



Consultation Paper on UAS Projects for 2020

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1 Background

The *National Information and Communications Technology Act 2009* (the Act) mandates the National Information and Communications Technology Authority (NICTA) to establish a Universal Access and Service Fund (UAS Fund) to promote and extend ICT services in PNG. The Act also provides for the establishment of a Universal Access and Service Board (UAS Board) and Secretariat within NICTA to implement the government's universal access and service policy and administer the UAS Fund.

Pursuant to s.108 of the Act, the UAS Board is required to engage NICTA through the UAS Secretariat to prepare a Universal Access and Service Projects Report. The report should summarize the UAS Projects under consideration for the subject year, their respective indicative costs, their proposed ranking (and the reasons) and the proposed aggregate budget.

Prior to any decision as to its 2020 Projects Report, NICTA and the UAS Board consult with stakeholders generally, soliciting suggestions and or proposals for the UAS Projects.

2 Introduction

This consultation paper seeks comments and suggestions from stakeholders on the proposed projects for 2020.

To assist NICTA and the UAS Board to carry out their respective functions in Part VI of the Act, particularly relating to the implementation of UAS Projects, the UAS Board through NICTA, in consultation with the operator licensees, relevant government agencies and other industry stakeholders, has developed the UAS Strategic Planning Report 2018-2022 (the Strategic Planning Report). The Strategic Planning Report provides a useful context, delineating the UAS objectives, and planning framework to assist the annual process of UAS Project identification and ranking. Comments or updates also are sought on this document, which is not binding and for informational purposes only.

The Strategic Planning Report takes into account factors relevant to the selection, costing and ranking of possible UAS Projects and identifies four (4) strategic Programs that could form part of UAS implementation for 2020. For the purposes of this consultation, the four (4) strategic programs form the basis of this consultation document highlighting recent projects completed by the UAS Secretariat under each program.

The proposed projects also include submissions by stakeholders as a result of our call for project proposals in May 2019. NICTA's Response Report to the Call for Project Proposals is available on the website at www.nicta.gov.pg.

3 Mobile Broadband Network Upgrade and Expansion

The purpose of this program is to extend the coverage of advanced broadband wireless mobile communications services (at least 3G/HSPA+, 4G/LTE, or other advanced systems). The goal 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 available, and where existing licensed operators are unwilling or unable to expand their networks, due to commercial or other constraints.

There are three types of Projects included in this Program:

- New BTS sites in areas currently with no mobile service; and
- Upgrades to existing 2G BTS sites.
- Provision of Backhaul for Mobile

3.1 Greenfield Proposed Projects

#	Proposed Project	Location	Cost	Population
1.	Infrastructure - --Tower Construction	Oro Bay LLG, Ijivitari District, Oro Province	K750,000	2,021
2.	Infrastructure – Tower Construction	Kol LLG, Jimi District, Jiwaka Province	K750,000	825
3.	Infrastructure – Tower Construction	Kotidanga LLG, Kerema District, Gulf Province	K750,000	33,354
4.	Infrastructure – Tower Construction	Rigo Inland LLG, Rigo District, Central Province	K750,000	3,900
5.	Infrastructure – Greenfield	Burum Kwat Rural LLG, Finschafen District, Morobe Province	K750,000	6,276
6.	Infrastructure – Greenfield	Yuat Rural LLG, Angoram District, East Sepik Province	K750,000	12,908
7.	Infrastructure – Greenfield	Yaleyemba Rural LLG, Samarai-Murua District, Milne Bay Province	K750,000	10,439
8.	Infrastructure – Greenfield	Arabaka Rural LLG, Middle Ramu District, Madang Province	K750,000	21,068
9.	Infrastructure – Greenfield	Kamano No.1 Rural, Kainantu District, Eastern Highlands Province	K750,000	15,130
10.	Infrastructure – Greenfield	Mt. Bosavi Rural, Nipa/Kutubu District, Southern Highlands Province	K750,000	15,136

11.	Infrastructure – Greenfield	Yapsie Rural LLG, Telefomin District, West Sepik Province	K750,000	9,146
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3.2 Upgrade Proposed Projects

#	Proposed Project	Location	Cost	Population
1.	Infrastructure – Telecommunications Upgrade	West Pomio LLG, Pomio District, East New Britain Province	K150,000	8,325
2.	Infrastructure – Telecommunications Upgrade	Central Inland LLG, Pomio District, East New Britain Province	K150,000	7,496
3.	Infrastructure – Telecommunications Upgrade	Melkoi LLG, Pomio District, East New Britain Province	K150,000	8,040
4.	Infrastructure - Upgrade	Yagaria Rural LLG, Lufa District, Eastern Highlands Province	K150,000	28,312
5.	Infrastructure – Upgrade	Hube Rural LLG, Finschafen District, Morobe Province	K150,000	8,952
6.	Infrastructure – Upgrade	Yawar Rural LLG, Bogia District, Madang Province	K150,000	33,940
7.	Infrastructure – Upgrade	Bumbita/Muhian Rural LLG, Maprik District, East Sepik Province	K150,000	18,530
8.	Infrastructure – Upgrade	Karimui Rural LLG, Karimui/Nomane District, Chimbu Province	K150,000	20,953
9.	Infrastructure – Upgrade	Maip Muritaka Rural LLG, Lagaip/Pogera District, Enga Province	K150,000	18,623
10.	Infrastructure - Upgrade	Goodenough Rural LLG, Kiriwina Goodenough District, Milne Bay Province	K150,000	17,211

The proposed upgrade locations are tentative and may change following consultations with the operators and communities. The total cost to implement all proposed projects both greenfield and upgrade under this program is **K9.8 Million**.

4 Community and Institutional Broadband Networks

The purpose of this program is to help deliver high-speed, full-service fixed broadband Internet connections to selected communities, with services and capacity widely 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 Community Broadband Program will support comprehensive implementation projects in a limited number of designated locations, which will consist of three integrated components:

- Broadband Network Access and Service;
- Institutional Connectivity; and
- Community ICT Centres (CICs)

4.1 Proposed Projects

#	Proposed Project	Location	Cost	Population
1.	**Computer Laboratory with Broadband Connectivity for National High and Secondary Schools	Nationwide	K5 Million	
2.	Computer Laboratory with Broadband Connectivity for Anga Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western highlands Province	K233,000	5,000
3.	Computer Laboratory with Broadband Connectivity for Baisu Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western highlands Province	K263,000	4,000
4.	Computer Laboratory with Broadband Connectivity for Engniu Memorial Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K263,000	8,000
5.	Computer Laboratory with Broadband Connectivity for Kelowaghi Community School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K249,000	5,000
6.	Computer Laboratory with Broadband Connectivity for Keltika Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K292,000	8,000
7.	Computer Laboratory with Broadband Connectivity for Keluwa Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K292,000	6,000
8.	Computer Laboratory with Broadband Connectivity for Nanga Emmanuel Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K249,000	5,000
9.	Computer Laboratory with Broadband Connectivity for Ogulbeng Primary School	Mt. Hagen Urban LLG, Mt. Hagen District,	K292,000	8,000

		Western Highlands Province		
10.	Computer Laboratory with Broadband Connectivity for Tega Lutheran Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K263,000	8,000
11.	Computer Laboratory with Broadband Connectivity for Tiki Memorial Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K246,000	6,000
12.	Computer Laboratory with Broadband Connectivity for Togoba Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K233,000	????
13.	Computer Laboratory with Broadband Connectivity for Wimbiku Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K249,000	4,000
14.	Computers with Broadband Connectivity for Baisu Clinic	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K18,000	4,000
15.	Computers with Broadband Connectivity for Balg Community Health Post	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K18,000	6,000
16.	Computers with Broadband Connectivity for Bukapena Health Centre	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K25,000	12,000
17.	Computers with Broadband Connectivity for Mt. Hagen Urban Clinic	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K18,000	10,000
18.	Computers with Broadband Connectivity for Kotna District Hospital	Kotna LLG, Dei District, Western Highlands Province	K30,000	60,000
19.	Computers with Broadband Connectivity for Kumdi Community Health Post	Mul LLG, Mul Baiyer District, Western Highlands Province	K18,000	4,000
20.	Computers with Broadband Connectivity for Kwinga Community Health Post	Mul LLG, Mul Baiyer District, Western Highlands Province	K18,000	4,000
21.	Computers with Broadband Connectivity for Mitiku Community Health Post	Dei Rural LLG, Dei District, Western Highlands Province	K18,000	4,000
22.	Computers with Broadband Connectivity Mukapeng Community Health Post	Kotna LLG, Dei District, Western Highlands Province	K18,000	5,000
23.	Computers with Broadband Connectivity for Nunga Health Centre	Kotna LLG, Dei District, Western Highlands Province	K25,000	8,000

24.	Computer Laboratory with Broadband Connectivity for Pabrabuk Health Centre	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K25,000	7,000
25.	Computers with Broadband Connectivity Paglum Community Health Centre	Mul LLG, Mul Baiyer District, Western Highlands Province	K18,000	4,000
26.	Computers with Broadband Connectivity Paiakona Community Health Centre	Tambul LLG, Tambul Nebilyer District, Western Highlands Province	K18,000	4,000
27.	Computers with Broadband Connectivity for Rebiamul Urban Clinic	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K18,000	10,000
28.	Computers with Broadband Connectivity for Susu Mamas Urban Clinic	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K18,000	10,000
29.	Computers with Broadband Connectivity for Tambul District Hospital	Mt. Giluwe LLG, Tambul Nebilyer District, Western Highlands Province	K31,000	80,000
30.	Computers with Broadband Connectivity Tengtenga Health Centre	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K25,000	7,000
31.	Computers with Broadband Connectivity for Tiki Health Centre	Kotna LLG, Dei District, Western Highlands Province	K25,000	5,000
32.	Computers with Broadband Connectivity for Tinsly District Hospital	Mul LLG, Mul Baiyer District, Western Highlands Province	K31,000	80,000
33.	Computers with Broadband Connectivity for Tipulga Pung Community Health Post	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K18,000	4,000
34.	Computers with Broadband Connectivity for Togoba Health Centre	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K25,000	6,000
35.	Computers with Broadband Connectivity for Wakanom Community Health Post	Mul LLG, Mul Baiyer District, Western Highlands Province	K18,000	4,000
36.	ICT Application and Content Development for Holy Trinity Teachers College	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K100,000	1,000
37.	Computer Laboratory for Kingku HiTech Training Institute	Kudjip LLG, South Waghi/Anglimp District, Western Highlands Province	K64,000	1,000
38.	Computer Laboratory with Broadband Connectivity and e-Library for Rebiamul Primary School	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K35,000	1,350

39.	Rural Primary School E-Library	Lorengau Urban LLG, Manus District, Manus Province and Suau LLG, Alotau District, Milne Bay Province	K70,000	300
40.	Wireless Mesh Network for Gagagaba Village	Rigo Coastal Rural LLG, Rigo District, Central Province	K109,000	3,000
41.	Computer Laboratory with Broadband Connectivity for Rosary Secondary School	Gena/Waugla Rural LLG, Kerowagi District, Chimbu Province	K600,000	1,800

***All National High and Secondary Schools will be determined following consultation with the Department of Education (DoE).*

The total cost to implement the proposed projects is **K9.6** Million. NICTA also clarifies that NOT all projects proposed under this program will be implemented subsequent to the consultation process.

5 ICT Platform for Future Growth

This program focuses on the demand side of ICT development objectives, to ensure that citizens and communities are able to gain the most benefits from the installation and availability of advanced broadband ICT networks and services. Different groups of users will find value in different types of ICT applications, functions, devices, and services, but there will in all cases be a wide scope of potential uses for individuals, families, small businesses, and others to improve their livelihood through the use of advanced ICTs.

The purpose of this program is therefore to help develop a platform for the future, long-term development of ICT utilization and opportunities across Papua New Guinea society. Projects in this area will support the development of creative, innovative, and high value ICT activities within communities across PNG, which will tap into the resources and knowledge of the local populations. In turn, NICTA is confident that such Projects will encourage further investment in and development of innovative ICT networks and services throughout the country.

There are two (2) main components to this program, which can be implemented through independent UAS Projects or in combination with other Fund Programs.

- ICT Applications and Content; and
- Digital Literacy

#	Proposed Project	Location	Cost	Population
1.	Content development on digital literacy	Mt. Hagen Urban LLG, Mt. Hagen District, Western Highlands Province	K100,000	1,000

2.	Training – ICT Innovation and Technology in Agriculture for Farmers	Kudjip LLG, South Waghi/Anglimp District, Jiwaka Province	K60,000	1,000
3.	Capacity Building/ Training supporting existing UAS projects	<ul style="list-style-type: none"> • Institutional Connectivity Project Site • Community ICT Centre sites 	K500,000	
4.	ICT Applications Development	PNG wide	K500,000	

The total cost for the proposed projects under this program is **K1.16** Million.

6 Expansion of Broadcasting Network Coverage

This program addresses the objective of extending coverage of radio and television broadcasting to all citizens and communities in PNG. The UAS Board and NICTA aim to support growth of the broadcasting sector through targeted use of UAS Fund resources to close gaps and assist low income consumers where the broadcasting market may not reach. This activity would focus on support for infrastructure expansion, primarily through enhancement or installation of broadcast antennae on existing or new towers, in close coordination with the rollout of mobile telecommunications infrastructure under Program 1, as well as potential assistance for low-income households with the costs of the digital broadcasting transition, via discounts on set-top boxes.

This program could be implemented through projects extending coverage for

- Radio Broadcasting; and
- Television Broadcasting

#	Proposed Project	Location	Cost	Population
1.	Broadcasting Services	Kol LLG, Jimi District, Jiwaka Province	K500,000	825
2.	Upgrade & restore Broadcasting Services	Gulf Province	K500,000	158,197
3.	Upgrade & restore Broadcasting Services	Central Inland LLG, Pomio District, East New Britain Province	K500,000	21,394

The proposed projects under this program will cost a total of **K1.5** Million.

7 Other Projects

All projects proposed by development partners including International Telecommunication Union (ITU), Asia Pacific Telecommunity (APT) and other interested parties may be considered under this category. A total amount of **K1** Million has been allocated for this program.

8 Budget

The total indicative budget for the proposed projects in all Programs is set at **K23** million. The total indicative budget and allocations for specific UAS Projects under each Program are estimates for initial planning purposes and subject to ongoing review and updating by the UAS Board and NICTA.

8.1 Implementation Schedule

Following this consultation, NICTA will finalise the report for the proposed projects for submission to the UAS Board for consideration. The UAS Board will then prepare the UAS Projects Report for 2020 for submission to the Minister for Information and Communications Technology for consideration.

Subject to obtaining timely approvals required in the Act, NICTA aims to have the UAS Projects for 2020 implemented in early 2020.

9 Consultation

NICTA hereby invites stakeholders, licensed operators and the general public to submit comments on the proposed UAS Projects for 2020. Further, NICTA also invites proposals for potential UAS Projects not covered in the list of proposed projects for consideration to be implemented in 2020. In this connection NICTA has also prepared the proposal form which is available on the NICTA website at www.nicta.gov.pg.

Copies of all submissions received will be published on NICTA's Public Register. Additional procedural information is set out in the Guidelines on the submission of written comments to public consultations and public inquiries, which are available on NICTA's Public Register.

10 Contact

If you have any enquiries relating to this consultation please address them to the following emails in the first instance; viru@nicta.gov.pg, wsuti@nicta.gov.pg or mkapal@nicta.gov.pg.