



क्रय अनुभाग
वन अनुसंधान संस्थान
(भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद्)
देहरादून-२४८००६, उत्तराखण्ड
GSTIN 05AAAAI1708G2Z6
PAN NO. AAAAI1708G

Purchase Section
Forest Research Institute,
(Indian Council of Forestry Research and Education)
Dehradun-248006, UTTARAKHAND
Phone: 0135-2224205
<http://fri.icfre.gov.in/tender/>
Email: po_fri@icfre.org



Notice Inviting Tender (E-Procurement mode)

निविदा दस्तावेज/ Tender Document

Ref. No X-129/POFRI/ECC/PK/AICRP-19/2020-21, TENDER ID: 2021_ICFRE_622145_1

Date: 12/03/2021

Bids under two bid systems (Technical and Commercial) are invited online at CPP Portal (<https://eprocure.gov.in/eprocure/app>) from the reputed manufacturer/authorized supplier/dealer for the following items.
Manual bids will not be accepted.

वस्तु की तकनीकी विशिष्टताये / Technical Specification of item, (Below mentioned quantity are for one Institute

S. No.	Name of item	Quantity	Warranty	EMD (Rs.)	Tender Fee (Rs.)
Supply and Installation of Sap Flow Monitoring System with accessories.					
1.	(i) SAP Flow System for Main Tree	As per Specification (Annexure VII)	01 Year for each item As per Specification (Annexure VII)	2,50,000/-	NIL
2.	(ii) SAP Flow System for Replication Tree				
3.	(iii) Data Analysis Software				
4.	(iv) SAP Flow System Installation Kit for Main Tree				
5.	(v) SAP Flow System Installation Kit for Replication Trees				

(For Detailed Technical Specification Please refer Annexure-VII)

नोट-1 : कृपया वस्तु का मूल्य एवं कर अलग-अलग दर्शाए/Please quote the rate & Taxes of the item separately

Note-2: E-way bill is to be issued by the Venders/Transporter

Note-3: The HSN / SAC Code of the item must be mentioned.

Technical Clarifications:	Dr. Parmanand Kumar Mob.:7579210296	Climate Change and Forest Influence Division,	0135-0135-222 4482 Email: pkumar@icfre.org
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Critical Date Sheet

S. No.	Particulars	Date	Time	Location
1.	Published Date	12.03.2021	05:15 PM	FRI website and CPP portal: https://eprocure.gov.in/eprocure/app
2.	Bid Document Download Start Date	12.03.2021	05:30 PM	At CPP Portal as above
3.	Seek Clarifications Start Date	22.03.2021	05:00 PM	Through Phone/Email
4.	Pre-BID meeting	17.03.2021	10:30 AM	Through google meet meet.google.com/qji-fxcv-apw
5.	Bid Submission Start Date	22.03.2021	05:00 PM	At CPP Portal as above
6.	Seek Clarification End Date	11.04.2001	05:00 PM	Through Phone/Email
7.	Bid Submission End Date	12.04.2021	03:00 PM	At CPP Portal as above
8.	Bid Opening Date	13.04.2021	03:00 PM	CPP portal / At Purchase Section, FRI Main Building, P.O. New Forest, Dehradun-248006

The tender document can be downloaded from <http://eprocure.gov.in/eprocure/app> and be submitted only through the same website.

[PURCHASE OFFICER]

Instructions for Online Bid Submission

This tender document has been published on the Central Public Procurement Portal ([URL:https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)) & Institute website <http://fri.icfre.gov.in/tender/>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

REGISTRATION

1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:<http://eprocure.gov.in/eprocure/app>) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
7. The CPP Portal also has user manual with detailed guidelines on enrollment and participation in the online bidding process. Any queries related to process of online bids or queries related to CPP Portal may be directed to the 24x7 CPP Portal Helpdesk.

The Institute will not be responsible for any type of technical issue regarding uploading of Tender on website.

SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

1. Bidder should take into account any corrigendum/clarifications published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS formats. Bid documents may be scanned with 100 dpi with black and white option.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

1. Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder should submit the Tender Fee/ EMD as specified in the tender. The hard copy should be posted/couriered given in person to the Tender Inviting Authority, within bid submission due date and time as indicated in the tender. Scanned copy of the same should be uploaded as part of the offer. The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the same.
4. Financial Bids can be submitted in **BOQ_XXXX.xls format** (as given in the portal), the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.
5. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
6. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
7. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

1. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 91-8826246593.

CHAPTER-1: INSTRUCTION TO BIDDERS

1.1 All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents.

1.2 Checklist as per Annexure-I, must be filled along with page numbers of tender document failing which bid is liable to be rejected and no further correspondence in this regard will be entertained.

1.3 Duly filled Annexure-1 must be placed in the front part of tender document.

1.4 The Tender should be enclosed / uploaded with proper certifications like Agency Certification, Authorization certificate and /or Proprietary Certificate, as the case may be, in support of your offer.

1.5 Supply means: "Supply, Installation & Commissioning".

1.6 बोली का जमा किया जाना / Submission of Bids:

- (i) The bids should be submitted/uploaded ONLINE in two parts:

The Technical Bid (Documents as per CHECK LIST Annexure – I,

The Financial Bid (Online at CPP Portal in BoQ_XXXX.xls format)

- (ii) The bids should be printed on official pad preferably with GST Number of the firm.
- (iii) The bid should bear full details and where possible may be duly supported with catalogues, pamphlets, literature, samples of the item/items as the case may be for comparing the quality and rates of the item(s).
- (iv) Bid received after the closing date and time shall not be considered.
- (v) The transportation cost, insurance charge etc., if any, Percentage/ rate of GST or all other taxes and duties should be clearly mentioned.
- (vi) **The bids / rates / tenders should remain valid for a minimum period of 90 days from the date of opening.**
- (vii) **Since this purchase being for research purpose and ICFRE/FRI, Dehradun is registered in DSIR, New Delhi. It is therefore exempted from the payment of custom duty and GST @ 5% as per the Govt. Rules. The bidder should quote accordingly.**
- (viii) There should not be any over-writing or cutting on rates quoted. However, all cutting/corrections must be duly authenticated else the offer will be rejected.
- (ix) The rates shall not be subject to escalation of any nature.
- (x) The rates quoted should be applicable to educational institutions and any cost advantage received in lieu thereof should be passed on the Institution.
- (xi) **While quoting, the firm shall give an undertaking regarding Tender Acceptance Letter as per Annexure-IV.**
- (xii) The quotations should be given for the items in the same order as in the enquiry letter.

- (xiii) Agreements/Purchase order/Completion certificates if any for similar works in other institutes, the details of such supplies for the preceding three years should be given together with the prices eventually or finally paid.
- (xiv) **Duly filled checklist as per Annexure-I should be submitted along with tender.**
- (xv) **Firm from India quoting on behalf of their foreign principal**
 - (a) Copy of agreement, with their foreign principal with the precise relationship between them, their mutual interest and nature of services which would be available from bidding firm from India, shall be submitted along with their tender.
 - (b) Price to be quoted in Indian Currency only.

1.7 निविदा शुल्क/ Tender Fee एवं/and अग्रिम धन राशि / Earnest Money Deposit (EMD)

The Technical Bid should accompany **non-refundable Tender Fee in form of Demand Draft only** and an **EMD in the form of FDR /Bank Guarantee only of the value mentioned at the first page of this tender document only for the equipment(s) bidding by the bidder as the case may be**, issued from any of the Commercial Banks of India drawn in favour of “Director, Forest Research Institute, Dehradun” valid 90 days beyond the validity period of bid. **The Bidder have to fill up EMD details online as per quoted items and send the hard copy of payment to the Purchase Section FRI, on or before the Bid Opening date and time as mentioned in Critical date sheet.** The qualification in Technical bid will be subject to the receipt and acceptance of EMD within schedule date and time as mentioned in the NIT. FRI Dehradun shall not be responsible for any delay in receipt of EMD. In case the EMD is not received within the aforesaid period, the bid will be outrightly rejected. Original EMD should be submitted in a Separate Sealed Cover super-scribed as EMD for Tender no. & Item Name and the same to be addressed to: Purchase Section, FRI Dehradun-248006.

Exemption on submission of Tender Fee/EMD will be given against valid MSME/NSIC/KVIC/Recognition certificate from Department for Promotion of Industry & Internal Trade [DPIIT] under valid category and within the validating period of the certificate.

The earnest money shall be refunded to all the unsuccessful firms, without any interest after finalization of the contract. EMD shall be refunded to the successful firm on receipt of PBG/Security Deposit. No interest is payable on the EMD to either the successful firms or the unsuccessful firms.

1.8 अग्रिम धन राशि प्रत्याभूति/Earnest Money Deposit (EMD) & निष्पादन बैंक प्रत्याभूति/Performance Bank Guarantee (PBG)

1. The Earnest Money Deposit (EMD) in the form of Bank Guarantee or FDR pledged in favour of “Director, Forest Research Institute, Dehradun” is required to be submitted by the bidder with tender Notice. This should remain valid for Ninety days. The format of the EMD is available at the institute’s website. No interest shall be claimed by the bidder on the EMD. The Earnest Money to be forfeited, if wrong information is given in the tender to influence the tender cost. The Earnest Money will also be forfeited if bidder wants to withdraw his bid without any reliable reason.
2. 3% of the cost price in the form of Bank Guarantee or FDR pledged in favour of “Director, Forest Research Institute, Dehradun” is required to be submitted by the successful bidder before the delivery / installation works complete of the items(s) which should remain valid at least during the warranty period plus sixty days. The format of the PBG is available at the institute’s website. No interest shall be claimed by the bidder on the PBG submitted. The Bank Guarantee may be forfeited in case of improper services provided by the bidder/firm after verification from the concerned Consignee/HOD. Bank Guarantee will only be accepted in the form of FDR/Bank Guarantee. **Bank Guarantee in the form of demand draft will not be accepted.**

1.9 बोलियों का खोला जाना / Opening of Bids:

- 1) The Technical Bids will be opened online at CPPP Portal (<https://eprocure.gov.in/eprocure/app>)-Plz refer Critical Date Sheet.
- 2) **The Financial bids of only the Technically Qualified bidders will be opened. The date and time for opening the Financial Bid will be communicated to the respective firm later by the system (CPP Portal (<https://eprocure.gov.in/eprocure/app>))**
- 3) If there are any discrepancies in price schedule and tender document please refer to the BOQ in the Central Public Procurement Portal, the BOQ item/words/conditions mentioned in BOQ prevails
- 4) Representatives of the firm(s) may be present at the time of opening the financial bids if they so desire.

CHAPTER-2: CONDITIONS OF CONTRACT

2.1 कीमत / Price

- (i) The price of the goods must be as per the BoQ. The price quoted shall be considered firm and no price escalation will be permitted. The price criteria should be on **F.O.R., FRI, Dehradun, F.O.R., TFRI, Jabalpur, F.O.R., AFRI, Jodhpur, and F.O.R., IFGTB, Coimbatore.**
- (ii) Govt. levies like GST, if any, shall be paid at actual rates applicable on the date of delivery. The rates should be quoted accordingly giving the basic price, GST, if any.
- (iii) The rate of **GST applicable to FRI Dehradun is 5% and also exempted from the payment of custom duty** for the items procured for Research Purpose as per Notification No. 45/2017-Central Tax (Rates) New Delhi, 14th November, 2017 and Notification No.47/2017-Integrated Tax (Rate) New Delhi 14 November 2017. The bidder should quote accordingly
- (iv) The price mentioned in Financial Bid must be inclusive of transportation, insurance, Custom Clearance Charges (if any) loading/unloading, installation, commissioning, training, warranty, AMC (if any) and any other incidental/local service required for delivering the goods for desired destination as decided by FRI Dehradun.
- (v) The institute will not be responsible in case of the bidders failing to include charges towards insurance & transportation, installation, commissioning and training, warranty, AMC (if any). **The price mentioned in the financial bid will be final and the bidder has to comply with that, if awarded the tender.**

2.2 वारंटी सपोर्ट / Warranty Support

- (i) The items covered by the schedule of requirement shall carry the warranty for the period mentioned in this tender document/specification of **COMPREHENSIVE WARRANTY** from the date of acceptance of the equipment by the respective Institutes i.e. FRI Dehradun, TFRI Jabalpur, AFRI Jodhpur and IFGTB Coimbatore. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolog for more than 48 hours. The comprehensive warranty includes onsite warranty with parts.
- (ii) The defects, if any, during the guarantee/warranty period are to be rectified free of charge be arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, local taxes, if any, should be borne by the beneficiary or his agent.
- (iii) The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost.
- (iv) The equipment must be supported by a Service Centre in India manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail
- (v) The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- (vi) Details of onsite warranty, agency who shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
- (vii) The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.

2.3 कार्य अनुबन्ध / Award of Contract:

The final selection of the bidder for the award of the contract will be made on the basis of the evaluation of techno-commercial proposal submitted by the prospective qualified bidders.

2.4 पूर्व आपूर्ति निरीक्षण/ Pre-supply Inspection:

Authorized representative of the Institute shall make the final inspection before supply of the item at site of the firm, if required.

2.5 वस्तु की आपूर्ति / Supply of Item:

The whole supply as per order shall have to be completed within the time mentioned in the order failing by the respective Institutes i.e. FRI Dehradun, TFRI Jabalpur, AFRI Jodhpur and IFGTB Coimbatore shall have the right to accept or reject any quantity of items ordered. The firm will have to arrange for supply of the material/ equipment in good condition.

2.6 छतिपूति / Indemnity

The vendor shall indemnify, protect and save by the respective Institutes i.e. FRI Dehradun, TFRI Jabalpur, AFRI Jodhpur and IFGTB Coimbatore against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipments supplied by them.

2.7 भाडा व इन्सुरेन्स / Freight & Insurance

The equipment's to be supplied will be insured by the vendor against all risks of Loss or damage from the date of shipment till such time it is delivered by the respective Institutes i.e. FRI Dehradun, TFRI Jabalpur, AFRI Jodhpur and IFGTB Coimbatore, site.

2.8 भुगतान की शर्ते / Payment Terms:

(i) **No advance payments are allowed under any circumstances.**

(ii) **Payment in INR for supply of goods:**

a) Where installation is not required: 100% payment will be made after satisfactory delivery of material duly certified by the HOD. **OR**

b) Where installation is required: 100% payment will be made after satisfactory delivery and installation of the material duly certified by the HOD. **OR**

c) 100% Advance will be paid against submission of 110% Bank Guarantee of the Total Order value subjected to the approval of competent authority.

(iii) **Payment in INR for AMC/CMC/Service:**

a) Quarterly/Half yearly after satisfactory completion of work/service duly certified by the H.O.D./P.I.

2.9 दंड/ Penalty for delayed Services/LD:

A penalty of 0.5% of the total order value per week shall be levied for the delay subject to a maximum of 10% of the total order value.

In case of the non-supply of the item after the acceptance of the work/supply order, EMD will be forfeited by the Institute.

2.10 अप्रत्याशित घटना/ Force Majeure:

For the purpose of and within the scope of contract by way of indication and not of limitation, the term "Force Mejeure" shall mean acts of nature, strikes, Lockouts, or other industrial disturbances, act of public/enemy, wars, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms lightening, flood, washouts, civil disturbances, explosion and any other similar even not within the control of either party on which by exercise of due care and diligence neither party is able to prevent of overcome.

2.11 मध्यस्थता/Arbitration:

In the event of any difference or dispute arising out this work, all effort shall be made by both the parties to settle the same amicably. Failing an amicable settlement, the dispute shall be finally settled through arbitration conducted under the Arbitration and Conciliation Act 1996, by arbitrators appointed in accordance with the said Act. The arbitration shall give reasoned and speaking award. All disputes are subject to Dehradun jurisdiction only.

2.12 बोली अस्वीकृती के लिए मानदंड/ Criteria for bid rejection:

(i) If not received on or before due date and time.

(ii) If the pages of Tender Document are not sequentially numbered and signed.

(iii) If documents as per Annexure-I are not attached.

(iv) If technical bid found without the required undertaking (Annexure-IV).

(v) If it found at a later date that any information given in the bids is incorrect/false then the bid is liable to be disqualified/rejected.

(vi) Canvassing in any form will result in disqualification.

(vii) If "extra, as actual" etc. are mentioned against any of the price components in the bid, then the bid will be rejected.

(viii) If it is found that a bidder has submitted two/multiple bids for the same item/equipment, both/all the bids will be outrightly rejected.

(ix) If "extra, as actual" etc. are mentioned against any of the price components in the bid the bid will be rejected.

(x) If any bidder submitting two/multiple bids for the same of a tender, both/all the bids if that bidder will be outrightly rejected.

(xi) If the firm quotes 'NIL' charges/ consideration, the bid shall be treated as unresponsive and will not be considered.

2.13 सत्यनिष्ठा संहिता /Code of Integrity

False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for upto 2 years as per rule 151 (iii) of the General Financial Rules along-with such other actions as may be permissible under law.

2.14 Fall Clause:

The Bidder undertakes that it has not supplied/is not supplying similar product/systems or subsystems OR providing similar services at a price/charge lower than that offered in the present bid in respect of any other ministry/department of the government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the bidder to any of the ministry/department of the government of India or a PSU at a lower price, then the very price with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the bidder to FRI Dehradun, if the contract has already been concluded.

CHAPTER-3: SCHEDULES OF REQUIREMENTS

3.1 टिप्पणी / Note:

- (i) **Technical Bid in form of Annexure-I, II, III, IV, V and VII (blank signed price bid) has to be uploaded on CPP portal. Financial Bid in form of Excel file BoQ_XXXX.xls has to be uploaded on CPP portal.**
- (ii) If the Supplier/firm is manufacturer/authorized dealer/sole distributor/of the item, the certificate to this effect should be attached/uploaded.
- (iii) Please note that the firm must submit the **separate compliance Statement** for each item quoting in Annexure-III in respect of all the specifications with the supporting printed catalogue/leaflet/Brochure of the quoted items with **highlighting their offered specifications.**
- (iv) It may also be noted that the tender bids received after the stipulated date & time or found incomplete and tender bids containing false/incorrect information shall be summarily rejected. The Institute shall not entertain any communication in this regard, whatsoever.
- (v) The firm is required to give its Bank Account details with IFSC for the purpose of making e-payment.
- (vi) The Forest Research Institute (FRI) Dehradun reserves the right to reject any quotation wholly or partly without assigning any reason.
- (vii) The quantity shown against the item is approximate and may vary as per demand of the Institute at the time placing order.
- (viii) The decision of the Institute in all matters relating to eligibility, acceptance, rejection of the bid will be final and binding on the applicants.
- (ix) Forest Research Institute (FRI) Dehradun discourages High Sea Sale Purchase. All tenders with High Sea Sale will be rejected.
- (x) The firms should clearly mention (in the financial bid) the Harmonized System of Classification (HS code) defined by the Central Custom and Excise Board (Govt. of India) for the item (s) involving import.
- (xi) **If the due date happens to be a holiday, then the TENDER FEE and EMD will be accepted till 3.00 PM on next working day followed by the holiday.**
- (xii) If an agent submits bid on behalf of the Principal/OEM, the same agent can not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- (xiii) **Indian Agent should submit the certificate from the Foreign Principal that they are the Authorized & Registered Indian Agent.**
- (xiv) The quantity shown in the tender can be increased or decreased to any extent depending upon the actual requirement. Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available at our Institute website <http://fri.icfre.gov.in/tender/>. Hence prospective bidders are advised to visit the Institute website regularly.
- (xv) **Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is incorrect/false then the bid is liable to be disqualified/rejected.**
- (xvi) **Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available CPP Portal (<https://eprocure.gov.in/eprocure/app>). Hence prospective bidders are advised to visit the CPP Portal (<https://eprocure.gov.in/eprocure/app>) regularly.**
- (xvii) Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is incorrect/false then the bid is liable to be disqualified/rejected.
- (xviii) Institute will not be responsible for non-receipt of bid(s) within the stipulated date due to any postal delay or delay for any other reason in transit.
- (xix) Before submission of bids, bidders should read the complete enquiry letter/tender document carefully and ensure that the bidders fulfill the eligibility criteria.

- (xx) In case the item /product is under rate contract with DGS&D or GeM, than bidder should certify that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
- (xxi) In case calculation mistakes are found in the financial bid, then calculation shall be made by the Institute on the basis of rate per unit quoted by the bidders will be processed further.
- (xxii) The Institute reserves the right to rectify any discrepancy of this advertisement, if found later on. In case of any inadvertent mistake in the process which may be detected at any stage even after the issue of purchase order, the Institute reserves the right to modify/withdraw/cancel any communication made to the bidder.
- (xxiii) In Item Wise BoQ_XXXX.xls sheet, In column M, leave blank for the item/service not provided/quoted by you. If quoted 0 then it will be considered that the item/service will be provided free of cost.**
- (xxiv) If there are any discrepancies in price schedule and tender document please refer to the BOQ in the Central Public Procurement Portal, the BOQ item/words/conditions mentioned in BOQ prevails.
- (xxv) Indian Council of Forestry Research & Education, Dehradun is registered with the Department of Scientific and Industrial Research (DSIR) for purposes of availing customs duty exemption in terms of Government Notification No. 51/96-Customs dated 23 July, 1996 and Central Excise duty exemption in terms of Government Notification No. 10/97-Central Excise dated 1 March, 1997.**

Compliance of Restrictions under Rule 144 (xi) of GFR 2017:

Restrictions on procurement from a bidder of a country which shares a land border with India

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- II. "Bidder" (Seller / Service Provider) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
 - a. An entity incorporated, established, or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established, or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established, or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation—
 - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 3. In case of an unincorporated association or body of individuals, beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. Any false declaration and non-compliance of the above would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

Purchase Preference under 'Make in India' Policy

Under 'Make in India' policy of Government of India, Purchase Preference will be given to eligible bidders as per Public Procurement (Preference to Make in India), Order 2017 issued vide order No. P-45021/2/2017-B.E.-II dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020) of Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. Bidders are required to submit necessary certificates & documents as detailed in the above referred GOI Order in support of their claim to avail benefit against this order.

Note: The bidders who claim Purchase Preference under 'Make in India' Policy shall fulfil all requirements of tender document applicable for Indigenous Manufacturer.

'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

Local Supplier:

'Class-I Local Supplier' means a supplier whose product offered for procurement has local content equal to or more than 50%.

'Class-II Local Supplier' means a supplier whose product offered for procurement has local content more than 20% but less than 50%.

'Non-Local Supplier' means a supplier whose product offered for procurement has local content less than or equal to 20%.

Margin of Purchase Preference: For being eligible for purchase preference under this clause, the Margin of purchase preference shall be 20% (i.e. L1 + 20% band).

Preference: Purchase Preference shall be given to 'Class-I Local Supplier' only in the manner specified here under:

A. In the procurement of Goods which are divisible in nature:

i. If L1 is from a 'Class-I local supplier', the contract for full quantity will be awarded to L1.

ii. If L1 is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on 'Class-I local supplier', then such balance quantity may also be ordered on the L1 bidder.

B. In the procurement of Goods which are not divisible in nature:

i. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.

ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.

iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.

C. 'Class-II local supplier' will not get purchase preference.

Verification of local content:

i. The 'Class-I local supplier' / 'Class-II local supplier' at the time of bidding shall be required to indicate percentage of Local Content and provide self-certification that the items offered meet the local content required for Class-I local supplier' / 'Class-II local supplier' and shall give the details of the location(s) at which the local value addition is made.

ii. False declarations will attract banning of business of the bidder or its successor(s) for a minimum period of three years along with any other penal action as may be deemed fit including rejection of the offer, forfeiture of all dues including EMD/ Security Deposit / banning of the firm

iii. A supplier who has been debarred by any procuring entity for violation of this order shall not be eligible for preference for procurement for the duration of debarment. It will be the bidder's responsibility to provide self-certification, clearly stating that the bidder is not serving debarment from any procuring entity for the tendered item at the time of tendering.

Exemption of small purchases: Procurements where the estimated value to be procured is less than Rs 5 (Five) Lakhs shall be exempt from above.

Note: The bidders who claim Purchase Preference under 'Make in India' Policy shall fulfil all requirements of tender document applicable for Indigenous Manufacturer.

Self-Certificate for Local Content

*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018,29.05.2019 and 04.06.2020)

OR

*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.

The details of the location(s) at which the local value addition made is/are as under:

1.....

2.....

3.....

* Strike out whichever is not applicable

Date:

Seal & Signature of the Bidder

3.2 परेषिती का दिवरण/ Consignee Details as under:-

Detail of Consignee where the item has to be supply & Install and the separate bills has to be raise in favour of the respective Directors of the Institutes.

S. No.	Name of Item & its Accessories and quantity	Consignee Details:
(1) Forest Ecology & Climate Change Division, Forest Research Institute, Dehradun -248006, UTTARAKHAND		
1.	(i) SAP Flow System for Main Tree: 4 nos. (1 for each site, total 4 sites are there in each institute)	Dr. Parmanand Kumar, Scientist, Mobile no. 7579210296 Forest Ecology & Climate Change Division, Forest Research Institute, Dehradun -248006 UTTARAKHAND
2.	(ii) SAP Flow System for Replication Trees: 32 nos. (8 for each site, total 4 sites are there in each institute)	
3.	(iii) Data Analysis Software: 2 nos.	
4.	(iv) SAP Flow System Installation Kit for Main Tree: 2 nos.	
5.	(v) SAP Flow System Installation Kit for Replication Trees: 2 nos.	
(2) Forest Ecology & Climate Change Division, Tropical Forest Research Institute, Jabalpur-MADHYAPARADESH		
1.	(i) SAP Flow System for Main Tree: 4 nos. (1 for each site, total 4 sites are there in each institute)	Sh. Dheeraj Kumar Gupta/M. Rajkumar, Scientist, Mobile No. 9424625519 Forest Ecology & Climate Change Division, Tropical Forest Research Institute, Jabalpur- MADHYAPARADESH
2.	(ii) SAP Flow System for Replication Trees: 32 nos. (8 for each site, total 4 sites are there in each institute)	
3.	(iii) Data Analysis Software: 2 nos.	
4.	(iv) SAP Flow System Installation Kit for Main Tree: 2 nos.	
5.	(v) SAP Flow System Installation Kit for Replication Trees: 2 nos.	
(3) Forest Ecology & Climate Change Division, Arid Forest Research Institute, Jodhpur-RAJASTHAN		
1.	(i) SAP Flow System for Main Tree: 4 nos. (1 for each site, total 4 sites are there in each institute)	Sh. S.R. Baloch, Scientist, Mobile No. 9829320199 Forest Ecology & Climate Change Division, Arid Forest Research Institute, Jodhpur- RAJASTHAN
2.	(ii) SAP Flow System for Replication Trees: 32 nos. (8 for each site, total 4 sites are there in each institute)	
3.	(iii) Data Analysis Software: 2 nos.	
4.	(iv) SAP Flow System Installation Kit for Main Tree: 2 nos.	
5.	(v) SAP Flow System Installation Kit for Replication Trees: 2 nos.	
(4) Institute of Forest Genetics and Tree Breeding, Coimbatore- TAMILNADU		
1.	(i) SAP Flow System for Main Tree: 4 nos. (1 for each site, total 4 sites are there in each institute)	Sh. S. Senthil kumar, CCF & HoD Silviculture & Forest Management Division, Mobile No. 8903241755 Institute of Forest Genetics and Tree Breeding, Coimbatore TAMILNADU
2.	(ii) SAP Flow System for Replication Trees: 32 nos. (8 for each site, total 4 sites are there in each institute)	
3.	(iii) Data Analysis Software: 2 nos.	
4.	(iv) SAP Flow System Installation Kit for Main Tree: 2 nos.	
5.	(v) SAP Flow System Installation Kit for Replication Trees: 2 nos.	

Chapter-4: Specification and allied Technical details
Chapter-5: Price Schedule (to be utilized by the bidders for quoting their prices online in .XLS format at CPPP Portal (<https://eprocure.gov.in/eprocure/app>
Chapter 6: Contract Form

Please See Annexure-I, II, III, IV, V & VII
Please See Annexure- VI & Price Bid in BOQ_XXXX.XLS Format
Purchase Order is used as Contract Form

[PURCHASE OFFICER, FRI]

CHECK LIST
(Eligibility Criteria for Bidders)

Bidders to indicate whether the following documents are uploaded by striking out the non-relevant option.

Envelope – 1 (Technical Bid) (Scanned copy of following documents to be uploaded on CPP Portal)			
S. No.	Content	Uploaded (Yes/No)/N.A.	Page No.
1.	TENDER FEE OR Self attested copy of Exemption certificate		
2.	EMD OR Self attested copy of Exemption certificate		
3.	AUTHORIZATION certificate issued by the OEM, if applicable.		
4.	Self attested copy of GST certificate as applicable		
5.	Self attested copy of affidavit of PARTNERSHIP DEED as applicable.		
6.	BIDDER'S PROFILE/INFORMATION FORM: Annexure -II		
7.	*COMPLIANCE SHEET with any deviation: Annexure- III		
8.	Tender Acceptance Letter : Annexure- IV		
9.	A copy of Un-priced (Blank), signed and stamped Commercial/Financial Bid: Annexure- VI		
10.	*Printed CATALOGUE/BROUCHER/LEAFLET of the quoted item(s) enclosed/uploaded. Keywords of the specifications in the above mentioned Catalogue/Broucher/Leaflet are highlighted.		
11.	Copy of the previous two supply orders of the similar equipment/ item of last 3 years from the Central Govt./State/Govt./PSU/ CSIR/ICAR/ ICMR etc. attached/uploaded for reasonability of rates: Annexure-V A certificate regarding the satisfactory performance of the contract.		
12.	Copy of the audited balance sheet of the bidder for the previous three financial years indicating the turnover in supply of the material.		

Envelope – 2 (Financial Bid) (Following EXCEL document to be uploaded with BID on CPP portal)		
1.	Price bid should be submitted in Excel (BOQ.xls) Format	Uploaded (Yes/No)

***Note:** Separate sheets need to be attached/uploaded in case of quoting for more than one equipment as applicable.

- 1. Checklist as per above Annexure-I, must be filled along with page numbers of tender document.**
- 2. Above checklist (annexure-1) must be kept in the front part (first page) of tender document.**

Note: - In Failing of above, bid shall be summarily rejected & no further correspondence in this regard will be entertained.

Signature:
Name:
Designation:
Seal of the Firm/Agency

BIDDER PROFILE/INFORMATION FORM

(To be given on Company Letter Head)

Company Name :
Registration Number :
Registered Address :
Name of Partners /Directors :
 :
City :
Postal Code :
Company's Establishment Year : :
Company's Nature of Business : :
Company's Legal Status 1) Limited Company
(tick on appropriate option) 2) Undertaking
 3) Joint Venture
 4) Partnership
 5) Others

Company Category 1) Micro Unit as per MSME
(tick on appropriate option) 2) Small Unit as per MSME
 3) Medium Unit as per MSME
 4) Ancillary Unit
 5) SSI
 6) Others

CONTACT DETAILS

Contact Name :
 Designation :
 Email Id :
 Phone No :
 Mobile No :

BANK DETAILS

Name of Beneficiary :
 A/c. No. CC/CD/SB/OD:
 Name of Bank :
 IFSC NO. (Bank) :
 Branch Address:
 Branch Code:
 Other Details

Vendor's PAN No.
Vendor's CST No/LST No/WCT
No/TIN No:

Signature:
Name:
Designation:
Seal of the Firm/Agency

COMPLIANCE STATEMENT OF SPECIFICATIONS

(To be given on Company Letter Head)

विस्तृत विवरण अनुपालन रिपोर्ट के साथ प्रस्तुत किया जाना है (अपने आधिकारिक लेटरहेड पर विक्रेता/ फर्म द्वारा प्रस्तुत करने के लिए)

Detailed specification cum compliance report to be submitted with the Technical Bid (to be submitted by the vender/firm on its official letter head)

Name of the Item(s).....Make:.....Model:.....

Manufacturer/Authorized Distributer /Dealer/Supplier.....

TECHNICAL SPECIFICATIONS:

(For Detailed Technical Specification Please refer Annexure-VII)

S. No.	Required Items Specifications/ Part/ Accessories as per Tender	Offered specification of item by the bidder	Compliance (Yes/No)	Deviation, If any, in unambiguous terms	Whether highlighted in technical leaflet/literature
1.					
2.					
.					
.					

I have also enclosed/uploaded all relevant documents in support of my claims (as above) in the following pages.

Signature:

Name:

Designation:

Seal of the Organisation

- Note:
- (i) Manufacturer/Authorized Distributer/Dealer/Supplier valid certificate must be enclosed/uploaded.
 - (ii) It is compulsory to enclose the printed Catalogue/Leaflet/Brochure etc. of the quoted items.
 - (iii) "Offered specification" should be filled up properly in the format provided above and should be **HIGHLIGHTED** in the enclosed/uploaded printed Catalogue/Leaflet/Brochure etc.
 - (iv) Volume & Weight of the item should also be mentioned.
 - (v) Separate Compliance Sheets (Annexure-III) must be attached/uploaded for different quoted Item(s)/Make/Model.

उपक्रम/UNDERTAKING
TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date:

To,
Director
Forest Research Institute
Dehradun-248006

Sub: Acceptance of Terms & Conditions of Tender.

Ref. No X-28/POFRI/ECC/PK/AICRP-19/2020-21
TENDER ID: 2021_ICFRE_622145_1

Date: 12/03/2021

Agreement/Contract Form

Dear Sir,

- (i) I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
- (ii) The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter
- (iii) **I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.**
- (iv) **I / We do hereby declare that our Firm has not been blacklisted/ debarred / banned by any Govt. Department/Public sector undertaking.**
- (v) I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.
- (vi) It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.

(vii) Compliance of Restrictions under Rule 144 (xi) of GFR 2017:

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the competent authority. I hereby certify that I fulfill all requirements in this regard and is eligible to be considered. (Where applicable, evidence of valid registration by the competent authority shall be attached)

Signature:
Name:
Designation:
Seal of the Firm/Agency

PREVIOUS SUPPLY ORDERS FORMAT

Name of the Firm:

Order placed by (Full address of Purchaser)	Order No., Date and Amount (Rs.)	Name of the ordered equipment and quantity	Date of completion of delivery as per contract	Has the equipment been installed satisfactorily?	Contact Person along with Telephone no., Fax no. and e-mail address

Signature and Seal of the Manufacturer/ bidder

Place:

Date:

Note : Please attach self attested copy of the previous two supply orders of last three years of the similar equipment/ item from the Central Govt./State Govt./PSU/ CSIR/ICAR/ ICMR etc. attached/uploaded.

COMMERCIAL/FINANCIAL BID

(To be uploaded online at CPP Portal in BoQ_XXXX.xls format)

Ref. No X-28/POFRI/ECC/PK/AICRP-19/2020-21

Dated: 12/03/2021

TENDER ID: 2021_ICFRE_622145_1

Rates: As per BoQ							
S. No.	Name of item / Specifications/ Make & Model.....	Qty.	Basic Rate (Rs.)	Excise Duty (Rs.)	*GST etc. @5% (Rs.)	Other charges(Freight /custom clearance etc (Rs.)	TOTAL for One Institute (Rs.)
1.	Supply and Installation of Sap Flow Monitoring System with accessories, NOTE: This BoQ is for one Institute Only, Final price will be calculated for four Institutes.						
1.01	(i) SAP Flow System for Main Tree: 4 nos. (1 for each site, total 4 sites are there in each institute)	04 Nos.	Rate per unit				
1.02	(ii) SAP Flow System for Replication Trees: 32 nos. (8 for each site, total 4 sites are there in each institute)	32 Nos.	Rate per unit				
1.03	(iii) Data Analysis Software: 2 nos.	02 Nos.	Rate per unit				
1.04	(iv) SAP Flow System Installation Kit for Main Tree: 2 nos.	02 Nos.	Rate per unit				
1.05	(v) SAP Flow System Installation Kit for Replication Trees: 2 nos.	02 Nos.	Rate per unit				
			Total				
			Grand Total Rs.				

*FRI Dehradun is eligible for Custom Duty exemption and GST @ 5%. Therefore the bidders may quote accordingly.

NOTE: This BoQ is for one Institute Only, Final price will be calculated for four Institutes.

RATES: The rates quoted by the bidders, shall be firm and inclusive of all taxes (including GST, transport etc.,) and should include all charges (as applicable) for custom clearance, packing, forwarding, insurance, freight, delivery and unloading at FRI Dehradun, Uttarakhand. Rates to be quoted in INR Only as per the schedule given in BOQ.

1) Price of the items should be clearly mentioned even if supplied Free of Cost.

Term & Conditions:

Prices (if quoted in Rs.): F.O.R.- FRI, Dehradun (Uttarakhand), F.O.R.-TFRI, Jabalpur (Madhyapadesh),
F.O.R.-AFRI, Jodhpur(Rajasthan), F.O.R.-IFGTB, Coimbatore (Tamilnadu).

1. Payment:
2. Validity:
3. Delivery period:
4. Other Charges:
5. Warranty: **01 Year for each item**
6. Rejection: Equipment if found not as per the required specification, warranty and AMC /CMC, would be rejected.
7. Penalty Clause: As per clause-2.9 of enquiry letter.
In case of the non-supply of the item after the acceptance of the work/supply order, EMD will be forfeited by the Institute.
8. PBG: 3% of the cost price in the form of Bank Guarantee or FDR pledged in favour of "Director, Forest Research Institute, Dehradun" is required from the successful bidder at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days.
9. This sheet with Un-priced/blank rates and stamped should be given with technical bids.

Customs Details:

(i) Forest Research Institute, Dehradun Custom House Agent (CHA) Address
M/s Cwick (Import Consolidation), Private Limited,
L-II/101, New Mahavir Nagar Extension,
Outer Ring Road, New Delhi-110018,
E-mail: info@cwickimport.com and followup@cwickimport.com
Tel: + 91-09313996082, + 91-11-25996082, + 91-11-25992781

(ii) Details of Institute:
Import Export Code (IEC code FRI) – 0100000011
AD CODE:- 02900682870007
Union Bank of India, Main Branch, Rajpur Road, Dehradun-248001

It is certified that the rate quoted is not over and above (higher side) the rates under RC with DGS&D or GeM.

Signature:

Name:

Designation:

Seal of the firm/Organisation

SPECIFICATIONS

Specification of SAP Flow Monitoring System

For the Main Tree: Quantity: 16nos

Integrated Standalone type SAP Flow System, with Data logger and probe/ needles with measurement depth of 15-20, 20-30- and 30-50-mm. Measurement techniques: Heat Field Deformation / **Heat Ratio/Heat pulse** technique. The equipment should be able to measure high sap flow rates as well as low to zero and reverse sap flow. Complete set to be provided with a Data-logger with battery.

For the Replication Trees: Quantity: 128 nos.

Integrated Standalone type SAP Flow System, Data logger with probes having two measurement points up to 25mm depth. Measurement technique: Heat Ratio / **Heat pulse technique**. Sap Flow System should be able to measure high, low and reverse and zero flow rates in small woody stems & roots as well as large trees. Complete set to be provided with a Data-logger with battery.

Other Specifications:

Range -100 to +100 cm hr⁻¹

Resolution- 0.01 cm hr⁻¹

Accuracy- 0.5 cm hr⁻¹

Measurement Duration- 120 seconds

Logging Interval: User Adjustable: Minimum interval, 3 minutes

Data Logger:

Computer Interface USB

Data Storage Micro SD Card (to be included)

Memory Capacity Up to 16GB, SD card supported.

GPRS/WiFi / internet enabled remote data access to be provided

Solar Power: A provision of Solar Power for Data loggers to be provided at site so that at least 20W Solar Panel for each SAP Flow System is available. Either the Individual Panels of 20W each or combined panels, cables, charge controllers and mounts may be provided as per site requirements. Should be capable of charging under low light conditions in forest.

Other Items required:

1. Data Analysis Software for transferring the data from data logger to Computer for obtaining sap flow velocities and sap flux densities in 2D and 3D and for further analysis.
2. SAP Flow System Installation Kit for Main Tree and for Replication Tress. The kit should contain the essential items to Install/Setup the System at site (on the tree trunk, wherever possible), such as drill machine, bits, drill guides, Data Transfer shuttle, heat sink grease, tree covering enclosures, weatherproof enclosures for dataloggers, etc

Requirement of Items at Each Institute

1. **SAP Flow System for Main Tree: 4nos. (1 for each site, total 4 sites are there in each institute)**
2. **SAP Flow System for Replication Trees: 32nos. (8 for each site, total 4 sites are there in each institute)**
3. **Data Analysis Software: 2nos.**
4. **SAP Flow System Installation Kit for Main Tree: 2 nos.**
5. **SAP Flow System Installation Kit for Replication Trees: 2nos.**

Requirement of all Four Institutes:

1. **SAP Flow System for Main Tree: 16nos.**
2. **SAP Flow System for Replication Trees: 128nos.**
3. **Data Analysis Software: 8nos.**
4. **SAP Flow System Installation Kit for Main Tree: 8 nos.**
5. **SAP Flow System Installation Kit for Replication Trees: 8nos.**

Warranty: 01 Year for each item