



Universal Access and Service Projects for 2020

Date of Submission: **24th MAY**

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	MENFRED ASUWE (MR)		
Organization	Type of Organization: <input checked="" type="checkbox"/> Community/Village/Education Institution <input checked="" type="checkbox"/> Government <input type="checkbox"/> Private <input type="checkbox"/> NGO <input checked="" type="checkbox"/> Other		
Position	SUBJECT TEACHER (ADVANCE MATHEMATICS & ICT)		
Mailing Address	Rosary Secondary School-KONDIU, Private Mail Bag, Kundiawa, Simbu		
Telephone	+675 74251425	Fax	
Email	masuwe514@gmail.com		

Project Information	
Project Title	INSTITUTIONAL CONNECTIVITY (WIFI AND INTERNET CONNECTIVITY)
Project Location	
Province	SIMBU
District	KEROWAGI
LLG	GENA WAUGLA LOCAL LEVEL GOVERNMENT
Ward	WARD 10

Project summary**Project Cost**

K326,220.00

Requested Amount

K326,180.00

Own funding

K40,000.00

Duration of the Project

From March 2020 To May 2020

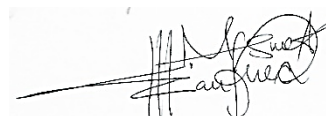
(The project is to be concluded within 12 months from the date of announcement of selection by the NICTA (UAS Secretariat)

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

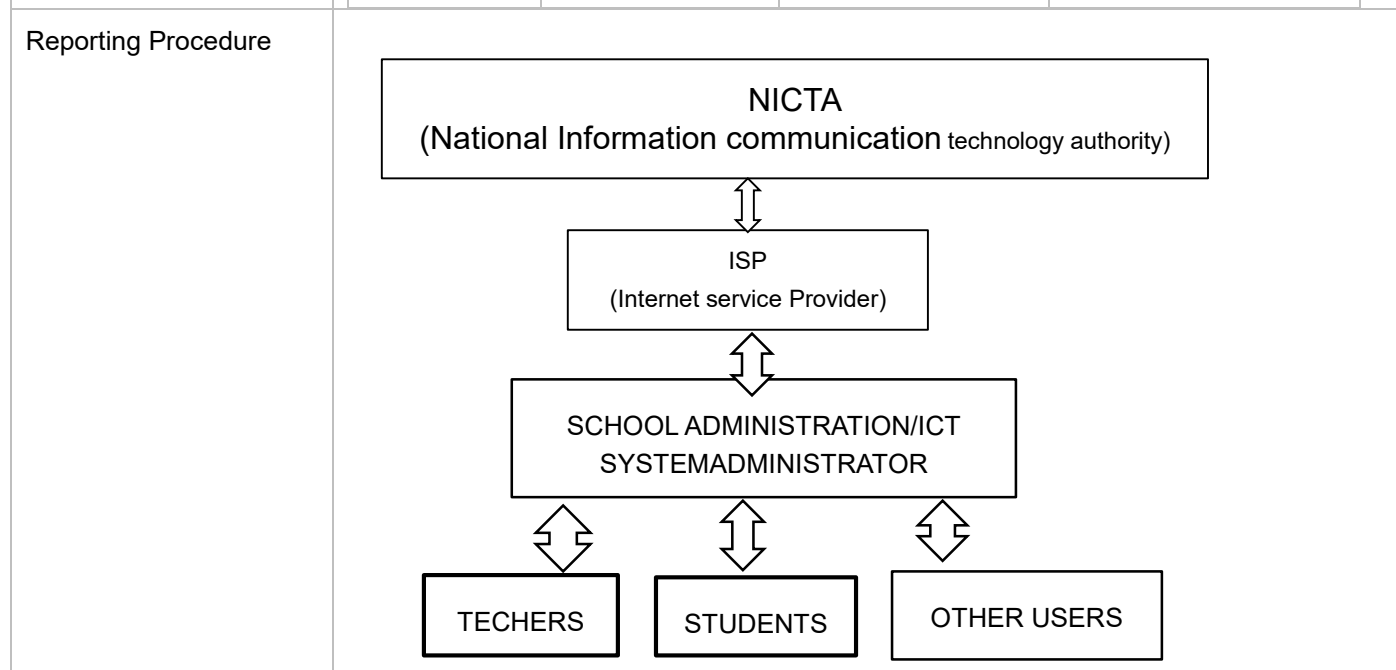
Annex 1

Please describe outline of the pilot project	
Objectives	<p>To have a reliable Wi-Fi and Internet service within the School to;</p> <ol style="list-style-type: none"> 1.Establish an Institutional connectivity to the outside world 2. Have access to up-to-date teaching and learning resource online 3.Provide and improve Teaching Staff Professional Development through online courses and other Distance and Flexible Course offered through online 4.Have an Improved E-library within the school for both students and teachers 5.Enhance effective and reliable communication for students' information and online selection
Purpose of Project	Institutional Connectivity through a Wireless Frequency (Wi-Fi) Setup and Internet Service for the School
Outline of pilot project	<p>Project description including equipment, networks / systems/ design and schematics needed for the Project.</p> <p>This Project is proposed mainly to set up three (3) locations in the school where both teachers and students can have access to internet. Generally, the project will set up a Wireless access by means of having a V-Sat Dish set beside the Chapel Area. This set-up will enable wireless access to internet in and around the School area. To have access to internet through Computers, laptops and phones in and around the school. And further connected to the three key location in the school</p> <p>Location 1(Project Area 1). The student's ICT lab where the project will set up N-Computing Network for 20 users on each Room in the Building. The Internet will be accessed through a Wireless Access Point attached to the Router in the ICT lab and connecting all Users. This building is purposely for Grade 11 and Grade 12 students taking Basic Computing and ICT subjects to use for Teaching and Learning. This location will have the Server located and the system administrator will be stationed there.</p> <p>Location 2 (Project Area 2). The Second Proposed Location is the Library, where we already have an E-Library set up with 10 users currently used for students' research purposes. We propose to Upgrade the N-computing network to 30 users to increase the user and also the resources for the E-library by connecting Internet through a wireless Access point by means of a router.</p> <p>Location 3 (Project Area 3). Teachers Computer is proposed to upgrade the Current N-Computing setup with 9 users currently used by all teachers using their sign-in accounts to prepare Teaching material and notes. This location is proposed to increase the users to</p>

	<p>20 users and connecting the Internet from the V-Sat Dish to provide up-to-date teaching materials for students. Also providing an avenue for teachers to communicate and enable them to do available online courses to further master their contents.</p> <p>The locations are further detailed on the Diagram shown in Annex 1A,1B,1C and 1D attached.</p>
Appropriateness of the Project	<p>The Proposed Project will address the following problems faced in the school where it will;</p> <ol style="list-style-type: none"> 1. Provide wide range of Up-to-date teaching and learning resources, where most times we are faced with worn out text books and lack of other reliable resources, which hinders teaching and learning in the classroom 2. Reducing cost of affording Individual text books for very large student's population at hand, where it can be obtained online efficiently. 3. Create an effective and reliable mode of communication where students and teachers are trying to get tertiary course information and fill in online selection at the end of every year 4. Enable all student population to be more digital literate in facing the current trend of information standards, where it will not be restricted to students who study ICT subject but for all students, teachers and families.
Number of Persons benefiting from the project	<p>How many persons would directly and indirectly be benefitting from the project evidenced by</p> <p>The proposed project, will be of beneficial to the 1500 students, 45 teachers and 35 ancillary staff supporting the school.</p> <p>The 1500 students are between the age of 14 to 22 school aged students from Grade 9s to Grade 12. Having a class size of (6) six from Class A to F in lower secondary grade 9 and Grade 10. Upper secondary having a class size of (7) seven, from Class A to G with average of 35 to 50 students per class.</p> <p>The proposed Project, is definitely of beneficial to them in terms of their learning, where it is our priority in the school and our Vision to enhance effective and efficient learning through reliable up-to date learning resources. This project will be highly beneficial to the students and the teaching staff in terms of their teaching and learning in the school.</p>
Project Benefits	<p>Proposed Project will benefit the school;</p> <ol style="list-style-type: none"> 1. By establishing a Connection to the outside world through the internet 2. Will enhance effective and efficient teaching and learning provided with up to date teaching and learning resources

	provided online 3. Enable teachers to be well informed in their subject specialty with such services at hand and also provide an avenue where teachers can further their Professional Development through online Distance and Flexible curses			
Partner organizations/institutions (if any)	Agency (Catholic Church)			
Milestone(significant phases of the project)	Fast, Reliable and efficient Internet Connectivity			
Expected output	A wireless Local area Network set up in the school connected to the Internet			
Project Risks	What are the risks to the Project? How will they be overcome or managed? (See management 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	Low	Unlikely	School is a Catholic agency school where Politics is not discussed in and around the school
	Land not secured	Low	Unlikely	Land owned by the School and the Catholic Agency
	Security	Low	Unlikely	School premises is Guarded by school employed securities on a 24/7 routine
	Project Equipment Personalized	Low	Unlikely	All school owned assets are controlled and maintained by

				the School run Workshop Department
	Lack of community support	Low	Unlikely	The Surrounding community is for the Development of the school
	Maintenance & recurrent costs	Low	Unlikely	School administration will incorporate this project into its School learning improvement plan where it will be budgeted for



Linkage to existing Government development policies	<p>This Proposed Project will fulfill (3) three of the Seven (7) Key objective in the National ICT policy 2008 in Section 6.1 Key Objectives." As stated under section 6.1 the First Objective, is the Overarching objective of the Government is to secure the social and economic benefits of an efficient ICT sector. Where this benefits can be achieved in areas as Education" (<i>National ICT Policy 2008, Pg. 7</i>). As such, the project will help in achieving stated objective in our locality as a school organization in maintaining and efficient social and economic benefits in having a set up like our proposed project.</p> <p>The Second objective as mentioned in the National ICT policy 2008, is "Papua New Guinea must have an efficient ICT infrastructure as the backbone of ICT policy with the use of technology appropriate</p>
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to circumstances of PNG. Which requires upgrade and refurbish existing network and allow new networks to develop" (*National ICT Policy 2008*, pg. 7). Thus this project is proposed for a new connective network in a rural setting in which it will definitely help in achieving the second Objective as stated.

Finally, the Sixth objective of the National ICT policy 2008, as stated where," the Government seeks to improve International capacity and connectivity to help PNG to truly become part of the international Community" (*National ICT Policy 2008*, Pg. 7). As stated this project is for a rural Educational Institutional to enable reliable Connectivity to the outside world in providing reliable resources for its benefit in the process of teaching and learning where it is much need at such changing world.

Thus finally as stated as the final statement of the Seven objectives of the National ICT Policy 2008, where "the Government aims to secure the benefits that can flow from increased availability and use of the internet" (*National ICT Policy 2008*, pg. 7). Thus this project is proposed for the increased use and access of internet by teachers and students in the school, where it will fulfill the final statement.

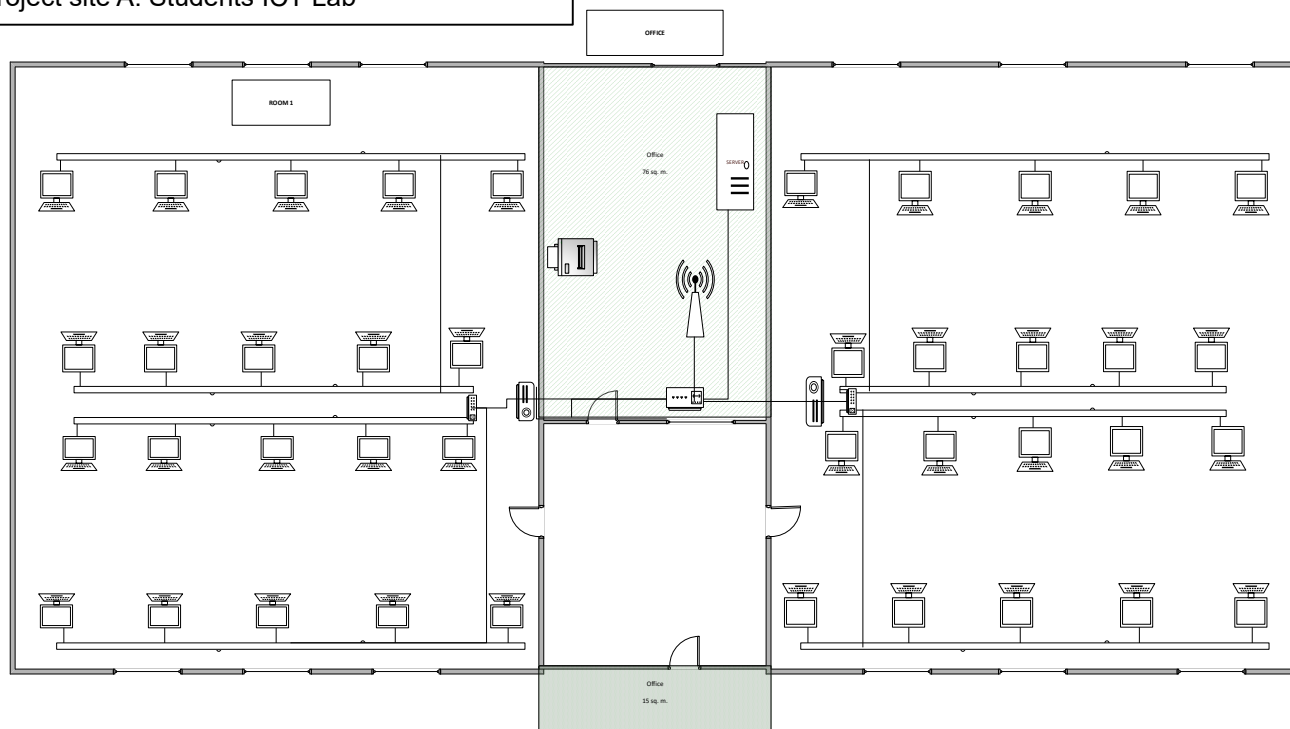
Thus far, this Project will achieve the Vision Statement of the National ICT Policy 2008, "Bridging the Digital Divide" (*National ICT Policy 2008*, pg. 8). Despite the location of the project where the School is located in a rural setting, this project will enable efficient and reliable access to the internet service.

Moreover, this proposed project will achieve the Medium Term Development Plan III 2018-2022, one of its Enablers as stated in Section 3.3.2 "Sustainable Infrastructure" (*PNG MTDP III 2018-2022*, pg. 17). Further elaborated under section 3.3.2 Sustainable Infrastructure, where "Internet is a catalyst and a key essential infrastructure in the implementation of various development across all sectors, (*PNG MTDP 2018-2022*, pg. 17). Hence, Education is one sector where this project is proposed to embrace and Link up internet to the school as infrastructure development creating avenue for effective and efficient teaching and learning in a wider perspective.

Also stated in the PNG Medium Term Development Plan III 2018-2022, Section 4.4 the Key Result Area 3 "Sustainable Social Development, Where TFF Education Policy has dramatically improved access to Education", (*PNG MTDP III 2018-2022*, Pg. 32). This Project will address problem in School taught Subjects where seen to decline in students' performance, where this project will provide an avenue for up-to-date teaching and learning resource easily accessible, contributing to effective and efficient teaching and learning.

Moreover this project will link up to the PNG Medium Term Development Plan III 2018-2022, the Key Result area 3"Sustainable

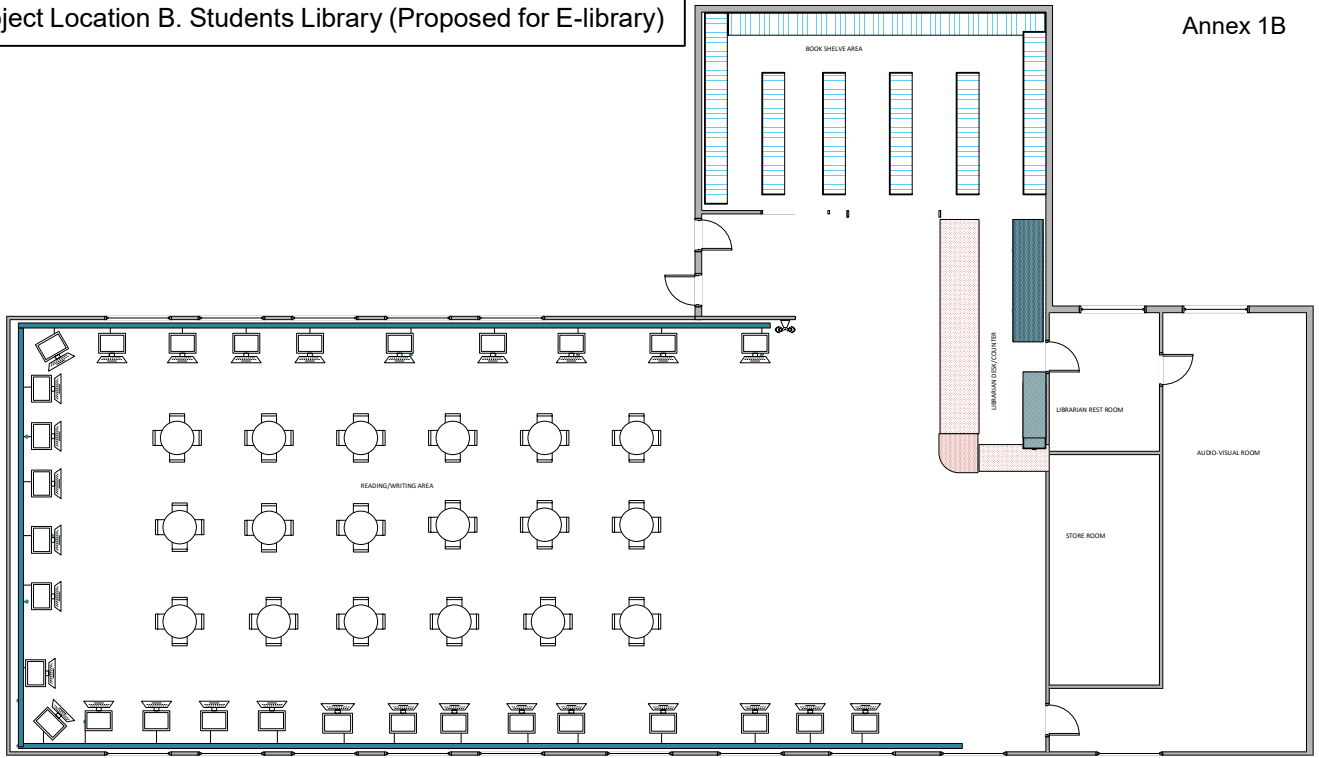
	Social Development "Section 3.1"Improved Education Services" (PNG MTDP III 2018-2022,Pg 33).hence, this project seeks to improve its Standards and quality in its locality as an Educational Institution, where it is promoting this Policy.
Financial Support	<p>Financial support from the organization/community/provincial governments/or any other source (if any):</p> <p>How will the project be supported by your organization/community/provincial government/administration? The project will be supported by the School as infrastructural development. Also the school will support this project because this project will provide resourceful academic materials reducing all cost of purchasing individual text book and resource material. The project will be included in the School Learning Improvement Plan and will be budgeted for every year.</p>
Sustainability of Project	<p>This Proposed Project will enhance effective and efficient teaching and learning in the school, where it is achieving the purpose of an Educational Institution, therefore, the Sustainability and the reliability of the project after completion will be considered as follows;</p> <ol style="list-style-type: none"> 1. The School administration has always taken ownership of its facilities, equipment's and machineries, since the establishment of this school. It guarantees 100% ownership through it monitoring systems. If the need arises for upgrade or maintenances the school will follow up the reporting system. 2.The project fall under the Improvement of effective and efficient teaching and learning where it will have incorporated into the School Learning Improvement Plan (SLIP) continually every year. Where it will be considered at the School Board of Management to endorse and budget for its continues service and maintenances in the long term. 3.The service will be strictly controlled by a full time System Administrator (our ICT Teacher) on a daily basis. Any persons apart from Teachers and students, requesting to use our service, will be required to pay an agreed amount on an agreed rate for the service to be used.
Please describe project implementation plan (schedule) in detail. (date, period, place, mission, etc.) Attached as Annex 2A	



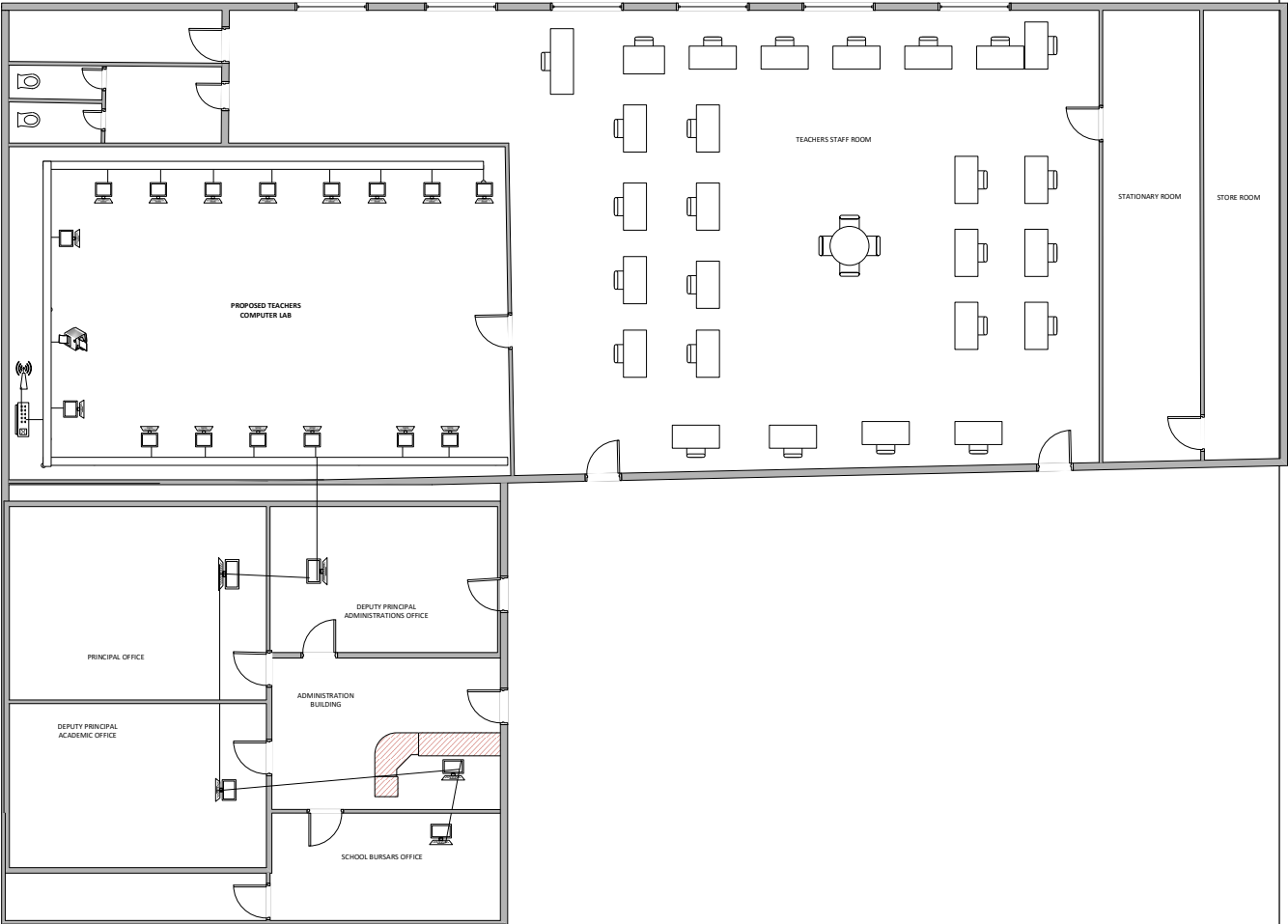
*The ICT lab is a Double Classroom which was design and build as a computer lab for students in 2010.

Project Location B. Students Library (Proposed for E-library)

Annex 1B

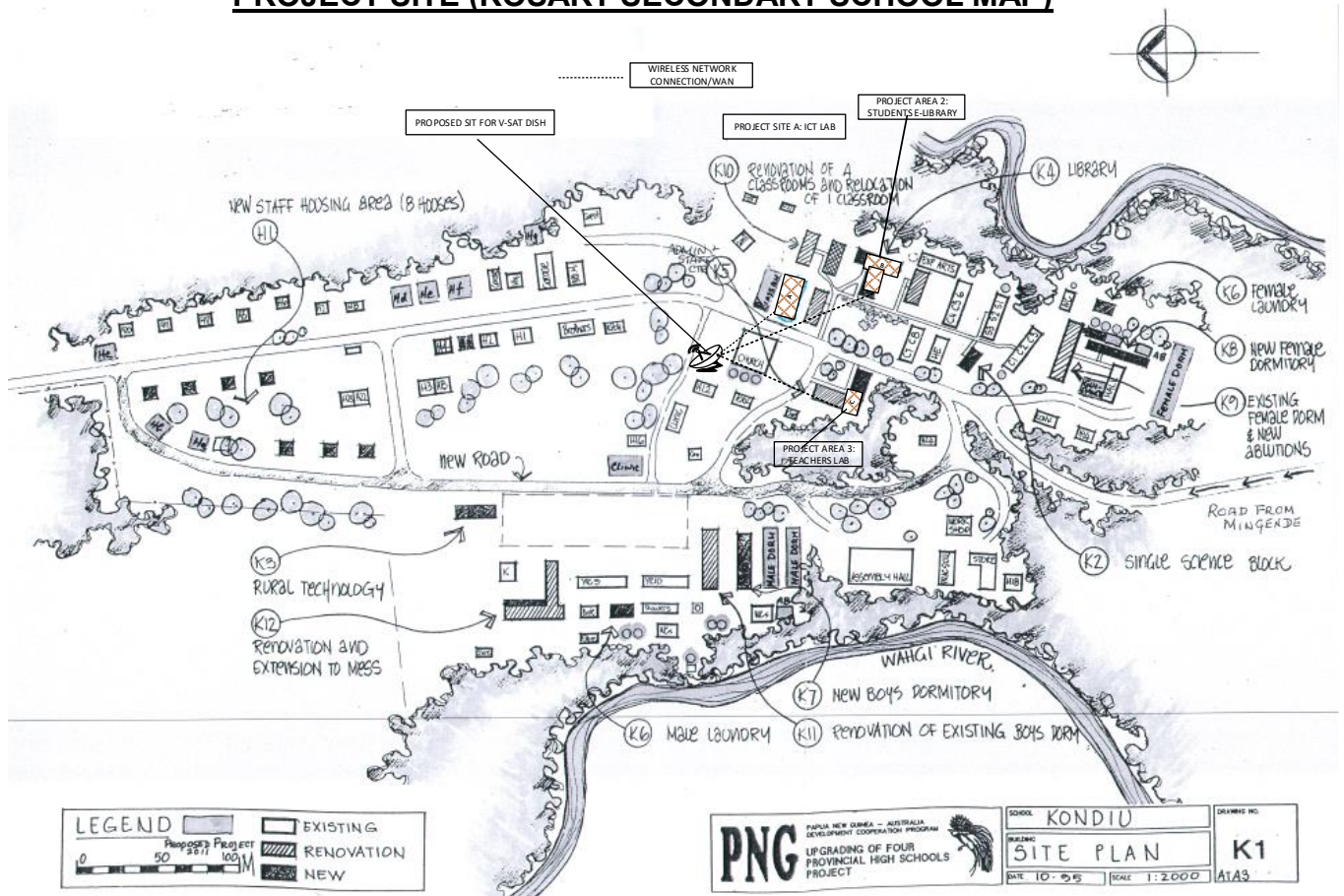


Project Location C. Teachers Lab



PROJECT SITE (ROSARY SECONDARY SCHOOL MAP)

Annex 1D



PROJECT SCHEDULE OUTLINE

Annex 2A

	Task Name ▼	Duration ▼	Start ▼	Finish ▼	Resource Names ▼	MISSION ▼
1	Project Schedule	13.4 wks	Mon 3/2/20	Tue 6/2/20		
2	Building inspection	36 days	Tue 5/21/19	Tue 7/9/19	Measuring devices	Get Correct measurement of location and distance
3	N-computing Network Plan for 3 buildings	7.2 wks	Tue 5/21/19	Tue 7/9/19	Measuring devices	Complete setting up N-computing in the Three Project locations
4	Setting up and re-configuring the the N-computing set-up in the 3 buildings	3.2 wks	Tue 5/21/19	Tue 6/11/19	N-computing sets, Monitors, Power cable, Network	Confirming all applications installed and configuring all devices
5	Connecting the Local network to the Internet	1 wk	Tue 5/21/19	Mon 5/27/19	V-Sat Disk/wireless disk	Connecting the Project sites to the Server and Connecting server to the V-sat Dish
6	Orientation of the Network and basic maintainance to the System administrator and	1 wk	Tue 5/21/19	Mon 5/27/19	Network Specialist	Give basic orientation on how to monitor and handle the newly established Network

PROJECT ESTIMATED COST

ESTIMATED COST OF THE PROPOSED PROJECT				
1. DEVICES				
NO	ITEM/DESCRIPTION	QUANTITY	AMOUNT (K)	COMMENTS
1	ICT Department 40-Users Ncomputing Lab	1	109,560.00	See Quotation attached A & B
2	Library 20-users Ncomputing Lab	1	54,780.00	See Quotation attached A & B
3	Staff 20 -Users Ncomputing Lab	1	54,780.00	See Quotation attached
4	V-Satellite Dish	1	25,000.00	Estimate Cost
5	Server	1	45,000.00	Estimate Cost
6	Laptop	3	6,000.00	Estimate Cost
7	UPS	1	7,000.00	Estimate Cost
8	Routers	6	1,500.00	Estimate Cost
		Total	303,620.00	
2. LABOUR COST				
NO	ITEM/DESCRIPTION	RATE	AMOUNT (K)	COMMENTS
1	12 Pupils assisting the Network Socialist	12 x 300 X6	15,600	labour payments
2	Network Specialist	2X500 x6	6000	labour payments
3	Mobility	4000	4000	Moving of device and materials
4	Risk Management	2000	2000	Incidents & Emergency purpose
		Total (K)	27,600	
			Grand Total (K)	331,220.00



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Email: ict.atechnologies@gmail.com
Skype: atec.png

GST Reg #: 20406

QUOTATION

INVOICE No: ATQ-19021

Date: 17/05/2019

BILL TO:

The Administration
Rosary Secondary School
P O Box 192
KUNDIAWA, Simbu Province

Attention: **Mr Menfred Asue**

Sales Person **Mr Michael Agua**

We are pleased to submit this Quotation for the following Items and Services as per your request.

QTY	ITEM DESCRIPTION	UNIT PRICE	EXTENSION PRICE
ICT DEPARTMENT 20-USERS NCOMPUTING LAB ROOM 1			
1	N-Computing Server PC <i>Intel Core i7 3.4GHz Processor, 8GB Ram, 1TB HDD, DVD+RW, USB 3.0 Port Windows 7, Office 2016 Pro, Avast Premier 2019</i>	3,909.09	3,909.09
1	Power Plus 3kVa UPS	1,800.00	1,800.00
20	L300 N-Computing L300 Terminals	1,150.00	23,000.00
20	22" AOC LED Monitors	650.00	13,000.00
1	24-Port Gigabyte Network Switch	1,090.91	1,090.91
20	USB Mouse	30.00	600.00
20	USB Keyboard	45.00	900.00
500	CAT-6 UTP Network Cable (Meters)	4.00	2,000.00
50	CAT-6 RJ-45 Plastic Connectors	2.00	100.00
2	Networking Accessories	500.00	1,000.00
32	Labour Charge <i>Terminations, Installations and Configurations</i>	75.00	2,400.00

Payment can be deposited into our BSP Account below:		SUB-TOTAL:	K	49,800.00
Account Name:	A-TECHNOLOGIES	GST (10%):	K	4,980.00
Account Number:	1002019717	Others:		
		GRAND TOTAL:	K	54,780.00

Thank you for choosing A-TECHNOLOGIES.

We look forward to do more business with you and serve you better at an affordable costs.

Invoice Prepared by: **Samson Mili Kura**
ICT Helpdesk Technican

A-TECHNOLOGIES
P O BOX 326
KUNDIAWA, SIMBU PROVINCE
PH 72555420 / 72444270



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Attention: Mr Menfred Asue

Sales Person Mr Michael Agua

We are pleased to submit this Quotation for the following Items and Services as per your request.

QTY	ITEM DESCRIPTION	UNIT PRICE	EXTENSION PRICE
ICT DEPARTMENT 20-USERS NCOMPUTING LAB ROOM 2			
1	N-Computing Server PC <i>Intel Core i7 3.4GHz Processor, 8GB Ram, 1TB HDD, DVD+RW, USB 3.0 Port Windows 7, Office 2016 Pro, Avast Premier 2019</i>	3,909.09	3,909.09
1	Power Plus 3kVa UPS	1,800.00	1,800.00
20	L300 N-Computing L300 Terminals	1,150.00	23,000.00
20	22" AOC LED Monitors	650.00	13,000.00
1	24-Port Gigabyte Network Switch	1,090.91	1,090.91
20	USB Mouse	30.00	600.00
20	USB Keyboard	45.00	900.00
500	CAT-6 UTP Network Cable (Meters)	4.00	2,000.00
50	CAT-6 RJ-45 Plastic Connectors	2.00	100.00
2	Networking Accessories	500.00	1,000.00
32	Labour Charge <i>Terminations, Installations and Configurations</i>	75.00	2,400.00

Payment can be deposited into our BSP Account below: Account Name: A-TECHNOLOGIES Account Number: 1002019717	SUB-TOTAL:	K	49,800.00
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KUNDIAWA, Simbu Province

Attention: **Mr Menfred Asue**Sales Person **Mr Michael Agua**

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QTY	ITEM DESCRIPTION	UNIT PRICE	EXTENSION PRICE
	LIBRARY 20-USERS NCOMPUTING LAB		-
1	N-Computing Server PC <i>Intel Core i7 3.4GHz Processor, 8GB Ram, 1TB HDD, DVD+RW, USB 3.0 Port Windows 7, Office 2016 Pro, Avast Premier 2019</i>	3,909.09	3,909.09
1	Power Plus 3kVa UPS	1,800.00	1,800.00
20	L300 N-Computing L300 Terminals	1,150.00	23,000.00
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	STAFF 20-USERS NCOMPUTING LAB		-
1	N-Computing Server PC <i>Intel Core i7 3.4GHz Processor, 8GB Ram, 1TB HDD, DVD+RW, USB 3.0 Port Windows 7, Office 2016 Pro, Avast Premier 2019</i>	3,909.09	3,909.09
1	Power Plus 3kVa UPS	1,800.00	1,800.00
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32	Labour Charge	75.00	2,400.00
	<i>Terminations, Installations and Configurations</i>		-
			-
			-
			-
			-
			-
			-

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Types of Projects That May Be Proposed

Program 01: Mobile Broadband Expansion and Upgrade

Under this program, the type of project that can be proposed are;

- Extension of broadband mobile services to unserved and underserved areas
- Upgrade of 2G network (voice + data) to 3G/4G network and
- Increase network backhaul capacity to cater for the increase traffic due to expansions and upgrades

Program 02: Community and Institutional Broadband Networks

The type of project that can be proposed are;

- 1) Broadband Network Access and Service
 - Expansion of national backbone network infrastructure:
 - Establishment of local broadband access network connections
 - Provision of public broadband communication services
- 2) Institutional Connectivity – Education, Health Facilities, Local Government Offices, Agriculture Centers
- 3) Community Information and Communications Technology Centers (CICs)
 - CIC construction, equipment, installation:
 - CIC operation and management:

Program 03: ICT for Future Growth

Type of projects that can be proposed are;

- 1) ICT Applications and Content
 - Original and translated web sites and other materials presented in local, indigenous languages, highlighting information of greatest interest to populations who speak these languages.
 - Information content made specifically for and by local community users, sharing local knowledge, history, and culture, as well as business and government information, ideally developed by local users themselves.
 - Projects focused on graphic interface, audio-video, and other non-written content aimed at engaging and assisting non-literate users; similar applications and content for disabled or uneducated users.
 - Entrepreneurial ventures focusing on creating innovative applications for mobile and smart phones, tablets, and other new devices.
- 2) Digital Literacy
 - Training classes and workshops
 - Public relations and awareness building programs
 - Entrepreneurial assistance and incubation initiatives
 - ICT applications and content development programs
 - Community-based technical support resources
 - Public administration training and application development

Program 04: Expansion and Upgrade of Broadcasting Network Coverage

Type of projects that can be proposed are;

- Expansion of free to view Digital Broadcasting (TV) Services to unserved areas
- Upgrade from analogue free to air broadcasting services to free to view Digital broadcasting services (TV)
- Expansion of free to air Radio broadcasting services to the unserved areas

Indicative Project Areas

Program 01: Mobile Broadband Expansion and Upgrade.

- Indicative project areas for 4G greenfield and Upgrade from 2G are prioritized from the maximum unserved population to minimum unserved served

- For Greenfield**

Region	Province	Uncovered Population	% Uncovered Population
Momase	Morobe	141,349	20.95%
Momase	East Sepik	118,238	26.24%
Southern	Milne Bay	94,946	34.34%
Momase	Madang	90,542	18.33%
Highlands	Eastern Highlands	89,936	15.51%
Highlands	Southern Highlands	85,300	16.72%
Momase	West Sepik	83,487	33.61%
Highlands	Enga	79,803	18.47%
Southern	Western	72,464	35.99%
Southern	Central	58,412	21.65%
Highlands	Hela	55,413	22.21%
Southern	Gulf	54,846	34.67%
Islands	East New Britain	52,257	15.91%
Islands	West New Britain	51,129	19.35%
Islands	Bougainville	48,644	19.51%
Highlands	Chimbu	44,576	11.84%
Southern	Oro	36,802	19.75%
Highlands	Western Highlands	35,232	9.71%
Highlands	Jiwaka	33,615	9.77%
Islands	New Ireland	29,314	15.11%
Islands	Manus	10,797	17.85%
Southern	National Capital District	878	0.24%

- For Upgrade**

Region	Province	3G Upgrade Uncovered Population	% 3G Upgrade Uncovered Population
Highlands	Eastern Highlands	291,003	50.19%
Momase	Morobe	240,062	35.57%
Momase	Madang	223,138	45.18%
Momase	East Sepik	148,575	32.98%
Highlands	Chimbu	139,066	36.94%
Highlands	Enga	122,332	28.31%
Southern	Milne Bay	113,122	40.91%
Islands	Bougainville	112,430	45.09%
Momase	West Sepik	91,195	36.71%
Islands	New Ireland	85,574	44.10%
Southern	Central	78,045	28.93%
Highlands	Southern Highlands	76,121	14.92%
Southern	Western	72,357	35.94%
Southern	Oro	71,628	38.45%
Highlands	Hela	70,872	28.41%
Islands	West New Britain	58,639	22.19%
Southern	Gulf	56,184	35.52%

Islands	East New Britain	54,012	16.45%
Highlands	Jiwaka	49,730	14.46%
Islands	Manus	27,966	46.24%
Highlands	Western Highlands	14,066	3.88%
Southern	NCD	0	0.00%

Program 02: Community and Institutional Broadband Networks

- The target project areas are learning institutions, local government institutions, local healthcare facilities and community base set ups who are ICT ready such as;
 - ✓ Universities
 - ✓ Colleges
 - ✓ Technical and Vocational Schools
 - ✓ National High Schools
 - ✓ Primary and Secondary Schools
 - ✓ Private/public setups
 - ✓ Villages/communities

ICT readiness refers to the basic infrastructure that the institution must have such as reliable power, ICT teachers, funding to help sustain, rooms for computers among others.

Program 03: ICT for Future Growth

- Target project areas include;
 - ✓ Universities with content creation programs/projects
 - ✓ Technical Colleges with content creation programs/projects
 - ✓ Local entrepreneurs with content creation programs/projects

Program 04: Expansion and Upgrade of Broadcasting Network Coverage

- The target project areas include;
 - ✓ Unserved free to view (Digital Television) services areas in PNG;
 - ✓ Unserved free air Radio Broadcasting Services in PNG