



*Bids & Awards Committee*

**SUPPLEMENTAL/BID BULLETIN No. 01**

**Procurement of Services, Equipment & Other Machineries with Accessories  
for the Installation, Testing & Commissioning of Fiber Backbone and  
Wireless Interconnectivity (SMART Campus) 2nd Bidding**

This Supplemental/Bid Bulletin No. 01 is issued to modify or amend provisions/specifications in the Bidding Documents. This shall form an integral part of the Bid Documents.

<b>WIRELESS INFRASTRUCTURE</b>	
<b>REFERENCE/QUERIES</b>	<b>AMENDMENT/CLARIFICATION</b>
<b>ITEM #1</b> – IP Radio, Dish-type, 5GHz, 34dBi or 30dBi	<b>ITEM #1</b> – IP Radio, Dish-type, 5GHz can be 30Ghz for less than 20Km distance and 34dBi antenna for more than 20Km
<b>ITEM #4</b> – Intelligent WISP Control Point with FiberProtect	<b>ITEM #4</b> – Due to Link Aggregation Requirement, the new requirement is: 10. unit Switch Layer 2 PoE switch 1. (8) GbE RJ45 ports with 27V passive PoE that support 2-pair and 4-pair modes 2. 1G SFP port for an additional fiber uplink option 3. 110W PoE supply when powered with the included AC/DC adapter
<b>ITEM #6</b> - Stand-off Mount (Antenna Bracket with Adjustable Mount Angle)	<b>ITEM #6</b> - Stand-off Mount (Antenna Bracket with Adjustable Mount Angle – both horizontal and vertical, and mounted in pole)
<b>Wireless Infrastructure:</b> <ul style="list-style-type: none"> <li>Regarding the wireless backbone, it is not stipulated that you required a VAS license and RSL, and based on our experience VAS &amp; RSL are needed upon turn over. I think you need to include it in your requirements.</li> </ul>	<ul style="list-style-type: none"> <li>It would be in the best interest of SLSU to require the winning bidder to provide the necessary license/s from NTC for our wireless infra.</li> </ul>





<ul style="list-style-type: none"> <li>• Since we process licenses for wireless infrastructures, even though we're using the unlicensed bond we still have to register to NTC for the licenses.</li> <li>• SLSU must request the bidder to provide the license of the installed wireless equipment. So, by the time the NTC performs their random inspections the SLSU can provide.</li> <li>• Since it's a fiber optic project, mostly it requires a fiber optic engineer to do the project and it's not on the list. Can you add it?</li> </ul> <p>Do we have an existing equipment?</p>	<p><b>NOTE TO ALL THE BIDDERS:</b> Bidders must have the following Licenses:</p> <ol style="list-style-type: none"> <li><b>1. NTC VAS license</b></li> <li><b>2. RSL License</b></li> <li><b>3. NTC Dealer's Permit for RCE / WDN</b></li> <li><b>4. NTC CPE</b></li> </ol> <ul style="list-style-type: none"> <li>• No need. With regards to the expertise, and quality of work by the Awarded Bidder, FOC Engineer/Fiber Optic Engineer. IT/ECE equivalent can suffice, as long as the bidder can present the necessary documents to support his valid and solid experience in terms of Fiber Optics technology. Provided in the TOR under Bidders Qualification.</li> <li>• Yes, most of the campuses are using UBIQUITY</li> </ul>
<b>FIBER LAN INFRASTRUCTURE</b>	
<b>REFERENCE/QUERIES</b>	<b>AMENDMENT/CLARIFICATION</b>
<b>ITEM # 18</b> –SFP Switch 24P for MD	<b>ITEM # 18</b> –SFP Switch 24P for MD – 10G
<b>ITEM # 14</b> - Enterprise-level, Next-Generation Firewall	<b>ITEM # 14</b> - Enterprise-level, Next-Generation Firewall (with 2,500 users and 16,600,000 concurrent sessions)
<b>MDF Components - What is the exact quantity for the accessories?</b>	The accessories were on lot quantity because it is based on the contractor's design. Actual quantity depends on the design.
MDF Components – 100 units Wall Mount Cabinets, saan po ang location nito? Also the 27 units Access Point.	<ul style="list-style-type: none"> <li>• Provided in the design, it's inside the buildings.</li> <li>• Wall Mount cabinets are distributed in all the campuses. Sogod Campus – 26, Tomas Oppus Campus – 19, Bontoc Campus – 14, San Juan Campus – 28, Hinunangan Campus – 12, Maasin City Campus – 1.</li> </ul>





	<ul style="list-style-type: none"> <li>• Will be installed inside the buildings. It's indicated in the map.</li> <li>• All Access Point is indoor, distribution per campus: Sogod - 4 Tomas Oppus - 4 Bontoc - 4 San Juan - 2 Hinunangan - 4 Maasin - 9</li> <li>• Engr. Sajid, SLSU Consultant for the project added that since prospective bidders will be conducting a survey/site visit, they just have to coordinate with the ICT personnel per campus so that they will be guided and their concerns will be addressed and from that, it will be their basis on how they can start in formulating/creating their design proposal. Not only for the access point but also with the proper/standard structured cabling inside the building, dapat malinis, if need to be concealed, aesthetics, as per required by SLSU, it should be highlighted and also the MDFs.</li> </ul>
<p>Since there are lots of components for this project, can you specify what specific product that needs brand certification?</p>	<p>All hardware equipment for wireless and Fiber LAN infrastructure.</p>
<p><b>Fiber LAN Infrastructure:</b></p> <ul style="list-style-type: none"> <li>• OSP Materials item # 5&amp;6 - Is it a Single Mode or Multi Mode?</li> <li>• Item #11 – where to put another 1 UPS? Is it rack mountable and online?</li> </ul>	<ul style="list-style-type: none"> <li>• Single Mode</li> <li>• There's no Fiber LAN Infrastructure in Maasin Campus but they still need the UPS</li> <li>• Rack mountable – online</li> </ul>



TECHNICAL SPECIFICATIONS	
REFERENCE/QUERIES	AMENDMENT/CLARIFICATION
<p><b>1. Cable Standard Compliance should be:</b></p> <ul style="list-style-type: none"> <li>• AZ/NZS 3080 – Generic cabling for customer premises ISO/IEC 11801.</li> <li>• TSO/TEC 60794-1-2 – Fiber optic testing methods.</li> <li>• ITU-T Recommendations – recommendations for G. 651 OMI, OM2, and OM3.</li> </ul>	<p><b>1. Cable Standard Compliance should be:</b></p> <ul style="list-style-type: none"> <li>• AZ/NZS 3080 – Generic cabling for customer premises ISO/IEC 11801.</li> <li>• TSO/TEC 60794-1-2 – Fiber optic testing methods.</li> </ul>
<p><b>10. Network Infrastructure Hardware</b></p> <ul style="list-style-type: none"> <li>• Core Switch Additional Module and Services Support               <ul style="list-style-type: none"> <li>- Must be compatible to the existing Core Switch (HP 10504 Switch)</li> <li>- Minimum requirements for existing Core Switch:                   <ul style="list-style-type: none"> <li>✓ Additional 1 unit, 24 Ports 1/10 Gig Base-T Module</li> <li>✓ Additional 21 unit, 10 Gig SFP+ Transceivers</li> <li>✓ Additional 3 Years, NBD Support and Services for 10500 Switch</li> </ul> </li> </ul> </li> </ul>	<p><b>10. Network Infrastructure Hardware</b></p> <ul style="list-style-type: none"> <li>• Core Switch Additional Module and Services Support               <ul style="list-style-type: none"> <li>- Must be compatible to the existing Core Switch</li> <li>- Minimum requirements for existing Core Switch:                   <ul style="list-style-type: none"> <li>✓ Additional 1 unit, 24 Ports 1/10 Gig Base-T Module</li> <li>✓ Additional 21 unit, 10 Gig SFP+ Transceivers</li> </ul> </li> </ul> </li> </ul>
<p><b>Do we need to include SNMP Card in the UPS?</b></p>	<p>Yes, include SNMP Card</p>
<p><b>13. Wireless Access Point &amp; Controller</b></p> <p>- Minimum Specification for Access Point:</p> <ul style="list-style-type: none"> <li>✓ Must be, Dual-Radio, IEEE 802.11ac, 2.4 GHz MIMO (300Mbps max. rate) and 5 GHz MIMO (1300Mbps max. rate) radios, and three omnidirectional downtilt antennas.</li> <li>✓ Must be a Controller-based Access Point.</li> </ul>	<p><b>13. Wireless Access Point &amp; Controller</b></p> <p>- Minimum Specification for Access Point:</p> <ul style="list-style-type: none"> <li>✓ Must be, Dual-Radio, IEEE 802.11ac, 2.4 GHz MIMO (300Mbps max. rate) and 5 GHz MIMO (1300Mbps max. rate) radios, and omnidirectional antennas.</li> <li>✓ Must be a Controller-based Access Point.</li> </ul>





<ul style="list-style-type: none"> <li>✓ Must be compatible to the PoE+ Switch with IEEE 803.at compliance</li> <li>- Antennas:             <ul style="list-style-type: none"> <li>✓ Three (3) integrated down-tilt omnidirectional antennas for 3x3 MIMO with peak antenna gain of 3.9dBi in 2.4GHz and 5.4dBi in 5GHz.</li> </ul> </li> <li>- Power:             <ul style="list-style-type: none"> <li>✓ Maximum power consumption: 13-watts (PoE) or 11-watts</li> <li>✓ Power over Ethernet (PoE): 48-Vdc (nominal), 802.3af/3at compliant source</li> </ul> </li> <li>- Minimum Specification for Controller:             <ul style="list-style-type: none"> <li>✓ Four (4) Dual SFP or 100Base-T Ports with 2 SFP+ Ports, supports up to 250 AP and 8,000 clients, with integrated AC power supply</li> </ul> </li> <li>- Performance and Capacity:             <ul style="list-style-type: none"> <li>✓ Must be support up to 250 AP license maximum</li> <li>✓ Must have firewall features for mobility wireless</li> <li>✓ Must have 6094 VI-AN supported</li> <li>✓ Must have 8,000 concurrent users</li> </ul> </li> <li>- Minimum Requirements for AP and Controllers:             <ul style="list-style-type: none"> <li>✓ Comply AP and Firewall license band on the AP qty</li> <li>✓ Comply with 1-unit IOG SFP+ LC SR Transceiver</li> <li>✓ Comply mounting/ceiling bracket for AP</li> <li>✓ Comply Limited Lifetime Warranty for the AP with 3-years support</li> <li>✓ Comply 3-years Warranty for WI-AN Controller</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>✓ Must be compatible to the PoE+ Switch with IEEE 803.at compliance</li> <li>- Antennas</li> <li>- Power:             <ul style="list-style-type: none"> <li>✓ Maximum power consumption: 13-watts (PoE) or 11-watts</li> <li>✓ Power over Ethernet (PoE): 48-Vdc (nominal), 802.3af/3at compliant source</li> </ul> </li> <li>- Minimum Specification for Controller:             <ul style="list-style-type: none"> <li>✓ 8 port Gigabit Ethernet, 1 (10G) SFP+ Port, supports up to 250 AP and 8,000 clients, with integrated AC power supply</li> </ul> </li> <li>- Performance and Capacity:             <ul style="list-style-type: none"> <li>✓ Must be support up to 250 AP license maximum</li> <li>✓ Must have firewall features for mobility wireless</li> <li>✓ Must have 6094 VI-AN supported</li> <li>✓ Must have 8,000 concurrent users</li> </ul> </li> <li>- Minimum Requirements for AP and Controllers:             <ul style="list-style-type: none"> <li>✓ Comply AP and Firewall license band on the AP qty.</li> <li>✓ Comply with 1-unit IOG SFP+ LC SR Transceiver</li> <li>✓ Comply mounting/ceiling bracket for AP</li> <li>✓ Comply Limited Lifetime Warranty for the AP with 3-years support</li> <li>✓ Comply 3-years Warranty for WI-AN Controller</li> </ul> </li> </ul>
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<b>Item #13 - Is there an existing compatible controller?</b>	Yes, all existing controllers should be compatible and be integrated with the new one.
<b>For the NMS do we need to provide the Server?</b>	Only NMS is required
<b>How many MPPT Controller? 4x PoE Smart MPPT Charger</b>	5 units MPPT Controller 80amps (1 each RS for 3RS and 2 spare)
<b>For the Fiber Optic is it Burial or Aerial? Measurement? Can we suggest to include certification?</b>	<ul style="list-style-type: none"> <li>• All burial – building to building</li> <li>• Already provided in the TOR</li> <li>• Conduct site visit before final proposal.</li> </ul>
<b>SCOPE/BIDDER'S DELIVERABLES/QUALIFICATIONS/TRAINING REQUIREMENTS</b>	
<b>REFERENCE/QUERIES</b>	<b>AMENDMENT/CLARIFICATION</b>
<b>Latitude and Longitude of Relay Towers</b>	RS - Maasin = 10.154837,124.884032 RS - Libagon Location 1= 10.373117,125.048986 RS - Libagon Location 2= 10.383166,125.063261
<b>Annex A - TOR Item #2 - Bidder's Deliverables:</b> Permission with DICT, is it SLSU who will communicate/coordinate with DICT regarding permits?	<ul style="list-style-type: none"> <li>• There is already an existing tower built by Handlink, Inc. with their DICT contract.</li> <li>• The winning bidder just have to install the solar panels.</li> <li>• Relative to the permits, SLSU will have a separate contract for the lease of tower with DICT.</li> </ul>
<b>32 units P2P, do we have the exact location per site or per campus?</b>	TWG answered in the Affirmative. It's provided in the design.
<b>Warranty period for services and hardware</b>	One (1) year
<b>Training required for Network Switches and Firewall Security and the expectation from the training certification</b>	<ul style="list-style-type: none"> <li>• Network: VLAN, Port Isolation, Ingress and Egress traffic shaping or bandwidth control for both Wireless and Wired Network, MAC Address based restriction for Switch ports and any advanced switching configurations.</li> <li>• Firewall: Basic to Advanced Firewall including restrictions on web access and content filtering.</li> </ul>



	The training must come from a certified trainer of the equipment vendor that the bidder will arrange for the procuring entity.
<b>Required PCAB License Classification</b>	Valid PCAB License on Communications Facilities from the date of Bid Opening. (In case of renewal, the bidder must submit PCAB application and Official Receipt)
<b>With regards to PCAB requirements, since this is a fiber and IT related projects, can we put a classification or category which is the communication facilities?</b>	Provided in the TOR - Telecom Installation
<b>Do we have contact persons for the site inspection?</b>	<ul style="list-style-type: none"> <li>• BAC answered in the affirmative.</li> <li>• Coordinate with the BAC Office</li> <li>• Certificate of Site visit issued during the first bidding is acceptable.</li> </ul>
Since we knew that Southern Leyte is prone to typhoon. For instance, the infrastructure is damaged by the typhoon and the construction is still ongoing, is it still covered in the warranty (necessary restoration) or is there another package?	<p>Refer to TOR Page 12 under F. Training Requirements 1. System and Equipment Warranty: “Warranty starts from the date of acceptance. Warranty includes version upgrades and updates”</p> <ul style="list-style-type: none"> <li>• If the construction is still ongoing, technically all the equipment/hardware exposed to weather hazards are still the responsibility of the winning bidder. Public storm warnings are issued in advance, therefore the winning bidder should ensure the safety and security of these equipment/hardware.</li> </ul>
<b>ADDITIONAL QUERIES</b>	
<b>QUESTIONS/QUERIES</b>	<b>BAC RESPONSE</b>
<b>Can we make a site survey anytime?</b>	Yes, but only during weekdays. You can conduct as early as possible to avoid any extension since this is already the second bidding.



<b>Can we request for another Prebid conference after the posting of the Bid Supplement before we can finalize our offer?</b>	BAC needs to convene with the TWG if it's possible. We have timelines to follow.
<b>How about the SLCC, what percent?</b>	50% of the ABC of similar contract

For guidance and information of all concerned.

*(signed)*  
**MABEL R. CALVA, MPA**  
BAC Chairperson  
Date: 29 March 2022

