



ASTI-FM 03-10
REV 1/30 APR 2024

DOST-ASTI Bids and Awards Committee
Notice of Negotiated Procurement -Two Failed Biddings

RFQ No.: 24-04-4786	Date: Jul-29-2024
PR No.: GAA-24-04-19020	Date: Apr-08-2024

The Advanced Science and Technology Institute (ASTI) , through its Bids and Awards Committee, will undertake **Negotiated Procurement:Two-failed Biddings** for the item/s listed below. Interested proponents are invited to attend **Negotiated Conference** at ASTI Building, Ground Flr. ASTI Bldg, C. P. Garcia Ave, U.P.Campus Diliman, Quezon City on: **August 5,2024 , 9:00 AM.**

For inquiries, you may call the BAC Secretariat at **+63 2 426-9759/60 local 1206/1212** and look for Ms. Katherine B. Ramos

Respectfully,

BAYANI BENJAMIN R. LARA
BAC Chairperson

ITEM NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE	TOTAL PRICE
1	<p>SPECTRUM ANALYZER</p> <p>1. OVERVIEW</p> <p>1.1. The DOST-ASTI is looking for a qualified and competent Service provider for the Supply and Delivery of One (1) Lot Spectrum Analyzer to be used for Project testing and Deployment Activities</p> <p>1.2. The Approved Budget for the Contract is inclusive of all taxes and service charges.</p> <p>2. TECHNICAL REQUIREMENTS</p> <p>2.1. GENERAL SPECIFICATIONS</p> <p>2.1.1. Frequency Range: 9kHz to 9GHz</p> <p>2.1.2. Displayed Average Noise Level (DANL): -164 dBm or better (Preamp ON) in order for the spectrum analyzer to measure weak signals (RBW=1Hz)</p> <p>2.1.3. Spectral Purity-SSB Phase Noise: -123 dBc/Hz (maximum) @ 10 MHz</p> <p>2.1.4. Amplitude Accuracy: ± 1.3 dB (maximum) @ ≤ 9GHz</p> <p>2.1.5. Markers: Up to 12 Markers</p> <p>2.1.6. Display Type: Full Touchscreen (Capacitive) or with Keypad Combination, with Screen Protector</p> <p>2.1.7. Display Monitor: at least 10" for better viewing.</p> <p>2.1.8. Display Resolution: 1280 x 800 pixels for better resolution.</p> <p>2.1.9. Screen Strength IK08 (protected against a 5 joule impact)</p> <p>2.1.10. Display Features: Impact resistance and Touch Gestures Support</p>	1	lot	3050000.00	3,050,000.00

2.1.11. Resolution Bandwidth (RBW): 1 Hz to 10 MHz

2.1.12. Software: Graphical User Interface (GUI) Control from a PC with Report

2.1.13. Generating Capability

2.1.14. GPS Receiver: Satellite System Supported

2.1.15. Audio Speaker: Internal, External Headphone Supported

2.1.16. USB Cable Interface: any compatible USB cable

2.1.17. Data Storage: Internal (8 GB); USB Flash Drive or SD Card (≥ 1 GB)

2.1.18. VSWR: 1.0 to 2.0 (typical)

2.1.19. Power Supply: AC/DC Power Supply, Car Power Adapter (DC/DC)

2.1.20. Connectors and Cables: Ethernet Cable, SMA Plug to BNC Jack

2.1.21. Adapter with Cable

2.1.22. Battery: Lithium-ion (Li-Ion)

2.1.23. Battery Operation: At least two (2) hours
Typical Instrument

2.1.24. Operation on Full Charge

2.1.25. Weight: ≤ 6 kg.

2.1.26. Carrying Case: Soft Case and Large Transit Case with Wheels and Handle

2.2. Inclusive of the following features:

2.2.1. INTERFERENCE FINDER and AM/FM AUDIO DEMODULATION FOR SPECTRUM ANALYZER

2.2.1.1. Setup: Integration Bandwidth, Power Limit, MAX/MIN Level, Volume Audio

2.2.1.2. Tone: 20 Hz to 20 kHz Demod

2.2.1.3. Frequency: Full Range of Instrument

2.2.1.4. Audio Demodulation: AM, USB, LSB, Wideband FM, Narrowband FM

2.2.1.5. Markers: Selectable Demodulation Marker (1 to 12)

2.2.1.6. Audio: Toggle On/Off

2.2.1.7. Volume: 0% to 100%

2.2.1.8. Record Audio: Up to 100,000 s

2.2.1.9. Squelch Level: -120 dBm to +30 dBm

2.2.1.10. Interference Triangulation: Triangulates on source of interference location using eCompass and digital maps displayed on screen.

2.3. COVERAGE MAPPING FOR SPECTRUM ANALYZER

2.3.1. Measurements: Channel Power, Spectral Density, RSSI, Field Strength, Power Flux Density

2.3.2. Measurement Set-up Map Type: Indoor or Outdoor Frequency (Excluding RSSI): Center/Start/Stop, Frequency Step, Frequency Offset

2.3.3. Span (Excluding RSSI): Span (Manual/Increment 1, 2, 5), Full Span, Last Span, Zero Span

2.3.4. Amplitude: Reference Level (Manual/Auto and Offset), Scale/Division, Y-Axis Unit, Preamp (on/off), Attenuation (Auto/Manual), Field Strength Bandwidth: RBW/VBW (Auto/Manual), VBW Type (Linear/Logarithmic), RBW:VBW Ratio, SPAN:RBW

Ratio Mapping Colors: Customizable Amplitude Range Threshold for each color Point Distance or Time Set-up: Repeat Type (1s to 60s), or Distance (1 m to 10,000 m) Save: Setup, KML Points, PNG, Tab Delimited Recall: Setup, KML Points File, Measurement File (fmspa) Antenna: Portable (Rubber Duckie), Nominal Impedance: 50- ohm, Gain: 5dBi (typical), Antenna Kit; Adapter for Antenna Kit; 50Ω

2.4. ANTENNA

2.4.1. Antenna: Directional, Log Periodic – at least 680MHz up to 10 GHz; Nominal Impedance: 50-ohm; Gain: 45dBi (typical) and with Antenna Casing GPS Antenna, Gain: 25dB Item no.2: Interference Hunter

2.5. INTERFERENCE HUNTER

2.5.1. Bandwidth: 9 kHz to 6 GHz

2.5.2. Power: Preamp on 0.6 Watts, Preamp off 0.5 Watts

2.5.3. Preamplifier bandwidth: 10 MHz to 6 GHz

2.5.4. Electronic Compass: Powered from USB; Accuracy $\pm 5^\circ$, nominal; Interface USB

2.5.5. GPS Receiver: Satellites Tracked 12; GPS Locking Time Cold start: 30s; Warm start:

2.5.6. 2s, Position Uncertainty ± 2 meter,

2.5.7. Environmental Operating Temperature -10°C to $+55^\circ\text{C}$; Maximum Humidity 95 %; Altitude 4600 meters; Shock MIL-PRF-28800F Class 2; Storage -40°C to 71°C .

3. TRAININGS

3.1. Inclusive of Free Theoretical and Field-Testing Training

3.2. The winning bidder should conduct a training/workshop about the operation and usage of the equipment to be procured. The training should be conducted within the prescribed delivery period (50 days upon receipt of NTP)

3.3. Estimated no. of participants: 10 persons

3.4. Duration: 1-3 days

3.5. Tentative Venue: DOST-ASTI

3.6. The schedule of training/workshop shall be agreed upon with the End-user.

3.7. All costs, including meals, rental of equipment/venue (if any), supplies (if any) and other requirements related to the training/workshop, will be shouldered by the winning bidder.

4. SERVICE SUPPORT

4.1. Local Service Engineer must be available, capable, and knowledgeable in basic and minor repair and troubleshooting

5. WARRANTY

5.1. Three (3) years for Spectrum Analyzer and One year for the battery

6. Post Qualification

6.1. Trial testing within five (5) working days

7. Delivery

7.1. Fifty (50) calendar days upon issuance of

