



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

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

ITB No:	19-02-2304	Date:	February-13-2019
PR No:	GAA-19-01-7165	Date:	January-09-2019
Source of Funds:	GAA		
Total ABC:	Php 10,500,000.00		
Time, Date & Venue of Pre-bid Conference:	February 26, 2019, 1:30 PM at DOST-ASTI		
Time and Date of Submission of Bids:	March 11, 2019, 12:00 PM		
Time, Date & Venue of Opening Bids:	March 11, 2019, 1:30 PM at DOST-ASTI		
Date of availability of Complete Set of Documents:	February 18, 2019		
Deadline of Potential Bidder's Clarifications:	March 01, 2019		
Deadline of ASTI's Supplemental Bid Bulletin:	March 04, 2019		
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,

PAUL JOHN M. SERRANO
Chairperson, BAC-2

NO.	TECHNICAL SPECIFICATIONS	QTY	UNIT	UNIT PRICE(Php)	TOTAL PRICE(Php)
1	<p>SAR Processing Software Charged to SAR with AIS project</p> <ul style="list-style-type: none"> - at least two (2) perpetual licenses, transferable to different machines as needed <p>I. Features Includes at least the following features:</p> <ul style="list-style-type: none"> - Synthetic Aperture Radar (SAR) image processing: SLC coregistration, SLC equalization and calibration, Reflectivity Map calculation, extraction of pointwise targets. - SAR Interferometry (InSAR): orbital data processing, interferogram calculation, interferogram flattening, interferogram filtering, phase unwrapping. - Differential SAR Interferometry (DInSAR): DEM conversion and resampling, topographic phase removal, residual phase processing, motion 	1	lot	10500000.00	10,500,000.00

estimation.

- Stacking of Differential Interferograms (SDInSAR): processing of series of interferograms for atmospheric delay suppression and motion estimation.
- Persistent Scatterers InSAR (PSI): full-processing chain for ground average deformation trend, ground elevation and atmospheric delay estimation.
- Urban Advanced PSI: PS real targets identification and classification (roofs, poles, dihedrals, trihedrals, fences, floor gratings)
- Temporary PSI: estimation of temporary targets (new constructions, demolitions, short-time structures)
- Multiple scattering centers PSI: estimation of double or multiple scattering centers per resolution cell in urban sites.
- Non-Linear PSI: estimation of non-linear trends (seasonal polynomial and non-parametric) in target displacement.
- Quasi-PSI: estimation of ground average deformation and ground elevation in areas where no PS targets can be detected.
- Unwrapped-PSI: time series analysis of unwrapped interferograms.
- Multi-Sensor analysis: combination (coherent or un-coherent) of data acquired by different sensors, with different characteristics (frequency, polarization) under different geometries
- DEM processing based on InSAR/Multi-Temporal InSAR results for DTM and/or DSM extraction
- Change detection exploiting pairs of images.
- Time Series Change detection exploiting image time series.
- Image classification based on results of previous modules

II. Data Visualization Features

Includes at least the following features:

1. Histograms generation with any of the data/results for any selection of pixels.
2. Plots generation in 2D, 3D, with colors or densities with any of the data/results for any selection of pixels.
3. Images generation with any of the data/results processed.

III. Data Export Features

Support for at least the following features:

1. Geocoded raster images in different formats.
2. Geocoded point-information, in 2D or 3D, with detailed information for each point (for GIS or Google Earth).
3. Hierarchical kmz files for a very efficient visualization in Google Earth.

IV. Small Area Analysis

Support for at least the following features:

1. Support for test processing
2. Browsing of final results on georeferenced optical layers, with possibility of displaying in colors any processing results and selecting point targets for characteristics listing and time series plotting.

V. Supported Sensors

Includes at least the following:

- ERS-1 and ERS-2 (CEOS and Envisat format)
- Envisat (stripmap, scansar)
- Sentinel-1 stripmap and IW (TOPS)
- Cosmo SkyMed (1,2,3,4) (stripmap, spotlight)
- TerraSAR-X (stripmap, spotlight, scansar, staring spotlight)
- Tandem-X
- Tandem-X bistatic pairs
- RadarSAT 1 and 2
- ALOS (ERSDAC and JAXA formats)
- ALOS-2
- Kompsat-5
- Gaofen-3
- Other sensors may be accommodated upon request and upon provision of necessary data

VI. Training

- Includes at least 5 days training on software usage and applications development
- Training shall be conducted at DOST-ASTI for at least 10 pax, unless agreed upon otherwise
- Supplier shall shoulder all necessary costs related to the training, including, but not limited to, the following: training documentation, meals, etc.

VII. Compatibility

- Must be compatible with latest Windows and Linux operating systems

VIII. Payment

- 90% to be paid upon successful acceptance of software licenses
- 10% to be paid upon completion of training
- all payments are subject to the usual government fees, taxes, and duties

Notes:

- at least 1 year support for maintenance updates, troubleshooting, and bug fixes
- Supplier must present an equivalent authorized reseller/distributor certificate
- Lowest calculated bidder must provide a technical demo/presentation prior to awarding
- Delivery: Licenses must be delivered within 30 days upon receipt of NTP, training to be scheduled within 6 mos. of delivery of licenses

TOTAL APPROVED BUDGET FOR THE CONTRACT (ABC):

Php 10,500,000.00

RESERVATION CLAUSE

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.