



**DOST-ASTI Bids and Awards Committee
REQUEST FOR QUOTATION**

Kind of Procurement Activity:	Negotiated Procurement:Small-value Procurement		
Deadline of Submission of Bids:	Jun-19-2023, 2:00 PM		
RFQ No.:	23-06-4408	Date:	June-13-2023
PR No.:	GAA-23-05-16861	Date:	May-31-2023

The Department of Science and Technology (DOST) - Advanced Science and Technology Institute (ASTI), through its Bids and Awards Committee (BAC), intends to procure the enlisted item/s below. Bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, except otherwise specified in the requirements. Award may be considered for prospective bidder/s proven to be the single/lowest calculated and responsive quotation among all other quotations. Guidelines on the format of quotations and eligibility documents are listed below. Kindly follow the prescribed GUIDELINES to avoid DISQUALIFICATION.

Quotations may be submitted 1) manually to the BAC Secretariat at G/F DOST-ASTI Bldg., UP Technology Park Complex, CP Garcia Ave., UP Campus, Diliman, Quezon City or 2) sent via electronic mail at bac-sec@asti.dost.gov.ph. For further information, please contact the BAC Secretariat at +63 2 8249-8500 loc. 1206/1212.

Thank you.

BAYANI BENJAMIN R. LARA
BAC Chairperson

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	<p>Tool - Crimping tool for Insulated Ferrule</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of crimping tool to be used for insulated ferrule.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Crimp tool type: Plier</p> <p>2.2. Crimp connector type: Insulated terminals</p> <p>2.3. With adjustable ratchet</p> <p>2.4. Insulated terminals sizes (AWG):</p> <p>2.4.1. 22 – 18</p> <p>2.4.2. 16 – 14</p> <p>2.4.3. 12 – 10</p> <p>2.5. DIN: 0.5 – 1 mm² / 1.5 – 2.5 mm² / 4 – 6 mm²</p> <p>2.6. Insulated terminal ring/splices: 16 – 26 AWG</p> <p>2.7. Material:</p> <p>2.7.1. Body: Carbon steel</p> <p>2.7.2. Grip handle: Thermoplastic</p> <p>2.8. Suitable for use on insulated vinyl, polycarbonate</p>	1	pc	6000.00	6,000.00

	<p>and nylon Red, Blue, Yellow</p> <p>3 WARRANTY</p> <p>3.1. This crimping tool must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
2	<p>Accessory - 11in1 USB C Hub</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of five (5) pcs of 11in1 USB C hub that will be used to connect modules, sensors, development board and electronic components with different interfaces to the laptop, monitors and other external displays for research purposes.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Material: Aluminum alloy</p> <p>2.2. Craft: Sandblasting and anodizing</p> <p>2.3. Color: Space gray</p> <p>2.4. Input: Type-C</p> <p>2.5. Port:</p> <p>2.5.1. Power delivery: 5V / 9V/ 14.5V / 20V 5A (Max.)</p> <p>2.5.2. HDMI:</p> <p>2.5.2.1. Supports 4K @30 Hz HD Display (Max.)</p> <p>2.5.2.2. Number of HDMI ports: Two (2)</p> <p>2.5.3. VGA transmission: Supports 1920 × 1080P @60 Hz (Max.)</p> <p>2.5.4. USB 3.0:</p> <p>2.5.4.1. Supports 5Gbps (Max) and is backward compatible with USB 2.0</p> <p>2.5.4.2. Number of USB 3.0 ports: Three (3)</p> <p>2.5.5. RJ45 network: Supports 10 Mbps, 100 Mbps, 1000 Mbps</p> <p>2.5.6. SD/TF: Supports SD 2.0 data transmission and simultaneous reading</p> <p>2.6. Data rate: 60 MB/s</p> <p>2.7. 3.5mm audio: US standard (CTIA)</p> <p>2.8. Standby current: < 400 mA</p> <p>2.9. Voltage: 5 V – 20 V</p> <p>2.10. Weight: approx. 127 ±5 g</p> <p>2.11. Compatible with Apple OS, Pad OS, Windows</p> <p>2.12. With light indicator</p>	5	pc	5200.00	26,000.00

3	<p>3 WARRANTY</p> <p>3.1. These 11in1 USB C hub must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
3	<p>Tool - USB to TTL UART</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of five (5) pcs of USB to TTL UART that will be used during debugging, testing and evaluating of modules that uses UART and connect it directly to laptop.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Implements full v2.0 USB protocol</p> <p>2.2. Internal EEPROM for device ID</p> <p>2.3. Baud rates: 300 bps to 921600 bps</p> <p>3 WARRANTY</p> <p>3.1. These USB to TTL UART must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	5	pc	175.00	875.00
4	<p>Connector - Female N-Type</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of five (5) pcs of female N-type connector needed for LoRa antenna.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of</p>	5	pc	1400.00	7,000.00

	<p>minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Connector:</p> <p>2.1.1. Style: N-type</p> <p>2.1.2. Type: Jack, Female Socket</p> <p>2.2. Termination:</p> <p>2.2.1. Contact: Push On</p> <p>2.2.2. Shield: Crimp</p> <p>2.3. Impedance: 50 ohms</p> <p>2.4. Mounting type: Free Hanging (In-line)</p> <p>2.5. Cable group: LMR-400</p> <p>2.6. Fastening type: Threaded</p> <p>2.7. Maximum frequency: 6 GHz</p> <p>2.8. Port number: 1</p> <p>2.9. Housing color: Silver</p> <p>2.10. Material:</p> <p>2.10.1. Center contact:</p> <p>2.10.1.1. Material: Bronze</p> <p>2.10.1.2. Plating: Gold</p> <p>2.10.2. Body:</p> <p>2.10.2.1. Material: Brass</p> <p>2.10.2.2. Finish: Nickel</p> <p>2.10.3. Dielectric: Polytetrafluoroethylene (PTFE)</p> <p>2.11. Voltage rating: 1500 V</p> <p>2.12. Insertion loss: 0.1 dB</p> <p>3 WARRANTY</p> <p>3.1. These female N-type connectors must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
5	<p>Development Board - Embedded Controller</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of embedded controller for open standard and redundant ARM-based microcontroller design suitable for autonomous systems.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Processor: STM32H753 with ARM Cortex-M7 core</p> <p>2.2. Clock speed: 480 MHz</p>	1	pc	45000.00	45,000.00

	<p>2.3. Memory</p> <p>2.3.1. Flash: 2 MB</p> <p>2.3.2. RAM: 1 MB</p> <p>2.4. Redundancy: 3x IMU sensors & 2x barometer sensors on separate buses</p> <p>2.5. Modular flight controller: separated IMU, FMU, and Base system connected by a 100-pin and a 50-pin Autopilot Bus connector</p> <p>2.6. Equipped with triple redundancy domains</p> <p>2.7. With low-noise IMUs on board which are temperature-controlled</p> <p>2.8. Can detect sensor failure and switch to another bus to maintain flight control reliability</p> <p>2.9. With independent power control for every sensor</p> <p>2.10. With vibration isolation system to filter out high-frequency and reduce noise for accurate readings</p> <p>2.11. Ethernet interface for high-speed mission computer integration</p> <p>2.12. Suitable for academic and commercial applications</p> <p>3 INCLUSION</p> <p>3.1. Flight controller module</p> <p>3.2. Standard base</p> <p>3.3. LV Power module</p> <p>3.4. Cable set</p> <p>4 WARRANTY</p> <p>4.1. This embedded controller must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>4.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>5 DELIVERY AND PAYMENT TERMS</p> <p>5.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>5.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
6	<p>GNSS Receiver</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of differential high-precision GNSS receiver capable for positioning system and reception for BeiDuo, Galileo, GLONASS, GPS/QZSS.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Provides multi-band RTK for the reception of GPS, GLONASS, Galileo, BeiDuo</p> <p>2.2. Communication protocol: DroneCAN 1 MB/s</p>	1	pc	45000.00	45,000.00

- 2.3. Processor: STM32G473 running at 170 MHz
- 2.4. Memory:
 - 2.4.1. Flash: 512 kB
 - 2.4.2. RAM: 96 kB
- 2.5. Intended application: Rover
- 2.6. GNSS receiver: ZED-F9P high precision
- 2.7. Antenna: Ceramic Patch Antenna with 20 dB LNA
- 2.8. Antenna peak gain (Max):
 - 2.8.1. L1: 4.0 dBi
 - 2.8.2. L2: 1.0 dBi
- 2.9. Magnetometer: BMM150
- 2.10. GNSS band: B1I, B2I, E1B/C, E5b, L1C/A, L1OF, L2C, L2OF
- 2.11. Positioning accuracy:
 - 2.11.1. 3D FIX: 1.5 m.
 - 2.11.2. RTK: 0.01 m.
- 2.12. Time-TO-First Fix:
 - 2.12.1. Cold start: ≤ 29 seconds
 - 2.12.2. Hot start: ≤ 1 second
- 2.13. Navigation update rate:
 - 2.13.1. RAW: 20 Hz Max
 - 2.13.2. RTK: 8 Hz Max
- 2.14. Cable length: 27 cm or 50 cm
- 2.15. Working voltage: 4.75 ~ 5.25 V
- 2.16. Current consumption: ~250 mA

3 INCLUSION

- 3.1. 1 x Fixed carbon fiber GPS mount

4 WARRANTY

- 4.1. This GNSS receiver must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.
- 4.2. Any replacement service must be successfully performed within sixty (60) business days.

5 DELIVERY AND PAYMENT TERMS

- 5.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).
- 5.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.

7	<p>HD and telemetry receiving smart controller</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) set of handheld smart controller with HD digital image and telemetry receiving system.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Equipped with dual 1080p FPV</p> <p>2.2. Optimized and integrated with 8-core CPU platform</p>	1	set	49500.00	49,500.00
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	<p>2.3. Range: 2.3.1. Using standard omni-directional antenna: 15 km..</p> <p>2.4. Android version: 9.0</p> <p>2.5. Transmitter output: HDMI interface</p> <p>2.6. IP rating: IP53</p> <p>2.7. Battery life: 12 hours</p> <p>2.8. Charging: 3.5 hours PD</p> <p>2.9. Latency: 180 ms</p> <p>2.10. Display 2.10.1. Measurement: 5.5-inch 2.10.2. Definition: 1920 x 1080 pixels 2.10.3. Brightness: 1000 cd/m2</p> <p>2.11. Support 4G network</p> <p>2.12. Can decode 1080p @ 60fps video in both H.264 and H.265 format</p> <p>2.13. Support PIX and QGC</p> <p>2.14. Support popular AG FC</p> <p>2.15. Support GPS/RTK mapping box</p> <p>3 INCLUSION</p> <p>3.1. Transmitter</p> <p>3.2. Receiver</p> <p>3.3. IP67 Camera with searchlights</p> <p>4 WARRANTY</p> <p>4.1. This HD and telemetry receiving smart controller must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>4.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>5 DELIVERY AND PAYMENT TERMS</p> <p>5.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>5.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
8	<p>Motor - Brushless EDF (CW)</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of clockwise brushless DC motor ducted fan for arQ 2.0</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Culvert diameter: 80 mm.</p> <p>2.2. Number of fan: 12</p> <p>2.3. RPM: 2000 KV</p> <p>2.4. Configuration: 12 N, 10 P</p> <p>2.5. Shaft diameter: 5 – 6 mm.</p> <p>2.6. Motor diameter: 35 mm.</p>	1	pc	9500.00	9,500.00

	<p>2.7. Maximum continuous power/10 S: 2800 W 2.8. Maximum continuous current: 112 A 2.9. No of Cells: 6 S L ipo 2.10. Maximum thrust @24 V: 4000 g 2.11. Material: High-end composite</p> <p>3 WARRANTY 3.1. This brushless EDF (CW) must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance. 3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS 4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP). 4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
9	<p>Motor - Brushless EDF (CCW) 1 GENERAL OVERVIEW 1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of counterclockwise brushless DC motor ducted fan for arQ 2.0 1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges. 1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS 2.1. Culvert diameter: 80 mm. 2.2. Number of fan: 12 2.3. RPM: 2000 KV 2.4. Configuration: 12 N, 10 P 2.5. Shaft diameter: 5 - 6 mm. 2.6. Motor diameter: 35 mm. 2.7. Maximum continuous power/10 S: 2800 W 2.8. Maximum continuous current: 112 A 2.9. No of Cells: 6 S L ipo 2.10. Maximum thrust @24 V: 4000 g 2.11. Material: High-end composite</p> <p>3 WARRANTY 3.1. This brushless EDF (CCW) must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance. 3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS 4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP). 4.2. Full payment will only be given once the item is</p>	1	pc	9500.00	9,500.00

	completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.				
10	<p>Electronic Speed Controller</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of two (2) pcs of brushless waterproof electronics speed controller for arQ 2.0</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. MCU: low-power AVR 8-bit ATmega168 series</p> <p>2.2. Working frequency: 20 MHz</p> <p>2.3. Can support maximum 210K erpm speed of brushless motor</p> <p>2.4. Continuous output current: 120 A</p> <p>2.5. BEC specs</p> <p>2.5.1. Type: Linear mode</p> <p>2.5.2. BEC output: 5.5 V / 5 A</p> <p>2.6. Input: 2 – 6 S Lipo</p> <p>2.7. Application: Suitable for hull with length < 120 cm</p> <p>2.8. Starting acceleration can be set</p> <p>2.9. With fast throttle response speed</p> <p>2.10. Offers protection functions such as:</p> <p>2.10.1. Low voltage protection</p> <p>2.10.2. Over temperature protection</p> <p>2.10.3. Throttle signal loss protection</p> <p>2.10.4. Locked rotor protection</p> <p>2.11. With built-in BEC with steering gear</p> <p>2.12. Ingress protection: IP67 (Waterproof)</p> <p>2.13. Equipped with aluminum alloy water cooling and heat dissipation system</p> <p>2.14. Suitable for driving all kinds of three-phase brushless motors</p> <p>3 WARRANTY</p> <p>3.1. This electronic speed controller must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	2	pc	11500.00	23,000.00
11	<p>Tool - RF Crimping Tool</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute</p>	1	pc	18000.00	18,000.00

	<p>(ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of RF crimping tool to be used for crimping connectors, cables needed for LoRa and other similar application.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Tool method: Manual</p> <p>2.2. Type: Hand Crimper</p> <p>2.3. Used for: Coaxial, RF connectors</p> <p>2.4. Cables: LMR-400 and LMR-300</p> <p>3 WARRANTY</p> <p>3.1. This crimping tool must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
12	<p>Connector - Female RP-SMA</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of five (5) pc of RF crimping tool to be used for crimping connectors, cables needed for LoRa and other similar application.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Connector:</p> <p>2.1.1. Style: RP-SMA</p> <p>2.1.2. Type: Female Socket</p> <p>2.2. Termination:</p> <p>2.2.1. Contact: Crimp</p> <p>2.2.2. Shield: Crimp</p> <p>2.3. Cable group: RG-174, 316</p> <p>2.4. Fastening type: Threaded</p> <p>2.5. Number of ports: 1</p> <p>2.6. Material:</p> <p>2.6.1. Housing color: Gold</p> <p>2.6.2. Body finish: Gold</p> <p>2.6.3. Center contact plating: Gold</p> <p>3 WARRANTY</p> <p>3.1. These female RP-SMA must have at least six (6)</p>	5	pc	500.00	2,500.00

	<p>months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
13	<p>Multiparameter Weather Sensor</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) unit of multiparameter weather sensor capable of measuring common weather parameters such as air temperature, wind speed and direction.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Wind speed:</p> <p>2.1.1. Range: 0 to 40 m/s</p> <p>2.1.2. Accuracy: 5% at 10 m/s at 4 angles</p> <p>2.1.3. Resolution: 0.1 m/s</p> <p>2.1.4. Calculations: user configurable damping</p> <p>2.2. Wind direction:</p> <p>2.2.1. Range: 0 to 359.9 degrees</p> <p>2.2.2. Accuracy: ±3 degrees at 10 m/s</p> <p>2.2.3. Resolution: 0.1 degree</p> <p>2.2.4. Calculations: user configurable damping</p> <p>2.3. Air temperature:</p> <p>2.3.1. Range: - 40 to 80 degrees Celsius (-40 to 176 degrees Fahrenheit)</p> <p>2.3.2. Accuracy: ±1.1 degree Celsius at 20 degrees Celsius</p> <p>2.3.3. Resolution: 0.1 degree Celsius</p> <p>2.4. Barometric pressure:</p> <p>2.4.1. Range: 300 to 1100 hPa</p> <p>2.4.2. Accuracy: ±0.5 hPa at 25 degrees Celsius (or better)</p> <p>2.4.3. Resolution: 0.1 hPa</p> <p>2.5. Three-axis compass:</p> <p>2.5.1. Range: 0 to 359.9 degrees</p> <p>2.5.2. Accuracy:</p> <p>2.5.2.1. 1 degree static heading accuracy</p> <p>2.5.2.2. 2 degrees dynamic heading accuracy</p> <p>2.5.3. Resolution: 0.1 degree</p> <p>2.6. Pitch and roll:</p> <p>2.6.1. Measurement type: MEMS</p> <p>2.6.2. Range: 50 degrees</p> <p>2.6.3. Accuracy: ±1 degree in range of ±30 degrees</p> <p>2.6.4. Resolution: 0.1 degree</p>	1	unit	200000.00	200,000.00

- 2.7. GPS position accuracy: 3 m (10') CEP
- 2.8. Operating temperature range: -25 to 55 degrees Celsius (-13 to 131 degrees Fahrenheit)
- 2.9. Power:
 - 2.9.1. Supply voltage: 9 to 40 VDC
 - 2.9.2. Supply current: <75 mA (<0.9 W) at 12 VDC
 - 2.9.3. Load equivalency number (LEN): 2
- 2.10. Communications:
 - 2.10.1. Available interface: Serial RS-232, Serial RS-422, CAN
 - 2.10.2. Available protocol: Comma delimited ASCII, NMEA 0183, NMEA 2000
 - 2.10.3. Serial output rate: 1 Hz typical, 10 Hz maximum recommended
- 2.11. Mounting-thread size on base: Standard 1"-14 UNS (3/4" NPT optional)
- 2.12. Certifications and standards: CE, IPX7, RoHS, IEC61000-4-2, IEC60945, IEC60950_1 C, IEC60950_22A, EN55022, EN55024, EN14982
- 2.13. Ingress protection: IPx7

3 ACCESSORIES

- 3.1. Weather station cable
 - 3.1.1. Length: at least 1 m.
 - 3.1.2. Protocol: NMEA 0183

4 WARRANTY

- 4.1. This multiparameter weather sensor must have at least one (1) year of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.
- 4.2. Any replacement service must be successfully performed within sixty (60) business days.

5 DELIVERY AND PAYMENT TERMS

- 5.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).
- 5.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.

14	<p>Marine LED Beacon</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of two (2) units of marine LED beacon to be used for signaling.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Range: 4 NM</p> <p>2.2. Color: Yellow</p> <p>2.3. Lens visual/mechanical diameter: 177 mm.</p> <p>2.4. Lens material: UV stabilized Polycarbonate</p> <p>2.5. Light source: High power Light Emitting Diode</p>	2	unit	130000.00	260,000.00
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	<p>(LED)</p> <p>2.6. Vertical divergence: > 8 degree (FWHM)</p> <p>2.7. Solar module: High efficiency cells; MPPT; 2.5 W</p> <p>2.8. Battery:</p> <p>2.8.1. Li-ion: 3.6 W / 6 Ah</p> <p>2.9. Degree of ingress protection: IP 68</p> <p>2.10. With ventilated battery compartment</p> <p>2.11. Adjustable intensity and range</p> <p>2.12. Installation</p> <p>2.12.1. Adapter</p> <p>2.12.1.1. 3 x M6 on 150 mm</p> <p>2.12.1.2. 3 x M12 on 200 mm</p> <p>2.12.2. Pole mount: 70 or 72 diameter</p> <p>3 WARRANTY</p> <p>3.1. These marine LED beacon must have at least one (1) year of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
15	<p>Antenna - Yagi Directional Antenna</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of one (1) pc of Yagi Directional Antenna that will be used during the field testing of the LoRa boards for arQ 2.0.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Frequency range: 862 – 870 MHz</p> <p>2.2. Gain: 8.9 dBi</p> <p>2.3. Polarization: Vertical</p> <p>2.4. Impedance: 50 ohms</p> <p>3 WARRANTY</p> <p>3.1. This directional antenna must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p>	1	pc	14000.00	14,000.00

	4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.				
16	<p>Connector - RP-SMA to SMA Adapter Set</p> <p>1 GENERAL OVERVIEW</p> <p>1.1. The Advanced Science and Technology Institute (ASTI) is seeking qualified and competent bidders for the Supply and Delivery of three (3) set of RP-SMA to SMA Adapter Set that will be used during testing of LoRa boards for arQ 2.0.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and services charges.</p> <p>1.3. The technical specifications written herein are of minimum requirement, unless otherwise stated.</p> <p>2 TECHNICAL SPECIFICATIONS</p> <p>2.1. Impedance: 50 ohms</p> <p>2.2. Material: Brass</p> <p>2.3. Plating: Gold-plated</p> <p>2.4. Package included:</p> <p>2.4.1. 1 x RP-SMA (female) to SMA (female)</p> <p>2.4.2. 1 x RP-SMA (male) to SMA (female)</p> <p>2.4.3. 1 x RP-SMA (male) to SMA (male)</p> <p>2.4.4. 1 x RP-SMA (female) to SMA (male)</p> <p>2.5. Style: Straight</p> <p>2.6. Used for Wi-Fi antenna/radio/RF coaxial coax/extension cable</p> <p>3 WARRANTY</p> <p>3.1. These RP-SMA to SMA adapter set must have at least six (6) months of warranty from the time of delivery which covers defects in materials. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.2. Any replacement service must be successfully performed within sixty (60) business days.</p> <p>4 DELIVERY AND PAYMENT TERMS</p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of Notice to Proceed (NTP).</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End User. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	3	set	1600.00	4,800.00

TOTAL APPROVED BUDGET FOR THE CONTRACT (ABC):

Php 720,675.00

GUIDELINES

A. Content and Format of Quotations

1. The Quotation/s must include the RFQ Number or the PR Number indicated above
2. Bidders must specify the BRAND NAMES and MODEL NAMES/NUMBER for the following goods:
 - a. Computer and electronic equipment and its accessories or peripherals
 - b. Software applications, programs, and digital licenses
 - c. Commercial off-the-shelf electronic devices or components
3. The Quotation/s must indicate the registered business name of the company (or individual), business address and contact number. It must also include the full name and signature of the company's authorized representative.

4. BIR Certificate of Registration for new DOST-ASTI suppliers.

B. Eligibility Requirements

Pursuant to Annex "H" or Consolidated Guidelines for the Alternative Methods of Procurement of the 2016 Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184, the following documents shall be submitted except for Repeat Order, Shopping under Section 52.1(a), and Negotiated Procurement under Sections 53.1 (Two-Failed Biddings), and 53.5 (Agency-to-Agency):

For Procurement of Goods

1. Upon submission of quotation
 - a. Valid PhilGEPS Registration Number / Organization ID
 - b. Valid Mayor's/Business Permit
2. Upon issuance of Notice of Award (NOA)
 - a. Omnibus Sworn Statement (shall be required only for procurement projects with ABC above P50,000.00)
 - b. Income/Business Tax Return (For ABCs above P500,000.00)

For Procurement of Infrastructure

1. Upon submission of quotation
 - a. Valid PhilGEPS Registration Number / Organization ID
 - b. Valid Mayor's/Business Permit
 - c. Valid PCAB License
2. Upon issuance of NOA
 - a. Omnibus Sworn Statement (shall be required only for procurement projects with ABC above P50,000.00)
 - b. Income/Business Tax Return (For ABCs above P500,000.00)

**Requirements under Section 53.6 (Scientific, Scholarly or Artistic Work, Exclusive Technology and Media Services) of the revised IRR of RA No. 9184 will not apply to artists such as singer, performer, poet, writer, painter and sculptor who are engaged in business.*

***Requirements under Section 53.10 (Lease of Real Property or Venue) of the revised IRR of RA No. 9184, specifically Mayor's/Business Permit, PhilGEPS Registration Number and Income/Business Tax Return will not apply to government agencies as lessors.*

****For methods of procurement requiring Mayor's Permit and PhilGEPS Registration Number, valid Certificate of Platinum Membership may be submitted in lieu of the said documents.*

C. Terms and Conditions

1. Additional requirements, if necessary, may be requested by the BAC depending on the item to be bid;
2. All transactions are subject to creditable withholding tax and final Value Added Tax or percentage tax per revenue regulation/s of the BIR;
3. Liquidated damages of at least equal to one-tenth of one percent (0.001) of the cost of the unperformed portion for every day of delay shall be imposed by the DOST-ASTI pursuant to Section 68 of the revised IRR of RA No. 9184; and
4. The DOST-ASTI reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.