



Indian Council of Forestry Research and Education
(An Autonomous body of the Ministry of Environment, Forest and Climate Change, Government of India)
P.O. New Forest, Dehradun – 248 006 (Uttarakhand), INDIA

Telephones: +91-135-2224831, 2224803, Fax: +91-135-2750296, E-mail: projectdirectoresip@gmail.com

NATIONAL COMPETITIVE BIDDING
(One-Envelope Bidding Process without e-Procurement)
FORTHE SUPPLY OF EDDY CO-VARIANCE SYSTEMS WITH TOWERS
(CARBON FLUX TOWERS) GOODS/ EQUIPMENT

BID REFERENCE : IN-ICFRE-151554-GO-RFB

DATE OF COMMENCEMENT OF SALE OF BIDDING DOCUMENT : 15 May 2020

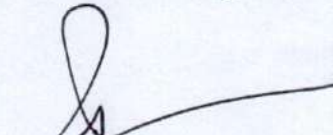
LAST DATE FOR SALE OF BIDDING DOCUMENT : 25 June 2020

LAST DATE AND TIME FOR RECEIPT OF BIDS : 26 June 2020, 03:00 PM

TIME AND DATE OF OPENING OF BIDS : 26 June 2020, 03:05 PM

PLACE OF OPENING OF BIDS : Dehradun

OFFICER INVITING BIDS : Project Director, ESIP
ADDRESS FOR COMMUNICATION :
Project Director
Ecosystem Services Improvement Project
Indian Council for Forestry Research and Education
P.O. New Forest, Dehradun, Uttarakhand-248006
Tel: +91-135-2224831, 2224803
Fax: +91-135-2750296
Email: projectdirectoresip@gmail.com
Website: www.icfre.gov.in


परियोजना निदेशक/Project Director
ई.एस.आई.पी./ESIP
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
इकधर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

SECTION I: INVITATION FOR BIDS (IFB)

परियोजना निदेशक/Project Director
ई.एस.आई.पी./ESIP
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
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FORTHE SUPPLY OF EDDY CO-VARIANCE SYSTEMS WITH TOWERS
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INVITATION FOR BIDS (IFB)

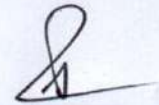
Date: 15 May 2020

Credit/ Grant No.: TF0A3990

Loan No. : N.A.

IFB No.: N.A.

1. The Government of India has received/applied/ intends to apply for financing from the World Bank towards the cost of Ecosystem Services Improvement Project (ESIP) and it is intended that part of the proceeds will be applied to eligible payments under the contract.
2. The Project Director, ESIP now invites sealed bids from eligible bidders for supply of **Eddy Covariance Systems with Towers (Carbon Flux Towers) and its installation:** Eddy Covariance System (Carbon Flux Tower) are equipped with high precision instruments to measure energy, water vapours and carbon dioxide exchanges. Eddy covariance is a micro-meteorological method to directly measure the exchanges of gas, energy and momentum between ecosystem and the atmosphere. It is based on eddy covariance technique which produces a direct measure of net carbon dioxide exchange across the canopy-atmosphere interface. It measures the exchange rate of carbon dioxide across the interface between the atmosphere and vegetation by measuring the covariance between fluctuations in vertical wind velocity and carbon dioxide mixing ratio. The area sampled with this technique, called the flux footprint, possesses longitudinal dimensions ranging between a hundred meters and several kilometers. It is capable of measuring ecosystem carbon dioxide exchange across a spectrum of times scales, ranging from seconds, hours to years.
3. **Quantity:** 02
4. **Locations** (for installation):
 - a. Budhni Forest Range, Sehore Forest Division, Madhya Pradesh
 - b. Raghunath Nagar Forest Range, Balrampur Forest Division, Chhattisgarh
5. **Delivery Period:** Within 180 days (delivery with complete installation) from the award of contract
6. Bidding will be conducted through the National Competitive Bidding (NCB) procedures agreed with the World Bank. The bidding is open to all eligible bidders as defined in the Bank's Procurement Guidelines. In addition, please refer to paragraphs 1.6 and 1.7 of the Guidelines setting forth the World Bank's policy on conflict of interest.



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7. Interested eligible Bidders may obtain further information from and inspect the bidding documents during office hours from 15 May 2020 to 25 June 2020 at the office of the Project Director, ESIP, Indian Council of Forestry Research and Education (ICFRE), Dehradun, India.
8. A complete set of bidding documents may be purchased by any interested eligible bidder on the submission of a written application to the above office and upon payment of a non-refundable fee as indicated below in the form of a Demand Draft/Cashier's Cheque/Certified Cheque on any scheduled bank in favour of Account Officer, ICFRE, Dehradun payable at Dehradun or bidding documents are allowed to be freely downloaded from ICFRE website (www.icfre.gov.in/tenders) and payment towards the cost of bid documents should accompany the bid submission. In all such cases, the bidder would be responsible for ensuring that any addenda available on the website is also downloaded and incorporated.
9. The bidding document may be obtained from the office of the Project Director, ESIP, ICFRE during office hours, on all working days either in person or by post. Bidding document requested by mail will be dispatched by courier/speed post on payment of under mentioned postal charges. The ICFRE will not be held responsible for the postal delay, if any, in the delivery of documents or non-receipt of the same.
 - a) Price of bidding document (non-refundable) : Rs. 590/-
 - b) Postal charges, inland: Rs. 100/-
 - c) Postal charges, overseas: Rs. 500/-
 - d) Date of commencement of sale of bidding document: 15 May 2020
 - e) Last date for sale of bidding document: 25 June 2020
 - f) Last date and time for receipt of bids: 26 June 2020 by 03:00 PM
 - g) Time and date of opening of bids: 26 June 2020, 03:05 PM
 - h) Place of opening of bids: Dehradun(INDIA)
 - i) Address for communication: Project Director
Ecosystem Services Improvement Project
Indian Council for Forestry Research and Education
P.O. New Forest, Dehradun, Uttarakhand-248006
Tel: +91-135-2224831, 2224803
Fax: +91-135-2750296
Email: projectdirectoresip@gmail.com
Website: www.icfre.gov.in

10. All bids must be accompanied by a bid security as specified in the bid document and must be delivered to the above office at the date and time indicated above. Electronic bidding will not be permitted. Late bids will be rejected.
11. Bids will be publicly opened in the presence of Bidders' designated representatives who choose to attend at the address given above on the specified date and time.
12. In the event of the date specified for bid receipt and opening being declared as a closed holiday for the purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

Seal of Office & Address

परियोजना निदेशक/Project Director
ई.एस.आई.पी./ESIP
भारतीय वनिकी अनुसंधान एवं शिक्षा परिषद
Indian Council of Forestry Research & Education
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Indian Council for Forestry Research and Education
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PART 1 – BIDDING PROCEDURES

परियोजना निदेशक/Project Director
ई.एस.आई.पी./ESIP
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्
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SECTION I - Instructions to Bidders [ITB]

Section I. Instructions to Bidders

A. General

- 1. Scope of Bid**
- 1.1 The Purchaser indicated in the Bidding Data Sheet (BDS), issues these Bidding Documents for the supply of Goods and Related Services incidental thereto as specified in Section VII, Schedule of Requirements. The name, identification and number of lots (contracts) of this National Competitive Bidding (NCB) procurement are specified in the BDS.
- 1.2 Throughout these Bidding Documents:
- (a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, telex, including if specified in the BDS, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;
- (b) if the context so requires, "singular" means "plural" and vice versa; and
- (c) "day" means calendar day.
- 2. Source of Funds**
- 2.1 The Government of India (hereinafter called "Borrower") specified in the BDS has applied for or received financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount specified in BDS towards the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which these Bidding Documents are issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan (or other financing) account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the funds.
- 3. Corrupt**
- 3.1 The Bank requires compliance with its policy in regard to

&Fraudulent Practices

corrupt and fraudulent practices as set forth in Section VI.

- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers and to permit the Bank to inspect all accounts, records and other documents relating to the submission of the application, bid submission (in case prequalified), and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.
- 4. Eligible Bidders**
- 4.1 A Bidder may be a firm that is a private entity, or a government owned entity subject to ITB 4.5.
- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:
- directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - receives or has received any direct or indirect subsidy from another Bidder; or
 - has the same legal representative as another Bidder; or
 - has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Purchaser regarding this bidding process; or
 - participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
 - any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods/equipment that are the subject of the bid; or
 - any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower for the Contract implementation; or
 - would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any of its affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly

- involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the contract.
- 4.3 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.7. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.
- 4.4 A Bidder that has been sanctioned by the Bank in accordance with the above ITB 3.1, including in accordance with the Bank's Guidelines on Preventing and Combating Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants ("Anti-Corruption Guidelines"), shall be ineligible to be prequalified for, bid for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
- 4.5 Bidders that are Government-owned enterprises or institutions in the Purchaser's Country may participate only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not dependent agencies of the Purchaser. To be eligible, a government-owned enterprise or institution shall establish to the Bank's satisfaction, through all relevant documents, including its Charter and other information the Bank may request, that it: (i) is a legal entity separate from the government (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to the government, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt; and (iv) is not bidding for a contract to be awarded by the department or agency of the government which under their applicable laws or regulations is the reporting or supervisory authority of the enterprise or has the ability to exercise influence or control over the enterprise or

institution.

- 4.6 A Bidder shall not be under suspension from bidding by the Purchaser as the result of the operation of a Bid-Securing Declaration.
- 4.7 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.8 A bidder shall provide such evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

5. Eligible Goods and Related Services

- 5.1 All the Goods and Related Services to be supplied under the Contract and financed by the Bank may have their origin in any country in accordance with Section V, Eligible Countries.
- 5.2 For purposes of this Clause, the term "goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "related services" includes services such as insurance, installation, training, and initial maintenance.
- 5.3 The term "origin" means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

B. Contents of Bidding Document

6. Sections of Bidding Documents

- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITB Clause 8.

PART 1 Bidding Procedures

- Section I. Instructions to Bidders (ITB)
- Section II. Bidding Data Sheet (BDS)

- Section III. Evaluation and Qualification Criteria
- Section IV. Bidding Forms
- Section V. Eligible Countries
- Section VI Bank Policy-Corrupt and Fraudulent Practices

PART 2 Supply Requirements

- Section VII. Schedule of Requirements

PART 3 Contract

- Section VIII. General Conditions of Contract (GCC)
- Section IX. Special Conditions of Contract (SCC)
- Section X. Contract Forms

6.2 The Invitation for Bids issued by the Purchaser is not part of the Bidding Document.

6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the document, responses to requests for clarification, minutes of pre-bid meeting (if any), or Addenda to the Bidding Document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its Bid all information or documentation as is required by the Bidding Documents.

7. Clarification of Bidding Documents

7.1 A prospective Bidder requiring any clarification on the Bidding Documents shall contact the Purchaser in writing at the Purchaser's address specified in the BDS. The Purchaser will respond in writing to any request for clarification, provided that such request is received no later than fifteen (15) days prior to the deadline for submission of bids. The Purchaser shall forward copies of its response to all those who have acquired the Bidding Documents directly from it, including a description of the inquiry but without identifying its source. If so specified in the BDS, the Purchaser shall also promptly publish its response at the web page identified in the BDS (where electronic downloading of bid document is permitted, the purchaser will upload the addenda on the website and it will be the responsibility of the bidders [who downloaded the bidding document] to search the website for any

addenda). Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 8 and ITB Sub-Clause 22.2.

- 8. Amendment of Bidding Documents**
- 8.1 At any time prior to the deadline for submission of bids, the Purchaser may amend the Bidding Documents by issuing addendum.
- 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents directly from the Purchaser in accordance with ITB clause 6.3 The Purchaser shall also promptly publish the addendum on the Purchaser's web page in accordance with ITB 7.1.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB Sub-Clause 22.2

C. Preparation of Bids

- 9. Cost of Bidding**
- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 10. Language of Bid**
- 10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- 11. Documents Comprising the Bid**
- 11.1 The Bid shall comprise the following:
- Letter of Bid, in accordance with ITB Clause 12;
 - Completed schedules, in accordance with ITB 12 and 14
 - Bid Security, in accordance with ITB Clause 19.1, if required;
 - Alternative bids, if permissible, in accordance with ITB 13;
 - Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 20.2;

- (f) Documentary evidence in accordance with ITB Clause 17 establishing the Bidder's qualifications to perform the contract if its bid is accepted;
- (g) Documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid;
- (h) Documentary evidence in accordance with ITB Clause 16, that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
- (i) Documentary evidence in accordance with ITB Clauses 16 and 30, that the Goods and Related Services conform to the Bidding Documents;
- (j) Manufacturer's authorization form; and
- (k) Any other document required in the BDS.

11.2 The Bidder shall furnish in the Letter of Bid, information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Letter of Bid and Price Schedules

12.1 The Letter of Bid and Price Schedules shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.2. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

13.1 Unless otherwise specified in the BDS, alternative bids shall not be considered.

14. Bid Prices and Discounts

14.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Price Schedules shall conform to the requirements specified below.

14.2 All lots (contracts) and items must be listed and priced separately in the Price Schedules.

14.3 The price to be quoted in the Letter of Bid, in accordance with ITB 12.1, shall be the total price of the bid, excluding any discounts offered.

14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid in accordance with ITB 12.1.

14.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise specified in the BDS. A bid submitted

with an adjustable price quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 29. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

14.6 If so specified in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Unless otherwise specified in the BDS, prices quoted shall correspond to 100% of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4 provided the bids for all lots (contracts) are submitted and opened at the same time.

14.7 The terms EXW and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by The International Chamber of Commerce, as specified in the BDS.

14.8 Prices shall be quoted as specified in the Price Schedule included in Section IV, Bidding Forms. The dis-aggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Section V Eligible Countries. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Section V Eligible Countries. Prices shall be entered in the following manner:

(a) **For Goods:**

- (i) the price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable), including GST as applicable payable on the finished Goods;
- (ii) any other taxes if payable in India on the Goods, if the contract is awarded to the Bidder; and
- (iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) specified in the

BDS.

- (b) for the Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:
- (i) the price of each item comprising the Related Services (inclusive of any applicable taxes).

14.9 Deemed Export Benefits

Bidders may like to ascertain availability of tax/duty exemption benefits, if any, available for contracts financed under World Bank Credits/ Loans. They are solely responsible for obtaining such benefits, which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the Purchaser will not compensate the bidder.

Where the bidder has quoted taking into account such benefits, it must give all information required for issue of necessary Certificates in terms of the Government of India's relevant Notification along with its bid as perform stipulated in Section IV Bidding Forms.

If the Bidder has considered the Deemed Export Benefits in its bid, the Bidder shall confirm and certify that the Purchaser will not be required to undertake any responsibilities of the deemed export scheme or the benefits available during contract execution except issuing the required certificates. Bids which do not conform to this provision or any condition by the Bidder which makes the bid subject to availability of deemed export benefits or compensation on withdrawal of or any variations in the deemed export benefits scheme will make the bid non-responsive and hence liable to rejection.

15. Currencies of Bid & Payment

- 15.1 The Bidder shall quote the Price in Indian Rupees only.

16. Documents Establishing the Eligibility and conformity of the Goods and Related Services

- 16.1 To establish the eligibility of the Goods and Related Services in accordance with ITB Clause 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.
- 16.2 To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section VII,

Schedule of Requirements.

- 16.3 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII Schedule of Requirements.
- 16.4 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period specified in the BDS following commencement of the use of the goods by the Purchaser.
- 16.5 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII Schedule of Requirements.
- 17. Documents**
- Establishing the Eligibility & Qualifications of the Bidder**
- 17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.
- 17.2 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:
- (a) that the Bidder meets each of the qualification criterion Criteria specified in Section III, Evaluation and Qualification;
- (b) (i) that, if required in the BDS, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Purchaser's Country;

(ii) that, if required in the BDS, the Bidder is or will be (if awarded the contract) represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications;

(c) Bids from Joint Ventures are not acceptable.

18 Period of Validity of Bids

18.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Purchaser in accordance with ITB 22.1. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB Clause 19, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB Sub-Clause 18.3.

18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be determined as follows:

(a) In the case of fixed price contracts, the Contract price shall be the bid price adjusted by the factor specified in the BDS for each week or part of the week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful bidder.

(b) In the case of adjustable price contracts, no adjustment shall be made.

(c) In any case, bid evaluation shall be based on the bid Price without taking into consideration the applicable correction from those indicated above.

19 Bid Security

19.1 The Bidder shall furnish as part of its bid, a Bid Security, if required, as specified in the BDS.

19.2 The Bid Security shall be in the amount specified in the BDS and denominated in Indian Rupees or a freely convertible currency, and shall:

परियोजना निदेशक/Project Director
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 भारतीय वनिकी अनुसंधान एवं शिक्षा परिषद्
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 डाकघर-न्यू फॉरेस्ट, देहरादून-248006
 P.O.-New Forest, Dehradun-248006

- (a) at the bidder's option, be in the form of either a certified check, demand draft, letter of credit, or a bank guarantee from a Nationalized /Scheduled Bank in India, or another security specified in the BDS;
 - (b) be substantially in accordance with one of the forms of Bid Security included in Section IV, Bidding Forms, or other form approved by the Purchaser prior to bid submission;
 - (c) be payable promptly upon written demand by the Purchaser in case the conditions listed in ITB Clause 19.7 are invoked;
 - (d) be submitted in its original form; copies will not be accepted;
 - (e) remain valid for a period of 60 days beyond the original validity period of the bids, or beyond any period of extension of bid validity, if so requested under ITB Clause 18.2.
- 19.3 If a Bid Security is required in accordance with ITB Sub-Clause 19.1, any bid not accompanied by a substantially responsive Bid Security shall be rejected by the Purchaser as non-responsive.
- 19.4 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security pursuant to ITB Clause 42.
- 19.5 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the contract and furnished the required performance security.
- 19.6 The Bid Security may be forfeited:
- (a) if a Bidder
 - (i) withdraws its bid during the period of bid validity specified by the Bidder in the Letter of Bid, except as provided in ITB Sub-Clause 18.2;

or

 - (ii) does not accept the correction of errors in pursuant to ITB 31,

or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB Clause

41; or

- (ii) furnish a Performance Security in accordance with ITB Clause 42.

19.7 If a bid security is not required in the BDS, and

- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2, or does not accept the correction of errors pursuant to ITB 31; or
- (b) if the successful Bidder fails to sign the Contract in accordance with ITB 41; or furnish a performance security in accordance with ITB 42;

the Borrower may, if provided for in the BDS, declare the Bidder ineligible to be awarded a contract by the Purchaser for a period of time as stated in the BDS.

20 Format and Signing of Bid

- 20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB Clause 11 and clearly mark it "ORIGINAL." Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the bid, in the number specified in the BDS and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. The authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries or amendments have been made shall be signed or initialed by the person signing the bid.
- 20.3. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

21 Sealing and Marking of Bids

- 21.1 The Bidder shall enclose the original and all copies of the bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "Original", "Alternative", and "Copy". These envelopes containing the original and the copies shall then be enclosed in one single

envelope.

21.2 The inner and outer envelopes shall:

- a. bear the name and address of the Bidder;
- b. be addressed to the Purchaser in accordance with ITB 24.1;
- c. bear the specific identification of this bidding process indicated in ITB 1.1; and
- d. bear a warning not to open before the time and date for bid opening.

21.3 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the bid.

21.4 Telex, Cable or Facsimile bids will be rejected as non-responsive.

22 Deadline for Submission of Bids

22.1 Bids must be received by the Purchaser at the address and no later than the date and time specified in the BDS. When so specified in the BDS, bidders shall have the option of submitting their bids electronically. Bidders submitting bids electronically shall follow the electronic bid submission procedures as specified in the BDS.

In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received upto the appointed time on the next working day.

22.2 The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23 Late Bids

23.1 The Purchaser shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB Clause 22. Any bid received by the Purchaser after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.

24 Withdrawal, Substitution, and Modification of Bids

24.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB Sub-Clause 20.2, (except that no copies of the withdrawal notice are required). The corresponding substitution or modification of the bid must accompany the respective written notice. All

notices must be:

- (a) Prepared & submitted in accordance with ITB Clauses 20 and 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "Withdrawal," "Substitution," or "Modification;" and
- (b) Received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB Clause 22.

24.2 Bids requested to be withdrawn in accordance with ITB Sub-Clause 24.1 shall be returned unopened to the Bidders.

24.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25 Bid Opening

25.4 Except as in the cases specified in ITB 23 & 24, the Purchaser shall publicly open and read out in accordance with ITB 25.3 all bids received by the deadline at the date, time and place specified in the BDS in the presence of Bidders' designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 22.1 shall be as specified in the BDS.

In the event of the specified date of bid opening being declared a holiday for the Purchaser, the bids will be opened at the appointed time and location on the next working day.

25.2 First, envelopes marked "Withdrawal" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. If the withdrawal envelope does not contain a copy of the "power of attorney" confirming the signature as a person duly authorized to sign on behalf of the Bidder, the corresponding bid will be opened. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "Substitution" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "Modification" shall be opened and read out with the

corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only bids that are opened and read out at Bid opening shall be considered further.

- 25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the Bid Prices, per lot (contract) if applicable including any discounts and alternative bids; the presence or absence of a Bid Security, if required; and any other details as the Purchaser may consider appropriate. Only discounts and alternative bids read out at Bid opening shall be considered for evaluation. The Letter of Bid and the Price Schedules are to be initiated by representatives of the Purchaser attending bid opening in the manner specified in the BDS. The Purchaser shall neither discuss the merits of any bid nor reject any bid (except for late bids, in accordance with ITB 25.1).
- 25.4 The Purchaser shall prepare a record of the Bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot (contract) if applicable, including any discounts, and alternative bids if they were permitted; and the presence or absence of a Bid Security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted bids in time, and posted online when electronic bidding is permitted.

E. Evaluation and Comparison of Bids

- 26 Confidentiality** 26.1 Information relating to the examination, evaluation, comparison, and post-qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until information on Contract Award is communicated to all Bidders in accordance with ITB 40.
- 26.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post-qualification of the bids or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB Sub-Clause 26.2, from the time of bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding

- process, it should do so in writing.
- 27 Clarification of Bids**
- 27.1 To assist in the examination, evaluation, comparison of the bids and post-qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid, that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the bids, in accordance with ITB Clause 31.
- 27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.
- 28 Deviations, Reservations, Omissions**
- 28.1 During the evaluation of bids, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified in the Bidding Documents;
- (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
- (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Documents.
- 29 Determination of Responsiveness**
- 29.1 The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself as defined in ITB 11.
- 29.2 A substantially responsive Bid is one that meets the requirements of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
- (a) If accepted, would
- (i) affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
- (ii) limit in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or
- (b) if rectified would unfairly affect the competitive position

of other bidders presenting substantially responsive bids.

- 29.2.1 Bids from Agents, without proper authorization from the manufacturer as per Section IV, shall be treated as non-responsive.
- 29.3.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 11 have been provided, and to determine the completeness of each document submitted.
- 29.3.2 The Purchaser shall examine the bid to confirm that the Bidder has accepted all terms and conditions specified in GCC and the SCC without material deviations or reservations. Deviations from or objections or reservations to critical provisions such as those concerning Performance Security (GCC Clause 18), Warranty (GCC Clause 28), Force Majeure (Clause 32), Limitation of liability (GCC Clause 30), Governing law (GCC Clause 9) and Taxes & Duties (GCC Clause 17) will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 29.4 If a bid is not substantially responsive to the Bidding Documents, it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
- 30 Nonconformities, Errors, and Omissions**
- 30.1 Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.
- 30.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price or substance of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 30.3 Provided that a bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component.
- 31 Correction of Arithmetical**
- 31.1 Provided that the Bid is substantially responsive, the Purchaser

- Errors** shall correct arithmetical errors on the following basis:
- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 31.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 31.1 shall result in the rejection of the Bid. If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be rejected and the Bid security may be forfeited.
- 32 **Conversion to Single Currency** Not applicable.
- 33 **Margin of Domestic Preference** Not applicable.
- 34 **Evaluation of Bids**
- 34.1 The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.
 - To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria listed in this Clause. No other criteria or methodology shall be permitted.
 - 34.2 To evaluate a Bid, the Purchaser shall consider the following:
 - (a) evaluation will be done for Items or Lots (contracts), as specified in the BDS; and the Bid Price as quoted in accordance with clause 14;
 - (b) price adjustment for correction of arithmetic errors in

- accordance with ITB Sub-Clause 31.1;
- (c) price adjustment due to discounts offered in accordance with ITB Sub-Clause 14.4;
- (d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 30.3;
- (e) The additional evaluation factors as specified in the BDS as per ITB 34.6 from amongst those set out in Section III, Evaluation and Qualification Criteria.
- 34.3 The estimated effect of the price adjustment provisions of the conditions of contract, applied over the period of execution of the contract, shall not be taken into account in bid evaluation.
- 34.4 If these Bidding Documents allow Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Bid Form, is specified in Section III, Evaluation and Qualification Criteria.
- 34.5 The Purchaser's evaluation of a bid shall include (i) price quoted EXW including GST as applicable on the finished goods; (ii) other taxes, if any, payable on finished goods; (iii) price for inland transportation, insurance, and other local services required to convey the Goods to their Final Destination; and (iv) price for Related Services, if any.
- 34.6 The Purchaser's evaluation of a bid may require the consideration of other factors, in addition to the Bid Price quoted in accordance with ITB Clause 14. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids, unless otherwise specified in Section III, Evaluation and Qualification Criteria. The factors, methodologies and criteria to be used shall be as specified in ITB 34.2 (f).
- 35 Comparison of Bids** 35.1 The Purchaser shall compare all substantially responsive bids to determine the lowest-evaluated bid, in accordance with ITB Clause 34.
- 36 Qualification of the Bidder** 36.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive bid meets the qualifying criteria specified in Section III evaluation and Qualification Criteria.
- 36.2 The determination shall be based upon an examination of the

documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 17.

- 36.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Purchaser shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 37 **Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids** 37.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

- 38 **Award Criteria** 38.1 Subject to ITB 37.1, the Purchaser shall award the Contract to the Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.
- 39 **Purchaser's Right to Vary Quantities at Time of Award** 39.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VII, Schedule of Requirements, provided this does not exceed the percentages specified in the BDS, and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.
- 40 **Notification of Award** 40.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter called "Letter of Acceptance") shall specify the sum that the purchaser will pay in consideration of the supply of Goods (hereinafter called "the Contract Price").
- Publication of Award** 40.2 At the same time the Purchaser shall publish in a National website or Govt. of India Central Public Procurement Portal (<https://eprocure.gov.in/cppp/>) or on the Purchaser's website (www.icfre.gov.in) with free access if available, or in the official gazette, the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the successful Bidder, and the price it

- offered, as well as the duration and summary scope of the contract awarded.
- Recourse to Unsuccessful Bidders**
- 40.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests in writing the grounds on which its bid was not selected.
- 40.4 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 40.5 Upon the successful Bidder's furnishing of the performance security and signing the Contract Form pursuant to ITB Clause 42, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 19.5.
- 41 Signing of Contract**
- 41.1 Promptly after notification, the Purchaser shall send the successful Bidder the Contract Agreement.
- 41.2 Within twenty-one (21) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.
- 42 Performance Security**
- 42.1 Within twenty one (21) days of the receipt of notification of award from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC, using for that purpose the Performance Security Form included in Section X Contract forms, or another Form acceptable to the Purchaser. Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose bid is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

परियोजना निदेशक/Project Director
 ई.एस.आर्.पी./ESIP
 भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद
 Indian Council of Forestry Research & Education
 हाकर-जु फॉरेस्ट, देहरादून-248006
 P.O.-New Forest, Dehradun-248006

Section II - Bidding Data Sheet

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Clause Reference	A. General
ITB 1.1	The Purchaser is: Project Director, Ecosystem Services Improvement Project Indian Council of Forestry Research and Education, P.O. New Forest, Dehradun, Uttarakhand-248006 (India)
ITB 1.1	The name and identification number of the NCB is: Procurement and installation of Eddy Co-variance Systems with Towers (Carbon Flux Towers) IN-ICFRE-151554-GO-RFB The number, identification and names of the lots (contracts) comprising this NCB are: Not Applicable
ITB 2.1	The Borrower is Government of India Loan or Financing Agreement Amount: US \$ 24.42 Million
ITB 2.1	The name of the Project is: Ecosystem Services Improvement Project
ITB 4.4	A list of firms debarred from participating in World Bank projects is available at http://www.worldbank.org/debarr

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Indian Council of Forestry Research & Education
हाऊस-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

B. Contents of Bidding Documents	
ITB 7.1	For Clarification of bid purposes only, the Purchaser's address is: Attention: Project Director Ecosystem Services Improvement Project Room No. 143 Indian Council of Forestry Research and Education P.O. New Forest, Dehradun, Uttarakhand-248006 (India) Tel: +91-135-2224831,2224803, Tele Fax: +91-135-2750296 E-mail: projectdirectoresip@gmail.com Website: www.icfre.gov.in/tenders
C. Preparation of Bids	
ITB 11.1(k)	The Bidder shall submit the following additional documents in its bid: N.A.
ITB 13.1	Alternative Bids "shall not be" considered.
ITB 14.5	The prices quoted by the Bidder "shall not be" subjected to adjustment during the performance of the Contract. If prices shall be adjustable, the methodology specified in Special Conditions of Contract will apply.
ITB 14.7	The Incoterms edition is Incoterms 2010.
ITB 14.8 (a) (iii)	"Final destination (Project Site)": 1. Budhni Forest Range, Sehore Forest Division, Madhya Pradesh 2. Raghunath Nagar Forest Range, Balrampur Forest Division, Chhattisgarh
ITB 16.4	Period of time the Goods are expected to be functioning (for the purpose of spare parts): at least 5 years
ITB 17.2 (b) (i)	Manufacturer's authorization is required as per proforma in Section IV.
ITB 17.2 (b)iii	After sales service is "required for 5 years" which shall be provided by the Supplier or alternatively by its Agent in case of a foreign bidder.
ITB 18.1	The bid validity period shall be 180 days.
ITB 18.3(a)	The factor will be as per the prevailing inflation rate
ITB 19.1	Bid shall include a Bid Security (issued by bank) included in Section IV Bidding Forms.
ITB 19.3	The amount of the Bid Security shall be: INR 2,00,000/-

ITB 19.3 (a)	Other types of acceptable securities are: Fixed Deposit/Time Deposit certificate issued by a Nationalized or Scheduled Bank located in India for equivalent or higher values are acceptable provided it is pledged in favour of Project Director, ESIP and such pledging has been noted and suitably endorsed by the bank issuing the certificate.
ITB 20.1	In addition to the original of the bid, the number of copies is: Two
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of signed authority letter of bidder is required to demonstrate the authority of the signatory to sign the bid.
D. Submission and Opening of Bids	
ITB 21.2 (c)	The inner and outer envelopes shall bear the following additional identification marks: Procurement and installation of Eddy Co-variance Systems with Towers (Carbon Flux Towers)
ITB 22.1	For bid submission purposes, the Purchaser's address is: Attention: Project Director, ESIP Address: Project Director Ecosystem Services Improvement Project Room No. 143 Indian Council of Forestry Research and Education P.O. New Forest, Dehradun, Uttarakhand-248006 (India) Tel: +91-135-2224831,2224803, Tele Fax: +91-135-2750296 E-mail: projectdirectoresip@gmail.com Website: www.icfre.gov.in/tenders, Country: INDIA The deadline for the submission of bids is: Date: 26 June 2020 Time: 03:00 PM Electronic bidding is not permitted.
ITB 25.1	The bid opening shall take place at: ICFRE, Dehradun Street Address: Indian Council of Forestry Research and Education P.O. New Forest, Dehradun, Uttarakhand-248006 (India) Tel: +91-135-2224831,2224803, Tele Fax: +91-135-2750296 E-mail: projectdirectoresip@gmail.com Website: www.icfre.gov.in/tenders, Country: INDIA Date: 26 June 2020 Time: 03:05 PM
ITB 25.3	The Letter of Bid and Price Schedules shall be initiated by representatives of the Purchaser conducting Bid opening. Each Bid shall be numbered, any

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	modification to the unit or total price shall be initiated by the Representatives of the Purchaser, etc.
E. Evaluation and Comparison of Bids	
ITB 34.2(a)	Evaluation will be done for supply and installation and commissioning of Eddy Covariance Systems with Towers (Carbon Flux Towers) Bids will be evaluated for each item and the Contract will comprise the item(s) awarded to the successful bidder.
ITB 34.4	Bidders "shall not" be allowed to quote separate prices for one or more lots.
ITB 34.6	The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: <ul style="list-style-type: none"> (a) Deviation in Delivery schedule: Adjustment as referred to in paragraph 1(a) of Section III will be applied to the bid price for bids offering delivery beyond the earliest delivery date (specified in Section VII - Schedule of Requirements) @ 0.5% per week or part of week. No credit will be given to deliveries before the earliest date and bids offering delivery after the final date (beyond 180 days) of stipulated delivery period will be treated as non-responsive. (b) Deviation in payment schedule: The SCC (Special Conditions of Contract) stipulates the payment schedule specified by the Purchaser. If the bid deviates from the schedule and if such deviation is considered acceptable, the bids will be evaluated by calculating interest earned for earlier payments involved in the terms outlined in the bid as compared with those stipulated in the SCC, at the interest rate of 12% per annum. [State Bank of India Bank PLR (Prime Lending rate) + 2%] (c) The cost of major replacement components, mandatory spare parts, and service: Not Applicable (d) The availability in the Purchaser's Country of spare parts and after-sales services for the equipment offered in the bid: Not Applicable (e) the projected operating and maintenance costs during the life of the equipment: Applicable, this will be covered under comprehensive maintenance contract (including extended warranty for five years) and periodic calibration of the equipments (f) the performance and productivity of the equipment offered: Not Applicable
F. Award of Contract	
ITB 39.1	The maximum percentage by which quantities may be increased is: 15% The maximum percentage by which quantities may be decreased is: 15%

Section III. Evaluation and Qualification Criteria

This Section complements the Instructions to Bidders. It contains the criteria that the Purchaser shall use to evaluate a bid and determine whether a Bidder qualifies in accordance with ITB 34 & 36. No other criteria shall be used.

Contents

1. Evaluation Criteria (ITB 34)
2. Qualification Requirements (ITB 36)

परियोजना निदेशक/Project Director
ई.एस.आर्.पी./ESIP
भारतीय वन्यजीव अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
हाकबर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

1. Evaluation Criteria (ITB 34.6)

The Purchaser's evaluation of a bid may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 14.8, one or more of the following factors as specified in ITB Sub-Clause 34.2 (f) and in BDS referring to ITB34.6, using the following criteria and methodologies.

- (a) Delivery schedule. (as per Incoterms specified in the BDS)

The Goods specified in the List of Goods are required to be delivered within the acceptable time range (after the earliest and before the final date, both dates inclusive) specified in Section VII, Schedule of requirements. No credit will be given to deliveries before the earliest date, and bids offering delivery after the final date shall be treated as non-responsive. Within this acceptable period, an adjustment, as specified in BDS Sub-Clause 34.6, will be added, for evaluation purposes only, to the bid price of bids offering deliveries later than the "Earliest Delivery Date" specified in Section VII, Schedule of requirements.

- (b) Deviation in payment schedule.

(i) Bidders shall state their bid price for the payment schedule outlined in the SCC. Bids shall be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The Purchaser may consider the alternative payment schedule and the reduced bid price offered by the Bidder selected on the basis of the base price for the payment schedule outlined in the SCC.

- (c) Cost of major replacement components, mandatory spare parts, and service.

(i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation (five years or the period specified in the BDS Sub-Clause 16.4 as appropriate, is in the List of Goods). An adjustment equal to the total cost of these items, at the unit prices quoted in each bid, shall be added to the bid price, for evaluation purposes only.

- (d) Availability in the Purchaser's Country of spare parts and after sales services for equipment offered in the bid.

An adjustment equal to the cost to the Purchaser of establishing the minimum service facilities and parts inventories, as outlined in BDS Sub-Clause 34.6, if quoted separately, shall be added to the bid price, for evaluation purposes only.

- (e) Projected operating and maintenance costs.

Operating and maintenance costs: An adjustment to take into account the operating and maintenance costs of the Goods will be added to the bid price, for evaluation

purposes only, if specified in BDS Sub-Clause 34.6. The adjustment will be evaluated in accordance with the methodology specified in the BDS Sub-Clause 34.6.

- (f) Performance and productivity of the equipment.
- (i) Performance and productivity of the equipment. An adjustment representing the capitalized cost of additional operating costs over the life of the plant will be added to the bid price, for evaluation purposes if specified in the BDS Sub-Clause 34.6. The adjustment will be evaluated based on the drop in the guaranteed performance or efficiency offered in the bid below the norm of 100, using the methodology specified in BDS Sub-Clause 34.6.

2. Multiple Contracts (ITB 34.4)

The Purchaser shall award multiple contracts to the Bidder that offers the lowest evaluated combination of bids (one contract per bid) and meets the post-qualification criteria (this Section III, Sub-Section ITB 36.1 Post-Qualification Requirements)

The Purchaser shall:

- (a) evaluate only lots or contracts that include at least the percentages of items per lot and quantity per item as specified in ITB Sub Clause 14.6
- (b) take into account:
- (i) the lowest-evaluated bid for each lot and
- (ii) the price reduction per lot and the methodology for its application as offered by the Bidder in its bid"

3. Post-qualification Requirements (ITB 36.1)

After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 35.1, the Purchaser shall carry out the post-qualification of the Bidder in accordance with ITB Clause 36, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

A. If the Bidder is a manufacturer:

- (a) Financial Capability

The Bidder shall furnish documentary evidence that it meets the following financial requirement(s): Bidder has cumulative revenue from related equipments of Rs. 02 Crores and above within the last five financial years.

- (b) Experience and Technical Capacity

The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s): The Bidder has the experience of at least 5 years of supply, installation and commissioning of the carbon flux tower or similar types of equipments etc.

- (c) The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement: Satisfactory performance of the equipments for the period of atleast 5 years.
- (d) The Bidder must furnish details of supplies made by him in the last five years in proforma attached in Section IV

B. If Bidder is not a manufacturer:

If a Bidder is not a manufacturer, but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section IV, Bidding Forms), the Manufacturer shall demonstrate the above qualifications (a), (b), (c) and the Bidder shall demonstrate that it has successfully completed at least 01 contract of similar goods in the past 10 years.

परियोजना निदेशक/Project Director
ई.एस.आई.पी./ESIP
भारतीय राष्ट्रीय अनुसंधान एवं शिक्षा परिषद
Indian Council of Forestry Research & Education
हाइकोर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

Section IV – Bidding Forms

परियोजना निदेशक/Project Director
ई.एस.आर्.पी./ESRP
भारतीय वन्यजीव अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
हाऊस-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

1. Letter of Bid

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and address.

Note: *All italicized text is for use in preparing these forms and shall be deleted from the final products.*

No alterations to the text except as provided in ITB 20.2, shall be permitted and no substitutions shall be accepted except as provided in ITB 12.]

Date: *[insert date (as day, month and year) of Bid Submission]*

NCB No.: *[insert number of bidding process]*

Invitation for Bid No.: *[insert No of IFB]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No. ___ issued in accordance with ITB 8: *[insert the number and issuing date of each Addenda]*;
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid Securing Declaration in the Purchaser's country in accordance with ITB 4.6
- (d) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services *[insert a brief description of the Goods and Related Services]*;
- (e) The total price of our Bid, excluding any discounts offered in item (f) below, is:

In case of only one lot, total price of the Bid *[insert the total price of the bid in Rs in words and figures]*;

In case of multiple lots, total price of each lot *[insert the total price of each lot in Rs in words and figures]*;

In case of multiple lots, total price of all lots (sum of all lots) *[insert the total price in Rs in of all lots in words and figures]*;

- (f) The discounts offered and the methodology for their application are:

- (i) The discounts offered are: [Specify in detail each discount offered.]
- (ii) The exact method of calculations to determine the net price after application of discounts is shown below: [Specify in detail the method that shall be used to apply the discounts]; Discounts.
- (g) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid, submission deadline in accordance with ITB Sub-Clause 22, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;
- (i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.2(e), other than alternative bids submitted in accordance with ITB 13;
- (j) We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Purchaser's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;
- (k) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB 4.5;¹
- (l) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(If none has been paid or is to be paid, indicate "none.")

¹Bidder to use as appropriate

- (m) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive;
- (o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption; and
- (p) We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely, "Prevention of Corruption Act 1988."

Name of the Bidder *[insert complete name of person signing the Bid]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder** *[insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid *[insert complete title of the person signing the Bid]*

Signature of the person named above *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* day of *[insert month]*, *[insert year]*

** : Person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules.

2. BIDDER Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: [insert date (as day, month and year) of Bid Submission]
NCB No.: [insert number of bidding process]

Page _____ of _____ pages

1. Bidder's Legal Name [insert Bidder's legal name]
2. Bidder's actual or intended Country of Registration: [insert actual or intended Country of Registration]
3. Bidder's Year of Registration: [insert Bidder's year of registration]
4. Bidder's Legal Address in Country of Registration: [insert Bidder's legal address in country of registration]
5. Bidder's Authorized Representative Information Name: [insert Authorized Representative's name] Address: [insert Authorized Representative's Address] Telephone/Fax numbers: [insert Authorized Representative's telephone/fax numbers] Email Address: [insert Authorized Representative's email address]
6. Attached are copies of original documents of: [check the box(es) of the attached original documents]
<input type="checkbox"/> Articles of Incorporation or Registration of firm named in 1, above, in accordance with ITB Sub-Clauses 4.3.
<input type="checkbox"/> In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law and not dependent agency of borrower or sub-borrower or purchaser, in accordance with ITB Sub-Clause 4.5.
<input type="checkbox"/> Included are the organizational chart, a list of Board of Directors, and the beneficial ownership

Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements.]*

परियोजना निदेशक/Project Director
ई.एस.आर.पी./ESRP
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद
Indian Council of Forestry Research & Education
हाकपूर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

5. Forms of Bid Security

Form of Bid Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Bank Guarantee No.....[insert guarantee reference number]

Date.....[insert date of issue of the guarantee]

WHEREAS, _____ [name of Bidder] (hereinafter called "the Applicant") has submitted his Bid dated _____ [date] or will submit his Bid for the supply of _____ [name of Contract] (hereinafter called "the Bid") under Invitation for Bids No.....[insert number] (hereinafter called "the IFB")

KNOW ALL PEOPLE by these presents that We _____ [name of bank] of _____ [name of country] having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ [name of Purchaser] (hereinafter called "the Purchaser ") in the sum of _____² for which payment well and truly to be made to the said Purchaser the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20_____.

THE CONDITIONS of this obligation are:

- (1) If after Bid opening the Applicant (a) withdraws his bid during the period of Bid validity specified in the Letter of Bid; or (b) does not accept the correction of the Bid Price pursuant to ITB 31;

or

- (2) If the Applicant having been notified of the acceptance of his bid by the Purchaser during the period of Bid validity:
- (a) fails or refuses to execute the Contract Agreement in accordance with the Instructions to Bidders, if required; or
- (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders.

²The Applicant should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 19.1 of the Instructions to Bidders.

we undertake to pay to the Purchaser up to the above amount upon receipt of his first written demand, without the Purchaser having to substantiate his demand, provided that in his demand the Purchaser will note that the amount claimed by him is due to him owing to the occurrence of one or any of the four conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date _____³ days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Purchaser, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____

WITNESS _____ SEAL _____

[signature, name, and address]

³ 45 days after the end of the validity period of the Bid.

6. Manufacturer's Authorization

(for equipments only)

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are legally binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

Date: *[insert date (as day, month and year) of Bid Submission]*
NCB No.: *[insert number of bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract against the above IFB.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm against this IFB.

No company or firm or individual other than M/s. _____ are authorized to bid, and conclude the contract for the above goods manufactured by us against this specific IFB. *[This para should be deleted for simple items where manufacturers normally sell the product through different stockists].*

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

परियोजना निदेशक/Project Director
ई.एन.एच.ए.ई./ESIP
भारतीय राष्ट्रीय अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
इकायर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

7. DECLARATION for Claiming Tax/ Duty Exemption⁴ (Name of the Project)

Bid No.

Description of item to be supplied

(Information for issue of certificate for claiming exemption of Tax/ Duty in terms of Government of India's relevant notification)

(Bidder's Name and Address):

To

(Name of Purchaser)

Dear Sir:

1. We confirm that we are solely responsible for obtaining deemed export benefits which we have considered in our bid and in case of failure to receive such benefits for reasons whatsoever, Purchaser will not compensate us.
2. We are furnishing below the information required by the Purchaser for issue of necessary certificate in terms of Government of India's relevant notification.

(i) Ex-factory price per unit on which the tax/duty is payable: *Rs.

(ii) No of Units to be supplied:

(iii) Total cost on which tax/duty is payable

(Rs.)

(The requirements listed above are as per Current notifications. These may be modified, as necessary, in terms of the rules in force)

(Signature) _____

(Printed Name) _____

(Designation) _____

(Common Seal) _____

* Please attach details item-wise with cost, if there are more than one items. The figures indicated should tally with what is given in the price schedule.

⁴ This declaration refers to ITB 14.9 and shall be retained only if ITB 14.9 is retained. The format may be modified as per the latest instructions of Government of India.

8. Proforma FOR PERFORMANCE Statement

[Please see ITB Clause 36.2 and Section III-
Evaluation and Qualification Criteria]

Proforma for Performance Statement (for a period of last three/five years)

Bid No. _____ Date of opening _____ Time _____ Hours

Name of the Firm _____

Order placed by (full address of Purchaser)	Order No. and date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery		Remarks indicating reasons for late delivery, if any	Has the equipment been satisfactorily functioning? (Attach a certificate from the Purchaser/Consignee)
				As per contract	Actual		
1	2	3	4	5	6	7	8

Signature and seal of the Bidder _____

परियोजना निदेशक/Project Director
ई.एस.आर.पी./ESIP
भारतीय वनस्पति अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
हाऊस-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

Section V. – Eligible Countries

Public Information Center

Eligibility for the Provision of Goods, Works and Non-Consulting Services in Bank-Financed Procurement

In reference to ITB 4.7 and 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this bidding process:

Under ITB 4.7(a) and 5.1: None

Under ITB 4.7(b) and 5.1: None

SECTION VI. Bank Policy - Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011.

“Fraud and Corruption:

1.16 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.⁵ In pursuance of this policy, the Bank:

(a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) “corrupt practice” is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;⁶
- ii) “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;⁷
- (iii) “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;⁸
- (iv) “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;⁹

⁵ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

⁶ For the purpose of this sub-paragraph, “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

⁷ For the purpose of this sub-paragraph, “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

⁸ For the purpose of this sub-paragraph, “parties” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

⁹ For the purpose of this sub-paragraph, “party” refers to a participant in the procurement process or contract execution.

- (v) "obstructive practice" is:
- (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
 - (c) will declare mis-procurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
 - (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,¹⁰ including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated¹¹;
 - (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank."

¹⁰ A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

¹¹ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

PART 2 - SUPPLY REQUIREMENTS

परियोजना निदेशक/Project Director
ई.एच.आर्.पी./ESIP
भारतीय राष्ट्रीय वन्यजन्तु एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
हावाज-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

Section VII – Schedule of Requirements

Notes for Preparing the Schedule of Requirements

The Schedule of Requirements shall be included in the bidding documents by the Purchaser, and shall cover, at a minimum, a description of the goods and services to be supplied and the delivery schedule.

The objective of the Schedule of Requirements is to provide sufficient information to enable bidders to prepare their bids efficiently and accurately, in particular, the Price Schedule, for which a form is provided in Section IV. In addition, the Schedule of Requirements, together with the Price Schedule, should serve as a basis in the event of quantity variation at the time of award of contract pursuant to ITB 39.

The date or period for delivery should be carefully specified, taking into account (a) the implications of delivery terms stipulated in the Instructions to Bidders pursuant to the *Incoterms* rules (i.e., EXW—that “delivery” takes place when goods are delivered to the carriers), and (b) the date prescribed herein from which the Purchaser’s delivery obligations start (i.e., notice of award, contract signature, opening or confirmation of the letter of credit).

1. List of Goods and Delivery Schedule

Line Item N°	Description of Goods	Quantity	Physical unit	Final (Site) Destination as specified in BDS	Delivery (as per Incoterms) Date		Bid Security in Indian Rupees ¹²
					Earliest Delivery Date	Latest Delivery Date	
1	Supply, installation and commissioning of Eddy Covariance Systems with Towers (Carbon Flux Towers)	02	02	1. One unit at Budhmi Forest Range (MP) 2. One unit at Raghunath Forest Range (CG)	90 days from the date of effectiveness the Contract	180 days from the date of effectiveness the Contract	Rs. 2,00,000/-

¹² Bid security listed here must be the same as provided under ITB/BDS 19.1.

2. List of Related Services [ITB Clause 14.8(b)] and Completion Schedule

Service	Description of Service	Quantity	Physical Unit	Place where Services shall be performed	Final Completion Date(s) of Services
1	<i>Performance or supervision of the on-site assembly and/or start-up of the supplied Goods</i>	As per specifications	Number	1. Budhni Forest Range, Sehora Forest Division, Madhya Pradesh 2. Raghunath Nagar Forest Range, Balrampur Forest Division, Chhattisgarh	31/01/2021
2	<i>Furnishing of tools required for assembly and/or maintenance of the supplied Goods</i>	As per specifications			31/01/2021
3	<i>Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods</i>	As per specifications			31/01/2021
4	<i>Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract</i>	As per requirement(s)			<i>Last date of expiry of warranty</i>
5	<i>Training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods</i>	02			31/01/2021

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3. Technical Specifications

Detailed Technical Specifications and Standards: All goods and materials to be incorporated in the eddy covariance system with towers (carbon flux towers) shall be new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided for otherwise in the contract. The Goods and Related Services shall comply with following Technical Specifications and Standards:

Summary of Technical Specifications:

Item No	Name of Goods or Related Service	Technical Specifications and Standards
1.	<p>Technical Specification of Eddy Covariance System (Carbon Flux) with Towers (42 Mtr. Square Guy Mast)</p> <p><u>Major Specifications</u></p> <p>The broad scope of supply is to deliver Eddy Covariance System with towers (Carbon Flux Towers) for the carbon flux measurement study in the forest areas of Madhya Pradesh and Chhattisgarh. The System will consist of "Data Logger with remote connectivity", "Fast Sensor: Infrared gas analyzer, 3D sonic anemometer" and "Slow Sensors: other Meteorological Sensors".</p> <p>The system will constitute of fully developed and established hardware for Data Logger/ Data Collection Platform (DCP). 12V rechargeable Lead Acid Battery, Solar Panel, Charge Controller, Meteorological Sensors and Accessories.</p> <p>The data logger should be programmable by higher level language for flexible R&D requirements. The fully integrated system will only be accepted.</p> <p>The sensors must comply with the type, range, accuracy, resolution and operating temperature conditions of the specifications.</p> <p>The DCP, sensors and solar panel will be mounted on a tower which should cater for fitments of assemblies for sensors, DCP, solar panel and other accessories.</p> <p>Different sensors (fast & slow) as mentioned in spec should be provided with complete accessories i.e. connectors, enough cables and mounting fixtures. The integration of the sensors with the DCP will be ensured by the firm.</p> <p>Software, if any, for processing the data collected through Flash Card/ RS 232 port.</p> <p>Training should be provided to the ICFRE on the operation and maintenance of the station.</p>	<p><i>Technical Specification</i></p>

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Specification of Data Collection Platform (DCP):

The Data Collection Platform (DCP) should incorporate the latest state-of-the-art technology and must consume very low power. Since the equipment will have to operate under stringent weather conditions in marine bound regions, the system should be rugged and sealed to avoid ingress of moisture.

The complete details of the current set up of the DCP should be provided. The loading of setup/program will be demonstrated with Laptop separately. The user manual should spell out the settings. A separate copy of the set-up program should be provided on a CD or Pen drive.

The design of the DCP should be modular and the replacement of the modules should be easy and user friendly.

The DCP should have least tuning parts (preferably none) and should provide consistent performance for at least two years.

Keeping in view the low temperature conditions in the field, there should be a provision for quick and easy replacement of the DCP from the NEMA-4X enclosure. The mounting/ dismounting of the DCP in the enclosure should be with the help of latches. Further, it should be possible to lock/ unlock these latches with gloves-in-hand.

The complete Technical Demonstration should be provided.

User manual for the station will also be provided by the firm which will include the setup/program details, calibration constants, wiring diagram of the concerned sensors, and any other station specific details.

Specification Data Collection Platform (One System):

1. **Analog Channel:** Analog Data Inputs: 28 and Input range: The data logger should have multiple input ranges along with "**Auto Ranging**" ability to measure sensors accurately without any loss of accuracy. The data logger should have following input ranges: +5000mV, +1000mV, +200mV, +50mV, +20 mV and be capable of directly measuring thermocouple types T, E, K and J accurate to within $\pm 0.3^{\circ}\text{C}$, over the temperature range of -25 to $+50^{\circ}\text{C}$ without external[†] circuitry. A multiplexer for analogue channel expansion shall be provided with the system.
2. **Digital Channel: Frequency Type: 04 Channels, Counter Type: 04 Channels** and the facility to convert counter channels to frequency channels & vice versa should be provided.
3. **SDI-12 Input:** 04 Channels
5. **Analog to Digital Conversion:** Resolution (16 Bit) or more and Conversion Accuracy ± 1 LSB and should have measurement

परियोजना निदेशक/Project Director

ई.एस.आई.सी./ESIP

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P.O.-New Forest, Dehradun-248006

accuracy of +/- 0.07%.

6. **Scan Rate:** Data logger should be capable of sampling analog channels on 10 millisecond time intervals.
7. **Watchdog Timer:** The DCP should have an internal watchdog timer to reset the system and restore the previous set-up in case of microprocessor resets and power glitch.
8. **Real Time Clock:** The normal time clock of the system should be derived from TCXO with accuracy of 1.0 ppm/yr. In addition, the system should also have battery backup. The accuracy of this clock should be better than 10 seconds in six months period.
9. **RS 232 C- Port:** The DCP should have a free RS232-C port capable of having communication with external devices. Also, it should be possible to access the data logger through this port. Serial communications with serial sensors and devices supported via I/O port pairs & Pakbus, Modbus, and DNP3 protocols supported.
10. **Ethernet/LAN Port:** DCP should have an Ethernet port for LAN based internet connection to access the data logger remotely. Same port should have capabilities to take input from an Ethernet output based sensor, Single feature will be used at a time.
11. **Data Storage:** The system should have in-built facility to store about 20 lakh data records in at least 4 MB memory. It should also be possible to download the stored data on a Flash/USB card including data and time information. A 16GB memory card should be provided with the system for logging and retrieval of fast sensor's (10Hz/20Hz) data.
12. **Power Requirements:** Typical Current Drain in Sleep Mode: ~2 mA or lower 1 Hz Scan (14 diff. meas. 60 Hz rej., 4 pulse meas.): 3 mA. At least one switched 12VDC port with maximum current supplying capacity of 1.0A for power-cycling sensors and or modem. Short circuit and over load protection.
13. **Weight:** Data logger should be less than 3.6 kg. (weight of Battery and NEMA-4 enclosure is excluded).
14. **Battery & Charging System:** Bidder will provide power budget calculations. Bidder will provide Sealed Maintenance Free Lead Acid (VRLA) Batteries for 12V/800 Amp-Hour capacity. A suitable in-built charge controller having over and under voltage protection should be provided in the DCP.

The combined capacity of the Solar panels should be 400Watts for 12 VDC configurations.

Environmental Specifications:

The DCP, Antenna, Sensors, Cable, Connectors, Battery, Solar panel etc. should be able to operate at optimal efficiency and withstand the following environmental conditions

Storage Temperature: -40°C to 50°C

Operating Temperature: -40°C to 50°C

Humidity: 10% to 100%

Wind Speed: Up to 50 m/s

The System should be hermetically sealed to avoid ingress of dust, rain and moisture.

Enclosure:

16" x 18" Enclosure suitable for data logger with a power supply and one or more peripherals.

NEMA 4X Enclosures.

Non Corrosive, white made of UV stabilized fiberglass.

Cable entry options: Two sealable conduit ports.

Mounting Structure:

Individual mountings as required for each sensor should be provided with the system.

A 42-Meter-high square guy mast must be supplied, installed and commissioned.

Scope of Work:

Bidder required to carry out complete integration, installation & commissioning of the eddy covariance system (flux monitoring system).

Data Acquisition system shall be installed at 1.5 meter height on tower from ground.

Demonstration and training on data downloading and other necessary functionalities of the system should be provided by the supplier.

GPRS modem for remote connectivity and data transfer shall be supplied and installed with the system. Transfer of slow response sensors and calculated fluxes shall be done by the remote communication.

A 42-Meter-high square guy mast as per annexure-1 must be supplied, installed and commissioned.

All the sensors, power supply and data acquisition system must be installed on the 40-meter guy mast itself on different levels as decided by the purchaser.

An Ultrasonic monkey repellent shall be supplied with the system.

परियोजना निदेशक/Project Director

ई.एच.आइ.सी./ESIP

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Indian Council of Forestry Research & Education

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P.O.-New Forest, Dehradun-248006

Specification for Fast Sensors (Infrared Gas Analyzer & 3D Sonic Anemometer) (One Level):

An Integrated (single unit) instrument with co-located CO₂/H₂O gas analyzer and 3D sonic anemometer being triggered by single electronics to reduce flux loss and synchronization errors System must be able to operate and provide accurate measurements without the use of a fine-wire thermocouple. Systems requiring the least data post-processing to correct for spatial and temporal errors will be given priority.

General Specifications:

- No internal or external heating of sensor desired
- Operating Temperature Range: -30° to +50°C
- Calibrated Pressure Range: 70 to 106 kPa
- Input Voltage Range: 10 to 16 Vdc
- Power @ 25°C: 5 W (steady state and power up).
- Measurement Rate: 10Hz & 20Hz
- Output Bandwidth: user programmable
- Output Options: SDM, RS-485, USB, analog
- Auxiliary Inputs: air temperature and pressure

Infrared Gas Analyzer specifications:

CO₂:

- Precision RMS (maximum): 0.2 mg/m³ (0.15 mol/mol)
- Calibrated Range: 0 to 1000 mol/mol
- Zero Drift with Temperature (maximum): ±0.55 mg/m³/°C (±0.3 mol/mol/°C)
- Gain Drift with Temperature (maximum): ±0.1% of reading/°C
- Cross Sensitivity (maximum): ±1.1 x 10⁻⁴ mol CO₂ /mol H₂O

H₂O:

- Precision RMS (maximum): 0.004 g/m³ (0.006 mmol/mol).
- Calibrated Range: 0 mmol/mol to 37°C dew point
- Zero Drift with Temperature (maximum): ±0.037 g/m³/°C (±0.05 mmol/mol/°C)
- Gain Drift with Temperature (maximum): ±0.3% of reading/°C
- Cross Sensitivity (maximum): ±0.1 mol H₂O/mol CO₂

Sonic Anemometer Specifications:

- Measurement Path; Vertical: 10.0 cm (3.9 in.); Horizontal: 5.8 cm (2.3 in.)

- Transducer Diameter: 0.64 cm (0.25 in.)
- Accuracy; Offset Error: $u_x, u_y: <\pm 8.0 \text{ cm s}^{-1}; u_z: <\pm 4.0 \text{ cm s}^{-1}$
- Gain Error: Wind Vector within $\pm 5^\circ$ of horizontal: $<\pm 2\%$ of reading, Wind Vector within $\pm 10^\circ$ of horizontal: $<\pm 3\%$ of reading; Wind Vector within $\pm 20^\circ$ of horizontal: $<\pm 6\%$ of reading
- Measurement Precision RMS $U_x, U_y: 1 \text{ mm s}^{-1}; U_z: 0.5 \text{ mm s}^{-1}$; Sonic Temperature: 0.025°C

Barometer Specifications:

- Total Accuracy: $\pm 1.5 \text{ kPa}$ (-30° to $+50^\circ\text{C}$)
- Measurement rate: 1-10 Hz

Ambient Temperature Specifications

- Total Accuracy: $\pm 0.15^\circ\text{C}$ (-30° to $+50^\circ\text{C}$)

Specifications For Other Meteorological Slow Sensors:

1. Air Temperature Sensor and Relative Humidity Sensor with Radiation shield (6 Levels)

Air Temperature Sensor Details

- Type; PT 100 or Thermistor
- Range: -40°C to $+60^\circ\text{C}$
- Accuracy: $+0.5^\circ\text{C}$ or better
- Time Constant: $<15 \text{ Seconds}$
- Input Power Supply: 7V DC to 35V DC
- Output: 0-5 V DC (or compatible with data logger)

Relative Humidity Sensor Details

- Sensor Element: Thin film capacitor
- Range: 0 to 100% RH
- Output Voltage; 0-5 V DC or (Compatible with data logger)
- Accuracy: $+1\%$ or better
- Response Time: $<15 \text{ seconds}$
- Input Power Supply: 7V DC to 28V DC,
- Operating Temp Range: -40°C to $+60^\circ\text{C}$
- An aspirated radiation shield should be provided with the system.

2. Rainfall Sensor (One Level)

- Sensor type: Tipping bucket with Siphon: Anodized aluminum
- Temperature: 0° to $+70^\circ\text{C}$
- Resolution: 1 tip

- Rainfall per tip: 0.01" (0.254 mm)
- Orifice diameter: 7.9" (20 cm)
- Accuracy:
 - Up to 9 inch/hr: $\pm 2\%$
 - 9 to 19 inch/hr: 3%

3. Four Component Net Radiation Sensor (One Level)

- Four-component net radiometer for accurate and reliable measurements of incoming and reflected solar radiation,
- Number of Signal Outputs: 4 - incoming and reflected short-wave radiation downward and upward long-wave radiation.
- Optional ventilated with heater
- Single-body sensor
- Internal temperature sensors: 10 K thermostat and Pt-100
- Response time (95 %): < 18 s
- Non-linearity (over full range): < 1 %
- Temperature dependence of sensitivity: < 5 % from -10 °C to $+40$ °C
- Sensitivity: 5 to 20 $\mu\text{V}/\text{W}/\text{m}^2$.
- Operating temperature: -40 °C to $+80$ °C
- Spectral range (50 % points): 305 to 2800 nm short-wave, 4.5 to 42 μm long-wave
- Field of view: 180 ° short-wave upper sensor 170 °, short-wave lower sensor
- 175 ° long-wave upper sensor 150 ° long-wave lower sensor
- Mounting rod: Screw-in, 350 mm long x 16 mm along with necessary mounting brackets Standard cable: 50 m cable required to connect the sensor to a data logger Weight with rod (excluding cable(s)): 850 g

4. Soil Heat Flux Sensor (2 Depths)

Soil heat flux sensor for high accuracy measurement of soil heat flux should be provided.

Heat Flux Sensor Specifications

- Sensitivity (nominal): 50 $\mu\text{V}/\text{W}/\text{m}^2$
- Resistance (nominal): 2 ohm;
- Temperature range: -30 to $+70$ °C
- Expected accuracy: $\pm 3\%$

5. Soil Moisture and Soil Temperature Sensor (3 Depths)

- Sensing Volume: 7800 cm^3
- Operational Temperature: -40 to $+70$ °C
- Rod Length: 300 mm
- Rod Diameter: 3.2 mm (0.13 in.)

परिचालक/प्रियेक्टर/Project Director

ई.एस.आई.पी./ESIP

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- Rod Spacing: 32 mm (1.3 in.)
- Sensor Output: SDI-12; serial RS-232
- Warmup Time: 3 s
- Measurement Time: 3 ms to measure; 600 ms to complete SDI-12 command
- Power Supply Requirements: 6 to 18 Vdc; must be able to supply 45 mA @ 12 Vdc Current Drain.

Soil Temperature Specifications:

- Measurement Range: -40° to $+70^{\circ}\text{C}$
- Accuracy: $\pm 0.5^{\circ}\text{C}$ for probe body buried in soil
- Precision: $\pm 0.02^{\circ}\text{C}$
- Volumetric Water Content Specifications:
- Range: 0% to 100%
- Accuracy: $\pm 3\%$ typical in mineral soils, where solution EC ≤ 10 dS/m
- Precision 3 : $< 0.05\%$

6. Wind Speed and Direction Sensor (6 Levels)

Wind Speed

- Type: Propeller with alpine version
- Range: 0 to 100 m/s
- Accuracy: ± 0.3 m/s or 1% of the reading
- Threshold: 1 m/s

Wind Direction

- Type: Potentiometer with Alpine version
- Range Mechanical: 360°
Electrical: 355° (5° open)
- Accuracy: $\pm 3^{\circ}$
- Threshold: 1.1 m/s at 10 degree displacement

7. Photosynthetically Active Radiation Point Sensor (Two sensors/ Up & Down):

- Spectral range (50% points): 400 to 700 nm ± 4 nm
- Measurement range: 0 to 4000 $\mu\text{mol}/\text{m}^2\cdot\text{s}$
- Sensitivity: 4 to 10 $\mu\text{V}/\mu\text{mol}/\text{m}^2\cdot\text{s}$
- Response time (95%): < 1 μs
- Non-stability (change/year): $< 2\%$
- Non-linearity (0 to 10,000 $\mu\text{V}/\mu\text{mol}/\text{m}^2\cdot\text{s}$): $< 1\%$
- Directional response (up to 80° with 1000 $\mu\text{mol}/\text{m}^2\cdot\text{s}$ beam): < 30 $\mu\text{mol}/\text{m}^2\cdot\text{s}$
- Temperature response: $< -0.12\%$
- Field of view: 180°
- Operational temperature range: -30°C to $+70$

Specifications For 42 Meters Angular Square Guy Mast Tower

S.No.	Design Specification	Details	Remark	
1	a	Design Wind Velocity	'	
		Survival	180 KMPH	
		Operational	140 KMPH	
	b	Twist & Sway		
	c	Antenna Loading		
		GSM	3XGSM	GSM Mounts extra
		Parabolic Antenna	2X1.2 M Dia MW Parabolic Antenna	
	d	Antenna Pole Mount	Separate for GSM & MW	
	e	Platforms		
	f	Obstruction Light System		
		No .Of Obstruction Light Lamp&Watts	1	'
		Power Cable Type&Length	2.5 Sq MM, 80 M	
	g	Lighting Protection and Earthing System		
Copper Wire/Tape Size &Length		35 Sq MM		
Copper Plate Size &Nos		300X300X5MM		
2	Comply Standard & Galvanized grade	IS:4759		
	Factor of Safety	1.5	'	
3	Structure Of Tower	Square Angular		
4	Structure	Angular		
5	Foundation bolts	32mm-4no.		
6	Bolt Grade	Property Class 5.6 Grade		
7	Galvanization	Hot dipped galvanised		

		Climbing Ladder	in-built (Horizontal Angles shall be used as climbing ladder.)		
		Cable Ladder	in-built (Horizontal Angles shall be used to tie the cables)		
8		Template for foundation			
9		Anchor Bolts & Nuts With Setting Template	Anchor Bolts should be Galvanised and Template should be MS painted		
10		Grade of RCC	M25		
11		Finish	Hot Dip Galvanised		
12		Guy rope	Hot Dip Galvanized		
Drawing of the 42 Meter Square Guymast is given at Annexure-I					

Related Services:		
1	a) Performance or supervision of the on-site assembly and/or start-up of the supplied Goods	Standard
2	b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods	Standard
3	c) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods	Standard
4	d) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract	Standard
5	e) Trainings of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods	Standard

4. Inspections and Tests

The following inspections and tests shall be performed:

Periodical calibration (as per standard requirements) of the equipments for satisfactory functioning of the eddy covariance systems and periodical maintenance of the equipments (as and when required)

**5. PROFORMA OF CERTIFICATE FOR ISSUE BY THE
PURCHASER AFTER
SUCCESSFUL INSTALLATION AND STARTUP OF THE
SUPPLIED GOODS**

[This is to be attached for supply, erection, supervision of erection and startup contracts only]

No.

Date:

M/s.

Sub: Certificate of startup of the supplied Goods

1. This is to certify that the plant/s as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para No. 2) and a set of spares in accordance with the Contract/Specifications. The same has been installed and commissioned.

- (a) Contract No. _____ dated _____
- (b) Description of the plant _____
- (c) Plant Nos. _____
- (d) Quantity _____
- (e) Rail/Roadways Receipt No. _____ dated _____
- (f) Name of the consignee _____
- (g) Date of startup and proving test _____

2. Details of accessories/spares not yet supplied and recoveries to be made on that account.

<u>S. No.</u>	<u>Description</u>	<u>Amount to be recovered</u>
---------------	--------------------	-------------------------------

3. The proving test has been done to our entire satisfaction and operators have been trained to operate the plant.

4. The supplier has fulfilled his contractual obligations satisfactorily. *

परियोजना निदेशक/Project Director
ई.एस.आई.पी./ESIP
भारतीय वनिकी अनुसंधान एवं शिक्षा परिषद
Indian Council of Forestry Research & Education
झाकसर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

or

The supplier has failed to fulfill his contractual obligations with regard to the following:

- (a)
 - (b)
 - (c)
 - (d)
5. The amount of recovery on account of non-supply of accessories and spares is given under Para No. 2.
6. The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated in endorsement of the letter.

Signature _____

Name _____

Designation with Stamp _____

* Explanatory notes for filling up the certificates:

- (a) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to Technical Specifications.
- (b) He has supervised the startup of the plant in time i.e., within the period specified in the contract from the date of intimation by the Purchaser in respect of the installation of the plant.
- (c) Training of personnel has been done by the supplier as specified in the contract
- (d) In the event of documents/drawings having not been supplied or installation and startup of the plant have been delayed on account of the supplier, the extent of delay should always be mentioned.

PART 3 – CONTRACT

परियोजना निदेशक/Project Director
ई.एस.आई.सी./ESIP
भारतीय वन्यजीव अनुसंधान एवं शिक्षा परिषद
Indian Council of Forestry Research & Education
हाकसर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

Section VIII – General Conditions of Contract

परिचोजना निदेशक/Project Director
ई.एस.आर्.पी./ESIP
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्
Indian Council of Forestry Research & Education
इण्डियन-फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

Section VIII. General Conditions of Contract

1. Definitions

The following words and expressions shall have the meanings hereby assigned to them:

- (a) "Bank" means the World Bank and refers to the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
- (b) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (c) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
- (d) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- (e) "Day" means calendar day.
- (f) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (g) "GCC" means the General Conditions of Contract.
- (h) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (i) "Purchaser's Country" is India.
- (j) "Purchaser" means the entity purchasing the Goods and Related Services, as specified in the SCC.
- (k) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, start-up, training and initial maintenance and other such obligations of the Supplier under the Contract.

- (l) "SCC" means the Special Conditions of Contract.
- (m) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (n) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (o) "The Project Site," where applicable, means the place named in the SCC.

2. Contract Documents

- 2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Corrupt & Fraudulent Practices

- 3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Appendix to the GCC.
- 3.2 The Purchaser requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

4. Interpretation

- 4.1 If the context so requires it, singular means plural and vice versa.
- 4.2 Incoterms.
- (a) Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties there under shall be as prescribed by Incoterms.
- (b) The terms EXW and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms specified in the SCC and published by the International Chamber of Commerce in Paris, France.
- 4.3 Entire Agreement

* The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Nonwaiver

(a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

(b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be English. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in English language, in which case, for purposes of interpretation of the Contract, this translation shall govern.

5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

6. Deleted

- 7. Eligibility**
- 7.1 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
- 7.2 All Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
- 8. Notices**
- 8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the SCC. The term "in writing" means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
- 9. Governing Law**
- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Union of India.
- 10. Settlement of Disputes**
- 10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 10.3 Notwithstanding any reference to arbitration herein,
- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree;

and

(b) the Purchaser shall pay the Supplier any monies due the Supplier.

11. Inspections and Audit by the Bank

11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep, accurate and systematic accounts and records in respect of the Goods in such form and details as will clearly identify relevant time changes and costs

11.2 The Supplier shall permit, and shall cause its Subcontractors to permit, the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors and consultants' attention is drawn to Clause 3 [Fraud and Corruption], which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under this Sub-Clause 11.1 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures)

12. Scope of Supply

12.1 The Goods and Related Services to be supplied shall be as specified in the Special Conditions of Contract.

13. Delivery and Documents

13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the SCC.

14. Supplier's Responsibilities

14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.

15. Contract Price

15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the SCC.

16. Terms of Payment

16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the SCC.

16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC

Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.

- 16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.
- 16.4 The payments shall be made in Indian Rupees to the Supplier under this Contract.
- 16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the SCC, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the SCC, for the period of delay until payment has been made in full, whether before or after judgment or arbitrage award.

17. Taxes and Duties

- 17.1 The Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

18. Performance Security

- 18.1 If required as specified in the SCC, the Supplier shall, within twenty-one (21) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the SCC.
- 18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 18.3 As specified in the SCC, the Performance Security shall be denominated in the Indian Rupees, and shall be in the format stipulated by the Purchaser in the SCC, or in another format acceptable to the Purchaser.
- 18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the SCC.

19. Copyright

- 19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser, directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such

third party.

20. Confidential Information

20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.

20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

- (a) the Purchaser or Supplier need to share with the Bank or other institutions participating in the financing of the Contract;
- (b) now or hereafter enters the public domain through no fault of that party;
- (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
- (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

21. Subcontracting

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already

specified in the bid. Such notification, in the original bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications and Standards

22.1 Technical Specifications and Drawings

(a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VII, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.

(b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

(c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

23. Packing and Documents

23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the SCC, and in any other instructions ordered by the Purchaser.

24. Insurance

24.1 Unless otherwise specified in the SCC, the Goods supplied under the Contract shall be fully insured—against loss or

damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the SCC.

25. Transportation & Incidental Services

- 25.1 Unless otherwise specified in the SCC, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.
- 25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in Schedule of Requirements and SCC:
- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- 25.3 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

26. Inspections and Tests

- 26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the SCC.
- 26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as specified in the SCC. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
- 26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-

Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

- 26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
- 26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.
- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.

27. Liquidated Damages

- 27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the delivered price of the delayed

Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those SCC. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.

28. Warranty

28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

28.2 Subject to GCC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.

28.3 Unless otherwise specified in the SCC, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.

28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

28.5 Upon receipt of such notice, the Supplier shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the SCC, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

29. Patent Indemnity

29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design,

trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

- 29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
- 29.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.
- 29.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.
- 29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

- 30. Limitation of Liability**
- 30.1 Except in cases of criminal negligence or willful misconduct,
- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser, and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement.
- 31. Change in Laws and Regulations**
- 31.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in India, where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.
- 32. Force Majeure**
- 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 32.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 32.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause

thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

33. Change Orders and Contract Amendments

33.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipment or packing;
- (c) the place of delivery; and
- (d) the Related Services to be provided by the Supplier.

33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.

33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

34. Extensions of Time

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which

case the extension shall be ratified by the parties by amendment of the Contract.

- 34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

35. Termination

35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

(i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;

(ii) if the Supplier fails to perform any other obligation under the Contract; or

(iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.

- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser.

35.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
- (i) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

36. Assignment

- 36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

APPENDIX TO GENERAL CONDITIONS

Bank's Policy- Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011:

"Fraud and Corruption:

1.16 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.¹³ In pursuance of this policy, the Bank:

(a) defines, for the purposes of this provision, the terms set forth below as follows:

- (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;¹⁴
- (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;¹⁵
- (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;¹⁶
- (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;¹⁷
- (v) "obstructive practice" is:

¹³ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

¹⁴ For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

¹⁵ For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

¹⁶ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

¹⁷ For the purpose of this sub-paragraph, "party" refers to a participant in the procurement process or contract execution.

- (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
 - (c) will declare mis-procurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
 - (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,¹⁸ including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated¹⁹;
 - (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank."

¹⁸ A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

¹⁹ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

Section IX. Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

[The Purchaser shall select insert the appropriate wording using the samples below or other acceptable wording, and delete the text in italics]

GCC 1.1(j)	The Purchaser is: Project Director, Ecosystem Services Improvement Project
GCC 1.1 (o)	The Project Site(s)/Final Destination(s) are: <ol style="list-style-type: none"> 1. Budhni Forest Range, Sehore Forest Division, Madhya Pradesh 2. Raghunath Nagar Forest Range, Balrampur Forest Division, Chhattisgarh
GCC 4.2 (a)	The meaning of the trade terms shall be as prescribed by Incoterms.
GCC 4.2 (b)	The version edition of Incoterms shall be 2010.
GCC 8.1	For notices , the Purchaser's address shall be: Project Director Ecosystem Services Improvement Project Indian Council for Forestry Research and Education P.O. New Forest, Dehradun, Uttarakhand-248006 Tel: +91-135-2224831, 2224803, Fax: +91-135-2750296 Email: projectdirectoresip@gmail.com Website: www.icfre.gov.in

परियोजना निदेशक/Project Director
 ई.स.स.स.प./ESIP
 भारतीय सांख्यिकी अनुसंधान एवं शिक्षा परिषद्
 Indian Council of Forestry Research & Education
 हाकर-न्यू फॉरेस्ट, देहरादून-248006
 P.O.-New Forest, Dehradun-248006

GCC 10.2**Settlement of Disputes**

The dispute settlement mechanism to be applied for adhoc arbitration shall be as follows:

- (a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the *Indian Council of Arbitration/president of the institution of Engineers (India)/The International center for Alternative Dispute Resolution (India).
- (b) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) above, within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the *Indian Council of Arbitration/president of the Institution of Engineers (India)/The International Centre for Alternative Dispute Resolution (India), shall appoint the arbitrator. A certified copy of the order of the *Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India), making such an appointment shall be furnished to each of the parties.
- (c) (c) Arbitration proceedings shall be held at Dehradun, India, and the lan
- (d) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- (e) Where the value of the contract is Rs. 10 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority namely the *Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Dispute Resolution (India).

	<p>(f) Except otherwise agreed to by the Parties, Arbitrators should give a decision in writing within 120 days of receipt of notification of dispute.</p> <p>Alternatively Any dispute or difference whatsoever arising between the parties out of or relating to the supply, erection, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the Rules of Domestic Commercial Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties.</p> <p>The arbitral tribunal shall consist of 3 Arbitrators, arbitration proceedings shall be held at New Delhi, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.</p> <p>Except as otherwise agreed to by the Parties, Arbitrators should give a decision in writing within 120 days of receipt of notification of dispute.</p>
<p>GCC 12.1 and 25.2</p>	<p>The scope of supply for the Goods and Related Services to be supplied shall be as specified below:</p> <ol style="list-style-type: none"> 1. Supply, installation and commissioning of Eddy Covariance Systems with Towers (Carbon Flux Towers)

GCC 13.1	<p>Details of Shipping and other Documents to be furnished by the Supplier are given below:</p> <p>GCC 13.1 Upon delivery of the goods to the transporter/consignee, the supplier shall notify the purchaser and mail the following documents to the Purchaser :</p> <ul style="list-style-type: none"> (i) Original Copies of the Supplier invoice showing contract number, goods description, quantity, unit price, total amount; (ii) Delivery note, Railway receipt, or Road consignment note or equivalent transport document or acknowledgement of receipt of goods from the Consignee; (iii) Original Copies of packing list identifying contents of each package; (iv) Insurance certificate; (v) Manufacturer's/Supplier's warranty certificate; (vi) Inspection certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and (vii) Certificate or origin. <p>The above documents shall be received by the Purchaser before arrival of the Goods (except where it is handed over to the Consignee with all documents) and if not received, the supplier will be responsible for any consequent expenses.</p>
GCC 15.1	<p>The prices charged for the Goods supplied and the related Services performed "shall not," be adjustable. If prices are adjustable, the method used to calculate the price adjustment is given in the attachment.</p>
GCC 16.1	<p>GCC 16.1 Payment shall be made in Indian Rupees in the following manner:</p>
	<p>(a) <i>On Delivery, Installation and Commissioning</i>: 100% of the contract price shall be paid on delivery, installation and commissioning of eddy covariance towers (carbon flux towers) and upon submission of the documents specified in Clause 13 of SCC.</p>

	(b) For all the payments to be made, against Bank guarantees, the bank guarantee shall be issued by a Scheduled Indian Bank or a foreign bank located in India in the format enclosed at Section X. The guarantees issued by other banks should be confirmed by a Scheduled Indian Bank or a foreign bank operating in India.
GCC 16.5	The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 60 days. The interest rate that shall be applied is 12% per annum.
GCC 17	In the case of tax/ duty waiver, the purchaser will issue only the certificates in terms of the Government of India's notification as per information given by supplier in form stipulated in Section IV. Supplier is solely responsible for obtaining such benefits and in case of failure to receive such benefits, the purchaser will not compensate the supplier separately.
GCC 18.1	Performance Security to the Purchaser shall be for an amount of 10% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations. In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/ replaced material shall be extended to a further period of 12 months and the Performance Bank guarantee for proportionate value shall be extended 60 days over and above the extended warranty period.
GCC 18.3	If required, the Performance Security shall be in the form of a "Bank Guarantee" or "a cashier's cheque or banker's certified cheque or crossed demand draft or pay order" drawn in favour of the Purchaser.
GCC 18.4	Discharge of the performance Security shall take place not later than 60 days following the date of completion of the Supplier's performance obligations, including the warranty obligation, under the contract.

GCC 18.5	<p>Add as Clause 18.5 to the GCC the following:</p> <p>In the event of any contractual amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty obligations.</p>
GCC 23.2	<p>Packing Instructions: The Supplier will be required to make separate packages for each Consignee. Each package will be marked on three sides with proper paint/indelible ink with the following:</p> <p>(i) Project; (ii) Contract No.; (iii) Country of Origin of Goods; (iv) Supplier's Name; (v) Packing List Reference Number.</p> <p>Suppliers should use recycled materials as much as possible for packing</p>
GCC 24.1	<p>The insurance shall be paid in an amount equal to 110 percent of the EXW value of the Goods from "Warehouse to warehouse (final destination)" on "All Risks" basis including War Risks and Strikes.</p>
GCC 25.1	<p>The Supplier is required under the Contract to transport the Goods duly insured to the specified final destination, and all related costs shall be included in the Contract Price.</p>
GCC 25.2	<p>Incidental services to be provided are:</p> <ul style="list-style-type: none"> (a) Performance or supervision of on-site assembly and/or start-up of the supplied Goods (b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods (c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods (d) Performance or supervision or maintenance and/or repair of the supplied Goods (e) Trainings of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods
GCC 26.1	<p>The inspections and tests shall be: Periodical calibration (as per standard requirements) of the equipments for satisfactory functioning of the eddy covariance systems and periodical maintenance of the equipments (as and when required)</p>

GCC 26.2	The Inspections and tests shall be conducted at: i). Forest Division, Madhya Pradesh and ii). Raghunath Nagar Forest Range, Balrampur Forest Division, Chhattisgarh
GCC 27.1	The liquidated damages shall be: 0.5% of contract price per week or part thereof.
GCC 27.2	The maximum amount of liquidated damages shall be: 10% of the contract price.
GCC 27.3	Period of validity of the Warranty shall be 05 years
GCC 28.3	<p>The period of validity of the Warranty shall be: Same as given in GCC 27.3.</p> <p>For purposes of the Warranty, the place(s) of final destination(s) shall be:</p> <ol style="list-style-type: none"> 1. Budhni Forest Range, Sehore Forest Division, Madhya Pradesh 2. Raghunath Nagar Forest Range, Balrampur Forest Division, Chhattisgarh <p>Sample provision</p> <p>GCC 28.3—In partial modification of the provisions, the warranty period shall be 60 months from date of acceptance of the Goods or 64 months from the date of shipment, whichever occurs earlier. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the Contract. If, for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall, at its discretion, either:</p> <ol style="list-style-type: none"> (a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with SCC 4, <p>or</p> <ol style="list-style-type: none"> (b) pay liquidated damages to the Purchaser with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be 2.5% of the contract value.
GCC 28.5	The period for repair or replacement shall be: within 15 days of the necessary communication.
GCC 31.1	This clause will apply only to variations in GST and other taxes payable in India on the final product which is being supplied and not for variations in tax on the individual components / raw materials which go into the product.

Section X – Contract Forms

1. Letter of Acceptance

[letterhead paper of the Purchaser]

[date]

To: [name and address of the Supplier]

Subject: **Notification of Award Contract No.**

This is to notify you that your Bid dated ... [insert date] ... for execution of the
 .. [insert name of the contract and identification number, as given in the SCC]
 for the Accepted Contract Amount of [insert amount in numbers and words in
Rupees], as corrected and modified in accordance with the Instructions to Bidders is hereby
 accepted by our Agency.

You are requested to furnish the Performance Security within 21 days in accordance with the
 Conditions of Contract, using for that purpose the of the Performance Security Form
 included in Section X, Contract Forms, of the Bidding Document.

Authorized Signature: _____
 Name and Title of Signatory: _____
 Name of Agency: _____

Attachment: Contract Agreement

परियोजना निदेशक/Project Director
 ई.एल.एन.ए./NSIP
 भारतीय वन्यजीव संरक्षण एवं शिक्षा परिषद
 Indian Council of Forestry Research & Education
 इन्फोस्ट-न्यू फॉरेस्ट, देहरादून-248006
 P.O.-New Forest, Dehradun-248006

2. Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS CONTRACT AGREEMENT is made

the *[insert: number]* day of *[insert: month]*, *[insert: year]*.

BETWEEN

- (1) *[insert complete name of Purchaser]*, a *[insert description of type of legal entity, for example, an agency of the Ministry of of the Government of {insert name of Country of Purchaser}, or corporation incorporated under the laws of {insert name of Country of Purchaser}]* and having its principal place of business at *[insert address of Purchaser]* (hereinafter called "the Purchaser"), and
- (2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier").

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in Rs]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract Agreement. This Agreement shall prevail over all other contract documents: In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed below.
 - (a) The letter of Acceptance
 - (b) this Contract Agreement
 - (c) The Supplier's letter of Bid and original completed Schedules including Price Schedules
 - (d) Special Conditions of Contract
 - (e) General Conditions of Contract
 - (f) Technical Requirements (including Schedule of Requirements and Technical Specifications)
 - (g) *[Add here any other document(s) listed in GCC/SCC as part of contract]*

3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

परियोजना निदेशक/Project Director
ई.एस.आई.सी./ESIP
भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद
Indian Council of Forestry Research & Education
डालमपुर-न्यू फॉरेस्ट, देहरादून-248006
P.O.-New Forest, Dehradun-248006

3. Performance Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Performance Guarantee No.....[insert guarantee reference number]

Date.....[insert date of issue of the guarantee]

To: _____ [name of Purchaser]

_____ [address of Purchaser]

WHEREAS _____ [name and address of Supplier²⁰] (hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ [name of Contract and brief description of Goods and related Services] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Applicant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Applicant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Applicant, up to a total of _____ [amount of guarantee²¹] _____ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Applicant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Goods and related Services to be supplied there under or of any of the Contract documents

²⁰ In the case of a JV, insert the name of the Joint Venture

²¹ An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees.

which may be made between you and the Applicant shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until (i.e.) 60 days following the Completion date of the Contract including any warranty obligations²², and any demand for payment under it must be received by us at this office on or before that date.

Signature and seal of the guarantor _____

Name of Bank _____

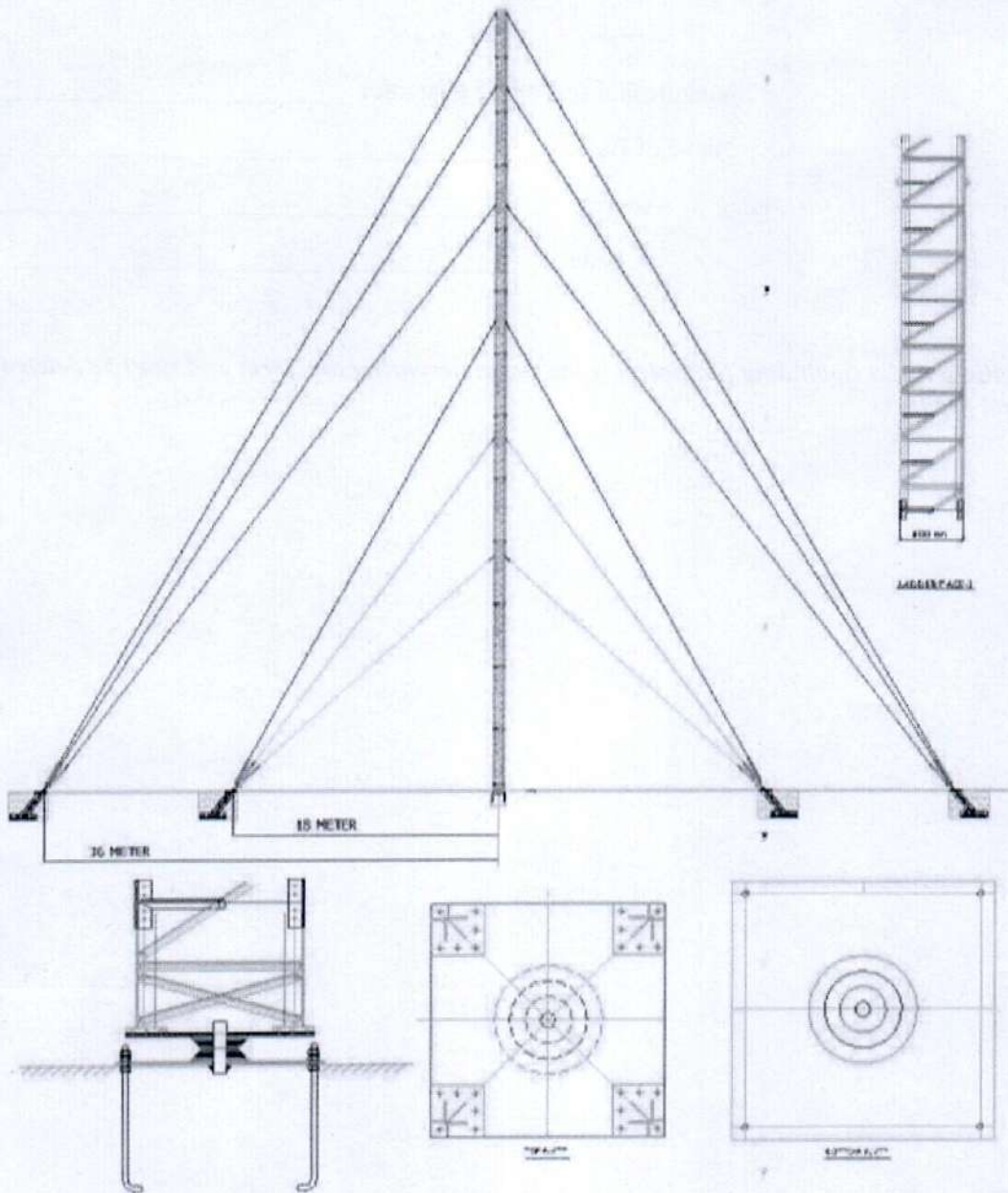
Address _____

Date _____

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

²² Completion date as described in GC Clause 18.4

परियोजना निदेशक/Project Director
 I.C.F.R.E./ICFRI
 भारतीय वन्यजीव संरक्षण एवं शिक्षा परिषद्
 Indian Council of Forestry Research & Education
 इन्फो-न्यू फॉरेस्ट, देहरादून-248006
 P.O.-New Forest, Dehradun-248006

42 Meter Square Guymast

परियोजना निदेशक/Project Director

इ.स.जी.ए./ICFRE

भारतीय सन्धिनी कानुनकार एवं शिक्षा परिषद
Indian Council of Forestry Research & Education

डाकघर-न्यू फॉरेस्ट, देहरादून-248006

P.O.-New Forest, Dehradun-248006