

Tender Notice: JSAC/14/2013 Dated 22.02.2013

Jharkhand Space Applications Center, Department of Information Technology, Govt. of Jharkhand invites sealed Tender from manufacturer or their authorized dealer for this region to supply and installation of **Differential Global Positioning System (DGPS)** at Jharkhand Space Applications Center, Engineers Hostel -1 Dhurwa, Ranchi.

Tender Reference		
1.	Date of commencement of tender document	23/02/2013
2.	The last date of submission of bids	22/03/2013 up to 3.00 p.m at JSAC, Ranchi
3.	Date and Time of Opening of Technical Bid	23/03/2013 at 12.00 a.m
4.	Date and Time of Opening of Price Bid (Commercial Offer)	To be announced after opening of Technical bid.
5.	Place of opening tender offers	Jharkhand Space Applications Center, 2nd Floor, Engineers Hostel – 1 Dhurwa, Ranchi-834004

A. Conditions of Tenders for Technical Bid.

1. A complete set of Tender document to be downloaded from <http://jsac.jharkhand.gov.in> and the fee of Rs 5000/- should be enclosed in form of Demand Draft drawn in favour of **Director, Jharkhand Space Applications Center payable at Ranchi** with the bid document at the time of submission.
2. The Tender must be accompanied by a Earnest Money Deposit (EMD) of Rs. **50000/-** in the form of Bank Draft Valid for period of 3 months drawn from a scheduled bank in favor of **Director , Jharkhand Space Applications Center payable at Ranchi**. Tenders not accompanied by earnest Money or incomplete in any respect will be rejected outright.
3. Tender Specific Authorization from the Principal Company is must for all participating vendors mentioning details like tender number, date and products for which the authorization is provided and the same should be enclosed in originals. The authorization from the Principal Company should be addressed to The Director, Jharkhand Space Application Center.
4. The tenderer should indicate specifically the **Make & Model** of the DGPS.
5. The Tenderers are required to furnish attested copies of Valid VAT clearance certificate from

the sales tax authority of the State of Jharkhand or any other State as applicable.

6. The Tenderers are required to furnish attested copies of Service Tax Registration certificate.

7. The tenderers are required to furnish attested copies of PAN card.

8. The rate quoted for the item must be inclusive of all applicable taxes and F.O.R.

9. Director JSAC reserves the right to accept or reject any tender offer without assigning any reason.

10. For item as given below tender should be submitted in two sealed envelopes separately written on it (i) Technical Bids (ii) Price Bid respectively and should be enclosed together in a common envelope, sealed and superscripted with the Tender Reference Number, Name of the Bidder.

Schedule of Payment

1. After satisfactory completion of the work, the agency will have to submit the challan/bill in triplicate with copy of Supply Order to this office and payment will be made by Jharkhand Space Application Center after passing of bill from this end.

2. 100% payment will be made after successful supply, Installation and training.

The number of items to be procured:

1.	1 DGPS Set (1 Base + 1 Rover), GPS Field Software(2 Licenses (1 for Base and 1 for Rover)) and GNSS DATA PROCESSING AND POST PROCESSING DESKTOP SOFTWARE (1 License)	EMD-50000/-
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The detail specification of DGPS is given below:

SL. No	Specification	Quantity
1	DGPS specification (Base & Rover having same specification) <ul style="list-style-type: none">• Processor – TI OMAP 3503.• Memory – Minimum Internal memory of 256 MB RAM.• Display: Transfective LED –backlit LCD, size: 4.2" diagonal, resolution 480X 640, luminance 280 cd/sq.m• Display resolution of 480x640 pixels.• Should have integrated 5 mega pixel or better camera with autofocus.• Operating system should be Windows Mobile 6.5 or higher.• Rugged and water resistant design (IP 65 standard)• External memory card slot micro/mini SD.• USB connectivity for data transfer• Integrated Wi-Fi and Bluetooth connectivity (Optional)• Voice recorder• High sensitivity integrated GPS receiver with embedded antenna. Enabled with fast acquisition time and accuracy under dense foliage.• GPS accuracy (HRMS) After correction: 10CM post processing	1 DGPS Set (1 Base + 1 Rover)

	<ul style="list-style-type: none"> • Channels: 200 or more. • Dual frequency GNSS receiver and antenna with multipath rejection technology for better accuracy. • Capable to work under forest canopy. • Update Rate: 1 Hz • Optional NMEA support. • The GPS device should be capable of tracking SBAS satellite signals. • The instrument should be supplied with software capable of loading base maps (shape file) in background. • Supplied software should have the capability to navigate to the features by selecting the features on the background map. • Supplied software should have the ability to collect new features in the field with attribute information and also export the data to shape file. • Battery – Rechargeable Lithium Ion battery with minimum 8 hours usage time with GPS on. • Optional USB charging facility • Ruggedness specifications compliance with IP 4X or above (Optional) • 24x7 technical supports on phone across the state. • Operating temperature of -20 °C to +50 °C • Storage temperature of -30 °C to +70 °C <p>The instrument should be supplied with standard accessories not limited to rechargeable battery with charger, stylus for touch screen operation, software and driver CD</p>	
2.	<p>GPS Field Software.</p> <p>(a) Should run on Microsoft Windows Mobile Version 6.0 Software platform for Pocket PCs or later.</p> <p>(b) Should be capable of</p> <ol style="list-style-type: none"> 1. Collecting data for a GIS or spatial data base 2. Navigating in the field 3. Should be able to collect GPS data. 4. Data captured should be post process able <p>(c) Should be able to create data dictionary with features and attributes.</p> <p>(d) Should have real time map display capability.</p> <p>(e) Should have support for in-field mission planning with Planning, sky plot and DOP graph, making it easy to find best time to collect quality data.</p> <p>(f) Should have the capability to take a raster or a vector image like bmp, JPEG, TIFF, Mr Sid, in the background for updation in the field.</p> <p>(g) Provide audio and visual warnings and alarms for loss of GPS position.</p> <p>(h) Data filtering and sorting</p> <p>(i) Should be able to read and write data to shape files.</p> <p>(j) Support for digitizing of points, lines or areas for simple feature capture when GPS is not available</p> <p>(k) Should have support for laser rangefinders</p> <p>(l) Should have password protection option</p> <p>(m) Should have provision to auto generate date and time attributes and auto increment data.</p> <p>(n) Should have the facility of taking offsets in the field manually.</p> <p>(o) Support point offsets including distance-bearing, bearing-bearing, triple bearing, distance-distance and triple distance offset types.</p>	2 Licenses (1 for Base and 1 for Rover)

	<p>(p) It should be possible to segment a line ie. record a continuous line with various segment with different attributes values.</p> <p>(q) It should also be possible to manually create features from map or by entering coordinates (Registration of points should be possible)</p> <p>(r) It should have the facility to send and receive e-mail attachments. It should be able to send & receive at least the following information via e-mail attachment, if required:</p> <ol style="list-style-type: none"> 1. Data Files 2. Data Dictionaries 3. Configuration Files 4. Complete projects. 	
3.	<p>GNSS DATA PROCESSING AND POST PROCESSING DESKTOP SOFTWARE SPECIFICATION</p> <p>Included software should be able to Post Process the GPS/GLONASS Data to improve the positional accuracy. In addition, it should be able to:</p> <ul style="list-style-type: none"> • Import background maps such as satellite imagery, remote sensing images, Aerial photographs, and vector maps. • Support GIS both export and import. • Support different datum transformations. • RINEX import and export facility. • Should have online help. • Should have the ability to create data dictionary with different point, line and area features with different attributes. • Should have the module to create/establish local co-ordinate system and export to the field device • Should be capable of transferring data to and from the field device. <p>Should be capable of downloading the base data from IGS base stations over the internet.</p>	1 License

B. Price Bid

Name of Work: *Tender Notice Inviting quotation for*

1. Supply and Installation of Differential Global Positioning System (DGPS)

Tender No. JSAC/14/2013

SL No.	Description of Item	Quantity	Rate	
			In figure	In Words
1.	1 DGPS Set (1 Base + 1 Rover), GPS Field Software(2 Licenses (1 for Base and 1 for Rover)) and GNSS DATA PROCESSING AND POST PROCESSING DESKTOP SOFTWARE (1 License)	01 Set		

1. Rate should be inclusive of all applicable taxes and F.O.R.

2. Price bid should be valid for 3 months.

Name and Signature of Authorized Person:

Name of Company.....

Address:

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Date:

C. Checklists

Sl. No	Items	Yes/No
1.	Tender Document Fee	
2.	EMD	
3.	Tender Specific Authorization from the Principal Company	
5.	VAT clearance certificate	
6.	Service Tax Registration certificate	
7.	PAN card	
8.	Make & Model of the DGPS	
9.	Technical Specification	

Signature