



**India Meteorological Department
Mausam Bhawan, Lodi Road
New Delhi-110003**

Notice Inviting Tender (NIT)

Tender Enquiry No. CPU/54/0719/67 Dated 07.10.2019

1. Director General of Meteorology (DGM) of India Meteorological Department (IMD), Ministry of Earth Sciences (MoES), Government of India on behalf of President of India invites **ON LINE TENDER** in two bid systems i.e. (i) Technical bid & (ii) Price bid from eligible and qualified firms for supply of following Goods/Articles. **Manual bids shall not be accepted.**
2. Name of Goods/Article/Services: **Procurement of “Solar Tracker and Pyrheliometer-Qty.-22Nos.”**
3. **Quantity & Specification** : As per tender enquiry document.
4. **Tender schedule is as follows:**

1.	Cost of Tender Documents.	NIL
2.	PRE BID Conference (A) Date & Time (B) Venue	24-10-2019 / 1100 Hrs Office of CR & S, IMD, Shivaji Nagar, Pune – 411005. Contract No.020-25572430 , 020-25865047
3.	Closing date and time for submission of tender	13-11-2019 / 1500 Hrs
4.	Tender Opening date & time (Technical Bid)	14-11-2019 / 1500 Hrs
5.	Place of Tender opening	Central Purchase Unit O/o DGM, IMD Lodi Road ,New Delhi-110003

5. Earnest Money Deposit (EMD): **Rs.4,00,000/-** (Rupees Four lakh only) / \$5630.00 (USD Five thousand six hundred thirty only) with validity of **Eight (8) months** from the date of closing of tender. EMD shall be accepted from the participating firm only in the form of Bank Guarantee (BG)/Fixed Deposit Receipt (FDR). Bank Guarantee issued from foreign banks must be authenticated by State Bank of India or any nationalized bank of India. **Signed and scanned copy of EMD must be uploaded on eprocure.gov.in and original must be submitted on or before opening of bids.**

6. (a) Micro and small Enterprises registered **for stores and services** specified in this tender with any government bodies specified by Ministry of Micro, Small & Medium Enterprises (MoMSME) are exempted for submitting the **Earnest money deposit (EMD)** against appropriate certificate.
(b) Firms other than SSI registered **for stores and services** with NSIC, are also exempted for submitting EMD.
(c) The exemption and relaxation in EMD are subject to validity of their registration on the date of opening of tender.
7. All prospective tenderers are requested to attend the Pre Bid meeting as mentioned above. The venue, date and time are indicated in the Para 4 above.
8. Tenderer may download the **Tender Enquiry Document** from the web site <https://eprocure.gov.in/eprocure/app> and upload their tender ONLINE on the same web site <https://eprocure.gov.in/eprocure/app>.
9. In the event of the tender opening date being declared as holiday for the purchase organisation, the tender will be opened on the next working day; the venue and time of the tender opening remaining same.

10. Purchaser: **The President of India**
Through Director General of Meteorology
India Meteorological Department
Lodi Road, New Delhi-110003

11. Consignee: **Head, CR & S, IMD**
Shivaji nagar, PUNE-411005
Maharashtra, INDIA

12. Testing & Acceptance Authority : **Head, CR & S,IMD**
Shivaji nagar, PUNE-411005
Maharashtra, INDIA

Head , Central Purchase Unit (CPU)
O/o Director General of Meteorology,
India Meteorological Department,
Lodi Road, New Delhi-110003
Telefax No: 011-24698148

निविदा आमंत्रित करने की सूचना (एन आई टी)

निविदा जाँच सं. CPU/54/0719/67 Dated 07.10.2019

1. मौसम विज्ञान के महानिदेशक (मौविमनि) भारत मौसम विज्ञान विभाग (भा.मौ.वि.वि.) पृथ्वी विज्ञान मंत्रालय, भारत सरकार, भारत के राष्ट्रपति की ओर से नीचे लिखे सामान / वस्तुएँ / सेवाओं की आपूर्ति के लिए पात्र

और अर्हक निविदाकारों से दो बिड प्रणाली अर्थात (एक) तकनीकी बिड और (दो) दर बिड में ऑनलाइन टेंडर पर आमंत्रित करते हैं –

13. सामान/ वस्तुएँ/ सेवाओं का नाम: **Procurement of “Solar Tracker and Pyrheliometer-Qty.- 22Nos.”**

2. विनिर्देशन और मात्रा: **मात्रा बाइस नग**, वितविनिर्देशन आर एफ पी के अनुसार

3. निविदा अनुसूची इस प्रकार है:

1.	निविदा कागजात की लागत	शून्य
2.	प्री बिड कांफ्रेंस (क) दिनांक व समय (ख) स्थान	24-10-2019 / 1100 बजे भारत मौसम विज्ञान विभाग शिवाजी नगर, पुणे -४११००५ फोन न०- 020-25572430 020-25865047
3.	निविदा जमा करने की अंतिम तिथि व समय	13-11-2019 / 1500 बजे
4.	निविदा खोलने की तिथि व समय (तकनीकी बिड)	14-11-2019 / 1500 बजे
5.	निविदा खोलने का स्थान	केंद्रीय क्रय एकक, कार्यालय महानिदेशक, भारत मौसम विज्ञान विभाग लोदी रोड, नई दिल्ली-110003

धरोहर राशि (ई एम डी): **₹. 4,00,000/-** (रुपये चार लाख केवल) / \$५६३०.००। बोली लगाने वाले को विदेशी बैंक द्वारा दी गई बैंक गारंटी भारतीय बैंक से भी प्रमाणित होनी चाहिए। ईएमडी केवल बैंक गारंटी बीजी / (सावधि जमा रसीद) एफडीआर (के रूप में भाग लेने वाली फर्म से स्वीकार किए जाएंगे।

4. (क) लघु उद्योग, कुटीर और छोटे पैमाने पर उद्यम जो किसी भी सरकारी निकायों के साथ इस निविदा में निर्दिष्ट समान और सेवाओं के लिए पंजीकृत है, उनको निविदा शुल्क और धरोहर राशि (ई एम डी) प्रस्तुत करने के लिए छूट दी गई है। (उचित प्रमाणपत्र प्रस्तुत करने पर)

(ख) एनएसआईसी के साथ इस निविदा में निर्दिष्ट समान और सेवाओं के लिए पंजीकृत अन्य कंपनियों को भी ईएमडी जमा करने के लिए छूट दी गई है।

(ग) निविदा शुल्क और ईएमडी में छूट और छूट निविदा खोलने की तारीख पर उनके पंजीकरण की वैधता के अधीन हैं।

5. ऐसे निविदाकार जो रुचि रखते हों इस आवश्यकता के बारे में और जानकारी परेषिति से ले सकते हैं। सभी भावी निविदाकर्ता प्री बिड बैठक (समारोह स्थल, तारीख और समय) में भाग ले सकते हैं यदि ऊपर पैरा 4

मे अनुरोध किया गया हैं। ऐसे निविदाकार जो रुचि रखते हों इस आवश्यकता के बारे में और जानकारी परेषिति से ले सकते हैं ।

6. निविदाकर्ता eprocure.gov.in वेबसाइट से निविदा जांच कागजात डाउनलोड कर सकते हैं और डाउनलोड किए गए कागजात के अनुसार अपनी निविदा वेबसाईट <https://eprocure.gov.in/eprocure/app> पर आनलाइन अपलोड करे तथा अंतिम तिथि व समय तक निविदा जमा कर सकते हैं।
7. यदि निविदा खोलने की तारीख के दिन क्रय संगथन का अवकश घोषित होता है तो निविदा अगले कार्य दिवस को खोली जायेगी, निविदा खोलने का स्थान और समय वही रहेगा ।
8. क्रयकर्ता:

भारत के महामहिम राष्ट्रपति
भा.मौ.वि.वि.के माध्यम से

भारत मौसम विज्ञान विभाग,

लोदी रोड, नई दिल्ली-110003

12. परेषिति:

प्रधान, सी आर एंड एस

भारत मौसम विज्ञान विभाग
शिवाजी नगर, पुने-411005

13. जाँच प्राधिकारी:

प्रधान, सी आर एंड एस

भारत मौसम विज्ञान विभाग

शिवाजी नगर, पुने-411005

प्रधान, केंद्रीय क्रय एकक (कें.क्र.ए) ,

मौसम विज्ञान के महानिदेशक का कार्यालय,

लोदी रोड, नई दिल्ली- 110003

टेलीफैक्स सं. : 011-24698148



**India Meteorological Department
Mausam Bhawan, Lodi Road
New Delhi-110003**

SECTION – I GENERAL INSTRUCTIONS TO TENDERERS (GIT)

1. Introduction :

The Purchaser has issued this TE documents for purchase of goods/stores/articles and related services as mentioned in “**Request for Proposal (RFP)** ” on open tender basis ,which also indicates, *inter alia*, the required stores, delivery schedule, terms and place of delivery etc. This section (“General Instructions to Tenderers”) provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders.

Bidders shall have to agree/accept all the terms and conditions of tenders including payment terms etc. Acceptance shall be unconditional and bidders shall have no claim and right in future on their terms if any.

2. Language of Tender:

The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in English language.

3. Eligible Goods and Services:

All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term “origin” used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

4. Tendering Expenses

The tenderer shall bear all the costs and expenditure incurred and/or to be incurred by it in preparation, mailing and submission of its tender including attending the pre-bid conference and or arranging demonstration of Product/Services or Field trials that may be deemed necessary by the Purchaser.

5. PRE-BID CONFERENCE:

Pre-bid conference shall be held as per NIT schedule so as to provide an opportunity to the participating bidders to interact with IMD with regard to various tender provisions/clauses, before the bids are submitted. **Bidders should depute their authorised representative for pre-bid meeting.** In case, due to the points/doubts raised by the prospective bidders, needs to be modified, and then the same will be considered for modification. After pre-bid conference, tender conditions will be frozen. **No change will be permissible after opening of Bids.** Clarification needed if any may be sent before commencement of pre-bid meeting. No reply in this regard shall be sent to

individual bidders. Bidders are advised to visit IMD Website to get the final view and clarification of IMD. **Pre-Bid minutes shall be uploaded on IMD website and e-procurement portal.**

6. Regular visit of IMD website:

Prospective bidders are advised to visit/see IMD website www.imd.gov.in and e-procurement portal www.eprocure.gov.in on regular basis for any change in NIT schedule, amendment / corrigendum in Tender Document including technical requirement and pre-bid minutes etc.

7. Amendments to TE documents:

At any time, prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it. The amendment will be uploaded on IMD web site only. In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline. Prospective bidders are advised to visit/see IMD website www.imd.gov.in and eprocure.gov.in on regular basis for any change in NIT schedule, amendment / corrigendum in Tender Document including technical requirement.

8. Documents Comprising the Tender:

The **Two Bid System**, i.e. “Techno – Commercial Bid” and “Price Bid” prepared by the tenderer shall comprise the followings:

(1).Techno – Commercial Tender (Un-priced Tender)

The following documents shall be the part of Technical bid. Bidder shall upload their tender on eprocure.gov.in.

- (i) Registration certificate of bidding firm with government body in their country. Credential/document not attached.
- (ii) Checklist section (as per Annexure-I) properly filled and signed.
- (iii) Scanned copy Earnest Money Deposit (**EMD**) in the form of **FDR/BG**. Original EMD shall be submitted in Central Purchase Unit of IMD on or before closing of tender.
- (iv) Documentary evidence for fulfilment of Eligibility /Qualification criteria(s).
- (v) Copy of agreement between bidding firm in India and their foreign principal indicating precise relationship between them and their mutual interest in this tender must be furnished along with their technical bid.
- (vi) Tender terms & Conditions Acceptance Form (as per Annexure-II) duly signed. (i.e tenderer has agreed to all the terms & condition of tender enquiry document).
- (vii) Authorization letter from principal authorizing Indian representative **to only submit /deposit the tender document** on behalf of foreign principal. Above documents must be enclosed with technical bids otherwise bids may be ignored and not to considered for technical evaluation.
- (viii) Technical Bid.
List of deliverables (un priced/without price) with make & model etc. **This should be exactly same as attached in price bid.**

Note*

- (a) The above documents (signed and scanned) shall be attached in the beginning of technical bid

(2) Price Bid:

- (i) All pages of the price bid should be page numbered, indexed and signed with company/firm seal by authorized signatory.
- (ii) Price Bid shall be preferred as per price schedule format (Annexure-V).
- (iii) Costing, of each and every item, sub items offered in bidder's technical bid, shall be done with all breakup prices.
- (iv) The Tenderer shall indicate on the Price Schedule specifying all components (main units and sub units etc. of each item) of prices shown therein including the unit prices and total tender prices of the **goods (H/w & S/w) , services, packing, inland transportation/freight/insurance to the sites, Goods & service tax(GST) etc** against the requirement.
- (v) Wherever, the Purchaser's invitation to tender calls for installation and commissioning or supervision of installation and commissioning of the instrument/equipment by the tenderer, the tenderer must clearly and separately quote the prices for the supply of the stores and the charges and the terms for installation and commissioning or supervision of installation and commissioning as the case may be. The charges towards installation and commissioning should not be included in the price of the stores.
- (vi) In respect of contracts involving installation and commissioning **by the overseas supplier** where charges for the same has been quoted by the tenderer, **firm shall bear the Income-tax liability as per rates prevailing** at the time of undertaking the job in accordance with the Income-tax Act in force in India on the installation and commissioning charges.
- (vii) AMC shall be only for the maintenance of stores (equipment and software only) therefore prospective bidders are advised to quote AMC charges accordingly and specifically. **It should not be quoted in terms of percentage of project** as consumable, transportation, warranty; installations, training etc are not covered under AMC. **Price bids shall not be accepted if AMC charge quoted in percentage.**
- (viii) In case any charges not mentioned in the price bid, it will be treated as all the charges are free of cost for that item.
- (ix) Indian vendor shall quote prices on F.O.R destination (sites of consignee) basis and Payment to Indian supplier shall be paid into Indian rupees only.
- (x) The Indian bidder supplying imported goods shall quote only in Indian Rupees if purchase order to be placed to them. It is the responsibility of Indian firm to pay custom duty etc. IMD shall not be responsible for custom clearance .Prices quoted by the tenderer shall remain firm and fixed during the currency of the contract.
- (xi) Foreign bidders, for **imported goods** if supplied directly from abroad, prices shall be quoted on **FOB value basis** in any freely convertible currencies.
- (xii) Foreign bidder may quote in INR towards allied service in India to be taken by their local partner.
- (xiii) Statutory levies, taxes and duties etc., if any, chargeable on the goods are payable on actual basis as applicable.
- (xiv) If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail.

Note*. Price bid shall prima-facia shall be rejected in case of any deviation from the technical bid of the bidder and found that any fact concealed or hided in price bid/technical bid.

9. Signing and Submission of Tender :

Tenderer shall upload their proposal on ONLINE through eprocure.gov.in as manual bids shall not be accepted. The tender shall not contain any erasure or overwriting, except as necessary to correct

any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.

10. Alteration and Withdrawal of Tender :

The tenderer, after uploading its tender, is permitted to alter / modify its tender so long as such alterations / modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders.

No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer.

11. Opening of Tenders :

The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT. In case the specified date of tender opening falls on / is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day. Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening, provided they bring with them letters of authority from the corresponding tenderers. Two Bid system will be as follows. The **Technical Bids** are to be opened in the first instance, at the prescribed time and date. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Technical Bids opening, the tender opening official(s) will read the salient features of the tenders like delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Bids of technically qualified tenderers only shall be opened for further scrutiny and evaluation on a date notified after evaluation of the techno commercial tender.

12. SCRUTINY AND EVALUATION OF TENDERS:

(1). Unresponsive bids:

The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders are liable to be treated as non – responsive and will be summarily ignored if followings are not provided along with technical bids.

- (i) Registration certificate of bidding firm with government body in their country. Credential/document not attached.
- (ii) Tender is unsigned.
- (iii) Checklist (annexure-I) not enclosed.
- (iv) Tender Acceptance Form (annexure-II) not duly signed and stamped. **(i.e all the terms & conditions of tender document are acceptable.** Original Letter shall be enclosed in technical bid.
- (v) Tender validity is shorter than the required period.
- (vi) Required EMD has not been provided unless exempted.
- (vii) Tenderer has not agreed to give the required performance security.
- (viii) Copy of agreement of bidding firm from India with its foreign principal with the precise relationship between them and nature of services which would be available from bidding firm in India. Copy of this agreement must be attached with the tender.

(2). Technical Evaluation:

Tenders shall be scrutinized and evaluated by the committee constituted by competent authority with reference to parameters prescribed in the TE document.

Minor Informality/Irregularity/Non-Conformity:

If during the preliminary examination, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, **the purchaser may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the tenderers.** Wherever necessary, the purchaser will convey its observation on such 'minor' issues to the tenderer asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

(3).Financial evaluation:

Thereafter, in the second stage, the Price Bids of technically qualified tenderers only shall be opened for further scrutiny and evaluation on a date notified after evaluation of the techno commercial tender.

The purchaser shall evaluate the technically qualified financial bids for deciding lowest bidder (L-1) on the basis of ultimate landing cost. **Wherever, against a requirement, both indigenous as well as imported offers are received,** the offers for imported stores will be evaluated on the basis of the total landed cost after loading the custom duty and other levies etc as may be applicable from time to time for taking purchase decision.

The ultimate/landing cost in respect of store is arrived at by considering following below elements including AMC, Warranty, and Extended Warranty cost and etc if any unless these are optional requirements.

Indigenous stores

1. Basic price
2. Excise duty (if applicable)
3. Goods & service tax (GST) & other applicable taxes
4. Insurance, freight and transportation of goods up to sites
5. Warranty, extended warranty and AMC etc

(A) Imported stores

1. Total Net FOB price in foreign currency of the project.
2. Ocean/Air Freight and Insurance charges (@10% of FOB price of shipment of stores coming through customs.
3. Custom Duty in India (if not exempted i.e. there is no mention in technical requirement to provide custom exemption certificate by consignee).Custom Duty Custom duty are applicable on hardware, software, Equipments, instruments, consumables and other items etc coming through customs Clearance). Custom duties on services are not levied.
4. Landing clearing and Bank charges @1.0% of total net FOB price of the project.
3. Plus actual Inland freight/insurance/transportation of goods up to the user sites quoted by bidder.
4. Goods service tax (GST) applicable in India.
5. Warranty, extended warranty and AMC etc

Conversion of currencies to Indian Rupees for Comparison of Tenders:

In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the BC selling rate of exchange of State Bank of India prevailing on **the date of opening of financial bids.**

13. Packing and Marking :

The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc.

14. Inspection, Testing and Factory acceptance test (FAT)

The purchaser's/consignee's reserve the right to inspect goods at factory site/supplier site before their dispatch if required and mentioned in technical requirement (RFP) section.

Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract.

Purchaser will not undertake any Pre dispatch inspection ,unless mentioned, for imported stores in the suppliers country of origin and equipment will be sent to the supplier on the basis of supplier own inspection at the premises and guarantee and warranty. The equipment will be accepted subject to final inspection and test on commissioning and before handing over the equipment to consignee.

SECTION – II

GENERAL CONDITIONS OF CONTRACT (GCC)

1. **Bidders shall have to agree/accept all the terms and conditions of tenders including payment terms etc. Acceptance shall be unconditional and bidders shall have no claim and right in future on their terms if any.**
2. Whenever there is any conflict between the provision in the GCC **regards to specific Para under this section and that in the “RFP” “List of requirements/ technical specifications”**, the provision contained in the RFP shall prevail and have an over-riding effect. Any Special instructions as per “RFP-List of requirements/ technical specifications” section will also apply for this purchase. The conditions (like qualification criteria, delivery schedule, mode of delivery & sites of delivery etc.) mentioned in “RFP-List of requirements/ technical specifications section” will also apply for this purchase.
3. **Alternative Tenders :**
Alternative Tenders are not permitted. However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.
4. **Tender Validity :**
The tenders shall remain valid for acceptance for a period of 180 days (one hundred eighty days) after the date of tender opening prescribed in the TE document.
5. **Purchaser’s Right to accept any tender and to reject any or all tenders :**
The purchaser reserves the right to accept in part or in full any tender or reject any tender without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.
6. **Price preference:** Price preference shall be given to **Micro and Small Scale Industries** registered for stores and services specified in this tender document with **National Small Industries Corporation** or any other government agencies as per the latest guidelines/orders from Government of India. Purchase preference and quantity etc shall be decided as per the Government of India orders. The tenderers shall have to attach valid registration certificate along with balance sheet indicating turnover etc for the previous financial year. Micro and small Enterprises are exempted for submitting fees/cost towards tender document and submission of earnest money deposit (EMD) also known as security deposit. However Micro and small Enterprises are not exempted for performance security. Micro and small Enterprises shall have to furnish performance security if purchase order is placed to them. There is no relaxation in this regard.
7. **Eligibility & Qualification criterion for Tenderers:** Firms in given below category are eligible to participate in tender **subject to registration of the firm with government bodies as per act /rules in their country and also fulfil of other specific qualification criteria, terms and conditions mentioned in technical requirement section and tender enquiry document also.**
 - (i) Original Equipment Manufacturer (OEM).
 - (ii) Original Software Company (OSC), who developed the main application software.
 - (iii) Authorized Supplier from Original Equipment manufacturer (OEM) /Developer of main application software company (OSC) etc. The tenderer shall have to submit authorization certificate from OEM /OSC etc. that they will provide service support after sale.
 - (iv) Integrators/ Authorized dealer/ Supplier/ subsidiary/ Distributors/ Stockist having full back to back maintenance support agreement for hardware & software from OEM & OSC etc..
 - (v) 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. Whether foreign principal has agreed to provide technical support and spares after sale services. The type and nature of after sales services to be rendered by the Indian Agent

- (b) Firm quoting on behalf of their foreign principal shall be responsible for furnishing performance security for the entire project.
 - (c) Either the firm in India on behalf of their foreign principal or the foreign principal directly bid in a tender **but not the both.**
 - (d) Price to be quoted in Indian currency towards portion of allied work and services which are to be undertaken in India (like installation & Commissioning of equipment).
 - (e) The complete name and address of the bidding firm in India and its permanent income tax account number (PAN) as allotted by the Indian Income Tax authority must be submitted.
 - (f) Indian Supplier /Integrator /Distributors /stockiest for imported stores shall quote in INR only & no payment shall be made to their foreign principal.
- (vi) Foreign firms registered in their countries may participate in tender. Proof of registration shall be attached with technical bid. They may associate their local partner in allied services in India by their local partner; however the foreign firms shall be responsible for their local partner work. Cost towards allied work by their local partner shall be quoted in INR only and shall be paid to local partner dually certified by foreign firms. **Performance Security shall be furnished by foreign supplier including indigenous components to be taken by their representative.**

8. Earnest Money Deposit (EMD) :

The tenderer shall furnish along with its tender, earnest money for an amount as shown in the tender notice. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct.

The tenderers who are registered on Tender submission date with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi , shall be eligible for exemption from EMD. **Micro and small Enterprises** specified by Ministry of Micro , Small & Medium Enterprises (MoMSME) **are exempted from earnest money deposit (EMD). EMD also known as security deposit.**

The EMD shall be furnished in Fixed Deposit Receipt (FDR) or Bank Guarantee (BG) (as per annexure-IV)) from any commercial bank doing government business. FDR may be issued in the favour of "DDO, O/O DGM, IMD, New Delhi". **Bank Guarantee issued from the foreign banks must be authenticated by STATE BANK OF INDIA or any other Nationalized Bank of India.** Demand draft for EMD in INR submitted by foreign bidders shall not be accepted.

The clause "encashment /release of FDR/BG requires clearance certificate from Purchaser i:e DGM, IMD" must be mentioned in issued FDR/BG by Bank.

The earnest money shall be valid for period of sixty (60) days beyond the validity period of the tender.

Refund of EMD: Unsuccessful tenderers' earnest money will be returned to them **without any interest**, after expiry of the tender validity period. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from the tenderer.

Forfeit of EMD: Earnest money of a Tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money will be forfeited without prejudice to other rights of Purchaser if supplier fails to furnish the required performance security within the specified period.

Firm shall have to extend the validity of EMD if extension of tender validity is agreed on the request of purchaser in exceptional cases.

9. Performance Security:

1. Successful bidder shall submit performance security within thirty (30) days from date of dispatch of supply order/award of contract by the purchaser or within twenty one (21) days from the receipt of supply order by the supplier whichever is earlier.
2. The purchaser may consider annulment/cancellation of supply order/ award of contract if performance security not received in stipulated time.
3. **There is no relaxation/exemption in submitting of performance security.**
4. The supplier, shall furnish performance security to the purchaser for an amount equal to Ten percent (10%) of the total value of the contract valid up to sixty (60) days beyond the warranty period.
5. **Performance Security shall be furnished by foreign supplier (participated directly in the tender) including indigenous components to be taken by their representative.**
6. **Performance Security has to be submitted irrespective of its registration with NSIC, MSME etc. Performance security is not relaxed to any supplier/service provider. Submission of Performance Security is must for all suppliers/service providers.**
7. It shall be in any one of the forms namely Fixed Deposit Receipt or Bank Guarantee drawn/issued issued by a commercial bank doing government business in the prescribed form in favour of the purchaser. In the event of any amendment issued to the contract, the supplier shall, within twenty-one (21) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended. Foreign tenderer may submit in the form of Bank Guarantee. **Bank Guarantee issued from the foreign banks must be authenticated by STATE BANK OF INDIA or any other Nationalized Bank of India.**
8. The purchaser will release the Performance Security without any interest to the supplier/ service provider on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of performance security for AMC (if applicable) . The supplier shall submit pre receipt for obtaining back their security.

10. Terms of Delivery:

Goods shall be delivered by the supplier in accordance with the terms of delivery specified in the contract. Generally it is **F.O.R destination** (in case of domestic supply) and **F.O.B** in case of foreign supplier. Time for inland transportation in India by foreign supplier for Installation and commissioning etc of stores shall be taken from the date on which stores are handed over to supplier by IMD after custom clearance. Suppliers should not deliver the goods without any valid delivery period. Purchaser shall not be held responsible for any thing (payment and loss of stores etc) if stores supplied without any valid delivery period as purchaser reserve the right to reject the delivery and terminate the supply order.

11. Delivery schedule: As per section under RFP-List of Requirements.

Date, on which all the stores as per supply order have been delivered to the consignee shall be treated as final date of delivery of stores for calculating liquidated damages etc.

12. Force Majeure:

Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable. Such events may include, but are not restricted to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, and freight embargoes. If there is delay in performance or other failures by the supplier to perform its obligation under its contract due to event of a Force Majeure, the supplier shall not be held responsible for such delays/failures. **If a Force Majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions** and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side. There may be a Force Majeure situation affecting the purchase organization only. In such a situation the purchase organization shall take up with the supplier on similar lines as above for further necessary action.

13. Warranty:

The warranty shall be **Onsite warranty**. All stores to be supplied should be free from all defects and faults in material workmanship and manufacture. They should be of the highest grade and consistent with the established and generally accepted standards for material of the type used and in full conformity with the specifications, drawings, or samples and shall, if operable, operate properly. **The Seller shall be bound to furnish a clear written warranty regarding the same**. The Seller will be required to replace them free of cost inclusive of all freight and handling charges. The supplier shall provide warranty certificate from the OEM for the goods along with date of manufacturing of stores/products.

The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. Custom charges if any, for Re-export/re-import of defective parts/repairs or replaced parts to the foreign supplier country for repairs etc shall be borne by supplier only. Transportation cost and Octroi etc, for sending defective parts for repairs and sending back repaired or replaced one to IMD site(s), shall be borne by supplier itself.

Other condition under warranty clause of "List of requirements/ technical specifications" section shall also be applicable.

14. Penalty clause/Liquidated damages clause (LD) for delayed stores & Services:

1. The supplier shall deliver the goods and perform the services (like installation & commissioning etc) under the contract within the time schedule specified by the purchaser in the "List of requirements/ technical specifications" section and as incorporated in the contract. **The delivery date, unless delivery is divided, on which all the items/stores/materials/services etc as per supply/purchase order are delivered shall be taken into account for penalty/LD purpose.**

The purchaser shall, without prejudice to other rights and remedies available to the purchaser under the contract, deduct as penalty/liquidate damage from the contract price a sum equivalent to 0.5% (half percent) per week of delay or part thereof on delayed supply of goods and/or delayed services subject to a maximum of 10% of the contract price of delayed items.

Once the maximum is reached purchaser may also consider followings:

- (i) Forfeiture of its performance security and
- (ii) Termination of the contract for default.

Note*

The supplier shall not be held responsible for delay in delivery of stores and their installation for the following reasons:

- (a) Delay in providing Entry permits/Road Permits (if required) to the supplier by the consignee.
- (b) Delay in providing proper site(s) by the consignee to the supplier. Site is not ready in all respect (i.e all civil & electrical at site completed) for installation of stores.
- (c) Delay in providing No Objection Certificate (NOC) required from any other government agency/agencies.
- (d) Communication facility required for project to be provided to the supplier by the consignee if it is not the responsibility of supplier.
- (e) Any other reason for which supplier is not responsible.

2. ***(a) Penalty/Liquidated damages shall be calculated on the purchase/contract price including the element of Goods & service tax etc mentioned in the price bids.***

(b) Custom duty shall not be taken for the purpose of Penalty/LD calculations.

3. The supplier shall not be held responsible for any delay in custom clearance by purchaser, handing over proper site by consignee and any other delay in part of consignee/purchaser if responsible. These periods shall not be counted in LD. The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the purchaser for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall be against the purchaser. **The supplier shall inform to the purchaser (CPU) directly in writing about these delays on part of IMD.**

15. Award Criteria and Tolerance Clause:

The purchase order /supply order shall be awarded to the eligible responsive tender evaluated as the most economical, technically qualified and suitable to the requirements subject to the availability of funds. The purchaser reserves the right to increase or decrease the quantity of required goods upto plus minus fifteen percent (+ - 15%) till the placement of supply/purchase order or contract without any change in the terms & conditions and prices quoted by the tenderers.

16. Modification of contract

If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract. If the supplier doesn't agree to the adjustment made by the purchaser, the supplier shall convey its views to the purchaser within fifteen (15) days from the date of the supplier's receipt of the purchaser's amendment / modification of the contract.

17. Custom Duty

Custom clearance shall be done by IMD through its clearing agent if purchase order is placed to foreign supplier. IMD shall pay the custom duty on imported goods. Foreign supplier or its representative shall assist in the process and provide the entire required document for custom clearance of the goods.

IMD shall not have any custom responsibility in case of supply order placed to Indian supplier for imported stores.

18. Taxes and Duties in India:

(1) Duty and Local Taxes:

Normally materials to be supplied to Govt. Department against Govt. contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. The local

Town/Municipal Body regulations at times, however, provide for such exemption only on production of such exemption certificate from any authorized officer. Contractors should ensure that stores ordered against contracts placed by this office are exempted from levy of town duty/Octroi duty, Terminal tax or other local taxes and duties. Wherever required, they should obtain the exemption certificate from the indenter /consignee concerned, to avoid payment of such local taxes or duties. The supplier shall pay the Octroi, entry tax etc. if exemption certificate not agreed by local authorities and same may be got reimbursed from purchaser on proof of payments.

Supply of Road Permits by the indenter /consignees: In all such cases where the requirement of Road Permit for entry of goods into a particular State is mandatory, the following provisions shall be strictly followed: -

(a) The supplier shall request the indenter /consignee for providing Road permit/ Way bill within 10 days of the receipt of the Supply order. The supplier shall furnish all the necessary information and documents in this regard to Indenter/consignee.

(b) On receipt of the above request from the supplier, the indenter/consignee concerned shall arrange to provide the Road permit/Way Bill in the prescribed form to the supplier within a maximum period of two weeks so that the same reaches the supplier before the dispatch of the stores. However, in cases where the Road permit/Way Bill is issued on proof of actual invoice of the material, the consignee shall arrange to provide the Road permit/Way Bill from appropriate authorities within a maximum period of 5 days from the receipt of invoice.

(c) The supplier shall pay the local charges/taxes (Octroi etc.) if exemption certificate not agreed by local authority and same will be reimbursed by purchaser on submission of receipt.

The supplier shall not be held responsible for any delay in supply due to non- supply/delayed supply of Road permit.

(2) **Income Tax and service tax etc:**

Tax deducted at source (TDS) shall be done before making payment to the suppliers as per existing law in force. The bidders (foreign as well as Indian tenderers) may visit website of Income Tax Department of India for details of Tax Liabilities, Rules, and Procedures etc. The bidders shall have to provide their Permanent Income Tax Number (PAN) and TAN. Firm may also mention the applicable rates of TDS as per DTAA with India. Copy of same may also be enclosed. Foreign vendor shall have to mention the details of establishment in India if any.

19. Terms and Mode of Payment

Payment Terms: Payment, as per term mentioned below, shall be made subject to recoveries, if any, by way of liquidated damages /penalty clause /TDS or any other charges as per terms & conditions of contract if not specified elsewhere in the document.

1. Cases where installation & Commissioning not to be done by bidder

(i) Domestic goods:

100 % payment shall be made to domestic supplier in Indian currency on receipt of entire goods/stores at sites and acceptance by consignee. No payment shall be made for partial delivery. The following documents shall be submitted:

- (i) Three copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount.

- (ii) Consignee Receipt Certificate in original issued by the authorized representative of the consignee
- (iii) Copies of delivery challan identifying contents of each package.
- (iv) Inspection certificate by the nominated Inspection agency, if any.
- (v) Insurance Certificate
- (vi) Final Acceptance Report from consignee.

(ii) Imported Goods:

Ninety (90) % payment, against proof of despatch of goods/stores as per S.O, shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the foreign supplier and upon submission of following documents:

- (i) supplier's commercial invoice showing contract number, goods description, quantity, unit price and total amount
- (ii) Original on-board Bill of Lading/Air way billing
- (iii) Copies of packing list identifying contents of each package
- (iv) Manufacturer's/Supplier's warranty certificate
- (v) Inspection certificate issued by the nominated inspection agency, if applicable as per contract
- (vi) Manufacturer's own factory inspection report
- (vii) Certificate of origin
- (viii) Insurance certificate
- (ix) Port of Loading
- (x) Port of Discharge
- (xi) Expected date of arrival

Balance payment of 10 % of net FOB price of goods would be made against 'Final Acceptance Certificate' to be issued by the consignees.

2. OR Cases where installation & Commissioning to be done by supplier:

Seventy percent (70%) of **contract value of stores** after proof of despatch of complete foreign goods or receipt of goods at sites in case of domestic goods and balance 30% payment towards stores after their successful installation and acceptance at site.

- (i) 100% payments towards services like FAT, Training, SAT, Installation & commissioning charges etc if any after their executions and completions.
- (ii) Necessary documents must be submitted for the release of payments.

3. Payment to the foreign supplier shall be made through IRREVOCABLE LC .LC shall be established for a specific period depending on delivery schedule only after receipt of unconditional acceptance of supply/purchase order and performance security from the supplier.LC extension charges shall be borne by the supplier in case of extension of delivery period requested by the supplier and request agreed by the purchaser.

- 4. The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.
- 5. Bills/invoices must be submitted separately for stores and services.
- 6. The bidder shall submit particulars of his bank account required for making payments.
 - (a) Account Number (b) Bank Name (c) Branch Name (d) Address

(e) IFS code (f) MICR No. (g) Telephone No.(h) SWIFT code etc.

20. Fall Clause

The bidder undertakes that it has not supplied/is not supplying similar products/systems or subsystems at a price lower than that offered in the present bid in respect of Ministry/Department of the Government of India or Public Sector Unit (PSU) and if it is found at any stage that similar products/systems or subsystems was supplied by the BIDDER

To any Ministry/Department of the Government of India or Public Sector Unit (PSU) at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and difference in the cost would be refunded by the BIDDER to the BUYER (India Meteorological Department) or it will adjusted from their bills, if the contract has already been concluded.

21. Termination of tender by the Purchaser:

From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.

In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

The purchaser, without prejudice to any other contractual rights and remedies available to it (the purchaser), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the purchaser. In the event of the purchaser terminates the contract in whole or in part, the purchaser may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the purchaser for the extra expenditure, if any, incurred by the purchaser for arranging such procurement. If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the purchaser.

22. Arbitration clause:

If dispute or difference of any kind shall arise between the purchaser and the supplier in connection with or relating to the extension of contract, the parties shall make every effort to resolve the same amicably by mutual consultations. If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the "List of requirements/ technical specifications" section either the purchaser or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per Indian Arbitration and Conciliation Act, 1996. In the case of a dispute or difference arising between the Purchaser/ Consignee and all suppliers relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer, appointed to be the arbitrator by the Director General of Meteorology. The award of the arbitrator shall be final and binding on the parties to the contract. Each party shall bear its own cost. **Venue of Arbitration:** The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi. The contract shall be interpreted in accordance with the laws of India.

23. List of Deliverables:

The tenderer shall submit the final list (List of Deliverables) of their proposal in given below format for all the stores, H/w, S/w, items, subunits etc and all other services which bidder is going to offer in their technical proposal to meet the requirement under “**List of requirement & Technical specifications**” of this tender document. The list of deliverables shall be same as submitted in the price bid. The price bid shall not be considered if it is not matching with the list of deliverables submitted with technical bids.

S.N	Name of Item/Store	Quantity	Make and Model
(1)	(2)	(3)	(4)
Stores (H/w & software)			
Services			

Note*: It is mandatory to mention the make and model of each offered stores.

CHECKLIST

S. N	Activity	Compliance Yes/ No/ NA	Page No. of your bid
1	Is Firm Registration certificate from Government bodies in their country attached with technical bid?		
	(i) Have you enclosed EMD (Bank Guarantee /FDR) of required amount?		
	(ii) Is the EMD submitted by other firm other than participating firm? If yes, then bid is likely to be ignored.		
	(iii) Is Registration certificate from NSIC/Government bodies on SSI attached for relaxation of EMD?		
3.	Have you kept validity of your bid as per the TE document?		
4.	Have you enclosed Tender Terms & Conditions Acceptance Form duly filled and signed (i:e terms and conditions are acceptable) with original set of tender. Tenders may be ignored if not signed.		
5.	Have you enclosed clause-by-clause compliance statement for the "List of requirements/ technical specifications" section?		
6.	Have you submitted copy of the last purchase order(s) and end user certificate?		
7.	Is tender Submitted by an OEM?		
	Is tender Submitted by an integrator Agent/Dealer/Supplier/Distributor/ Stockist etc of OEM? whether Back-to-back support agreement with equipment manufacturer and software developer company attached?		
8.	(i) Permanent Account No. of bidding firm with proof.		
	(ii) Is Goods & service tax(GST) number with registration certificate attached?		
9.	Name of the firm who quoted the price		
10.	Name of tender currency		
11.	Name of the supplier with complete address to whom supply order to be placed.		

(Name & Signature with date and firm/company seal)

Tender Terms & Conditions Acceptance Form

(For all the terms & conditions of tender document are acceptable to tenderer)

To
The Director General of Meteorology,
India Meteorological Department,
Lodi Road, New Delhi-110003

Ref: TE document No. CPU/ _____ dated _____

I/We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. _____, dated _____ (if any), the receipt of which is hereby confirmed. We now offer to supply and deliver *the goods and services in* conformity with your above referred document.

If our tender is accepted, we undertake to supply the goods and perform the services (Installation & commissioning etc.) as mentioned in tender document with the delivery schedule specified in the “RFP- List of requirements/ technical specifications”..

I/We further confirm that, if supply / purchase order is placed to firm, we shall provide performance security of required amount in an acceptable form for due performance of the contract.

I/We agree to keep our tender valid for acceptance as required in tender document or for subsequently extended period, if any, agreed to by us. I/We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. I/We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

I/We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities.

I/We confirm that we fully accept and agree to all the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum etc. if any.

(Signature with date and seal of the company)

(Name and designation)

Duly authorised to sign tender for and on behalf of tenderer

Note*: 1. Firm/company shall use their own printed letter head for issuing this certificate.
2. Acceptance shall be unconditional.

MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD
(Format only)

Whereas

(hereinafter called the “tenderer”)

has submitted their offer dated.....

for the supply of

(hereinafter called the “tender”)

against the purchaser’s tender enquiry No.

KNOW ALL MEN by these presents that WE

of having our registered office at

..... are bound unto

(hereinafter called the “Purchaser)

in the sum of

for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this..... day of20.....

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.
b) Fails or refuses to accept/execute the contract.

WE undertake to pay the “Director General of Meteorology, India Meteorological Department”, up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force upto and including 60 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

Bank Guarantee issued with the tender enquiry reference No. CPU/.....
Dated.....(Signature of the authorized officer of the Bank)

.....Name and designation of the officer.....

Seal, name & address of the Bank and address of the Branch

PRICE SCHEDULE (Financial Bid format)

S.N	Name of Item/Store	Quantity	Make & Model	Base price	Applicable taxes & duties	Unit Price 5+6 (7)	Total price (3x7) (8)
(1)	(2)	(3)	(4)	(5)	(6)		
Store Components (hardware & Software etc.)							
Services components							
-							
-							

Total Tender price in figure:

And in words:

Note/instruction:

1. **The bidder shall use their own letter head for quoting the prices.**
2. Price shall be preferred in above format.
3. The names of each stores/items offered in technical proposal must be mentioned with make & Model including services etc if any. The deliverables list attached with financial bid must be exactly same as per the technical bids.
4. Charges, if any, for inland (within the India) Transportation /freight/insurance of stores shall be mentioned. In case not mentioned, it is treated as free of cost.
5. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
6. All applicable taxes must be mentioned against each item. Rate of each applicable tax must be mentioned in price bid. If taxes not mentioned, then it is treated that price quoted is inclusive of taxes.
7. Costing for each and every items and sub items which is offered in technical bid shall be done with all breakups. Charges for FAT, Trainings, installation, SAT and other services etc. are to be mentioned clearly in price bid.
8. Price Bid (in pdf format excluding note/instruction) shall be uploaded on eprocure.gov.in

Signature of Tenderer _____

Seal of the Tenderer _____

REQUEST FOR PROPOSAL DOCUMENT

Procurement of Solar tracker and Pyrheliometer

October, 2018

IMPLEMENTING AGENCY:

**Ministry of Earth Sciences
Government of India
India Meteorological Department,
O/o the Director General of Meteorology
Mausam Bhawan, Lodi Road,
New Delhi-110 003**

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Technical Specification

PROCUREMENT OF SOLAR TRACKER AND PYRHEIOMETER

1. INTRODUCTION

India Meteorological Department owns and operates a network of 45 Solar Radiation Station (SRS) all over India. As part of augmentation of radiation observation network, IMD proposes to upgrade 22 Nos. of Solar tracker and Pyrheliometer as part of augmentation to WRDC stations.

The tentative list of SRS sites are given in **Annexure-I**

2. SCOPE OF TENDER

The supplier shall have full responsibility to execute the project on a **TURN-KEY BASIS** by taking up the supply, installation, integration and commissioning of all equipment and interface the Pyrheliometer with data Acquisition System (DAS) as given below:

- 2.1 Supply, transportation and delivery of all equipment consisting of solar tracker and Pyrheliometer and other related accessories/deliverables etc. at respective sites.
- 2.2 Details of site preparation for installation of solar tracker and Pyrheliometer as specified in **Annexure-II**.
- 2.4 Installation, integration and commissioning of solar tracker and Pyrheliometer at all field sites including civil work regarding site preparation, cable laying and all such work required to be done at field site for functioning of the station.
- 2.5 **Comprehensive Warranty for One year followed by Comprehensive Annual maintenance contract (CAMC) for next Five years.**

3. OVERALL REQUIREMENTS

- 3.1 The Solar tracker equipment along with Pyrheliometer should incorporate the state-of-the-art technology and provide capability for unattended operation in all weather conditions. The system shall run using Sealed Maintenance Free (SMF) battery(s), rechargeable through a solar panel. The battery shall be capable to run the system for minimum period of **15 days** on full load during total cloudy or foggy conditions. The bidders shall provide power budget calculation in the technical bid.
- 3.2 All equipment should be qualified for MIL GRADE or better specifications and suitable for outdoor applications.
- 3.3 Pyrheliometer sensor should be interfaced with DAS as per IMD requirement. At selected sites (WRDC), it should be possible to install sensor at solar tracker and to be interfaced with DAS.
- 3.4 The solar tracker shall have time synchronization (time keeping) via GPS or GPRS modem/Internet.
- 3.5 Training of 5 IMD officials at Pune for Operation and Maintenance of System and also field training at all 22 Solar Radiation Sites to Nodal officers designated by IMD.
- 3.6 Ensure support for solar tracker and Pyrheliometer with spares for 10 years.
- 3.7 The firm shall provide demonstration of the complete Solar tracker and Pyrheliometer, and other accessories etc. as per RFP, offered in their bids, for a period of 15 days at No cost and No commitment basis as a part of Technical Evaluation at IMD designated site, Pune. Failure and/or Non-compliance of any component during the above period will be liable to cancel the bid.

4. SPECIFICATIONS OF SOLAR TRACKER AND PYRHELIOMETER

For all sensors offered, valid certification IMD/WRC is to be submitted.

4.1 Specification of Solar Tracker

S.N.	Item	Details
1.	Axis of motion	Two
2.	Pointing accuracy	Better than 0.1°
3.	Resolution	Better than 0.01°
4.	Drive	Stepper motor Gear driven (no belt)
5.	Methodology(Micro-controller and GPS based control)	The system should have a GPS (Global Positioning System) to acquire data i.e. latitude, longitude and exact GMT time etc. The movement of the sun tracker should be controlled by standalone micro-controller system (using GPS data) only. After initial configuration, it should continuous tracking of the Sun.
6.	Payload	30 Kg or more
7.	Torque	30 Nm
8.	Mounting provision	(i) Two Pyrheliometer for direct radiation measurement (one operational and the other for calibration) (ii) One Pyranometer with shading assembly and support for diffuse radiation measurement (iii)One Pyranometer without shading assembly and support for global radiation measurement (iv) Complete mounting kit for two Pyrheliometer, two Pyranometer and shading ball /disc assembly to be provided with the solar tracker with Pyrheliometer.
9.	Power requirement	Should work on 12V SMF battery and charging assembly to be provided with each unit. The system should have very low operational power consumption so that entire system can work on batteries alone for more 7 days or more, in case of power failure. There should be also being an arrangement to charge the battery through solar panel.
10.	Provision of Manual orientation adjustment	Required.

11.	Max velocity	2.5 ⁰ /s
12.	Clock accuracy	2 ppm or better (The complete system should be Sun time synchronized including active sun tracking and GPS with accuracy of sun tracking.)
13.	Operating temperature & humidity	-20 ⁰ C to + 60 ⁰ C and 0 to 100 % RH.
14.	Rotation	540 ⁰ AH, zenith -90 ⁰ to +90 ⁰

4.2. Specifications of Secondary Standard Pyrheliometer

1.	Sensor	Thermopile with suitable glass window
2.	Opening angle	5 ⁰
3.	Slope angle	1 ⁰
4.	Aperture/Length ratio	1:10
5.	Response time	< 10 s for 95 %
6.	Temperature dependence (percentage maximum error due to change of ambient temperature within operating range)	<± 1 % (over operating range)
7.	Impedance	< 500 Ω
8.	Stability (percentage change in response per year)	<± 1 %
9.	Non-Linearity (percentage deviation from the responsivity at 500 Wm ⁻² for the irradiance range 0 to 1000 Wm ⁻²).	<± 0.3 %
10.	Facility to mount over a solar tracker with Pyrheliometer	YES
11.	Spectral range	280 to 4000 nm
12.	Sensitivity	8 to 10 μVW ⁻¹ m ²
13.	Calibration Traceability	Traceable to WRC
14.	Operating temperature and humidity	-40 ⁰ C to +50 ⁰ C and 0 to 100 % RH

5. POWER SUPPLY

- 5.1 The complete solar tracker shall have capability for unattended operation at remote place using Sealed Maintenance Free (SMF) battery, Solar charge controller and rechargeable through a Solar panel.
- i) **Battery:** Single 12 V, 65 AH chargeable SMF battery. The battery has to keep in FRP(**Fibre Reinforced Polyester**) Enclosure. The size of FRP enclosure should keep 12 V, 65 AH chargeable SMF battery and solar charge controller.
 - ii) **Fibre Reinforced Polyester (Protection: Class IP-65):** The size of FRP Enclosure should keep one 12 V, 65 AH Battery and Solar Charge Controller. It should be weather proof and used for outdoor purpose.
 - iii) **Solar Charge controller:** It should charge the 12 V, 65 AH SMF battery through 40 W Solar panel and also Over-load protection, Short circuit protection, Protection from the lightning strike and Under-voltage protection.
 - iv) **Solar Panel:** Rated capacity 40 W, Open Circuit voltage: 21.6 V, Short circuit current: 2.62 A
- 5.2 The Supplier must attach a detailed **POWER BUDGET CALCULATION** taking care of solar panel and battery efficiency and sufficient safety factor of the system supported with documentary proof in technical bid for power consumption of the Solar radiation system station so that it should run for 15 days during cloudy day or without charging the battery. The detailed power consumption of each component of the Solar radiation system must be clearly mentioned in the technical brochures to support Successful bidder's statement.

6. INSTALLATION AND COMMISSIONING OF THE SYSTEM

- 6.1 The Supplier shall be responsible for implementation of the project on a **turnkey basis providing end to end solution.**
- 6.2 The supplier shall be responsible for supply of all equipment and deliverables including transportation to the field sites safely without any damage.
- 6.3 Site preparation including all Civil and other related works such as construction of concrete foundation for Solar Tracker, installation and commissioning of Solar Tracker including installation of sensors and configuration of sensor with Dataloggers shall be the responsibility of the Successful bidder.
- 6.4 The supplier shall undertake installation work in presence of Nodal officer designated by IMD office and IMD official deputed for the purpose. The Nodal officer and IMD official will commission the station after successful continuous verification of one week uninterrupted data quality of sensor.
- 6.5 The Pyrheliometer sensor shall be mounted on solar tracker.
- 6.6 All cabling in the Solar Radiation Station site should be concealed/underground using suitable PVC pipe conduits.
- 6.7 The supplier shall supply of 25 hard bound copies of operation and maintenance manuals and 25 soft copies in USB Drive.

7. COMPLIANCE STATEMENT

The bidder shall submit detailed para-wise compliance statement in tabular form giving full details of each parameter along with reasons for compliance/non-compliance, if any. The bidder shall also submit the details of references, reports etc. for each compliance giving

name of technical manual, chapter number, page number and para and shall provide a copy of referred documents along with the technical bid. Silence on any para or simply making a statement 'complied' without proper justification or reference will be considered as non-compliance. Also all the claims with respect to any specification shall be supported by document along with bid document otherwise same may be treated as non-compliance.

The tenderer shall submit a detailed item-wise compliance/ non-compliance statement referring para-wise/sub-para wise to the requirements given in the document, for quick evaluation of tender and for any future reference. The compliance statement shall be supported by original brochure(s) of the equipment or sub component from the manufacturer. In case the original brochure is silent on any part of tender specification, it shall be supported by an undertaking by the manufacturer along with user certificate* for that particular equipment/ sub-component, if claimed complied. The technical specifications and other requirements contained in this document are essentially required by the indenter. However, reasons for non-compliance, if any, for certain limited paras, or even sub-para of the document may also be given by the tenderer. **Silence or inadequate information on any part of the technical specification, any conditional compliance or failure / omission to provide any such details will be treated as non-compliance.** All non-compliance of specifications, even of small nature, should be clearly brought out.

Sample format for Compliance (C)/ Non- Compliance (NC) statement:

Clause/Para/ Sub-para no.	Item description as per IMD specification	Compliance (C)/ Non- Compliance (NC)	Remarks (if any)/ Supporting Documents(wher ever required)
Section-I			
...			
...			
Section-II			
...			
....			
Section-III			
1	Introduction	Understood	
2	Scope of tender	C	
2.1		C	
2.2			

8. ONSITE COMPREHENSIVE WARRANTY AND CAMC

8.1 The successful bidder shall provide onsite **comprehensive warranty for ONE YEAR** followed by **FIVE YEARS CAMC** of the entire system including site maintenance, consumables like Batteries, cells etc. after successful installation and commissioning. The firm has to enter into agreement as per terms and conditions laid down by IMD during Comprehensive Warranty and CAMC period.

8.2 The terms and conditions during on site Comprehensive Warranty Period/CAMC are given in detail as **Annexure –III.**

9. DELIVERY SCHEDULE

a)	Delivery	Delivery of all equipment and accessories shall be done at respective sites in single consignment within three months from the date of placement of supply order (For Indian supplier) and from the date of opening of Letter of Credit (For Foreign supplier). Single Consignment: 22Nos. of Solar Tracker and Pyrheliometer within six months from the date of placement of supply order.
b)	Installation and Commissioning	Within Six months from the placement of supply order/ opening of LC as the case may be. The firm has to install and commission all 22Nos. of Solar Tracker and Pyrheliometer within three months. The firm has to plan in such a way that the project should be complete within nine months.

Delivery of one set equipment shall be done at each respective SRS field site. The list of deliverables is given as **Annexure-IV**.

10. PAYMENT TERMS

10.1 Payment for supply, installation & Commissioning

- a. 40% after successful supply of hardware/material.
- b. 30 % after installation of SRS and training at site.
- c. 20 % after commissioning of solar tracker and Pyrheliometer at SRS site.
- d. 10% after completion of the project (successful commissioning of all 22 Nos. Solar Tracker and Pyrheliometer).
- e. It is to be noted that the bidder may submit bills for payment after completion of supply/installation/commissioning for all 22 Nos. of Solar Radiation Stations.
- f. Payment shall be made subject to recoveries/adjustment, if any, by way of liquidated damages/penalty clause or any other charges as per terms and conditions of contract.

10.2 Payment during 5 years CAMC period of Solar Radiation Station

- a) CAMC charges of 22 Nos. Solar Tracker and Pyrheliometer will be paid on half yearly basis.
- b) Payment shall be made on the basis of certificate issued by the consignee authority/coordinating Nodal officer at Pune subject to recoveries/adjustment, if any, by way of liquidated damages/penalty clause or any other charges as per terms and conditions of contract.

11. TRAINING

The successful bidder shall provide comprehensive training in installation, integration, calibration, operation, maintenance, troubleshooting and replacement of defective modules of proposed solar tracker and Pyrheliometer related topics **to 5 (Five) IMD officers for a minimum period of Two Working Days at IMD Pune.** Training syllabus, material and documentation in English language shall be provided along with time table well before commencement of training for evaluation by IMD. Soft copy of finalized training material should be provided to all the trainees.

The bidder shall also provide One day onsite training to nodal officers designated by IMD for operation and routine maintenance of entire installed system at each SRS site.

12. BIDDER QUALIFICATION CRITERIA

- a) The bidder/manufacturer should have minimum **two years'** experience in successful installation, maintenance, calibration of 10 Nos. of GSM/GPRS Solar radiation networks for any government/public sector/internationally or nationally recognized institutes or sectors.
- b) A certificate in this regard from the minimum **three users** about satisfactory and proven performance of the networks of the system must be enclosed with the technical bid.
- c) The bidder should have minimum annual **turnover of INR 2Crores or equivalent value for past three years** ending on 31.03.2018. Necessary documentary evidence in support of turnover shall be submitted with technical bid. Annual financial performance for past three years should be submitted. Out of three years the company must have made profit atleast for two years.



TENTATIVE LIST OF 22 NOS. OF SRS SITES

S. N.	STATION	STATE	REMARKS
1.	Ahmedabad	Gujarat	Prime and WRDC Station
2.	Bangaluru	Karnataka	Prime Station
3.	Bhopal	Madhya Pradesh	Prime Station
4.	CRL,Pune	Maharashtra	Regional Radiation Centre of RA-II (Asia)
5.	Chennai	Tamil Nadu	Prime and WRDC Station
6.	Goa	Goa	Prime and WRDC Station
7.	Hyderabad	Telangana	Prime Station
8.	Jaipur	Rajasthan	Prime Station
9.	Jodhpur	Rajasthan	Prime and WRDC Station
10.	Kodaikanal	Tamil Nadu	Prime and WRDC Station
11.	Kolkata	West Bengal	Prime and WRDC Station
12.	Mumbai	Maharashtra	Prime and WRDC Station
13.	Nagpur	Maharashtra	Prime and WRDC Station
14.	New Delhi	Delhi	Prime and WRDC Station
15.	Patna	Bihar	Prime Station
16.	Pune	Maharashtra	Prime and WRDC Station
17.	Ranchi	Jharkhand	Prime Station
18.	Shillong	Meghalaya	Prime and WRDC Station
19.	Srinagar	Jammu and Kashmir	Prime Station
20.	Thiruvananthapuram	Kerala	Prime and WRDC Station
21.	Varanasi	Uttar Pradesh	Prime Station
22.	Visakhapatnam	Andhra Pradesh	Prime and WRDC Station

DETAILS OF SOLAR RADIATION SITES PREPARATION FOR INSTALLATION OF SOLAR TRACKER WITH PYRHELIOMETER

1. SRSSITE

Area of the SRS site should be top of the terrace of IMD building. The site should free of obstacles like building and pillars. There are some SRS sites where are to be installed on the ground.

2. Foundation platform of Solar Tracker

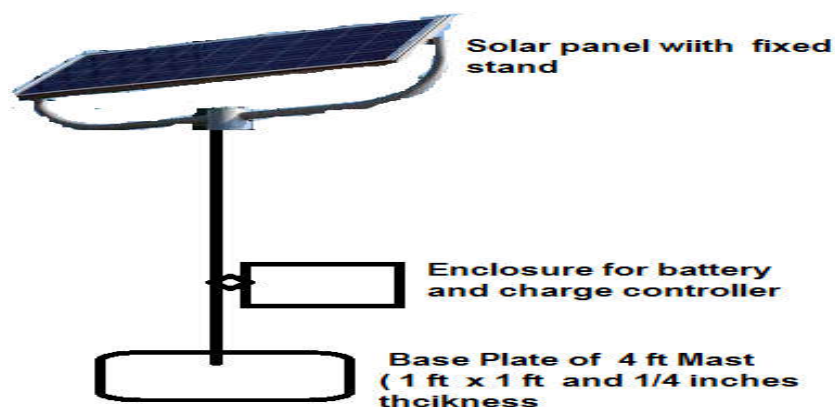
- a) The Solar tracker concrete foundation must be of dimensions 1ft x 1ft (length x width) and 4ft height (1.0 ft below ground level) at installation on ground.
- b) If solar tracker is to be installed on terrace of the buiding, then concrete foundation must be of dimensions 1 ft x 1ft (length x width) and 4ft height.
- c) The solar tracker should be installed on the concrete platform so that it should be leveled and there should be any jerking during rotation of solar tracker.

3. Installation of Pyrheliometer

The Pyrheliometershould be installed on the solar tracker so the measurement of direct radiation should free from error.

4. Installation of Solar panel

- a) The installation of solar panel should be done on 5 ft Pole Mast and Solar charge controller and 65 AH,12 V SMF Battery with FRP enclosure should also installed on 5 ft Pole mast. Concrete Platform for the mast should be 1.0 ft x 1ft (length x width) (1.0 ft below ground level and 1.0 ft. above the ground level) for installation at ground and 1.0 ft x 1ft (length x width) and 1.0 ft. above the ground level) for installation at terrace of the building. Block diagram is given below:



TERMS AND CONDITIONS DURING ONE YEAR ONSITE COMPREHENSIVE WARRANTY AND FIVE YEARS COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT

1. The successful bidder shall provide onsite Comprehensive Warranty for one Year followed by Comprehensive CAMC for Five years of all solar trackers and Pyrheliometer. The warranty period shall start from date of successful commissioning of the system. After expiry of one year Warranty, IMD will sign an agreement with the firm for Comprehensive CAMC of all 22 Nos. of Solar tracker and Pyrheliometer for Five years.
2. The CAMC shall be awarded to the firm on the basis of satisfactory maintenance during One year warranty period. The CAMC will be reviewed every year on the basis of the firm performance regarding maintenance of Solar Radiation Station. If the firm was unable to carry out the maintenance work during warranty and CAMC as per IMD's Terms and Conditions then the IMD shall be free to terminate the CAMC with one month notice and the firm may be blacklisted to participate in any IMD's tender for next Five years.
3. IMD will appoint a nodal officer at SRS sites of respective ZIMCs/MCs and RMCs. During comprehensive warranty/CAMC period, the Nodal Officer at SRS will authenticate the preventive maintenance / maintenance and data quality done by the Successful Bidder. The bidder's engineer/representative must associate the respective nodal officer during any visit/maintenance etc. at each site who shall verify all the inventory of installed items before starting the maintenance work and while leaving Engineer/representative from site after its completion during each visit. A separate register/logbook should be maintained with the respective nodal officers.
4. The bidder shall undertake work of servicing and routine Preventive Maintenance (PM) of solar tracker once in **every three months**. The PM shall **ensure the data quality** and retrieval of logged data from the system. A penalty of Rs. 20,000/= per site per three months will be imposed in case of failure to do the routine preventive maintenance and other related works mentioned above. This penalty will be deducted from their Performance Security deposit/CAMC Charges.
5. Reports of PM visits should be submitted on a quarterly basis certified by the respective Nodal officer to coordinating at Pune.
6. SRS will be considered as non-functional during onsite Comprehensive Warranty/CAMC periods:
 - i. **Even if a sensor or any component/unit becomes faulty.**
 - ii. **In case of non-receipt of data even from a sensor.**
 - iii. **If solar tracker at any SRS becomes faulty.**
7. In case SRS system lies in Plain Areas if down time is more than **Two days, (after reporting complaint),** penalty at the rate of 0.5% (of CAMC value) per day **per SRS shall be imposed on the bidder.** This penalty will start from third day and shall be deducted from their Performance Security deposit/CAMC Charges. The maximum penalty shall be limited to 10% of CAMC per site.
8. If the SRS site in Jammu & Kashmir, Himalaya region and North East India; down time is more than **Five days,** penalty at the rate of 0.5% (of CAMC value) per day **per SRS site shall be imposed on the successful bidder.** This penalty will start from sixth day and shall be deducted from their Performance Security deposit/CAMC Charges. The maximum penalty shall be limited to 10% of CAMC per site.
9. It is mandatory to replace SMF battery (65 AH, 12V) every two years or earlier if required at each SRS site after commissioning of the system.

10. Reports of maintenance visits along with data retrieved from field SRS and date and time stamped photographs from at least four different angles of site, pre- and post-maintenance, shall be submitted to respective Nodal officers immediately. **The bidder shall also provide the details, reasons and remedial actions for defects to Nodal officers of SRS site and coordinating offices at Pune.**
11. If the bidder does not rectify the fault for more than 15 days then IMD reserves the right to get the system rectified from any outside agency. The charges incurred shall be deducted from CAMC charges of the firm.
12. It is the responsibility of the successful bidder to ensure that all SRS are in working condition during comprehensive warranty/CAMC periods.

LIST OF DELIVERABLES

S. No.	Item	Make & model Country of origin*	Qty. Nos.
1	2	3	4
1.	Secondary Standard Pyrheliometer		22
2.	Solar tracker withall Accessories		22
3.	12V,65 AH SMF Battery with FRP enclosures		22
4.	40 W Solar Panel and solar charge controller with mounting accessories on the mast.		22sets
5.	Installation, integration of sensor of field Solar Radiation station, foundation for solar tracker and installation of solar tracker		22 sites
6.	Transportation of materials to SRStites safely in good condition as per list enclosed in Annexure –I.		One item
7.	Hard and soft copy of operation and maintenance manuals		10
8.	Training of 5 IMD officials for 3 working days at IMD Pune		One item
9.	Operational Training for each Nodal officers at all Solar Radiation Station sites		One item
10.	CAMC charges First year Second year Third year Fourth year Fifth year		One item

Note*: It is mandatory to mention the make and model of each offered Stores/ Items.

PRICE BID FORMAT

S. No.	Item	Make & model Country of origin	Qty. Nos.	UNIT PRICE			Total price
				Base price	Applicable taxes and duties	Total price	
1	2	3	4	5	6	7=5 +6	8=7x4
1.	Secondary Standard Pyrheliometer		22				
2.	Solar tracker with all Accessories		22				
3.	12V,65 AH SMF Battery and its FRP enclosure		22				
4.	40 W Solar Panel with mounting accessories on the mast.		22 sets				
5.	Installation, integration of sensor of field Solar Radiation station, foundation for solar tracker and installation of solar tracker		22 sites				
6.	Transportation of materials to SRS sites safely in good condition as per list enclosed in Annexure –I.		One item				
7.	Hard and soft copy of operation and maintenance manuals		25				
8.	Training of 5 IMD officials for 3 working days at IMD Pune		One item				
9.	Operational Training for each Nodal officers at all Solar Radiation Station sites		One item				
10.	CAMC charges First year Second year Third year Fourth year Fifth year		One item				
