

फ़ैक्स/Fax: (0674)-2301651

टेलीफ़ोन/Tel: (0674)-2300060(निदेशक /Director)

EPABX: 2300010/2300016/2300481/2301815

ई-मेल/E-mail: director.iwmm@icar.gov.in

वेब/Web: www.iwmm.res.in



भाकृअनुप-भारतीय जल प्रबंधन संस्थान
ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT
(भारतीय कृषि अनुसंधान परिषद /Indian Council of Agricultural Research)
रेल विहार के सामने, चन्द्रशेखरपुर, भुवनेश्वर -751023, ओड़ीशा
Opp. Rail Vihar, Chandrasekharpur, Bhubaneswar-751023. Odisha



File No. 2-19/Store/Equipment/2015-16/

Dated: 17.02.2018

NOTICE INVITING TENDER THROUGH E-PROCUREMENT

Online Bids are invited from the interested firms under **two-bid system** for purchase of Equipments/Instruments. Manual bids shall not be entertained.

Tender documents may be downloaded from e-Procurement website of CPP Portal <https://eprocure.gov.in/eprocure/app> and also from ICAR-Indian Institute of Water Management website www.iwmm.res.in and submitted through online at CPPP as per the schedule as given in **CRITICAL DATE SHEET** as under:

CRITICAL DATE SHEET

Tender No.	No. <u>ICAR-IIWM/ 39 /2018</u>
Date and Time for Issue/Publishing	11.00 A.M on 19/02/2018
Document Download/Sale Start Date and Time	11.00 A.M on 19/02/2018
Bid Submission Start Date and Time	11.30 A.M on 19/02/2018
Pre bid meeting Date and Time	03.00 P.M on 23/02/2018
Clarification Start Date and Time	11.30 A.M on 19/02/2018
Clarification End Date and Time	02.00 P.M on 26/02/2018
Bid Submission & EMD Submission End Date and Time	04.00 P.M on 26/02/2018
Date and Time for Opening of Technical Bids	04.00 P.M on 27/02/2018
Address for Communication	Administrative Officer, ICAR-IIWM, SE Rly. Project Complex, Chandrasekharpur, Bhubaneswar-751023 (Odisha). Email: ao.iwmm@icar.gov.in

Sd/-

(S.K.Singh)
Administrative Officer

IMPORTANTNOTES:-

1. Tender Documents can be downloaded from the ICAR-IIWM website www.iiwm.res.in or from the Central Public Procurement Portal [URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app) Bidders should enroll/register in the e-procurement module of Central Public Procurement Portal through the website: [URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app) for participating in the bidding process. Bidders should also possess a valid Digital Signature Certificate (DSC) for online submission of bids.
2. **Bids received on e-tendering portal only will be considered. Bids in any other form sent through sealed cover/email/post/fax etc. will be rejected.**
3. **EMD defined on the Portal is MINIMUM i.e. mentioned against each item as indicated in the EMD column of the above table. The EMD should be submitted separately for each equipment for which bidders want to offer the bid.**
4. ICAR-IIWM will not be responsible for any delay in enrollment / registration as bidder or submitting/uploading the offer on e-tender portal. Hence, bidders are advised to register in e-tendering website: [URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app) and enroll their Digital Signature Certificate and upload their quotation well in advance.
5. Any change/corrigendum/extension of opening date in respect of this tender shall be issued through websites only and no press notification will be issued in this regard. Bidders are therefore requested to regularly visit our website for updates.
6. ICAR-IIWM reserves the right to accept/reject any or all the tenders in part/full without assigning any reason thereof.

Place: Bhubaneswar
Date: 19-02-2018

(S.K.Singh)
Administrative Officer
For and on behalf of the Director

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INSTRUCTIONS FOR ONLINE BID SUBMISSION

1. For Online Bid Submission as per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)). The bidders are required to submit copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates.

More information useful for submitting the online bids on the CPP Portal is available/obtained at [URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app). Manual/offline bids shall not be accepted under any circumstances.

For Registration

2. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
3. Foreign Bidders have to refer "**DSC details for foreign Bidders**" for Digital signature Certificates requirements which comes under Download Tab at <http://eprocure.gov.in/eprocure/app?page=Standard Bidding Documents &service=page> and the remaining part is same as above and below.
4. The intending Tenderer, in case of Authorized Distributor/ Authorized Dealer shall possess valid authorized Distributorship /Dealership license from Original Equipment Manufacturers. The tenderer shall enclose the copy of the same as PDF file in Cover-I of e-tender while submitting the tender.
5. The equipment shall be in compliance with the specifications mentioned in Annexure –VI of the tender and shall be of the latest technology, best quality and high standards.
6. Any optional accessories/ tooling, besides the standard equipment recommended for the better performance of the equipment, if offered, be provided with their full technical details including their use and advantage in a separate sheet with the tender documents.
7. No extra payment shall be paid on account of any discrepancy in nomenclature of items.
8. **While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any tender estipulate any condition of his own, such conditional tender is liable to be rejected.**
9. Director, ICAR-IIWM, reserves the right to reject any tender/bid wholly or partly without assigning any reason.
10. The Purchase Advisory Committee (PAC) constituted by the Director, ICAR-IIWM shall have the right to verify the particulars furnished by the bidder independently.
11. Tenderer shall take in to account all costs including installation, commissioning, cartage etc. forgiving delivery of material at site i.e. ICAR-IIWM, Bhubaneswar be for quoting the rates. In this regard, no claim for any extra payment for any reason shall be entertained.

12. The item should be delivered at ICAR-IIWM, Bhubaneswar and its Research Farm at Deras, Mendhasal, Khurda (As per the details given in Annexure-V) and the supplier shall be responsible for any damage during the transit of goods.
13. **All the tender documents & price bid to be up loaded as per this tender are to be digitally signed by the bidder.**
14. All the communications with respect to the tender shall be addressed to: **The Director, ICAR-IIWM, Opp. Rail Vihar, Chandrasekharapur, Bhubaneswar-751023.**

The Firms are also required to upload copies of the following documents:-

1) TECHNICAL BID

- a) Scanned copy of Earnest Money Deposit (EMD)/its exemption, if any.
- b) Scanned copy of firm registration, PAN Card, GST Registration Certificate.
- c) Tender Acceptance letter (Annexure-IV)
- d) Scanned copy of Income Tax Statement for the last three years i.e. for the assessment year 2015-16, 2016-17 and 2017-18.
- e) Scanned copy of Bank details (Annexure-II).
- f) Scanned copy of Make and Model of all the equipments (for which bidders wants to offer the bid), sub systems and additional items should be mentioned in the technical bid and complete technical details should be provided in the form of brochures and write-ups.
- g) Warranty of the equipments (each equipment for which bidders wants to offer the bid) may also be mentioned and to this effect documentary evidence like brochures or an undertaking mentioning the name of equipment and warranty period for that equipment must be uploaded.
- h) Check list in compliance to specification to be uploaded (Annexure-I) duly filling Col.No.4.

2) FINANCIAL BID

- a) Price Bid as BoQ.xls
- b) **The bidder are advised to quote price for equipment in INR which should be inclusive of all taxes.**

**Sd-
Administrative Officer
For and on behalf of the Director**

TERMS AND CONDITIONS

1. **The Bidder(s) may note that ONLINE BIDS will ONLY be accepted. All the requisite supporting documents as mentioned in the bid document should and must be uploaded On-line <http://eprocure.gov.in/eprocure/app>. The Bids sent through FAX, E-mail, by hand and/or by post shall not be accepted/ processed, in any case.**
2. The bidders may submit duly filled and completed bidding document ONLINE as per instruction contained in the bidding documents. Incomplete bid shall be rejected. The conditions of tender shall be governed by the details contained in complete bid document.
3. The rates should be quoted as per the BOQ uploaded on the CPP Portal. The bidders are advised to download this BOQ.xls as it is, and quote their offer/rates in the permitted column and upload the same in the Financial Bid. The Bidder shall not tamper/modify downloaded price bid template in any manner. In case if the same is found to be tempered/modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with ICAR-IIWM.
4. In case, holiday is declared by the Government on the day of opening the bids, the bids will be opened on the next working day at the same time. The ICAR-IIWM, Bhubaneswar reserves the right to accept or reject any or all the tenders.
5. The firm must also possess valid PAN No., GST registration Number and a copy of the same must be uploaded in the Cover-1 of the E-tender.
6. Bid Validity: 90 days.
7. Our Institute is registered with DSIR and are exempted from Excise Duty & Custom Duty. Hence, CDEC/DSIR will be provided to the firm, if demanded. Rates should be quoted accordingly.
8. The detailed instruction for online submissions of bid(s) through e-procurement module of Central Public Procurement of NIC, the bidder(s) may visit following link: [http://eprocure.gov.in/eprocure/app?page=HelpForContractors & service=page](http://eprocure.gov.in/eprocure/app?page=HelpForContractors&service=page)
9. **Bid Security (EMD):** The units registered with National Small Industries Corporation (NSIC) or the concerned Ministry or Department shall be exempted from the payment of Bid Security (Earnest Money Deposit) as defined under **General Financial Rules , 2017**. In such case, copy of the certificate showing registration with the above mentioned institutions to be uploaded in Cover-I of the e-tender in PDF format.
10. In case the unit is not covered as above, should submit the offer along with the **Bid Security (EMD) for the amount in the form of Demand Draft only**, in favour of "ICAR-UNIT-IIWM" drawn on any nationalized bank and payable at Bhubaneswar **as mentioned against each equipment/Instrument**.
11. EMD have to be submitted to this office on or before **26.02.2018 (04.00 PM)**. Name of the Tenderer and Tender reference number has to be furnished behind the EMD Demand Draft. The scanned copy of Earnest Money Deposit by way of Demand Draft in PDF form should be included in Cover-I of the E-tender. The offers without bid security will be rejected.
12. The EMD will be returned to the unsuccessful bidders.
13. The EMD will be forfeited if the bidder fails to accept the order based on his/her offer/bid or fails to supply the items.
14. **The successful tenderer, irrespective of its registration status, in the event of receiving award for supply of said equipments shall have to deposit performance security at the rate of 10% (ten percent) of the contract value within 07 days of receipt of confirmed Purchase Order.**

15. **Delivery:** **One month from the receipt of order for supply of the said equipment.**
16. **Payment:** 100% of the contract price on receipt of goods by the consignee supported by satisfactory installation/working report.
17. **Installation:** Within one month from the date of receipt of equipment in the Institute falling which Liquidated damage clause shall apply.

Liquidated Damage Clause: It would be realized @0.5% (half percent) of the base price (excluding taxes) of the delayed goods for each week of delay subject to maximum 10%.

18. **PRICES:-**

- I) Bidders need to quote the price of the equipments in INR on FOR basis to ICAR-IIWM, Bhubaneswar.
- II) The FOR price is inclusive of all taxes, incidental charges i.e. freight, forwarding and insurance etc.

(S.K.Singh)
Administrative Officer

Annexure-I

फ़ेक्स/Fax: (0674)-2301651

टेलीफ़ोन/Tel: (0674)-2300060(निदेशक /Director)

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Opp. Rail Vihar, Chandrasekharpur, Bhubaneswar-751023. Odisha



Name of the Firm :

Tender Reference No :

Name of the Tender/work :

Check List

Sl. No.	Details	Submitted (Yes/No)	If submitted, mention page no. of pdf file	Remarks
1	Scanned copy of Earnest Money Deposit (EMD)/its exemption, if any			
2	Scanned copy of Firms registration, PAN Card, GSTIN.			
3	Tender Acceptance letter (Annexure-IV)			
4	Scanned copy of Income Tax Statement for the last three years i.e. for the assessment year 2015-16, 2016-17 and 2017-18.			
5	Scanned copy of Bank details (Annexure-IV).			
6	Scanned copy of Make and Model of all systems, sub systems and additional items should be mentioned in the technical bid and complete technical details should be provided in the form of brochures and write-ups.			
7	Warranty of the equipments (each equipment for which bidders wants to offer the bid) may also be mentioned and to this effect documentary evidence like brochures or an undertaking mentioning the name of equipment and warranty period for that equipment must be uploaded.			

**Signature of the Bidder,
with Official Seal**

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(On the letterhead of the Firm)

MANDATE FORM FOR BANKING DETAILS

Name of the Firm :

Registered /Postal Address :

1.	Permanent Account Number (PAN) No.	
2.	Service Tax Registration No., if applicable	
3.	Bank details:	
	Bank Name	
	Branch Address	
	Account No.	
	Type of Account (Current/Savings)	
	MICR No	
	RTGS/NEFT Code	

Place:

Name of the Authorized Signatory

Date:

Stamp & Signature

(On the letterhead of the Firm)

CERTIFICATE ABOUT NON-BLACK LISTING

We _____ on this date _____ do hereby certify that our company / firm has not been blacklisted by any Government Department / Government Educational Institutions / Research Institute(s) during the last three years.

Authorized signatory of Bidder with Seal

Name _____

Designation _____

Place _____

Date _____

TENDER ACCEPTANCE LETTER
(On the letterhead of the Firm)
)

Date:

To,

The Director,
ICAR-IIWM,
Chandrasekharpur,
Bhubaneswar-751023.

Sub: Acceptance of terms and Conditions of tender.

Tender Reference No:

Name of the tender/work:-_____

Dear Dir,

1. I/we have downloaded the tender documents for the above-mentioned Tender/work from the website (s) namely:

_____ as per your advertisement,, given in the above mentioned website(s).
2. I/we hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No._____ to _____ (including all documents like annexure(s), schedules(s), etc.,) which form part of the contract agreement and I/we shall abide hereby the terms/ conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department / organization too have also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document (s)/corrigendum(s) in its totality /entirety.
5. I/we do hereby declare that our Firm has not been blacklisted/debarred by any Govt. Department/Public Sector Undertaking.
6. I/we certify that all information furnished by our Firm is true and correct and in the event the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason thereof 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.

Yours faithfully,

**Signature of the Bidder,
with Official Seal**

DETAILS OF ITEMS.

Item. No.	Name of Equipment	Quantity	Imported/ Indigenous	E.M.D. to be deposited (₹)	Place of delivery/ Installation of Goods/Equipment
1.	Non recording raingauge with measure Cylinder	One	Indigenous	200.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
2.	Single Stevenson screen with iron stand	One	Indigenous	700.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
3.	Open pan Evaporimeter with still well, measuring cylinder, wooden frame, thermometer for water temperature measurement with clip	One	Indigenous	1400.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
4.	Maximum thermometer	One	Indigenous	200.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
5.	Minimum thermometer	One	Indigenous	200.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
6.	Dry bulb thermometer	One	Indigenous	200.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
7.	Wet bulb thermometer	One	Indigenous	200.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
8.	Sunshine recorder	One	Indigenous	1000.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
9.	Sunshine recorder cards(1 year)	One	Indigenous	100.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.

10.	Cup counter anemometer with stand	One	Indigenous	500.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
11.	Windvane with stand	One	Indigenous	300.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
12.	Soil thermometer 5 cm, 10 cm and 20 cm	One	Indigenous	200.00	ICAR-IIWM Research Farm, Deras, Mendhasal, Khurda-752054, Odisha.
13.	Portable Nitrate analyzer	One	Indigenous	900.00	ICAR-IIWM, Chandrasekharpur, Bhubaneswar-751023, Odisha.
14.	Soil Moisture Meter (TDR/FDR) with 50 numbers access tube	One	Indigenous	14000.00	ICAR-IIWM, Chandrasekharpur, Bhubaneswar-751023, Odisha.
15.	Differential Global Positioning System (Differential GPS)	One	Indigenous	20000.00	ICAR-IIWM, Chandrasekharpur, Bhubaneswar-751023, Odisha.
16.	ERDAS IMAGINE Professional 2016 or latest version	One	Indigenous	20000.00	ICAR-IIWM, Chandrasekharpur, Bhubaneswar-751023, Odisha.
17.	ARC GIS software Desktop or Latest version	One	Indigenous	20000.00	ICAR-IIWM, Chandrasekharpur, Bhubaneswar-751023, Odisha.
				75900	

SPECIFICATIONS OF THE ITEMS.

Item No.	Name of the items with Specifications	Quantity/ Unit
01	<p>Non recording raingauge with measuring cylinder</p> <ul style="list-style-type: none"> • Made from fiber glass reinforced polyester • Collector area 200 cm² • Rainfall measuring capacity 200 mm • Rainfall collector bottle capacity 4 liters <p>Raingauge should follow IS 5225-1992 standard</p> <ul style="list-style-type: none"> • Measuring cylinder 20 mm capacity made of colour less, transparent glass with the thickness of 2 mm. <p>Measuring cylinder – Glass should follow IS 4849 : 1968 standard</p> <ul style="list-style-type: none"> • Good quality plastic confirming to quality as per IS 10073-1992 also can be considered. 	1 No.
02	<p>Single Stevenson screen with iron stand</p> <ul style="list-style-type: none"> • Rectangular wooden box made from teak preferably. All four sides double louvred with a door in front. • Length 56 cm; Breadth 31.5 cm; Height 41.2 cm • Four legs for the screen made from iron stand (preferably rust proof) and their height shall be exactly 117.5 cm above the ground from the floor of the screen. • IS 5948 – 1970 standard shall be followed. 	1 No.
03	<p>Open pan evaporimeter with still well, measuring cylinder, wooden frame, thermometer for water temperature measurement with clip</p> <ul style="list-style-type: none"> • The pan-evaporimeter made from copper or non-rusting, non-magnetic stainless steel sheet of 1± 0.1 mm thickness conforming to IS 1550 or IS 5522. • Still well made from brass or ERW brass tube of 102 mm outside diameter with a wall thickness of 3 ± 0.5 mm and the base from cast brass. • The measuring cylinder made from clear cast seamless acrylic plastic tubing and the bottom plate of clear acrylic plastic sheet or made from brass sheet is preferable. • Rot resistant lumber treated with creosote or other effective wood preservative shall be used for the platform. • Dimensions as per IS 5973 – 1998 standard shall be followed. • Wire mesh cover for Pan made from galvanized iron (IS 3150) is preferable. 	1 No.
04	<p>Maximum thermometer</p> <ul style="list-style-type: none"> • It should follow IS 5681 1983 standard. • Mercury in glass thermometer • Range : -35 deg C to 55 deg C • Accuracy 0.2 deg C • Interval 0.5 deg C 	1 No.
05	<p>Minimum thermometer</p> <ul style="list-style-type: none"> • It should follow IS 5681 1983 standard. • Alcohol in glass thermometer • Range : -40 deg C to 50 deg C • Accuracy 0.3 deg C • Interval 0.5 deg C 	1 No.

06	<p>Dry bulb thermometer</p> <ul style="list-style-type: none"> • It should follow IS 5681 1983 standard. • Mercury in glass thermometer • Range : -35 deg C to 55 deg C • Accuracy 0.2 deg C • Interval 0.5 deg C 	1 No.
07	<p>Wet bulb thermometer</p> <ul style="list-style-type: none"> • It should follow IS 5681 1983 standard. • Mercury in glass thermometer • Range : -35 deg C to 55 deg C • Accuracy 0.2 deg C • Interval 0.5 deg C • Includes good quality muslin wicks with sufficient number for at least one year of continuous operation. 	1 No.
08	<p>Sunshine recorder</p> <ul style="list-style-type: none"> • The sphere is made of uniform and well-annealed glass, colourless or of pale yellowish tint. • The base shall be made from good quality white marble. • The bowl shall be made from tin bronze conforming to IS : 306-1968. • Dimensions and other specifications mentioned for IS 7243-1974 should be followed. 	1 No.
09	<p>Sun shine recorder cards (1 year)</p> <ul style="list-style-type: none"> • Cards shall be made from white pasteboard with thickness 0.43 to 0.48 mm when dry. • Other properties and dimensions shall follow the Appendix A (clause 4.2) of IS 7243-1974 standards 	1 No.
10	<p>Cup counter anemometer with stand</p> <ul style="list-style-type: none"> • Three conical cups made from copper sheets with thickness of 0.71 mm • The cup arms and the fixing sockets is made from brass rod. • The counter mechanism has five figures and reads up to 9 999.9 km before repeating itself. • Dimension shall comply IS 5912 1997 standards. 	1 No.
11	<p>Windvane with stand</p> <ul style="list-style-type: none"> • Shall be made from good quality steel and shall be rust proof. • Direct reading of wind directions and directions like E,W,N,S shall have mark at the end of arm with red paint and other four directions NE, NW, SE, SW should have arms with / without marking. • It shall follow IS 5799-1970 standards for dimensions and other specifications. 	1 No.
12	<p>Soil thermometer 5 cm, 10 cm and 20 cm (One each)</p> <ul style="list-style-type: none"> • Mercury-in-glass enclosed-scale or sheathed solid-stem type with a bend near bulb at an angle 120 deg. • Bulb shall be cylindrical and in alignment with stem. • Range -20 deg C to 65 deg C • Interval 0.5 deg C • IS 6592 1972 standards shall be followed. 	3 Nos.
<p>N.B: Those bidders quoted for item No.01-12 should submit the proof against followings:</p> <ol style="list-style-type: none"> 1. All instruments supplied should be calibrated by India Meteorological Department (IMD) should submit calibration certificate. 2. Instruments manufacturer or supplier shall have IMD recognition certificate. 		

13	<p>Portable Nitrate Analyser</p> <p>a. Range: 0.0 to 300 mg/L (ppm) NO₃⁻ -N (nitrate-nitrogen) b. Resolution: 0.1 to 1.0 mg/L (ppm) c. Accuracy: Should be ±0.1 mg/L to ±1.0 mg/L d. Method: Spectrophotometric or Colorimetric e. Environment: 0 to 50°C (32 to 122°F); f. Weight: Below 1.5 kg g. Other Criteria: Portable, Light weight, Battery operated, Clear display for reading, Data logging facility, Compatible Chemical reagents</p>	1 No.																								
14	<p>Soil Moisture Meter (TDR/FDR) with 50 numbers access tube</p> <p>i. Soil moisture probe with sensors using TDR/FDR principle at multiple depths of 10-15 cm interval. ii. Probe length: 0.9-1.0 m. iii. Soil moisture measurement range: over dry to saturation. iv. Operating temperature range: 0–70 °C. v. Radial sphere of influence: 10–15 cm from access tube. vi. Sensor/ probe diameter: 30–60 mm. vii. Access tube (50 number) diameter: 35–70 mm & length: 15-20 cm higher than probe. viii. Hand-held data logging display system with software and other accessories required for successful measurement of soil moisture in field.</p> <p>N.B: Those bidders quoted for item No.14 should submit the name of the model, detail technical brochures and authorized dealership/distribution certificate for the products.</p>	01 no.																								
15	<p>Differential Global positioning System</p> <p>I. Specification of receiver {Integrated module (Combine Receiver and Antenna)}</p> <table border="1" data-bbox="284 1073 1300 1801"> <tr> <td data-bbox="284 1073 609 1108">1. No. of Channels</td> <td data-bbox="609 1073 1300 1108">220 Channels or higher</td> </tr> <tr> <td data-bbox="284 1108 609 1266">2. Satellite Signal Track</td> <td data-bbox="609 1108 1300 1266">GPS: L1, L2, L2C GLONASS L1, L2 SBAS-WAAS, EGNOS, GAGAN Upgradable to Galileo, BeiDou L-band</td> </tr> <tr> <td data-bbox="284 1266 609 1297">3. Positioning rate</td> <td data-bbox="609 1266 1300 1297">10 Hz or better</td> </tr> <tr> <td data-bbox="284 1297 609 1360">4. Static and Fast Static</td> <td data-bbox="609 1297 1300 1360">Horizontal: 3 mm + 1 ppm or better Vertical: 5 mm + 1 ppm</td> </tr> <tr> <td data-bbox="284 1360 609 1486">5. Post Processed Kinematic (PPK) GNSS surveying</td> <td data-bbox="609 1360 1300 1486">Horizontal: 8 mm + 1 ppm or better Vertical: 15 mm + 1 ppm</td> </tr> <tr> <td data-bbox="284 1486 609 1549">6. Operating Temperature</td> <td data-bbox="609 1486 1300 1549">-40° C to + 65° C</td> </tr> <tr> <td data-bbox="284 1549 609 1612">7. Dust & Water proof</td> <td data-bbox="609 1549 1300 1612">IP 67 (Ingress Protection) or higher</td> </tr> <tr> <td data-bbox="284 1612 609 1644">8. Shock</td> <td data-bbox="609 1612 1300 1644">Survive a 2m pole drop</td> </tr> <tr> <td data-bbox="284 1644 609 1675">9. Bluetooth</td> <td data-bbox="609 1644 1300 1675">Should have integrated Bluetooth</td> </tr> <tr> <td data-bbox="284 1675 609 1738">10. Communication Port</td> <td data-bbox="609 1675 1300 1738">2 nos. Serial port</td> </tr> <tr> <td data-bbox="284 1738 609 1801">11. Memory</td> <td data-bbox="609 1738 1300 1801">Should have internal memory for long static observation (10MB or higher).</td> </tr> </table> <p>II. Specification for Controller</p> <table border="1" data-bbox="284 1801 1300 1896"> <tr> <td data-bbox="284 1801 609 1896">1. Operating System</td> <td data-bbox="609 1801 1300 1896">Windows Embedded Handheld 6.0 Professional or higher</td> </tr> </table>	1. No. of Channels	220 Channels or higher	2. Satellite Signal Track	GPS: L1, L2, L2C GLONASS L1, L2 SBAS-WAAS, EGNOS, GAGAN Upgradable to Galileo, BeiDou L-band	3. Positioning rate	10 Hz or better	4. Static and Fast Static	Horizontal: 3 mm + 1 ppm or better Vertical: 5 mm + 1 ppm	5. Post Processed Kinematic (PPK) GNSS surveying	Horizontal: 8 mm + 1 ppm or better Vertical: 15 mm + 1 ppm	6. Operating Temperature	-40° C to + 65° C	7. Dust & Water proof	IP 67 (Ingress Protection) or higher	8. Shock	Survive a 2m pole drop	9. Bluetooth	Should have integrated Bluetooth	10. Communication Port	2 nos. Serial port	11. Memory	Should have internal memory for long static observation (10MB or higher).	1. Operating System	Windows Embedded Handheld 6.0 Professional or higher	01 No.
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2. Processor	1 GHz or better
3. Internal memory	16 GB or more
4. Card Slots	SIM card Slot & expandable memory card slot
5. Display	<ul style="list-style-type: none"> i. Touch Screen, Colour, 8 cm or higher ii. 480 x 600 pixel, WVGA TFT or higher iii. Sunlight-readable
6. Wireless	<ul style="list-style-type: none"> i. Integrated cellular data, text and voice capability ii. Bluetooth iii. Wi-Fi
7. Camera/ GPS/ compass/ accelerometer	<ul style="list-style-type: none"> i. 5 MP or higher camera with geo-tagging and dual LED flash ii. GPS receiver: 2-4 m accuracy with WAAS/SBAS correction iii. Integrated electronic compass and accelerometer
8. Keyboard	<ul style="list-style-type: none"> i. Alpha numeric Hard/Soft Keypad
III. Field Software	
1. Survey Style Configuration	The Software should allow configurable survey style for PPK, Static / Fast Static etc.
2. Multitasking	The software should be capable of multitasking so that multiple operations can be opened at a time e.g. COGO, Stakeout, Point Manager etc.
3. Co-ordinate Systems Manager	Should have datum and projection support. Should support Grid coordinates.
4. Color Graphical Support	The Software should have color graphical support to visualize work while working.
5. Feature Coding	Should support Feature Coding with attributes for GIS data collection. Control Coding should be possible for automatic plot creation.
6. COGO	Should support COGO functionality. Should be able to Key in Lines, Sub-divide lines and creating parallel lines for staking out purpose.
7. Menu Driven	Should be User Friendly and Menu Driven for easy field operation.
8. Data Storage	Should be able to store GNSS data collected by the RTK system
9. Stake Out	Should support Graphical stakeout, not only for points but for Lines and DTM as well. Should be able perform Real Time Quality Control for stake out positions.
10. Background Map	Should be able to accept background maps in CAD format.
IV. Post-process Software	
1. Operating System	Windows
2. Importing Raw Data	Should be able to import Raw data from the GPS/GLONASS receiver as well as RINEX data. Also should be able to import raw data as well as precise ephemeris data via internet IGS data from net
3. Baseline Processing	Should be capable of processing GPS L1 and L2 as well as GLONASS raw data.
4. Network Adjustment	Should be able to perform Network Adjustment using Least Square adjustment principle.
5. Export	Capable of Exporting the data in RINEX format as well in CAD format.
6. Reporting	Software should be capable of generating reports directly for

		the surveyed data	
	7. Datum Transformation	Capable of transferring the data from one datum to another forgiven set of common points with or without the knowledge of datum	
	8. Feature Coding	Software should support feature coding.	
	9. COGO	Software should have COGO functionality	
	10. Surfaces	The software should be a capable of Surface Modeling, 3D visualization and quick contouring.	
	Details of unit/material required for DGPS		
	1. GNSS Receiver with all complete accessories	2 Nos.	
	2. Controller with Field software	2 Nos.	
	3. Tripod	1 No.	
	4. Bipod with range pole	1 No.	
	5. Post processing Office software	1 license	
	6. Warranty	1 year or more	
	7. Training on use of instrument	At least of 3-5 days at ICAR-IIWM	
	Other Preferable Terms and Condition		
	1. Warranty should be at least 1 year from the date of installation.		
	2. Training will be provided to us at least for a period of 3-5 working days at our site.		
	3. Supplying Firm should have supply experience of DGPS system in Government organizations.		
16	ERDAS IMAGINE Professional 2016 or latest version		1 No.
	Product Name	imagine professional 2016 or latest version with 1 year subscription cost	
	Name of Software	ERDAS Imagine Professional	
	Software Description, Functionality/ Features	MAGINE Professional includes all the capabilities of IMAGINE Essentials and IMAGINE Advantage and advanced features such as graphical data modeling, advanced image classification, point cloud classification and extended hyperspectral tools.	
	Software Version	2016 or higher	
	Free Upgradation to Higher Version	YES	
	Edit, visualize, manage and analyze geospatial data both in vector and raster graphics	Yes	
	3D Imagery / Analysis capability	Yes	
	Image Exporting capability	Yes	
	Image Management capability	Yes	
	Interoperability capability	Yes	
	Labeling capability	Yes	
	Map Creation capability	Yes	
	Near-Matching capability	Yes	
	Spatial Analysis capability	Yes	
	GPS Tracking capability	Yes	
	Georeference imagery capability	Yes	
	Biodiversity Analysis capability	Yes	
	OGC format support	Yes	
	Customizable integrated editor	Yes	
	Application Integration feature	Yes	
	Data Import / Export and Synchronization feature	Yes	
	Data Visualization feature	Yes	

	Drag & Drop Interface feature	Yes	
	Forecasting feature	Yes	
	Multi-Language feature	Yes	
	Search Functionality feature	Yes	
	Third Party Integration feature	Yes	
	Visual Analytics feature	Yes	
	Web Integration feature	Yes	
	Wireless Network Support feature	Yes	
	Number of Years upto which Support is available from OEM / Franchise online	1	
	Supported Web browsers	Internet Explorer & reg; 7 and higher with JavaScript enabled, or Firefox & reg; 3 and higher with JavaScript enabled for Software Help	
	Supported image file formats	All Erdas Imagine supported format	
	Supported databases	All Erdas Imagine supported RDBMS	
	Valid Licence copy to be provided	YES	
	Software supplied through	Media etc.	
	Installation and Demonstration	Yes	
	No. of days Training Provided at Site	upto to 5	
17	ARC GIS Desktop Advanced software or Latest version		1 No.
	Software Domain / Type	Geographic Information System (G.I.S.) Software	
	Name Of Software	ESRI ArcGIS DESKTOP ADVANCED 10.6 or higher	
	Software Version	10.6 or higher	
	Free Upgradation To Higher Version	YES	
	Edit, Visualize, Manage And Analyze Geospatial Data Both In Vector And Raster Graphics	Yes	
	3D Imagery / Analysis Capability	Yes	
	Census Data Integration Capability	Yes	
	Geocoding Capability	Yes	
	Image Exporting Capability	Yes	
	Image Management Capability	Yes	
	Interoperability Capability	Yes	
	Labeling Capability	Yes	
	Map Creation Capability	Yes	
	Near-Matching Capability	Yes	
	Reverse Geocoding Capability	Yes	
	Spatial Analysis Capability	Yes	
	GPS Tracking Capability	Yes	
	Routing And Navigation Capability	Yes	
	Georeference Imagery Capability	Yes	
	Network Analysis Capability	Yes	
	Biodiversity Analysis Capability	Yes	
	OGC Format Support	Yes	
	Customizable Integrated Editor	Yes	
	Users Access Control Feature	Yes	
	Application Integration Feature	Yes	
	Audit Trail Feature	Yes	
	Calendar Management Feature	Yes	
	Data Import / Export And Synchronization Feature	Yes	
	Data Visualization Feature	Yes	

Data Management Feature	Yes
Drag & Drop Interface Feature	Yes
Forecasting Feature	Yes
Mobile Integration Feature	Yes
Multi-Language Feature	Yes
Performance Management Feature	Yes
Role-Based Permissions Feature	Yes
Search Functionality Feature	Yes
Secure Data Storage Feature	Yes
Signature Capture Feature	Yes
Single Sign On Feature	Yes
Social Media Integration Feature	Yes
Third Party Integration Feature	Yes
Visual Analytics Feature	Yes
Web Integration Feature	Yes
Wireless Network Support Feature	Yes
Number Of Years Upto Which Support Is Available From OEM / Franchise Online	1 years
Supported Image File Formats	ALL ARCGIS SUPPORTED FORMATS
Supported Databases	ALTIBASE Dameng IBM DB2 IBM Informix Microsoft Azure SQL Database Microsoft SQL Server Netezza Data Warehouse Appliance Oracle PostgreSQL SAP HANA SQLite Teradata Data Warehouse Appliance
Maximum User Handling Capability	ONE USER
Concurrent User Handling Capability	ONE USER
Valid Licence Copy To Be Provided	YES
Software Supplied Through	"Media & URL Link" etc.
Installation And Demonstration	TO BE PROVIDED
No. Of Days Training Provided at Site	upto to 5 Days

Instructions for Online Bid Submission

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (URL: <http://eprocure.gov.in>). 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: <http://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” 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 DSC’s to others, which may lead to misuse.
6. Bidder then logs in to the site through the secured login by entering their user ID / password and the password of the DSC / e-Token.

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 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 / RAR / DWF 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 login to 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. The Bidder has to select the payment option as “Offline” to pay the tender fee/ EMD as applicable and enter details of the instrument.
4. The Bidder should prepare the EMD as per instructions specified in the tender document. The Original should be posted / couriered/ given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
5. A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bid in the format provided and no other format is acceptable. The bidders are required to download the BOQ file, open it and complete the white coloured (unprotected cells with their respective financial quotes and other details (such as the name of the bidder) No other details should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the file name. If the BOQ file found to be modified by the bidder, the bid will be rejected.
6. The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bid is maintained using the secured Socket Layer128 bit encryption technology. Data storage encryption of sensitive fields is done.

8. The uploaded tender documents must become readable only after the tender opening by the authorized bid openers.
9. Upon the successful and timely submission of bids) i.e. after Clicking “Freeze Bid Submission: in the portal), 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.
10. 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 tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority or the relevant contact person indicated in the tender.
2. 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 1204200462.

General Instructions to the Bidders

1. The tenders will be received online through portal <http://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the documents in pdf format.
2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the website <https://eprocure.gov.in/eprocure/app> under the link “Information about DSC”.
3. Tenderer are advised to follow the instructions provided in the “Instructions to the Tenderer” for the e-submission of the bids online through the Central Public Procurement Portal for e- Procurement at <http://eprocure.gov.in/eprocure/app>.

**KIND ATTENTION: FOR TAKING ASSISTANCE, IF ANY
CPP Portal website: www.eprocure.gov.in**

**(S.K.Singh)
Administrative Officer**