



**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>	Mar-31-2023, 2:00 PM		
<b>RFQ No.:</b>	23-03-4299	<b>Date:</b>	March-27-2023
<b>PR No.:</b>	ROAMER-23-03-16295	<b>Date:</b>	March-20-2023

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>Fabrication of Mobile Robot Platform</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 Fabrication, Assembly, and Delivery of One (1) Unit Mobile Robot Platform to be used in the development of the autonomous land-based mobile robot under ROAMER Project.</p> <p>1.2. The approved budget for the contract is inclusive of all applicable government taxes and service charges.</p> <p>1.3. Detailed fabrication reference drawing(s) will be provided upon signing of the Non-Disclosure Agreement.</p> <p>2. Technical Specifications</p> <p>2.1. Materials</p> <p>2.1.1. Aluminum Sheet – 3.2 mm thickness</p> <p>2.1.2. Stainless Steel Sheet – 1.5 mm thickness</p> <p>2.1.3. Stainless Steel Rod – 12 mm diameter</p> <p>2.1.4. Necessary and Spare Fasteners (i.e., bolts, nuts, etc.)</p> <p>2.2. Included Parts</p> <p>2.2.1. Anti-Spark Switch - Aluminum PCB (Printed Circuit Board) 300A</p>	1	lot	660000.00	660,000.00

- 2.2.1.1. Quantity: Two (2) pcs
- 2.2.1.2. Hardware: Latest version
- 2.2.1.3. Max Voltage: 20S (90V, safe for 80V) or better
- 2.2.1.4. Continuous Current: At least 150A
- 2.2.1.5. Maximum Current: At least 300A
- 2.2.1.6. LED Button Diameter: 12 mm
- 2.2.2. Dual Electronic Speed Controller
  - 2.2.2.1. Quantity: Two (2) pcs
  - 2.2.2.2. Dual FSESC6.7 with Aluminum PCB
  - 2.2.2.3. Hardware: Latest version
  - 2.2.2.4. Firmware: Latest version
  - 2.2.2.5. Voltage: 8V-60V (Cells: 3-13S LiPo, safe for 3S to 12S LiPo)
  - 2.2.2.6. Current
    - 2.2.2.6.1. Continuous Current: At least 100A (single), at least 200A (dual)
    - 2.2.2.6.2. Instantaneous Current: At least 400A (single), at least 800A (system)
  - 2.2.2.7. BEC: 5V@1.2A output, 3.3V 1A output for external electronic equipment
  - 2.2.2.8. Supported Sensors: ABI, HALL, AS5047, AS5048A
  - 2.2.2.9. EPRM: At least 150000
  - 2.2.2.10. Regenerative Braking Capacity: Yes
  - 2.2.2.11. Communication Ports: At least USB, CAN, UART COMM port
  - 2.2.2.12. Motor/Power Wires Size: 12 AWG
  - 2.2.2.13. Programmable: Yes
- 2.2.3. Brushless DC Motor
  - 2.2.3.1. Quantity: Four (4) pcs
  - 2.2.3.2. BLDC Belt Motor Battle Hardened 6384 190 KV 4000W
  - 2.2.3.3. Max Power: 4000 Watts, 190KV
  - 2.2.3.4. Max Current: 95 Amps
  - 2.2.3.5. Max Volts: 4-13S
  - 2.2.3.6. Max Torque: 9Nm
  - 2.2.3.7. Motor Resistance: 0.05Ohm
  - 2.2.3.8. Weight: 1100g
  - 2.2.3.9. Motor Size: 6384
    - 2.2.3.9.1. Length: 84 mm
    - 2.2.3.9.2. Diameter: 63 mm
  - 2.2.3.10. Shaft
    - 2.2.3.10.1. Diameter: 8 mm
    - 2.2.3.10.2. Length: 30 mm
    - 2.2.3.10.3. Shape: Round
  - 2.2.3.11. Stator: 0.2 mm thickness lamination Japan steel
  - 2.2.3.12. Magnet: N42SH high-temperature curved magnet
  - 2.2.3.13. Number of Poles: 14
- 2.2.4. Motor Pulley
  - 2.2.4.1. Quantity: Six (6) pcs
  - 2.2.4.2. Bore Diameter: 8 mm
  - 2.2.4.3. Width: 16 mm
  - 2.2.4.4. Material: Steel
  - 2.2.4.5. Tooth: 16T
  - 2.2.4.6. Pitch: 5 mm
  - 2.2.4.7. Shaft: 8 mm
- 2.2.5. Electrical Skateboard Motor Keyway
  - 2.2.5.1. Quantity: Six (6) pcs

- 2.2.5.2. Length: 14 mm
- 2.2.5.3. Width: 3 mm
- 2.2.5.4. Height: 3 mm
- 2.2.6. Modular Absolute Encoder
  - 2.2.6.1. Quantity: Four (4) pcs
  - 2.2.6.2. AMT223C-V
  - 2.2.6.3. Encoder Type: Absolute
  - 2.2.6.4. Encoder Technology: Rotary
  - 2.2.6.5. Input Voltage: 3.8 - 5.5 VDC
  - 2.2.6.6. Output Type: 12 Bit Multi-Turn
  - 2.2.6.7. Shaft Diameter: Assorted sleeves
  - 2.2.6.8. Operating Temperature: -40 °C to 105 °C
  - 2.2.6.9. Maximum Rotational Speed: 8000 RPM (12-bit resolution)
  - 2.2.6.10. Absolute Resolution: 12 Bit Multi-Turn
  - 2.2.6.11. Orientation: Axial
  - 2.2.6.12. Communication: SPI
- 2.2.7. Wheel Set for Longboard
  - 2.2.7.1. Number of Sets: Two (2)
  - 2.2.7.2. Wheel
    - 2.2.7.2.1. Quantity: Four (4) pcs
    - 2.2.7.2.2. Wheel Diameter: 8 inches
  - 2.2.7.3. Belts
    - 2.2.7.3.1. Quantity: 2 pcs
    - 2.2.7.3.2. Width: 20 mm
  - 2.2.7.4. Wheel pulleys
    - 2.2.7.4.1. Quantity: Two (2) pcs
- 2.2.8. Electric Motor Mount for DIY Double Kingpin Trucks
  - 2.2.8.1. Quantity: Three (3) pcs
  - 2.2.8.2. Suitable for 6384 motor
  - 2.2.8.3. 63 series motor mount 3
  - 2.2.8.4. Axle Diameter: 8/10 mm
  - 2.2.8.5. Material: Aluminum Alloy
  - 2.2.8.6. Color: Black
- 2.2.9. Steel Mitre Gear
  - 2.2.9.1. Quantity: Four (4) pcs
  - 2.2.9.2. Bore: 12 mm Bore
  - 2.2.9.3. Teeth: 20
  - 2.2.9.4. Module: 2
  - 2.2.9.5. Gear ratio: 1:1
  - 2.2.9.6. Material: S45C induction hardened steel with chemi-black finish
  - 2.2.9.7. Tensile Strength: at least 569 N/mm<sup>2</sup>
  - 2.2.9.8. Pitch Angle: 45°
  - 2.2.9.9. Face Angle: 48°
- 2.2.10. Six (6) Circuit ATO Standard Series Fuse Block with Ground Bus [880027-BP]
  - 2.2.10.1. Quantity: One (1) pc
  - 2.2.10.2. Fuse Type: ATO/ATC
  - 2.2.10.3. Type: Fuse Blocks
  - 2.2.10.4. Box Dimensions: 3"H x 7"W x 8"L
  - 2.2.10.5. WT: 0.8 lbs.
  - 2.2.10.6. Continuous Current Rating: At least 100A
  - 2.2.10.7. Current Rating per Circuit: 30A Max
- 2.2.11. 40A 32VDC Fuse Automotive
  - 2.2.11.1. Quantity: Ten (10) pcs
  - 2.2.11.2. Fuse Type: Automotive (ATO), Blade type
  - 2.2.11.3. Current Rating: 40A
  - 2.2.11.4. Voltage Rating: 32V
  - 2.2.11.5. Dimensions (LWH): 19.10 mm x 5.10 mm x

- 12.30 mm
- 2.2.12. Fuse Holder 60A 32V 1 Circuit Blade
  - 2.2.12.1. Quantity: Two (2) pcs
  - 2.2.12.2. Fuse Holder Type: Holder
  - 2.2.12.3. Fuse Type: Blade (MAXI)
  - 2.2.12.4. Current Rating: 60A
  - 2.2.12.5. Voltage: 32V
  - 2.2.12.6. Termination Style: Screw Terminal
- 2.2.13. 80A 32VDC Fuse Automotive
  - 2.2.13.1. Quantity: Two (2) pcs
  - 2.2.13.2. Fuse Type: Automotive (MAXI), Blade Type
  - 2.2.13.3. Current Rating: 80A
  - 2.2.13.4. Voltage Rating: 32V
  - 2.2.13.5. Dimensions (LWH): 29.21 mm x 8.85 mm x 21.59 mm
- 2.2.14. Sixty (60) A AC 32VDC Fuse Automotive
  - 2.2.14.1. Quantity: Two (2) pcs
  - 2.2.14.2. Fuse Type: Automotive (MAXI), Blade Type
  - 2.2.14.3. Current Rating: 60A
  - 2.2.14.4. Voltage Rating: 32V
  - 2.2.14.5. Dimensions (LWH): 29.21 mm x 8.85 mm x 21.59 mm
- 2.2.15. Pillow Block Bearing
  - 2.2.15.1. Quantity: Four (4) pcs
  - 2.2.15.2. Inside Diameter: 12 mm
  - 2.2.15.3. Material: Cast Iron
  - 2.2.15.4. Bearing Unit Type: Pillow Block
  - 2.2.15.5. Centre Height: 30.2 mm
  - 2.2.15.6. Mount Hole Size: 13 mm
  - 2.2.15.7. Length: 127 mm
  - 2.2.15.8. Depth: 31 mm
  - 2.2.15.9. Overall Height: 62 mm
  - 2.2.15.10. Mount Hole Centre-to-Centre: 95 mm

3. Warranty

3.1. The item and all of its parts must have one (1) year of warranty from the time of delivery which covers defects in fabrication and materials. Warranty service shall commence from the date of end-user acceptance.

3.2. Any replacement service for defective and incorrect items must be successfully delivered within fifteen (15) calendar days upon receipt of notice from end-user or DOST-ASTI Property and Supply Section.

4. Payment and Delivery Terms

4.1. Price must be inclusive of government taxes and other charges.

4.2. The goods must be delivered within sixty (60) calendar days upon issuance of Notice to Proceed.

4.3. Payment will be processed 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.

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

**Php 660,000.00**

## 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.