

Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (e.g. production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "*or at least equivalent.*" References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.



Technical Specifications

Item No.	Specification	Statement of Compliance
		<p><i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i></p>
LOT 1 - INTERNET OF THINGS DEVICES (P2,460,000.00)		
1	<p>INDUSTRIAL OUTDOOR IP CAMERA WITH AI OBJECT DETECTION</p> <p>Sensor: 1/1.8", 4.0 megapixel, progressive scan, CMOS; Minimum Illumination: "Colour: 0.0005 lux (F1.2, AGC ON) 0 lux with IR/LED on"; WDR: True WDR 120dB; Lens: 2.8 ~ 12mm, AF automatic focusing, and motorized zoom lens; Illuminator: Up to 30m (98ft), 850nm, IR Auto/Manual Control; AI/ Intelligence Features: Support false alarm filtering: Cross Line detection, Intrusion detection, Enter Area detection, Leave Area Detection; People counting, support people flow counting, and crowd density monitoring; Complete Delivery, Installation, Configuration, Testing and Full Documentation; 2 YEARS WARRANTY</p>	



3	<p>CONTROL SYSTEM (POE) WITH SOLAR POWER BACK-UP SYSTEM INCLUDING INSTALLATION MATERIALS</p> <p>Solar Panel System 150 Watts Mono; IP67 Grade, Aluminum or Stainless Steel Enclosure for Pole Installed complete with Accessories / Brackets; Industrial Grade PoE Managed Switch; Complete Delivery, Installation, Configuration, Testing and Full Documentation; 2 YEARS WARRANTY</p>	
5	<p>INDUSTRIAL GRADE EMBEDDED PC SYSTEM</p> <p>Processor: Intel Core i7 10810U (Six core 12 threads, 1.6G, Max. Turbo 4.9G, 12MB Cache), RAM: 1*DDR4 2133/2400 SODIMM memory slot, 32GB, Network: 2*Intel i211-AT 10/100/1000M, LAN; Storage: 1*M.2 2280 slot, 1*2.5"HDD, support RAID 0/1 1T Industrial Grade; Working Temperature: -20°C ~ +50°C (Industrial grade SSD), surface airflow; Accessories / Power Supply: Industrial Grade Power Supply 12VDC / 5A; Operating System: Ubuntu Pro, Complete Delivery, Installation, Configuration, Testing and Full Documentation; 2 YEARS WARRANTY</p>	
6	<p>INDUSTRIAL LORA WAN GATEWAY PLUS LTE</p> <p>Interface: "4G/3G connectivity, LoRaWAN 863 - 870MHz, 1x RS485/RS422 Modbus RTU/TCP, 1x Ethernet 10/100Mbit/s, Packet Forwarder, Embedded LoRaWAN server Class A & C, Flash memory: 50 Mb (uncompressed, compressed files)"; Accessories / Power Supply: Industrial Grade Power Supply 12VDC / 5A, LORaWAN Outdoor Antenna, Includes 4G LTE DataSims for Remote and SMS Alert 1 Year Subscription; Complete Delivery, Installation, Configuration, Testing and Full Documentation; 2 YEARS WARRANTY</p>	
LOT 2 - COMPUTER SERVER/LAPTOP (P740,000.00)		
2	<p>COMMAND CENTER SERVER WITH COMPLETE POWER BACK-UP AND MONITORING</p> <p>50" Smart TV; Cat6 LAN Cabling System; UPS 1KVA RackMount; HDMI Video Switcher (at</p>	

	<p>Cables; Branded Server Intel Xeon E-2334 3.4GHz, 8M Cache, 4C/8T, Turbo (65W), 3200 MT/s 16GB UDIMM, 3200MT/s, ECC 1TB Hard Drive SAS 12Gbps 10k 512n 2.5in with 3.5in HYB CARR Hot-Plug"; Complete Delivery, Installation, Configuration, Testing and Full Documentation; 2 YEARS WARRANTY</p>	
<p>4</p>	<p>HIGH END LAPTOP</p> <p>Operating System: Laptop recommends Windows 11 Pro for business; Processor: Intel Core i5-1335U Processor 1.3 GHz (12MB Cache, up to 4.6 GHz, 10 cores, 12 Threads); Graphics: Intel Iris Xe Graphics; Display: 13.3-inch, 2.8K (2880 × 1800) OLED 16:10 aspect ratio, 0.2ms response time, 60Hz refresh rate, 550nits HDR peak brightness, 100% DCI-P3 color gamut, 1,000,000:1, 1.07 billion colors, PANTONE Validated, Glossy display, 70% less harmful blue light, SGS Eye Care Display, Non-touch screen, (Screen-to-body ratio)85%; Memory: 16GB LPDDR5 on board, Storage: 512GB M.2 NVMe PCIe 4.0 Performance SSD; I/O Ports: 1x USB 3.2 Gen 2 Type-A (2x Thunderbolt 4 supports display / power delivery 1x HDMI 2.1 TMDS, 1x 3.5mm Combo Audio Jack; Keyboard & Touchpad: Backlit Chiclet Keyboard, Camera: FHD camera with IR function to support Windows Hello; Audio: Smart Amp Technology, Built-in speaker, Built-in array microphone, harman/kardon (Premium) with Cortana voice-recognition support; Network and Communication: Wi-Fi 6E(802.11ax) (Dual band) 2*2 + Bluetooth 5.3 Wireless Card; Battery: 63WHrs, 2S2P, 4-cell Li-ion; Power Supply: TYPE-C, 65W AC Adapter, Output: 20V DC, 3.25A, 65W, Input: 100-240V AC 50/60GHz universal; Laptop Features: System diagnosis, Battery health charging, Fan Profile, Splendid, WiFi SmartConnect TaskFirst, Live update, AI Noise Canceling, Military Grade: US MIL-STD 810H military-grade standard; Ecolabels & Compliances: EPEAT Gold, Energy star 8.0, RoHS, REACH, Security: Trusted Platform Module (TPM) 2.0, with Anti-Virus Software, IR webcam with Windows Hello support</p>	
<p>***** Nothing Follows*****</p>		

Additional Requirements:

The technical specification that shall be submitted by the Bidder shall include, among others:

- a. offered product specifications as supported by brochures or catalogues;*
- b. bidder's certification that it has after-sales support;*
- c. bidder's certification for two (2) years warranty for All Items in Lot 1 and Item No. 1 of Lot 2 and one (1) year warranty for Item No. 2 of Lot 2; and*
- d. certification from manufacturer/distributor that bidder is authorized dealer.*

