



National Information and Communications Technology Authority

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# **2023 UAS Project Report**

**Prepared by**

**Universal Access and Service (UAS) Board**

**For**

**Minister for Information and Communication**

**Hon. Timothy Masiu**

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## 1. INTRODUCTION

Pursuant to the requirements of the National Information and Communications Technology Act 2009 (the Act), the UAS Board submits this report to the Minister for consideration and to perform functions set out under Part V of the Act.

Sections 108 (2) – (3) of the Act provide for the UAS Board to undertake certain tasks, namely:

“(2) The UAS Board shall consider the report prepared by NICTA under Subsection (1) and prepare a UAS Project report which identifies the UAS Board’s recommendations for UAS Projects, their ranking and the reason for such ranking.”

“(3) The UAS Board shall submit the UAS Project report (as prepared under Subsection (2)), to the Minister, at least once in every calendar year, for the Minister’s consideration.”

The UAS Board, having undertaken these tasks, now provides the Minister with the 2023 UAS Projects Report, pursuant to Section 108(3) of the Act.

The UAS Board has considered a report submitted by NICTA which proposed UAS Projects for 2023. Following its consideration of NICTA’s report, the UAS Board in this Report recommends for approval by the Minister, UAS Projects for 2023. These recommended Projects have been evaluated and ranked on the criteria in the Act.

Section 108(5) – (9) of the Act provide for the Minister to perform the certain functions namely:

“(5) Within sixty (60) days of receipt of the UAS Project report the Minister shall -

- (a) review the UAS Project report; and
- (b) determine from the list which UAS Projects will be implemented within the proposed aggregate budget; and
- (c) notify this decision to the UAS Board and NICTA.”

“(6) If the Minister does not notify his decision under Subsection (5) within sixty (60) days of receipt of the UAS Project report, then the Minister is taken, at the end of that sixty (60) day period, to have rejected all UAS Projects identified in the UAS Project report.”

“(7) The Minister shall provide to NICTA his reasons for the rejection of any UAS Project identified in the UAS Project report.”

“(8) Subject to ensuring the protection of confidential information including the indicative costing of any UAS Project, NICTA shall publish the Minister’s reasons on its public register.”

“(9) A failure on the part of the Minister to select a particular UAS Project for implementation does not preclude the UAS Board from re-evaluating and re-submitting the UAS Project at a later date to the Minister in accordance with Subsection (3).”

## 2. SUMMARY OF PROJECTS

The recommended UAS Projects for 2023 and their ranking are summarised in Table 1 below.

Project	Ranking	Budget
Mobile Broadband Projects	1	K23.5 million
Fixed Broadband Projects	2	K4.95 million
Broadcasting Projects	3	K2.6 million
Digital Literacy Projects	4	K0.2 million
Applications and Content Projects	5	K0.45 million
Affordable Smart Devices Projects	6	K0.8 million
	<b>Total</b>	<b>K32.5 million</b>

Table 1: Summary of recommended UAS Projects for 2023.

The sections following this summary outline the way in which each Project fulfils the criteria, and the reasons for the ranking, and the descriptions of each Project.

### 3. MOBILE BROADBAND PROJECTS

#### 3.1 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 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.

Under this project, new mobile broadband towers will be constructed in areas currently with no mobile service as listed in the table provided.

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 current market analysis and stakeholder consultations.

#### 3.2 Indicative Budget and targets for 2023

To assist the UAS Board in considering this Project, and funding needs, NICTA provides below an indicative 2023 budget and target outcomes. This project is planned for implementation in the second quarter (Q2) of 2023. Refer to indicative timeline provided in [insert section].

Project	Budget	Target Outcome
<b>4G Greenfield</b> Construction of a maximum of nineteen (19) 60m towers	<b>K20.0 million</b> K1.05 million per site	<b>New 4G service</b> Approximate population of 900,000 to be covered by new 4G service.
<b>4G Upgrade</b> Capacity upgrades of a maximum of fifty-four (54) existing mobile sites to 4G	<b>K2.5 million</b>	<b>New 4G service</b> Approximate population of 500,000 to be covered by new 4G service

Project	Budget	Target Outcome
Mobile Blackspot	K1.0 million	<b>Improve 4G signal quality</b> Locations of blackspot sites to be determined through operator feedback and consultations

### 3.3 Indicative Implementation approach

#### Procurement strategy

Licensed operators will be invited to bid to provide 4G service upgrade or new 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.

#### 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, base stations 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 and capabilities to provide the services, including existing presence in locations to be upgraded. 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.

### 3.4 Project to be funded

LLG Name	Region	Province	District
Woitape Rural	Southern	Central	Goilala
Baimuru Rural	Southern	Gulf	Kikori
Kiunga Rural	Southern	Western	North Fly
Bomai/Gumai Rural	Highlands	Chimbu (Simbu)	Gumine
Watabung Rural	Highlands	Eastern Highlands	Daulo
Melkoi Rural	Islands	East New Britain	Pomio

Gama Rural	Momase	Madang	Usino Bundi
Murat Rural	Islands	New Ireland	Kavieng
Louiside Rural	Southern	Milne Bay	Samarai-Murua
Awipori Rural	Highlands	Hela	Koroba-Kopiago
Paiela/Hewa Rural	Highlands	Enga	Lagaip/Pogera
Kunua	Islands	AROB	North Bougainville
Mt Bosavi Rural	Highlands	Southern Highlands	Nipa Kutubu
Kandrian Inland Rural	Islands	West New Britain	Kandrian/Gloucester
Yapsie Rural	Momase	West Sepik	Telefomin
Safia Rural	Southern	Northern (Oro)	Ijivitari
Wewak Islands Rural	Momase	East Sepik	Wewak
Nabak Rural	Momase	Morobe	Nawae
Balopa Rural	Islands	Manus	Manus
Iabu Rural	Momase	Madang	Bogia
Karkar Rural	Momase	Madang	Sumkar
Rai Coast Rural	Momase	Madang	Rai Coast
Aua Wuvulu Rural	Islands	Manus	Manus
Nigoherm Rural	Islands	Manus	Manus

Table 2: Greenfield project locations

LLG	District	Province	Region	No. of Proposed Upgrade sites
Dobu Rural	Esa'ala	Milne Bay	Southern	3
Kokoda Rural	Sohe	Oro	Southern	3
Kiriwina Rural	Kiriwina-Goodenough	Milne Bay	Southern	3
Kaintiba Rural	Kerema	Gulf	Southern	2
Kome Rural	Menyamya	Morobe	Momase	3

Simbai Rural	Middle Ramu	Madang	Momase	1
Ambunti Rural	Ambunti-Drekikier	East Sepik	Momase	4
Karkar Rural	Sumkar	Madang	Momase	1
Sialum Rural	Tewae-Siassi	Morobe	Momase	3
Buka	North Bougainville	AROB	Islands	6
Lovongai Rural	Kavieng	New Ireland	Islands	4
Kandep Rural	Kandep	Enga	Highlands	3
Wage Rural	Kandep	Enga	Highlands	3
Kol Rural	Jimi	Jiwaka	Highlands	3
Jimi Rural	Jimi	Jiwaka	Highlands	4
Karimui Rural	Karimui-Nomane	Chimbu	Highlands	1
Maip Muritaka Rural	Lagaip-Porgera	Enga	Highlands	2
Lamari Rural	Obura-Wonenara	Eastern Highlands	Highlands	1
Lai Valley Rural	Mendi-Munihu	Southern Highlands	Highlands	1
North Koroba Rural	Koroba-Kopiago	Hela	Highlands	2
Yelia Rural	Obura-Wonenara	Eastern Highlands	Highlands	1

Table 3: Upgrade project locations.

All project locations have been determined through an analysis of the existing mobile network infrastructure and service. The analysis focused identifying 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.

### 3.5 Indicative Timetable of key milestones

This project may be rolled out in one phase, as follows, and the likely funding requirements have taken into account the requirements for 2022:

Initial project design	Completed
Public consultations	Completed



Project Approvals	December 2022
Tender	January 2023
Bid submission and evaluation	February 2023
Contract award, project launch	March 2023
Project implementation, M&E	April 2023

### 3.6 Assessment of Project against Section 108(e) criteria

Criteria	Assessment
(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
(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.
(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.
(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.
(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.

Criteria	Assessment
(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.
(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.
(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.

Table above illustrates how these Project fulfils the section 108 criteria.

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.

## 4. FIXED BROADBAND PROJECTS

### 4.1 Project Description

This Project is designed to help deliver high-speed, full-service fixed broadband Internet connections to selected communities, 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, etc, in partnership with the relevant agencies.

### 4.2 Indicative Budget and Targets for 2023

Detailed below is the indicative 2023 budget and target outcomes for this project which is planned for implementation in the second quarter of 2022. Refer to indicative timeline detailed in 3.4.

Project	Budget	Target Outcome
<b>Connect our Schools</b> Establishment of ICT facilities with computers and fixed broadband access to a maximum of (4) schools	<b>K1.4 million</b> K350,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
<b>Connect our Medics</b> Establishment of ICT facilities with computers and fixed broadband access to a maximum of (4) health facilities	<b>K0.6 million</b> K150,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
<b>Connect our Farmers</b> Establishment of ICT facilities with computers and fixed broadband access to a maximum of (4) agricultural centres	<b>K0.6 million</b> K150,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
<b>Connect our MSMEs</b> Establishment of ICT facilities with computers and fixed broadband access to four (4) MSME Hubs/Centres	<b>K1.4 million</b> K350,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
<b>Community Networks</b> Establishment of ICT facilities with computers and fixed broadband access to one (1) location identified to operate a community network	<b>K0.35 million</b>	Fixed broadband connectivity for targeted institutions and surrounding communities
<b>Local Government Offices</b> Establishment of ICT facilities with computers and fixed broadband access to four (4) Local Government Offices	<b>K 0.6 million</b> K150,000 per site	Fixed broadband connectivity for targeted institutions and surrounding communities
<b>Total</b>	<b>K4.95 million</b>	

### 4.3 Implementation approach

#### Procurement strategy

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.

### **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 ICT 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.

## **4.4 Projects to be funded**

### **Number of projects**

A total of twenty-one (21) projects in maximum will be funded which consist of a mix of schools, health centres and agriculture centres, MSME centres, etc.

### **Size, scope**

Deployments of community broadband connections to project locations. Connections and broadband service to major public institutions, 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 for public institutions will be determined through consultations with the Department of Education (DoE), Department of Agriculture and Livestock (DAL), Department of Higher Education Research and Science Technology (DHERST), Department of Health (DoH) as well as relevant civil society and local technology bodies both from the public and private sector. A number of locations identified through proposals received during public consultation process in recent years will also be included in the projects for 2023.

## **4.5 Indicative Timetable of key milestones**

Initial project design	Done
Public consultations	Done

Project Approvals	December 2022
Tender	March 2023
Bid submission and evaluation	April 2023
Contract award, project launch	May 2023
Project implementation, M&E	June 2023

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

Criteria	Assessment
(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 will be implemented to prioritise potential broadband users in rural communities without other access to these services.
(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 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.
(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.
(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.
(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

Criteria	Assessment
	by the business programs of PNG licensed mobile operators.
(f) any other information the UAS Board considers relevant	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.
(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.

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.

## 5. BROADCASTING PROJECTS

### 5.1 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 2023, 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.

### 5.2 Indicative Budget and targets for 2023

To assist the UAS Board in considering this Project, and funding needs, NICTA provides below an indicative 2023 budget and target outcomes. This project is planned for implementation in the second quarter of 2023.

Project	Budget	Target Outcome
Digital Television Broadcasting	K1.4 million	Expand coverage of broadcasting signals and or upgrade and restore broadcasting services in the selected geographical locations providing access to broadcasting services
Radio Broadcasting	K1.2 million	
Total	K2.6 million	

### 5.3 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. Contractors do not have to be licensed operators, but must have the capability to provide all necessary planning, equipment, and resources. 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. Contractors need not be licensed operators/broadcasters, but must demonstrate capability to construct the necessary facilities and link them to existing broadcast networks. 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 contractor 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.

### 5.4 Projects to be funded

Service	District	Province
Digital TV	Hagen	Western Highlands
	Kokopo	East New Britain
	Arawa	AROB

Service	District	Province
	Alotau	Milne Bay
Radio	Tari	Hela
	Daru	Western
	Popondetta	Oro

The locations have been identified based 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.

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

## 5.5 Indicative Timetable of key milestones:

Initial project design	Completed
Public consultations	Completed
Project Approvals	December 2022
Tender	April 2023
Bid submission and evaluation	May 2023
Contract award, project launch	June 2023
Project implementation, M&E	July 2023



## 5.6 Assessment of ranking against Section 108(e) criteria

Criteria	Assessment
(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 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.
(b) the net benefits of the UAS Project to Papua New Guinea, taking into account any costs and detriments to any person	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.
(c) whether the UAS Project is sustainable with a one-time capital subsidy	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.
(d) whether the UAS Project would not otherwise occur but for a subsidy payment under this Part	Proposals accepted for funding under this Project will be selected on the basis 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. 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.
(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.

Criteria	Assessment
(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.

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.

## 6. DIGITAL LITERACY PROJECTS

### 6.1 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).

### 6.2 Indicative Budget and targets for 2023

Project	Budget	Target Outcome
Training Component for the Fixed Broadband Connectivity Project	K50,000	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	K200,000	

### 6.3 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.

## **6.4 Projects to be funded**

### **Number of projects**

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

### **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.

## **6.5 Indicative Timetable of key milestones**

Initial project design	Completed
Public consultations	Completed
Project Approvals	December 2022
Tender	July 2023
Bid submission and evaluation	August 2023

Contract award, project launch	September 2023
Project implementation, M&E	October 2023

## 6.6 Assessment of ranking against Section 108 (e) criteria

Criteria	Assessment
(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 will encourage greater ICT usage and therefore sustain further investment in ICT infrastructure.
(b) the net benefits of the UAS Project to Papua New Guinea, taking into account any costs and detriments to any person	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	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	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. 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.

Criteria	Assessment
(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.
(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.

This Project is ranked third 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.

## 7. ICT APPLICATIONS AND CONTENT PROJECT

### 7.1 Project Description

The purpose of this Project is to help support the development of localised applications and content and in the long-term help proliferate ICT utilization and opportunities across Papua New Guinea. It would support the development of creative, innovative, and high value ICT activities which will tap into the resources and knowledge of the local populations.

Specific individual projects will be designed by NICTA and the UAS Board, in consultation with appropriate partners and other stakeholders.

NICTA has identified projects based on proposals received during the public consultation to be piloted with the available Fund budget (together with other resources). Local SMEs involved in ICT are highly encouraged to participate. NICTA and the UAS Board will enter into agreements with participating organizations and SMEs to define and implement the projects deemed most appropriate, cost-effective, and valuable.

### 7.2 Indicative Budget and targets for 2023

Provided below are indicative 2022 budget and target outcomes. This project is planned for implementation in the third quarter of 2022. Refer to indicative timetable provided in 4.4.

Project	Budget	Target Outcome
Digital Government Applications and Content Projects	K200,000	Projects reaching target populations with useful

Project	Budget	Target Outcome
Public Applications and Content Projects	K250,000	content and valuable applications, while providing helpful lessons for scaling up similar projects, and developing further partnerships
Total	K450,000	

### 7.3 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 local technology bodies and 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

Design of a preliminary plan and implementation strategy to enhance or improve the efficiency of new and existing Government services through the development of ICT Apps for general public use.

### 7.4 Projects to be funded

#### Number of projects

Project	Number of Projects
Digital Government Applications and Content Projects	1
Public Applications and Content Projects	1

#### Size and scope

The projects identified from stakeholder proposals will be supported from the total allocated fund for this project. Content and Application Development Project may provide content development for institutions that require information in education, health and other sectors for knowledge purposes. NICTA will work in partnership with DICT to design Digital Government Applications and Content projects for implementation.

#### Locations

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

## 7.5 Indicative Timetable of key milestones

Initial project design	Done
Public consultations	Done
Project Approvals	December 2022
Tender	July 2023
Bid submission and evaluation	August 2023
Contract award, project launch	September 2023
Project implementation, M&E	October 2023

## 7.6 Assessment of ranking against Section 108 (e) criteria

Criteria	Assessment
(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 will encourage greater ICT usage and therefore sustain further investment in ICT infrastructure.
(b) the net benefits of the UAS Project to Papua New Guinea, taking into account any costs and detriments to any person	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	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	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.

Criteria	Assessment
(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. 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.
(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.
(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.

This Project is ranked fifth because it ranks fifth 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. This project can be applied more broadly and are likely to have greater impact in terms of meeting the UAS objectives once network infrastructure is available.



## 8. PROJECT SITES LISTS AND DETAILS

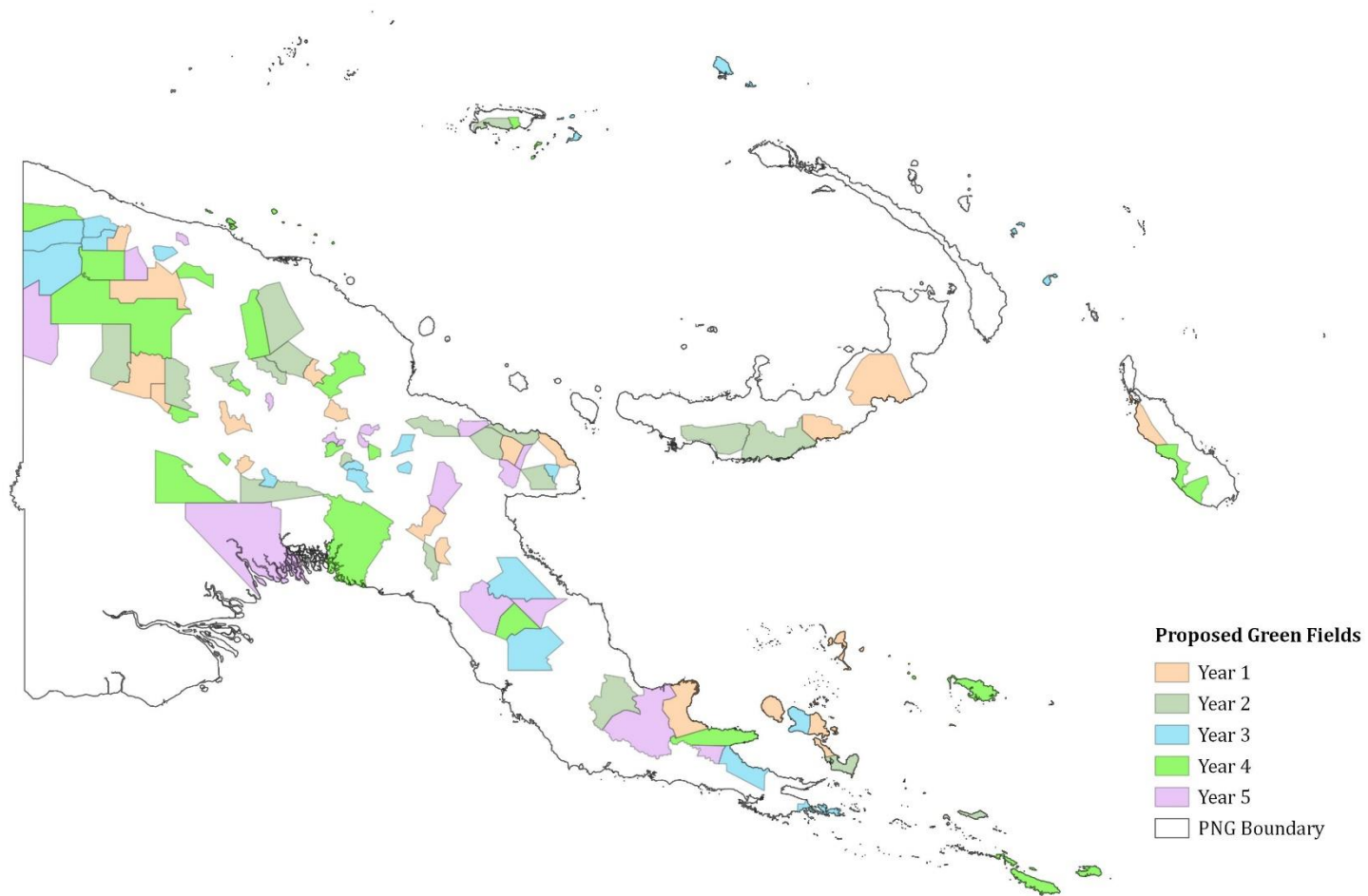
### 8.1 Mobile Broadband - Greenfield Projects List

No	LLG Name	Total Pop 2021	Served	(%) Served	Unserved	(%) Unserved	Region	Province	District	Islands
1	Woitape Rural	30075	8391	28%	21684	72%	Southern	Central	Goilala	
2	Baimuru Rural	22000	9744	44%	12256	56%	Southern	Gulf	Kikori	
3	Kiunga Rural	22423	5012	22%	17411	78%	Southern	Western	North Fly	
4	Bomai/Gumai Rural	15036	8645	57%	6391	43%	Highland s	Chimbu (Simbu)	Gumine	
5	Watabung Rural	11284	5209	46%	6075	54%	Highland s	Eastern Highlands	Daulo	
6	Melkoi Rural	14303	10880	76%	3423	24%	Islands	East New Britain	Pomio	
7	Gama Rural	11607	2604	22%	9003	78%	Momase	Madang	Usino Bundi	
8	Murat Rural	9055	3547	39%	5508	61%	Islands	New Ireland	Kavieng	
9	Louiside Rural	31257	19374	62%	11883	38%	Southern	Milne Bay	Samarai-Murua	
10	Awipori Rural	31268	23237	74%	8031	26%	Highland s	Hela	Koroba-Kopiago	

11	Paiela/Hewa Rural	22827	490	2%	22337	98%	Highland s	Enga	Lagaip/Poger a	
12	Kunua	17610	5146	29%	12464	71%	Islands	AROB	North Bougainville	
13	Mt Bosavi Rural	12883	534	4%	12349	96%	Highland s	Southern Highlands	Nipa Kutubu	
14	Kandrian Inland Rural	19799	8266	42%	11533	58%	Islands	West Britain New	Kandrian/Glo ucester	
15	Yapsie Rural	11403	0	0%	11403	100%	Momase	West Sepik	Telefomin	
16	Safia Rural	9138		0%	9138	100%	Southern	Northern (Oro)	Ijivitari	
17	Wewak Islands Rural	14585	5956	41%	8629	59%	Momase	East Sepik	Wewak	
18	Nabak Rural	11955	3578	30%	8377	70%	Momase	Morobe	Nawae	
19	Balopa Rural	4872	657	13%	4215	87%	Islands	Manus	Manus	
20	Iabu Rural	13788	11956	87%	1832	13%	Momase	Madang	Bogia	Manam Island
21	Karkar Rural	70675	68680	97%	1995	3%	Momase	Madang	Sumkar	Bagabag Island
22	Rai Coast Rural	44296	33402	75%	10894	25%	Momase	Madang	Rai Coast	Long Island

23	Aua Wuvulu Rural	2312	0	0%	2312	100%	Islands	Manus	Manus	Aua Wuvulu Island
24	Nigoherm Rural	2103	0	0%	2103	100%	Islands	Manus	Manus	Parteka/Lau Island

## 8.2 Map of Greenfield projects locations by LLGs



### 8.3 Mobile Broadband - Upgrade Project List

LLG	District	Province	Region	No. of Proposed Upgrade sites
Dobu Rural	Esa'ala	Milne Bay	Southern	3
Kokoda Rural	Sohe	Oro	Southern	3
Kiriwina Rural	Kiriwina-Goodenough	Milne Bay	Southern	3
Kaintiba Rural	Kerema	Gulf	Southern	2
Kome Rural	Menyamya	Morobe	Momase	3
Simbai Rural	Middle Ramu	Madang	Momase	1
Ambunti Rural	Ambunti-Drekikier	East Sepik	Momase	4
Karkar Rural	Sumkar	Madang	Momase	1
Sialum Rural	Tewae-Siassi	Morobe	Momase	3
Buka	North Bougainville	AROB	Islands	6
Lovongai Rural	Kavieng	New Ireland	Islands	4
Kandep Rural	Kandep	Enga	Highlands	3
Wage Rural	Kandep	Enga	Highlands	3
Kol Rural	Jimi	Jiwaka	Highlands	3
Jimi Rural	Jimi	Jiwaka	Highlands	4

Karimui Rural	Karimui-Nomane	Chimbu	Highlands	1
Maip Muritaka Rural	Lagaip-Porgera	Enga	Highlands	2
Lamari Rural	Obura-Wonenara	Eastern Highlands	Highlands	1
Lai Valley Rural	Mendi-Munihu	Southern Highlands	Highlands	1
North Koroba Rural	Koroba-Kopiago	Hela	Highlands	2
Yelia Rural	Obura-Wonenara	Eastern Highlands	Highlands	1

## 8.4 Map of Upgrade Project Locations by LLG

