

GOVERNMENT COLLEGE OF ENGINEERING, KEONJHAR

(Formerly Orissa School of Mining Engineering [Degree Stream], Keonjhar)
At: Jamunalia, P.O.: Old Town, Dist., Keonjhar, Pin: 758002 (Odisha)
Tel: 06766-213180, 213181 (O)/ 254230 (Fax), Web: www.gcekjr.ac.in

INVITATION LETTER

Package Code: TEQIP-III/2019/OD/geco/48

Current Date: 30-Aug-2019

Package Name: DGPS

Method: Shopping Goods

Sub: INVITATION LETTER FOR DGPS

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	DGPS	1	Government College of Engineering, At: Jamunalia, Po: Old Town, Keonjhar Dist: Keonjhar, Pin: 758002, Odisha	NA

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. Quotation

- 3.1 The contract shall be for the full quantity as described above.
 - 3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.
 - 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
 - 3.4 Applicable taxes shall be quoted separately for all items.
 - 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
 - 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
 5. Quotation shall remain valid for a period not less than **30**days after the last date of quotation submission.

6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be Substantially responsive i.e. which
- 6.1 are properly signed; and
- 6.2 Confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.
8. Award of contract The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of Contract.
- 8.2 *The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be Incorporated in the purchase order.*
9. Payment shall be made in Indian Rupees as follows:

Payment Description	Expected Delivery Period (in Days)	Payment Percentage
Satisfactory Delivery, Installation and Satisfactory	45	100

10. Liquidated Damages will be applied as per the below:
 Liquidated Damages Per Day Min %:N/A
 Liquidated Damages Max %:N/A
11. All supplied items are under warranty of **24** months from the date of successful acceptance of items and AMC/Others is **0**.
12. You are requested to provide your offer latest by **14:00** hours on **14-Sep-2019**.
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any)
15. Testing/Installation Clause (if any) **SUPPLY AND INATALLATION AT GCE, KONJHAR WITHIN DUE DATE OF SUPPLY.**

16. Performance Security shall be applicable: **0%**
17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed quotation to be submitted/ delivered at the address mentioned below, **Government Engineering College, Keonjhar, The Principal At-Jamunalia, Post-Old Town, Dist-Keonjhar, Pincode-758002**
19. We look forward to receiving your quotation and thank you for your interest in this project.

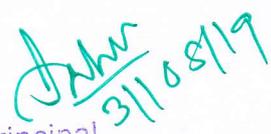
(Authorized Signatory)
Name & Designation


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Annexure I

DGPS TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATIONS BASE & ROVER INCLUDING ANTENNA RECEIVER, CONTROLLER, FIELD SOFTWARE & POST PROCESSING ETC.		
Sl. No	Point	Description
1	MAIN	Identical interchangeable Base & Rover complete system including accessories like Antenna receiver. controller and cables etc.
2.	BASE & ROVER	
2.1	TYPE	Antenna and receiver built in single housing with Bluetooth
2.20	TRACKING	GPS: L1C/A, L1C, L2C, L2E, L5 GLONASS: L1C/A, L1P, L2C/A, L2P, L3 SBAS: L1C/A, L5 (for SBAS satellites that support L5) Galileo: E1, E5A, E5B BeiDou (COMPASS): B1, B2 SBAS: QZSS, WAAS, EGNOS, GAGAN
3.	NO OF CHANNELS	400 Plus
4.	MODES	Static, Rapid Static kinematic, Real Time Kinematic
ACCURACY		
5	STATIC PERFORMANCE	
5.1	HORIZONTAL	3mm+0.1ppm
5.2	VERTICAL	3.5mm+0.4ppm
6	KINEMATIC & RTK PERFORMANCE	
6.1	Horizontal Accuracy	8mm + 1 ppm
	Vertical Accuracy	15mm + 1 ppm
CODE DIFFERENTIAL GNSS POSITIONING		
	Horizontal	0.25 m + 1 ppm RMS
	Vertical	0.50 m + 1 ppm RMS
	Time to RTK Initialization	Less than 8 sec
7.	LED STATUS INDICATOR	Tracking , transmission & Bluetooth etc
8.	COMMUNICATIONS	<ul style="list-style-type: none">• Serial: 3 serial on Port 1, full RS-232 serial (Dsub 9 pin) on Port 2• fully Integrated in built Radio Modem & support of External radio protocol• Cellular GSM/GPRS modem option.• Bluetooth
9.	POWER	Battery for continuous data logging at least 5 hours/each
10.	POWER CONSUMPTION	Not more than 3.2 watts
11.	WEIGHT	Receiver with battery weight should be less than <1.7 kg
12.	UPDATE RATE	20Hz or better
13.	OPERATIONAL TEMPURATURE	-40° C to +65° C
14.	STORAGE TEMPURATURE	-40° C to +75° C
15.	DUST & WATER PROTECTION	IP 67 or better
16.	SHOK/DROP	2m or more on to hard surface
17.	HUMIDITY	100%, condensing


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SPECIFICATION FOR CONTROLLER

Sl. No	Point	Description
1.	TYPE	Scratch-resistant, touch-screen display, highly readable in both low light and glaring sunshine.
2.	OPERATING SYSTEM	Microsoft® Windows Embedded Handheld 6.5
3.	WEIGHT	Not more than 1.5 kg
4.	CAMERA & GPS	5MP or more resolution with autofocus and LED Flash Inbuilt GPS with Geo-tagging Facility.
5.	DISPLAY	4.2"VGA LCD TFT with High visibility backlit LCD with 640x480 pixel.
6.	GRAPHICAL DISPLAY	Controller should be capable of creating complete points, lines in the field which will be displayed
7.	KEYBOARD	Full QWERTY key pad Hard with Numeric keyboard for numbering & function short keys
8.	MEMORY	256 MB of RAM or more Internal 8 GB or more flash storage
9.	BATTERY	More than 10-15 hours on operation condition on a single charge
10.	OPERATION	-30°C to +60°C or better
11.	STORAGE	-30 C to +70 C or better
12.	COMMUNICATION	Bluetooth, USB Port, Wi-Fi, 3G, Data communication interface
13.	DUST AND WATER PROTECTION	IP68 water proof and dust proof
14.	DROP	1 m or better

CONTROLLER FIELD SOFTWARE

Sl. No	Point	Description
1.	Should have following functions	<p>The software should be able to log data for all the signals tracked & Static, Fast Static, RTK. Automatic survey (by distance, by time, stop & go)</p> <p>Satellite view status (quality, position, sky view, satellites list, base info, PDOP, HDOP), Line, polygon, area calculation, National grids, System settings (units, precision, parameters, etc.)</p> <p>Stake Out Should support Graphical stakeout, not only for points but for Lines as well. Should be able perform Real Time Quality Control for stake out positions</p> <p>Feature Coding with Automatic drawing</p> <p>Active Background maps in the form of JPEG/TIFF, DXF/DWG</p> <p>Export to industry standard formats like CSV, DXF, KML etc</p> <p>Should support COGO functionality</p> <p>Calculation of transformation parameters from point list.</p> <p>Data formats input and outputs</p> <ul style="list-style-type: none"> • CMR: CMR+, CMRx input and outputs • RTCM: RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1 <p>NMEA outputs,</p>
2.	ELLIPSOIDS	All common ellipsoids, User definable ellipsoids
3.	MAP PROJECTIONS	Mercator, Transverse Mercator, User definable UTM and country specific Oblique Mercator, Lambert (1 and 2 standard parallels) Soldner Cassini, Polar Stereographic, Double Stereographic, RSO, other country specific projection
4.	GEOIDAL MODEL	Upload Geoidal model to system
5.	GRAPHICS	Graphical representation of points, lines and areas application result plots
6.	ICONS	Icons indicating the current status of measure modes, settings, battery etc. It should be possible to configure or see status of the iconed devices by touching on the screen
7.	CONFIGURATION SETS	Ability to store and transfer all instrument and application configuration settings for different operators, survey tasks etc.
8.	FREE CODING	Recording codes with optional attributes in between of measurements
9.	THEMATICAL CODING	Manual code entry or selection from a user defined coding points

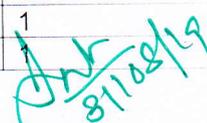
		lines and areas with optional attributes when measuring Manual code entry or selection from a user defined
10.	QUICK CODING	Recording a measurement with a point code or free code by entering numerical quick code from user defined code list
11.	AVERAGING	Averaging of multiple points within user defined
12.	ON BOARD PROGRAMMES	Surveying, Staking, COGO, Area , Two point distance, Hidden point measurements.
13.	ON BOARD APPLICATION	Controller should have software to work in both GPS and TPS mode and should support survey data collection, job creation, Graphical stakeout, Map screen with zoom in

OFFICE SOFTWARE

Sl. No	Point	Description
1.	PLATFORM	Inbuilt CAD Platform Calculate distance & Angle between points , Line Joining, polygon, text, circle, etc The software should be a combined software capable of handling the GPS, TPS and Digital level data
2.	IMPORT	Capable of importing the RAW Data logged from GPS and RINEX data with maps created in the field to be downloaded as such and should be capable of downloading data from Total stations and Digital levels
3.	EXPORT	Capable of Exporting the data in RINEX format as well as capable of transferring the maps directly to CAD with the code lists enabling the symbols to be attached without manual editing.
4.	REPORTING	Software should be capable of generating HTML Style reports directly for the surveyed data
5.	PROCESSING OPTIONS	Capable of Processing the Raw static data of GPS and GLONASS for both manually and automatically
6.	DATUM TRANSFORMATION	Capable of transferring the data from one datum to another for given set of common points with or without the knowledge of datum
7.	ADJUSTMENT	Capable of performing 3D adjustments for the surveyed area of GPS networks.
8.	OPERATING SYSTEM	Designed to run on windows 7, windows 8, windows 10 operating system
9.	DATUM CONVERSION	Facility to compute parameters for datum conversion
10.	COGO Calculation	Software should be capable of computing the coordinates of unknown points using reference points and coordinates
11.	IMAGE REFERENCING	Software should have an image referencing module and the surveyed data should be imported directly on this back ground Raster image
12.	IMPORT RTK DATA	Should be able to handle RTK data and be able to Process RTK data
13.	SURFACE & CONTORING	The software should be a capable of Surface Modelling, 3D visualization and quick contouring.

ALL ACCESSORIES, HARDWARE AND SOFTWARE SHOULD BE OF SAME OEM BASE STATION

SL. No.	ITEM	QUANTITY (No)
1.	Receiver	1
2.	Wooden Telescopic Tripod	1
3.	Tribrach with optical plummet,	1
4.	Rechargeable batteries	2
5.	Quick charger , charge two battery simultaneously	1
6.	Carrying case	1
7.	Post Processing software	1
8.	Controller with Battery , Charger & cable	1
9.	Controller Software	1
10.	Controller mount	1
11.	External Battery Cable	1


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ROVER STATION

SL. No.	ITEM	QUANTITY (No)
1.	Receiver	1
2.	Wooden Telescopic Tripod	1
3.	Tribrach with optical plummet,	1
4.	Rechargeable batteries	2
5.	Quick charger , charge two battery simultaneously	1
6.	2m Aluminum Telescopic	1
7.	Aluminum Telescopic bipod	1
8.	Controller with Battery , Charger & cable	1
9.	Controller Software	1
10.	Pole bracket	1
11.	Controller mount	1

Special NOTE: -

1. Bidders are requested to go through the Technical specifications All the Fields are must (100% matching or higher specification) for Technical Evaluation of the DGPS Equipment. Otherwise bid will be rejected.
2. The above noted Specifications are the guideline for quoting the rates. The Tendering Authority has discretionary power in accepting/rejecting the bid submitted by the tenderer with any deviation from the above noted specifications for DGPS Equipment.

Ank
31/08/19

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FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _____
To: _____

Sl. No.	Description of goods \ (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex-Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____ (Amount in figures)

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Rupees _____ amount in words) within the period specified in the Invitation for Quotations. We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier
Name: _____
Address: _____
Contact No. _____