 31 December 2021 are in accordance with the Australian Charities and Not-for-Profits Commission Act 2012, including:

- (i) giving a true and fair view of the entity's financial position as at 31 December 2021 and its performance for the period ended on that date, and
- (ii) complying with Australian Accounting Standards - Simplified Disclosures and the Australian Charities and Not-for-Profits Commission Act 2012 and other mandatory professional reporting requirements; and

(b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

On behalf of the board



Danish Ali Lakhani
Chair
Pakistan
16 May 2022



Sylvia Efi Widyantari Sumarlin
Director
Indonesia
16 May 2022



Abbreviations and Glossary

AfgREN	Afghanistan Research and Education Network
AI	Artificial Intelligence
AI3	Asian Internet Interconnection Initiatives
AIT	Asian Institute of Technology
APAN-JP	Asia Pacific Advanced Network (Japan)
APEC-TEL	Asia Pacific Economic Cooperation Telecommunications and Information Working Group
APIDT	Asia Pacific Internet Development Trust (the Trust)
APIE	Asia Pacific Internet Engineer Program
APIGA	Asia Pacific Internet Governance Academy
APNIC	Asia Pacific Network Information Centre
ARENA-PAC	Arterial Research and Educational Network in Asia-Pacific
BdREN	Bangladesh Research and Education Network
BGP	Border Gateway Protocol
CBR	Community Based Research
CCTCP	Cyber and Critical Tech Cooperation Program
CERNET	China Education and Research Network
CNXAPAC	Community Network Exchange Asia Pacific
COW	Community Owned/Operated Wireless
CSC-ISAC	Cyber Security Community Information Sharing and Analysis Center
DFAT	Department of Foreign Affairs and Trade (Australia)
DIY	Do It Yourself
DMSF	Davao Medical School Foundation
DNS	Domain Name System
DOST-ASTI	Department of Science and Technology: Advanced Science and Technology Institute (Philippines)
EBA	Evidence-Based Approach
ERNET	Education and Research Network (India)
HARNET	Hong Kong Academic and Research Network
HRD	Human Resource Development
ICANN	Internet Corporation for Assigned Names and Numbers
IGF	Internet Governance Forum
IIT Bombay	Indian Institute of Technology Bombay
IPv4	Internet Protocol Version 4
IPv6	Internet Protocol Version 6
ISIF Asia	Information Society Innovation Fund
ISP	Internet Service Provider

ISOC	Internet Society
IoT	Internet of Things
IT	Information Technology
IXP	Internet eXchange Point
JUCC	Joint Universities Computer Centre Ltd
JPRS	Japan Registry Services Co. Ltd
LAN	Local Area Network
LEARN	Lanka Research and Education Network (Sri Lanka)
MPLS	Multi-Protocol Label Switching
MYREN	Malaysian Research and Education Network
NAT	Network Address Translation
NIDS	Network Intrusion Detection System
NIT Silchar	National Institute of Technology Silchar (India)
NMM	Network Monitoring and Management
NREN	Nepal Research and Education Network
NTN	Non-Terrestrial Network
PacTraining	Supporting Efficient Connectivity in the Pacific project
PREGINET	Philippine Research, Education and Government Information Network
RDAP	Registration Data Access Protocol
REN	Research and Education Network
RIR	Regional Internet Registry
RPKI	Resource Public Key Infrastructure
SARENA-PAC	Satellite Arterial Research and Educational Network in the Asia-Pacific
SDN	Software Defined Network
SingAREN	Singapore Advanced Research and Education Network
SOI Asia	School On Internet Asia
SSH	Secure Shell Protocol
SWITCH SEA	Supporting Women in IT and ResearCH South East Asia (project)
ThaiREN	Thailand Research and Education Network
VNIX	Vietnam National Internet eXchange
VXLAN	Virtual Extensible Local Area Network
WAN	Wide Area Network
WIDE Project	Widely Integrated Distributed Environment
WWW	World Wide Web

All figures are in USD unless otherwise indicated.



A participant in the PacTraining Women in IT event in Vanuatu in November 2021.



POSTAL ADDRESS (AU)

PO Box 3646
South Brisbane
QLD 4101
AUSTRALIA



POSTAL ADDRESS (HK)

21st Floor, Edinburgh Tower
The Landmark
15 Queen's Road Central
HONG KONG



PHONE

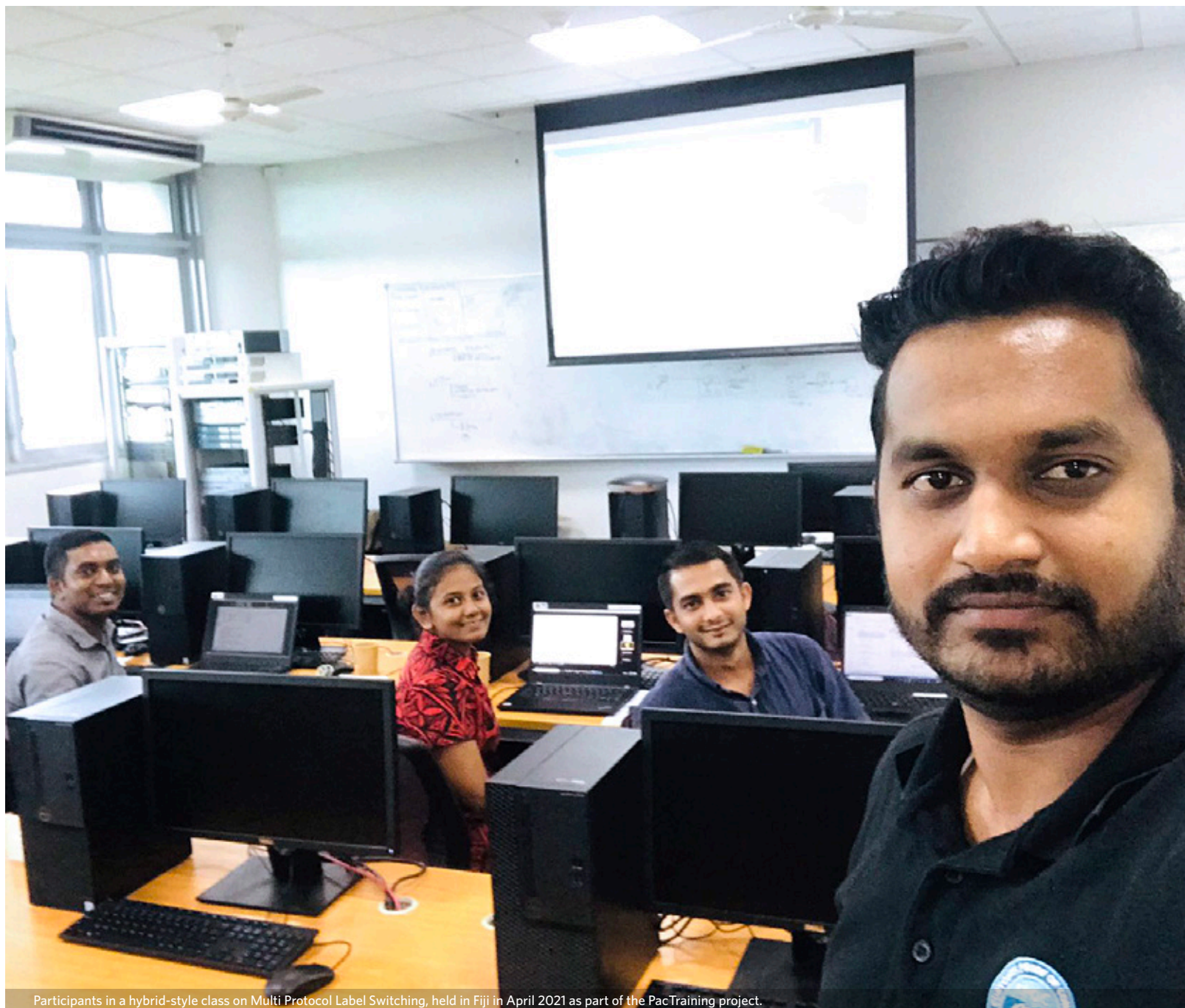
+61 7 3858 3188



EMAIL

foundation@apnic.net

<https://apnic.foundation>



Participants in a hybrid-style class on Multi Protocol Label Switching, held in Fiji in April 2021 as part of the PacTraining project.