

Tender No. 27-287/2016-FI

**TENDER DOCUMENT
FOR PROCUREMENT OF CUSTOMISED GAGAN
ENABLED RUGGED GPS PDAS FOR DATA
COLLECTION OF FOREST/TOF INVENTORY**

**Date of issue & Sale of Tender Document
14th March, 2016**

**Closing date & Time of Receipt of Tender
4th April, 2016 (14:00 hrs.)**

**Opening of Technical Bid
4th April, 2016 (15:30 hrs.)**

**Opening of Financial Bid
(Will be informed separately
to technically qualified bidders)**



**FOREST SURVEY OF INDIA
MINISTRY OF ENVIRONMENT, FORESTS & CC
GOVERNMENT OF INDIA
KAULAGARH ROAD, P.O. IPE
DEHRADUN**

Forest Survey of India
Ministry of Environment, Forests & CC
Government of India
Kaulagarh Road, P.O. IPE
Dehradun

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Forwarding letter

(To be filled in by Tendering Party)

From:
.....
.....
.....

To
Address of tender issuing authority

Sub: Tender for procurement of customized GAGAN enabled rugged GPS PDAs for data collection of forest/TOF inventory

Sir,

We are submitting herewith our tender (Technical and Financial) for supplying **customized GAGAN enabled rugged GPS PDAs for data collection of forest/TOF inventory**. We have read and understood all the terms and conditions governing in the tender. We agree to abide by these terms and conditions. We are enclosing herewith your receipt No..... dated as a proof of having purchased the non transferable tender document/non-refundable demand draft of Rs 1000/- as the cost of tender document downloaded from FSI website. Accordingly, we are enclosing herewith our Earnest Money Deposit in the form of Demand Draft No..... dated for Rs..... (in words)..... drawn in favour of Assistant Director (Accounts), Forest Survey of India, Dehradun to participate in the tender.

All pages of the Tender Document along with copy of “Terms & Conditions” contained herewith have been duly signed.

Stamp & Signatures of the Authorised Signatory
(Name of the Authorised Signatory).....
Name of the firm
Complete Address.....
.....
Date.....
Telephone Nos.....
E-Mail ID.....

Last Date of submission of Tender: 4th April, 2016

**FOREST SURVEY OF INDIA
Ministry of Environment, Forests & CC
Government of India**

TENDER DOCUMENT

Forest survey of India (FSI) invites SEALED TENDERS in two bid system(Technical Bid and Financial Bid) from OEMs/Device Integrators to procure **15 Rugged GAGAN Enabled GPS PDAs** under a three years warranty period for its use for data collection of forest/TOF inventory. The Technical Specifications of the device have been given in Annexure-A and Financial bid has been given in Annexure-B.

2. Pre-qualification Criteria for Tendering firm:

- i. The bidder should have been registered in India and in operations for a period of at least 5 years as on last date of response submission.
- ii. The average annual turnover of the bidder should not be less than Rs. 1 Cr for the last three financial years ending not later than 31.03.2015. This should be backed by audited balance sheets and profit & loss account for the same period.
- iii. The bidder should have been profitable in the year ending on 31.03.2015
- iv. The bidder should have a positive Net Worth of more than Rs. 2.00 Cr as of 31.03.2015
- v. Preference would be given to domestically manufactured electronic goods in procurement as per guidelines issued by the Govt. through notification No. 8(78)/2010-IPHW dated 10-02-2012, and subsequent amendments / clarifications/notifications. To fall under this category and avail preference, Bidders must indicate percentage domestic value addition in terms of Bill of Material (BOM).
- vi. The bidder should have executed or have under execution at least three projects over the past five years involving OEM supply of GPS PDAs & its integration on web based or enterprise level software projects in any State Govt./PSU/Central Govt. /Govt. Educational Institute or Large Private Enterprise in India.
- vii. The bidder should submit valid documentary proof of Certificate of Registration of Agency, Service Tax, Sales Tax/VAT and the details of Income Tax Registration Number (PAN), and Audited Balance Sheet for last three financial years excluding current year.

- viii. The bidder needs to submit profile with all contact details, list of clients, and jobs undertaken/completed (with scope of works undertaken).
- ix. The bidder must be having an ISO 9001:2008 certification for quality management in software development and preferably ISO 27001:2005 certification for information security management system (Attached copy of certification to be provided).
- x. The bidder must be CMMI Level 3 organization for software development.
- xi. The bidder must be currently empanelled with an Indian Govt. / Public Sector Undertaking firm (Attached copy of empanelment to be provided) as an IT/GIS Service provider.
- xii. The firm should be an OEM of Industrial PDA/Authorized Reseller of OEM with experience of supplying such device to any Govt. organization in India in last one year.
- xiii. Joint Ventures or Consortiums are not eligible for this tender.
- xiv. The bidder shall be the single point of contact for FSI Dehradun and shall be solely responsible for all warranties, upgrades, patches and guarantees etc. offered by the OEM etc. Please attach an undertaking to this effect.
- xv. The bidder must specify its complete compliance regarding the minimum device technical specification as in Annexure –A
- xvi. The bidder must give an undertaking mentioning that it can complete the project inclusive of all hardware and software components within 30 days of issue of Purchase order.
- xvii. The bidder must fulfill the above qualification conditions for evaluation of their responses. Technical scoring would be undertaken for participants meeting the Pre- Qualification Criteria only.
- xviii. Selection will be based on Quality and Cost Based Selection (QCBS) method with 80% weight age to technical score and 20% to financial score. Financial score will be calculated by considering the lowest bidder's amount as 100 and calculating the other bidders score in respect to the lowest bidder.
- xix. Response of bidder fulfilling the above eligibility/ pre-qualification conditions will only be evaluated by the duly constituted evaluation committee. Responses of the bidder not fulfilling the eligibility/ pre-qualification conditions given above shall be summarily rejected. Undertaking for subsequent submission of any of the above documents will not be entertained under any circumstances.
- xx. The authority reserves all right to change/amend any requirements or clauses as is required for the execution of the project and such changes would be notified only to the participants of the RFP.
- xxi. Participants scoring more than 80 out of 100 in technical scoring would be accepted to participate in the financial bid submitted during the Technical Bid submission stage and any responses scoring lower than 80 in technical scoring would be summarily rejected. **The minimum technical score "St" required to pass is: 80 Points**
- xxii. Criteria and point system for the evaluation of Commercial Proposals are:
Financial Score Sf = 100 x Fm / F
in which **Sf** is the financial score, **Fm** is the lowest price and **F** is the price of the proposal under consideration.
- xxiii. Final Evaluation:

The weights given to the Technical and Financial Proposals are: T = 0.8 & P = 0.2

Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the Data Sheet.

$$\text{Total Score } S = St \times T\% + Sf \times P\%$$

3. Technical Scores

DESCRIPTION	Parameters	Points
The responder's average annual turnover should be at least Rs. 1 Crore (Rupees One Crore Only) during the last three years. The turnover refers to a company and not the composite turnover of its subsidiaries /sister concerns etc.	Yes	10
Preferably the firm should be an OEM of Industrial PDA device or GPS based data logging equipment. Proof – Factory details & ISO certification for manufacturing of electronics products in India	Yes	10
	No	0
Minimum supply of 200 nos. of GPS enabled devices for State Govt./PSU/Central Govt. /Govt. aided Educational Institute in the last three years. (Documentary evidence as in Work Order/ Work Certificate / Proof of Supply documents to be provided)	>500	10
	200 - 500	5
The firm should have executed at least 3 Web GIS solutions for State Govt./PSU/Central Govt./Govt. aided Educational Institute in last three years with minimum value of 50 Lakh each.(Documentary evidence as in Work Order/ Work Certificate/Proof of Supply documents to be provided)	3	5
	>3	10
The firm should have executed at least one mobile app development project for State Govt./PSU/Central Govt./Govt. aided Educational Institute in last three years Documentary evidence as in work order or completion certificate need to be attached.	1-2	5
	>2	10

DESCRIPTION	Parameters	Points
Certification: Minimum ISO Certification in Electronics goods servicing. Proof – Copy of valid certification	Yes	5
The firm should have CMMi level III certification or higher	Yes	5
The firm should have executed at least one full cycle process from Data Collection by GPS based device to Monitoring by web-based spatial and non-spatial reporting. Documentary evidence as in work order or completion certificate need to be attached.	1	5
	>1	10
The firm should have executed at least one Forestry related software application of minimum value of 25 Lakh on a single order for State Govt./PSU/Central Govt. /Govt. aided Educational Institute in last three years. Documentary evidence as in work order or completion certificate need to be attached.	25-50 Lakh	5
	>50 Lakh	10
<u>Demo & Presentation of the system</u> The bidder must show the following features:- 1. GAGAN support for the device. 2. Any on-field data collection application already implemented and running for State Govt./PSU/Central Govt./Govt. aided Educational Institute 3. Proposed Methodology	20	
Total Points	100	

*Last three years are 2012-2013, 2013-14, and 2014-15 for Technical points.

4. Preparation of Tenders (Responses)

Envelope 1 – PRE QUALIFICATION CRITERIA – Sealed envelope marked as PRE QUALIFICATION CRITERIA and containing proof of all items mentioned in Section 2 organised serially. It should also contain the original tender.

Envelope 2 – EMD to be drawn in favour of Assistant Director (Accounts), Forest Survey of India, Dehradun for an amount of **Rs. 15,000/- As per the Public Procurement Policy for Micro & Small Enterprises order 2012 of Govt of India,**

units registered under Single Point Registration Scheme of NSIC are exempted from payment of tender cost and EMD.

Envelope 3 – TECHNICAL RESPONSE – Sealed Envelope marked as TECHNICAL RESPONSE containing the Technical Proposal and Product Brochure along with a section with proof of documents organized exactly in the same serial as mentioned in the section TECHNICAL SCORES under Section 3.

Envelope 4 – FINANCIAL BID – Sealed Envelope marked as FINANCIAL BID and should have the financial offer exactly in the same manner as illustrated in the Annexure-B- **Financial Bid in the tender document** (signed by Authorised signatory) along with Power of Attorney.

The content on the envelope, RFP number, responder's name & address should be clearly marked on the top of all the sealed envelopes. All the envelopes thus prepared shall be put in a single sealed envelope clearly mentioning the RFP number, responder's name & address on the top of the sealed envelope.

Bidders will first be evaluated for Envelope 1 & 2. Then Envelope 3 will be opened for technical evaluation and depending on the achievement of minimum score. Envelope 3 will only be opened for bidders selected through evaluation of all previous envelopes. Late bids will be summarily rejected and only those offers which are submitted within the date and time of submission as mentioned in document will be evaluated.

Any deviation by bidders in organization the documents as mentioned above will lead to immediate cancellation of such bids.

All response should be valid for a period of 180 days from issue of the RFP notice.

TECHNICAL RESPONSE should mandatorily comprise of the following:

1. The proposed solution [Hard Copy as well as in Soft Copy (CD) in pdf format only] as per the below schedule.
 - (i) Understanding of Requirements and scope of work
 - (ii) Proposed Technical Architecture
 - (iii) Detailed Technical Solution
 - (iv) Detailed Technical Specifications of the Equipment and/or products Training Plan
 - (v) Submission of Prototype Models for validation and Testing
 - (vi) Completion of Delivery Schedule
 - (vii) Case study of similar installation in India
 - (viii) Technical Scores Compliance – As per format given in RFP with supporting documents.
2. The complete project inclusive of hardware and software to be deployed should be completed within a 40 day period or in a phased manner as decided by DG,

FSI from the date of release of Purchase Order. Bidders who already have tested and proven solution for the same are encouraged to bid.

5. Terms and conditions

1. **Amendments to Invitation of Bid:** At any time prior to the deadline for submission of bids, Authorised Officer reserves the right to add/modify/delete any portion of this document by issuance of an addendum, which would be published on the website and will also be made available to all the bidders who have indicated their intention to bid. The addendum shall be binding on all bidders.
2. **Financial Bid:** Unsigned, unstamped or illegible financial bids would be summarily rejected. Financial bids should be submitted only in the official letterhead of the company. Financial bids should be signed by the authorized signatory of the company and **Power of Attorney** for the same needs to be provided along with the RFP document. All pages of the blank original RFP document and the Response of the Bidder need to be signed by the authorized signatory or else the bid will stand cancelled.
3. **Performance Guarantee:** Successful Bidder awarded the project would have to provide a Performance guarantee of 5% from a Scheduled nationalized Bank in India in the form of an unconditional bank guarantee favoring Assistant Director (Accounts), Forest Survey of India, Dehradun and any failure of the bidder to adhere to the terms of delivery and technical requirements or as enumerated in the agreement to be signed between the successful bidder and DG, FSI would lead to encashment of the bank Guarantee and blacklisting of the firm.
4. **Support Services:** The devices to be sent to the vendor's registered service Centre Preferably at Dehradun for scheduled and unscheduled maintenance during the warranty period of three years. For onsite maintenance of the devices within warranty period if necessary, only the available Govt. accommodation will be provided by Forest Survey of India.
5. **Capacity Building of FSI:**
 - (A) The responder agency will involve FSI in development of software applications right from beginning to completion. The firm will share the source code of application/software with FSI. Necessary training will be imparted by the firm to FSI at all stages of development of application/software.
 - (B) The firm will ensure that the capacity building of FSI technical personnel will be done so as to enable him to make necessary changes/updatons in the application/ software at FSI itself.
 - (C) **Submission and Opening of Responses:**

- A. The responses complete in all respects addressed to The Director General, Forest Survey of India, Kaulagarh Road, Dehradun and should reach him by the date and time fixed as per the Schedule of Events of this RFP only.
- B. All the Events of the bidding process will be conducted as per the date and time stipulated in the Schedule of Events of this RFP only.
- C. DG, FSI, reserves the right to accept or reject the whole; accept or reject part of any or all responses at its sole discretion without assigning any reason whatsoever.
- D. The responses including the proposed solution(s) as submitted by the eligible responders shall be evaluated by a duly constituted evaluation committee set up by DG, FSI. The tenders will be opened as per the schedule of the events mentioned in the tender. These responders may be called to present the solution proposed by them to the said committee at their own cost at a specified date, time and venue to be communicated to them at least three days in advance.
- E. DG, FSI reserves the right to call for fresh RFPs at any stage and/or time.
- F. DG, FSI reserves the right to modify, expand, restrict, scrap, refloat the Expression of Interest and/or float a new and/or separate tender without assigning any reason for the same.
- G. DG, FSI at its discretion may use the complete proposed solution and/or a part of, technical specifications as submitted by any responder(s) with the response(s) for tendering. The said usage does not confer any right and/or claim of any sort and/or manner on the responder(s) for this RFP and/or tender irrespective of the outcome of this RFP.
- H. The responder shall bear all costs associated with the preparation and submission of its response, and this office will in no case be responsible or liable for these costs, regardless of the conduct or the outcome of the RFP process.

(D) Payment Terms:

- A. Recipients of the GPS Device who are authorized by DG, FSI will release 50% payment within 15 days of receipt of the goods from the vendor under perfect working condition. Balance will be released within 30 days in 2 installments after assessing the working performance of the device.
- B. The above payment term is subject to modification before the supply contract is finalized as per the direction of DG, FSI.

(E) Governing Law and Disputes:

- A. The responses and any contract resulting there from shall be governed by and construed according to the Indian Laws.
- B. All disputes or differences whatsoever arising between the parties (i.e. DG, FSI and the Responder) out of or in relation to the construction, meaning and operation or effect of this RFP Document or breach thereof, shall be settled amicably. If, however, the parties as above are not able to resolve them amicably, the same shall be settled by arbitration in accordance with the applicable Indian Laws, and the award made in pursuance thereof shall be binding on the parties, as above. The Arbitrator/s shall give a seasoned award. Any appeal will be subject to the exclusive jurisdiction of the courts of Uttarakhand only.
- C. The successful Responder shall continue work under the contract during the arbitration proceedings unless otherwise directed in writing by DG, FSI.
- D. The venue of the arbitration shall be Dehradun and shall be governed by the rules as specified by Indian Council of Arbitration.

(F) Corrupt or Fraudulent Practices:

- A. Responders & Vendors shall observe the highest standard of ethics during the procurement and execution of the contract.
- B. DG, FSI will reject a proposal for award if it determines that the Responder recommended for award is engaged in corrupt or fraudulent practices in competing for the contract in question.
- C. DG, FSI will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm was engaged in corrupt or fraudulent practices in competing for this response, or in executing the contract.

(G) Indemnity Clause:

- A. The firm should sign an indemnity bond to safeguard against any pirated software, equipment, design etc. being supplied to the DG, FSI.
- B. The selected vendor shall indemnify DG, FSI against all third party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied software/hardware/manpower etc. and related services or any part thereof.

(H) Force Majeure clause:

If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is

prevented or delayed by reasons of any war, hostility, act of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics quarantine restrictions, strikes, lockouts or acts of God (hereinafter referred to as "events"), provided notice of happenings of any such event is duly endorsed by the appropriate authorities/ chamber of commerce in the country of the party giving notice, is given by party seeking concession to the other as soon as practicable, but within 21 days from the date of occurrence and termination thereof and satisfies the party adequately of the measures taken by it, neither party shall, by reason of such event, be entitled to terminate this contract, nor shall either party have any claim for damages against the other in respect of such nonperformance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of the purchaser as to whether the deliveries have so resumed or not, shall be final and conclusive, provided further, that if the performance in whole or in part or any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, the purchaser may at his option, terminate the contract.

ANNEXURE-‘A’

Minimum Technical Specification of Rugged GPS-PDAs to be procured through this FRP:

Criteria	Minimum Requirement	Complied/Not	Remarks
Operating System	Embedded Linux Kernel Ver.3.0 (LTSI) or Higher		
Processor	ARM Cortex-A8 processor		
Processor Core	Min.1 GHZ		
RAM	Min. 512 MB		
Internal Memory	Min. 1 GB		
External Storage	Min. 8GB SSD		
Display	A. Size 5 inch or more, TFT B. True Colour, Transmissive C. Sunlight readable high-bright display with Corning Gorilla Glass or similar Enclosure D. FSTN Backlighting Enabled E. Display must not Degrade or Fade on Prolonged Use. F. Min. Resolution: 800x480 Pixel.		
Position Format	Latitude & Longitude having all option of display in Degree, Minute & Second, Degree Decimal, UTM and other Grids including user defined grids.		
Constructions	A. 6 Feet Drop Resistant B. Dust Proof, Ports are adequately Protected. C. Fully gasketed, IP 65 Complaint/Waterproof/ Water-resistant D. Ergonomic Form Factor E. Protective Casing of high impact plastic alloy with rubberized exterior padding.		
Operating Conditions	-10 to 60 Deg. Celsius, Upro 95% Humidity (Non-Condensing)		
PC Connection/ Interface	<ul style="list-style-type: none">• USB and Mini USB with NMEA, RTCM 104 DGPS Data Format, RS232 with NMEA.		

	<ul style="list-style-type: none"> • Plug & Play Supported • Should not require a device install CD. Installation software must be embedded in the device. 		
Communication	<ul style="list-style-type: none"> • GSM 2G & 3G Supported for Voice & Data • Wi-Fi on 802.11a, b, c, g & n Architecture • The device should act as a Wi-Fi Modem to Communicate independently with other Wi-Fi enable devices within a range of 10m without an external Modem. 		
GPS Performance:			
GPS Receiver	<p>A. High Sensitivity & High performance GPS Receiver on U-BLOX M8/SiRF Prima II/ <i>SiRFstarIV</i> / <i>SiRFstarV</i> Grade Chipsets having integrated SBAS Support.</p> <p>B. SBAS Enabled.</p> <p>C. 16 paralalled channel or more</p> <p>D. RECEIVER: L1, C/A</p> <p>E. GPS Receiver Continuously track and uses up to 16 Satellite to compute and update position in addition to the GAGAN Signal.</p> <p>F. It must capture and utilize GAGAN Signal as DGPS Correction as and when available.</p> <p>G. Clear display of DGPS Symbol or Icon when SBAS DGPS Correction is Carried Out by the device.</p> <p>H. Display of Satellite Signal Strength</p> <p>I. GAGAN SBAS supported DGPS Correction, with NMEA Format GPS Data Output.</p> <p>J. Should support most widely used 100 Datums.</p>		

	K. SI Units Supported		
Acquisition Time	<ul style="list-style-type: none"> • Warm: 15 second Approx. • Cold: 45 second Approx. • Auto Locate: 5 minutes Approx. 		
Update Rate	1 Second, Continuous		
Waypoints	> 1000 with names and graphic symbol, >10 nearest (automatic), >10 proximity		
Routes	> 50 reversible routes with up to 50 points each, plus MOB & Track Back Mode.		
Tracks	Automatic Track log; >10 saved Tracks; retrace your path in both direction.		
Alarm	Approach & Arrival, Off-Course, Proximity Waypoint, Low Battery, High Temperature etc.		
SBAS Accuracy & DGPS	<ul style="list-style-type: none"> • Position: < 3 Meter, 95% typical • Velocity: 0.05 meter/sec steady state • Must Receive GAGAN Signal PRN 127 & 128 as and when available • GAGAN Signal Display Icon 		
Antenna	Built-in Quadrifilar Helix/Internal		
Battery	<ul style="list-style-type: none"> • Internal Rechargeable lion 3.7 V, 8000 mAh • Battery Life: Min.8-10 hours 		
USB	At least one standard USB port		
Keypad	Physical 4 keys + virtual Keypad		
Camera	Fully Integrated embodied back Camera, Minimum 5 MP auto focus with LED Flash, Auto Geo tagging support. GPS & Time Stamp on the Photos		
Device Control, Setting and Application Management	Should Support Min.20 Embedded Apps for various types of Forestry/Land Base Activity Data Collection.		

	Provision of Server side web based software interfacing with the GPS device for data transfer and onboard software/firmware updates		
	Provision to Lock the Administrator defined default settings of the device. (Default/User or Admin defined Setting Lock)		
	Protection of Software Installation & Delete through a Password Locking Provision for the Administrator.		
Weight	Less than 600 grams including Battery		
Accessories	Data downloading cable (Original), Carry Case, User Manual, and Training Video CD.		
Software / Application Development Requirements			
	Embedded software on the device for Forest Data Collection		
	Web Application for Web Server side Integration with GPS for dynamic analysis, query and reports		
	Web Application hosting for server side application and database		
	Training & Deployment of devices along with software/ application		

ANNEXURE-‘B’

Financial Bids

Financial Bids should be submitted in a separate envelope duly sealed, stamped and signed in the following format. The financial bids of only technically eligible parties would be opened and the financial bid envelope should be clearly marked as “Financial Bid for RFP No.....”

Item	Unit price	Taxes	Total Cost for units
GAGAN Enabled GPS- PDA; per unit inclusive of three years warranty from date of supply.		 (Per Unit Cost inclusive of taxes and duties)
Embedded software on the device for Forest Data Collection inclusive of three years warranty from date of supply		 (Per Unit Cost inclusive of taxes and duties)
Software for Web Server side Integration with GPS for dynamic analysis, query and reports inclusive of three year warranty from date of installation		 (Overall cost)
Web hosting charges for server side application and database for a total period of three years		 (Overall cost)
Training & Deployment of devices		 (Per Unit Cost inclusive of taxes and duties)

Total Cost in figures:	
Total Cost in words:	

Unit Prices must be submitted for different slabs of supply, under different tables, in the financial bid. There would be four financial bids for four such slabs.

- A. Total Cost for less than 50 Units
- B. Total Cost for 50 - 100 Units
- C. Total Cost for 100 - 300 Units
- D. Total Cost for 300 - 500 Units

Note: Submitting Bids in other format shall lead to a non-responsive Bid and is liable for rejection