



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

<b>Kind of Procurement Activity:</b>	Negotiated Procurement:Small-value Procurement		
<b>Deadline of Submission of Bids:</b>	Oct-27-2023, 2:00 PM		
<b>RFQ No.:</b>	23-10-4590	<b>Date:</b>	October-23-2023
<b>PR No.:</b>	GAA-23-10-17835	<b>Date:</b>	October-06-2023

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><b>Actuator - Smart BLDC Motor</b></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 SMART BLDC MOTOR, to be used for arQ 2.0.</p> <p>1.2. The Approved Budget for the Contract (ABC) includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Input voltage: 24 V</p> <p>2.2. Speed:</p> <p>2.2.1. No-load: 250 rpm</p> <p>2.2.2. Nominal: 180 rpm</p> <p>2.2.3. Constant: 65 rpm/v</p> <p>2.3. Torque:</p> <p>2.3.1. Nominal: 1.2 N.M</p> <p>2.3.2. Constant: 0.6 N.M/A</p> <p>2.4. Nominal current: 1.6 A</p> <p>2.5. Nominal power: 43 W</p> <p>2.6. Motor efficiency: 60 %</p> <p>2.7. Max stall current: 5 A</p> <p>2.8. Resistance: 3.2 Ω</p> <p>2.9. Phase to phase inductance: 1.2 mH</p>	1	pc	17200.00	17,200.00

	<p>2.10. Axial direction payload: 300 N  2.11. Radial direction payload: 550 N  2.12. Rotor inertia: 200 gcm<sup>2</sup>  2.13. Number of pole pairs: 14  2.14. Reducer ratio: 6:1  2.15. Support multiple protection functions  2.15.1. Over temperature  2.15.2. Charge and discharge  2.15.3. Overvoltage  2.15.4. Overcurrent  2.16. Support bus current sampling  2.17. Equipped with high density brushless motor</p> <p>3. WARRANTY  3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.  3.2. Warranty service shall commence from the date of end-user acceptance.  3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p>4. DELIVERY AND PAYMENT TERMS  4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.  4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.  4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
2	<p><b>Actuator - BLDC Motor(350kV)</b>  1. GENERAL OVERVIEW  1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF ONE (1) PC OF BLDC MOTOR, capable up to 350 kV to be used for arQ 2.0.  1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS  2.1. Speed: 320 kV  2.2. Configuration: 24 N 28 P  2.3. Shaft diameter: 40.6 mm  2.4. Stator length: 10 mm  2.5. Idle current (@10.0 V): 1 A  2.6. No of cells: 6 S Lipo  2.7. Maximum continuous power/10S: 750 W  2.8. Maximum continuous current/10s: 35 A</p> <p>3. WARRANTY  3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.  3.2. Warranty service shall commence from the date of end-user acceptance.  3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p>4. DELIVERY AND PAYMENT TERMS  4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.  4.2. Full payment will only be given once the item is</p>	1	pc	4455.00	4,455.00

	<p>completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
3	<p><b>Embedded Module</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) PCS OF EMBEDDED MODULE, to serve as a microcontroller unit of some of the prototype boards of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Processor:</p> <p>2.1.1. Quad-core cortex-A55 (2.016 GHz)</p> <p>2.1.2. ARMv8-A architecture with neon and crypto extensions</p> <p>2.1.3. Mali-G31 MP2 GPU with 4 x execution engines (650 MHz)</p> <p>2.1.4. L1 instructor cache: 32 kB, 4-way set associative (128 sets), 64-byte lines, shared by 1 processor</p> <p>2.1.5. L1 data cache: 32 kB, 4-way set associative (128 sets), 64-byte lines, shared by 1 processor</p> <p>2.1.6. L3 data cache: 512 kB, 16-way set associative (512 sets), 64-byte lines, shared by 4 processors</p> <p>2.2. Memory:</p> <p>2.2.1. DDR4 4GiB with 32-bit bus width</p> <p>2.2.2. Data rate: 2640 MT/s (PC4-21333 grade)</p> <p>2.2.3. 1.2 V low power design</p> <p>2.3. Storage:</p> <p>2.3.1. 1 x eMMC connector (8/16/32/64 GiB are available)</p> <p>2.3.2. 1 x Micro SD slot (DS/HS mode up to UHS-I SDR104)</p> <p>2.4. Networking:</p> <p>2.4.1. 1 x GbE LAN ports (RJ45, supports 10/100/1000 Mbps)</p> <p>2.4.1.1. With Ethernet transceiver</p> <p>2.4.1.2. LED indicator</p> <p>2.4.1.2.1. Green LED: Flashing by data traffic at 100 Mbps connection</p> <p>2.4.1.2.2. Amber LED: Flashing by data traffic at 1000 Mbps connection</p> <p>2.4.2. Optional WiFi USB adapters</p> <p>2.5. Video: 1 x HDMI 2.0 (up to 4K@60 Hz with HDR, CEC, EDID)</p> <p>2.6. Audio:</p> <p>2.6.1. 1 x HDMI digital output</p> <p>2.6.2. 1 x optional SPDIF optical output</p> <p>2.7. External I/O:</p> <p>2.7.1. 4 x USB 3.0 host ports (shares one single root hub)</p> <p>2.7.2. 1 x USB 2.0 OTG port for host or device mode. (No power input)</p> <p>2.7.3. 1 x Debug serial console (UART)</p> <p>2.7.4. 1 x Peripheral expansion header (40-pin, 2.54 mm pitch)</p>	2	pc	4900.00	9,800.00

	<p>2.7.5. 1 x Audio expansion header (7-pin, 2.54 mm pitch)</p> <p>2.8. Other features:</p> <p>2.8.1. IR receiver for remote controller</p> <p>2.8.2. System LEDs indicators:</p> <p>2.8.2.1. Red (PWR) – solid light when DC power is connected</p> <p>2.8.2.2. Blue (ALIVE) – flashing like heartbeat while Kernel is running</p> <p>2.9. Power:</p> <p>2.9.1. 1 x DC jack:</p> <p>2.9.1.1. Outer (negative) diameter: 5.5 mm</p> <p>2.9.1.2. Inner (positive) diameter: 2.1 mm</p> <p>2.9.1.3. DC input: 5.5 V ~ 13 V (*15 V / 4 A PSU is not compatible with C4)</p> <p>2.9.1.3.1. DC 12 V / 2 A power adaptor is recommended</p> <p>2.9.2. Power consumption:</p> <p>2.9.2.1. Idle: ~1.8 W</p> <p>2.9.2.2. CPU stress: ~3.64 W (performance governor)</p> <p>2.9.2.3. Power off: ~0.14 W</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
4	<p><b>Embedded Module</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) PCS OF EMBEDDED MODULE, to serve as a microcontroller unit of some of the prototype boards of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Processor: ARM® Cortex™-A15 Quad 2.0 GHz / Cortex™-A7 Quad 1.4 GHz</p> <p>2.2. Memory: 2 Gbyte LPDDR3 RAM PoP (750 MHz, 12 GB/s memory bandwidth, 2x32 bit bus)</p> <p>2.3. Audio: HDMI digital audio output (optional USB sound card)</p> <p>2.4. USB:</p> <p>2.4.1. 3.0: Super speed USB standard A type connector 2 x port</p> <p>2.4.2. 2.0: High speed USB standard A type connector</p>	2	pc	4350.00	8,700.00

	<p>x 1 port</p> <p>2.5. Display: HDMI 1.4a with a Type-A connector</p> <p>2.6. Storage (option):</p> <p>2.6.1. Module socket: 5.0 Flash storage (up to 64 Gbyte)</p> <p>2.6.2. MicroSD card slot (up to 128 Gbyte)</p> <p>2.7. Transmission rate:</p> <p>2.7.1. Ethernet LAN: 10/100/1000 Mbps Ethernet with RJ-45 jack (auto-MDIX support)</p> <p>2.7.2. WiFi (option): USB IEEE 802.11 ac/b/g/n 1T1R WLAN with antenna (external USB adapter)</p> <p>2.7.3. HDD/SSD SATA interface (optional): Super speed USB (USB 3.0) to serial ATA3 adapter for 2.5"/3.5" HDD and SSD storage</p> <p>2.8. Power input: 4.8 V ~ 5.2 V (5V / 4A power supply is recommended)</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
5	<p><b>Filament - PETG 1.75mm (solid yellow)</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF THREE (3) PCS OF 3D PRINTER FILAMENT, for printing 3D components needed for arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Diameter: 1.75 mm</p> <p>2.2. Color: Solid yellow</p> <p>2.3. Material: PETG (Polyethylene terephthalate glycol)</p> <p>2.4. Must be odorless</p> <p>2.5. Must be hydrophobicity (won't absorb water and as such clog the extruders)</p> <p>2.6. Good gloss and recyclable</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p>4. DELIVERY AND PAYMENT TERMS</p>	3	pc	1000.00	3,000.00

	<p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
6	<p><b>Filament - ASA 1.75mm</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) PCS OF 3D PRINTER FILAMENT, for printing 3D components needed for arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Diameter: 1.75 mm</p> <p>2.2. Color: Black</p> <p>2.3. Material: eASA (Acrylonitrile Styrene Acrylate)</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	2	pc	1300.00	2,600.00
7	<p><b>Storage - Electronic Dry Cabinet</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF ONE (1) SET OF ELECTRONIC DRY CABINET, to be used as a storage of electronic components needed for arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Storage Capacity: 100 L</p> <p>2.2. Power: 5 W/H</p> <p>2.3. Humidity Control Mode: Automatic Humidification</p> <p>2.4. Dehumidify Range: 25% - 60%</p> <p>2.5. Features:</p> <p>2.5.1. With two height adjustable feet</p> <p>2.5.2. Includes four plastic shelves</p> <p>2.5.3. With lock and keys</p> <p>2.5.4. Noiseless</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from</p>	1	set	12500.00	12,500.00

	<p>the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
8	<p><b>Embedded board - BMS board (2S LiFePO4)</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF FIVE (5) PCS OF EMBEDDED BOARD, for battery management system (BMS) of LiFePO4 batteries needed for arQ 2.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Overcharging detection voltage: 3.65 V</p> <p>2.2. Over-discharging detection voltage: 2.7 V</p> <p>2.3. Peak current: 12 ~ 25 A for 7 ~ 20 ms</p> <p>2.4. Maximum continuous discharge current: 6 A</p> <p>2.5. Maximum continuous charge current: 6 A</p> <p>2.6. Short detection: Cut off load</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	5	pc	110.00	550.00
9	<p><b>Storage - 3D filament dry box</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) PCS OF 3D FILAMENT DRY BOX, with constant temperature and humidity, moisture-proof and dust-proof with heating function specially developed for 3D printing filaments.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p>	2	pc	3250.00	6,500.00

	<p>2.1. Rated power: 100 – 240 VAC ~50/60 Hz</p> <p>2.2. Power output: 12 VDC, 3 A</p> <p>2.3. Power of drying heater: 36 W</p> <p>2.4. Maximum temperature: 80 °C</p> <p>2.5. Weighing power: 0.1 W</p> <p>2.6. Weighing load: 2 kg</p> <p>2.7. Weighing error: ±0.02 kg</p> <p>2.8. Filament diameter: 1.75 mm / 2.85 mm / 3 mm</p> <p>2.9. Operating time adjustment range: off/2/4/8 hours / normally open</p> <p>2.10. Must be dust-proof and moisture-proof</p> <p>2.11. Strong compatibility and can adapt to a variety of wire diameters</p> <p>2.12. Compatible with most of the 1 kg filament reels on the market</p> <p>2.13. With fixed temperature of 60 °C ±10°C</p> <p>3. PACKAGE INCLUSION</p> <p>3.1. One (1) pc adapter</p> <p>3.2. One (1) pc user manual</p> <p>4. WARRANTY</p> <p>4.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>4.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>4.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>5.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>5.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
10	<p><b>Battery - LiFePO4 Battery Pack</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) PCS OF LITHIUM IRON PHOSPHATE (LiFePO4) BATTERY PACK, to be used to charge LiFePO4 batteries needed for arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Capacity: 24 Ah (307.2 Wh)</p> <p>2.2. Maximum discharge rate: 20 A</p> <p>2.3. Maximum charging rate: 20 A</p> <p>2.4. Charging voltage: 14.4 V</p> <p>2.5. Disconnect voltage: 10 V</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully</p>	2	pc	5500.00	11,000.00



	<p>performed within fifteen (15) calendar days.</p> <p><b>4. DELIVERY AND PAYMENT TERMS</b></p> <p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
11	<p><b>Tool - Mallet Hammer</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF ONE (1) PC OF MALLET HAMMER, to be used in the pilot testing sites of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Hammer type: Sledgehammer</p> <p>2.2. Material:</p> <p>2.2.1. Head: Medium carbon steel</p> <p>2.2.2. Handle: Fibreglass</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	1	pc	2600.00	2,600.00
12	<p><b>Workshop Consumables - Blind Rivet</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF THREE (3) BAGS OF BLIND RIVET, to be used in assembling different parts of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Rivet type: Blind</p> <p>2.2. Rivet diameter: 4.8 mm ±2mm</p> <p>2.3. Rivet length: 20 mm ±2mm</p> <p>2.4. Fixing hole diameter: 4.9 mm ±2mm</p> <p>2.5. Material:</p> <p>2.5.1. Body: Stainless steel</p> <p>2.5.2. Mandrel: Stainless steel</p> <p>2.6. Thickness of material:</p>	3	bag	480.00	1,440.00

	<p>2.6.1. Minimum: 11 mm ±2mm 2.6.2. Maximum: 15 mm ±2mm 2.7. Standards: DIN 7337 2.8. Color: Grey 2.9. Finish: Plain</p> <p>3. WARRANTY 3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials. 3.2. Warranty service shall commence from the date of end-user acceptance. 3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p>4. DELIVERY AND PAYMENT TERMS 4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP. 4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user. 4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
13	<p><b>Workshop Consumables - Sandpaper</b> 1. GENERAL OVERVIEW 1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) BOXES OF SANDPAPER, to be used in removing unnecessary dirt present on the prototype boards of arQ 2.0. 1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS 2.1. Quantity: 100 pcs per box 2.2. Material: Silicon carbide 2.3. Grit: #1000 2.4. Waterproof 2.5. Must be electro coated</p> <p>3. WARRANTY 3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials. 3.2. Warranty service shall commence from the date of end-user acceptance. 3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p>4. DELIVERY AND PAYMENT TERMS 4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP. 4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user. 4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	2	box	800.00	1,600.00
14	<p><b>Cable - Male SMA to Female SMA</b> 1. GENERAL OVERVIEW 1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF FOUR (4) PCS</p>	4	pc	1150.00	4,600.00

	<p>OF MALE SMA TO FEMALE SMA, to be used in connecting antennas to prototype boards of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Terminated</p> <p>2.2. 1st connector:</p> <p>2.2.1. Style: SMA</p> <p>2.2.2. Contact gender: Male</p> <p>2.3. 2nd connector:</p> <p>2.3.1. Style: SMA</p> <p>2.3.2. Contact gender: Female</p> <p>2.4. Overall impedance: 50 ohms</p> <p>2.5. Coaxial type: RF</p> <p>2.6. Voltage rating: 250 V</p> <p>2.7. Color: Black</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
15	<p><b>Workshop Consumables - Sandpaper</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TWO (2) BOXES OF SANDPAPER, to be used in removing unnecessary dirt present on the prototype boards of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Quantity: 100 pcs per box</p> <p>2.2. Material: Silicon carbide</p> <p>2.3. Grit: #400</p> <p>2.4. Waterproof</p> <p>2.5. Must be electro coated</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p>4. DELIVERY AND PAYMENT TERMS</p>	2	box	800.00	1,600.00

	<p>4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
16	<p><b>Tool - Bolt cutter</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF ONE (1) PC OF BOLT CUTTER, to be used in the pilot testing sites of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Material: Steel</p> <p>2.2. Cutting ability must be up to ¼ inch or 6 mm</p> <p>2.3. Length: 42 inches</p> <p>2.4. Able to cut bolts, chain, threaded rod, cable wire and more</p> <p>2.5. With adjustable and replaceable jaws</p> <p>2.6. With cushioned non-slip rubber grips</p> <p>2.7. With hardened steel blades</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	1	pc	3025.00	3,025.00
17	<p><b>Storage &amp; Organizing Box</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF FOUR (4) UNITS OF STORAGE AND ORGANIZING BOX, to be used in safeguarding electronic components and some equipment needed for arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Durable</p> <p>2.2. Material: High quality plastic material</p> <p>2.3. Capacity: up to 12 liters</p> <p>2.4. Size: 41.5 cm x 26.5 cm x 15.5 cm ±5 cm</p> <p>3. WARRANTY</p>	4	unit	275.00	1,100.00

	<p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
18	<p><b>Storage &amp; Organizing Box</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF TEN (10) UNITS OF STORAGE AND ORGANIZING BOX, to be used in safeguarding electronic components and some equipment needed for arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Material: High quality plastic material</p> <p>2.2. Capacity: up to 22 liters</p> <p>2.3. Size: 44 cm x 29.2 cm x 23 cm ±5 cm</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	10	unit	280.00	2,800.00
19	<p><b>Tool - Hole Saw</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF ONE (1) SET OF HOLE SAW, to be used in the pilot testing sites of arQ 2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Contents:</p> <p>2.1.1. Six (6) pcs of Hole Saw:</p> <p>2.1.1.1. 1 x 7/8" (22 mm)</p>	1	set	2200.00	2,200.00

	<p>2.1.1.2. 1 x 1 1/8" (29 mm)  2.1.1.3. 1 x 1 3/8" (35 mm)  2.1.1.4. 1 x 1 3/4" (44 mm)  2.1.1.5. 1 x 2" (51 mm)  2.1.1.6. 1 x 2 1/2" (64 mm)  2.1.2. Two (2) pcs Arbors:  2.1.2.1. 3/8" (9.5 mm) hex shrank arbor  2.1.2.2. 7/16" (11 mm) hex shrank arbor  2.1.3. One (1) pc adapter</p> <p><b>3. WARRANTY</b>  3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.  3.2. Warranty service shall commence from the date of end-user acceptance.  3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p><b>4. DELIVERY AND PAYMENT TERMS</b>  4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.  4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.  4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>				
20	<p><b>Tool - Electric drill refitting plate shears</b></p> <p><b>1. GENERAL OVERVIEW</b>  1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF FIVE (5) PCS OF ELECTRIC DRILL REFITTING PLATE SHEARS, to be used in the pilot testing sites of arQ 2.0.  1.2. The ABC includes all applicable government taxes and services charges.</p> <p><b>2. TECHNICAL SPECIFICATIONS</b>  2.1. Material: Steel and iron  2.2. Scope of application: 12 – 21 V lithium drill  2.3. Maximum shear capacity:  2.3.1. Iron sheet: 0.3 – 1 mm  2.3.2. White sheet: 0.3 – 1.2 mm  2.3.3. Steel: 0.8 – 1 mm  2.3.4. Copper sheet: 1.5 mm  2.3.5. Aluminum sheet: 1.5 mm  2.4. Equipped with sharpening blades that are wear-resistant and with high cutting efficiency</p> <p><b>3. WARRANTY</b>  3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.  3.2. Warranty service shall commence from the date of end-user acceptance.  3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.</p> <p><b>4. DELIVERY AND PAYMENT TERMS</b>  4.1. The goods must be delivered within thirty (30) calendar days upon issuance of NTP.  4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the</p>	5	pc	400.00	2,000.00

	End-user. 4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.				
21	<p><b>Workshop Consumables - Silica gel</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF THIRTY (30) BUNDLES OF SILICA GEL, to be put inside the arQ</p> <p>2.0.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. High quality Silica Gel</p> <p>2.2. Environmentally friendly</p> <p>2.3. CAS no: 112926-00-8</p> <p>2.4. MF: SiO2</p> <p>2.5. ENECS No.: 231-545-4</p> <p>2.6. Purity: 99.8%</p> <p>2.7. High temperature resistance</p> <p>2.8. PH level: 4 – 7</p> <p>3. WARRANTY</p> <p>3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.</p> <p>3.2. Warranty service shall commence from the date of end-user acceptance.</p> <p>3.3. Any replacement service must be successfully performed within fifteen (15) calendar 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 NTP.</p> <p>4.2. Full payment will only be given once the item is completely delivered, inspected, and accepted by the End-user.</p> <p>4.3. No payment shall be made for the supplies and materials not yet delivered under this contract.</p>	30	bundle	165.00	4,950.00
22	<p><b>Laptop Accessory - Webcam</b></p> <p>1. GENERAL OVERVIEW</p> <p>1.1. DOST-ASTI seeks qualified and competent bidders for the SUPPLY AND DELIVERY OF ONE (1) PC OF WEBCAM, to be used to scan the QR codes being put in the arQ data loggers.</p> <p>1.2. The ABC includes all applicable government taxes and services charges.</p> <p>2. TECHNICAL SPECIFICATIONS</p> <p>2.1. Color: Black (Preferred)</p> <p>2.2. Lens:</p> <p>2.2.1. Type: Hybrid lens</p> <p>2.2.2. Angle of view: 80°</p> <p>2.3. Focus type: Fixed focus</p> <p>2.4. Video analysis degree: FHD 2160P</p> <p>2.5. USB type: USB 2.0/USB-C</p> <p>2.6. Microphone type: Built-in dual noise reduction microphone</p> <p>2.7. Length of connection line: 1.5 m</p> <p>2.8. Supports 3840 x 2160 resolution</p>	1	pc	4600.00	4,600.00

- 2.9. With automatic light correction
- 2.10. Equipped with 4K full HD auto focus
- 2.11. With multi-angle adjustable bracket
- 2.12. With removable camera protection cover
- 2.13. Equipped with built-in omnidirectional dual noise reduction microphone
- 2.14. Equipped with anti-jamming protective magnetic ring to reduce signal interference
- 2.15. Plug and play

**3. WARRANTY**

- 3.1. Must have at least six (6) months of warranty from the time of delivery which covers defects in materials.
- 3.2. Warranty service shall commence from the date of end-user acceptance.
- 3.3. Any replacement service must be successfully performed within fifteen (15) calendar days.

**4. DELIVERY AND PAYMENT TERMS**

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

**TOTAL APPROVED BUDGET FOR THE CONTRACT (ABC):**

**Php 108,820.00**

**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.