



National Information and Communications Technology Authority

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UNIVERSAL ACCESS & SERVICE (UAS) PROJECT REPORT

2024



for

MINISTER FOR INFORMATION & COMMUNICATION
TECHNOLOGY

HON. TIMOTHY MASIU, MP

by

UAS BOARD

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1. INTRODUCTION

After reviewing a report by NICTA outlining proposed UAS Projects for the year 2024, the UAS Board has compiled a report putting forth its recommendations for 2024 UAS Projects. In accordance with the National Information and Communications Technology Act 2009 (the Act), the Universal Access and Service (UAS) Board presents this report to the Minister for consideration and to fulfill the responsibilities outlined in Part V of the Act.

As specified in Section 108(2) of the Act, the UAS Board is mandated to create a UAS Project report detailing its recommendations for UAS Projects, including their ranking and the rationale behind such rankings. Furthermore, Section 108(3) requires the UAS Board to submit this UAS Project report, prepared under Subsection (2), to the Minister at least once annually for the Minister's review.

To assess the ranking of UAS Projects, Section 108(4) stipulates that the UAS Board must consider various factors, including whether the proposed project aligns with the objectives of the Universal Access and Service Fund, the net benefits to Papua New Guinea, sustainability with a one-time capital subsidy, necessity of subsidy for project occurrence, likely efficiency and effectiveness, financial and technical feasibility, and any other pertinent information. Additionally, the Board must ensure that UAS Projects do not encompass services under a mandatory coverage obligation and are not duplicative of existing UAS Projects.

In crafting this report, the UAS Board incorporates feedback from stakeholders on UAS Project proposals and refers to the UAS Strategic Plan 2023-2027 for guidance on government policy aspirations, aiding in project identification, indicative costing, aggregate budgeting, and priority ranking. The estimated budget for 2024 UAS Projects is K32,294,000.00 million.

The Minister is invited to review the UAS Board's report recommending UAS Projects for 2024. Pursuant to Section 108(5) of the Act, within sixty (60) days of receiving the UAS Project report, the Minister is required to: (a) assess the report, (b) determine which UAS Projects will be implemented within the proposed aggregate budget, and (c) communicate this decision to the UAS Board and NICTA.

The report provides descriptions of the projects in the order the projects have been ranked based on the criteria set out in the Section 108 of the Act. For each project, the scope, targeted outcomes, budget and implementation approaches are delineated. Mobile broadband project which ranked first is presented in section 2 of the report followed by Fixed Broadband Projects in section 3, Broadcasting Projects in section 4 and Digital Literacy Projects in section 5 which are ranked second, third and fourth respectively.



Image 1: Mobile tower under construction at Kore, Central Province.

2. MOBILE BROADBAND PROJECTS

2.1 Project Description

This Project is intended to extend the coverage of advanced broadband wireless mobile communications services (at least 3G/HSPA+, 4G/LTE, or other advanced systems) as far as possible into all areas of the country. The objective is to deliver reliable, high-quality access to Internet and “smart” mobile applications and capabilities to as many PNG citizens as possible, where access to such services is not adequately present, and where existing licensed operators are unwilling or unable to expand their networks, due to commercial or other constraints. The ultimate objective of this program is to achieve virtually 100% mobile broadband service coverage throughout PNG.

These goals can be achieved under the Fund through support for projects that invest in advanced mobile network infrastructure and service improvement and expansion by licensed mobile operators. UAS Projects under this program would provide financial support for build-out of local broadband mobile network coverage into unserved and underserved areas, to fill identified gaps and ensure signal access for all target communities and improve security and quality of services.

Projects in 2024 will include the construction of new mobile broadband towers in areas currently with no mobile service, improvement of mobile signals in blackspot areas, and the establishment of an Equipment Identity Register (EIR) for all mobile operators.

Mobile Blackspots - Leveraging existing and next-generation network technologies and strategic cell service infrastructure deployment, this project targets mobile blackspots, notorious for disrupting calls, data connections, and digital access. By expanding network coverage to previously underserved areas, this project aims to boost signal strength by

implement small cell installations, mesh networks, and carrier aggregation to enhance signal penetration in challenging geographical environments.

Equipment Identity Register (EIR) - The EIR once established shall enable mobile operators with the potential oversight of NICTA to control network access based on the International Mobile Station Equipment Identity (IMEI) of the device, International Mobile Station Equipment Identity and Software Version Number (IMEISV or IMEI/International Mobile Subscriber Identity (MSI) combinations avoiding misuse of the network from subscribers.

Implementing contractors/operators will be in charge of installing and operating wireless voice and broadband networks and services within specified locations where such service is currently non-existent. Priority locations for each separate Project have been selected by NICTA, based on an assessment of current network coverage and stakeholder consultations.

2.2 Indicative Budget and targets for Mobile Broadband in 2024

To assist the Minister in considering this Project, and funding needs, the UAS Board provides in Table 2 below recommended 2024 budget and target outcomes. This project is planned for implementation in the second quarter (Q2) of 2024. Refer to indicative timeline provided in Section 3.5

Project	Budget	Target Outcome
4G Greenfield Construction of a maximum of ten (10) 60m towers	K8.0 million K800,000 per site	New 4G service
Equipment Identity Register (EIR)	K10.0 million	Establish stand-alone EIR for all mobile operators
Mobile Blackspot	K1.0 million	Improve quality of service in the served areas
TOTAL	K19.0 million	

Table 1: Indicative budget for Mobile Broadband Projects 2024.

2.3 Indicative Implementation approach

Procurement strategy

Licensed operators will be invited to bid to provide new 4G service within the identified areas, for a fixed subsidy per project. Bidders will be selected based on qualification and minimum subsidy proposed to cover the required areas, or alternatively based on the maximum number of persons to receive coverage for the fixed subsidy amount.

Operators and mobile subscribers may propose specific Blackspot projects to improve coverage/signal levels in mobile blackspot areas in terms of mobile coverage. NICTA will work in close consultation with operators to ascertain specific project details.

NICTA will work with the operators to implement the EIR.

Taking on board the advice from the National Procurement Commission (NPC), in addition to the conventional public tendering, NICTA will also work the NPC to explore potentially utilising alternative options of project procurement methods which may include single source procurement, call for expressions of interest and three quotes.

Main requirements

Project bidding documents will identify locations and minimum service requirements. These will generally include construction of tower infrastructure, backhaul and network connectivity, installation or upgrade of Base Stations, establishment of local electrical power and all other necessary facilities, and operation of broadband mobile services on a commercial basis within the identified areas. There may also be mandates for minimum customer take-up of the services. UAS subsidized operators will be required to provide open access and infrastructure sharing for all facilities, including towers and backhaul network, as well as mobile roaming to other licensed operators for users within the project locations.

Bidding parameters

Bidders must be licensed mobile network operators, with qualifications, resources and capabilities to provide the services. Bids must include details of proposed network deployment to ensure minimum coverage. Contracts will be awarded to the operator proposing the least total subsidy bid per project, or proposing to cover the largest unserved population for the fixed subsidy amount.

2.4 Projects to be funded

All project locations have been identified based on stakeholder feedback through consultations, direct requests from Members of Parliament, members of the public and representatives of various organisations that operate in rural areas of PNG. The specific requests for mobile service to be deployed in their proposed locations have been assessed against the existing mobile network infrastructure and service to identify LLGs without any mobile broadband network infrastructure and prioritised based on levels of estimated uncovered populations. Locations of largest uncovered population (no 2G/3G/4G services) gap being given the highest priority.

Locations

Specific sites within the priority locations will be further refined and determined through the tender process in consultation with the participating licensed operators. Proposed project sites are provided in Table 3 below.

No	LLG Name	Total Pop 2021	Region	Province	District
1	Afore Rural	23549	Southern	Oro	Ijivitari
2	Baimuru Rural	21601	Southern	Gulf	Kikori
3	Wau Rural	17080	Momase	Morobe	Wau Waria

4	Kunua Rural	16401	Islands	AROB	North Bougainville
5	Makamaka Rural	16099	Southern	Milne Bay	Alotau
6	Unavi Rural	14531	Highlands	Eastern Highlands	Lufa
7	Kagua Rural	13149	Highlands	Southern Highlands	Kagua/Erave
8	Gama Rural	10782	Momase	Madang	Usino Bundi
9	Murat	7751	Islands	New Ireland	Kavieng
10	Ambunti Rural	4626	Momase	East Sepik	Ambuniti-Drekikir

Table 2: Proposed Mobile Broadband Greenfield sites for 2024.

2.5 Indicative Timetable of key milestones

This project may be rolled out in one phase, as indicated in Table 4 below, and the likely funding requirements have taken into account the requirements for 2024:

Initial project design	Completed
Public consultations	Completed
Project Approvals	December 2023
Tender	January 2024
Bid submission and evaluation	February 2024
Contract award, project launch	March 2024
Project implementation, M&E	April 2024

Table 3: Indicative timeline of key milestones for Mobile Broadband Projects..

2.6 Assessment of Project against Section 108(e) criteria

Ranked 1 - This Project is ranked first since it ranks highest on criteria (a), (b) and (e). This Project provides the largest net benefits due to providing expanded network coverage and service delivery capability. It is also based on well-known technology that is efficient in delivering such services. Currently, extending such network coverage and services ranks higher on these criteria than the other projects identified in this report, which focus on fixed

broadband services which do not offer as wide a coverage and on service usage and assisting communities to derive more benefit from services.

A detail assessment for the Mobile Broadband against the criteria in Section 108(e) of the Act is given in Annexure E.



Image 2: Allan Jones Primary School ICT learning Centre funded by the UAS Fund.

3. FIXED BROADBAND PROJECTS

3.1 Project Description

This Project is designed to help deliver high-speed, full-service fixed broadband connections to selected communities and institutions, with services and capacity available to public institutions as well as local businesses and households, on an affordable basis throughout each designated local service area. To achieve these outcomes, the Fixed Broadband Projects would support the deployment of fixed broadband services in a limited number of designated public and private institutions which may include schools, rural agricultural resource centres, health facilities, and local MSME hubs, rural airports, etc, in partnership with the relevant agencies.

3.2 Indicative Budget and Targets for 2024

Detailed below in Table 4 is the recommended 2024 budget and target outcomes for this project which is planned for implementation in the second quarter of 2024. Refer to indicative timeline detailed in Table 5.

Project	Budget	Target Outcome
Connect our Airstrips Establish broadband connectivity to a maximum of five (5) rural airstrips	K870 million (K174,000 per site)	Reliable fixed broadband connections for five (5) remotely located airstrips providing vital air-transport services as identified by RAA
Connect our Schools Establishment of ICT facilities with computers and fixed broadband access for a minimum of eighteen (18) schools	K4.158 million K231,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
Connect our Medics Establishment of ICT facilities with computers and fixed broadband access to up to five (5) health facilities	K0.936 million K186,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities. This is a new venture partnership with the Department of Health to be trialled.
Connect our MSMEs Establishment of ICT facilities with computers and fixed broadband access to up to four (4) MSME Hubs/Centres	K1.496 million K374,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
Connect Government Establishment of ICT facilities with computers and fixed broadband access to a minimum of ten (10) Government Offices	K 1.74 million K174,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
Emergency Communications	K 1.0 million	Timely support for applicable emergency communications systems
Total	K10.194 million	

Table 4: Indicative Budget for Fixed Broadband Connectivity.

3.3 Implementation approach

Procurement strategy

The following possible procurement approaches for fixed broadband may be utilised for this project;

- (a) NICTA will issue a request for bids from qualified licensed operators, identifying the locations and scope of facilities and services required, and the available subsidy amounts. Local SMEs involved in internet service provision are highly encourage to participate. Bidders will propose the range of infrastructure, network configuration, technologies, and other features to be offered for the available budget. NICTA will select the most responsive proposals that will deliver the broadest and most cost-effective services.
- (b) NICTA in partnership with other agencies or international partners may deploy the fixed broadband services through a Memorandum of Agreement (MoA)

Main requirements

At a minimum, contractors must establish broadband access network links into the designated communities, and connections to the identified public institutions. They must also establish some form of public broadband access facility (community ICT center, public WiFi, or equivalent). The contractor must ensure continuous operation of public Internet service at project locations.

Bidding parameters

Bidders will define in their proposals the specific scope and configuration of infrastructure and services to be provided in the designated locations, and all other required and optional features. The amount of subsidy available will be disclosed to bidders, who must design their projects to meet this budget. NICTA and the UAS Board will select the qualified bids that best meet the requirements, and that provide greatest value for the communities.

3.4 Projects to be funded

Number of projects

A total of forty-four (44) projects in maximum will be funded which consist of a mix of rural airstrips, schools, health centres and MSME centres, etc.

Size, scope

Deployments of community broadband connections services to project locations plus public ICT access facilities in each location.

Project support will include subsidizing of one-off capital assistance within the project duration of two (2) years.

Locations

Specific project locations are provided in Annex B, C and D which were identified through proposals received during public consultation process in recent years and for 2024.

3.5 Indicative Timetable of key milestones

These projects may be rolled out as indicated in Table 5 below subject to available funding and project partners.

Initial project design	Done
Public consultations	Done
Project Approvals	December 2023
Tender	March 2024
Bid submission and evaluation	April 2024
Contract award, project launch	May 2024
Project implementation, M&E	June 2024

Table 5: Indicative timetable of key milestones.

3.6 Assessment of ranking against Section 108(e) criteria

Ranked 2 - This Project is ranked second because it ranks second on criteria (a), (b) and (e). This Project is designed to provide network capability and services, and in that respect similar to Project 1, and superior on these criteria project following. This Project ranks behind Mobile Broadband Projects because the delivery of services is to a more limited target population, and achievement of net benefits, UAS objectives and efficiency, is not as high as for Mobile Broadband Projects.

The detailed assessment of this project against Section 108(e) of the Act is given in Annexure E.

4. BROADCASTING PROJECTS

4.1 Project Description

This Project addresses the objective of extending coverage of radio and television broadcasting to all citizens and communities in PNG. NICTA aims to support growth of the broadcasting sector through targeted use of UAS Fund resources to close gaps and assist low-income consumers which the broadcasting market may not reach. This activity will focus on support for infrastructure expansion, primarily through enhancement or installation of broadcast antennae on existing or new towers.

For 2024, this Project is intended to improve broadcasting coverage in a number of selected Provinces identified through an analysis of broadcasting service coverage as well as submission received through recent the consultations. NICTA will solicit bids from qualified contractors for a single, integrated project to be rolled out to the selected locations.

4.2 Indicative Budget and targets for 2024

To assist the Minister in considering this Project, and funding needs, the UAS Board provides in Table 9 below an indicative 2024 budget and target outcomes. This project is planned for implementation in the second quarter of 2024 in concurrent with Mobile and Fixed Broadband Projects.

Project	Budget	Target Outcome
Radio Broadcasting	K2.6 million	Expand coverage of broadcasting signals and or upgrade and restore broadcasting services in the selected geographical locations providing access to broadcasting services
Total	K2.6 million	

Table 6: Indicative budget for Radio Broadcasting Project in 2024.

4.3 Implementation approach

Procurement strategy

NICTA will solicit bids from qualified contractors to construct and install the necessary infrastructure, facilities, and equipment to expand broadcast signals within the designated areas NICTA will coordinate with broadcasters to identify the required locations, and contractors will propose how best to build and install the needed facilities.

Main requirements

Survey existing infrastructure and transmission network, determine scope of needs. Install broadcast antennae and related equipment and facilities to link to existing radio and TV broadcast networks. Wherever possible, use available towers and similar structures that are capable of supporting broadcast antennae.

Bidding parameters

Bidders will be asked to propose the technical approach and requirements for expanding broadcast coverage within the designated areas. The amount of available subsidy will be disclosed by NICTA, and bidders will identify the maximum scope of coverage they can achieve for that budget. The qualified bidder proposing the widest population coverage for the available budget will be awarded each project. Bidders must also propose a plan for distributing subsidized set-top-boxes to low-income households.

4.4 Projects to be funded

A total of three (3) Provinces namely New Ireland, Hela and Enga have been identified based on analysis of existing service coverage as derived from data provided by broadcasting operators.

Size, scope

Districts within a selected province, where broadcast signals are not sufficiently available, to reach all unserved LLGs within the defined area.

The priority sequence has been based on the broadcasting service gap analysis and proposed location identified through the public consultation process, with locations of largest unserved population gap being given the highest priority. The priority is based on the absence of broadcasting coverage.

Locations

The locations proposed in submissions during recent consultations process were considered and will be given high priority. Three (3) target project provinces were identified as indicated in Table 10 below.

Specific locations (districts, LLGs) to be determined through consultations with the broadcasters and local officials.

Service	Province
Radio Broadcasting	New Ireland
	Hela
	Enga

Table 7: Proposed broadcasting project locations for 2024.

4.5 Indicative Timetable of key milestones:

These projects may be rolled out as indicated in Table 8 below subject to available funding. It is envisaged that the roll out will be in concurrent with the Broadband Projects as indicated earlier.

Initial project design	Completed
Public consultations	Completed
Project Approvals	December 2023
Tender	April 2024
Bid submission and evaluation	May 2024
Contract award, project launch	June 2024
Project implementation, M&E	July 2024

Table 8: Indicative timetable of key milestone.

4.6 Assessment of ranking against Section 108(e) criteria.

Ranked 3 - This Project is ranked third on criteria (a), (b) and (e). It provides support for the deployment of important broadcasting network infrastructure and services which in the context of PNG provide critical means of disseminating important and often life-saving information to the rural populace who may not be within traditional ICT services.

Annexure E provides a detailed assessment of this project against the criteria in Section 108(e) of the Act.

5. DIGITAL LITERACY PROJECTS

5.1 Project Description

Digital Literacy Projects will support training/capacity building activities that increase utilization of ICTs by all citizens, businesses and government/public offices, to achieve a broader contribution of ICTs to social and economic development, consistent with the Government's national development objectives.

These projects are intended to help enhance capacity, understanding, and experience in relation to ICT services and applications, and opportunities that these technologies can present in people's daily lives.

The Digital Literacy Projects will be developed by NICTA in collaboration with public, private, and civil service organizations and will be implemented through partnerships with the ICT industry, education/training service providers, and key government agencies including the Department of ICT (DICT).

5.2 Indicative Budget and targets for 2024

The Digital Literacy Projects indicative Budget is provided in Table 9 below.

Project	Budget	Target Outcome
Training Component for the Fixed Broadband Connectivity Project	K350,000	Projects reaching target populations with useful training while providing helpful lessons for scaling up similar projects, and developing further partnerships.
Public Awareness and Capacity Building to support Digital Government Plan 2023-2027 (DGP)	K75,000	
Public Digital Skills Training Project	K75,000	
Total	K500,000	

Table 9: Indicative Budget for Digital Literacy for 2024.

5.3 Implementation Approach

Procurement strategy

NICTA has received proposals from potential partner organizations that are qualified to offer the needed resources. These includes universities, local governments, small entrepreneurs, social service organizations, training institutes, and community groups.

Proposals have been selected for innovation, cost-effectiveness, and capability and resources of the partners. Priority will be given to proposals that are likely to have a large number of potential beneficiaries at the earliest time.

Main requirements

Project partners will be required to design and deliver digital literacy training to enable and encourage uptake of ICT services, particularly in the rural areas.

5.4 Projects to be funded

A minimum of two (2) projects for the Public Awareness and Digital Skills whilst for the Fixed Broadband training will depend on the number of fixed broadband projects as indicated in Table 10 below.

Project	Number
Training Component for the Fixed Broadband Connectivity Project	Number of training projects will complement the number of Fixed Broadband Projects deployed in 2024
Public Awareness and Capacity Building to support Digital Government Plan 2023-2027 (DGP)	1
Public Digital Skills Training Project	1

Table 10: Digital Literacy Projects for 2024.

Size and scope

The projects identified from stakeholder proposals will be supported from the total allocated fund for this project. Digital literacy projects provide capacity building programs for communities within existing UAS projects under the Fixed Broadband Projects.

Locations

Specific locations and target beneficiaries of the projects will be determined by NICTA through consultations with the implementing parties.

5.5 Indicative Timetable of key milestones

projects may be rolled out as indicated in table 15 below subject to available funding. It is envisaged that the roll out will be in concurrent with the Broadband and Broadcasting Projects as indicated earlier.

Initial project design	Completed
Public consultations	Completed
Project Approvals	December 2023
Tender	July 2024
Bid submission and evaluation	August 2024
Contract award, project launch	September 2024
Project implementation, M&E	October 2024

Table 11: Indicative timetable of key milestone.

5.6 Assessment of ranking against Section 108 (e) criteria

Ranked 4 - This Project is ranked fourth on criteria (a), (b) and (e). It is a project directed to increase the ability of the communities to use and derive benefits from ICT services. This is, in terms of the criteria, not as highly ranked as providing network infrastructure to deliver the services at all. As a usage – oriented Project, it can be applied more broadly and is likely to have greater impact in terms of meeting the UAS objectives once network infrastructure is available for the target populations

A detailed assessment of this project against the criteria in Section 108(e) of the Act is given in Annexure E.

6. CONCLUSION

The Board recommends a budget of **K32,294,000.00** million to implement the UAS Projects for 2024. Whilst the UAS levy is the most immediately available means to finance the implementation of the projects, there will be ongoing consideration and effort by NICTA to utilize other sources of funding as provided for in the Act including PNG Government and donor funding.

The recommended UAS Projects for 2024 and their ranking are summarised in Table 12 below.

Ranking	UAS Project	UAS Project Budget (K)	Specific Projects	Budget Break up by specific projects (K)
1	Mobile Broadband	19,000,000.00	Greenfield	8,000,000.00
			Blackspot	1,000,000.00
			Equipment Identity Register (EIR)	10,000,000.00
2	Fixed Broadband	10,194,000.00	Connect our Airstrips	870,000.00
			Connect our Schools	4,158,000.00
			Connect our Medics	930,000.00
			Connect our MSMEs	1,496,000.00
			Connect Government	1,740,000.00
			Emergency Communication	1,000,000.00
3	Broadcasting	2,600,00.00	Radio Broadcasting	2,600,000.00
4	Digital Literacy	500,000.00	Training Component for the Fixed Broadband Connectivity Project	350,000.00
			Public Awareness and Capacity Building to support Digital Government Plan 2023-2027 (DGP)	75,000.00
			Public Digital Skills Training Project	75,000.00
Total		32,294,000.00		32,294,000.00

Table 12: Summary of recommended UAS Projects for 2024.

ANNEXURE - PROJECT SITES LISTS AND DETAILS

ANNEXURE A - Mobile Broadband**Greenfield Projects List**

No	LLG Name	Total Pop 2021	Region	Province	District
1	Afore Rural	23549	Southern	Oro	Ijivitari
2	Baimuru Rural	21601	Southern	Gulf	Kikori
3	Wau Rural	17080	Momase	Morobe	Wau Waria
4	Kunua Rural	16401	Islands	AROB	North Bougainville
5	Makamaka Rural	16099	Southern	Milne Bay	Alotau
6	Unavi Rural	14531	Highlands	Eastern Highlands	Lufa
7	Kagua Rural	13149	Highlands	Southern Highlands	Kagua/Erave
8	Gama Rural	10782	Momase	Madang	Usino Bundi
9	Murat	7751	Islands	New Ireland	Kavieng
10	Ambunti Rural	4626	Momase	East Sepik	Ambuniti-Drekikir

Table 13: Greenfield Projects list

Map of Greenfield projects locations

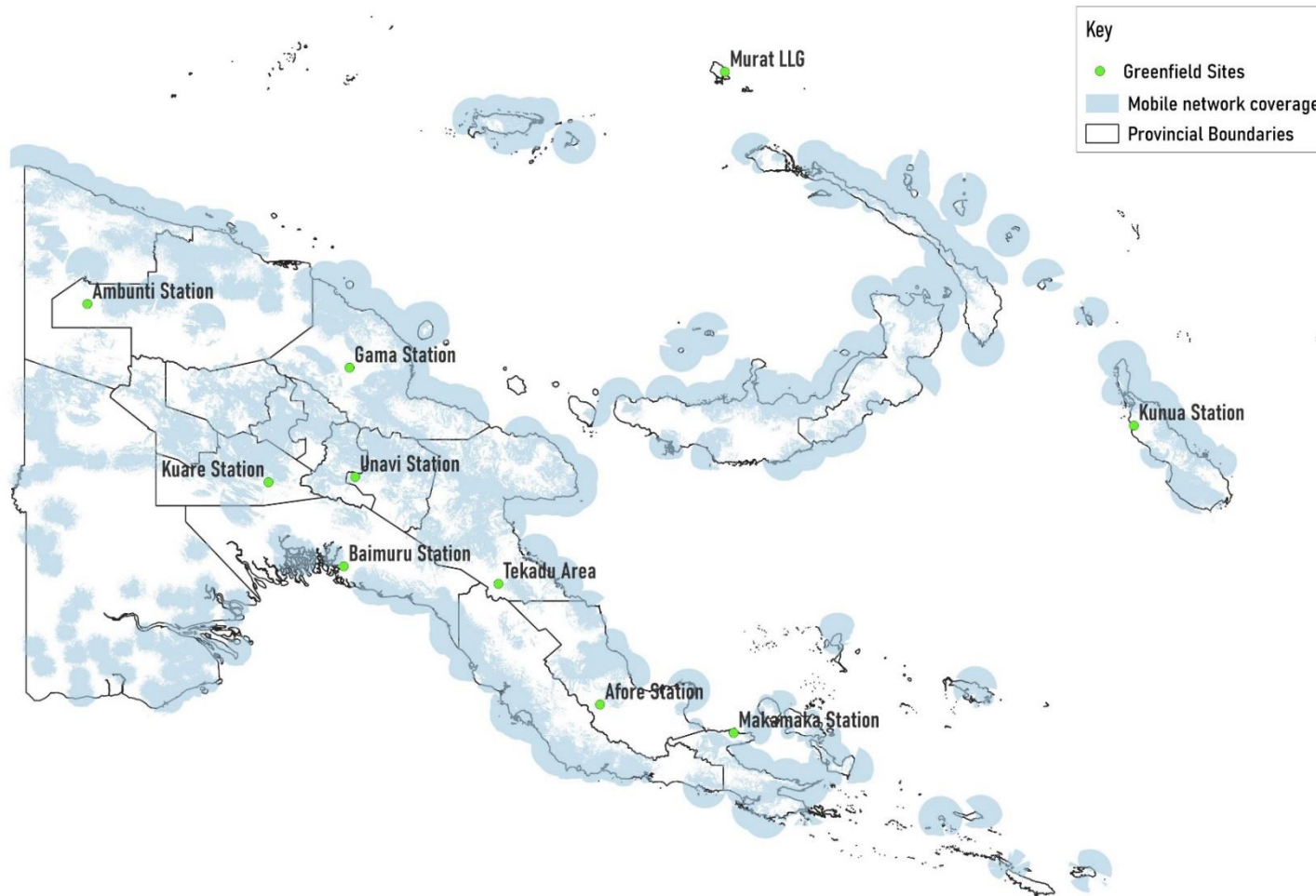


Image 3: Map of Greenfield Projects.

ANNEX B: List of Rural Airstrips

No.	Name of Airstrip	Latitude	Longitude	Province	District	LLG
1	Kaiyam	-4.90937	143.522801	Enga	Kompam	Kompam Rural
2	Sasareme	-7.622778	142.868889	Western	South Fly	Bamu Rural
3	Tapini	-8.3566667	146.989167	Central	Goilala	Tapini Rural
4	Tarakbits	-5.614	141.0421	Western	Noth Fly	Ningerum
5	Tetebedi	-9.1586	148.0686	Oro	Sohe	Kokoda Rural

ANNEXURE C: Fixed Broadband – Connect the Schools Projects List

No.	Year of Consultation	Site Name	Type of Organisation	Name of organisation	Province	District	LLG
1	2023	Aitape Secondary School	School	Aitape Secondary School	West Sepik	Aitape-Lumi	Aitape Central
2	2023	Papa Junior High School	School	Papa Junior High School	Central	Hiri-Koiari	Hiri
3	2023	Iokosim Primary	School	Iokosim Primary	East Sepik	Wewak	Dagua
4	2023	Boera Primary School	School	Boera Primary School – With support from the ITU Partner2Connect Program	Central	Hiri-Koiari	Hiri
5	2023	Tubuserea Primary School	School	Tubuserea Primary School – With support from the ITU Partner2Connect Program	Central	Hiri-Koiari	Hiri
6	2023	Kimadan Primary School	School	Kimadan Primary School – With support from the ITU Partner2Connect Program	New Ireland	Kavieng	
7	2023	Timonai Primary School	School	Timonai Primary School – With support from the ITU Partner2Connect Program	Manus	Manus	

8	2023	Buin Primary School	School	Buin Primary School – With support from the ITU Partner2Connect Program	AROB	South Bougainville	
9	2023	Mortlock Primary School	School	Mortlock Primary School	AROB	Central Bougainville	
10	2023	Hutjena Secondary School	School	Hutjena Secondary School	AROB	North Bougainville	
	2023	Kiriwina Secondary School	School	Kiriwina Secondary School	AROB	Kiriwina-Goodenough	
11	2021	Mouklen Primary School	School	Mouklen Primary School	Manus	Manus	Rapatona
12	2021	Monoitu FODE	School	PELD Information and Energy Services	AROB	South Bougainville	Kopi'i
13	2021	Tonu Secondary School	School	PELD Information and Energy Services	AROB	South Bougainville	Motuna Huyono Tokunutui
14	2021	Bana High School	School	PELD Information and Energy Services	AROB	South Bougainville	Lato
15	2021	Konkopine	School	PELD Information and Energy Services	AROB	South Bougainville	Lato
16	2023	Kondiu Rosary Secondary School	School	Kundiawa District	Simbu		

17	2023	Kondum Agaundo Memorial School	School	Kundiawa District	Simbu		
18	2023	Kundiawa College of Nursing	School	Kundiawa District	Simbu		

Table 14: A minimum of 18 schools including those in the list above.

ANNEXURE D: Fixed Broadband – Connect Government Projects List

	Year Consultation	of Site Name	Type of Organisation	Name of organisation	Province	District	LLG
1	2023	Telefomin District	Government	Telefomin District Office	West Sepik	Telefomin	
2	2023	Menyamya District	Government	Menyamya District Office	Morobe	Menyamya	
3	2023	Angoram District	Government	Angoram District Office	East Sepik	Angoram	
4	2023	Pomio District	Government	Pomio District Office	East New Britain	Pomio	
5	2023	Tewai-Siassi District	Government	Tewai-Siassi District Office	Morobe	Tewai-Siassi	
6	2023	Rai Coast District	Government	Rai Coast District Office	Madang	Rai Coast	
7	2023	Esa'ala	Government	Department of Finance	Milne Bay	Esa'ala	
8	2023	Misima	Government	Department of Finance	Milne Bay	Samarai Murua	
9	2023	Losuia	Government	Department of Finance	Milne Bay	Kiriwina Goodenough	
10	2021	Murat LLG	Government	Murat LLG Ward Member	New Ireland	Kavieng	Murat

Table 15: List of Connect Government Project sites.

ANNEXURE E: Assessment against Section 108 Criteria

Criteria	Mobile Broadband Projects	Fixed Broadband Projects	Broadcasting Projects	Digital Literacy Projects
Ranking	<p>Ranked 1 - This Project is ranked first since it ranks highest on criteria (a), (b) and (e). This Project provides the largest net benefits due to providing expanded network coverage and service delivery capability. It is also based on well-known technology that is efficient in delivering such services. Currently, extending such network coverage and services ranks higher on these criteria than the other projects identified in this report, which focus on fixed broadband services which do not offer as wide a coverage and on service usage and assisting communities to derive more benefit from services.</p>	<p>Ranked 2 - This Project is ranked second because it ranks second on criteria (a), (b) and (e). This Project is designed to provide network capability and services, and in that respect similar to Project 1, and superior on these criteria project following. This Project ranks behind Mobile Broadband Projects because the delivery of services is to a more limited target population, and achievement of net benefits, UAS objectives and efficiency, is not as high as for Mobile Broadband Projects.</p>	<p>Ranked 3 - This Project is ranked third on criteria (a), (b) and (e). It provides support for the deployment of important broadcasting network infrastructure and services which in the context of PNG provide critical means of disseminating important and often life-saving information to the rural populace who may not be within traditional ICT services.</p>	<p>Ranked 4 - This Project is ranked fourth on criteria (a), (b) and (e). It is a project directed to increase the ability of the communities to use and derive benefits from ICT services. This is, in terms of the criteria, not as highly ranked as providing network infrastructure to deliver the services at all. As a usage – oriented Project, it can be applied more broadly and is likely to have greater impact in terms of meeting the UAS objectives once network infrastructure is available for the target populations.</p>

(a) whether the proposed UAS Project would promote the objectives of the Universal Access and Service Fund	This Project meets the UAS Fund objective set out in Section 90(1) of the Act. It directly relates to the improvement of ICT services within PNG, and to rural communities in particular	This Project meets the UAS Fund objective set out in Section 90(1) of the Act. It directly relates to the improvement of ICT services within PNG, and will be implemented to prioritise potential broadband users in rural communities without other access to these services.	This Project meets the UAS Fund objective set out in Section 90(1) of the Act. It directly relates to the improvement of ICT services within PNG, and will encourage greater ICT usage and therefore encourage further investment in ICT infrastructure. Improved broadcasting service coverage is critical to informing economic and social transactions.	This Project meets the UAS Fund objective set out in Section 90(1) of the Act. It directly relates to the improvement of ICT services within PNG, and will encourage greater ICT usage and therefore sustain further investment in ICT infrastructure.
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(b) the net benefits of the UAS Project to Papua New Guinea, taking into account any costs and detriments to any person	There are clear net benefits to the communities in the locations in which mobile broadband service will be provided through the provision of services that will underpin economic development and greater social cohesion.	There are clear net benefits resulting from the provision of services in this Project. They will underpin economic development and greater social cohesion. In particular, the community broadband networks from the Project will provide very important local economic infrastructure supporting online transactions that enable the economic reach of the communities served to be extended.	Improved information distribution through increased broadcasting service coverage will provide net social and economic benefits through a better-informed community in the areas the Project covers.	The ICT platforms and practical innovations envisaged will have net social and economic benefits for PNG and the specific proposals that are accepted for funding will be selected on that basis.
(c) whether the UAS Project is sustainable with a one-time capital subsidy	In each of the chosen locations the Project will be sustainable with a one-time capital subsidy and continued operation of the services and related costs will be provided by the successful bidder.	In each of the chosen locations the Project will be sustainable with a one-time capital subsidy and continued operation of the services and related costs will be provided by the successful bidder.	Yes, there will be a one-time contribution from the UAS Fund and the specific proposals that are accepted for funding will be selected on the basis that they will be commercially or otherwise sustainable after that contribution.	Yes, there will be a one-time contribution from the UAS Fund and the specific proposals that are accepted for funding will be selected on the basis that they will be commercially sustainable after that contribution.

(d) whether the UAS Project would not otherwise occur but for a subsidy payment under this Part	This Project, in the locations identified, would not otherwise occur except for the subsidy provided from the UAS Fund.	This Project, in the locations identified, would not otherwise occur except for the subsidy provided from the UAS Fund.	Proposals accepted for funding under this Project will be selected on the basis that they would not be progressed but for the subsidy.	Proposals accepted for funding under this Project will be selected on the basis of their merit and that they would not be progressed but for the subsidy.
(e) the likely efficiency and effectiveness of the proposed UAS Project and whether it is financially and technically feasible	The Project will be undertaken efficiently and effectively, and this will be guaranteed through an arms-length public tender process. The project is financially and technically feasible as shown by similar projects in other locations and by the business programs of PNG licensed mobile operators.	The Project will be undertaken efficiently and effectively, and this will be guaranteed through an arms-length public tender process. The project is financially and technically feasible as shown by similar projects in other locations and by the business programs of PNG licensed operators.	The Project will be undertaken efficiently and effectively, and this will be guaranteed through an arms-length public tender process. Financial and technical feasibility will have to be proven by the proponents of proposals that are accepted for a subsidy.	The Project will be undertaken efficiently and effectively, and this will be guaranteed through an arms-length public tender process. Financial and technical feasibility will have to be proven by the proponents of proposals that are accepted for a subsidy
(f) any other information the UAS Board considers relevant	Other relevant information is contained in this report and in the associated analysis of existing mobile broadband network coverage and service.	Other relevant information is contained in this report.	Other relevant information is contained in this report.	Other relevant information is contained in this report.

(g) (shall ensure that) any UAS Project does not include services under a mandatory coverage obligation	The Project does not include services subject to a mandatory coverage obligation.	The Project does not include services subject to a mandatory coverage obligation.	The Project does not include services subject to a mandatory coverage obligation.	The Project does not include services subject to a mandatory coverage obligation.
(h) (shall ensure that) any UAS Project is not otherwise provided by a pre-existing UAS Project	The Project and its constituent elements are not covered by a pre-existing UAS Project.	The Project and its constituent elements are not covered by a pre-existing UAS Project.	The Project and its constituent elements are not covered by a pre-existing UAS Project.	The Project and its constituent elements are not covered by a pre-existing UAS Project.

Table 16: Assessment against Section 108 Criteria.