



India Meteorological Department
MausamBhawan, Lodi Road
New Delhi-110003

Notice Inviting Tender (NIT)

Tender Enquiry No. **DGM-HQ-32011(88)/1/2022-CPU**

Dated: 28.04.2022

1. Director General of Meteorology (DGM), India Meteorological Department (IMD), Ministry of Earth Sciences (MoES), Government of India, on behalf of president of India invites ONLINE e-TENDER in two bid systems from qualified bidders i.e. (i) Techno-commercial bid & (ii) Price bid from eligible and qualified Indian firms for procurement of services. Manual bids shall not be accepted.
2. Name of Goods/Article/Services: **Development & Implementation of Unified Mobile App for IMD.**
3. Quantity & Specification : As per RFP section under tender enquiry document.
4. Tender schedule is as follows:

1.	PRE BID Conference (A) Date & Time (B) Venue	10.05.2022 / 1100 Hrs ISSD, Mausam Bhawan, IMD, Lodi Road, New Delhi-110003. Telephone No. 011-43824320
2.	Closing date and time for submission of tender	17.06.2022/ 1500 Hrs
3.	Tender Opening date & time (Technical Bid)	21.06.2022/ 1200 Hrs
4.	Place of Tender opening	Central Purchase Unit O/o DGM, IMD Lodi Road ,New Delhi-110003

5. **Earnest Money Deposit (EMD):** Rs.4,60,200/- (Rupees Four Lakh Sixty Thousand Two Hundred) only. EMD shall be accepted from the participating firm only in the form of Bank Guarantee (BG). Banker's Cheque/Demand Draft are NOT acceptable.
6. Signed and scanned copy of EMD document/MSME-NSIC Certificate must be uploaded on CPP Portal at <https://eprocure.gov.in/eprocure/app> . Original EMD document in the form of BG/FDR and Hard Copy of MSME/NSIC Certificate for EMD-Exemption must be submitted in Central Purchase Unit (CPU) room No.517 on or before closing of bids submission date. EMD shall be valid for 240 days from the date of opening of tender.

7. (a) Micro and small Enterprises registered as OEM for stores and services specified in this tender with any government bodies specified by Ministry of Micro, Small & Medium Enterprises are exempted for submitting the earnest money deposit (EMD).
(b) Firms other than SSI registered as OEM for stores and services 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.
8. All prospective bidders are requested to attend the Pre Bid meeting if mentioned above. The venue, date and time are indicated in the Para 4 above. The prospective bidders can send their queries preferably 5 days in advance before scheduled pre-bid meeting, on email: ranju.madan@imd.gov.in and sankar.nath@imd.gov.in.
9. The bidder shall download the Tender Enquiry Document from <https://eprocure.gov.in/eprocure/app> and <https://internal.imd.gov.in/pages/tenders.php> bidder shall upload their tender ONLINE through <https://eprocure.gov.in/eprocure/app> along with scanned copies of EMD documents as mentioned in Para 5 above. Manual bids are NOT accepted.
10. EMD should be issued in the favour of "O/o Director General of Meteorology, IMD, New Delhi" and payable at New Delhi.
11. Purchaser: The President of India
Through Director General of Meteorology
India Meteorological Department
Lodi Road, New Delhi-110003
12. Consignee: Head (ISSD) (HQ)
India Meteorological Department
Lodi Road, New Delhi-110003
13. Testing & Acceptance Authority : Head (ISSD)
Lodi Road, New Delhi-110003

Central Purchase Unit (CPU)
O/o Director General of Meteorology
Lodi Road, New Delhi-110003.
Email : cpu.imd@imd.gov.in

निविदा आमंत्रित करने की सूचना (एनआईटी)

ई-निविदा जाँच सं. **DGM-HQ-32011(88)/1/2022-CPU-** दिनांक : 28.04.2022

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, संस्थापन और आरंभ के लिए पात्र और अर्हक भारतीय निविदाकारों से दो बिड प्रणाली अर्थात (एक) तकनीकी बिड और (दो) दर बिड में ऑनलाइन निविदा आमंत्रित करते हैं।
2. सामान/ वस्तुएँ/ सेवाओंका नाम: **Development & Implementation of Unified Mobile App for IMD.**
3. विनिर्देशन और मात्रा:आर एफ पी के अनुसार,
4. निविदाअनुसूचीइसप्रकारहै:

1.	प्री बिड कांफ्रेंस (क) दिनांक व समय (ख) स्थान	10.05.2022 / 1100 Hrs ISSD, मौसम भवन, कार्यालय महानिदेशक, भारत मौसम विज्ञान विभाग, लोदी रोड, नई दिल्ली-110003 Telephone No. 011-43824320
2.	निविदा जमा करने की अंतिम तिथि व समय	17.06.2022/ 1500 Hrs
3.	निविदा खोलने की तिथि व समय (तकनीकी बिड)	21.06.2022/ 1200 Hrs
4.	निविदा खोलने का स्थान	केंद्रीय क्रय एकक, कार्यालय महानिदेशक, भारत मौसम विज्ञान विभाग लोदी रोड, नई दिल्ली-110003

5. धरोहर राशि (ई एम डी) : Rs.4,60,200/- (चार लाख साठ हजार दो सौ) केवल, बैंकगारंटी अथवा मियादी जमा रसीद (एफ॰डी॰आर॰) द्वाराही स्वीकार की जायेंगी।
6. ई॰एम॰डी॰, निविदा खुलने की तिथि से २४० दिन के लिये वैध होनी चाहिये। हस्ताक्षरितई॰एम॰डी॰तथा अन्य दस्तावेज की स्कैन कीगई प्रतिवेबसाईट <https://eprocure.gov.in/eprocure/app> परआनलाइनअपलोडकरे। मूल ईएमडी (B.G. / FDRके रूप) में और छूट के लिए किसी भी अन्य प्रमाण पत्र को केंद्रीय क्रय एकक (सीपीयू) कमरा नंबर 517 में बोलियों के जमाकरनेकीअंतिमतिथिवसमय से पहले जमा करना होगा।
7. (क) लघु उद्योग, कुटीर और छोटे पैमाने पर उद्यम जो किसी भी सरकारी निकायों के साथ इस निविदा में निर्दिष्ट सामान और सेवाओं के लिए पंजीकृत है, उनको निविदा शुल्क और धरोहर राशि (EMD) प्रस्तुत करने के लिए छूट दी गई है।
(ख) एन॰एस॰आई॰सी॰ के साथ इस निविदा में निर्दिष्ट सामान और सेवाओं के लिए पंजीकृत अन्य कंपनियों को भी ईएमडी जमा करने के लिए छूट दी गई है।
(ग) ई॰एम॰डी॰ में छूट निविदा खोलने की तारीख पर उनके पंजीकरण की वैधता के अधीन हैं।

8. ऐसे निविदाकार जो रुचिर खते हों इस आवश्यकता के बारे में और जानकारी प्रेषित से ले सकते हैं। सभी भावी निविदाकर्ता प्रीबिड बैठक (समारोह स्थल, तारीख और समय) में भाग ले सकते हैं यदि ऊपर पैरा 4 में अनुरोध किया गया है। ऐसे निविदाकार जो रुचिर खते हों इस आवश्यकता के बारे में और जानकारी प्रेषित से ले सकते हैं। संभावित बोलीदाता अपने प्रश्नों को अधिमानतः निर्धारित प्री-बिड मीटिंग से 5 दिन पहले ईमेल : : ranju.madan@imd.gov.in और sankar.nath@imd.gov.in पर भेज सकते हैं।
9. निविदाकर्ता <https://eprocure.gov.in/eprocure/app> और <https://internal.imd.gov.in/pages/tenders.php> वेबसाइट से निविदा जांच कागजात डाउनलोड कर सकते हैं और डाउनलोड किए गए कागजात के अनुसार अपनी निविदा तथा हस्ताक्षरित ई०एम०डी० दस्तावेज की स्कैन की गई प्रति वेबसाइट <https://eprocure.gov.in/eprocure/app> पर आनलाइन अपलोड करें।
10. ई०एम०डी० दस्तावेज “O/o Director General of Meteorology, IMD, New Delhi” के पक्ष और नई दिल्ली में देय, जारी किया जा सकता है।
11. क्रयकर्ता: भारत के महामहिम राष्ट्रपति
भा.मौ.वि.वि.के माध्यम से
भारत मौसम विज्ञान विभाग,
लोदी रोड, नई दिल्ली-110003
12. प्रेषित: प्रमुख (ISSD), भारत मौसम विज्ञान विभाग
लोदी रोड, नई दिल्ली-110003
13. जाँच प्राधिकारी: प्रमुख (ISSD), भारत मौसम विज्ञान विभाग,
लोदी रोड, नई दिल्ली-110003

केंद्रीय क्रय एकक (CPU)
मौसम विज्ञान के महानिदेशक का कार्यालय,
लोदी रोड, नई दिल्ली -110003
Email : cpu.imd@imd.gov.in



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

Tender Enquiry . DGM-HQ-32011(88)/1/2022-CPU

Dated – 28/ 04/2022

TENDER DOCUMENT

For

**Unified Mobile App for
India Meteorological Department
Lodhi Road, New Delhi – 110003**

Chapter 1: Instructions to Bidders

(1) Introduction:

- (i) The Bidder shall upload the following documents on CPP PORTAL <https://eprocure.gov.in/eprocure>.
- (ii) Checklist section (Annexure-II of Tender document) properly filled and signed. It should be attached in beginning of tender.
- (iii) The firm has to submit a signed Bid Security Declaration as per Annexure-III.
- (iv) Documentary evidence for fulfilment of Eligibility/Qualification criteria(s) as per Tender Document.
- (v) NSIC/MSME Enlistment Certificate (if applicable).
- (vi) Tender terms & Conditions Acceptance Form (Annexure-I of Tender document) duly filled, signed & stamped. (I.e. bidder has agreed to all the terms & condition of tender enquiry document).

(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) Prices should be quoted as per price schedule format (Chapter-5 of Tender document). The Bidder shall indicate on the Price Schedule specifying all components of prices shown therein including the unit prices and total tender prices of Services, packing, inland transportation/freight/insurance to the sites, sale tax & VAT etc against the requirement.
- (iii) Costing of each and every item, sub items offered in bidder's bid, shall be done with all breakup prices.
- (iv) In case of any charges not mentioned in the price bid, it will be treated as all the charges are free of cost for that item.
- (v) Statutory levies, taxes and duties etc., if any, chargeable on services are payable on actual basis as applicable.
- (vi) If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail.

(3) Signing and Uploading of Tender:

The bidder shall upload their bid only on CPP Portal <https://eprocure.gov.in> only. Partial and Manual bids shall not be accepted. Evaluation of bids shall be done based upon uploaded bids on CPP Portal only. Tender documents should not be uploaded with bid on CPP portal. File size should not exceed the limit of 25 MB.

(4) Opening of Tenders:

The purchaser will open the online 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 bidders, who have submitted tenders on time may attend the tender opening, provided they bring with them letters of authority from the corresponding bidders.

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(5) Scrutiny and evaluation of Tenders:

(a). 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 documents not attached along with the bid.

- (i) Tender is unsigned. (Each page of techno-commercial bid shall be signed & stamped by authorised signatory and same be uploaded on <https://eprocure.gov.in> with digital signature).
- (ii) Checklist (Annexure-II of Tender document) not properly filled and enclosed.
- (iii) Tender Acceptance Form (Annexure-I) of Tender document) not properly filled, signed and stamped (i.e. all the terms & conditions of tender document are acceptable).
- (iv) Tender validity is shorter than the required period.
- (v) Required Bid Security Declaration has not been provided as per (Annexure-III)
- (vi) Bidder has not agreed to give the required performance security.
- (vii) In any means/reason the incomplete bid uploaded on <https://eprocurement.gov.in> shall be treated as

unresponsive.

(b). Bid Evaluation:

Bids shall be scrutinized and evaluated by the committee constituted by competent authority with reference to parameters prescribed in the TE document. Wherever necessary, the purchaser will convey its observation on such „minor“ issues to the bidder asking the bidder to respond by a specified date. If the bidder 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.

The ultimate cost will be arrived at by considering following elements to decide the lowest bidder (L-1).

1. Basic price
2. Excise duty (if applicable)
3. Sale tax, service tax & other applicable taxes

Chapter 2: Conditions of Contract (CoC)

1. **Eligible Bidders:** Indian firms.

2. **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.

3. **Price preference:** Price preference shall be given to Micro and Small Scale Industries registered 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 bidders 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.

4. **Earnest Money Deposit (EMD):** As per NIT

5. **Performance Security:** The supplier shall furnish performance security to the purchaser for an amount equal to Three percent (3%) of the total value of the supply order in the form of FDR or Bank Guarantee from any commercial bank, within twenty one (21) days from date of the receipt of supply order, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier. Performance Security has to be submitted irrespective of its registration DGS&D/NSIC. Performance security is not relaxed to any supplier.

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. The purchaser will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations. The supplier shall submit pre receipt for obtaining their security.

6. **Scope of Work:** Design, develop, hosting, deployment & maintain an Integrated GIS based interactive app (Android, and IOS mobile platforms) as described in Section 3 including all core features/functionalities and capabilities and adding further capabilities as decided by IMD.

7. **Compliance of Rule 144(xi) of GFR-2017:** Bidder has to submit a compliance certificate that they comply with the Govt order F.No. 6/18/2019-PPD dated 23rd July 2020 of Min. Of Finance, DoE, Public Procurement Division, failing which their bid shall not be accepted and liable to be rejected.

8. Penalty clause/Liquidated damages clause (LD): The supplier shall deliver the stores under the contract within the time schedule as specified in RFP. The purchaser shall, without prejudice to other rights and remedies available to the purchaser under the contract, can deduct as penalty/liquidate damage from the contract price a sum of equivalent to 0.5% (half percent) per week of delayed of stores subject to a maximum of 10% of the contract price of delayed items. L/ D shall not be imposed under force majeure conditions.

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Once the maximum is reached purchaser may also consider followings:

- a. Forfeiture of its performance security and
- b. Termination of the contract for default.

9. Taxes and Duties in India:

i. 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.

ii. 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 bidders) 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.

10. Terms and Mode of Payment:

Payment Terms: Payment shall be made to the firm after completion of work and certificate to be provided by the user section. Payment 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.

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.

11. Termination of contract: From the time of submission of tender to the time of awarding the contract, if a bidder 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 bidder attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that bidder, 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.

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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.

12. 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.

Chapter3: Schedule of Requirement

1. Background: India Meteorological Department is the principal government agency in all matters relating to the meteorological observations and to provide current and forecast weather information along with warnings/alerts.

IMD is mandated to provide following the meteorological services to the nation in the following areas:

- Weather Forecasting
- Climatology
- Hydrometeorology
- Instrumentation
- Agricultural Meteorology
- Tourist Forecast
- Civil Aviation
- Meteorological Telecommunication
- Regional Specialized Meteorological Centre
- Positional Astronomy
- Satellite Meteorology
- Marine Meteorology
- Radar Meteorology

The Headquarter of IMD is located at New Delhi. All concerned Regional/ State Meteorological Centers which are responsible for different States/UTs.

As a part of E-Governance initiative, IMD data are being disseminated via following modes of communications:

- National web-site with URL <http://www.mausam.imd.gov.in>
- Websites by each Regional/state MC.
- Mobile Apps
 - i. Mausam for weather information,
 - ii. Damini for lightning,
 - iii. Meghdoot for Agro-met services

iv. Rain alarm

The data for website and MobileApps are uploaded and updated at various intervals by concerned division and various field units of IMD.

The following related data, products and services are provided by the IMD via website and mobile app:

- Current weather information, weather forecast and Severe weather advisory for the
 - i. Cities
 - ii. Districts
 - iii. Met sub divisions
- Model products
- Agromet Advisory for the
 - i. Cities
 - ii. Districts
 - iii. Met sub divisions
 - iv. Blocks/Tehsils
- Satellite Imagery and Satellite Products
- Radar Imagery and Radar Products
- Cyclone Information

2. Scope of the work and system requirement under present tender

The bidder shall go through the existing app mentioned under Para 3 and shall design, develop, hosting, deployment & maintain an Integrated GIS based interactive app (Android, and iOS mobile platforms) as described in Section 3 including all core features/functionalities and capabilities and adding further capabilities as decided by IMD.

It would provide accurate, reliable, real time information, dissemination and improved electronic delivery of services to users in efficient and user friendly manner. It should be in pursuit of excellence, quality and efficiency in app navigation with following characteristics.

- Act as an enabler and facilitator in developing overall mobile based service delivery ecosystem in India.
- Provide easy access for the citizens to various services of IMD via single Mobile Application.
- Provide easy discoverability of services, easy manageability and standardization of service delivery.
- Provide multi-lingual support covering official Indian languages, in addition to English.
- The Application should preferably be installed on licensed VM infrastructure on two servers on high availability mode.

The broad areas of Scope of work are as below:

- 2.1 Study of the existing "Functional apps" being manned, managed, executed and supported by the bidders.
- 2.2 System Requirements Study and System Design at UI level.
- 2.3 Enhance Existing user interface (UI) and user experience (UX) or implementation of a new GIS based integrated app at par with major Mobile Apps available in the market such as Windy, Rain-Alarm.
- 2.4 Integrate Upgrades and enhancements on the existing system to match industry best practices.
- 2.5 Operations and Maintenance of Client Apps.
- 2.6 Training of IMD users for effectively using of the app.
- 2.7 Proper Documentation of the Project including all frontend developed services/core features which will be used for designing test cases to further validate the running functionality.
- 2.8 All the development(s) should be free from all known vulnerabilities and Bugs Development/Customization. Technical Helpdesk and Handholding Support for issue resolution.

- 2.9 Continuous development and integration of new services as assigned by IMD.
- 2.10 Continuous resolution of Issue and changes proposed by IMD.
- 2.11 Continuous improvement on various services in order to make the application more usable, to increase user experience, and robustness.
- 2.12 Implement industry grade tools, processes and solutions for Continuous Development.
- 2.13 Process improvement in all areas
- 2.14 Hand holding training to the end-users and Backend personnel wherever applicable and suggested by IMD.
- 2.15 The App should work on All Android, iOS devices with the versions of operating systems released by them in last three years and all future releases at any given point of time.
- 2.16 The App should support security features such as mobile Open Web Application Security Project(OWASP) and should pass security testing by a third party.
- 2.17 Manage frontend with respect to ongoing activities/status of services such as blocking/unblocking of a service by standardizing UI components, messages that will be displayed to end user in the app.
- 2.18 Change Requests, wherever applicable are to be handled by IMD during the contact period. No Additional cost shall be paid for change requests.
- 2.19 Bidder shall enable a collaborative development environment (including ticketing system, email, comment section, upload pictures & videos, etc.,) and a corresponding release process so that multiple teams i.e IMD and bidder team can work together to fast-track service roll out on app.
- 2.20 Handling of Videos, Images, PDF, Word, and export to different formats etc, Downloading, uploading, using native/non-native features shall be done by the Bidder.
- 2.21 Search Engine Optimization for App: The Bidder shall support SEO Program that results in an increase in overall visitors.
- 2.22 The Bidder must ensure that the App Production and staging environment are in sync at all times. Development environment for deployment should be at same level as Production/Staging server.
- 2.23 Versioning of source code is to be maintained (preferably in OpenForge/Github – a private Git repository under the monitoring of IMD officials) and reporting the same (Monthly). Further Bidder shall provide complete backup of source code changes carried out / new code developed at the end of each enhancement as and when required. Government code base repository such as OpenForge may be used. Ministry has the ownership of the code and bidder will not use the same code base for any other project.
- 2.24 Bidder shall handover the complete codebase and complete documentation (technical and non-technical) to the ministry or the ministry assigned agency.
- 2.25 Correct and update Mobile app portion to adjust itself automatically as per the screen resolution of the Mobile i.e. 1024*768, 1200*800 etc. Resolution independent Mobile web will automatically expand/compress itself as per the screen resolution and hence there should not be any vertical scroll in the Mobile Apps. There should be minimum use of flash technology.
- 2.26 The mobile app should be designed to work on different form factors/devices etc. without compromising on User experience and providing an optimal viewing and interaction experience—easy reading and navigation with a minimum of resizing, panning, and scrolling— across a wide range of mobile devices. The application shall include the proper placements of alerts/notifications/banners etc.
- 2.27 The Bidder must maintain the different release/build versions through proper Release management process. Any new build/change pushed to respective stores must be QA audited and passed and certified by IMD and deemed fit for production roll out.
- 2.28 The Bidder must ensure that CDN is utilized optimally including caching, advanced off load, prefetching, adaptive image compression and on demand image loading including predictive prefetch etc. and other capabilities. Do proper network analysis and improve basis implementation done taking support from the concerned service provider.
- 2.29 Hosting of Mobile app on different App Stores for different mobile apps such as Google Playstore, Apple Appstore, Govt. Appstore etc. shall be done by the Bidder.
- 2.30 Bidder shall respond to all queries/concerns raised by the end users through Google Playstore or Apple Appstore, Govt. Appstore comments. If required, bidder may contact IMD teams for necessary inputs.
- 2.31 IMD will identify high usage weather applications with huge social impact. These above services would be the ones which will be integrated to IMD platform to start with.

- 2.32 The services offered through platform shall primarily be public services. Though, citizen centric services and as decided by IMD from time to time shall also be brought on the platform.
- 2.33 Taking cognizance of the fact that IMD already has taken some steps in the direction of mobile enablement. The proposed APP shall have capabilities to integrate/new development/modification of existing app with such platforms to enlarge the scope of services being delivered through the platform.
- 2.34 Create and manage environments for Integration testing and UAT (User Acceptance Testing), the UAT setup shall be near replica of the production setup. This will entail setting up of two environments namely a Staging Environment and a Live Production Environment. The Staging Environment app version must be tested and certified by the IMD Officials before it goes to the Live Production Environment.
- 2.35 Creation of new services and management of existing services on mobile app, shall be supported through a user-friendly graphical user interface. The app shall be responsive and built on responsive framework, be compatible with standard form factors on smart phones and intelligent vis a vis user preference.
- 2.36 If any IMD product have e-readiness but do not have APIs available then bidder will be responsible for developing the APIs also.
- 2.37 The app and APIs should security audited through a CERT-IN empanelled third party auditor or STQC before on boarding. The auditor is to be selected by IMD.
- 2.38 To integrate easy to use content management system for easily managing overall content of the website.
- 2.39 The app should work on both portrait (vertical) and landscape (horizontal) direction mode, and it should auto switch when user rotates the mobile.
- 2.40 User should be asked for enabling popups to show the current weather information over current (or preselected/favourite) location, forecasts, alerts, etc.

Chapter4: Specifications and Allied Technical Details

1. The app should be fully interactive, hybrid mobile app, built using the platform-specific development tools and latest technologies defined by Google and Apple for Android and iOS respectively. The app must be having similar interface, design,color theme, all content, etc., in both Android and iOS platform, it should not be deviated too much from each other.IMD team is the final decision making authority based on the comparison aspects provided by the implementation team / bidder.
2. The app should be developed in latest technology stack such as React JS, Redux, Flux, SasS etc.
3. The app should be in continuous improvements, follows the platform specific and latest best practices for security and performance to ensure a smooth, hassle free experience for the user.
4. For the UI/UX part, the app should have customized design guideline based primarily on Material design guidelines defined by Google for Android apps, Apple's HIG guidelines for iOS apps.
5. It should be Integrated GIS based interactive user-friendly Mobile App for both collection and dissemination of all types of IMD's products with different modules and desired requirements.
6. The Mobile App should be accessible on all platforms like, Android, iOS etc.
7. To provide information to users with minimum number of clicks.
8. Bidder shall discuss IMD team on app sizes and if SDK based integration is required, bidder shall discuss the same with IMD team.
9. Development of consistent visual elements and Mobile Apps architecture that is scalable and expandable and W3 compliant.
10. Enhance the presentation of the content of IMD products.
11. Open Source or IMD Provided/approved maps details should be used to implement the proposed GIS features
12. The sample Products are listed below
 - (i) Current weather
 - (ii) 5 days Forecast
 - (iii) Rain Alert
 - (iv) Lightning Alert
 - (v) Cyclone Alerts

- (vi) Route nowcast
- (vii) Agromet products
- (viii) Fisherman warnings
- (ix) Background GIS with IMD GFS model forecast animation
- (x) GIS overlay with Satellite and Radar data/Imagery/products similar to Windy and Rain alert app.

13. Translucent overlay with current Location weather for multiple days which can be minimized.
14. Options for selecting different features mentioned above
15. Customized user settings for all Pop-up alerts
16. Customized user settings to manage favourite stations
17. Handy widgets in different sizes and themes (It should support for system theme such as dark color theme, or whatever default themes of Android, iOS)
18. It should be multilingual for both collection and dissemination of all types of IMD's products.
19. The App should be attractive similar with background colour boxes as different app does. Design (UI/UX) shall be developed as per guidance from IMD team. Bidder shall assign product resources for better UI/UX.
20. All parameters may be displayed with suitable image to make the app more visual based for example temperature may be displayed with image of thermometer.
21. All types of warnings i.e.; location based, cyclone warning should be displayed as notification with pop-up.
22. A composite map with satellite image, radar image, lightning warning may be added according to the GPS location of the mobile phone.
23. Integration of graphics for monitoring the convective activity.
24. App Admin interface should be easy in terms of usability and changes in design & content.
25. App should have the mechanism to manage User feedback/ reviews and suggestions.
26. Analytical reports mechanism to track and identify user experience and actions.
27. App should be able to accommodate the future scalability requirements.
28. Network level security, traffic to be encrypted using secured connectivity.
29. Continuity Measures, risk management plan for the continuity of services, data.
30. Backup policy, business continuity plan.
31. Identify risks if any post App implementation along with mitigation plan.
32. Storage disk space and memory required for the proposed App should be provide with technical bid.
33. Structure overall content with proper tagging to make it reader friendly.
34. Design should be coded in Open-Source Tools/Software/Programming Languages/Platforms.
35. Develop Resolution independent design structure.
36. List out the assumptions related to load & infrastructure (such as mobile specifications, internet bandwidth etc.) so that response time is always < 3 seconds
37. Real time information via GPS availability
38. Mobile Apps download should be based on phone OS and services
39. Feature for update application with permission to download
40. One time download. No running cost for user.
41. Mobile Apps should be hosted after extensive testing and Apps must be 100% bug free.
42. A dedicated App designing, building & maintenance team will have to work as an integral component of IMD.
43. The bidder should provide samples of the concept designs of homepage and at least two templates of inner pages to the IMD for technical evaluation purpose with the proposal.
44. The bidder should assign a technical project manager who can manage and track the overall project and provide project timelines/deliverable/status with the proposal.
45. User settings to configure features such as rain alert/Lightning alert pop up notifications etc. (sensitivity, region of Interest, notification interval).

46. The Bidder should develop a web portal which will be hosted in IMD location where the issues raised by users in Playstore/Appstore and issues raised by IMD are displayed with status like a dashboard. The Bidder shall be responsible for updating the issues raised by the user in Playstore/Appstore and also the current status of the issue (Fixed/in-progress, etc)
47. Documentation regarding defects raised in Alpha testing of software should be submitted before Site acceptance test.
48. Icons should be available with hover text for switching between products.
49. Share Option should be available to share the products/warnings in WhatsApp/Facebook/Twitter/Instagram/Signal/Telegram/etc.
50. The share content should be a graphic rich warning/ product image.
51. The App should auto-save user preferences in the device for non-registered users.
52. The App should integrate with Android/IOS devices to act based on app related voice commands.
53. Displaying Maps of India sub-continent, states, districts, etc., in the app interface must be followed by rules of the Government of India. IMD will provide the respective shape files, which can be converted to GIS/other map format by the bidder.

2.1. Weather Module

This module shall be used to display the following weather parameters. The bidder may visit IMD's existing Mausam app to get idea about the contents.

Links :

- (i) <https://play.google.com/store/apps/details?id=com.imd.masuam>
- (ii) <https://apps.apple.com/us/app/id1522893967>

- 1) Geolocation based current weather information nearest to the observing stations shall be available to the users.

(i) Current weather :

- Max and Min Temperature
- Humidity
- Wind Direction
- Rainfall
- Sunrise/Sunset Timings
- Moonrise/Moonset Timings
- Weather Forecast

(ii) City forecast (being display in mausam.imd.gov.in website)

- Weather Symbols ,Max/Min ,Forecast

(iii) Radar ((being display in mausam.imd.gov.in website)

- Images as per the requirement of IMD

(iv) Nowcast: (being display in mausam website)

(v) Panel - Manage Cities

- (i) Current Location
- (ii) Delete Location
- (iii) Add Multiple Locations

(vi) Aviation related information/forecasts such as METAR. TAF SIG charts etc as per the existing online briefing system of IMD.

2.2. Cyclone module:

- (i) Cyclone Track with cone of uncertainty and wind warning should be display in GIS platform.
- (ii) The data shall be in csv,xml, kml or any other web/GIS compatible format.
- (iii) The cyclone bulletin shall be display as per IMD's requirement.
- (iv) The notification content shall be extracted from mausam.imd.gov.in/rsmcnewdelhi.imd.gov.in website
- (v) Fishermen, Coastal, Sea area related informations.

2.3. CrowdSource Module:

The crowd source module will be used to collect the weather observations from the public. The module should have four parts:

2.3.1. Data Submission by Public

- (i) This application should allow users to report the observed weather and to upload pictures of weather phenomena throughout the year in 24x7 through GIS Map.
- (ii) Besides the observation phenomenon, there should be option for type text message, enter location and observation time as well as attach photographs/videos with observation
- (iii) The interface should be developed in such a way that it can collect the weather observations and also the weather impacts both during the weather events. The sample events and impact can be seen from the following link https://city.imd.gov.in/citywx/crowd/enter_th_datag.php. However the design should be as per the IMD requirements.
- (iv) Users can also report on each other's observations if they find them suspicious. This should be done from the map view by inspecting more details of single observation.
- (v) The observations from the public from app/web will be stored via IMD's web application server database
- (vi) There should be no registration but each device should get randomly generated individual device ID so the observations can be grouped and shown in the users' overview in the public observation feature.
- (vii) It should be able to use the device features to capture data like Images, Bar-codes, Audio, Videos, GPS, Document pages along with date and time stamping and be able to sync these to the server. APP should have the ability to auto-fetch the time, location, date when they capture a weather event through the Camera in crowd source module.
- (viii) The users can only view the weather events submitted by other users, and not the user details. The privacy of the users in Crowd source module must be maintained.
- (ix) User should be able to delete the uploaded photo by themselves (in case wrongly uploaded pictures)
- (x) Irrelevant / Unacceptable photo content uploaded by user must be able to delete by the admin user from the web portal.
- (xi) Front (Selfie) Camera should not be enabled to capture the images

2.3.2. Data validation and filtration:

- (i) The large amounts of crowd-sourced data must be filtered and classified automatically to eliminate irrelevant observations.
- (ii) Machine Learning methods can be used to filter the data before publication.
- (iii) IMD shall provide the ground truth data to validate and filter the irrelevant observations crowd source data. These may be observational data, radar data/images, Satellite data/images etc.
- (iv) Deep Learning image classification methods can be used to filter the pictures taken by mobile users before publication.
- (v) It shall be an on-going process throughout the service period

2.3.3. Visualisation:

- (i) People's input should also be visualized immediately after filtration in existing GIS platforms which will attract them to keep providing observations in the future as they notice that their input is being used.
- (ii) Users should have the option to view their own and other users' observations on a map and filter phenomena interims of event/day/time etc as desired by IMD and they are interested in.
- (iii) This visualization will be done in app itself, but it could also be disseminated to IMD's official webpage (<https://mausam.imd.gov.in>).
- (iv) The application should have the facility to see these observations with radar, satellite images and model images as a layer.
- (v) The integration with crowd sourcing observations received from any third-party is also needs to be display. The API development if any shall be developed by the bidder.

2.3.4. Archival/Retrieval and Analysis

- (i) The data received from both through web interface as well as through Mob.App should be Archived which can be used for analysis.
- (ii) There should be an interface to generate the Statistics/report on the quality and quantity of citizen weather observations which will helps us to assess how viable these observations are as a supplementary source of information alongside the more traditional weather observations carried out by national meteorological and hydrological services.
- (iii) The bidder shall propose the Software/Hardware required implementing the same.

2.4. Lightning Module:

This module shall be used to display lightninglocations.The bidder may visit IMD's existingDamini app to get idea about the contents.

Links:

- (i) <https://play.google.com/store/apps/details?id=com.lightening.live.damini>
- (ii) <https://apps.apple.com/app/id1502385645>

2.4.1. Features :

- (i) The apps should give Lightning Alert to the user on GIS map about the lightning on the basic of user location.
- (ii) Lightning should be shown in the map on the basis of 5 min lightning, 10 min lightning and 15 min lightning by GPS notification. under 20KM and 40KM.
- (iii) It should also be displaying the lightning forecast
- (iv) The location-based lightning warning should be displayed as notification with pop-up.
- (v) There should be provision to put Instructions, Do's and Don'ts during Thunderstorm, Safety Tips
- (vi) The data shall be in csv,xml, kml or any other web/GIS compatible format.
- (vii)The Lightning alert should be displayed in notification pop up as per user's alert configuration (sensitivity, region of Interest, notification interval)

2.5. Agromet Module: This module shall be design to deliver critical information to farmers through a simple and easy to use mobile application. The bidder may visit IMD's existingDamini app to get idea about the contents.

Link:

- (i) <https://play.google.com/store/apps/details?id=com.aas.meghdoot>
- (ii) <https://apps.apple.com/in/app/meghdoot/id1474048155>

2.5.1. Features :

- (i) The module should be in GIS platform and seamlessly aggregates contextualised district and crop wise advisories issued by Agro Met Field Units (AMFU) with the forecast and historic weather information to the fingertips of the farmers.
- (ii) The advisories are also issued in vernacular wherever available.
- (iii) Should be in multilingual
- (iv) There should be provision to select the district, stations, block, and Theshil as per their requirement.
- (v) The location based weather warning should be displayed as notification with pop-up.

2.6. Rain Alarm module:

This module should alerts when rain is approaching to location within 20 to 40 Km. The bidder may visit IMD's existing Damini app to get idea about the contents.

Link:

- (i) https://play.google.com/store/apps/details?id=de.mdiener.rain.usa&hl=en_US&gl=US
- (ii) <https://apps.apple.com/app/rainalarm/id397676100>

2.6.1. Features:

- (i) Alerts to every type of precipitation, whether rain, snow or hail
- (ii) Alert as a notification with vibration and/or sound
- (iii) It should be simple and easy map overview
- (iv) The Rain alert should be displayed in notification pop up as per user's alert configuration (sensitivity, region of Interest, notification interval).

2.7. Route Nowcast Module

- (i) Users shall be able to select the origin and destination and the map shall display the possible routes with weather.
- (ii) The Weather conditions shall be shown as different colours in the route based on Radar/Satellite data.
- (iii) Blue - clear weather, orange - light rain, red- heavy rain/ hail etc. The colours should be embedded only on the route.

2.8. Functionalities and Features of the app

2.8.1. App Design, UI/UX

The platform should have a robust Configuration and Management system which should allow faster creation and management of desired User Interface and link it to various services. The design of the App shall be implemented in such a manner that it is easy for the users to navigate services as well as to be able to configure favourite services that can be accessed from the home page.

2.8.2. Design for Multiple Interaction Methods

Interaction methods vary across devices. Three main interaction methods should be considered when designing the UI:

- (i) **Focus Based:** The browser focus "jumps" from element to element;
- (ii) **Pointer Based:** Key-based navigation controls a pointer that can cover any part of the screen;
- (iii) **Touch Based:** Events are related directly to a finger or stylus touch position on the screen.

The optimum configuration of UI elements varies depending on the interaction method used by the device. Ideally, the UI should be adapted based on knowledge of the interaction methods supported by the target device. If this is not possible, then the UI should be designed to provide a good experience for each of these different interaction methods.

2.8.3. Ensure Paragraph Text Flows

On small screens it is important that paragraph text flows both so that it doesn't require horizontal scrolling and so that it will re-flow if the view orientation is changed.

2.8.4. Ensure Consistency of State between Devices

User credentials valid on one device should be valid on other devices. User preferences captured on one device should be accessible on other devices. Data updated on one device should be viewable consistently on other devices. An important example of this is offering a consistent experience where data entered on a desktop is available on a mobile and vice versa.

2.8.5. Low bandwidth support

Mobile app should be able to provide services at low bandwidths also. For this, the mobile app should be tuned for low bandwidths to facilitate access of services by users when bandwidth is low.

2.8.6. Notifications

Customized user settings for all Pop-up alerts. Users can manage their own notifications. The App should send Push notifications from the backend. Users will not be able to stop warning notifications. However, user has the option to not opt for other notification triggered from backend through frontend-based user setting.

2.8.7 App Security

Manage application, data and server security of App as per ISO 27001 standards. The solution should be free from the vulnerabilities defined in Open Web Application Security Project (OWASP) top 10 vulnerabilities and other known vulnerabilities.

2.8.8 Ease of Use and Branding

- (i) Mobile App shall be multi-lingual, with support for official India languages, in addition to English. Languages shall be selected from the list of Scheduled Languages as per Census 2001. Mobile App shall be developed in top 12 Indian languages in addition to English. The texts in the app must be authentic in the regional languages (not simple Google translation). It must be certified by the IMD Officials of the MCs/RSMCs.
- (ii) The platform architecture should be scalable to support potentially all citizens accessing different types of services. The design should be such that the effort for setting up a new service should be minimal for integrating departments so that once
- (iii) Service API integration is done; it should be possible to provide services through configuration and minimum development.
- (iv) App shall have a section where the users can update their preferences in terms of personal details, frequently accessed services and short cuts, language etc., which will then be available for all services so that data entry can be minimized.
- (v) Provide Search option for the users to discover relevant services.

2.8.9 Reporting and Configurability

This Mobile App shall generate necessary reporting and dashboards for data representation, which should be configurable as per the IMD's needs.

2.8.10 Application enablement or Application on-boarding

- (i) For every application enablement, there will be API integration with the services of that application and enabling corresponding service flow on each enabled channel. This integration will have to make services available on an end-to-end basis.

- (ii) Each service of a given application shall include, as per requirement, applying for service, status update and delivery of service, notifications to the applicant and any other flow available as part of the delivery of a service.

2.8.11 Application enablement process

Once the platform has been made operational, it will integrate with division's applications/back-end for enabling individual services. Application enablement means going live with services of a department which involves:

- (i) Develop necessary APIs, if not available, for all services under the application on the platform (in addition to common APIs required for all applications and other common functionalities such as authentication etc.)
- (ii) Integrating with the different divisions application by
 - a. Interacting with respective division and gathering requirements and
 - b. Developing APIs for the integrating divisions (only if required) and
 - c. Integration of APP with the department service APIs.
- (iii) Providing an end-to-end user interface on mobile app for all services of the application.
- (iv) Providing capability inside the mobile app to fetch service through the platform.
- (v) Testing, deployment and go-live after sign-off from IMD and/or respective application owner division.
- (vi) Enablement of Mobile and Mobile App with push SMS is mandatory.

2.8.12 GIGW Compliance: The App should comply with the GIGW Guidelines

3. Mobile App Architecture

Given the differences in the technology with their related advantages and disadvantages and interoperability issues, it is very important to have credible architectural principles to form the basis for choice of a particular technology and architecture to deliver mobile services. Design principles are given below:

3.1. Design Principles

3.1.1. User Centric

End users availing the service must be centric to the design of the platform. Their ease of interaction with mobile devices, the kind of devices commonly used by targeted segments, network availability and demand for service should guide the choice of technology for service development and roll out. Support for local language is necessary.

3.1.2. Heterogeneous and Interoperable

The App should be designed keeping in mind that information flows across applications owned by different departments. It should be able to integrate and interoperate with various other external entities. The ability of the solution to easily and in a relatively seamless manner integrate with external entities, interoperate with multitude of technologies is a significant criterion while selecting the technology

3.1.3. Sustainable and Scalable

Architecturally, the platform should be sustainable and scalable. Sustainability requires the platform to use software, tools, frameworks etc. which has a large usage base and regular long-term support and upgrades. For scalability, it is important for this platform to be cloud enabled to take the advantage of next generation cloud implementations and technologies. The following criteria should be kept in mind during selection of the technology:

- (i) Every component needs to scale to a large volume.
- (ii) Every component as well as the whole system needs to provide consistent and acceptable performance even at very large scale.
- (iii) Single point of bottle-neck and failure must be avoided.

While upgrades and scaling-up, it is necessary that the platform supports earlier versions especially when upgrading the APIs.

3.1.4. Pluggable and Loosely coupled Components

The system should be built with open standards and open APIs with plug-n-play capabilities. The system should be designed to plug-in new technologies and components in a seamless manner, similarly any obsolete technologies or components should be removed without impacting any other component of the system. The components should be loosely coupled to allow changes in applications that are integrated with it and in any sub-system level without affecting other parts. It should be architected to work in a heterogeneous technical environment.

3.1.5. Address privacy concerns

The App should address the privacy concerns of integrated applications and thus restrict visibility of each department to data/information pertaining only to them. Also, the platform should protect user's information if any.

3.1.6. Analytics

The platform should be able to generate insights for analytics. These include, but are not restricted to, on-demand reports which can be configured, filtered and customized by IMD. The platform should look at the usage at an aggregate as well as at an individual level. Relevant dashboards should be available for decision makers about the platform's performance and usage and insights on user information (demographic, location, behavioural etc. aspects).

3.1.7. App Security

The App needs to have capability to manage security and privacy at multiple levels. Non-functional requirements such as data security, user authorization and access control need to be taken into account while designing the components of the platform.

3.1.8. Easy integration with external interfaces

In the current IT environment when several function specific systems are developed, a system comprises of core functional modules talking to several platforms and services through APIs published by such platforms. The mobile APP needs to have technical capabilities to integrate with external interfaces such as location services etc.

3.1.9 Search

App should have searching feature option for the citizen to discover relevant services. Searching should be implemented in multilingual and fully configurable. Searching option should exist on all pages on App. It should support all kind of keywords.

3.2 Integration Aspects

The platform needs to provide well defined, open standards based, well published APIs for various to consume and integrate with the app. At a broad level the APP shall have Pre-Processing API, Post-Processing API and Business Logic API (which may be broken into business logic and payment API wherever required).

Apart from open standards-based web-services, the integration module should support data exchange based on XLS, XML, delimited text and other acceptable and widely used formats. The integration module should also provide an online and batch mode integration facility. Integration with popular social networking sites like Facebook, Twitter and Google+ using the published API as well as integration with mail server would be required. Any new service enabled on IMD will need to be notified/ popularized via Twitter, Facebook,Whatsapp,Telegram, Signal, Instagram, Google+ or any other social media platform. The integration module will need to be integrated with state and national portal / platform. The API Layer of the app platform should offer the following feature

- (i) Provide a common API layer or equivalent to support for faster and seamless integration.
- (ii) Support for various data formats like XLS, XML, CSV,GRIB1, GRIB2, NetCDF3, NetCDF4, NetCDF5, HDF4, HDF5 Delimited based, and Text or any other GIS compatible format etc.
- (iii) Publishing of API Development guide as well as Security standards document for integration with the platform
- (iv) The app shall have plugin based architecture for integrating with various divisions and 3rd party integration while supporting department API in SOAP/XML/Rest/HTTP formats.

4. Functional and Data Security

The platform needs to provide comprehensive functional and data security. The functional security can be achieved by enabling role and permissions based delegation model. The data security can be achieved by business logic or by way virtualization of the data.

5. Remote Application Monitoring (RAM)

The platform is going to have multiple loosely coupled modules to facilitate scalability and management of the solution. APP needs to have high availability and load balancing built into it. The real time monitoring and management of the app using single interface is key to provide uninterrupted and high available service to the citizen and businesses across the country. APP should have provision for Remote Application Monitoring.

7. Analytics, MIS Reporting and Dashboard

The platform needs to provide extensive parameterized reporting to run various reports from time to time. It should support MIS reports for all but not limited to the given below items:

- (i) Number of hits and number of concurrent users- date wise.
- (ii) App downloads report from various app stores
- (iii) It should provide service wise reports for Push SMS showing the number of successful and failed SMS from app.
- (iv) Any other report as required by IMD.

8.Customer Support / SLA Monitoring / Application Management

The Bidder is required to provide Help Desk module for customer support function, Application Management Module for application management and SLA monitoring. The Help Desk module shall be used by the bidder to manage the customer ticketing and life cycle. The SLA monitoring tool shall have the ability to track the

SLAs as described in the RFP at a minimum; the monitoring tool shall have the ability to generate the necessary reports. The SLA monitoring tool shall have the ability to export or import the necessary data. The application monitoring tool shall help IMD to manage and monitor APP and related components of APP effectively.

9. New User Registration

New users will register on the IMD app using their Mobile Number and OTP received. Warnings and public data submission can be accessed directly without the need for user to register on IMD platform. For accessing any other services users must mandatorily register using a mobile number. In future there are possible changes envisaged in system where users will be allowed to access the informational/search-based services directly without the need to register.

Initially users can register using only India based mobile number and the mobile app is available and open only on India play-store/app store. It is envisaged that the app will be made open for all countries Playstore/Appstore in coming time with the possibility of registration using country based registration. Once the user has registered on IMD a proper guided tour should be available for users on usage of application.

Bidder shall develop the authentication and authorization modules to support the same.

10. Home Screen

Home Screen of the application will be designed and developed after the discussion with IMD team. The features should be managed appropriately so that all main features/ promotional aspects/ warnings etc can be accommodated on Home Screen. Bidder shall assign product manager who will propose and discuss the design aspects/features/functionalities with IMD teams on regular basis. Also, proper documentation should be managed with complete version history.

11. Multilingual

The App should be in 11 regional languages in addition to English and Hindi (Total 13 languages during RFP). User has the option to select any language based on their preference. Bidder has to get the work translated in different languages as per requirement of different States/services.

Languages are selected from the list of Scheduled Languages as per Census 2001. Currently, languages supported by application are:

- i. Assamese
- ii. Bengali
- iii. Gujarati
- iv. Hindi
- v. Kannada
- vi. Malayalam
- vii. Marathi
- viii. Oriya
- ix. Punjabi
- x. Tamil
- xi. Telugu
- xii. Urdu
- xiii. English

Note: Additional languages will have to be enabled by the selected Bidder based on the requirements from time to time.

12. Delete Profile

The App shall have a provision for the user to delete their profile after Login .

This feature should ensure that Mobile App is indexed with all popular Search Engines (Google, Yahoo, Bing& Live) using top keywords and meta description

13. Ratings and Feedback

Users can rate Services on boarded on App and see the overall rating of the app/service and check how many users have rated it. Users can also send feedback when they are rating any service/app in order to specify any specific observation or improvement.

Top Rated section on Home Screen allows users to view apps/services based on the rating given to an app/service and been rated most times.

14. Phone/Email Support

There should be help line number so that users can contact. In addition, users can send their queries/feedback related to core IMD app and applications/services on boarded through in-app feedback mechanism available while user is accessing any specific service or via Help and support section from main menu. User Manuals and FAQ should be available for quick reference and updated from time to time as and when new information is available.

15. Social Connectivity

Users can login using their social IDs (Facebook, twitter, and Google+) after validating their mobile number for one-time registration after going to settings section. Post this user can access IMD across platforms using the same social media login credentials. This may be changed in future basis on IMD decision.

16. Profile Management

To manage the unique profile of every customer the platform shall maintain the following keys for each user on the platform:

Demographics - Age, Gender (Male/ Female/ Others), Location (District, State), Date of Birth (minimum 10-years age), Profile Picture, Occupation (drop down), Education (drop down), Mobile Number etc. The fields are dynamic in nature shall be updated from time to time.

17. Sort/Filter

Users shall filter based on predefined categories. Sorting of services visible to users under different sections of IMD app can be done alphabetically, most popular; top rated or by Service type applicable to categories wise.

18. Offline Support

App should provide offline feature which enhance the usability of various services for the users. Offline application functionality refers to the App's ability to offer all its features to users without network connectivity (including Wi-Fi). Features such as access to Home Page Services and subservices, state specific landing pages, Notifications, Various forms, Settings etc. The offline functionality should work irrespective of any browser type. The objective of implementing the offline feature is to provide functionality in areas where internet connectivity is poor or providing better user experience. The app should have features to display the department complete information such as logos, icons, descriptions and location information on offline mode. Proper cache mechanism which includes API responses and master data should be implemented in order to provide better user experience.

19. Caching

To ensure quick response time and better user experience, the caching strategies should be implementing by the bidder.

The landing page is generally a static page and shall be cached to ensure prompt rendering when the department is invoked. Majority of images, icons, or static banners are retrieved and cached in the client cache itself. Static data, small lists are retrieved and cached within the application cache.

20. Branding

The App should have a section where the citizen can update their preferences in terms of personal details, frequently accessed services and shortcuts, language etc. The App should also have a powerful Search options for Citizens to search various services without the need to browse all available services.

21. Product Management

The Bidder shall be responsible for overall design/UI/UX related aspects of App.

- i. The app should have the latest features at Par with top e Commerce weather Mobile Apps.
- ii. Shall devise strategies to enhance the user reachability and implement them.
- iii. The Bidder is required to manage and update the IMD product design guidelines after taking concurrence from IMD team and keep it abreast with latest market trends from time to time.
- iv. Product team must prepare Notification text for promotion SMS/Notifications required to be pushed to different users for awareness/information of different services. The Product team is required to send all such notification/push SMS as per timelines suggested by IMD through an online tool.

22. Play Store Management

- i. Hosting of Mobile app on different App Stores for different mobile apps such as Google playstore, Apple Appstore etc. shall be done by the Bidder.
- ii. Credentials of all respective stores will be provided by IMD. Other than that, all the work related to hosting the apps on these app stores shall be done by the Bidder on behalf of IMD.

- iii. The Bidder must maintain and upgrade from time-to-time information/banners/data on respective stores.
- iv. The Bidder is required to correct all reported issues to keep active user engagement and improve the system basis user feedback and issues.
- v. The Bidder is required to monitor vital statistics and information including ANRs and crashes and continually improve the system to fix all these items.
- vi. The Bidder must ensure that the build/changes updated on respective stores comply with all store policies and the builds are not rejected.
- vii. The Bidder must monitor and improve the issues reported in respective stores related to device versions and OS versions.

23. App Performance

Network Load Time/Performance –Bidder must evaluate the App with different data load time of the app on different network types and speed of the app on all of the popular 2G, 3G, 4G, 5G networks across different platforms and compare the performance with other popular apps and make continuous improvements so as to enhance user engagements and fast loading of app. IMD app should be at par with other popular apps using similar network conditions.

Home Page and other services Page load time and Navigational Performance should be highly optimized. The test conducted should be through an industry used tool across platforms and not manual. The device specifications (OS, memory, processor etc.) used for these tests (both Android and iOS) must be among the most used category across the nation. The cost of any tool used will be borne by Bidder.

24. Hosting and Deployment

- (i) Mobile App platform shall be hosted on the hardware provided by IMD. The hosting environment as well as data for the entire platform has to reside within the territory of IMD/India.
- (ii) Storage disk space, bandwidth and memory required for the proposed App should be provide with technical bid. IMD will explore either through NIC or procure in-house.
- (iii) Hosting of Mobile app on different App Stores for different mobile app stores such as Google Playstore, Apple Appstore, Govt. Appstore etc. shall be done by the bidder.

25. Operations and Maintenance

- (i) The bidder shall operate and maintain the platform, mobile app.
- (ii) Regular bug fixing as raised by IMD.
- (iii) Adherence to SLA and SLA monitoring for services and infrastructure that is entirely within the platform.
- (iv) Provide SLA monitoring tool to evaluate different service level parameters
- (v) Responsible for providing Level 1 support through call centre. This will also cover all app related queries.
- (vi) On-going enhancement of App by implementing new features, enabling newer technologies to meet the mobile governance.
- (vii) Responsible for management of operations activities of mobile governance like reconciliation, grievance redressal /help desk, to resolve their queries by providing product information, logs and other related information.
- (viii) Escalation mechanism for informing about service unavailability.
- (ix) Department and third-party services can be hosted in external locations and their hosting and maintenance are outside the scope. However, in case any of these services are not accessible, the platform will raise alerts so that escalation to the concerned division can be taken up by support.

- (x) The front end (forms) processes, workflow, backend processes (database), security, privileges at application level, Network level, backup and DR policies will not be changed by the bidder without prior approval of IMD. Bidder will make a change management process duly approved by IMD for this purpose.

26. Change Requests

Bidder shall be responsible for ongoing support for integrating:

Modifications and enhancements (i.e. due to changes in integrating division APIs for Mobile App integration, Workflow changes, and other changes from time to time) raised by the integrating division shall be part of the scope of the project.

27. Minimum Eligibility Criteria

27.1 The bidder should enclose brief organizational profile including background, availability of staff and experience of the bidder in the relevant field. Relevant Proof in support to be submitted.

27.2 The bidder should have office in Delhi-NCR. Address, Telephone number of the office along with proof of the office at Delhi-NCR should be attached.

27.3 The bidder should have at least 5 years" experience and should have execute at least 3 projects on mobile applications in the field to Govt. Departments/organizations/PSUs/ State Govt./Quasi Govt. organizations etc. Copy of work order + Completion Certificates from the client; OR Work Order + Self Certificate of Completion OR Work Order + Phase Completion Certificate from one of the Directors of the bidding entity/client certificate Self-certificate letter undertaking to this effect on company's letter head signed by company's authorized signatory. Also, the bidder must provide the links of at least 3 projects (mobile apps with usage statistics) for us to download, test and evaluate to understand the capacity and capability of the bidding company.

27.4 The bidder should not have been blacklisted by any of the State or Central Government organization. It should not have been found guilty of any criminal offence by any Court of law. They should submit a "self-declaration" for the same.

27.5 The bidder shall have a Cumulative Total Turnover of INR 15 Crores during last three financial years (i.e. Year 2018-19, year 2019-20 & year (2020-21) with minimum turnover of INR 5 crores in each of last three years in one of the following areas, IT Software Applications.

27.6 Bidder should not have been blacklisted or debarred from tendering by Govt. of India/State Government/Central PSU at the time of bid submission date.

27.7 All relevant documents/proof on the above should be attached with the technical bid.

28. Commercial Structure

28.1 Components of Commercial Structure

The bidder has to quote against the components of the Commercial Structure given in **Annexure-II**:

28.2 Security Audit Fees

The bidder is required to perform Security audit on quarterly or earlier (in cases where major update/major Build change etc.) basis including the following activity

- 1) Have the audit report identify the Mobile app level vulnerabilities and provide recommendations for remediation's of identified vulnerabilities
- 2) Submit the detailed report on the vulnerabilities and the remediation's to IMD.
- 3) Responsible for fixing issues raised by third party security Auditor nominated by IMD so that security audit clearance certificate can be issued as per NIC/Cert in Requirements.
- 4) Any other activity concerning security audit related aspects, not essentially covered by work areas outlined as above.
- 5) The Bidder has to get the complete work audited quarterly by an external **Cert-In**empanelled agency. Cost of per audit shall be quoted in financial bid. Total number of audits shall be as per the guideline for Govt. of India.
- 6) In addition, IMD at its Cost/discretion may get the work security audited from a separate independent nominated agency apart from regular audits done by the Bidder.

29. Duration and extension

The Overall "Term" for the Project is 3 years; however the initial Contract shall be given for 2 years which

can be extended for another period of 1 year. The project duration can be extended by IMD at the sole discretion of IMD, with commercials as discovered in the proposal, which will be binding to the bidder. The information to this effect will however be given to the Bidder at least 3 months in advance of currency of the contract.

Note: An undertaking from Authorised signatory of the bidder has to be provided stating that the Bidder agrees to extension, if IMD so decides, beyond initial 2 years at the quoted cost and as per the term and conditions of this RFP.

30. Requirements for presentations and references:

Bidders must confirm that they are prepared to attend a meeting with IMD officials in one week's notice, at their own cost, if IMD requires presentations/ any clarification of their tendered solution.

31. Delivery terms, Schedule and Installation:

31.1 Delivery terms:

- 1) The bidder should be able to deliver aesthetically designed App which will be highly user friendly, SEO friendly and compatible with all the latest browsers and technologies.
- 2) Delivery should be in the form of a published app in the respective market place and will be the property of IMD.
- 3) All the items are required to be delivered directly MausamBhawan, Lodi Road, New Delhi

31.2 Delivery Schedule:

Application should be design, develop, Go-Live in the respective market place within six (6) months from the date of issue of supply order.

32. Site Acceptance Test (SAT)

The Bidder should take note of the rigorous standards of the tests, which must be met by the IMD's requirement before IMD will accept it. In essence, the acceptance tests are as follows: After completion of the development the bidder shall inform the consignee for acceptance of the system at the site. The bidder shall submit an acceptance test procedure (ATP) well in advance. IMD will participate in the Performance Testing, Security Testing & Usability Testing certification from certified vendor.

After completion of above test, a functional test period will start on an agreed date and mutually agreed test procedure at site. The test will last for **seven (7)** working days and will consist of the periodic running of various diagnostic, checkout, demonstration and test routines. The purpose of the test is to establish that the equipment is functional, and that various aspects of its performance and behaviour are in accordance with the published specifications as per the tender document and the Contract.

After the above a functional test IMD will be launched forGo-Live.

33. Reliability test

Following the functional test, a reliability test **period of 10 (ten)** days of uninterrupted operation of the system is required. During this period, no failure that affects the full functionality of the system as per requirements should occur. Failing this the reliability test cycle will be repeated. The system shall be commissioned only after successful completion of reliability test and training as per details given in the next Para.

34. Training

- 1) For every application enablement, the Bidder shall conduct five days training to the nominees of IMD. The training shall be on the on overall workflow of the developed solution, technical, functional, integration, administration functions and usage aspects of Appat IMD office.
- 2) Handover, guidance and training to IMD official staff to make design changes, to update content and to maintain the proposed solution.

35. Backup and restoration:

The vendor should demonstrate step by step Back-up and restoration of full application to IMD officers during the Site Acceptance Test both from media and other source. An ISO image type backup of entire application to be carried out the restoration of the system through the same to be demonstrated during the SAT. IMD officers shall verify the same before commissioning of the system.

36. Documentation

The Bidder shall create and maintain standard documentation for Design and Development (Design Guidelines, FRS for app core functionalities etc., Functional Testing, Test plan, Test Cases etc., Release and Deployment, Store Presence, Performance Report, Security Testing Report, Training manuals, User Manuals, Privacy policy etc. and FAQs related to IMD app that will be placed in App and will be reference otherwise also.

Bidders must provide self-contained documentation and manuals for the Functional Requirement Documentation, App Design Documentation, App Installation guide, App Administration guide and App User Operation document .and Creation and Maintenance of standard documentation, user manuals and training modules that could be used for training the government departments and employees. In-house maintenance like system backup & recovery etc in hard bound copies (two sets-each site) and in printable electronic form (preferably in PDF and word format in CD/DVD). Such material must be made available prior to installation and updates must be provided for the duration of this Contract. Bidders shall also make provision for availability through on-line access to such material via an appropriate Web Site or FTP site.

37. Compliance/Non-compliance statement:

To facilitate quick evaluation of the proposals, the bidders should submit in a tabular form, a detailed compliance/non-compliance statement pertaining to each Para and sub-Para of this RFP as per **Annexure-I**. The technical specifications and other requirements contained in the RFP are essentially required to be met fully by the bidders. Reasons for non-compliance, if any; may also be given in detail. Details/Supporting documents for compliance, wherever required may also be provided. The bidder is required to submit un-priced list of deliverables in tabular form along with technical offer.

38. Technical support

- 1) After satisfactory commissioning and site acceptance tests (SAT) on-site, the bidder shall provide comprehensive technical support of Mobile App including up-gradation and updates for a period of 3 years from the date of successful deployment.
- 2) This period can be extended/ shortened at the discretion of the competent authority. There shall be an option to renew the empanelment for a further additional period of 1 year or beyond (on yearly basis) based on satisfactory performance and with the existing Terms and conditions. IMD will have the right to terminate the contract without assigning any reason whatsoever. IMD also reserves the right to modify the term and conditions through mutual consultation.
- 3) The updating /maintenance in the source code of the Mobile App should also include quality assurance (as per Government of India guidelines).
- 4) The support shall be for full software at the same level of operational efficiency and service support. i.e. to address analyse and fix any technical glitches within the existing features within 4 working.
- 5) The bidder shall provide comprehensive technical support round the clock (24x7x365) to address, analyze and fix any technical glitches within the existing features. The scope of technical support includes rectification/debugging of errors present within the entire app.
- 6) Any software modification, updates, antivirus and software licenses renewal etc shall also be done by bidder without any financial obligation on IMD.
- 7) During the support period, the bidder should associate IMD officials with his own engineers who will make available the full details of servicing done on the system to the IMD officials.
- 8) Break up of year wise cost towards support period shall be mentioned in price bid. Payment shall be released towards this on quarterly basis after completion of period subject to satisfactory performance.
- 9) Tender shall include year wise quote for three (3) years comprehensive technical support, the cost of which will be considered for evaluation and determination **for lowest offer (L1)**.
- 10) The bidder should be ready to accommodate **marginal changes as decided by IMD** in order to fulfil such requirements that may arise as per requirement during the intervening period between preparation

of this document and commissioning and operation of the system including years technical support period after the Site Acceptance Tests.

Note: Bidder should provide the web-based help desk facility for fault booking and rectification besides contact details like phone number, mobile number and email addresses with escalation matrix round the clock during entire technical support period.

39. Terms and Conditions:

- 1) The bidder has to give an undertaking that it will not use IMD data for any other purposes including commercial. If the bidder uses the IMD data for any other purposes including commercial the purchaser reserves the right to terminate the contract at any time, by serving written notice to the Bidder without any compensation.
- 2) The Director General of Meteorology also reserves the right to accept or reject any or all the bids without assigning any reason.
- 3) Bidders are required to quote in format given in tender document.

40. Payment Clause:

40.1 Payment of the total quoted 100% charges excluding technical support cost shall be made only after Go live.

40.2 Payment Milestones for Security Audit Fees

The Security Audit Fees shall be paid on a quarterly basis and on the actual number of audits carried out in a quarter.

40.3 The Payment of Technical support period:

The bill towards payment of support charges shall be raised quarterly. Payment shall be released on quarterly basis after deducting penalty amount, if applicable and TDS etc. on the submission of certificate of satisfactory services during the period by the Information System and Services Division (ISSD) division, O/o Director General of Meteorology, based on reports from station.

41. Service Level Agreements

41.1 Severity Levels and Penalty

Deviations from the agreed upon performance would need to be consistently measured and severity level for non-compliance need to be assigned. The following table 1 describes the various severity levels.

41.1.1 Severity Level

Table 1 – Severity Level

Severity Level	Description
1	Minimum loss of service and minimum loss in quality of service delivered
2	Delay or denial of service or services observed / reported. Lack of availability of a feature results into non enablement of service
3	Delay or denial of services observed, lack of effective and timely communication resulting into citizen perception issues
4	Complete loss of service for a period of time resulting into significant inconvenience to the users or multiple instances of complete loss of service resulting into users losing confidence in the system and hence directly affects the ability of the platform to on-board additional services, get buy-in, popularize the service.

41.2.2 Penalty

The penalty for not meeting the SLAs is linked to the severity level of the breach of the SLA as detailed in table 2 below;

Table 2– Penalty

Severity Level	Penalty as % of (quarterly Payment)
4-c	10%
4-b	7.5%
4-a	5%
3	3%
2	1.5%

Total penalty for a quarter is capped to 20% of the quarterly Payment.

41.3.3 Service Quality SLA

Table 3 – Service Quality SLA

Description (For each Developed service)	Severity Level
complete failure of the app for more than four hours to 24 hours	Level 4-a
If the complete failure duration extends beyond 24 hours up to 2 days	Level 4-b
If the above failure duration extends beyond 2 days up to 7days or part of the day	Level 4-c
After 7 days IMD is free to take decision for next course of action such as fault resolution from any alternate source. The cost incurred on such fault resolution shall be recovered from the bidder and proportionate payment of support charges shall be deducted from bank guaranty/support payment	
For the purpose of penalty clause implementation, the time of failure period for repair will be counted after 2 hours from the time of reporting of fault.	

42. List of Deliverables

Proposed lists of deliverables are given under **Annexure-II**.The list is suggestive. The bidder may propose additional item required, if any, to fulfil the requirement of Scope of work. List of deliverables submitted in technical bid must be same as mentioned in financial bid except the pricing. Financial bid will be ignored and not considered for further evaluation if any deviation found.

43. Pre-bid meeting

Any clarification required shall be discussed and clarified during the pre-bid meeting which will be held in the ISSD Division, IMD-Delhi, MausamBhawan, Lodhi Road, New Delhi-110003.

Prospective bidders may send their queries to be discussed during pre-bid meeting at least 5 days in advance to Ms. Ranju Madan, Sc-"F" at email address ranju.madan@imd.gov.in and to Dr. Sankar Nath, Sc-"E" at email address sankar.nath@imd.gov.in.

NEXURE-II

PROPOSED LIST OF DELIVERABLES

SL. No	Name of Item/Store	Quantity
1	Development and Go-Live of Integrated mobile app With Specified Works	1 job
2	Year wise Support With updates for three (3) years.	1st year, 2nd year 3rd year
3	Training	1 job
4	Miscellaneous (to meet the project requirement)	

Chapter5: Price Schedule (Financial Bid Format)

S.N.	Name of item/store	Quantity	Base Price	Applicable taxes & duties	Unit price 4+5	Total Price
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Total Tender price in figure:

Total Tender price in words:

Note/Instruction:

1. The bidder shall use their own letter head for quoting the prices. Document should be signed and stamped on all the pages.
2. Price shall be preferred in the format for deliverables for stores & services as given at Annexure.
3. The names of each stores/items offered in technical proposal must be mentioned with make & Model including services etc if any..
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.
8. Price Bid (in pdf format excluding note/instruction) shall be uploaded on eprocure.gov.in

Signature of Bidder Seal of the Bidder

Chapter6: Contract Forms

Annexure-III

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-II0003

Ref: Tender Enquiry (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 "TENDER DOCUMENT- 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 within scheduled time.

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. (Signature with date and seal of the company)

I/We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment.

I/We confirm that we are not deregistered/banned/blacklisted by any Central/ State Government/ agency of Central/ State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities on the date of submission of bids.

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.

(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.

Chapter 7: Other Standard Forms

Annexure-IV

CHECKLIST

S.No	Activity	Compliance Yes/ No/ NA	Page&Para No.of the bid
------	----------	---------------------------	-------------------------------

			Document
	Is Registration certificate of the Indian Firm with any state or central government body of India attached with technical bid?		
	Is Earnest Money Deposit (EMD) Declaration enclosed?		
	Is the validity of bid as per the TE document?		
	Is the Tender Terms & Conditions Acceptance Form duly filled and signed (i.e. terms and conditions are acceptable)? (as per Annexure- I)		
	Is the bid signed?(Tenders is liable to be rejected if not signed)		
	Is the clause-by-clause compliance statement for the "List of requirements/ technical specifications" section enclosed? Compliance matrix indicating point wise compliance to all the points of tender document. Each point needs to be complied and single statement for all the points will not be agreed to.		
	Is the copy of the last purchase order(s) and end user certificate enclosed?		
	Whether Permanent Account No. of bidding firm with proof is provided.		
	Is sales & service tax number/GST with registration certificate attached?		
	Name of the firm who quoted the price?		
	Name of tender currency?		
	Name of the bidder with complete address to whom supply order is to be placed?		
	Whether un-priced bid similar to price bid with price hidden is enclosed?		
	Whether un-priced bid similar to price bid with price hidden is enclosed?		

(Signature with date) (Full name, designation on behalf of the bidder)

Undertaking for Tender/Bid Security Declaration

We, _____ (Legal Name of Tenderer / Bidder) hereby confirm that we are submitting the tender for _____ (Name of the work as per Para 2 of NIT) floated by India Meteorological Department, Ministry of Earth Sciences, Govt. of India, New Delhi.

We do hereby undertake that in the following cases, we shall be debarred from participating in the retender of this work and also will be debarred from participating in any tender of India Meteorological Department, Ministry of Earth Sciences, Govt. of India, New Delhi for a period as specified in table below:

Sr. No.	Case	Period of Ban*
	if we resile or withdraw our Tender during the period of Tender evaluation before opening of Financial Bids or	2 years
	if, having been notified of the acceptance of our Tender by Office of the DGM, India Meteorological Department, Ministry of Earth Sciences, Govt. of India, New Delhi during the period of tender validity, we a) Fail or refuse to enter into rate contract with O/o the DGM, India Meteorological Department, Ministry of Earth Sciences, Govt. of India, New Delhi within the time limit specified and/or b) Fail or refuse to submit unconditional acceptance of Supply Order within the time limit specified and/or c) Fail or refuse to furnish the performance security in accordance with Para 5 of Chapter 2 within the time limit specified.	3 years

****Period of ban shall be from the date of resiling / withdrawal of this tender or from date of issue of Supply Order, as the case may be.***

(Signature with date and seal of the company) (Name and designation)

Note: The undertaking shall be signed by authorized signatory, duly authorised to sign tender for and on behalf of Bidder.

BANK GUARANTEE MODEL FORMAT FOR PERFORMANCE SECURITY

**To,
The President of India**

Through :-

**Director General of Meteorology,
India Meteorological Department,
Lodi Road, New Delhi-110008**

WHEREAS _____ (Name and address of Successful bidder) (Hereinafter called "Successful bidder") has undertaken, in pursuance of contract no _____ dated _____ to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that Successful bidder shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give Successful bidder such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of Successful bidder, up to a total of _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring Successful bidder to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein. We hereby waive the necessity of your demanding the said debt from Successful bidder before presenting us with the demand. We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and Successful bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification. This guarantee shall be valid up to and including the _____ day of _____, 20 _____

(Signature with date of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch I/2333/2021

Non-Blacklisting declaration (Sample Format only)

To:

Date:

(Consignee Name and address)

Subject: Non-Blacklisting declaration in connection with TENDER No: dated
..... For

Dear Sir,

This is to notify that our Firm/Company/Organization intends to submit a proposal in response to invitation for TENDER No: for....

In accordance with the above we declare that:

- a) We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment.
- b) We are not blacklisted by any Central/ State Government/ agency of Central/ State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities.

Sincerely,

[BIDDERS NAME]

Name

Title

Signature