



NATIONAL INFORMATION & COMMUNICATIONS
TECHNOLOGY AUTHORITY

Universal Access and Service Projects for 2020

Date of Submission: **May 2019**

Project Proposal Form – FORM 002

(All project proposals submitted MUST follow this format and sequence. Projects proposals, which do not follow this format and sequence, may not be considered. All questions must be answered)

Applicant Information			
Name	PIUS NOLIH		
Organization	Type of Organization: <input type="checkbox"/> Community/Village/Education Institution <input type="checkbox"/> Government <input checked="" type="checkbox"/> Private <input type="checkbox"/> NGO <input type="checkbox"/> Other		
Position	Senior Network Engineer		
Mailing Address	PO Box 493, Boroko, NCD		
Telephone	75515506	Fax	
Email	piusnolih@gmail.com		

Project Information	
Project Title	Rural Primary School E-Library
Project Location	
Province	Manus Island and Milne Bay
District	Lorengau and Alotau
LLG	PNKA and Suau
Ward	Andra Island and Iloilo

Project summary

Education is the single biggest opportunity that a child can have. The aim of this project is to provide up-to-date school learning materials via online connection and to be available in offline mode as well for Rural Base School Settings. This basic Infrastructure consist of an Offline E- Library Server, 10 iPad or tablet and a solar powered battery as power source. The e-library will provide and promote access to updated knowledge and information, which can improve/boost literacy and numeracy skills for elementary/primary school students.

The purpose of this project is to connect and provide accessibility with “up to date” Academic Materials and generally learning content for our remote schools. The current National Education Curriculum is poorly managed as seen by the decline in our educational standard. Our Intent is to research and provide the best possible solution to ELearning given our technical expertise. Our prior analysis identifies two main criteria that is common in previous setups and the failures that such ELearning programs failed.

1. Economically viable
2. Efficient and sustainable.

The installation will consist of setting up the power source, setting up the E-Granary Elibrary infrastructure and the Learning tools provided such as the iPads or the Tablets. Other locally supplied Wi-Fi enabled devices can be used if locals can afford to purchase, i.e., laptops or smartphones.

The two Batteries will serve as backup or redundancy. The Server will be updated and backed up onto a cloud platform for ease of recovery. The IPad and Tablets will be configured and restricted for Egranary access only.

The installation should not take more than 3 days and will take another 2 days of Awareness. The first awareness will begin before the project and the next will follow the project completion. After that, a training will be conducted for the local custodian or administrator with videos, manuals and hands on Aids for administrative convenience.

Please describe this summary within about 20 lines here. As for the detail, please fill in the Annex 1

Project Cost	Requested Amount	Own funding
K79000	K70000	K9,000

Duration of the Project

Andra From April 2020 To May 2020

Iloilo From September 2020 To October 2020

(The project is to be concluded within 12 months from the date of announcement of selection by the NICTA (UAS Secretariat)

Contact Point Information (If contact point is different from the applicant, please fill in as follows)

Name

Organization

Address

Position

Telephone		Fax	
Email			
		Date	Insert Date
Signature _____			

Project Details

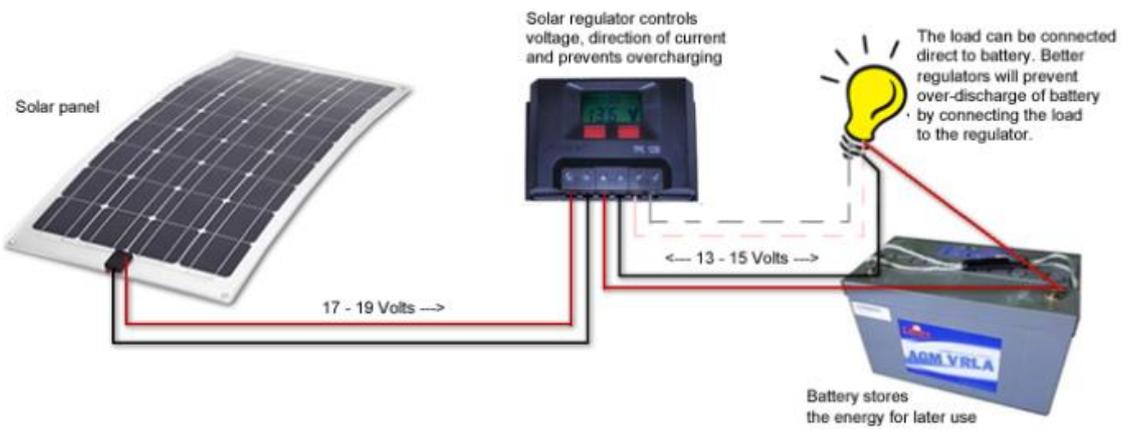
Please describe outline of the pilot project	
Objectives	<ul style="list-style-type: none"> • Provide adequate up-to-date school learning materials. • Increase access to literacy and numeracy and learning and development for children. • Improve/boost literacy and numeracy skills for elementary/primary school students. • Provide a learning tool that will last and can be procured locally
Purpose of Project	We aim to provide and promote access to knowledge and information, which can improve/boost literacy and numeracy skills for elementary/primary school students.
Outline of pilot project	<p>Project description including equipment, networks / systems/ design and schematics needed for the Project.</p> <p>(You may attach another sheet if necessary.)</p>
Appropriateness of the Project	<p>The extent to which the Project can support and improve the lives of persons in the project areas evidenced by</p> <ul style="list-style-type: none"> • Needs analysis (what is the problem, development opportunity, priorities that project seeks to address) • Project details • Applicability to community needs • Project location (attach maps where appropriate)
Number of Persons benefiting from the project	<p>How many persons would directly and indirectly be benefitting from the project evidenced by</p> <ul style="list-style-type: none"> • Andra Island – 70 Children. Iloilo Village - 150 • The project will greatly benefit the community in terms of up to date educational materials for teachers and students and other available projects captured on the elibrary sourced which will be applicable to Andra and Iloilo rural settings. • Children from Elementary to Grade 7, teachers and interested members for other community to pursue information on their small-scale projects.
Project Benefits	<p>The Project benefits are seen and will be captured in this areas listed below:</p> <ul style="list-style-type: none"> • reduced cost on internet infrastructure and power • a local solution where internet is only needed for updates once in a while • boost/improve literacy and numeracy learning • adequate and up to date information • other access information on community small scale projects for respective communities. E.g; projects on growing greens and potatoes etc using island seaweed or water.
Partner organizations/institutions (if any)	
Milestone(significant phases of the project)	<ul style="list-style-type: none"> • Purchasing of Materials • Purchasing of Server abroad • Preparing As Built Document for installation • Configuring of Server, IPADs/Tablets

	<ul style="list-style-type: none"> • Testing and Packing. • Ship materials onsite. • Initial Community awareness • Installation of Solar Panels and Server • Setup and complete installation • Testing • Training and Handover of Documentation • Final Community awareness 																												
Expected output																													
Project Risks	<p>What are the risks to the Project? How will they be overcome or managed? (See management table)</p> <table border="1"> <thead> <tr> <th>Risk -List all possible risks you can think of</th> <th>Consequence 4 – Extreme 3 – High 2 – Medium 1 -Low</th> <th>Probability 4 – Almost certain 3 – Likely 2 – Positive 1 - Unlikely</th> <th>Risk Management/Mitigation plan</th> </tr> </thead> <tbody> <tr> <td>Lack of political or administrative support</td> <td>1</td> <td>2</td> <td>After installation, a formal training, documentation, and support will be implemented. Further assistance from political reps will be sort after 1 or 2 years of review is done.</td> </tr> <tr> <td>Land not secured</td> <td>1</td> <td>1</td> <td>This will be mounted on existing Building/Classroom.</td> </tr> <tr> <td>Security</td> <td>3</td> <td>2</td> <td>My Team will conduct community Awareness.</td> </tr> <tr> <td>Project Equipment Personalized</td> <td>1</td> <td>1</td> <td>Solar panels will be installed with secure frames. Server to be caged and IPads or Tablets will be only used in the classroom and not to be taken out.</td> </tr> <tr> <td>Lack of community support</td> <td>2</td> <td>2</td> <td>Awareness being carried out will be done every 6 months.</td> </tr> <tr> <td>Maintenance & recurrent costs</td> <td>1</td> <td>1</td> <td>Community Fundraising drive by Andra and Iloilo working islanders will be carried out yearly for Maintenance and saved in Community Accounts.</td> </tr> </tbody> </table>	Risk -List all possible risks you can think of	Consequence 4 – Extreme 3 – High 2 – Medium 1 -Low	Probability 4 – Almost certain 3 – Likely 2 – Positive 1 - Unlikely	Risk Management/Mitigation plan	Lack of political or administrative support	1	2	After installation, a formal training, documentation, and support will be implemented. Further assistance from political reps will be sort after 1 or 2 years of review is done.	Land not secured	1	1	This will be mounted on existing Building/Classroom.	Security	3	2	My Team will conduct community Awareness.	Project Equipment Personalized	1	1	Solar panels will be installed with secure frames. Server to be caged and IPads or Tablets will be only used in the classroom and not to be taken out.	Lack of community support	2	2	Awareness being carried out will be done every 6 months.	Maintenance & recurrent costs	1	1	Community Fundraising drive by Andra and Iloilo working islanders will be carried out yearly for Maintenance and saved in Community Accounts.
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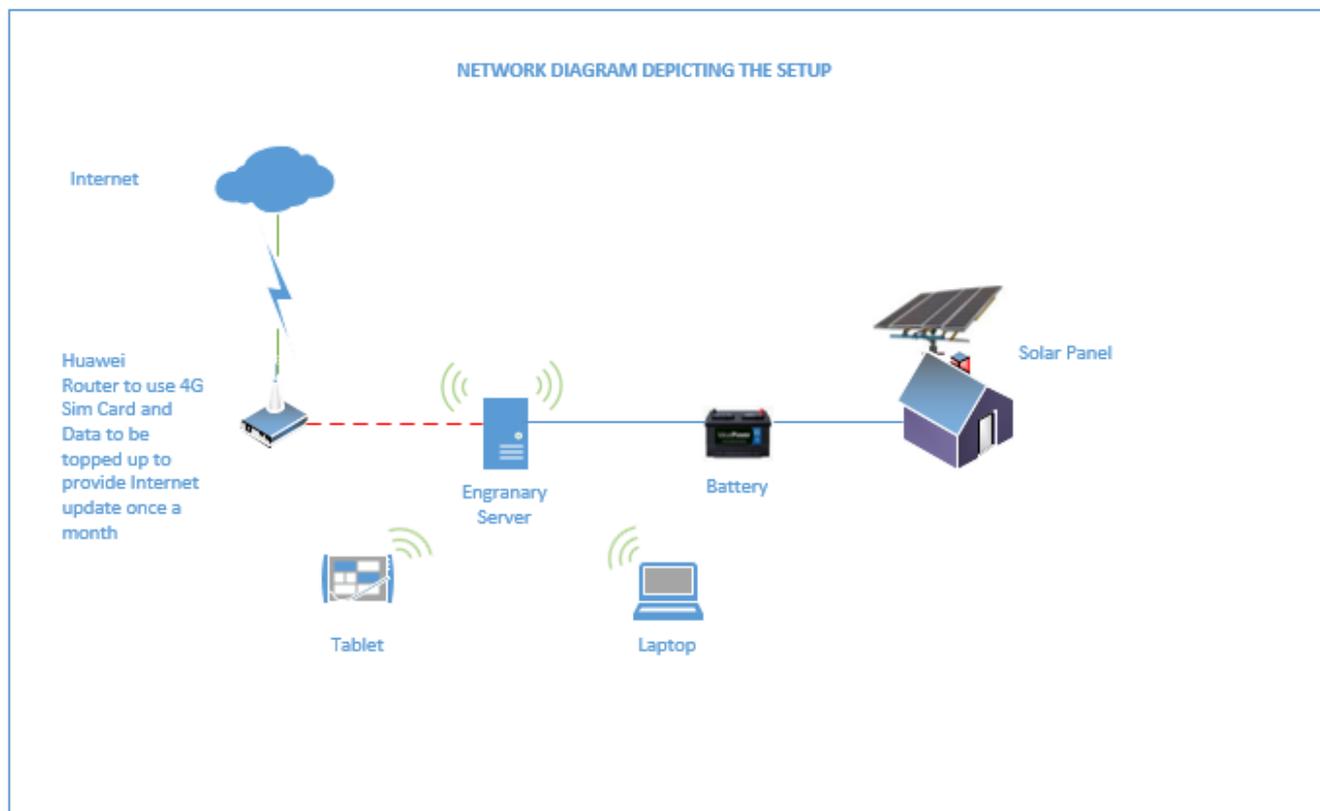
Reporting Procedure	Trained local staff to provide weekly/monthly reports.
Linkage to existing Government development policies	<p>The Project plays a significant role in providing key information on those medium-term development plan areas of concern. By having access and guidance to translate those information, locals are no longer limited to key information to improve their lives. An example would be to have guidance in setting up local gardens or fish farms with readily step-by-step guides available on the Egranary.</p> <p>NICTA Strategic Planning Report highlights universal access to broadband mobile services. With Digicel coverage nationwide, 4G/3G can be accessible from the WiFi Router using a sim to update Egranary on monthly basis depending on the Elibrary updates.</p> <p>The NICTA Strategic Planning Report and National Broadband Plan highlights Economic transformation, access to information, innovation, rural communities participation in sharing experiences when such project being a tool to enable correct and appropriate information is disseminated</p>
Financial Support	Being a small scale project with bigger impact to the community, the project will have a working community for Andra which I am the current President and will have fundraising activities quarterly to sustain Internet and asset aging. As For Iloilo, the similar activities will be conducting in the city as well.
Sustainability of Project	Project is self-sustainable as local communities wanting offline access to materials can be charged a small amount of fee. Communities elites working around PNG and Abroad will also contribute. Driving awareness and working with the community to take ownership. Individuals in the community who showed interest and eager to learn and are fast learners will be identified and trained. Remember every community always have such person available.
Please describe project implementation plan (schedule) in detail. (date, period, place, mission, etc.)	

Pictorial Diagram of How the Egranary will be mounted inside the secured Library in Andra island and

Cabinet Displaying Egranary Server mounted with Solar kits and regulators connected at the bottom



Solar connects to a Regulator and then connects to a Battery. Can be any car Battery as well.



BILL OF MATERIALS

Item	Description	Quantity	Unit Cost (K)	Total Cost (K)	Comments
Server	12Volt Egranary all in one Server	2	20000	40000	
Access Point	Huawel 4G Router with outdoor Antenna	2	500	1000	
Solar Panel		2	1500	3000	
Controller		2	950	1900	
Battery		4	700	2800	
Tablets		20	900	18000	
Solar Kits		2	800	1600	
Power Guard		2	100	200	
Accessories	Cable Ties, Valcro, Electrical Tape, etc	2	750	1500	
Tax	Customs Duty/Logistical costs	2	1500	3000	
Labour	3x24 Hours @ 5/hr	2	0	0	Applicant to provide
Airfare		6	0	0	Applicant to provide
Accommodation		6	0	0	Applicant to provide
Transport		2	0	0	Applicant to provide
Cargo		18	3000	6000	
Grand Total:				79000	

