

**Notice Inviting Tender**  
**For**  
**FOREST BOUNDARY SURVEY**  
**BY DGPS/ETS & SUPPLY AND INSTALLATION**  
**OF MONOLITHS.**

**Short Tender Notice No. 02/2016**



झारखण्ड सरकार

**Government of Jharkhand**

Deputy Conservator of Forests, Planning, Tribal Area, Ranchi

**Department Of Forests, Environment & Climate Change**

SIDA Building, Van Bhawan, Doranda, Ranchi

Tel:- 0651-2481161.,

E-mail: [dcfpta@gmail.com](mailto:dcfpta@gmail.com)

Website-<http://www.forest.jharkhand.gov.in>

**Department Of Forests, Environment & Climate Change**  
**Government of Jharkhand**

**Notice Inviting Tender**  
**For carrying out**

**Forest Boundary Survey**  
**By DGPS/ETS & Supply and installation of stone**  
**Monoliths**

**Short Tender Notice No. 02/2016**

Department of Forests, Environment & Climate Change, Government of Jharkhand intends to carry out "FOREST BOUNDARY SURVEY BY DGPS/ETS" Technology along the forest boundary in various forest divisions of the state of Jharkhand.

Therefore tenders are invited from the reputed agencies involved in such works. Interested agencies may download the Tender document from the website [www.forest.jharkhand.gov.in](http://www.forest.jharkhand.gov.in) or may obtain the same from office of the Deputy Conservator of Forests, Planning, Tribal Area, SIDA Building, Van Bhawan Doranda, Ranchi. Tel:-0651-2481161, during office hours in working days.

The agencies/bidders are advised to study the Tender document carefully. Submission of Bids shall be deemed to have been done after careful study and examination of the Tender document with full understanding of its implications. The agencies downloading the tender document from the website should deposit the tender fee of 1000/- (One Thousand rupees) in the form of DD. The tender should be accompanied by Earnest Money Deposit of 800000/- (Eight Lakh rupees) and if the EMD was previously deposited by the agencies as per earlier tender notice 01/2015 and the subsequent corrigendum and was not returned back a photocopy along with the bid should be attached.

**Schedule of Events**

<b>Last date &amp; Closing Time for Submission of Bids</b>	<b>: 24 February, 2016 at 03.00PM</b>
<b>Place for Submission of Bids</b>	<b>: Office of the DCF, Planning, (TA) SIDA Building, Van Bhawan, Doranda, Ranchi</b>
<b>Date &amp; Time for opening of Technical bid</b>	<b>: 25 February, 2016 at 11.00AM</b>
<b>Date &amp; Time for opening of Financial Bid</b>	<b>: 25 February, 2016 at 04:00 PM</b>

  
Deputy Conservator of Forests,  
Planning, Tribal Area, Ranchi

# CONTENTS

Addl. Principal Chief Conservator of Forests, Development  
Jharkhand, Ranchi

Sl. No.	Description	Page No.
<b>1</b>	<b>2</b>	<b>3</b>
1	Invitation for Tender	3
2	Particulars of Tender	5
3	Instructions to Bidders	7
4	General Terms and Conditions	11
5	Scope of Work	11
6	Format for Covering Letter	19
7	Check List of Technical bid	20
8	Format for declaration that the provisions of Tender document are acceptable.	22
9	Format for Price Bid	24
10	Information about the Bidding Firm	25
11	Declaration by the Bidder	26
12	Format for Technical details (availability of equipments)	
13	Format for letter of Authorization for Signing Bid/Proposal	27
14	Format for financial requirement –Annual Turnover	28
15	Format For Financial Requirement -Net Worth Certificate	29
16	Format for profiles of the Projects completed	30
17	Format for Brief Agency Profile	31
18	Format for declaration by bidder/agency that the agency has not been blacklisted	32
19	Format for declaration by bidder/agency that the agency has not been Convicted by court of law.	32
20	Format for submission of experience details	33
21	Format for availability of technical man power	34
22	Format for undertaking to confirm capability and resources	35
23	Format for certificate for satisfactory completion of the projects	36



# Invitation of Tender

## For

**Selection of suitable agency for carrying out Forest Boundary Survey by DGPS/ ETS & supply and installation of stone monoliths for control stations.**

1. **The Short Tender notice published in Newspapers vide Short Tender Notice No. – 02/2016 is a part of this Tender Document.**

2. **Project Background**

The State Government of Jharkhand have decided to carry out DGPS survey along the boundaries of forest land, documentation of forest land, demarcation of forest boundaries and preparation of Geo-referenced maps in various forest divisions of the state. Initially the DGPS survey will be conducted covering approximately 50000 (Fifty Thousand) forest boundary pillars in various forest divisions during the financial year 2015-16. Number of boundary pillars is liable to be changed and also extended further in other areas in the state.

The forest boundaries are to be surveyed by the said method. For undertaking the above task of geo-referencing of cadastral map, satellite data and forest boundary, State Government needs support services from agencies in the area of **Land Survey/survey of the forest boundary by using DGPS/ETS Technology**. The present requirement is for the precise determination of geo-coordinate of each boundary pillar, boundary of the forest area and supply of Geo-referenced maps.

3. **Evaluation of Bids : -**

Received Technical and Financial bids will be evaluated separately in two stages. In Stage-I Technical bids of all the bidders will be evaluated first on a given time & date as per schedule of events in presence of the bidders/their authorized representatives. In Stage-II Financial Bids will be evaluated in the presence of bidders/their authorized representatives on the given date and time as per the schedule of events. The Financial Bids of only those bidders will be opened and considered who will be declared technically qualified during first stage evaluation.

### **Stage-I: Technical Bid**

A bidder would be declared technically qualified for the consideration of financial bid (Financial evaluation) if it provides the documents as listed in the check list as given at **Annexure-2** and meets the following criteria: -

- a) The bidder/agency should have service Tax registration valid for the current financial year and should submit a copy of the registration along with copy of returns for 2014-15.
- b) The bidder/agency should have valid CST/State VAT/TIN Registration certificate and should submit a copy of registration along with copy of VAT returns for 2014-15.
- c) The bidder/agency should submit a copy of the PAN card.
- d) The bidder/agency shall submit copy of the Certificate of registration of the firm/society/company (if any), in the name of which proposal is offered.
- e) The bidder/agency should have minimum fifteen technical manpower support for this purpose. Professionally qualified Surveyor/ Amin/ ITI certificate holder/diploma holder or Engineer degree holder will be construed as the requisite technical person. The information about the technical man power may be detailed as per **Annexure-14**. These technical persons should be on the payroll of the bidder. As proof, the bidder should submit copies of form-16 issued to all such persons during 2014-15.
- f) The bidder/agency shall submit undertaking/self-declaration that the proprietor/partner/Director of the bidding agency has not been convicted or charge-sheeted by court of law and it has not been black listed as per the Performa as given at **Annexure-12**.



- g) The bidder should be a functional organization/firm/agency. To substantiate this claim, the bidder should submit the copy of balance sheet for last two years ending on 31.03.2015. These balance sheets should be duly certified by the Statutory Auditor with his stamp.
- h) The bidder should have affiliation/recognition with ISRO/NRSC/SRSCS/FSI/any Govt. Department for undertaking DGPS Survey. For this propose the bidding should submit the relevant certificate obtained from the competent authority.
- i) Experience Requirement:
- Bidder should have cumulative experience of executing contracts of undertaking such DGPS survey with ETS Technology to any Govt. Organization / PSU/Private Sector for last 5 years as on bid calling date. The minimum experience of such survey works should be an area of 1000 Sq.km whether a single work order or aggregate in case of multiple orders. The copy of order/orders and certificate indicating its successful execution should be enclosed in the Performa as given at **Annexure-13**. The bidder firm should have also completed such survey work in the due time and for this propose the details shall also be provided as per **Annexure-16**.
- j) The bidding firm should submit the bid as per the covering letter as per the Performa as given at **Annexure-1**.
- k) The bidding firm should submit the declaration as per the Performa as given at **Annexure-3 & 6**.
- l) The bidding firm should submit the information about the bidding firm as per the Performa as given at **Annexure-5**.
- m) The person who signs the bid document should be an authorized person and for this propose the authorization letter should be submitted as per **Annexure-7**.
- n) The bidding firm should submit the turnover as per the Performa as given at **Annexure-8**.
- o) The bidding firm should submit the net worth as per the Performa as given at **Annexure-9**.
- p) The bidding firm should submit the profile of the completed projects as per the Performa as given at **Annexure-10**.
- q) The bidding firm should submit its profile as per the Performa as given at **Annexure-11**.
- r) The bidder firm should have ISO 9001 certification, and copy of same should also be submitted.
- s) The bidding firm may submit any literature or leaflet/papers with regard to the work as executed by them, if any.

## **Stage-II: Financial Evaluation**

- (i) Forest Department will evaluate the financial bids received from the technically qualified bidders. During evaluation of financial bids, Forest Department may at its discretion, ask the bidders for clarification of their bids. The bidder should submit the financial bid in Performa as per **Annexure-4**.

- (ii) **Evaluation Method of Financial Bids:** Technical bids of all the bidders will be examined first. Financial bids of only those bidders, who were found to be fulfilling the technical criteria, will be evaluated. The Technical bid of all the bidders and financial bid of qualified bidders as per technical criteria will be opened as per the details regarding date and time mentioned in the Short tender Notice No 02/2016.

#### 4. Particulars of Tender Notice

Interested bidders may quote their offers as per details mentioned below:

1	Name of Work	DGPS survey of forest boundary with reference to the Ground control points (GCP), existing GCP of SOI, Govt. of India using dual frequency DGPS/ETS & supply and installation of stone monoliths at control points only.
2	Tentative Quantity	Identification & demarcation of forest boundary pillars by DGPS Survey and documentation of forest records including clear marking of 50000 forest boundary pillars and preparation of Geo-referenced maps in various forest divisions of the state of Jharkhand
3	Earnest money	The bidder shall submit the earnest money in the form of bank guarantee of Rs. 8 lakhs (Rs. Eight lakhs) only.
4	Time of Completion	Five months from the date of issue of work order.
5	Validity of offer for acceptance	Six months from the last date of submission of Bid.
6	Pre-bid meeting	-
7	Date of commencement and time of Issue of Tender documents	From 11.02.2016 to 23.02.2016 during office hours on working days.
8	Last date & time of submission of bids.	24.02.2016 up to 3:00 PM.
9	Date & time of opening Technical bids	25.02.2016 at 11:00 AM.
10	Date & time of opening Financial bids	25.02.2016 at 4:00 PM
11	Place of issue and submission of Tender communication.	Office of the DCF Planning (TA),SIDA Building, Van Bhawan Doranda, Ranchi-834002. Ph. No. – 0651-2481161 e-mail ID-dcfpta@gmail.com

#### 5. Instructions to Bidder/Agency

The Department of Forests, Environment & Climate Change, Government of Jharkhand invites bids from eligible interested agencies for the mentioned work as per terms & conditions mentioned in the tender document. This is an invitation for submission of bids to provide comprehensive services as listed in the scope of the work of this document but not restricted to those mentioned here, related to requirement.

##### 5.1 Tender Document

This Tender document comprises of total **36 pages**. In addition, any other documents/instructions/amendments/revisions issued by Department of Forests, Environment & Climate Change, Government of Jharkhand to the bidder till the due date of opening of the bids shall also be deemed to be integral part of the Tender document. Failure to furnish all the information as per the Tender document in every respect will be at the bidder's risk.



5.2 Cost of Tender Document.

The agency shall submit the Tender Document with fee of Rs.1,000/- (Rupees one Thousand) only in the form of demand draft in favor of Deputy Conservator of Forests, Planning, Tribal Area, Jharkhand, Ranchi.

5.3 Technical Bid should be submitted in sealed envelope with clear typing of "Technical Bid" along with Tender name and Notice number on the sealed envelope and thus sealed envelope should be kept in another sealed cover with Tender name and Notice number written on the sealed cover.

5.4 This Tender document is not transferable. Short Tender Notice No. 02/2016

5.5 Consortium bids are not allowed.

5.6 The bids are required to be submitted on the agencies letter head with due signature at every page.

5.7 The agency should submit documentary proof of the criteria in their tender document as indicated in the Check List as given at **Annexure-2**.

5.8 Department of Forest, Environment & Climate Change, Government of Jharkhand reserves the right to accept or reject any or all bids without assigning any reason there to. It also reserves right to seek further information/details from the bidder (s).

5.9 Please note that this is a tender and selection will be done after technical evaluation and financial evaluation. Financial bids will only be opened of the bidders who fulfill the technical qualifications.

5.10 Agencies/Firms/Organizations if found to have indulged in any corrupt or fraudulent practices their bids will not be taken up for consideration.

5.11 Department of Forest, Environment & Climate Change, Government of Jharkhand may call any or all the agencies/bidders subject to satisfying technical criteria to make a presentation on their strength and capabilities, past experience on similar type projects and their proposed view on the project.

5.12 The agency/bidder shall be responsible for all the costs associated with the preparation of the bids. The Department of Forest, Environment & Climate Change, Government of Jharkhand shall not be responsible in any way for such costs, regardless of the conduct or outcome of this process.

5.13 Mere submission of bids does not entitle the agencies/bidders to meet technical criteria. Department of Forest, Environment & Climate Change, Government of Jharkhand reserves the right to vet and verify any or all information submitted by the agency/bidder.

5.14 Department of Forest, Environment & Climate Change, Government of Jharkhand reserves the right to change, modify, add or alter the Tender document/bidding process.

5.15 No exclusivity rights will be provided nor should be assumed by the agency/bidder at any stage.

5.16 Sealed bids prepared in accordance with the procedures enumerated in Tender Notice document should be submitted to Deputy Conservator Forests, Planning Tribal Area, SIDA Building, Van Bhawan, Doranda, Ranchi, Jharkhand not later than the date and time laid down, at the address given in the Schedule of Events as mentioned above.

5.17 The detailed schedule of events is as per this document. Department of Forest, Environment & Climate Change, Government of Jharkhand shall not be responsible for non-receipt /non-delivery of the bid/bids due to any reason whatsoever.

5.18 The agencies/organization quoting abnormally low/high price may be rejected from consideration during the financial bid analysis.

5.20 The agency should submit the bids in two envelopes, (i) the Technical Bid & (ii) Financial Bid. Technical Bids should be sealed in an envelope super scribed or typed



"Technical Bid" and "Financial Bid" should be sealed in another envelope super scribed/typed "Financial Bid". Both these envelopes should contain address of the contact persons of the bidder firm and should be addressed to Deputy Conservator Forests, Planning Tribal Area, SIDA Building, Van Bhawan, Doranda, Ranchi, Jharkhand.

Both these envelopes should be sealed in third envelope. The third sealed envelope should be super scribed (i) Bids for identification of Forest boundary Pillar (ii) Name and address of the contact persons of the bidding agency should be written on the envelope and it should be addressed to Deputy Conservator Forests, Planning Tribal Area, SIDA Building, Van Bhawan, Doranda, Ranchi, Jharkhand.

## **6. Earnest Money**

- 6.1 Bidders shall submit earnest money with technical bid in the form of Bank Guarantee of requisite value as mentioned in "Particulars of Tender Notice" as at point no. 4 above. The Bank Guarantee shall be made in favor of "Deputy Conservator Forests, Planning Tribal Area" payable at Ranchi from any Indian Nationalized bank/Scheduled bank.
- 6.2 The bank guarantee shall remain valid for 12 months.
- 6.3 The earnest money shall be returned to all unsuccessful bidders, within thirty days from the date of completion of tender process.

## **7 The earnest money shall be forfeited if**

- 7.1 Any bidder withdraws his bid or resiles from his bid during the validity period.
- 7.2 The successful bidder fails to furnish his acceptance of the order within fifteen days of placement of work order.
- 7.3 The bidder fails to successfully complete the work within the stipulated time frame. Delay in completion due to extreme and unavoidable situations shall have to get approved by Department of Forest, Environment & Climate change, Government of Jharkhand. This approval shall also have a cut-off date by which the entire work shall have to be completed.

## **8 Security Deposit**

- i. Before award of the work, finally selected agency for a particular piece of job, the agency would be required to deposit a security deposit of an amount equal to 5% of total amount payable by the department to the agency after successful completion of the Job.
- ii. This security deposit may be given either in the shape of a Bank Draft or bank guarantee issued by a nationalized or scheduled bank in favor of the Divisional Forest Officer of the work giving division. The bank draft must be payable in the city/town of the forest division headquarters. For this purpose the Bank guarantee submitted by the successful bidder as earnest money may also be adjusted.
- iii. The security deposit will be refunded after successful completion of the assigned job and verification by third party.
- iv. However, if the work is left unfinished or not done to the satisfactory of the department within the stipulated time, to be mentioned in the work order and in the event of its non-extension, the security deposit would be forfeited.

## **9. Submission of Bids**

- 9.1 Bidders are advised to submit their bids strictly based on the specifications, terms and conditions contained in the tender document and subsequent revisions/amendments, if any. The bids should be submitted along with covering letter as given at **Annexure-1**.
- 9.2 The bids shall be prepared and submitted by typing or printing in English on white paper in consecutively numbered pages duly signed by the authorized signatory with agency/firm/organization/company seal affixed on each page. Any part of the bids, which



is not specifically signed by the authorized signatory and not affixed with Agency/firm/organization/company seal, shall not be considered for the purpose of evaluation. The bidder shall also enclose the information about bidding firm as per **Annexure-5**.

- 9.3 Original copy of tender document, amendments/revisions to tender document including minutes of meeting(s), issued by the Forest Department, if any, shall be signed and submitted along with the bids.
- 9.4 All the Performa must be on the bidder's official letterhead (if specified). Any change in wording of the Performa will not be allowed. The bidder shall submit a declaration as given at **Annexure-6**.
- 9.5 The bids shall contain no erasers or overwriting except as necessary to correct errors made by bidder. The person signing the proposal shall initial such corrections.
- 9.6 Complete bid document including all enclosures should be submitted in hard bond or spiral binding and all pages should be numbered (except leaflet/catalogue) and must be signed by the company's authorized signatory with seal of the company/firm/organization.
- 9.7 The bidders should submit the bids in two envelopes, The Technical bid and financial bid should be sealed in separate envelopes and both these envelopes should be sealed in a third envelope.
- 9.8 The agency should submit the bids in two envelopes, (i) Technical Bid & (ii) Financial Bid. Technical Bid should be sealed in an envelope super scribed or typed "Technical Bid" and Financial Bid should be sealed in another envelope super scribed/typed "Financial Bid". Both these envelopes should contain address of the contact persons of the bidder firm and should be addressed to Deputy Conservator Forests, Planning Tribal Area, SIDA Building, Van Bhawan, Doranda, Ranchi, Jharkhand.
- Both the above (**Technical and Financial Bids envelopes**) bids document should be sealed in a third envelope. The third envelope should be sealed and super scribed (i) Bids for identification of Forest boundary Pillars (ii) Name and address of the contact persons of the bidding agency should be written on the envelope and it should be addressed to Deputy Conservator Forests, Planning Tribal Area, SIDA Building, Van Bhawan, Doranda, Ranchi, Jharkhand.
- 9.9 Technical Bid should not contain price of any item or activity. Such cases, even if found anywhere, shall not be given any consideration.
- 9.10 In case of any contradictions between figures and words, the words shall be considered final.
- 9.11 The price bids should not contain any technical matter or other matter except price. After opening of Technical bids financial bids of technically qualified agency/firms/organizations/companies will be opened on date and time as per the schedule of events.

## **10 Authority of Person Signing the Documents**

A person signing the bid document or any document forming part of the bid document shall be deemed to warrant that he has authority to sign such document and if on enquiry it appears that the person signing the document had no authority to do so Department of Forest, Environment & Climate Change Government of Jharkhand may, without prejudice to other civil and criminal remedies, cancel the bid and hold the signatory liable for all costs and damages. For this purpose Power of Attorney in the Performa as prescribed at **Annexure-9** shall be submitted.

## **11 No Claim or Compensation for Submission of bid**

The bidder whose agency is not selected shall not be entitled to claim any costs, charges or expenses in connection with his submission of bid, even though Department of Forest, Environment & Climate Change Government of Jharkhand may decide to withdraw the Notice Inviting tender.



## **12 Validity of Bids**

Unless otherwise specified, the bidder shall keep his bids valid initially for a period of Six months from the last date of submission of the bid.

## **13 Other Terms & Conditions**

- 13.01 Insertion, post-script, addition and alteration shall not be recognized unless confirmed by bidder's signature and stamp.
- 13.02 Incomplete bids not submitted as per requirement are likely to be rejected.
- 13.03 Bidders shall submit their bids strictly as per terms and conditions of the tender document without any deviation.
- 13.04 If at any point of time any of the documents/information submitted by the bidder is found to be incorrect, false or untruthful, the bid and/or the resultant order may be summarily rejected/ cancelled at the risk of the bidder.
- 13.05 Failure to furnish all information and documentary evidence as stipulated in the bid document or submission of a bid that is not substantially responsive to the bid document in all respects shall be summarily rejected.
- 13.06 All bids will be received in duly sealed cover within the due date and time. Bid received after the due date and time is liable for outright rejection.
- 13.07 Department of Forest, Environment & Climate Change Government of Jharkhand reserves the right to reject part or whole of the bid/order without assigning any reason thereof, postpone the date of receipt and opening of the bids or cancel the bid without bearing any liability, whatsoever, consequent upon such decision.
- 13.08 No postal transaction shall be entertained for obtaining Tender Notice document.
- 13.09 Issuance of Tender document shall not construe that the bidders would be automatically considered qualified.

## **General Terms & Conditions**

### **1. Introduction**

The instruction/information contained in the Tender Notice documents are for guidance and compliance of the intending bidder. Bidders are advised to obtain clarification from Deputy Conservator Forests, Planning Tribal Area, SIDA Building, Van Bhawan, Doranda, Ranchi, Jharkhand, if any, prior to submission of their bid, failing which it will be deemed that the stipulation made in the Tender documents have been read, understood and are acceptable to the bidder/agency.

Bidder shall bear all costs associated with the preparation and submission of the bid, journeys undertaken by them and subsequent bidding process till the empanelment of suitable bidder and the Department of Forest, Environment & Climate Change Government of Jharkhand in no case shall be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

### **2. Scope of work**

- a) The Scope of work includes identification & demarcation of forest boundaries by DGPS/ ETS Survey wherever necessary and documentation of forest records including clear marking of forest boundary and preparation of Geo-referenced maps for 50000 forest boundary pillars under various forest divisions of the state of Jharkhand.



- b) The agency will prepare and supply Geo-reference maps along with report consisting of all the readings and photographs at each boundary pillar as evidence for notified forest land in GIS usable format in geographic coordinate system-WGS84 datum of the respective zone.
- c) Submission of RAW (for Rover and Base) as well as post processed/real time differentially corrected (for Rover) DGPS readings (along with source file, all errors charts and outputs) at each Boundary Pillar along the periphery of the notified forest land, in RINEX and native format (8 Decimal places in degrees for latitude and longitude including height above MSL and HAE in cm) with area and perimeter.
- d) The survey shall be performed using DGPS in real time or post processed mode. However the survey shall be performed using ETS in GPS shadow areas and data should be geo-referenced using GCPs collected dual frequency DGPS receivers.
- e) Field training about the procedure of the DGPS survey will be imparted to the field staff & officers of the concern forest divisions.
- f) Scanning of all documents including Gazette notification, maps, bleached cadastral records etc.
- g) Supply and erection of RCC monuments of size 1.5m X 23cm x 23cm at each control point.
- h) The agencies so selected for empanelment are expected to perform, on awards of work after finalization of financial bids later on, the following activities:
  - i) To find out the precise geo-coordinate of the boundary pillars in the forest area.
  - j) To make a close survey of all the boundary pillars of the forest area using dual frequency DGPS in RTK mode / ETS from the temporary GCP.
  - k) To prepare forest boundary vector in the form of shape file using the coordinates of the boundary pillars in geographic lat./long. as well as UTM projection with WGS 84 spheroid and datum.
  - l) One set of hard copy of maps and readings of each location in MS Excel (latitude and longitude in WGS84 datum and height above MS land HAE in cm) certified by the respective surveyor/ Amin, Forest guard, Forest Beat Officer , Forest Range Officer ACF and DFO should be submitted.

To maintain the accuracy of measurements using DGPS/ETS as follows:

## 2.1 DGPS Survey:

- i. The Survey shall be carried **along the boundaries which are invariably shown by the concerned local forest staff** and conforming to the notifications, cadastral maps or other documents relating to location and extent of the land.
- ii. **DGPS readings at each station along the periphery** shall be taken by a Rover with a **minimum observation period of 15 minutes. Differentially correct** the DGPS Rover data with base station / control point data, if real- time DGPS is not used. In addition to DGPS readings, at each location simultaneously Handheld GPS readings must also be taken for comparison, with the same observation period of 15 minutes.
- iii. **Establishment of Base stations (Control Points):**
  - **Base Stations to be fixed by Multi/Dual frequency DGPS receivers with SOI Control Point as reference** (to be supplied by SFD).
  - The minimum **observation time** for base station shall be **12 hours** from nearest SOI control point.



- Required number of Control Points shall be established in such a way that the **distance** between the DGPS base station & rover shall be **less than 10 km** (for single frequency DGPS Rovers) and **less than 50 km** (for dual frequency DGPS Rovers).
  - The panoramic view surrounding the Base Station as well as antenna location showing the terrain in near proximity should be digitally photographed (should be taken in three or four different directions) and documented.
- v. Rovers shall be of **Dual/Multiple frequency DGPS receivers within a radius of 50 km from the base**. In case **Single frequency DGPS receivers** are used they should be used **within 10 km radius only**. Readings of the BPs differentially correct the DGPS Rover data with base station / control point data.
1. In case **real-time DGPS** rovers are used, the Dual Frequency DGPS with **OMNISTAR XP/HP connection** shall be used alone and reading taken when **accuracy is within 25 cm**.
- vi. The height above MSL shall also be recorded for location and must be linked to HAE.

## 2.2 Total Station Survey

- a. **Follow the procedure** detailed in Para iv (01). Each BP must be fixed from at least 2 known locations.
- b. **Geo-reference the data** using GCPs. (GCPs shall be collected using dual frequency DGPS receivers in real-time/ post processed mode as per procedure detailed in iv (01)).
- c. The accuracy desired is 5 mm/km, and angles to  $1^{\circ}/3600^{\circ}$ . **The distance** between the Total Station and the target **shall not be more than 500m**.

## 2.3 Conditions to be observed for Survey

- i. The survey shall be conducted with similar instruments as far as possible.
- ii. DGPS instruments are used for survey they must be set-in to **Geographic Coordinate System – WGS84 Datum**.
- iii. Raw (**for Rover and Base**) as well as post-processed/ real-time differentially corrected DGPS readings (for Rover) (along with source file, all error charts and outputs) for each location; and the Handheld GPS readings along with original source file for each Survey Station shall be submitted every week or as soon as the work is completed, whichever is earlier, to the Geomatics Centre (In case real-time DGPS is used, the RAW and the differentially corrected readings in real-time for each Survey Station along with error profile and charts must be submitted).
- iv. For each area a unique ID shall be given. All the features shall be recorded in this ID. All the features will be extracted from this data.
- v. The **attributes** shall be collected as specified by SFD and shall be linked to the corresponding features.

## Accuracy level (DGPS)

- A. **RTK (Real Time Kinematic)**
  - Horizontal - 10mm+ 1 ppm or better
  - Vertical - 15mm+ 1 ppm or better
- B. **Kinematic**
  - Horizontal - 10mm+ 1 ppm or better



Vertical - 15mm+ 1 ppm or better

**C. Static**

Horizontal - 3mm + 0.5 ppm  
Vertical - 5mm + 0.5 ppm  
Initialization time typically <10 seconds  
Initialization reliability typically >99.9%

**Accuracy level (ETS)**

Angular Accuracy - 2" or better  
Least Count - 0.5" or better  
Distance Accuracy with Prism - 1.5mm +/-2 ppm or better  
Prism, high-precision DR Standard EDM  
Standard measurement .....  $\pm(1 \text{ mm} + 1 \text{ ppm})$  (0.0033 ft + 1 ppm)  
Fast Standard .....  $\pm(3 \text{ mm} + 2 \text{ ppm})$  (0.01 ft + 2 ppm)  
Tracking .....  $\pm(5 \text{ mm} + 2 \text{ ppm})$  (0.016 ft + 2 ppm)

**To deliver the output in the following formats**

- i. The co-ordinate list (excel format) should be supplied both for geodetic system (Lat/Long up to 5 decimal of the second) and Projected System – Universal Traverse Mercator, i.e., the UTM projection (northing/easting/height up to 5 decimals) of the respective zone.
- ii. Forest Boundary Pillar survey point coordinate in a GIS format (.shp file)
- iii. Boundary vector in GIS format (.shp file)
- iv. The agency should submit a field drawing of the survey pillar along with field photographs from 4 directions (E,N,S & W)

**Note:**

The co-ordinate list and description of the location of all the boundary pillars along with GTS points shall be submitted to concerned DFO in the state of Jharkhand and cannot be used by the agency for any other purpose for which the agency has to submit a declaration. The locations and IDs of all the control points of surveyed forest boundary should be submitted by the agency.

**Tender documents**

Tender Notice documents shall comprise of all the documents mentioned in the table of contents of this document. In addition to these any other documents/ amendments/revisions or instructions issued by Department of Forest, Environment & Climate Change Government of Jharkhand from time to time to bidders till due date of opening of the bids, shall also be deemed to be integral part of the tender document.

**3. Price**

The price bid will be submitted as per the **Annexure 4** of the tender document.

The bidder shall quote his price as per schedule of items of work. The contract price rates shall be firm and shall not be subject to any variation except for statutory variation of taxes and duties during the contractual completion period. The price shall be inclusive of all taxes, duties and levies including Jharkhand Vat etc. as on the opening date of price bid.

**4. Completeness of Bids**

All activities including safety and protection devices as required shall be deemed to have been included in the bids, whether such items are specifically mentioned in the Tender notice document or not.



5. **Compliance with regulations**

The bidder shall comply with all applicable laws or ordinances, codes, approved standards, rules and regulations and shall procure all necessary and/or other statutory bodies and government permits & licenses etc. at his own cost. The agency/organization/firm/company shall leave the Department of Forest, Environment & Climate Change Government of Jharkhand harmless as a result of any infractions thereof.

6. **Agreement**

The selected agencies/firms/organizations/companies shall have to enter into an agreement in the office of the DFO in whose jurisdiction the DGPS Survey work will be conducted in prescribed format before start of the work.

7. **Income Tax**

Without prejudice to the obligations of the bidders under law, any income tax which Department of Forest, Environment & Climate Change Government of Jharkhand may be required to deduct by law/statute, shall be deducted at source and shall be paid to income tax authorities on account of the bidders. Department of Forest, Environment & Climate Change Government of Jharkhand shall provide a certificate to the agency for such deductions of tax.

8. **Force Majeure conditions**

In the event of either party being rendered unable by force majeure to perform any obligation required to be performed by them under this agreement, relative obligation of the party affected by such force majeure shall be treated as suspended during which force majeure condition last.

The term force majeure shall have herein mean riots (other than among the bidders employee), civil commotion, war (whether declared or not), invasion, act of foreign enemies hostilities, rebellion, insurrection, military coup to usurp power, naxalites activities, act of God such as earthquake, lightening, floods, fires not caused by bidders negligence and other cause which the bidders has no control and accepted as such by the Department of Forest, Environment & Climate Change Government of Jharkhand whose decision shall be final and binding.

If the work is suspended by force majeure conditions lasting for more than 45 days, the Department of Forest, Environment & Climate Change Government of Jharkhand shall have the option of canceling this contract in whole or part thereof, at its discretion. The bidder shall not claim for compensation for force majeure conditions.

9. **Jurisdiction of the Court**

All disputes would be settled within Ranchi jurisdiction of court of law only.

10. **Signing of Agreement:**

Finally selected agency will be required to execute an Agreement with the DFO in whose jurisdiction DGPS Survey work will be conducted for successful completion of job. The work order would be issued by the head of the concerned forest division.

11. **Payment**

- i. No advance would be given
- ii. Payment would be made by the Divisional Forest Officer of the work-order issuing division.
- iii. Payment would be made in four installments, mentioned below :-
  - a) On successful completion of 25% Job, 15% of the total payment will be released.



- b) On successful completion of next 25% Job, 30% of the total payment will be released.
- c) On successful completion of the next 25% work, 50% of the total payment would be released.
- d) And on successful completion of the rest job and submission of report to the satisfaction of the Divisional Forest Officer of the division remaining payment would be released.

## 12. Verification of Surveyed Data

Verification of Ground/Post-Processed Data will be in two parts:

1. Verification in the field at DGPS location during field observation by Forest Officials.
2. Third Party verification after completion of job.

## 13. Deliverables

- a) PF/RF- wise survey report
- b) One set of soft copy of notified Forest Maps, with area, perimeter and attributes.
  - In e00 format in Geographic Coordinate System- WGS84 datum and Universal Transverse Mercator Projection-WGS84 datum.
  - Forest (PF/RF) wise RAW and differentially corrected DGPS readings in RINEX and native format (8 decimal places in degrees for latitude and longitude including height above MSL and HAE in cm)
  - For Total stations: unregistered & geo-referenced maps along with GCPs (RAW & differentially Corrected DGPS readings in above format)
- c) One set of hard copy of maps and readings of each location in MS excel (latitude and longitude in WGS 84 datum and height above MSL and HAE in cm) certified by the respective surveyor/Amin, Forest Guard, Forest Beat Officer, Forest Range Officer, ACF and DFO.

## Sequence of Preparation of Report and Maps

- i) Inception Report: indicating the method and work schedule shall be submitted within 2 weeks of entering into agreement. Before submission, the consultant shall hold extensive discussion with the respective CCFs/CFs of Regions/Circles and respective DFOs to decide on the method, work schedule, details of attribute data needed and constitution of support teams from Jharkhand. The firm shall make a presentation on the method and work schedule.
- ii) Draft Report along with surveyed & geo-referenced maps of Protected forest or reserve forest(hard copy and soft copy) containing all information as mentioned in scope of work and Deliverables should be submitted. ( The maps in 1:1000 scale, subject to maximum A 0 size, shall be certified by the respective Amin/Surveyor, FBO,FRO,ACF and DFO). The report along with certified maps shall be delivered to the respective RCCFs/CCFs/CFs of Circle or region.
- iii) Final report duly incorporating the comments of the respective RCCFs/CCFs/CFs of circle or region shall be delivered within one month of communication of comments on draft report.

## 14. Responsibilities of Jharkhand Forest Department

- a) Jharkhand Forest Department shall provide details of certified forest blocks to be surveyed and mapped with all attribute data.
- b) Jharkhand Forest Department shall coordinate the work with the consultant's team.
  - The field officers (FRO, Amin/FBO/FG) shall locate and demarcate the notified forest boundaries, with reference to the Gazette Notification, demarcation registers and other records to locate the boundaries described in the Gazette Notification.
- c) The boundaries located by field officers shall be authenticated by respective ACFs and DFOs.

- d) Respective ACFs and DFOs shall provide the PF/RF maps and also facilitate interaction/Coordination with the revenue officials.
- e) Respective DFOs should give priority in construction of boundary pillars if missing.
- f) On prior request Jharkhand Forest Department shall provide logistic support like accommodation subject to their availability, rates on par with touring forest officials.

### **Roles of various Jharkhand Forest Department Officers:-**

Sl.No	Designation	Roles
1.	FBO (Forester)	<ul style="list-style-type: none"> <li>a) Identification of stations, BPs and boundaries.</li> <li>b) Providing local support in carrying out the survey.</li> </ul>
2.	Amin/Surveyor	<ul style="list-style-type: none"> <li>a) Supervise identification of Station and boundaries.</li> <li>b) 100% verification of stations and boundaries.</li> <li>c) Providing local support in carrying out the survey.</li> </ul>
3.	FRO	<ul style="list-style-type: none"> <li>a) Providing all attribute data</li> <li>b) Test checking of 50% station and boundaries.</li> <li>c) Organisation of field work and providing necessary support.</li> <li>d) Interaction/Coordination with revenue officials, LRDC and other stake holders.</li> <li>e) Incharge of work in his/her range.</li> <li>f) Collection of necessary maps.</li> <li>g) Collection of Gazette notification and maps of PF/RF.</li> </ul>
4.	ACF	<ul style="list-style-type: none"> <li>a) Collection of necessary maps.</li> <li>b) Collection of Gazette Notifications and maps of PF/RF.</li> <li>c) Test checking of 25% survey stations/BPs and boundaries.</li> <li>d) In charge officer of entire work.</li> <li>e) Interaction/Coordination with revenue, LRDC and other stakeholder agencies.</li> </ul>
5.	DFO	<ul style="list-style-type: none"> <li>a) Collection of relevant maps.</li> <li>b) Collection of Gazette notifications, maps and other records.</li> <li>c) Providing all the attribute data.</li> <li>d) Test checking of 10% survey stations/BPs and boundaries.</li> <li>e) Interaction/Coordination with revenue, LRDC, and other stakeholder agencies.</li> <li>f) Overall responsibility in conducting the survey.</li> </ul>
6.	GIS Cell	<ul style="list-style-type: none"> <li>a) Assigning unique ID to each PF/RF.</li> <li>b) Designing of attributes to be collected.</li> <li>c) Technical Evaluation of the data provided by the FIRM as per the specification.</li> <li>d) Joining of the GIS data of block boundaries.</li> <li>e) Linking of attribute data.</li> </ul>

  
 Addl. Principal Chief Conservator of Forests, Development  
 Jharkhand, Ranchi



### 15. Responsibilities of the Firm

- a) The Firm shall deploy sufficient teams along with all logistics and equipment to carry out the survey and mapping of notified forest area.
- b) Each team shall comprise of a Team leader who shall be specialist in Geomatics, a DGPS operator and /or a TS operator and sufficient number of supporting surveyors for accomplishing the task.
- c) The firm shall help the department in ascertaining the locations of the BPs with the help of available records.

### Roles of various team members of survey teams

Sl No.	Designation	Roles and qualifications
1.	Surveyors.	<ol style="list-style-type: none"><li>a) Diploma in Surveying &amp; leveling, Civil engineering.</li><li>b) 3 years experience in handling of DGPS, Total stations and the associated software for downloading &amp; processing of data.</li></ol>
2.	DGPS/TS Operator	<ol style="list-style-type: none"><li>a) Diploma or B Tech in civil engineering AMIE or equivalent.</li><li>b) 3 Years experience in handling of DGPS, Total stations and the associated software for downloading and processing of data.</li></ol>
3.	Team leader	<ol style="list-style-type: none"><li>a) B.Tech in Civil Water resources, RS, Geo-informatics, GIS, CS, IT, AI, EC, Environmental Sciences or equivalent.</li><li>b) MSc in Geo Sciences, Physics, Electronics, Mathematics, statistics Computer Science, IT, Environmental Sciences or equivalent.</li><li>c) MCA or equivalent.</li><li>d) 2 years experience in handling of DGPS, Total stations and the associated software for downloading &amp; processing of data.</li><li>e) 2 years experience in the field of signal/Image Processing/GIS (for B Tech)/MCA/M.Sc in any image processing and GIS software.</li></ol>
4.	Project Leader ( to supervise 4-5 team)	<ol style="list-style-type: none"><li>a) B. Tech in Civil water resources, RS, Geo-informatics, GIS, CS, IT, AI, EC, Environmental Sciences or equivalent.</li><li>b) M. Sc. In Geo Sciences, Physics, Electronics, Mathematics, Statistics, Computer Science, IT, Environmental Sciences or equivalent.</li><li>c) MCA or equivalent.</li><li>d) 5 years experience in handling of DGPS, Total stations and the associated software for downloading and processing of data.</li><li>e) 5 years experience in the field of signal/ Image processing/ GIS (for B.Tech) MCA/ M.Sc) in any Image Processing and GIS software.</li></ol>

**Covering Letter**

(To be submitted in the official letter head of the agency/firm/organization/company)

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

Sir,

We are hereby submitting our proposal in full compliance with the terms and condition of the Tender Notice No. .... A blank copy of the Tender document, duly signed on each page is also submitted as a proof of our acceptance of all terms & Conditions.

We confirm that, we have the capability of survey by DGPS/ETS Technology for the Forest Boundary and preparation of Geo referenced Maps.

The bids are submitted in two separate and sealed envelopes marked "Technical Bid" & "Financial Bid" and both placed in another sealed envelope.

Authorized Signatory

Name:

Designation:

Company Seal:



**Check List of Technical Bid**  
**Technical Bid for Forest Boundary survey by DGPS/ETS**  
**Short Tender Notice no 02/2016-17**

Sl. No.	Particulars	Yes/No	Flag No.*
1	2	3	4
1	Covering Letter as per <b>Annexure-1</b>		I
2	Declaration by the Agency as per <b>Annexure-3</b>		II
3	Information about the bidding Firm/Agency as per <b>Annexure-5</b>		III
4	The copy of registration of bidding firm/Company/Agency etc. (Attach relevant certificates)		IV
5	The bidder is registered Firm/Company/Agency/has affiliation with ISRO/NRSC/SRSCS/FSI/any Govt. Department for undertaking DGPS Survey (Attach relevant certificates received from them)		V
6	To indicate the functionality of the firm attach the balance sheets of last two years ending 31.03.2015 of the firm duly certified by statutory Auditor.		VI
7	Copy of Valid Service Tax Registration		VII
8	Copy of ISO 9001 certification for the bidder firm/agency, (if any).		VIII
9	Photocopy of the PAN card		IX
10	The agency shall submit details of technical manpower & attested copy of their salary slips supported by copy of form-16 issued to all such persons during 2014-15 as proof of their employment as per <b>Annexure-14</b>		X
11	A copy of valid VAT/CST/TIN registration certificate		XI
12	Declaration by the bidder as per <b>Annexure-6</b>		XII
13	Authorization letter issued by the agency as per <b>Annexure-7</b>		XIII
14	Information with regard to annual turnover of the agency as per <b>Annexure-8</b>		XIV
15	Information with regard to Net worth of the agency as per <b>Annexure-9</b>		XV
16	Profile of the Projects completed as per <b>Annexure-10</b>		XVI
17	Brief Agency Profile as per <b>Annexure-11</b>		XVII
18	A self certificate by the bidder that agency is not blacklisted in any state in India or in the case foreign bidder in any country and none of the partner/Director/Proprietor has not been Charge sheeted/convicted as per <b>Annexure-12</b>		XVIII
19	Experience details of the agency as per <b>Annexure-13</b>		XIX
20	Copy of the order/orders and certificate indicating as successful execution of survey of 1000 Sq Km area by DGPS/ETS Technology in due time in Government organization/PSU/Private sector during two years in the last five years ending on 31.03.2015 as per <b>Annexure-16</b>		XX
21	Undertaking from bidder that they have resources and capability to survey Forest boundaries by DGPS/ETS technology and prepare the Geo referenced maps etc as per requirements of Tender notice as per <b>Annexure-15</b>		XXI
22	Product leaflet/catalogue (if any)		XXII

\* Please flag the annexure and write flag number as in the box.

**Please ensure:**

- That all information is provided strictly in the order mentioned in the check list mentioned above.
- Bidders are advised to strictly confirm compliance to bid conditions and not to stipulate any deviation/conditions in their offer. Subsequent to bid submission, the Department of Forests, environment & Climate Change Govt. Of Jharkhand may or may not seek confirmations/clarifications and any bid not in line with Bid conditions shall be liable for rejection.

Any clarification/confirmation bidder may require shall be obtained from the Department of Forests, Environment & Climate Change Govt. Of Jharkhand before submission of the bid.



Bidder shall submit complete bidding document including subsequent amendment, modification and revision, duly signed and stamped as a token of having read, understood and accepted all the terms and condition mentioned therein

(Signature of Bidder)  
With Seal

  
Addl. Principal Chief Conservator of Forests, Development  
Jharkhand, Ranchi



**Format for declaration that the provisions of Tender Notice are acceptable and confirm that all statements made by the bidders are complete & correct**

**Annexure-3**

*(To be typed on the Letterhead paper of the Applicant, including full postal address, Telephone, FAX numbers and e-mail address)*

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

**Subject: Tender for selection of Agencies for Forest boundary survey by DGPS/ETS.**

Dear Sir,

Having examined the Tender Document we, the undersigned, bids for conducting **Forests boundary survey** in full conformity with the said tender document .

We have read the provisions of the tender and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our bids shall not be given effect to.

We agree to abide by this tender, consisting of this letter, the detailed response to the Tender and all attachments, for a period of one year from the date fixed for submission of bid as stipulated in the Tender.

This application is made with the full understanding that:

- (a) Bids by qualified Agencies will be subject to verification of all information submitted for qualification and bidding;
- (b) Department of Forest, Environment & Climate Change, Jharkhand reserves the right to reject or accept any application, cancel the qualification process, and reject all applications and Department of Forest, Environment & Climate Change, Jharkhand shall not be liable for any such actions.

Any genuine changes made by Department of Forest, Environment & Climate Change, Government of Jharkhand in the interest of project with respect to the technical requirement during the course of project implementation will be acceptable.

We hereby declare that all the information and statements made in these bids are complete, true and correct and accept that any misinterpretation contained in it may lead to our disqualification.

**(Contd..)**

## Information Detail

- 1 Name of agency
- 2 Address of agency
- 3 Name, Designation and Address of the contact person to whom all correspondences shall be made regarding this Tender
- 4 Telephone no. of contact person
- 5 Mobile no. of contact person
- 6 Fax no. of contact person
7. E-mail address of contact person

We hereby declare that our bids are made in good faith and the information contained is true and correct to the best of our knowledge and belief.

<Signature of Authorized Signatory>  
<Name>  
<Designation>  
<Contact Address>  
<Telephone Numbers (Mobile & Land)>  
Agency Seal



*Annexure-4*

<b>Price bid documents</b>
----------------------------

**PRICE BID**

**Financial bid for Selection of Agencies for  
FOREST BOUNDARY SURVEY  
BY DGPS/ETS & SUPPLY AND INSTALLATION OF MONOLITHS.**

Description	Rate in Rupees for one Boundary Pillar. (in words and figures)
The Rate for undertaking DGPS/ETS SURVEY and all other allied activities as per the scope of work for each Boundary Pillar. (inclusive of all applicable taxes)	

Signature of Authorized Signatory  
Name  
Designation  
Contact Address  
Telephone Numbers (Mobile & Land)  
Agency Seal

**Information about the Bidding Firm**  
**Tender for Forest Boundary survey by DGPS/ETS**  
**Short Tender Notice no. 02 /2016**  
(To be submitted in the official letter head of the company)

Sl. No.	Particulars	
1	2	3
1	Name of the Bidder	
2	Address of Bidder with Telephone, Fax, e mail.	
3	Address of the Registered Office	
4	Address of the works	
5	GPS Co-ordinate of Registered Office	
6	Name & Designation of Authorized Signatory for Correspondence (Attach Power of Attorney as per <b>Annexure-12</b> )	
7	Nature of Firm (Proprietorship/Partnership/Pvt. Ltd./Public Ltd. Co./Public Sector)	
8	Permanent Account Number (PAN)/TIN (Attach proof)	
9	Firm's Registration Number (Attach proof)	
10	Sales Tax/Value Added Tax Registration Number (Attach proof)	
11	Office/ Work Stations and Service network in Jharkhand with TIN No.(Give details)	
12	Other details and remarks, if any	
13	Copy of Service Tax registration	

Yours faithfully,

(Signature of Authorized Signatory)

Name :

Designation :

Agency seal :

(Separate sheet may be used for giving detailed information duly signed)



**Declaration by the Bidder**

**Tender for forest boundary survey by DGPS/ETS.**

**Short Tender Notice No 02/ 2016**

(To be submitted in the official letter head of the company)

I/We \_\_\_\_\_ (here in after referred to as the Bidder) being desirous of bidding for conducting DGPS survey work under above mentioned Tender Notice and having fully understood the nature of the work and having carefully noted all the terms and conditions, specifications etc. as mentioned in the Tender document, DO HEREBY DECLARE THAT

1. The Bidder is fully aware of all the requirements of the Tender document and agrees with all provisions of the Tender document.
2. The Bidder is capable of executing and completing the work as required in the Tender.
3. The Bidder accepts all risks and responsibilities directly or indirectly connected with the performance of the works.
4. The Bidder has no collusion with any employee of Forest Environment & Climate Change of the Govt. of Jharkhand or with any other person or firm in the preparation of the bid.
5. The Bidder has not been influenced by any statement or promises of the department of Forest Environment & Climate Change of the Govt. of Jharkhand or any of its employees, but only by the Tender document.
6. The Bidder is financially solvent and sound to execute the work.
7. The Bidder is sufficiently experienced and competent to perform the contract to the satisfaction of the department of Forest Environment & Climate Change of the Govt. of Jharkhand.
8. The information and the statements submitted with the bids are true.
9. The Bidder is familiar with all general and special laws, acts, ordinances, rules and regulations of the State and Central Government that may affect the work, its performance or personnel employed therein.
10. The Bidder has not been debarred from similar type of work by any SNA/ Government Dept. /PSU.
11. These Bids shall remain valid for Six months from the date of opening of the financial Bids.
12. The Bidder gives the assurance to execute the work as per specifications terms and conditions.
13. The Bidder confirms the capability to complete the work supply Geo-referenced maps reports etc well before the scheduled time.
14. The Bidder accepts that the firm/company /agency will be black listed by Forest Environment & Climate Change of the Govt. of Jharkhand if the Bidder fails to undertake the work or sign the contract within the stipulated period.

Authorized Signatory

Name:

Designation:

Agency Seal:

**Format of Authorization letter for Signing Bid****Tender for forest boundary survey by DGPS/ETS.****Short Tender Notice No 02/ 2016****AUTHORIZATION LETTER**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Know all men by these presents, we.....(name and address of the registered office) do hereby constitute, appoint and authorize Mr./Ms..... (Name and residential address) who is presently employed with us and holding the position of.....as our authorized person to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bids for survey of forests boundaries by DGPS/ETS technology in various Forest Divisions of Jharkhand including signing and submission of all documents and providing information/Bids to the department of Forests ,Environment & Climate Change Govt. of Jharkhand, representing us in all matters before [Insert Name], all matters in connection with our bids for the said work.

She/He is also authorized to attend meetings and submit technical and commercial information as may be required by Department of Forest, Environment & Climate Change, Govt. of Jharkhand in the course of processing above said bids. Ms. /Mr. \_\_\_\_\_ is hereby authorized to make technical presentation on behalf of the Agency/Organization/Firm/Company (Proof of above two persons as employee of the Agency/Organization/Firm/Company to be enclosed)

We hereby agree to ratify all acts, deeds and things lawfully done by our said authorized persons and that all acts, deeds and things done by our authorized person shall and shall always be deemed to have been done by us.

For

Accepted

..... (Signature)

Authorized Signatory

Name:

Designation:

Agency Seal:

**Note:**

- a. The mode of execution of the Authorization letter should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.



**FORMAT FOR FINANCIAL REQUIREMENT – ANNUAL TURNOVER**

**Tender for forest boundary survey by DGPS/ETS.**

**Tender Notice No 02/ 2016**

[On the letterhead of Bidding Company/Firm/Agency]

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

We certify that the Bidding Company/Firm/Agency had an average Annual Turnover of Rs. -----  
----- based on audited annual accounts of the last three years ending 31.03.2015.

*Authorised Signatory*  
(Power of Attorney holder)

*Statutory Auditor*  
(Stamp & Signature)

Date;

**FORMAT FOR NET WORTH CERTIFICATE**

**Tender for forest boundary survey by DGPS/ETS.  
Tender Notice No 02/ 2016**

[On the letterhead of Bidding Company/Firm/Agency]

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

This is to certify that Net worth of \_\_\_\_\_ {insert the name of Company/Firm/Agency},  
as on 31st March 2015 is Rs \_\_\_\_\_ - \_\_\_\_\_. The details are appended below.

Particulars	Amount (In Rs.)
Equity Share Capital	
Add: Reserves	
Subtract: Revaluation Reserve	
Subtract: Intangible Assets	
Subtract: Miscellaneous Expenditure to the extent not written off and carried forward losses	
Net Worth as on 31 <sup>st</sup> March 2015	

*Authorised Signatory*  
*(Power of Attorney holder)*

*Statutory Auditor*  
*(Stamp & Signature)*



**Annexure 10**

**PROFILES OF PROJECTS COMPLETED**

1. Name of client
2. Name of the Project
3. Brief Description of the Project
4. Scope of the Project (Activities Involved)
5. Details of Solution and Methodology Adopted
6. No. of Locations at which Project is being/was implemented
7. Resource Base
  - Total area surveyed
  - Total number employee deployed for the project
  - Total number of DGPS/ETS used in the project
  - Name of softwares used in the project
8. Value of the project (INR)
9. Date of award of contract
10. Scheduled date for Completion of the Project
11. Date of commencement of the project
12. Date of successful completion of the project
13. If not completed, expected date of completion
14. Name of the person who can be referred to from Clients' side, with Name, Designation, Postal address, Contact phone, FAX number, e-mail id etc.

*Attach Additional Sheets and Annexure, if required.*

**Authorized Signatory  
(Agency Seal)**

**BRIEF AGENCY PROFILE**

- 01 Name of the Firm/Agency/Organization/Company
- 02 Name of Directors along with DIN
- 03 Year of Establishment
- 04 Address of Office
- 05 Telephone No.
- 06 Fax No.
- 07 E-mail Address
- 08 Website
- 09 Sectors' in which the Agency/Organization/Firm/Company has provided similar services to Govt. / PSU/ Agencies in India
- 10 No. of full time personnel currently under employment
- 11 No. of years of Proven experience of providing similar Services
- 12 Certifications (ISO 9001:2000, if any)

**Authorised Signatory  
(Agency Seal )**



## **DECLARATION**

**Format for declaration by bidder or agency that proprietors/Directors/  
Promoters/Partners of the agency has not been Convicted/Charge sheeted by any  
court of law.**

**Tender for forest boundary survey by DGPS/ETS.  
Short Tender Notice No 02/ 2016**

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

Dear Sir,

This is to notify you that our Firm/Agency/Organization/Company intends to submit bids in response to your Tender Notice No: \_\_\_\_\_ In accordance with the above we would like to declare that:

- a) We are not involved in any litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment.
- b) That none of the Director/Partner/Proprietor of the agency has not been convicted or charge sheeted by court of law.
- c) We are not black-listed by any Central / State Government / Public Sector Undertaking in India.
- d) We will not use the survey data for any other purpose. We will not handover any survey data to any other person or firm or company other than to directed by the Department of Forest, Environment & Climate Change, Government of Jharkhand. We will maintain the secrecy and sanctity of the data.

Sincerely,

**AUTHORIZED SIGNATORY  
[AGENCY'S NAME]**

Name

Signature Date

Agency Seal

*Format for submission of experience details*

**Tender for forest boundary survey by DGPS & ETS.  
Tender Notice No 02 / 2016**

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for Forest boundary survey.

Dear Sir,

This is to notify you that our Firm/Agency/Organization/Company intends to submit bids in response to your Tender Notice No: ----- In accordance with the above we would like to declare that we have been associated with the DGPS/ETS Technology for the last ..... years and have experience for surveying by DGPS/ETS Technology for more than 1000 points. It is certified that we have or not have experience for the DGPS survey in the forest area.

Financial Year	Area surveyed by the DGPS technology (Ha)	Forest/non-forest land	Year of survey	Evidence in support of the claim

Sincerely,

AUTHORIZED SIGNATORY  
[AGENCY'S NAME]  
Name  
Signature Date  
Agency Seal



Format for Availability of Technical Manpower.

**Tender for forest boundary survey by DGPS/ETS.  
Short Tender Notice No 02/ 2016**

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

Dear Sir,

This is to notify you that our Firm/Agency/Organization/Company intends to submit bids in response to your Tender Notice No: ----- In accordance with the above we would like to declare that the employees as per details given below are working in the agency for more than 12 months.

Name of the employee	Technical Qualification of the employee	Designation	Date of joining in the Agency/ Organization	Copy of the Form-16 issued to the employee	Proof of the Technical Qualification of the employee

Sincerely,

AUTHORIZED SIGNATORY  
[AGENCY'S NAME]  
Name  
Signature Date  
Agency Seal

**Format for Undertaking to confirm having capability & resources**

**Tender for forest boundary survey by DGPS/ETS.  
Short Tender Notice No 02/ 2016**

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

We certify that we have the resources and capability for Forest Boundary survey by DGPS/ETS technology. We confirmed that we are aware that the DGPS survey work contains field survey in the forest area and preparation of Geo-referenced maps etc as per requirement of the Tender notice.

*Signature of Chief Executive Officer/Managing Director*

Date;

*Note:-*

*1. The above response sheet should be signed and certified as true by the Chief Executive Officer/Managing Director being full time Director.*



Format for Certificate for satisfactory completion of the Project.

**Tender for forest boundary survey by DGPS/ETS.  
Short Tender Notice No 02/ 2016**

To,

**Deputy Conservator of Forests,  
Planning Tribal Area,  
SIDA Building, Van Bhawan,  
Doranda, Ranchi.**

Sub: Declaration Letter for Agencies for **Forest boundary survey.**

Dear Sir,

This is to notify you that our Firm/Agency/Organization/Company intends to submit bids in response to your Tender Notice No: ----- In accordance with the above we would like to declare that the projects as per details given below along with the details of clients have been timely completed by the agency.

Name of the project	Area of the Project	Details of clients including name of the contact persons	Date of initiation of work	Scheduled date for completion of the project	Date of actual completion of the project	Copy of the work order & certificate issued by the clients for timely completion of the projects.

Sincerely,

AUTHORIZED SIGNATORY  
[AGENCY'S NAME]  
Name  
Signature Date  
Agency Seal

कार्यालय : अपर प्रधान मुख्य वन संरक्षक, विकास, झारखण्ड, राँची

पत्रांक .....

दिनांक.....

सेवा में,

क्षेत्रीय मुख्य वन संरक्षक,  
बोकारो।

विषय:— डी०जी०पी०एस० सर्वे कराने हेतु स्वतंत्र एजेन्सी के चयन के संबंध में।

प्रसंग:— इस कार्यालय का पत्रांक 180 दिनांक 19.01.2016

महाशय,

उपर्युक्त संदर्भित पत्र द्वारा टेन्डर डोक्यूमेंट के कम संख्या 5 में final clarification पर अनुमोदन माँगा है।

प्रधान मुख्य वन संरक्षक, झारखण्ड, राँची ने निम्न संशोधन स्वीकृति की अनुमति प्रदान की है:—

Sl. No.	Query	Clarification made in pre bid conference on 11-01-2016	Final Clarification
1	2	3	4
5	After taking DGPS reading of a boundary pillar and if there is no boundary pillar found, how to do the marking on ground physically nowhere in the tender document it is mentioned.	It was informed that appropriate decision will be taken by the committee and the same will be intimated/ put up in the website of the department before the closer of bid time.	After taking DGPS reading the point shall be marked in the following manner:- 1. Digging of pit of size 1'x1'x1' 2. 10 cm layer of charcoal be placed in the pit at the bottom 3. The Charcoal layer will be followed by 10 cm layer of lime. 4. Then a coloured (half green and half red) in paint wooden post of hardwood not less than 10 cm diameter and 5 feet height be firmly fixed vertically straight in the pit in such a manner that 3 feet of it is kept above the ground surface. 5. The post will be numbered with the no of Boundary pillar and HH GPS readings will be taken by the forest personnel. 6. Photographs of the post along with detail surrounding will be taken. 7. In case temporary boundary pillar is found at the point of DGPs survey point the same should be written on the boundary pillar.

अनुरोध है कि उपरोक्त पुनरीक्षित प्रस्ताव को Tender document के पार्ट के रूप में अपलोड करने की कृपा की जाय।

आपका विश्वासी,

ह0/-

अपर प्रधान मुख्य वन संरक्षक,  
विकास, झारखण्ड, राँची।



झापांक :-

दिनांक :-

प्रतिलिपि :- प्रधान मुख्य वन संरक्षक, झारखंड, राँची को सूचनार्थ प्रेषित।

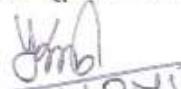
ह0/-

अपर प्रधान मुख्य वन संरक्षक,  
विकास, झारखंड, राँची।

झापांक :- 96

दिनांक :- 25/1/16

प्रतिलिपि :- उप वन संरक्षक, योजना, जनजातीय क्षेत्र, राँची को सूचनार्थ प्रेषित।

  
25/1/2015  
अपर प्रधान मुख्य वन संरक्षक,  
विकास, झारखंड, राँची।

Annexure-I

Queries /Clarifications sought for the opportunity Titled - " Forest Boundary Survey by DGPS/ETs and supply and Installation of stone monoliths" by the representatives of firms/organisation and reply thereto.

Sl.No.	Firm/Organisation	Query	Original tender document	Clarification
1	2	3	4	5
1	Mt. Sural Kumar Sinha Geotrax International Services, Hyderabad	The linear distances for establishing C/Ps for single and dual frequency DGPS rovers are less than 10 Kms and less than 50 Kms respectively. It is not clear hence it should be mentioned that one control point should be taken for a grid of 25 sq. Km.	<u>pg. 13 of tender document 2.1 (iii)</u> Required number of Control points shall be established in such a way that the distance between the DGPS base station & rover shall be less than 10 Km (for single frequency DGPS rovers ) and less than 50 Km (for dual frequency DGPS rovers.)	It is clarified that the Control points to be established on need basis for conducting DGPS Survey of the boundary pillars and there is no need to establish grid. Hence no changes are required to be made to the tender document. However it is informed that proposed survey of 50,000 points is to be done in 6 Regions in equal portions.
2	do	Since the firm doing DGPS survey are only offering Services and not making any final product the copy of VAT returns for 2014-15 is not applicable	<u>pg. 5 of tender documents 3 (b)</u> The bidder/ agency should have valid CST/State VAT/TIN registration Certificate and should submit a copy of registration along with copy of VAT returns for 2014-15.	It was agreed to delete the requirement of VAT registration from the technical bid
3	do	The minimum observation time for taking DGPS readings at each station along the periphery mentioned is 15 min. However more time will be required for taking observation as in some places getting satellite signals may take more time	<u>pg. 12 tender documents 2.1 (iii)</u> DGPS readings at each station along the periphery shall be taken by a Rover with a minimum observation period of 15 minutes	It was agreed that the minimum observation period may be increased to 20 minutes
4	do	The height above MSL shall also be recorded for location and must be linked to GTS (Greater triangulation Survey) but not HAE as mentioned in the tender document	<u>pg. No.13 of tender documents 2.1 (vi)</u> The height above MSL shall also be recorded for location and must be linked to HAE	Decision was taken to replace H/AE with GTS (Greater triangulation survey)

ES  
u/m/16  
10/10/16  
12/10/16



1 No.	Firm/Organisation	Query	Original tender document	Clarification
1	2	3	4	5
5	do	After taking DGPS reading of a boundary pillar, and if there is no boundary pillar how to do the marking on ground physically. Nowhere in the tender document it is mentioned		It was informed that appropriate decision will be taken by the committee and the same will be intimated put up in the website of the department before the closure of bid time
6	do	The Form- 16 should be submitted by the bidder of the technical persons under his pay roll	<u>pg.no. 5 of tender document 3 (c)</u>  The information about the technical manpower may be detailed as per Annexure- 4. These technical persons should be on the payroll of the bidder. As proof, the bidder should submit copies of form- 16 issued to all such persons during 2014-15	It was decided that Form- 16 of the technical persons under the payroll of bidder should be submitted
7	M K Singh Navdistrshi, Ranchi	The experience requirement should be quantified exactly.	<u>pg. No. 6/3(1)</u>  Minimum Experience requirement of such survey works should be an area of 1000 sq. Km. Whether a single work order or aggregate in case of multiple orders.  <u>page no. 7/4(4)</u>  <u>Time of completion:</u>  Five months from the date of issue of work order	No change will be made in the tender document. The experience requirement mentioned is the threshold requirement.
8	Satish Ghosh Cyber swift Infotech Pvt. Ltd	It is mentioned in the tender documents that the time of completion is five months from the date of issue of work order. As nearly 50,000 readings have to be taken @ 500 per day it is difficult as from one instrument only 8 readings can be taken per day		No change will be made in the tender document.
9	Mr. Sanjeev Kumar Patilandy, IL & FS Environment Gurgaon	We understand that the Bank Guarantee can be prepared from any Indian Nationalised / scheduled Bank for 12 months (as mentioned in the RFP document). We request you to kindly provide the Bank guarantee format for the current tender or else we can use our own format. Please suggest	<u>page no. 7/4(3)</u>  <u>Earnest Money Deposit:</u>  EMD of Rs. 8,00,000/- in the form of Bank guarantee	It was decided that earnest money may be deposited as Demand draft

ES  
11/11/16

Prady

11/11/16

Prady

Prady

Prady

Sl. No.	Firm/Organisation	Query	Original tender document	Clarification
1	2	3	4	5
10	do	We propose and request to department to kindly change the clause as below Before award of the work, finally selected agency for a particular piece of job would be required to deposit a security deposit of an amount equal to 2% of the total amount The security Deposit must be furnished within 30 working days of awarding the contract	Before the award of the work, finally selected agency for a particular piece of job, would be required to deposit a security deposit of an amount equal to 5% of the total amount  <u>Security deposit</u> page no. 9/8(1)	There will be no change in the security deposit amount. It will remain 5% of the total amount
11	do	We request department to keep provision of contractual clause discussion (GCC & SCC) and change in any clause with mutual consent during negotiation and contract signing stages. Please confirm.	<u>General Terms &amp; Conditions</u> <u>6. Agreement</u> Formal of contract/ Agreement that will be executed with the authority after award of the project page no. 15/11	No change will be made
12	do	We request you to modify the payment terms as per Annexure- II	Payment terms	No change will be made.
13	Mr. Sunil Kumar Srinha	How much forest area and which all forest areas will be taken up for DGFS survey for this time?		It is agreed that the forest areas where the DGFS survey will be taken up will be distributed throughout Jharkhand in all the six territorial regions, however the PFs in which the survey is to be done will be taken up in neighbouring and contiguous PFs

22/11/16

Handwritten signature

22/11/16

Handwritten signature

Handwritten signature