





National Information and Communications Technology Authority

# Office of the Chief Executive Officer

July 31, 2018

Our Ref : C £18/5/1

Honourable Sam H Basil, MP
Minister for Communications and Information Technology & Energy
Ministry of Communications and Information Technology & Energy
PO Box 1122
WAIGANI 131
National Capital District

My Dear Honourable Minister,

SUBJECT: REQUEST FOR APPROVAL TO PROPOSED UNIVERSAL ACCESS AND SERVICE (UAS) PROJECTS FOR 2018

On June 27, 2018 the UAS Board met and considered possible UAS Projects for 2018. These are Projects that meet the requirements and serve the purposes of the Universal Access and Service Scheme that has been incorporated into the *National Information and Communications Technology Act 2009 ("Act")*.

In accordance with Section 108(2) of the Act, the UAS Board considered a report prepared by NICTA in which potential UAS Projects were identified, developed, indicatively costed and ranked in order of priority.

In summary the proposed UAS Projects for 2018 are estimated to cost a total of PGK11 million. The UAS Board resoled as follows:

"The Universal Access Services Board hereby resolves, pursuant to Section 107(a)(1) of the NICT Act 2009, and after due consideration of reports and information received, to advise NICTA that the desired level of funding in the Universal Access Services Fund for 2018 is \$11 million Kina, in order to provide for the estimated 2018 UAS Project Implementation for this year, and a prudent reserve of 10%."

The UAS Projects for 2018 comprise the following specific Projects in assessed priority order (each being more fully described in the enclosed UAS Projects report at Attachment A):

- Project 1: Mobile broadband network upgrade and expansion (indicative cost 7.0 million PGK)
- Project 2: Community and institutional broadband networks (indicative cost 0.8 million PGK)
- Project 3: ICT platform for future growth project (indicative cost 0.25 million PGK)
- Project 4: Extension of broadcasting network coverage (indicative cost 2.0 million PGK)

As noted in the UAS Board's resolution, above, a prudent reserve of 10% has been added to the indicative costs listed above to bring the total estimate to 11 million PGK.

The indicative costs noted above are for expenditure incurred or committed in 2018. All of these Projects are multi-year projects and further work will be considered when Projects for future years are being considered and assessed.

As a result of its considerations, the UAS Board hereby submits its UAS Project report and recommendations to you for consideration in accordance with Section 108(3) of the Act and recommends that you approve the UAS Projects for 2018 now being put forward. Section 108(5) of the Act contemplates that the Minister might take up to sixty (60) days from receipt of the report to make a decision and notify the UAS Board and NICTA accordingly. With respect, the UAS Board and NICTA would appreciate it, if possible, if the decision might be expedited in order implementation of the work to implement the Projects that you approve to commence at the earliest time.

Yours sincerely,

CHARLES S. PUNAHA CHIEF EXECUTIVE OFFICER

ON BEHALF OF THE UAS BOARD AND NICTA

Attachment A

# REPORT FROM THE UNIVERSAL ACCESS SERVICES BOARD ON RECOMMENDED 2018 UNIVERSAL ACCESS SERVICE PROJECTS

TO THE HONOURABLE SAM BASIL, MINISTER FOR COMMUNICATIONS, INFORMATION TECHNOLOGY AND ENERGY

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### 1 INTRODUCTION

Under Section 108(1) of the NICT Act, NICTA is engaged by the UAS Board to undertake certain tasks relating to UAS Projects, including:

- "(a) identify, develop and estimate the indicative cost of UAS Projects; and
- (d) estimate the proposed aggregate budget for all UAS Projects to be undertaken under this Part for the relevant period identified by the UAS Board; and
- (e) rank the UAS Projects identified and developed under Subsections (1)(a) or (b) in order of priority with regard to
  - (i) their affordability within the proposed budget; and
  - (ii) the remaining factors listed in Subsection (4); and
- (f) prepare for consideration by the UAS Board, a report which summarises the UAS Projects under consideration, their respective indicative costing, their proposed ranking (and the reasons for their ranking), and the proposed aggregate budget, as identified above."

NICTA has undertaken these tasks, including providing the UAS Board with the 2018 UAS Projects Report, pursuant to Section 108(1)(f).

Sections 108(2)-(3) of the NICT 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 has considered the Report by NICTA, and now complies with Sections 108(2)-(3) of the NICT Act by providing the Honourable Minister with this "REPORT FROM THE UNIVERSAL ACCESS SERVICES BOARD ON RECOMMENDED 2018 UNIVERSAL ACCESS SERVICE PROJECTS".

This Report recommends for approval by the Honourable Minister, 4 Universal Access Services Projects for 2018. These recommended Projects have been evaluated and ranked on the criteria in the NICT Act. The 2018 recommended UAS Projects, and their ranking, are as follows:

### PROJECT RANKINGS

Project #1: Mobile Broadband Network Upgrade and Expansion

**Project 2: Community and Institutional Broadband Networks** 

**Project #3: ICT Platform for Future Growth Project** 

Project #4: Extension of broadcasting network coverage

The reasons for the rankings, and the way in which each Project fulfills the criteria, are explained below, following the descriptions of each Project.

The UAS Board also is aware from NICTA, and has considered, indicative costs and implementation and procurement timelines and processes for these UAS Projects.

The UAS Board respectfully requests that the Honourable Minister promptly approve these Projects and direct NICTA, with support from the UAS Board, to take all appropriate steps to fund and implement them.

The UAS Board also notes that pursuant to Section 108 (5) of the NICT Act, if the Minister does not identify approved 2018 UAS Projects within 60 days, the recommended Projects are deemed to be rejected (which would, in practical terms, deprive members of the public of the important benefits of these 2018 UAS Projects).

### 2 PROJECT 1: MOBILE BROADBAND NETWORK UPGRADE AND EXPANSION

This Project would 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 goal would be 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. The ultimate objective of this program is to achieve virtually 100% mobile broadband service coverage throughout PNG.

These goals can be accomplished 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.

There are two types of work included in this Project:: (1) new BTS sites in areas currently with no mobile service, and (2) upgrades to existing 2G BTS sites. Implementing contractors/operators will be responsible for installing and operating wireless voice and broadband data/Internet telecommunications networks and services within specified locations where such service is not currently available. Priority locations for each separate Project will be selected by NICTA, based on market analysis and stakeholder consultations.

For 2018, NICTA it may be optimal to have a relatively small number of initial projects, to begin the process and test the procedures, costs, and market response. Following recent pilot projects that have been successfully implemented, NICTA has identified designed 2-3 new 3G upgrade as well as 2-3 new 3G network projects, in selected priority locations. These projects would be developed and bids solicited in two stages during the course of the year, to allow all parties to focus resources on a limited number of bidding processes at one time.

### 2.1 Indicative Budget and targets for 2018

To assist the UAS Board in considering this Project, and funding needs, NICTA provides below an indicative 2018 budget and target outcomes. This project can begin in 2018, but project implementation, and expenditure of funds, may continue into 2019.

- Budget allocation = 7 million PGK
- Target outcome:

3G Upgrade: Approx. 130,000 population newly covered by 3G+ service New 3G service: Approx. 80,000 population newly covered by 3G+ service

### 2.2 Indicative Implementation approach

### Procurement strategy:

Licensed operators will be invited to bid to provide 3G+ 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 RFPs will identify location boundaries and minimum service requirements. These will generally include construction of backhaul and tower infrastructure 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 telecom operators, with qualifications and capabilities to provide the services, including existing presence in locations to be upgraded. Bids must include detail on 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.

### 2.3 Specific Projects

Number of projects:

3G Upgrade = 1-2 projects New 3G service 1-2 projects

### Size, scope:

Based on the UAS NICTA Secretariat's "Gap Analysis," (in its Strategic Planning Report), this Project is proposed to include:

**3G Upgrade projects**: Approx. 4-5 LLGs within 2-4 Districts for each project selected from one or more of the following geographic locations, in descending order of priority:

- 1. Bougainville Province
- 2. Hela Province
- 3. Madang Province
- 4. Manus Province

- 5. West Sepik Province
- 6. New Ireland Province

The priority sequence has been based on the UAS Secretariat's Access Gap analysis, with locations of largest gap being given the highest priority.

**New 3G service projects**: Approx. 2-3 LLGs within 1-2 Districts for each project selected from one or more of the following geographic locations, in descending order of priority:

- 1. Gulf Province
- 2. Manus Province
- 3. West Sepik Province
- 4. East Sepik Province
- 5. Western New Britain Province

The priority sequence has been based on the UAS Secretariat's Access Gap analysis, with locations of largest gap being given the highest priority.

### Locations:

Specific locations (districts, LLGs) within the priority Provinces to be determined through consultations with the public, operators, and local officials

### 2.4 Indicative Timetable of key milestones

This project may be rolled out in two phases, as follows, and the likely funding requirements have taken into account the requirements for 2018:

Initial project design	April, Sept
Public consultations	May, Oct
RFP release	June, Nov
Bid submission, evaluation of bids	Aug, Dec
Contract award, project launch	Sept, Jan '19
Project implementation, M&E	2019-2020

### 2.5 Assessment of Project against Section 108 criteria

Criteria	Assessment
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(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 3G 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.
(f) any other information the UAS Board considers relevant	Other relevant information is contained in this report and in the associated Access Gap Analysis.
(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.

As shown by the Table above, this Project fulfills the Section 108 criteria.

This Project is ranked first because 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 also is 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 Projects 2 and 4, which focus on service usage and assisting communities to derive more benefit from services.

### 3 PROJECT 2: COMMUNITY AND INSTITUTIONAL BROADBAND NETWORKS

This Projects would 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 would support comprehensive implementation projects in a limited number of designated locations, consisting of three integrated components:

- Broadband Network Access and Service: Extending broadband network links into areas unserved by sufficient high capacity signals;
- Institutional Connectivity: Providing broadband connections directly to identified local public institutions, including schools, health facilities, local government offices, and community centers.
- Community ICT Centers (CICs): Establishment of public access CICs within each designated community.

To achieve the multiple, inter-related goals of this Project, this Project would be designed to require implementing partners and contractors/operators to provide the full range of specified outputs simultaneously within each defined service area.

For 2018, NICTA has identified 3 to 4 pilot locations across 2 distinct Projects, and can invite project design and operation proposals from operators for an identified budget.

### 3.1 Indicative Budget and targets for 2018

To assist the UAS Board in considering this Project, and funding needs, NICTA provides below an indicative 2018 budget and target outcomes. This project can begin in 2018, but project implementation, and expenditure of funds, may continue into 2019.

- Budget allocation = 0.8 million PGK
- Target outcomes:

Launch of broadband community networks and services in 1-2 pilot locations, connecting major public institutions, and providing public community access points.

## 3.2 Implementation approach

Procurement strategy:

For each location, NICTA would issue a request for proposals from qualified licensed telecom operators, identifying the locations and scope of facilities and services required, and the available subsidy amounts. 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 (fiber) access network links into the designated communities, and connections to identified public institutions (schools, government offices). 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 these locations. Options for other services, including fixed and wireless broadband, may also be included.

### 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.

# 3.3 Projects to be funded

- Number of projects:
  - 1-2 projects (separate procurements) in one or more of the following geographic locations, in descending order of priority:
    - 1. Western Province
    - 2. Gulf Province
    - 3. Manus Province
    - 4. West Sepik Province
    - 5. East Sepik Province
    - 6. Western New Britain Province

The priority sequence has been based on the UAS Secretariat's Access Gap analysis for new 3G services, with locations of largest gap being given the highest priority. For the community centres to be able to operate they are likely to require cellular mobile broadband internet access in the first instance, given the low coverage of fixed broadband internet access at this time.

### Size, scope:

Pilot deployments of community broadband connections in 1-2 locations (LLGs) per project. Connections and broadband service to major public institutions, plus public ICT access facilities in each location.

### Locations:

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

# 3.4 Indicative Timetable of key milestones

### 2018:

Initial project design	May
Public consultations	June
RFP release	July
Bid submission, evaluation of bids	Sept
Contract award, project launch	Oct
Project implementation, M&E	2019

# 3.5 Assessment of Project against Section 108 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 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 is a Project to provide network capability and services, and in that respect similar to Project 1, and superior on these criteria to Projects 3 and 4. This Project ranks behind Project 1 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 Project 1.

## 4 PROJECT 3: ICT PLATFORM FOR FUTURE GROWTH PROJECT

### 4.1 Summary of Possible Projects and Program

The purpose of this Project is to help develop a platform for future, long-term development of ICT utilization and opportunities across Papua New Guinea society. It would support the development of creative, innovative, and high value ICT activities within PNG communities, which will tap into the resources and knowledge of the local populations.

There are two main components to this Project: (1) ICT Applications and Content, and (2) Digital Literacy projects. Specific individual projects will be designed by NICTA and the UAS Board, in consultation with appropriate public officials and other stakeholders.

For the first year's preliminary implementation of this Program, NICTA would invite interested partner organizations to submit proposals for innovative projects under each category, to be developed and piloted with the available Fund budget (together with other resources). NICTA and the UAS Board will enter into agreements with selected organizations to define and implement the projects deemed most appropriate, cost-effective, and valuable. Without limiting the possible proposals that might be provided to NICTA, the project could involve the development of self-learning software to improve the digital literacy of those using the Broadband Centres established under Project 2, or the digital literacy of post-school adult population generally.

### 4.2 Indicative Budget and targets for 2018

To assist the UAS Board in considering this Project, and funding needs, NICTA provides below an indicative 2018 budget and target outcomes. This project can begin in 2018, but project implementation, and expenditure of funds, may continue into 2019.

- Budget allocation 0.25 million PGK
- Target outcomes:

Initial pilot projects, reaching target populations with useful content and valuable digital literacy training, while providing helpful lessons for scaling up similar projects, and developing further partnerships.

### 4.3 Implementation approach

Procurement strategy:

The first year implementation would involve two modest-scale pilot projects, aimed at identifying options for further expansion. NICTA will consult with potential partners and solicit proposals for introductory ICT content and digital literacy projects, which can be scaled up where appropriate. Priority will be given to proposals that are likely to have a large number of potential beneficiaries at the earliest time.

Main requirements:

ICT content project: Design of a preliminary plan and implementation strategy to encourage development of locally relevant ICT content. Digital literacy project: Design of a preliminary plan and implementation strategy to support wide improvement in digital literacy among disadvantaged population groups.

Bidding parameters:

NICTA will solicit ideas and proposals from potential partner organizations that are interested and qualified to offer the needed resources. These may include universities, local governments, small entrepreneurs, social service organizations, training institutes, and community groups. Such partners will be invited to propose projects within the general parameters and budgets defined by NICTA and the UAS Board. Proposals will be selected for innovation, cost-effectiveness, and capability and resources of the partners.

### 4.4 Projects to be funded

Number of projects:

ICT content = 1 pilot project Digital literacy = 1 pilot project

Size, scope:

Each project will be supported by approx. 250,000 PGK from the Fund.

Locations

Specific locations and target beneficiaries of the pilot projects will be determined by NICTA and the UAS Board together with the selected partners, and through consultations with other key stakeholders. However it is intended to align the pilot projects with the locations for new and upgrade 3G service in Project 1 unless compelling reasons require otherwise.

### 4.5 Indicative Timetable of key milestones:

### 2018:

Initial project proposal solicitations	July
Preliminary selection of partners	August
Negotiations	September
Detailed project design, planning	Oct-Nov
Contract award, project launch	Dec
Project implementation, M&E	2019

### 4.6 Assessment of Project against Section 108 criteria

ssessment

(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.
(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 because it ranks third on criteria (a), (b) and (e). It is a project directed to increase the ability of the communities to use and derive benefit from the 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, this ranks above Project #4 because the platform and literacy project can be applied more broadly and are likely to have greater impact in terms of meeting the UAS objectives.

### 5 PROJECT 4: EXTENSION OF BROADCASTING NETWORK COVERAGE

This Project 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 will focus on support for infrastructure expansion, primarily through enhancement or installation of broadcast antennae on existing or new towers, as well as potential assistance for low-income households with the costs of the digital broadcasting transition, via discounts on set-top boxes.

For 2018, this Project is intended to serve as an initial planning and pilot exercise, while also delivering expanded broadcast coverage to a selected set of districts. NICTA will solicit bids from qualified contractors for a single, integrated project to be rolled out within one target province initially. The project planning, negotiations, and implementation will help define the parameters of future projects under this program.

## 5.1 Indicative Budget and targets for 2018

To assist the UAS Board in considering this Project, and funding needs, NICTA provides below an indicative 2018 budget and target outcomes. This project can begin in 2018, but project implementation, and expenditure of funds, may continue into 2019.

- Budget allocation = 2.0 million PGK
- Target outcomes:

Expanded coverage of broadcast signals throughout selected province/districts

### 5.2 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. In addition, the UAS Fund will make available limited subsidies for digital set-top boxes on a preliminary trial basis, which will be offered to qualified low-income users through the selected contractor.

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. Prepare plan for discounted set-top-boxes for qualified customers.

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.

## 5.3 Projects to be funded

Number of projects:

1 pilot project

Size, scope:

3-4 districts within a selected province, where broadcast signals are not sufficiently available, to reach all unserved LLGs within the defined area

The pilot project will be in one of the following geographic locations, in descending order of priority:

- 1. Morobe Province
- 2. Hela Province
- 3. Gulf Province
- 4. Milne Bay Province
- 5. Central Province
- 6. Eastern Highlands Province

The priority is based on the absence of broadcasting (TV and FM) coverage as shown by the access gap analysis.

Locations:

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

# 5.4 Indicative Timetable of key milestones:

### 2018:

Initial project design	June
Public consultations	July
RFP release	Sept
Bid submission, evaluation of bids	Nov
Contract award, project launch	Dec
Program implementation, M&E	2019

# 5.5 Assessment of Project against Section 108 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.
(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 fourth because it ranks fourth on criteria (a), (b) and (e). The reasons for this are summarized already in the ranking discussion for Projects # 1-3.

