



ASTI-FM 03-11
REV 0/2 APR 2018

**DOST-ASTI Bids and Awards Committee
Invitation to Bid (Public Bidding)**

ITB No:	19-07-2536 - A	Date:	August-16-2019
PR No:	NetMeshR4-19-06-8017	Date:	June-20-2019
Source of Funds:			
Total ABC:			
Time, Date & Venue of Pre-bid Conference:			
Time and Date of Submission of Bids:			
Time, Date & Venue of Opening Bids:			
Date of availability of Complete Set of Documents:			
Deadline of Potential Bidder's Clarifications:			
Deadline of ASTI's Supplemental Bid Bulletin:			
Delivery Schedule:			

The Advanced Science and Technology Institute (ASTI), through its Bids and Awards Committee (BAC), hereby invites all interested bidders to submit their bids for the item(s) listed below. Guidelines regarding the format, eligibility, technical and financial documents needed are described in the Instruction to Bidders of the Philippine Bidding Documents

Bidding will be conducted through open competitive bidding procedures using a non discretionary "pass/fail" criterion as specified in the 2016 R-IRR of RA 9184.

A complete set of Bidding Documents may be purchased by interested bidders upon payment of a fee for the Bidding Documents. It is also downloadable for free of charge at DOST-ASTI's website - www.asti.dost.gov.ph

For further inquiries, contact ASTI's BAC Secretariat via email at bac-sec@asti.dost.gov.ph. Interested bidders may also call the number - (632)-426-7423 and look for ASTI's BAC Secretariat.

Respectfully,

PEDRITO B. MANGAHAS
Chairperson, BAC-1

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	Hardware Verifier (Network/ protocol analyzers) Two (2) sets Hardware Verifier 1. Each set is composed of one (1) pair of main unit, modules, and accessories 1.1. User interface 1.1.1. Active TFT Display 1.1.2. Touchscreen functionality 1.1.3. Supported language: English 1.2. Data/Service interface 1.2.1. Supports various USB Data Interface - type A, type mini - B, etc. 1.2.2. Ethernet - 10M/100M/1000M, RJ45 connector 1.2.3. WLAN - IEEE 802.11 b/g/n 1.2.4. Bluetooth 1.2.5. Internal clock: ±4.6 ppm or less (accuracy), STRATUM3 compliant 1.2.6. Provision for external clock input 1.3. Accessories	2	set	2255000.00	4,510,000.00

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- 1.3.1. Battery
 - 1.3.1.1. Rechargeable and can be easily replaced
 - 1.3.1.2. Operating time: 1.5 hours
 - 1.3.1.3. Remaining capacity indicator
- 1.3.2. Charger/Mains Adapter
 - 1.3.2.1. Input: 100 - 240 Vac, 50 Hz/60 Hz
 - 1.3.2.2. Output: DC voltage and current must be compatible with device requirements
- 1.3.3. Other accessories – bag, screw kit, stylus, utilities ROM
- 1.4. Environmental operating conditions
 - 1.4.1. Temperature
 - 1.4.1.1. Operating: 0° to +50°C (non-condensing)
 - 1.4.1.2. Charging: 0° to +40°C (non-condensing)
 - 1.4.1.3. Storage: –30° to +60°C (non-condensing, without battery or AC adapter)
–20° to +50°C (non-condensing, with battery and AC adapter)
 - 1.4.2. Humidity
 - 1.4.2.1. Operating: ≤85% RH (non-condensing)
 - 1.4.2.2. Storage and Transportation: ≤90% RH (non-condensing, without battery and AC adapter)
 - 1.4.2.3. Storage and Transportation: ≤85% RH (non-condensing, with battery and AC adapter)
- 1.5. Compliance/certification
 - 1.5.1. EMC: EN61326-1, EN61000-3-2
 - 1.5.2. LVD: EN61010-1
 - 1.5.3. RoHS: EN50581
 - 1.5.4. Laser safety: IEC 60825-1: 2007 CLASS 1, 21CFR1040.10
- 1.6. 10G Multirate transport interface
 - 1.6.1. Supports the following: OTN (OTU1), Ethernet (10 Mbps, 100 Mbps, 1 Gbps), SDH up to STM-16, SONET up to OC-48, PDH (E1, E3, E4), and DS_n (DS1, DS3), Ethernet 10G Single channel
 - 1.6.2. Available interface: RJ45, RJ48, SFP/SFP+, BNC
 - 1.6.3. The system should be able to perform and support the following tests, measurements, and functionalities:
 - 1.6.3.1. Ethernet tests
 - 1.6.3.1.1. Ethernet tests up to 10GBps
 - 1.6.3.1.2. IPv4 and IPv6
 - 1.6.3.1.3. TCP throughput (RFC6349, iPerf), Y.1564, IEEE 1588 v2, RFC 2544, Ping, Traceroute, BER, Multistream, OAM, SyncE, MPLS, MPLS-TP, Multistage VLAN, PBB, In-band Control, Auto discovery, Path-through
 - 1.6.3.1.4. Available filters – to extract relevant parts of traffic
 - 1.6.3.1.5. Thresholds – to highlight abnormalities
 - 1.6.3.2. eCPRI/RoE (IEEE1914.3)
 - 1.6.3.2.1. IPv4 and IPv6
 - 1.6.3.2.2. BER, VLAN, SyncE, IEEE 1588 v2, E-OAM
 - 1.6.3.3. OTN
 - 1.6.3.3.1. Errors, Alarms, Error Performance, Delay, APS Test, FEC Test, O.182 Test, Overhead Editing, Capture, TCM Monitoring and Generation, Tributary Scan
 - 1.6.3.4. SDH/SONET, PDH/DS_n
 - 1.6.3.4.1. PDH/DS_n Test, Tw-Way Monitoring,

Mapping, Errors, Alarms, Error Performance Delay, APS Test, Header Monitoring, Generation, Pointer Event Generation, Tributary Scan

- 1.6.3.5. Capable of frame capture for protocol analysis (such as Wireshark)
- 1.6.3.6. Electrical cable tests and optical signal level
- 1.6.3.7. Test automation through scripting or through provided software
- 1.6.3.8. Available test reports in pdf, xml or other format
- 1.6.3.9. Unit must be accessible and can be controlled remotely through built-in software

2. Other items

2.1.1. Optical Transceiver

- 2.1.1.1. Quantity: 2 pcs. per set (4 pcs total number of items to be delivered)
- 2.1.1.2. SFP+
- 2.1.1.3. Data rate up to 10 Gbps
- 2.1.1.4. 1310nm center wavelength
- 2.1.1.5. DFB laser transmitter, PIN photo detector receiver
- 2.1.1.6. -8 to -0.5 dBm TX Output power
- 2.1.1.7. -12 dBm RX Sensitivity
- 2.1.1.8. 3.3V supply voltage
- 2.1.1.9. LC/UPC Connector Duplex
- 2.1.1.10. Compliant to IEEE 802.3ae standard (optical interface)
- 2.1.1.11. Compliant to SFF-8431 (electrical interface)
- 2.1.1.12. RoHS6 compliant (lead free)

2.1.2. Video Inspection Probe for optical connectors

- 2.1.2.1. Quantity: 1 unit per set (2 units total number of items to be delivered)
- 2.1.2.2. Up to 400x digital probe
- 2.1.2.3. Auto pass/fail analysis based on IEC 61300-3-35 standard
- 2.1.2.4. USB Interface
- 2.1.2.5. Report generation capability
- 2.1.2.6. Includes pre-installed drivers and software
- 2.1.2.7. Includes connector tips - universal (1.25mm PC Male 2.5mm PC Male 2.5mm APC Male), bulk head (1.25mm PC Female (LC) 2.5mm PC Female (FC) 2.5mm PC Female (SC) 2.5mm APC Female (SC))
- 2.1.3 Items 2.1.1 and 2.1.2 must be compatible with Item 1 (main hardware unit)

3. Post Qualification

- 3.1. Trial testing within five (5) working days

4. Warranty

- 4.1. At least three (3) years

5. Delivery

- 5.1. 45 days upon receipt of NTP

6. Others

- 6.1. It should be noted that the above listed specifications are minimum specifications, bidders are encouraged to provide better specifications in their

<p> bids so long as it does not deviate too much from the intent of the original specifications. 6.2. 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 (45 days upon receipt of NTP). 6.2.1. Estimated no. of participants: 10 persons 6.2.2. Duration: 1-3 days 6.2.3. Tentative Venue: DOST-ASTI 6.2.4. The schedule of training/workshop shall be agreed upon with the End-user. 6.2.5. 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. </p>				
TOTAL APPROVED BUDGET FOR THE CONTRACT (ABC):				Php 4,510,000.00
RESERVATION CLAUSE				
<p>The Advanced Science and Technology Institute reserves the right to accept or reject any proposal, to annul the bidding process, and to reject all proposals at any time prior to contract award, without thereby incurring any liability to the affected proponent or proponents.</p>				