

Two Bid Tender Document

**Design, Fabrication & Installation of 30 meter
Tower for Large Aperture Scintillometer under
FRI**



**Forest Research Institute
P.O. New Forest
Dehradun-248006**

2010-11

Sl.No.-----

**PURCHASE SECTION
FOREST RESEARCH INSTITUTE
P.O. New Forest,
DEHRADUN-248006**

TENDER NO: X-3/10-11 /Purchase dated 30.4.2010

**DUE DATE FOR PRE-BID CONFERENCE: May. 19, 2010 at 11:00 Hrs, venue
Purchase office, FRI (Main Building)**

**DUE DATE FOR SUBMISSION OF TECHNICAL & FINANCIAL BIDS: June, 02,
2010 at 10.00 A.M.**

DUE DATE FOR OPENING OF TECHNICAL BIDS: June, 02, 2010 at 11.00 A.M.

OPENING DATE FOR FINANCIAL BIDS: June 08, 2010 at 11.00 A.M.

CONTENT OF TENDER PAPER

THIS PAPER INCLUDES THE FOLLOWING DOCUMENTS:-

1. Tender Notice (Chapter I)
2. Terms & conditions (Chapter -II)
3. Description of the items, specification (Chapter III)
4. Schedule of Price(Chapter IV)
5. Agreement (Chapter V)
6. Format for Bank Guarantee (Chapter VI)

Issued to M/S

**(PIAR CHAND)
Purchase Officer**

Purchase Section
Forest Research Institute,
ICFRE, P.O. New Forest, Dehradun-248006
BIDDING DOCUMENT

Chapter-1 Instructions to Bidders

Sealed Tenders are invited from the reputed firms for the purchase of following items for this Institute:-

Sl. No.	Tender No.	Name of the Equipments	Earnest Money
1.	N0.X-3/10-11/Purchase	1. Design, fabrication & installation of 30 meter tower for Large Aperture Scintillometer	1,00,000.00

The details of the above items and other Terms and Conditions, etc. are available in the tender documents, obtainable from the Purchase Officer, Forest Research Institute, Dehradun-248006, on payment of **Rs.227.00 (Rs.277.00, if tender is required by Speed post)** (including **13.5%** Utranchal Trade Tax), by **CROSSED DEMAND DRAFT** in favour of the **Accounts Officer, FRI. Pre-bid Conference** for finalization of technical specifications has been arranged at the Institute premises on **May 19, 2010 at 11:00 Hrs.** The Tenders (both technical and financial bids) should reach this office on or before **June 02, 2010 up to 10.00 A.M.**, out of which the **technical bids** will be opened on the same day at **11.00 A.M.** in the presence of the tenderers or their authorized representatives, if any. Any or all tenders can be rejected by the Director, FRI without assigning any reason. The tender forms and specifications are also available at web site <http://fri.icfre.gov.in/>. The tender form downloaded from above web sites must include Rs.227/- as tender fee along with the tenders submitted.

Purchase Officer
Forest Research Institute

To
M/s

Chapter-2: Conditions of Contract

Terms and Conditions

Pre-bid conference: A pre-bid conference has been arranged with the users for finalization of technical specifications of the equipment. Bidders are requested to take part in the Pre-bid conference at scheduled date and time. The modified specifications, if any, after Pre-bid conference will be available at the websites and also can be obtained from the office of Purchase officer. After Pre-bid conference no changes will be accepted in the desired specifications. If no party attends the Pre-bid conference then listed specifications will be considered as final.

The proposals must consist of three separate sealed envelopes as follows:

The **First envelope** must enclose following documents and must be marked in bold letter as “QUALIFYING DOCUMENTS & EMD”

- a. A brief description of the organization and an outline of recent experience in assignments of a similar nature.
- b. Proof of registration with Directorate of Industries or equivalent,
- c. Proof of Sales Tax Registration,
- d. PAN.
- e. EMD will be as follows (liable to be forfeited if wrong information is furnished)

Name of the Equipments	Earnest Money
1. Design, fabrication & installation of 30 meter tower for Large Aperture Scintillometer	1,00,000.00

- f. The bidding firm must possess an experience of at least five (05) years, in the field of supply, support and maintenance of the equipment. (Enclose copies of the supportive documents OR supply orders).

The **Second envelope** must enclose the Technical proposal and must be marked in bold letter as “TECHNICAL PROPOSAL”.

The **Third envelope** must enclose the Financial proposal and must be marked in bold letter as “FINANCIAL PROPOSAL”.

TECHNICAL PROPOSAL

During the preparation of technical proposal, in addition to technical details of the equipment along with **original catalogue and other literature**, the tenderer must give particular attention to the following:

- i) Users list and supportive documents from the users for the satisfactory performance and after sales service.
- ii) Information about suitably trained technical staff along with well established service network must be furnished.

- iii) On hand training proposal for the staff of the Institute at site.
- iv) All specifications should be certified and guaranteed for genuineness and that the model of the equipment is not going to be obsolete in near future (supportive documents from the Principal to be enclosed).
- v) Availability of spares/parts for next five years to be ensured (supportive documents from the Principal to be enclosed).
- vi) In absence of original catalogue and other literature the tender would be considered as invalid.

SUBMISSION OF PROPOSAL

Financial and Technical Proposals and an envelope containing the qualifying documents and EMD should be sealed in three separate envelopes and then sealed in a counter envelope. The proposals should be clearly distinguished by writing on the cover "Qualifying Documents", "Financial Proposal" and "Technical Proposal". The outer envelope must be clearly marked "DO NOT OPEN EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE" and "TENDER FOR EQUIPMENT".

The proposal must contain no interlineations or overwriting except as necessary to correct errors made by the concerned themselves, in which cases such corrections must be initialed by the person or persons signing the proposal. Your completed proposal must be delivered on or before the stated time and date.

PROPOSAL EVALUATION

A three-stage procedure will be adopted in evaluating the proposals

- (i) Checking of qualifying documents. This will be the first envelope, which shall be checked, and disqualification amongst these documents will lead to rejection of the proposal *in toto*,
- (ii) A technical evaluation of the qualified firm on the basis of the qualifying documents will be carried out prior to opening the financial proposal,
- (iii) A financial evaluation. Firms will be ranked using a combined technical / financial score as indicated below.

Technical Proposal

The evaluation committee appointed by the client will carry out its evaluation applying the evaluation criteria and point system as specified below. Each responsive proposal will be attributed a technical score (St.).

The points given to technical evaluation criteria are

i)	Firms relevant experience (including similar jobs in hand)	15
ii)	Technical specifications of the equipment	70
iii)	Service life/spares availability	15

The technical proposal should score at least 70 points out of 100 to be considered for financial evaluation.

Financial Proposal

The evaluation committee will determine if the financial proposals are complete and without computational errors. The lowest financial proposals (Fm) will be given a financial score (Sf) of 100 points. The financial scores of other proposals will be computed as follows $S_f = 100 \times F_m / F$ (Where F is amount of financial proposal).

Proposal will finally be ranked according to their combined technical (St) and financial (Sf) scores using the formula $S = S_t \times T\% + S_f \times F\%$.

The weight (T%) given to the Technical Proposal is 60%

The weight (F%) given to the Financial Proposal is 40%

General Terms & Conditions

The offer will be subject to the following terms and conditions: -

1. Please note that FRI, Dehra Dun has Custom Duty Exemption and Excise Duty Exemption Certificate. This may be kept in consideration while quoting the rates.
2. The stores are required to be delivered in full and within 90 days after acceptance of the offer.
3. The offer should be firm and open for acceptance till 120 days from the stipulated date of opening. Price escalation will not be allowed.
4. Full details of business terms and conditions, e.g. packing and forwarding, delivery period, VAT/Sales Tax/Trade Tax (whether provincial or Central), other Taxes/Charges, if any, the validity period of quotation, discount, free delivery, packing or any other information relevant to the items may please be indicated clearly.
5. Full specifications, details and information regarding the articles to be supplied, such as make, size, etc. along with **original catalogue**, etc. to be furnished with the offer. The list of users of goods of similar or same nature in the country should also be enclosed. The offer would not be considered fit if these details are not provided.
6. Normal terms of payment will be 100% payment within 30 days after receipt and acceptance of goods in satisfactory working condition after installation. Other terms of payment should be clearly spelt in the offer.
7. The tender should accompany a DEMAND DRAFT/FDR of **value as specified in Clause e of Chapter 2 (EMD)** as Earnest Money, payable to the Accounts Officer, Forest Research Institute, Dehradun, which will be refunded, if the offer is not accepted. In case the offer is accepted but not honored by the tendered; the Earnest Money will be forfeited. The Earnest Money will also be forfeited, if wrong information is given in the tender to influence the tender cost.
8. The Tenderer should also specify regarding Dealership/Proprietary item and copy of the latest certificates from the principal should be produced with the tender.
9. Freight, forwarding charges, if any, should be mentioned in the offer. In case of import being done by this institute, the FOB prices should be mentioned.
10. The stores are required to be delivered to the consignee concerned and the consignee will do inspection and verification of the goods.

11. The tenderer should quote on their printed letter-head paper, indicating thereon Sales Tax/Trade Tax No., Registration No., Fax No., Telex No., Telephone No., E-mail, etc.
12. **Two year on site comprehensive WARRANTY** for all the items and works to be given OR (as specified in specifications)
13. **Performance Bank Guarantee:** The supplier will have to submit a PBG or Performance security in the form of Bank Guarantee or FDR @ 5% of total order value from a commercial bank in an acceptable form within 21 days of issue of supply order. Performance security should remain valid for a period of 24 months beyond the date of completion of all contractual obligations of the supplier including the warranty obligations. Failure to abide by the contractual obligation will liable to forfeit the Performance Bank Guarantee.
14. Any or all tenders can be rejected by the Director, FRI without assigning any reason. It cannot be challenged in any court.
15. Disputes, if any, will be under the jurisdiction of Dehradun Court, Uttranchal, India.

(PIAR CHAND)
PURCHASE OFFICER

CHAPTER III (Description of the items and specifications)

Final Specifications for Designing, fabrication & installation of 30 meter tower for Large Aperture Scintillometer after Pre-bid Conference.

Specifications

(Design, and installation of 30m tower)

Guyed and open lattice type 30 meter tower

1. Tower Height : 30 Meter
2. Mounting Facility : It should be vibration free. It should have provision for mounting
the following things
- Sensors : (a) LAS-Instrument at the top of each 30 m tower
(b) Sensors air temperature, relative humidity and wind speed-wind direction sensors with total weight of 5 kg at 29 m height for receiver tower only
- a. Accessories needed at : (a) A metal circular platform base of 50 cm diameter is
each tower top to fix the LAS transmitter (35 cm X 23 cm x 32 cm with weight 15 kg) and receiver (35 cm x 23 cm x 32 cm with weight 15 kg)
(b) Three solar panels (30 cm x 30 cm x 30 cm each) weighing total 10 kg for both towers
(c) Battery with box with 30cm x 30cm x 30cm dimension weighing 25 kg each on both the towers
- b. Cable Connection : Extra Cables
(a) LAS Receiver to Data Logger
(b) LAS Receiver to Battery and Solar Panel
(c) Sensors to Data Logger
(d) Solar Panel to Battery at LAS Receiver Tower
(e) LAS Transmitter to Battery and Solar Panel
(f) Solar Panel to Battery at LAS Transmitter Tower
3. Design bases Wind : 65 m/s
4. Each Section Length : 6 Meter
5. No of Sections : 05 Nos
6. Angle : ISA 65 x 65 x 6
7. Lacing Member Size : ISA L 35 x 35 x 5
8. Lacing Angle : 45 Deg.
9. Horizontal Lacing Angle : ISA L 35 x 35 x 5
10. Foundation : Base Square 600 mm
11. Guy Supported Levels : 3 Guy Levels
12. Guy Levels : At 6, 18 and 30 Meter
13. Guy Rope Dia : 012 mm

14. GI Nuts and Bolts : As per IS : 1367 – 1979
15. Wind Loading : As per IS : 875
16. Design Specification : As per IS : 800
17. Minimum Breaking Load : 140 Kg f mm⁻², Cf 1.2
18. Platform : At 26meter (inside) and 30 meter (outside)
19. Size of Platform : 1500 x 1500 mm
20. Gate and Fencing : to be erected for protection
21. Ladders : Inside the tower alternating with slanting and horizontal bins
Constituted of thick mesh
22. Aviation Lamp intensity : An automatically operable aviation lamp with sufficient
meeting the aviation warning standards to be installed at 30m with suitable clamps. The automatic twilight sensor and control unit for the same is to be installed at suitable location in the campus.
23. Lightening Arrestor 1 meter : A lightening arrestor with spiked copper rod of at least
height should be installed at the top of the tower and connected to an earth pit with copper bars and suitable copper cable. The earth pit should confirm the relevant IS specifications.
24. Cable Routing junction : Provision for cable routing from instrument booms /
boxes to the bottom of the tower will be provided. The cable bunch has to run in a flexible PVC pipe / with equivalent arrangement from top to the lower end of the tower and into the instrument enclosure installed not very far from the tower.
25. Finishing and Protection galvanized : The steel structure to be hot dip galvanized. All Steel
sections like L angles, flats, tubular sections, bolts and nuts etc. shall be given a coat of Zinc Phosphate primer over a coat of ETCH primer. Synthetic enamel paint of two coats shall be applied over the above. The color scheme to confirm to the aviation warning colors of orange and white for every 6meter sections.

Complete design of tower and layout has to be submitted along with technical bid.

**(PIAR CHAND)
PURCHASE OFFICER**

Chapter-4: Price Schedule

(To be utilized by the bidders for quoting their prices)

Item with detail specifications	Cost per unit	Taxes, if any	Total cost in figure and words

Name/Seal of the Tenderer

Chapter-5: Agreement

The Supplier _____ agrees to accept the terms and conditions of this bidding document in letter and spirit.

Name/Seal of the Tenderer

Chapter-6: Format for Bank Guarantee

To

Forest Research Institute
P.O. New Forest
Dehradun

Your Order No. _____ for the supply and delivery of _____ has been accepted by M/s _____.

In accordance with the terms of payment of the said order, we have agreed to pay the balance of 5% of the contract price of the supplier, furnishing you with an acceptable Performance Bank Guarantee for 5% of the total contract value, viz Rs. _____ for the due performance by the Supplier of all its contractual obligations and to be valid for a period of 24 months for the date of bank guarantee for this purpose you have agreed to accept our guarantee.

In consideration thereof, we hereby guarantee payment of and undertake to pay Rs. ___ and remit to you on demand and without demur the sum of Rs. _____ being 5% of the total value of the contract on receipt of your intimation that the Supplier has committed a breach of any of its contractual obligations.

This guarantee shall be valid for a period of 24 months from the date of Installation of the equipment in satisfactory condition or 27 months from the date of dispatch of the last lot of consignment whichever is earlier, and in any event shall expire on _____, you shall have the right to file/make your claim on us under the guarantee for a period of sixty days from the said date of expiry.

This guarantee shall not be revoked without your express consent and shall not be affected by your granting time or any other indulgence to the supplies or by any change in the constitution of the Bank or the supplies or for any other reason whatsoever.

Not with standing any thing, contained herein above our liability under this guarantee is restricted to Rs. _____ and this guarantee will remain in force up to and inclusive of _____ - unless an action to enforce a claim under the guarantee is filed against us within sixty days from the date of expiry i.e. on _____ or before _____, all rights under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

Signatory Bank with Seal