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APIDTT 2021 Grant Agreement: Endof-Grant Report

This is the end-of-grant report for the 2021 grant agreement between APIDTT (the Trust) and the APNIC Foundation (the Foundation). It reports on the end-of-year status of the eight projects and includes financial reports for the period 1 January to 31 December 2021. All currency figures are in USD.

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Financial Reports The Foundation financial reports and the AI3-SOI Asia financial reports are attached as separate documents.

Introduction

This is an end-of-grant report for the 2021 grant agreement between the Trust and the Foundation – the first year of funding between the two organisations. It reports on the end-of-year status of eight projects and includes financial reports for the period 1 January to 31 December 2021.

The eight projects are listed in Table 1 below. Of the eight projects, five are managed by APNIC (2-6), one is managed by the APNIC Foundation (1), one is managed by Keio university in Japan (7) and one is an activity managed and implemented by the Foundation in coordination with the Trust (8).

Each project report provides details on their individual objectives, benefits to the community and their status as of December 31. The financial report provides details on project budgets, budget variance and overheads. It should be noted that all eight projects except project six will continue to receive funding in 2022.

Proje	cts	Project Budget	Project Overhead %	Project Overhead	Project Total
1.	ISIF Asia (including IPv6 grants)	2,245,000	20	449,000	2,694,000
2.	M-Root	770,000	5	38,500	808,500
3.	APNIC Academy	900,000	10	90,000	990,000
4.	Community Trainers Network Expansion	445,000	10	44,500	489,500
5.	Training delivery	652,000	10	66,000	718,000
6.	Curriculum development for non- technical audiences	500,000	10	50,000	550,000
7.	Asian Internet Interconnection Initiatives (AI3) and School of Internet Asia (SOI Asia)	2,276,300 (Al3=619,850; SOI=1,406,450; Foundation=250,000)	15	341,445	2,617,745
8.	Sponsorships	250,000	15.25	45,000	295,000
	Totals	8,038,300		1,124,445	9,162,745

Table 1 – 2021 grant agreement projects, budgets and overhead

Executive Summary and Analysis

As this was not only the first year of funding from the Trust to the Foundation, but also the first year of the Foundation's operations, there were two important priorities. The first was to ensure that each of the eight projects delivered results and achieved impact that justified the Trust's significant investments. The second priority was for the Foundation to put in place the systems and processes needed to ensure the funding was efficiently and transparently managed.

Results for the year include the provision of 116 courses/webinars to 3,584 participants; 1.8 million in funding disbursed to 22 organisations in 16 economies; more than 30 community trainers in place; and new satellite connectivity options for 28 universities across Southeast Asia.

The primary aim of the Trust's 2021 grant was to support training and knowledge development, with four of the eight projects focused on either delivering training or developing knowledge products for training. A second focus was on Internet infrastructure (M-root) with the SOI Asia-Al3 project supporting training, curriculum development and infrastructure (satellites). This responds directly to the Trust's purpose 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 two largest projects funded by the 2021 grant – ISIF Asia and AI3-SOI Asia – ended the year on track overall in terms of planned activities and budget. The grant to support AI3-SOI Asia was dispersed as two separate donations to Keio university in Japan at the beginning of the grant period (February and March). Keio has provided a summary financial report on the spending of the funds up to 31 December (see Appendix 1) – please note the additional information provided up until 31 March 2022 for the Japanese financial year and that the underspend documented is expected to be managed successfully. As of 31 December, ISIF Asia was on schedule for the disbursement of funding to the 22 grantees selected during the second half of the year.

It should also be noted that all eight projects funded by the Trust engaged and expanded existing activities and all will receive funding in 2022.

Key points

Overall, the key points of this final report are that:

- 1. All eight projects achieved at least one of their objectives stated in the grant agreement with most achieving all their objectives.
- 2. As of 31 December, the Foundation retained remaining balances of 172,184 in grant funding and 52,222 in overheads for a total remaining balance of 224,406. This will be addressed via a credit note in the 2022 grant agreement.
- 3. Several of the projects had slow starts because of hiring challenges and COVID delays causing significant underspend by several of the APNIC projects.
- 4. Each project was documented and reported to the community. Here is a list of the blogs published about the projects:
 - APIDTT support: <u>https://blog.apnic.net/2021/07/09/exploring-apnics-2021-activity-themes-apnic-capacity-for-internet-development/</u>
 - SOI Asia-Al3: <u>https://blog.apnic.net/2021/07/01/rens-pioneers-of-the-internet-asia-pacific/</u>
 - ISIF Asia: <u>https://blog.apnic.net/2021/06/03/expanded-isif-asia-grants-and-awards-program-now-open-for-applications/</u>
 - M-root: <u>https://blog.apnic.net/2020/12/18/first-m-root-anycast-instance-deployed-under-new-mou/</u>
 - APNIC Academy: https://blog.apnic.net/2021/06/08/expanding-apnic-academy-in-2021/
 - Curriculum for non-technical audiences: <u>https://blog.apnic.net/2021/05/05/growing-a-game-of-community-engagement/</u>
 - Training delivery: <u>https://blog.apnic.net/2022/01/12/apnic-academy-2021-in-review/</u>

Community trainers: <u>https://blog.apnic.net/2021/07/26/event-wrap-lknog-5-and-sanog-37/</u>

To support the implementation of the projects, the Foundation invested heavily in new systems and platforms (NetSuite for finance; Fluxx for grant management; Confluence for project management; SharePoint for document management). Six new Foundation staff positions – finance and business; monitoring and evaluation, grants management, human resources, communications and Tokyo project coordinator – were recruited during the report period further strengthening the management of the grant and its projects.

Challenges

In the management and implementation of the eight projects covered by the grant agreement, the following challenges were noted (in addition to the obvious COVID challenges throughout the year):

- Six of the eight projects Training Delivery, Academy, Community Trainers, M-Root, Curriculum Development for Non-Technical Audiences and Al3-SOIAsia – significantly underspent their budgets for the reporting period. Full details are provided in the financial report. The reasons for this underspend included:
 - It took time to set up and start the implementation work of each project. Several projects needed to develop new relationships (M-Root; Al3-SOI Asia, Community Trainers) that took time to put into place and get going. One project (Curriculum Development for Non-Technical Audiences) did not engage its main contractors until June. Delays were also caused by staff adjusting to new project processes.

Proposed solution: Improved processes and better planning and project implementation

• The project planning process significantly overestimated both the cost of specific activities (such as salaries) and the ability of projects to spend money as scheduled.

Proposed solution: Improved project budget planning

 A lack of clarity around budget priorities that resulted in some projects having to choose between competing budgets.

Proposed solution: Improved allocation of budgets

2. All the projects faced slow hiring and personnel challenges that caused in some cases substantial delays. Future project planning must include suitable time frames for hiring of up to 4 to 6 months. In one project, one staff member also resigned (training delivery). In addition to the projects, the Foundation also hired new staff to support the projects. Moving forward, it's expected these challenges will be better managed and allowed for.

Proposed solution: HR expertise has been increased

Implementation

For the management and implementation of the grant, the Foundation engaged with two partners on a sub-contracting basis. The grant funded five projects at APNIC Pty Ltd; one project at Keio university in Japan, with two projects being managed and implemented by the Foundation. The details are as follows:

1. APNIC

The five projects managed and implemented by APNIC were (please note these links are to internal project pages and are not viewable externally): 1) <u>M-Root</u>; 2) <u>APNIC Academy</u>; 3) <u>Training Delivery</u>; 4) <u>Community Trainers</u>; and 5) <u>Curriculum Development for Non-Technical Audiences</u>.

To document respective roles in project management and funding the Foundation signed an Affirmation of Commitment (AoC) with APNIC (see Appendix 2). The AoC positioned APNIC as a sub-contractor to the Foundation where the Foundation:

- Provided funding to APNIC on a cost recovery basis for each project's activities. APNIC invoiced the Foundation monthly for its project costs.
- Having agreed to an annual budget for each project, agreed that APNIC manage and implemented project activities as an independent sub-contractor. Reports were provided to the Foundation on a quarterly basis.
- Recognized that all five projects were established and on-going activities of APNIC.

2. Keio university

The project managed by Keio university was (please note this is link is to internal project pages and is not viewable externally): <u>AI3-SOI Asia</u>. The project was funded in two tranches made as donations to Keio university in February and March respectively. The donation documents can be seen in Appendix 3.

The AI3-SOI Asia project team is based at Keio university in Tokyo. They collaborate with and support several other Japanese agencies and organizations including WIDE and AITAC. Started in 2001, the project is well established in its operations and partnerships.

During the year a Project Coordinator based in Tokyo was hired by the Foundation.

3. APNIC Foundation

The Foundation managed and implemented the <u>ISIF Asia grants program</u>, including the IPv6 grants.

The eighth and final project (please note this is link is to internal project pages and is not viewable externally) <u>"Sponsorships and contributions to advance Internet knowledge and education in the Asia Pacific region"</u> is managed and implemented by the Foundation in close coordination with the Trust.

Financial Summary

Under the terms of the grant agreement, the total funding agreed on was \$9,162,745, including overhead. Under the Payment Schedule, the Tranche 1 and 2 payments totalled 5,756,312, with total grant expenditure equalling 5,584,128 (see Table 2).

As of 31 December, the Foundation retained remaining balances of 172,184 in grant funding and 52,222 in overheads for a total remaining balance of 224,406. This will be addressed via a credit note in the 2022 grant agreement.

Detailed financial reports on each project are provided separately to this report as attached Excel files. The main highlights of these reports are:

- 1) Underspend by all the APNIC projects that was largely recognised in the second tranche request.
- A request from ISIF Asia to increase the number of grantees from the original 18 to 22 with a subsequent increase in budget that was funded by a transfer from other ISIF Asia activities and the IPv6 grants.
- 3) The sponsorship budget being overspent by some 70,000

The Al3-SOI Asia project has submitted a revised budget for the Japanese financial year up until 30 March 2022. A summary of the revisions is provided in Appendix 1 and a detailed financial report is included with this report It forecasts a minor surplus of 5,475.46 for the Japanese financial year.

2021 Projec	Grant Total	Grant Received	Grant Expenditure	Grant Remaining	Overhead Remaining
1. ISIF Asia	2,245,00	0 2,188,341	1,912,305	276,036	55,207
2. M-Root	770,000) 157,322	132,770	24,552	1,227
3. APNIC Aca	idemy 900,000) 314,930	291,929	23,001	2,300
4. Community Trainers	445,000) 148,206	162,565	(14,359)	(1,436)
5. Training De	elivery 652,000	309,439	293,244	16,195	1,999
6. Curriculum Developme Non-Techn Audiences) 182,961	437,636	(254,675)	(25,467)
7. Asian Intern Interconnec (Al3) and S of Internet (SOI Asia) Foundation	ction School Asia and	0 2,055,113	2,059,551	(4,438)	(665)
8. Sponsorshi	ips 250,000	400,000	294,127	105,873	19,057
Total	8,038,30	0 5,756,312	5,584,128	172,184	52,222

However, there are substantial additional commitments of over 700,000 requested by the project for most of 2022.

Table 2 - 2021 grant actuals, expenditure and remaining balances

Project Reports

1. ISIF Asia

ISIF Asia seeks to support and build communities that research, design and implement solutions to strengthen the availability, affordability and accessibility of the Internet to facilitate human and economic development in the APAC region.

Objectives

- Support and build a network of grant and award recipients that establishes an active, diverse and engaged community of Internet researchers and practitioners.
- Fund innovative and relevant solutions in different stages of development focusing on three main programs: 1) Infrastructure; 2) inclusion and 3) Knowledge. The solutions should address problems identified through community consultation and evidence-based research, responding to community needs, and seek to maximize their potential, in particular addressing issues around availability, affordability and accessibility. Under the Infrastructure program, the ISIF Asia grants will encourage and support the continued deployment and use of IPv6 by network operators across the Asia Pacific, with a particular focus on network operators in developing economies and/or underserved areas.

- Produce high-quality evidence-based communications products accompanied by an effective dissemination strategy to facilitate use and adoption of R&D results.
- Expand ISIF Asia's existing network of donors and sponsors to establish new funding partnerships and fundraising strategies in support of the ISIF Asia objectives.

Benefits to the Internet community

- Helping improve and support the increased availability, affordability and accessibility of the Internet in the region.
- Many types of organizations from the Asia Pacific region (including APNIC members) will be eligible to apply to the grants and awards, so they can directly benefit from the funding opportunities offered to support their Internet-related research and operational priorities¹.
- Project reports will be publicly available where new knowledge and understanding about robust R&D solutions developed will be shared for the benefit of the community. This includes case studies and reports on successful IPv6 deployments that can benefit others planning their own deployments.
- Design and implementation of R&D solutions that directly respond to and benefit member's needs (network operations, security, etc) across the 3 focus areas, following best practices and supporting the development of the Internet, for example an increased rate of IPv6 deployment and use in the Asia Pacific.

Achievements

Project:

- USD 1,820,000 in grants had been awarded by 31 December supporting 22 projects across 3 programs (Infrastructure, Inclusion and Knowledge). Actual disbursement of the funding continued into January 2022.
- There were three grant types:
 - 6 Impact Grants of USD 150,000 each
 - 8 Scale-up Grants of USD 85,000 each
 - 8 Small Grants of USD 30,000 each
- Projects in 16 economies were supported: India (4), Australia (3), Malaysia (2), Indonesia (2), Bangladesh, Cambodia, China, Lao PDR, Federated States of Micronesia, Myanmar, New Zealand, Papua New Guinea, Solomon Islands, Sri Lanka and the Philippines. Three of these economies (in bold) had not been supported previously. However, it should be noted that this list is where grantees are based, and some of these projects cover multiple economies – the project based out of China, for example, also involves Nepal, Singapore, Afghanistan, Japan and Thailand, as well as other economies already listed above and some outside the Asia Pacific.
- During 2021, considerable development work was implemented to migrate the existing application and selection online portal to Fluxx, a grants management system to better fit the expected growth and strengthen the due diligence processes under a new jurisdiction, adjusting contracts and reporting mechanisms, in support of transparency, and knowledge sharing.
- The selection process was revamped with the establishment of three new committees, with increased diversity in terms of gender, geographical representation and stakeholder group.

Full details of each grant are available in Appendix 4

A call for ISIF Asia's IPv6 grants remains open.

¹ Note: Individuals are not eligible to apply.

Staffing: A Grants Management Lead was recruited

2. M-Root deployment

M-Root anycast instance deployment support involves new collaboration between APNIC, the WIDE Project and Japan Registry Services (JPRS) to accelerate anycast deployment of M-Root around the Asia Pacific.

Objectives

- Streamline M-Root deployment and operations by improving process and automation
- Deploy 12 new M-Root instances in 2021

Benefits to the Internet community

- Faster and more reliable DNS service
- Faster and easier deployment of Root DNS anycast instances at desirable or underserved locations.
- Will help improve and increase the availability, affordability and accessibility of the Internet in the region.

Achievements

Project:

- Completed deployment of M-root in Hanoi.
- Deployment of M-root servers in Guam, Kaohsiung, Manila, Dhaka, Kuala Lumpur, Bangkok, Jakarta, Ulaanbaatar, Kathmandu, Mumbai and Singapore are progressing but equipment delivery delays are slowing deployment.

Staffing:

- Senior Systems Engineer recruited
- JPRS technical position unfunded
- WIDE technical position unfunded

3. APNIC Academy

APNIC Academy Platform and Curriculum development is accelerating and strengthening the development of an integrated online platform (the APNIC Academy) to support training and technical assistance and develop a comprehensive curriculum for self-paced and instructor-led training.

Objectives

- Integrate various training systems (including registration, calendar and training wiki) into APNIC Academy
- Establish online technical assistance functionality to connect Members with community experts
- Extend multilingual support to more courses
- Build a comprehensive Internet infrastructure-focused training curriculum ready for future certification

Benefits to Internet community

- Improved access to training and technical assistance.
- Improved technical capacity in the Asia Pacific region.
- Advance education in the Asia Pacific Region

Achievements

Project:

- Extended translation support provided to the APNIC Academy's online video-based courses.
- Commenced integration of Salesforce's event management and training event registration systems.
- Launched the Technical Assistance (TA) platform.
- Migrated training content on apnic.net to the APNIC Academy website, creating one training site for the first time.

Staffing:

- Full Stack Web Developer recruited
- Senior UX/UI Designer recruited
- Training project manager unfilled

4. Community trainers

The expansion of the Community Trainers network involves recruiting, retaining and developing more Community Trainers at the local level to expand the scope and effectiveness of APNIC Academy training.

Objectives

- Provide relevant, best practice technical training at a local level (and in local language where needed).
- Develop and maintain a sustainable, scalable model to support the Community Trainer network.

Benefits to the Internet community

- Local support for APNIC training and technical assistance
- Increased instructor led APNIC training in targeted economies
- Options for training in local language and improved translation support for training content
- Advance education in the Asia Pacific Region

Achievements

Project:

• There are now 30 active Community Trainers

- Twenty-eight Community Trainers from 14 economies were engaged for 68 instructor-led online training events
- Recruitment has commenced for the new Retained Community Trainers model (CT retainer program) for dedicated on-the-ground local support to the community

Staffing:

- Training and Development Coordinator recruited
- Training and Development Coordinator recruited
- HR remote workforce position (Foundation) recruited

5. Training delivery

Training members of the Asia Pacific technical community to proficiently understand, configure and manage their Internet infrastructure and services while embracing best current practices.

Objectives

- Training Delivery: To provide instructor-led training with a focus on deployment and operations of Internet infrastructure technologies
- Technical Assistance: To provide technical advice on deployment and operations of Internet infrastructure technologies on an individual member basis
- Content Development: To act as Subject Matter Experts to assist in training content development

Benefits to the Internet community

- Empower Internet engineers in the region with a full understanding of technology and processes so that they can undertake tasks with more confidence and success
- Apply best current practices to ensure network operators keep pace with the latest industry developments
- Ensure a deeper understanding of regional address management policies, as the foundation of network planning
- Improve network services by developing skills to provide better services, while providing Internet engineers with professional networking opportunities
- Advance education in the Asia Pacific Region

Achievements

Project:

- 116 courses/webinars to 3,584 participants. The remote instructor-led trainings were delivered as a mix of hybrid, pure online, open tutorials and targeted events.
- Completed development of the Network Management and Monitoring (NMM) course. Configuration management module in progress.
- Completed development of the Network Automation course

Completed updating content for the following existing courses:

- Internet routing: BGP-TE/multihoming lab module; BGP OpSec (Operations & Security) BCP lab.
- IPv6 deployment: New DHCPv6-PD lab (both for instructor-led and virtual labs for the Academy); new IPv6 transition techniques slides 6rd and NAT64/DNS64/464XLAT.
- Network security: New SSL/TLS slides and lab module; Intrusion Detection with Suricata module with labs.
- Updated the RPKI/ROV lab guides with two new validators (rpki-prover & rpki-client), following the deprecation of the RIPE validator and maintenance ceasing on OctoRPKI.

Staffing:

- Full time trainer recruited
- Full time trainer recruited
- Full time trainer unfilled
- Full time trainer unfilled

6. Curriculum development

Curriculum development for non-technical audiences involves developing APNIC-branded courseware and gamified material, to explain how the Internet works from an APNIC and Internet addressing perspective.

Objectives

To produce ready-made, APNIC-branded, courseware, slideware, media and online educational material to:

- Enable newcomers to actively participate in APNIC processes
- Increase understanding of non-technical audiences --such as government officials-- about APNIC's technical functions and its role in the Internet ecosystem
- Facilitate onboarding processes of newly recruited APNIC staff members

To develop introductory courseware about Internet fundamental concepts, including IP address management and APNIC's role in the Internet ecosystem, as well as an introduction to Internet governance from an APNIC perspective in two formats:

- Stand-alone, APNIC branded, slideware and media, for tailored use by APNIC staff during presentations and engagements
- A self-paced, online learning course offered by the APNIC Academy, with the option of gaining a certificate of achievement upon completion

To produce a digital version of the IPGO game developed to increase understanding of Internet fundamentals, IP address management, and Internet governance.

Benefits to the Internet community

- More prepared fellowship recipient participation in conferences and policy development.
- More enabled participants at APNIC conferences
- Informed decision-making by government officials, with better understanding of how the Internet works

- More meaningful engagements with non-technical audiences and a better understanding of APNIC's role and services
- Advance education in the Asia Pacific Region

Achievements

Project:

- A team of instructional designers was appointed in May
- The 'Analysis' phase of product development concluded with agreed project goals, learning objectives, target audience and high-level design
- A procurement process was established to select a Game Designer. A tender process was launched, with the deadline to receive vendor proposals closed in November
- Conducted three workshops and four consultations with target audience groups
- A Minimum Viable Product (MVP) is scheduled to be delivered mid-2022

Staffing:

• Product Manager contractor recruited (in June)

7. Asian Internet Interconnection Initiatives (AI3) and School of Internet Asia (SOI Asia)

AI3

The AI3 project has two main objectives:

- To continue the development and achieve the eventual full implementation of resilient satellite connectivity to support research and education infrastructure and collaboration in the Asia-Pacific with an initial focus on Southeast Asia.
- At the same time provide connectivity in times of disaster and emergency

To achieve these objectives, this project is focusing on three initiatives:

- The development of a Ku-band VSAT network in the Asia Pacific utilizing Unidirectional Link Routing (UDLR)
- The development of an emergency-ready, disaster response network
- Supporting Research and Education Network (REN) technology development and collaboration

These initiatives build on and continue the previous work of the AI3 program.

Expected outcomes

Research and education institutions in Asia, including remote or poorly connected sites, have reliable connectivity or alternative connectivity for their activities, including network-based experiments.

This included the following outcomes for 2021:

- Three campuses connected in 2021 in Timor Leste, Nepal and Laos
- The purchase and installation of at least three routers and three switches
- The leasing of satellite bandwidth

- The leasing of VSAT hubs
- The purchase and installation of VSAT terminals

In addition to the development of the platform, this initiative also conducted the following activities to prepare for emergencies:

- Capacity building/training for the rapid deployment and operation of the platform
- Promotion of Internet emergency readiness to REN communities and strategic partners in the region.

The expected outcome of the disaster preparation activities:

• Communities affected by disasters and emergencies in the Asia Pacific will be able to rapidly recover connectivity to support relief and re-building efforts.

SOI Asia

The objective of SOI Asia is to support and foster a collaborative community among Southeast Asian universities and research institutions with the aim of using an Evidence-based Approach (EBA) and related research to support the design of resilient future societies.

To achieve this objective, the project is focusing on three initiatives:

- Developing the EBA methodology: Using an EBA, develop capacity building programs for solving emerging issues in Asia.
- Implementing an Internet engineer of the future development program: Develop capacity building programs for network engineers to advance global research and education networks of the future.
- The development of a common blended learning platform: This will be among partner institutions to support the above capacity building programs.

These initiatives build on and continue the previous work of the SOI Asia program. Here is a summary of the three initiatives:

Expected outcome: Research and education institutions in Asia will be able to develop their own programs for sustainable EBA-oriented human resource development.

This project is also developing curriculum and providing technical training for Internet engineers involved in SOI Asia and elsewhere. This includes self-paced online classes and virtual labs for individuals and group that allow participants to hone their teamworking skills in an operational environment while using actual equipment. The initiative is collaborating with AI3, the <u>APNIC</u> <u>Academy</u>, <u>AITAC</u>, <u>Interop</u> and other Internet community members in developing the training programs.

Expected outcome: Partner institutions in <u>ARENA-PAC</u> and SARENA-PAC will be able to develop the human resources to manage their Internet infrastructure.

These outcomes include the following targets for 2021 and beyond:

- EBA program implementation in three fields; 2022-2025: 3 programs/year
- Faculty development program implementation: 1 program
- Consultation and coordination with partners: 2021: 1 meeting; 2022-2025: 2 meetings/year
- 2021: 1 AI3/SOI Asia meeting, 1 APAN/TEIN meeting, 1 other meeting / year
- Curriculum and content development: FY2021: full development

Achievements

The Asia Pacific Resilient Society (APRS) was established within Keio University Global Research Institute (KGRI), as a working group to support and develop the Al3 and SOI Asia projects starting in April 2021. Office space has been rented on the Mita campus and office equipment (laptops, audio headsets, digital gadgets) have been purchased and prepared.

Project:

Al3 (satellite connectivity)

- New proposal developed for satellite networks using Starlink LEO satellite network and other Ku-band services.
- Started discussions with SoftBank on the use of OneWeb LEO satellite network for a test bed network in Japan.
- Looking at developing a university-based, emergency-ready disaster response network.

SOIAsia (curriculum and research)

- Engaging 28 university and research institute partners in 15 South East Asian economies via MoUs
- Asia Pacific Internet Engineer course (APie): Initial curriculum and course design pilot program being developed
- Equipment procurement and installation: 2 computer servers; 1 GPU computer server; 2 storage servers; network equipment

Staffing:

- Program Manager recruited
- Program Assistant recruited
- Admin staff recruited
- Developer recruited
- Developer recruited

8. Sponsorships and contributions to advance Internet knowledge and education in the Asia Pacific region

The objective of this activity was to sponsor and support activities, organizations, events and content that advanced Internet knowledge and education in the Asia Pacific. It collaborated closely with the on-going and established sponsorship activities of APNIC. The Foundation also coordinated closely and received endorsement for each sponsorship from the Trust.

The management of sponsorship requests has been incorporated also on the Foundation Fluxx portal, where pre-approved requests were processed to follow a more rigorous review process, following a consistent process for administration and compliance.

Achievements

Sponsorships:

Organization	Amount	Scope
1. Internet Protocol Journal	25,000	Global
2. PeeringDB	10,000	Global
3. AIT - AINTEC conference	1,000	APAC
4. AIT - AP* Secretariat Support	5,000	APAC
5. CyberGreen Institute (3 year commitment)	100,000	Global
6. IXP Manager	29,000	Global
7. IXPDB	17,000	Global
8. APNG (moved to 2022)	2,500	APAC
9. Digital Empowerment Foundation: Community Network Xchange event	5,900	APAC
10.Shadowserver	100,000	Global
TOTAL	295,000	

Table 3 — Sponsorships

Appendices

Appendix 1 — AI3-SOI Asia summary financial report

AI3-SOI Asia financial report for 2021 is attached as a separate document.

			February 2021	- March 2022	
			Budget	Spending (including expected expenditure in Jan - Mar 2022)	Balance
Project Support			\$45,997.36	\$36,437.55	\$9,559.82
AI3	Satellite	Dev	\$169,270.30	\$318,206.80	- \$148,936.50
	Emergency	Capacity Dev	\$0.00	\$0.00	\$0.00
	REN	Dynamic net Net. Mgmt IoT Server Community	\$219,691.69	\$128,874.80	\$90,816.89
	Personnel		\$193,188.93	\$42,990.11	\$150,198.82
	Report		\$0.00	\$0.00	\$0.00
SOI Asia	EBA	Process Equipment FW FD Partner Relation Communities	\$251,743.57	\$385,863.12	- \$134,119.55
	APie	Curriculum Equipment Operation	\$341,589.30	\$404,787.70	-\$63,198.40
	Platform	Equipment Development Operation	\$234,089.14	\$203,219.12	\$30,870.02
	Personnel		\$266,784.71	\$196,500.35	\$70,284.36
	Report		\$0.00	\$0.00	\$0.00
TOTAL			\$1,722,355.00	\$1,716,879.54	\$5,475.46

Appendix 2 — APNIC Foundation Affirmation of Commitment

Affirmation of Commitments between APNIC and APNIC Foundation

Parties

This Affirmation of Commitments is made between:

A. APNIC Pty Ltd ACN 081 528 101 for and on behalf of the Asia Pacific Network Information Centre of 6 Cordelia Street, South Brisbane, Queensland, Australia (APNIC);

and

B. APNIC Foundation Limited ACN 646 643 156 of 6 Cordelia Street, South Brisbane, Queensland, Australia (AFA),

and

APNIC Foundation Limited a company incorporated in Hong Kong with its registered office located at 21st Floor, Edinburgh Tower, The Landmark, 15 Queens's Road Central, Hong Kong (**AFHK**)

(AFA and AFHK collectively, APNIC Foundation)

Background

- 1. APNIC Foundation, comprised of its constituent corporate entities, AFA and AFHK, was formed by APNIC to further its efforts to support training, capacity building and other Internet development activities in the Asia Pacific region.
- 2. In this document:
 - a. a right given to APNIC Foundation is a right given to both AFA and AFHK; and
 - b. an obligation of APNIC Foundation is an obligation of either AFA or AFHK, or both of them, at the election of AFA and AFHK on a case-by-case basis.
- 3. APNIC is the sole member of both AFA and AFHK.

- 4. This document sets out the commitments that each party makes to the other party for the provision of funding and other resources by APNIC to APNIC Foundation.
- 5. This document replaces and supersedes any previous Affirmation of Commitments entered into between the parties or a subset of the parties.

Mutual Objectives

- 6. APNIC declares its intention and commitment to ensure that the ongoing objectives and activities of APNIC Foundation, as set out in APNIC Foundation's respective constituent documents, are fully supported.
- 7. The parties envisage that, over time, APNIC Foundation will become self-funded, and its reliance upon APNIC to provide financial and other resources to enable the APNIC Foundation to carry out its objectives and activities, should diminish over time.
- 8. The parties acknowledge that with APNIC's technical, resourcing, and administrative capability it is uniquely suited to assisting APNIC Foundation in the delivery of its programs in the Asia Pacific region.
- 9. APNIC is committed to assisting and supporting APNIC Foundation in accordance with the terms of this document.

Commitment to funding and other support

- 10. APNIC commits to ensure that, where alternative sources of funding are not procured or available to APNIC Foundation, APNIC Foundation will have the funding described in clause 11 below, for the period up to 10 years starting from the date of this document (**Funding Period**). APNIC also commits to provide a minimum of two years notice of any substantial change to its willingness to fund and support the APNIC Foundation.
- 11. The funding referred to in clause 10 above will comprise:
 - a. the salary and other on-cost of employing such number of APNIC Foundation's staff members as agreed between the parties, who may be employed by APNIC and seconded to APNIC Foundation (or as otherwise agreed between the parties);
 - b. operational overheads up to an amount approved annually by the APNIC Executive Council as part of the APNIC budgetary approval process;
 - c. on a project-by-project basis as agreed between the parties, APNIC will assist APNIC Foundation with respect to the initial costs of delivering those projects until such costs are reimbursed by the donors; and

d. such other funding or variation of the aforementioned funding as agreed between the parties from time to time,

with the intention being that where alternative funding is available, the funding provided by APNIC under this clause 11 will be reimbursed on a cost recovery basis at such time as agreed between the parties.

- 12. The parties envisage that over the Funding Period, APNIC Foundation will increasingly rely on funding from parties outside of APNIC, and eventually become self-funded. APNIC Foundation will seek, to the extent appropriate and reasonable, donors to fund APNIC Foundation's operational expenses and the delivery of projects that meet APNIC Foundation's objectives.
- 13. The parties acknowledge and agree that:
 - a. any amounts provided by APNIC to APNIC Foundation will be on an interest free basis; and
 - b. the repayment by APNIC Foundation of costs incurred by APNIC for the benefit of APNIC Foundation pursuant to this document, including in respect of completing works as subcontractor to APNIC Foundation, will be without markup and only on a cost recovery basis,

such that APNIC will not derive a profit from the relationship between the parties.

Subcontracting and cost recovery

- 14. Where appropriate and reasonable to do so and as agreed between the parties, APNIC Foundation will engage APNIC as a subcontractor to:
 - a. provide APNIC Foundation with staffing and other resources to assist APNIC Foundation in delivering its projects; and
 - b. assist in the design, implementation, management, and maintenance of certain projects funded by APNIC Foundation.
- 15. Unless otherwise agreed between the parties, where APNIC is engaged as a subcontractor by APNIC Foundation pursuant to clause 14 above, the following terms will apply:
 - a. **(project)** the parties will agree on the scope of works, deliverables, timeframes, and budget (**Project Specifics**) for each project or part thereof being subcontracted to APNIC (**Subcontracting Project**);
 - b. **(performance)** APNIC will complete the subcontracting works in accordance with the Project Specifics;

- c. **(documentation)** APNIC will provide such information as required by APNIC Foundation to fulfil its reporting obligations but will not assume responsibility for those obligations;
- d. **(cost recovery)** APNIC will invoice APNIC Foundation on a cost recovery basis for all costs incurred in performing and adhering to the Project Specifics for each Project;
- e. (intellectual property) each party:
 - i. agrees that all intellectual property rights developed in the course of performing the Subcontracting Project (**Project IP**) will be owned and vest in:
 - A. the party that performs such work; or
 - B. where APNIC further subcontracts the performance of the Subcontracting Project, APNIC as the main subcontractor;
 - ii. agrees, where reasonable to do so, to make the Project IP available under a Creative Commons Attribution-Share Alike License; and
 - iii. grants to each other party a worldwide, non-exclusive, royalty free, irrevocable, non-transferrable license to the Project IP.

Commitment to accountability

- 16. For so long as APNIC continues to provide funding or other resources to APNIC Foundation for its projects and activities under this document, clauses 17 to 21 below will apply.
- 17. APNIC Foundation will, on an annual basis by 1 December each year, submit its annual strategic plan for the following year to APNIC for its guidance and approval.
- 18. APNIC Foundation will, at the end of each quarter in each calendar year, submit its operational and activity report for that quarter to APNIC for its approval.
- 19. APNIC Foundation will, within 30 days after each meeting of its board of directors, provide APNIC will a copy of the minutes of the directors' meeting.
- 20. APNIC Foundation will, to the extent permissible by law in the jurisdictions in which it is incorporated, adopt and observe all appropriate staffing, governance and financial policies and processes in the interests of good governance and to meet the requirements of laws which apply to it and the reasonable requirements of its donors.
- 21. APNIC Foundation commits to have its annual financial statements audited by a firm of auditors acceptable to APNIC.

Commitment to collaboration, cooperation and support

- 22. APNIC and APNIC Foundation are committed to maximizing collaboration, cooperation and mutual support between the parties.
- 23. To achieve the objectives, set out in clause 22 above, the parties are committed to regular meetings at management level to ensure that there is regular open, transparent and productive communication between the parties.
- 24. Specifically, APNIC is committed to cooperating with the APNIC Foundation by providing training, technical assistance and other support as agreed with APNIC Foundation in the development of its projects and activities in accordance with clauses 10 to 15 above.
- 25. In turn, APNIC Foundation is committed to cooperating with APNIC's development activities in supporting its efforts to provide training, technical assistance and other services to APNIC's members and the Asia Pacific Internet community.

Key personnel

- 26. For so long as APNIC continues to provide funding and other resources to APNIC Foundation or engages employees for the benefit of APNIC Foundation for its projects and activities under this document, clauses 27 and 28 below will apply.
- 27. APNIC and APNIC Foundation agree that the following are the key personnel for APNIC Foundation:
 - a. CEO/Executive Director;
 - b. Head of Programs; and
 - c. such other persons who may, from time to time, occupy senior executive positions within the APNIC Foundation.
- 28. APNIC Foundation may not:
 - a. remove or dismiss any key personnel;
 - b. change the position designation of any key personnel; or
 - c. make any new appointment or replace any key personnel,

without the prior written consent of APNIC.

Designated contact persons

29. For the purposes of all communication under this document, unless otherwise agreed between the parties, the designated contact person:

- a. for APNIC is its Director-General; and
- b. for APNIC Foundation is its CEO.

No partnership or agency

- 30. This document does not create any partnership, agency, association, employment, or any other fiduciary relationship.
- 31. This document does not give any party, any authority to act as agent for, or on behalf of, or to represent or bind the other party in any manner.

Status of this document

- 32. The parties record their mutual intention that this document serves as a nonbinding record of their understanding.
- 33. This document does not create any enforceable obligations under law.

Duration and amendments

- 34. This document is intended to have effect for the Funding Period, whilst APNIC funds and supports APNIC Foundation in the manner set out in this document.
- 35. The parties can modify this document by recording any such modification in writing signed by both parties.

Appendix 3 – Keio University donation documents

Keio university donation documents

1	RECEIPT
王雄雄雄武学雄村东京雄雄武学世林王家世州王家定代王家世代王学世代王字世代王字世代 李林武章 使祥武等法对王子姓氏学世代王子姓氏王子姓的王父母父子生世代王子母 华王子母母王家母母王子母世王子母世王子母世王子母子王子母子王子	Date: February 26, 2021
Name of Contributor : APNIC F Amount of Contribution : 260,0	00 USD
As Donation for : Keisuke Uel Studies	nara, Faculty of Environment and Information
We would like to express our he Contribution to Keio University	artfelt appreciation for your Generous
	Keio University 2·15·45 Mita, Minato·ku Tokyo 108·8345 Japan
	〒108-8345 東京都港区三田二丁目 15 番 45 鹿 麻 羔

	Na0003
RECEIP	Т
	Date: April 9, 2021
Amount of Contribution : 1,766,300 USD As Donation for : Research activities conducte Center, Keio University Glo We would like to express our heartfelt appreci- contribution to Keio University.	bal Research Institute.
	Keio University 2:15-45 Mita, Minato-ku Tokyo 108-8345 Japan
	〒108-8345 東京都造区三田二丁Ⅱ 15 巻 45 慶 應 義 地力//佳

Appendix 4 — ISIF Asia grant information

ISIF Asia – Infrastructure USD 435,000

Distant Curve Remote Area Telecommunications (150,000)	AU	Expand the Central Australian Desert Project to Serve the Indigenous Community of Nitjpurru (Pigeon Hole), Northern Territory
Universiti Kebangsaan Malaysia (85,000)	MY	Hybrid LoRa Network for Underserved Community Internet (LUCI)
The University of Auckland (85,000)	NZ	Field-ready network-coded tunnels for satellite links
PNG University of Technology (85,000)	PNG	Sustainable smart villages in rural Papua New Guinea
The University of Newcastle (30,000)	AU	Securing software defined network architectures

ISIF Asia – Inclusion USD 795,000

Rural Broadband (150,000)	IN	Connectivity Bridges: Reaching remote locations with high speed Internet services
Common Room Networks Foundation (150,000)	ID	Local community-based Internet infrastructure development and Internet utilization
Myanmar Book Aid and Preservation Foundation (150,000)	MM	Equal access to the Information Society
National Institute of Technology Silchar (85,000)	IN	Bamboo towers for low-cost, affordable, and sustainable rural Internet connectivity
Boom! Inc. (85,000)	FM	Broadband for All - Yap State Federated States of Micronesia
SATSOL Ltd. (85,000)	SB	OASIS Data Garden Project
Humanity & Inclusion (30,000)	BD	Inclusive and efficient access to Internet services and information for persons with disabilities
Makerbox Lao (30,000)	LA	Empowering remote agricultural communities through long- range wide area networks
Davao Medical School Foundation, Inc (30,000)	PH	Internet Connection to 4 Villages in San Isidro, Mindanao, Philippines

ISIF Asia – Knowledge USD 590,000

Tsinghua University (150,000)	CN	Developing a collaborative BGP routing, analyzing and diagnosing platform
Swiss German University (150,000)	ID	Intelligent Honeynet threat sharing platform
TeleMARS (85,000)	AU	Training and knowledge sharing: Network analysis for Al transformation
SCoRe Lab (85,000)	LK	Bug Zero: Bug bounty platform

Passarelles Numeriques (30,000)	КН	Cybersecurity in Cambodia
India Internet Engineering Society (30,000)	IN	IPv6 Knowledge Transfer
Servelots Infotech (30,000)	IN	An inclusive DIY COW (Community Operated Wireless) kit for enabling local communications at remote locations
University of Malaya (30,000)	MY	Design, development and operation of a SDN-based Internet exchange playground for networkers

Appendix 5 — Public links to project information

Public links to project information

ISIF Asia: https://isif.asia/

M-root: https://m.root-servers.org/

APNIC Academy: <u>https://academy.apnic.net/en/</u>

Training delivery: https://training.apnic.net/

Community Trainers: <u>https://training.apnic.net/community-trainers/</u>

AI3-SOI Asia: https://www.soi.asia/about/