



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	MR.JUKI WALDI		
Organization	HIGHCOMS ENGINEERING LIMITED	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	MANAGER		
Mailing Address	P.O.BOX 648,MT.HAGEN.WHP		
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Project Information

Project Title	SUPPLY & INSTALLATION OF COMPUTERS WITH BROADBAND CONNECTION AT TAMBUL DISTRICT HOSPITAL
Project Location:	TAMBUL DISTRICT HOSPITAL
Province	WESTERN HIGHLANDS PROVINCE
District	TAMBUL NEBILYER
LLG	TAMBUL LLG
Ward	TAMBUL/NEBILYER DISTRICT

Project summary

While we are now in the computer age, a larger fraction of our population do not possess the necessary knowledge and skills to use the ITC services that are available to gain maximum benefit. This problem can be reduced by training and giving people the opportunity to use the services. People will remain IT illiterate they are denied this chance.

The provision of ITC services for health workers at Tambul District Hospital will enable them to access information on different types of health issue, treatment options (new & improved),available drugs, medical research papers, etc. In PNG there may be new health issues appearing due to lifestyle and climate changes which can be attached with the right knowledge and that can be available on the internet. Secondly Medical staff from rural establishments within the province like their public servants counterparts would in most cases vacate place of work to attend to administration matters. This is lost work time and a financial loss to the state. With this network all administrative queries can be handled from work stations.

The ITC setup for this health facility will have three thin clients computers connected to a server. One each computer for the facility OIC, Nurses and Medical officer and Health extensions officers. Additional equipment will be a network printer for all to print documents. All equipment will be provided with backup power (UPSs) to allow users to save work during power outages.

The WHPHA has an organizational ITC network plan in place but did not implement it due to insufficient funds. The plan was to connect all outstations to the main HUB located at the Mt. Hagen General Hospital. The Authority is pleased to see NICTA involvement to help fulfill its plans and are committing counterpart funding of 20% of the total project costs.

The WHPHA has IT personals to maintain this project and will sustain it through its annual operations costs

Project Cost	Requested Amount	Own funding
K30,633.90	K24,507.12	K6,126.78

Duration of the Project

From August 2019 To November 2019

It is anticipated, this project will take at least four weeks from equipment ordering to installation, testing and commissioning.

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

Name	MR.DAVID VORST		
Organization	WESTERN HIGHLANDS PROVINCIAL HEALTH AUTHORITY		
Address	P.O.BOX 36,MT.HAGEN.WHP		
Position	CHIEF EXECUTIVE OFFICER		
Telephone	5421166	Fax	5421445/5422127
Email	david.vosrt@whhs.gov.pg		

Date

27 May 2019

Signature

Project Details

Please describe outline of the pilot project	
Objectives	Provide three computers with Broadband service for Tambul District Hospital.
Purpose of Project	Offer health workers from Tambul District Hospital the opportunity to use ITC services to improve performance and communicate with headquarter staff regarding patient care, medical supply orders and administrative functions.
Outline of pilot project	<p>We propose to setup 3 thin client computers connecting directly to a server via rack mount network switch. Please refer to attachment "A" for more technical specifications for the server and thin client. Additional items will be a network printer/copier/scanner for printing and photocopying work and scanner for scanning and emailing documents.</p> <p>Accessing prohibited sites will not be allowed on this setup. We will install a PC with Firewall and connect on the network to achieve that.</p> <p>This setup will then be configured to be part of the Western Highlands Provincial Health Authority network</p> <p>The entire network equipment will be supported with floor mount backup power (UPS) during power outages. This will allow users to save their last work.</p> <p>All thin clients will have access to broadband service for medical staff to research new and better knowledge on patient care, obtain further expert assistance from the Mt.Hagen referral hospital on patient care, ordering medical supply and administration functions.</p> <p>The preferred ISP in this project will be Digicel PNG Limited. It has good broadband service coverage there.</p> <p>The ongoing operational costs including broadband service fees will be included in WHPHA recurrent budget. Maintenance of the setup will be the responsibility of WHPHA IT personals.</p>
Appropriateness of the Project	We are in the computer age. Computers are used just about everywhere and every day. While a lot of countries around the globe have leaped forward in making those services available and enabling all citizen to use them fully to their advantage, this trend is lacking in PNG. One reason is the lack of knowledge on how to use it and the opportunity to use it. This project will provide the chance for health workers to improve their performance and patient care. It will also create an opportunity for those computer illiterate to learn to use computers and the broadband service.
Number of Persons benefiting from the project	<p>Tambul District Hospital is the referral hospital for all the Health and Sub health centers. It serves the entire Tambul Nebilyer District with a total population of 80,000 plus public servants and their dependents from the various government agencies based there. The hospital is operated by 21 medical staff. It handles daily referral cases of approximately 45 patients.</p> <p>This project if implemented will benefit the 80,000 plus people of Tambul Nebilyer District and 21 medical staff of the hospital.</p>
Project Benefits	The benefit of having this project is improved health services and patient care for the 80,000 plus people of Tambul Nebilyer District, and others.
Partner organizations/institutions (if any)	The Western Highlands Provincial Health Authority manages all health facilities within the Western highlands Province. The office of the CEO WHPHA has made a commitment of 20% of the total costing to support this project. Please find attached the letter (attachment "B") confirming their commitment to work in partnership to successfully implement this project in the form of counterpart funding.

Annex 1

Milestone(significant phases of the project)	This will be a very small installation. Basically it will consist of two stages. First is the order of all equipment and materials followed by installation, testing and commissioning. It will last approximately four weeks. It will be completed with a basic computers skills training for users. The training will be conducted by the WHPHA through its internal training programs.																														
Expected output	<p>This project will produce computer literate 21 medical staff of the hospital with new and increased knowledge of ITC services. This knowledge will be transformed to improved patient care and staff performance. Staff will research information on patient care , reading medical research in latest discoveries which should also increase their knowledge of the medical field. Patient care will be improved from ensuring (ordering) medical supplies and have them readily available on site. It will also and communication with Mt.Hagen hospital regarding referral patients and patients needing. Regularly staff leave job site and go to Mt.Hagen headquarters to attend to administration matters. These queries can be handled from their work station after the operation of this project, meaning more time for patient care.</p> <p>All the above will contribute to the better and improved patient care. In the end it's the 80,000 plus people of Tambul Nebilyer District and 21 staff members to benefit from this project.</p>																														
Project Risks	<p>What are the risks to the Project? How will they be overcome or managed? (See management table)</p> <table border="1" data-bbox="368 817 1492 1794"> <thead> <tr> <th data-bbox="368 817 528 1048">Risk -List all possible risks you can think of</th> <th data-bbox="533 817 692 1048">Consequence</th> <th data-bbox="697 817 842 1048">Probability</th> <th data-bbox="847 817 1492 1048">Risk Management/Mitigation plan</th> </tr> </thead> <tbody> <tr> <td data-bbox="368 1055 528 1182"></td> <td data-bbox="533 1055 692 1182"> 4 – Extreme 3 – High 2 – Medium 1 -Low </td> <td data-bbox="697 1055 842 1182"> 4 – Almost certain 3 – Likely 2 – Positive 1 - Unlikely </td> <td data-bbox="847 1055 1492 1182"></td> </tr> <tr> <td data-bbox="368 1189 528 1339">Accessing prohibited web sites</td> <td data-bbox="533 1189 692 1339">1</td> <td data-bbox="697 1189 842 1339">1</td> <td data-bbox="847 1189 1492 1339">Access of prohibited sites will be denied through installation of a mini PC with the appropriate firewall software. This will be done to also ensure usage of data is minimized to business only.</td> </tr> <tr> <td data-bbox="368 1346 528 1473">Land not secured</td> <td data-bbox="533 1346 692 1473">1</td> <td data-bbox="697 1346 842 1473">1</td> <td data-bbox="847 1346 1492 1473">Land is secured as it is an established health facility and it does not have any outstanding land issues. However if issues does arise the hospital committee will deal with it through its community representatives from the local community, villages and council wards (tribes).</td> </tr> <tr> <td data-bbox="368 1480 528 1608">Security</td> <td data-bbox="533 1480 692 1608">1</td> <td data-bbox="697 1480 842 1608">1</td> <td data-bbox="847 1480 1492 1608">This is an established facility and has been operating since the colonial era. Security has never been an issue. There is a fulltime security officer for the property however if such issues does arise the community will address it.</td> </tr> <tr> <td data-bbox="368 1615 528 1742">Project Equipment Personalized</td> <td data-bbox="533 1615 692 1742">1</td> <td data-bbox="697 1615 842 1742">1</td> <td data-bbox="847 1615 1492 1742">The equipment supplied will be registered assets of the Western Highlands provincial Health, as such this problem will be eliminated.</td> </tr> <tr> <td data-bbox="368 1749 528 1794">Maintenance & recurrent costs</td> <td data-bbox="533 1749 692 1794">1</td> <td data-bbox="697 1749 842 1794">1</td> <td data-bbox="847 1749 1492 1794">Running costs for this installation will come from the WHPHA operational budget.</td> </tr> </tbody> </table>			Risk -List all possible risks you can think of	Consequence	Probability	Risk Management/Mitigation plan		4 – Extreme 3 – High 2 – Medium 1 -Low	4 – Almost certain 3 – Likely 2 – Positive 1 - Unlikely		Accessing prohibited web sites	1	1	Access of prohibited sites will be denied through installation of a mini PC with the appropriate firewall software. This will be done to also ensure usage of data is minimized to business only.	Land not secured	1	1	Land is secured as it is an established health facility and it does not have any outstanding land issues. However if issues does arise the hospital committee will deal with it through its community representatives from the local community, villages and council wards (tribes).	Security	1	1	This is an established facility and has been operating since the colonial era. Security has never been an issue. There is a fulltime security officer for the property however if such issues does arise the community will address it.	Project Equipment Personalized	1	1	The equipment supplied will be registered assets of the Western Highlands provincial Health, as such this problem will be eliminated.	Maintenance & recurrent costs	1	1	Running costs for this installation will come from the WHPHA operational budget.
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Reporting Procedure	The WHPHA through its Information Systems Manager, Dr. David Johnson will oversee the implementation of this project. Dr. Johnson will report to NICTA project manager issuing weekly progress reports. The contractor is also expected to issue biweekly project progress reports to Dr. Johnson.
Linkage to existing Government development policies	Internet usage by the population is growing but at a low pace. The reason being most are computer illiterate and not having the opportunity to use them. The project will address these problems through training users (health workers). This will further help increase staff knowledge on their job thus increasing productivity and improve the welling being and health of the people of Dei District.
Financial Support	The Western Highlands Provincial Health Authority (WHPHA) will support this project by counterpart funding 20% of the total establishment cost. Please refer to attachment "B", pledging it's support for this project.
Sustainability of Project	Annual running costs for this facility will be for service fees, purchase of consumable, power bills, broadband service, etc. The WHPHA to fund these costs from its recurrent operational budget.

The intended project implementation period is four weeks. This time is considered sufficient while accommodating any unforeseen circumstances likely to cause delays.

Weeks # 1 - 3

- (a) Place orders for all hardware (computer, server, cables, etc.)
- (b) Place order for Digicel Broadband access equipment
- (c) Pre installation site visit
- (d) WHPHA to conduct in house IT skills training for staff @ Mt.Hagen hospital
- (e) Install network cable and accessories & electrical GPOs

Weeks # 4

- (a) Install Digicel Broadband access equipment
- (b) Installation of network equipment, test and commission

TAMBUL DISTRICT (DE) HOSPITAL ICT SETUP COST

DESCRIPTION	UNIT COST	QTY	TOTAL COSTS
15RU ,600x600x635mm data rack,wall mount	K 1,736.50	1	K 1,736.50
850VA UPS,Eaton floor mount	K 360.00	4	K 1,440.00
24 port patch panel,cat6	K 308.00	1	K 308.00
Indoor cat 6,solid core networkcable,blue	K 3.20	130	K 416.00
Cat6 ,RJ45 8pin socket,blue c/w ,mount block,patch lead	K 144.00	4	K 576.00
duct, 25mm x 25mm (white),4m	K 55.15	10	K 551.50
40mm conduit, rigid, grey HD, 4m	K 47.00	6	K 282.00
TP Link,16 port network switch	K 910.00	2	K 1,820.00
10A,GPO double,c/w mounting block	K 42.00	5	K 210.00
2.5mm TPs cable	K 6.50	40	K 260.00
Lenova M720-17,8GB RAM,1TB HD,windows 10P64,DVDRW (server)	K 5,567.00	2	K 11,134.00
Vi Zero client kit	K 472.00	3	K 1,416.00
45cm HP screen, c/w mouse + pad,key board	K 710.00	5	K 3,550.00
HP LJ Pro MFP Printer/copier/fax/scanner,Colour	K 2,479.00	1	K 2,479.00
Digicel Equipment for Broadband connection	K 770.00	1	K 770.00
Labour -installation	K 8,500.00	1	K 8,500.00
Total			K 27,849.00
10% GST			2,784.90
TOTAL AMOUNT PAYABLE TAMBUL			30,633.90

Attachment "A"

2019- Celebrating 25 Years of Strong Governance to the Community of WHP



Chief Information Officer

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NICTA FUNDED UAS PROJECT 2020

This letter is to advise that the WHPHA supports the **ICT SERVICE CONNECTION FOR RURAL HEALTH FACILITIES WITHIN the WESTERN HIGHLANDS PROVINCIAL HEALTH AUTHORITY** project as put forward by Highcoms Engineering Limited.

As background the WHPHA is deploying a Province wide Health Information System (ePMRMS) across the province and throughout the Highlands Region. We have made substantial investments in a Data Centre and ICT Infrastructure over the past 5 years and have fully deployed ePMRMS at Mount Hagen Hospital.

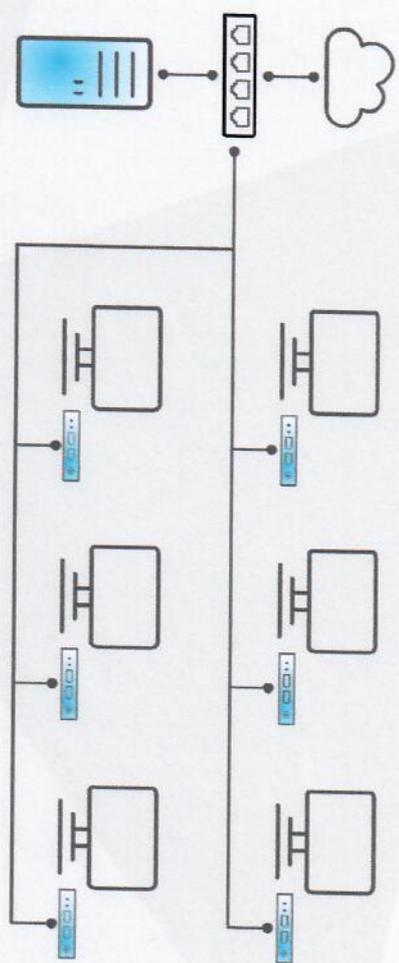
We recently installed a 4.5m C-BAND Satellite Dish as the Hub of this network and will be connecting up our three District Hospitals over the next 12 months. We are pleased to support this project as it will allow us to integrate our Community Health Posts of which there are around 33 detailed in the proposal.

The WHPHA will continue to invest in this project and proportionately fund any successful proposal.

Dr David Johnson
Chief Information Officer

7/6/2019.

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Applications



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Save **95%**
Maintenance Cost



Save **95%**
Power Consumption



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S100



- ① Power/ Reset Button
- ② USB2.0
- ③ 3.5mm Microphone
- ④ 3.5mm Speaker



- ⑤ 10/100 Mbps Ethernet
- ⑥ USB2.0
- ⑦ VGA Display Port
- ⑧ 5V DC Power Input

V1



- ① VGA Display Port
- ② HDMI Display Port
- ③ 10/100/1000 Mbps Ethernet



- ④ 5V DC Power Input
- ⑤ USB2.0
- ⑥ 3.5mm Speaker
- ⑦ 3.5mm Microphone
- ⑧ USB2.0
- ⑨ Power/ Reset Button



Why vCloudPoint?



Simplicity: one-click installation, no configurations, plug and play.

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Manageability: provided software to manage any users & devices in detail.

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