

**भारतीय उष्णदेशीय मौसम विज्ञान संस्थान**  
**INDIAN INSTITUTE OF TROPICAL METEOROLOGY**  
**(पृथ्वी विज्ञान मंत्रालय, भारत सरकार का एक स्वायत्त संस्थान)**  
**(An autonomous Institute under the Ministry of Earth Sciences, Govt. of India)**  
**पाषाण, पुणे - 411 008 / PASHAN, PUNE-411 008**

**अभिव्यक्ति प्रस्ताव सूचना / NOTICE OF EXPRESSION OF INTEREST**

निदेशक, भारतीय उष्णदेशीय मौसम विज्ञान संस्थान, डॉ. होमी भाभा मार्ग, पाषाण, पुणे - 411008 (भारत) निम्नलिखित की आपूर्ति हेतु निर्माताओं/आपूर्तिकारों एवं उनके प्रत्यायित विक्रय एजेंटों से अभिव्यक्ति की रुचि आमंत्रित करते हैं :

Director, IITM invites Expression of Interest (EOI) from Manufacturers / Suppliers and their accredited selling agents for the supply of the following.

क्रम सं. Sr. No.	निविदा सं. Tender No.	विवरण / Description
01.	PS/EOI/125/20/2025	<p>भारत में एरोसोल, बादलों के मापन और क्लाउड सीडिंग प्रायोगिक सेवाओं के संचालन के लिए विमान किराए पर लेना।</p> <p><b>Hiring Aircraft measurements of aerosols clouds and conduct cloud seeding experimental services in India.</b></p>

संस्थान को बिना कारण बताए किसी भी या सभी अभिव्यक्तियों को निरस्त करने का अधिकार सुरक्षित है। विस्तृत विवरण एवं बोलियों के प्रस्तुतीकरण हेतु कृपया वेबसाइट <https://moes.euniwizarde.in> देखें। संभावित बोलीदाताओं की जानकारी के लिए, रुचि की अभिव्यक्ति का विवरण इस संस्थान की वेबसाइट <http://www.tropmet.res.in> एवं सरकार का सेंट्रल प्रोक्यूरमेंट पोर्टल (सीपीपी) <http://www.eprocure.gov.in> पर भी उपलब्ध है।

The Institute reserves the right to reject any or all Expression of Interest without assigning any reason thereof. For details and submission of bids please visit website <https://moes.euniwizarde.in> For the information of the prospective bidders, the Expression of Interest details are also available on this Institute's Website: <http://www.tropmet.res.in> and Government's Central Procurement Portal (CPP) <http://www.eprocure.gov.in>.

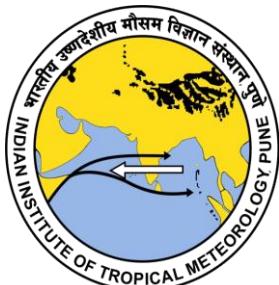
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प्रशासनिक अधिकारी (पीएसयू), कृते निदेशक  
**Administrative Officer (PSU), for Director**  
**ईमेल/Email :psu.iitm@tropmet.res.in**

**INVITATION  
FOR  
EXPRESSION OF INTEREST  
FOR**

**Hiring Aircraft measurements of aerosols, clouds and conduct  
cloud seeding experimental services in India**

**No:PS/EOI/125/20/2025**



**INDIAN INSTITUTE OF TROPICAL METEOROLOGY  
(AN AUTONOMOUS INSTITUTE UNDER MINISTRY OF EARTH SCIENCES, GOVERNMENT OF INDIA)  
DR. HOMI BHABHA ROAD, PASHAN, PUNE - 411 008  
MAHARASHTRA, INDIA**

## Expression of Interest for

### Hiring Aircraft measurements of aerosols, clouds and conduct cloud seeding experimental services in India

#### 1.0 ABOUT MINISTRY OF EARTH SCIENCES (MoES) & ITS UNITS

The Ministry of Earth Sciences (MoES) is mandated to provide the nation with best possible services in forecasting the monsoons and other weather/climate parameters, ocean state, earthquakes, tsunamis and other phenomena related to earth systems through well integrated programmes. The Ministry also deals with science and technology for exploration and exploitation of ocean resources (living and non-living) and plays nodal role for Antarctic/Arctic and Southern Ocean research. The various Units under the Ministry of Earth Sciences are: India Meteorological Department (IMD), National Centre for Medium Range Weather Forecasting (NCFMRWF) Noida, Indian Institute of Tropical Meteorology (IITM) Pune under the Atmospheric Sciences, National Centre for Earth Science Studies (NCESS) Thiruvananthapuram, National Centre for Seismology (NCS) under the Geosciences and Seismology sectors; National Institute of Ocean Technology (NIOT) Chennai, National Centre for Polar and Ocean Research (NCPOR) Goa, Indian National Centre for Ocean Information Services (INCOIS) Hyderabad, National Centre for Coastal Research (NCCR) Chennai, and Centre for Marine Living Resources and Ecology (CMLRE) Kochi under the Ocean Science and Technology sectors. MoES aims to create a framework for understanding the complex interactions among key elements of the Earth System, namely ocean, atmosphere, and solid earth, by encompassing national programmes in ocean science, weather, climate, environment, and seismology.

One of the ministry's primary objectives is to conduct intensive observational campaigns, including instrumented aircraft measurements of aerosols, clouds, trace gases, and focused cloud seeding experiments. These efforts are crucial for improving model parameterizations, advancing our understanding of cloud processes, and reducing uncertainties associated with cloud seeding experiments.

#### 1.1 About recent cloud seeding experiment by IITM

Recent aircraft observations of clouds, aerosols, trace gases, and meteorological and thermodynamic properties began in 2009 under the Cloud Aerosol Interaction and Precipitation Enhancement Experiment (CAIPEEX) program. The initial phases of CAIPEEX focused on investigating cloud-aerosol interactions and studying cloud and aerosol properties across various locations in the Indian subcontinent. The final phase (i.e., CAIPEEX-IV), conducted in 2018 and 2019, specifically aimed to test the cloud seeding hypothesis over Solapur, India. This experiment reported an enhancement in rainfall at the downwind location of the seeding area where warm cloud seeding was conducted. It also highlighted the necessity of science-based approaches for effective hygroscopic seeding of convective clouds, given the substantial uncertainties associated with natural environmental variability. Ambient environmental conditions prior to seeding were found to be critical in determining the appropriate timing, type, location, and seedability of clouds.

The CAIPEEX program has delivered critical insights into cloud and precipitation processes over India. Aircraft observations over the Western Ghats (WG) revealed that forced updrafts enhance rapid condensational growth, triggering coalescence within a few hundred meters of cloud depth. In the rain shadow region, suppressed rainfall was linked to high cloud bases, dry air intrusions laden with aerosols, and multilevel inversions, which hinder warm rain processes. Elevated aerosol layers (above 3 km) from anthropogenic and natural sources also contributed to rainfall suppression. Distinct differences in droplet size distributions were noted between polluted pre-monsoon and less polluted monsoon clouds. Narrower spectra in polluted clouds and bimodal spectra in monsoon clouds were

attributed to in-cloud activation and droplet evaporation. Maximum cloud liquid water was observed at the tops of polluted clouds, with raindrops forming in undiluted cores at greater heights.

For the first time, CAIPEEX documented cloud condensation nuclei (CCN) and ice nuclei (IN), revealing mixed-phase cloud behaviour. Raindrop formation in monsoon clouds was driven by condensation and collision-coalescence in ascending adiabatic volumes. The program highlighted the role of natural dust in cloud and precipitation processes and noted vertical IN variations (average  $1.12 \text{ L}^{-1}$ ), lower than model predictions. Aerosol dispersion effects were found to offset indirect effects by up to 39%.

Despite numerous benchmark research outcomes reported to date, uncertainty persists regarding the efficacy of cold cloud seeding experiments. This EOI aims to conduct research sorties across various parts of India to study cloud processes and test the hypothesis of cold cloud seeding through targeted experiments. The proposed campaign falls under the Weather Modification vertical of the Mission Mausam program by MoES, Government of India.

## **1.2 Expected deliverables of the proposed cloud seeding experiment**

- Cloud seeding experiments in mixed phase and ice phase regimes and their impact on the rain microphysics in different geographical conditions
- Representation of mixed phase and cold cloud processes in numerical prediction models Likely enhance the accuracy of surface rainfall
- intervention of cloud systems to evaluate the rain enhancement/suppression from deep clouds.

## **2. PURPOSE OF THIS EOI**

The purpose of this Expression of Interest (EOI) is to shortlist prospective bidders for the issuance of the Request for Proposal (RFP) for the Hiring of the research and seeding aircraft. Participation and qualification in the EOI are mandatory prerequisites for proceeding to the subsequent tendering process. The Indian Institute of Tropical Meteorology (IITM), Pune, acting on behalf of the Ministry of Earth Sciences (MoES), has been designated as the nodal institute responsible for conducting aircraft observations to evaluate and understand the cloud seeding hypothesis and propose guidelines.

This Expression of Interest (EoI) aims to hire an instrumented aircraft for conducting observations of clouds, aerosols, and trace gases, as well as performing cloud seeding experiments. The observations are to be carried out up to an altitude of 9 km above the ground surface.

## **3. SCOPE OF WORK FOR PROPOSED PROCUREMENT**

(a) For this EOI, “vendor” or “tenderer” or “bidder” means the tenderer who is the supplier of a modified aircraft required for research and cloud seeding experiment.

(b) This invitation for EOI is open to Indian/Foreign companies or their authorized distributors/dealers or Indian Agents or Owner who are to supply the pressurized aircraft, equipment and services and provide warranty on behalf of respective original equipment manufacturers and who have their sales and support office(s) in India.

(c) The bidder should preferably be ISO Certified or equivalent. Government-owned enterprises bidding jointly with private bidders will not be entitled for the benefits of a Government-owned enterprise.

- (d) Necessary certification from the FAA for the aircraft.
- (e) The bidder should qualify for the Non-scheduled Operations Permit (NSOP) as per mandatory requirements set by DGCA (CIVIL AVIATION REQUIREMENT, SECTION3 AIR TRANSPORT, SERIES „C“ PART III, ISSUE II, 1st JUNE 2010, File No.:AV.14027/02/2002-AT.1, Rev. 3, 31st May 2011) and obtain NSOP at the time of agreement.
- (f) The proposed aircraft should qualify for CAP-3200, as a mandatory Requirement and comply with recent DGCA rules for import to India.
- (g) The Age of the aircraft should be less than 15 years or comply with recent DGCA rules for import.
- (h) All necessary documents with respect to the above points should be supplied.
- (i) [Initially, the contract will be executed for one year](#). This may be extended further for a period of one more year based on satisfactory and acceptable performance on the same terms and conditions. However, the requirement for instrumentation may be revised as per need.

#### **4. Pre-qualification criteria for Participation**

All the below criteria should be complied with individually and collectively and should be supported by duly certified documents authenticating these aspects, without which the proposal shall not be considered.

- (a) The bidder must be a legal entity incorporated/established under the appropriate Law. The bidder should submit a duly certified **Certificate of Registration of Incorporation** authenticating the above aspects. **Details of Service/ support centers in India** may also be submitted (like address, manpower details, PAN Number, GST Number, Indian Nationalized Bank Account etc.). For services and support provided, payments will be made only in INR.
- (b) The bidder should have **at least 5 years of experience** in conducting Cloud seeding experiments and research campaigns in India or elsewhere.

#### **5. Specifications of the research cum cloud seeding aircraft are given as Enclosure I**

**Enclosure - I**

**Specification for Hiring of Instrumented Research-seeder Aircraft, along with various services**

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**(A) Technical Specifications for the proposed Research Aircraft.**

**(i) Aircraft requirement**

1. The proposed aircraft should be a twin-engine pressurized aircraft and is required to carry instrumentation (scientific and seeding), crew and scientists.
2. The aircraft should have sufficient payload to carry all the instrumentation in addition to 2 pilots and 2 scientists (with instrument racks and flareracks).
3. Additional specifications that are required are given in Table 1.
4. Aircraft with telemetry link to the operation base (Time, GPS position, and state variables (static pressure, ambient temperature to be recorded).
5. Aircraft should have racks for holding cloud seeding flares and an igniting facility for flares.

**Table 1: Specifications of aircraft.**

<b>Requirement</b>	<b>Minimum specification (at maximum gross weight)</b>
Crew	2 pilots + 2 scientists
Payload	Payload should be sufficient to cater to carry the scientific instruments specified
Cabin Volume	>6 m <sup>3</sup>
Minimum lowest operating altitude	500-1000 ft AMSL
Minimum highest operating altitude	25000 to 28000 ft AMSL with full load and full fuel. The aircraft should be able to fly above 30,000 ft when required for any special mission
Sampling Speed	60-120 m/s
Ascent rate	400 – 500 ft /min
Endurance	4 – 5 hours
Range	The range of aircraft should be sufficient enough to carry out observation and seeding operations at about 300 km from the base of operation while carrying full set of scientific equipment, scientists and crew on board.
Special requirements	It is mandatory to have all three types (Counterflow Virtual Impactor (CVI) inlet, isokinetic and reverse flow) of inlets and 2-3 instrument racks

Instruments	Certification for listed instrument inlets and related modifications
Research power	> 5kW at 28VDC > 2kW at 220VAC 60Hz > 1kW at 115VAC 60Hz
Icing conditions	Certified for flight into known icing conditions
Capability	To operate over land and ocean
Permits	The bidder must comply with DGCA requirements (CAP3200 compliance is mandatory). Proper air worthiness certificate issued by a competent authority is required. STC certification is necessary.

## **(ii) Crew requirements for aircraft**

The aircraft crews are required for the whole duration of the campaign and should consist of scientific, operational and engineering staff as follows:

- Two Pilots to fly the aircraft.
- One Aviation Maintenance Engineer with experience on the proposed aircraft type.
- One Instrumentation Engineer (IE) for online maintenance of research aircraft instrumentation. This IE will be responsible for instrumentation management, data quality efforts, including day-to-day operation of aircraft instrumentation, instrument maintenance and calibrations.

## **(iii) Mission-specific requirements**

- Aircraft crew should have participated in at least two major field campaigns.
- The proposed aircraft should be modified to carry at least 4-6 PMS canisters that are wing or fuselage mounted, or be able to accommodate mission-specific instruments as defined by IITM.
- Mission specific research flights will be conducted as designed by IITM.

## **(iv) Aircraft instrumentation requirements**

Aerosol and cloud physics instrumentation required from the bidder along with the aircraft are given in Table 2 and Table 3. Instruments available from IITM are specified in Table 4 will also be used for the campaign. Table 2 gives details of mandatory instruments to be included along with aircraft tender and bidder is required to provide pre and post calibration details for all the instruments mentioned here. Table 3 provides details of optional instruments that could be provided. Table 4 provides details of instruments to be provided by IITM.

Aircraft is required to have inlets and certification for such installations of listed instruments mentioned in Table 2 and Table 3 and Table 4.

**Table 2: List of Instrumentation to be included along with research aircraft tender**

VARIABLE	INSTRUMENT	RANGE
Gust probe measurements	High frequency turbulence	≥20 Hz
Aircraft Integrated Meteorological Measurement	Aircraft Integrated Meteorological Measurement System (AIMMS-30, Air Data	High resolution

	Probe (ADP) Integrated Inertial / GPS Carrier Phase / Central Processing Module)	
Air temperature	Rosemount temperature probe	-50°C to +50°C
Dew point temperature	Chilled mirror aircraft hygrometer	-40°C to +60°C
Logging, telemetry & event markers from aircraft to base of operations	ESD DTS (GPS)	
High resolution cloud droplet measurements	High resolution cloud droplet probe (Cloud Droplet Probe –CDP 2 with particle-by-particle data)	Particle by particle data files, size distribution
Ice Water Content	NEVZOROV PROBE	0.003 – 3 g/m3
Polarization measurements with particle probe, with particle-by-particle arrival information	Cloud, Aerosol, and Precipitation Spectrometer (CAPS- DPOL), With K-tips	Aerosol particle and cloud hydrometeor size distributions from 0.51 to 50 µm Precipitation size distributions from 15 µm to 960 µm with 15 µm resolution
Three-Dimensional Imaging of hydrometeors	3V-CPI (3-View Cloud Particle Imager)	1024 x 1024-pixel CMOS camera and data acquisition system capable of taking and recording 2.3 µm/ pixel-size digital images of cloud particles with 8-bit grey scale (256 levels) at a maximum frame rate of 400 frames/s.
Diffuser inlet installed in laminar flow outside of the aircraft boundary layer	Isokinetic aerosol inlet	> 20 lpm
Analysis of cloud residue particles, their size distribution and black carbon mass	CVI inlet	Droplet diameter cut size range 6-14 µm
For CRDS measurement	Rear facing trace gas inlet	
Nucleation mode aerosol	High flow Differential Mobility Analyzer (DMA)	0.01 to 0.5 µm or better

spectrometer		
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\*Note: Gust Probe data from aircraft should be recorded

### List of instruments from IITM

**Table 3**

VARIABLE	INSTRUMENT	RANGE
Accumulation and coarse mode aerosol spectrometer (particle by particle)	Ultra High Sensitivity Aerosol Spectrometer	0.05 to 1 $\mu\text{m}$
Cloud droplet/particle size distribution	Cloud Imaging Probe (CIP)	25 to 1550 $\mu\text{m}$
Precipitation imaging and size distribution	Precipitation Imaging Probe (PIP)	100 to 6000 $\mu\text{m}$
Liquid water content	Hotwire Liquid Water Content (LWC)	0 to 3 g/m <sup>3</sup>
Aerosol particles collection for physical and chemical analysis and for energy dispersive Xray spectrometer (EDS)/Scanning Electron Microscopy (SEM) or Transmission Electron Microscopy (TEM) measurements for size, morphology, hygroscopicity and mixing state, etc.	Cascade Impactors, for size resolved sampling	
Observations of CO, CO <sub>2</sub> , H <sub>2</sub> O, CH <sub>4</sub>	Gas analysers (for CO, CO <sub>2</sub> , H <sub>2</sub> O, CH <sub>4</sub> ) –CRDS based	(water trap required )
Chemical species of aerosols	Mini AMS	--
Cloud condensation nuclei	Dual column CCN counter	0.1 to 1.2 % SS

- Aircraft should be equipped to carry a minimum of 4-6 PMS canisters. (The bidder can bring Cloud Combination Probe (CCP) to accommodate this change).
- Bidder shall make necessary arrangements for data systems, installation of instruments, data archival, etc.
- Cloud seeding racks for flares to be provided as required. Approximately 750 ejectable Glaciogenic and 250 BIP Glaciogenic flares may be required.

**(v) Data acquisition system:**

Particle Analysis and Display System (PADS) for Data acquisition and display and racks for all instruments to be provided by the bidder.

Bidder should ensure the redundancy of the data system for any failures.

**(vi) Periodic Calibrations:**

The bidder should do periodical calibrations of all the instruments (AIMMS calibration flights to be conducted and data to be verified in colocation with radiosonde flights conducted by IITM) and provide reports to IITM.

**(vii) EXPERIENCED CREW:**

Bidder shall provide two licensed, qualified, and experienced Pilots for the Aircraft for the duration of chartered period. The bidder should provide details of all crew.

**(viii) Requirements for the Pilot of Aircraft:**

Commercial Pilot License. Should have experience of 2000 minimum total flight hours in fixed-wing airplanes. 1000 minimum total flight hours in multi-engine airplanes. 200 minimum hours of cloud measurement. 500 minimum instrument flight hours, Mountain flight experience

**Advantageous:** Formation flight approved, decompression chamber accredited, remote area survival course accredited, previous appointment as Chief/Senior Pilot, proven ability to operate in remote areas for unspecified periods.

The statement in this connection should be provided in addition to the Curriculum Vitae.

**(ix) Requirements for Aviation Maintenance Engineer:**

Aviation Maintenance Engineer should have at least 5 years' experience working on proposed aircraft type. An Aircraft and Power plant License is required.

The statement in this connection should be provided in addition to Curriculum Vitae.

**(x) Requirements for Instrumentation Engineer:**

Instrumentation Engineer should have experience equivalent to 3 years of field project time (or 6 major field campaigns) working on forward scattering probes and optical arrayprobes.

The statement in this connection should be provided in addition to Curriculum

Vitae.

**(xi) SAFETY EQUIPMENT:**

The Aircraft should be equipped with all the necessary equipment for safe flying operations in clouds, and over water bodies such as de-icing equipment, navigation equipment, communication equipment and lifesaving equipment.

**(xii) Specific Terms & Conditions:**

1. Flight hours will be considered from take-off to landing. Test flights will not be counted as flying hours.
2. Flight hours will be counted only after all initial quality checks on data and satisfactory compliance.
3. Ferry flights for maintenance and other causes not related directly to the science missions will not be counted.
4. The flight hours of a mission that was aborted due to aircraft equipment failure before completion of its science objectives will not be counted. The IITM representative will determine whether the science mission was accomplished before the forced termination of the mission.
5. Bidder shall make sure on installation, functionality of instruments, calibration and accuracy of related data.
6. Bidder shall incorporate and synchronize all data into the same format and system as desired by IITMuser.
7. The list of NOGO instruments on the aircraft are AIMMS, CCP or (CDP+CIP), PIP, PCASP/UHSAS, LWC, and CCNC and the bidder may keep well-calibrated spare instruments in case of failure of NOGO instruments in use.
8. The bidder will provide the necessary ground support if specific missions are to be conducted anywhere in the country. In case of failure to conduct flight missions due to dysfunction of NOGO instruments, flight will not be conducted. Such an event may be penalized at 0.5 % of contract value for one day and continued failure for five days will be 1% penalty and then up to a maximum of 10% of contract value.

**(xiii) IMPLEMENTATION:**

1. The delivery period of all items of the tender to be procured as indicated in the tender unless otherwise commissioning period will be 1 (one)week.
2. The technical specifications given in the schedule of requirements is indicative and the Bidders are required to quote for all the models /

makes which conform to the given specifications.

3. All Bidders are required to quote for the specifications mentioned in the schedule of requirements. The final price should be inclusive of all the components mentioned in the said configuration (except for places where it is mentioned to quote separately)
4. All Bidders are required to furnish the details of the makes and specifications of each component(s) which is going to be supplied with the equipment and should be mentioned in the technical bid.
5. All Bidders are required to specify the delivery schedules of each of the equipment to be delivered.
6. Whichever latest versions of the operating and the applications software are available at the time of delivery, as mentioned in the schedule of requirements should be pre-loaded.
7. Bidders are required to provide the technical literature of the equipment listed in the schedule of requirements such as data sheets, etc. along with the bid.
8. Bidders are required to give compliance for following scope of work and technical requirements
9. Instrument and data support (should include data corrections, documentation, periodic calibration, checks and quality data and provision for daily summaries and instrument functions, data archival and dissemination to data server) - quote separately for OEM support as mentioned in Appendix D. An instrumentation specialist may be included, and should be kept in consultation with IITM's specific requirement. (this item may be quoted separately)
10. Instruments provided by IITM will be installed by the bidder in presence of IITM scientist and engineers.

All the data collected (raw and processed), including calibration data in the entire experiment, will be the sole property of IITM.

No data will be shared for any scientific publications/reports etc. with the outside personnel involved in the missions. The outside personnel (involved) need to sign a Non-Disclosure Agreement with IITM in respect of data and derived products.

The bidder shall make arrangements for pre-inspection of the aircraft for the program by the Officials of IITM by two weeks prior to the start of the program.

## **(B) Cloud seeding Flares**

Glaciogenic (BIP and ejectable) and hygroscopic (BIP) flares should be provided as per requirement. Complete technical information on flares be provided along with bid. Flares must be certified for import to India. Successful bidder must provide test flares (custom made thin long flare tubes, minimum 5 no.) 2 months before the execution of the project. Provide detailed information, including

publications/patents, with necessary certification for safety, test results from field experiments/laboratory, usage statistics and information already available. Total number burn in place flares required for the experiment is approximately 250 BIP hygroscopic flares, 750 ejectable Glaciogenic and 250 BIP Glaciogenic flares.

#### **Duration of cloud seeding study and other factors**

Duration of the experiment is 5 months (May-June-September during year 2025 and 2026 or extendable) and depending on the availability of clouds over the radar range and over the study area, it is anticipated that 120 flying hours of observations for 120 days is required.

#### **Area of Operations**

The primary area of operation will be within a 200 km radius of Solapur, Maharashtra, where IITM has setup a C-band radar for this purpose. IITM has the discretion to decide on observations to be taken over any other location/region in India and necessary permissions to import and operate the aircraft should be undertaken by the bidder. Additionally, the performance of the service and vendor will be critically evaluated during the experiment. IITM holds the right to decide on the continuation/cancellation of the experiments at any time.

#### **C. Scientific data and instrumentation support from OEM (Quote separately)**

The main objective of this item is to ensure quality assured data from various airborne instruments and their integration as demanding for the cloud seeding evaluation.

**Following may be quoted separately (item wise) by the bidder and will be included to decide L1 bid at the stage of RFP. IITM reserves the right to include/exclude this component.**

- 1) Instrument and scientific data support (should include instrument calibrations (mid and post campaign), data corrections, documentation, periodic calibration, checks and quality data and provision for daily summaries and instrument functions, data integration, archival and dissemination to data server). This includes time sync data from all airborne instruments for research and seeder aircraft, telemetry data, cloud seeding data and related observations,etc.
- 2) An instrumentation specialist (give details with bio data, indicating minimum 5 years involvement and support given to airborne

observations relating to aerosol-cloud- precipitation studies), data integration specialist (give details with bio data minimum 3 years involvement and support given to airborne observations relating to aerosol- cloud-precipitation studies), who can ensure quality data in the field campaign onsite. Also as required from time to time for remote services in resolving any data issue after the campaign for minimum of 3 months. Specific tasks as and when given by IITM related to the instrumentation (calibration, correction of data, etc.) should be conducted periodically and reports and documentation to be prepared during the campaign.

- 3) **Training:** The bidder should provide training to IITM scientists on the instrument calibrations and data quality control onsite. Data and instrumentation workshop at IITM (1 per year).
- 4) The bidder will provide a report on data and associated products within 3months of completion of campaign.
- 5) The bidder should carry out Pre and post-calibration of instruments with OEM support and all calibration data and documentation should be provided to IITM.
- 6) The bidder should do the installation and data collection for size resolved black carbon mass concentration pBp (particle by particle), to be used with CVI inlet (Quote separately).
- (7) The bidder should provide provision for installation and data collection from DMA for the research aircraft for aerosol measurements in the size range of 0.02 to 0.5 microns. (Quote separately).
- (8) The bidder should provide a separate quote for the 3V-CPI (3-View Cloud Particle Imager) (maintenance, quality data collection, post processing and final data product) for imaging of hydrometeors.

## 2.0 EVALUATION PROCESS:

**Step1:** Interested bidders may express their willingness in writing by responding to all the points mentioned in **Section 4** and **Section 5** above with documentary evidence before the last date of submission.

Submission of the EoI does not obligate the buyer to proceed with the bidder and award the contract. The buyer reserves full right to accept or reject the EoI without assigning any reasons thereof.

**Step2:** It is mandatory to meet all the pre-qualification criteria of **Section 4** failing which bidder may be disqualified.

**Step3:** It is mandatory to run and submit results (output files, logs, modified source code) for all the benchmark programs mentioned in **Section 5** failing which bidder will be disqualified. The outputs of submitted results should be within 5% of RMSE (over Indian region) of the original output files provided with EoI. (As per the discussion with IO Step 3 as mentioned here may be deleted,

**Step4:** (IITM) shall review the proposals, verify the benchmark results and call the bidders for a presentation or for clarification if required.

**Step5:** (IITM) will short list the bidders based on details provided in response to **Section 4** and **5** above and other relevant documents.

**Step6:** The short-listed bidders will only be allowed to participate in the next stage of the tendering process [S1].

## 3.0 Instructions to Bidder

- a)** The Director IITM reserves the right to cancel the EoI/tendering process at any time without assigning any reason thereof. Director, IITM, Pune will not be held liable for any loss which may incur to any bidder because of this cancellation.
- b)** The Institute reserves the right to reject the proposal submitted by any of the bidders without assigning reasons therefore.
- c)** **Corrupt or Fraudulent Practices:**

The Buyer (i.e., IITM) requires that the bidders, suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the following are defined:

<b>Sr. No.</b>	<b>Term</b>	<b>Meaning</b>
A)	Corrupt practice	The offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution
B)	Fraudulent	a misrepresentation or omission of facts in order to influence a

	practice	procurement process or the execution of a contract
C)	Collusive practice	Means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, noncompetitive levels
D)	Coercive practice	means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract

- d)** An undertaking (self-certificate) is to be submitted that the Bidder has not been blacklisted by any Central/State Government Department/Organization.
- e)** Please note that all the pages of the EOI documents should be signed with date and seal of the Bidder.
- f)** The bidder shall complete the Bid Form (Annexure-2) as furnished in the bidding documents. These forms must be completed without any alterations to its format and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested. The Bid Form shall be submitted with the bidding documents.
- g)** The covering letter and the Proforma given in this document should be submitted on bidder's company Letter Head, along with the technical proposal.
- h)** Canvassing in any form would disqualify the bidder from further participation.
- i)** All the submitted proposals will be scrutinized on the basis of documents and information furnished by company/ industry along with the prescribed proforma mentioned elsewhere in this document.
- j)** Director, IITM, Pune may obtain clarifications wherever required from the company or from the referred client list in the profile. Proposals shall be shortlisted based upon the scrutiny, offers of those companies / industries that fulfill the prequalification criteria, presentation / interaction on proposed methodology, benchmark and other conditions as stated above.
- k)** RFP document shall be issued only to those bidders who will qualify this EOI.
- l)** The Bidders should fill the Proforma-I as attached and sign on all pages.
- m)** The Bidders should sign on each page in their response to this EOI.
- n)** To evaluate a bid, the Institute shall only use all the factors, methodologies and criteria defined in Clause No. 4 & 5. No other criteria or methodology will be used.

**o) This Institute is following and abides with the Public Procurement (Preference to Make in India), Order 2020, DIPP, MoCI Order No. P-45021/2/2017 -PP (-B.E.II) dated 16<sup>th</sup>September 2020 and subsequent amendments if any to the said order. Accordingly, preference will be given to the “Make in India products” while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of “Make in India product” along with respective documentary evidence as stipulated in the previously mentioned order in the technical bid itself. OEMs are also required to provide information on their status (viz. class I/II local supplier or non-local supplier) details.**

**p) Settlement of Disputes:**

The Purchaser / Buyer and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the EOI published.

If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser / Buyer or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has to be given in accordance with this Clause shall be finally settled by arbitration.

The dispute settlement mechanism / arbitration proceedings shall be concluded as under:

A)	In case of Dispute or difference arising between the Purchaser / Buyer and a domestic supplier relating to any matter arising out of or connected with this EOI, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996 and its subsequent amendments, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to The Secretary, Ministry of Earth Sciences, Govt. of India and if he / she is unable or unwilling to act, to the sole arbitration of some other person appointed by him / her willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties.
B)	In the case of a dispute between the Purchaser / Buyer and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International

	Trade Law) Arbitration Rules.
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- q) Governing Language: All correspondence and other documents pertaining to this EOI, which are exchanged by the parties (viz Buyer and bidders), shall be written in the English language only.
- r) The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in this EOI.
- s) The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in this EOI.
- t) The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in this EOI.
- u) Jurisdiction: The disputes, legal matters, court matters, if any shall be subject to the place from where the tender / Purchase Order / Contract is issued i.e. Pune (India).

### **3.1 EOI Documents: EOI shall contain the following documents:**

- a) In addition to the supporting documents for section 4 & 5 the following documents should be submitted.
- b) Dully filled, sealed and signed Proforma-I enclosed in the EOI document.
- c) Dully filled, sealed and signed Undertaking towards acceptance of all the T&C of the EOI (Annexure-I).
- d) Dully filled, sealed and signed Certificate for Non-blacklisting (Annexure-II)
- e) Authority letter of the bidder authorizing personnel for bidding on behalf of the firm / company. (Annexure-III)
- f) Eligibility Certificate (Annexure-IV)
- g) Undertaking from the bidder towards Earnest Money Deposit (EMD) (Annexure-V)
- h) Certificate from the bidder towards compliance with the Office Memorandum: F/No/6/18/2019-PPD dated 23rd July, 2020, issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India. (Annexure-VI)
- i) A copy of Certificate of Incorporation, Partnership Deed / Memorandum and

Articles of Association / any other equivalent document showing date and place of incorporation, as applicable, in support of eligibility criteria.

- j) Copies of PAN and GST registration certificates, as applicable.
- k) Copies of documents in support of eligibility requirements. The copies of balance sheets OR the certificate from a Chartered Accountant certifying the annual sales turnover of the bidder for the last 3 financial years
- l) Other documents necessary in support of eligibility criteria, product catalogues, brochures etc.
- m) Company profiles including organizational structure with details of ownership and evidence of incorporation.
- n) Evidence of technical & financial capability, including annual audited accounts for the past five (05) years ending March 31, 2025. Certificate from Chartered Accountant for the Net worth Criteria.
- o) Suggestions and views, if any for **Hiring Aircraft measurements of aerosols, clouds and conduct cloud seeding experimental services in India**.
- p) Submission of EOI: EOI should be submitted on <https://moes.euniwizarde.in> on or before **11 Sep 2025 up to 15:00 hrs** and should also submit sealed envelope clearly marked "**EOI for Hiring Aircraft measurements of aerosols, clouds and conduct cloud seeding experimental services in India**" to IITM, Pune".
- q) The vendor must sign and stamped the duly filled Pre-Contract Integrity Pact (Annexure-A) as a part of qualification criteria.
- r) Vendor also should submit self-declaration form on status of their supply (Class I/II local supplier, non-local supplier) together with the details of equipment qualifying for make in India consideration. [MK2]

#### 4.0 Independent Monitors

**4.1** The BUYER has appointed independent monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission. The details of Independent External Monitors are as below.

- (1) Dr. Ajay Kumar Lal ,IRAS (Retd.), DDA, HIG, Block 3A/101 A.  
Motia Khan (Near Jhandewalan Temple),  
D.B. Gupta Road, New Delhi-110015  
Email: [ajayklal@yahoo.com](mailto:ajayklal@yahoo.com),  
Mobile No: 9560712003
- (2) Shri. Pavan Kumar Jain, IDSE (Retd.)  
A-402, Shree Ganesh  
Apartments, Plot No. 12B, Sector-7 Dwarka,  
New Delhi- 110075

[Email: mespkj@gmail.com](mailto:mespkj@gmail.com), Mobile No: 9313498388

**4.2** The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

**4.3** The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.

**4.4** Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of the meetings.

**4.5** As soon as the Monitors notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.

**4.6** The BIDDER(s) accepts that the Monitors has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the Monitors, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitors shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.

**4.7** The BUYER will provide to the Monitors sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

**4.8** The Monitors will submit a written report to the designated Authority of the BUYER/Secretary in the Ministry / within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

## 5.0 Important dates:

**5.1** Last date for collection of benchmark suite: **19 Aug 2025, 1700 hrs.**

**5.2** Pre- EOI discussion meeting : **20 Aug 2025 at 11:00 hrs. (Through Online/Hybrid)**

**5.3** Last date of EOI submission : **11 Sep 2025 up to 15:00 hrs.**

**5.4** Opening of EOI documents : **11 Sep 2025 at 15:30 hrs.**

Note: Date of pre-submission discussion meeting is scheduled on **20 Aug 2025 at 11:00 hrs.** through VC/hybrid mode, Pune. Registered participants should send request for VC link on email id [psu.iitm@tropmet.res.in](mailto:psu.iitm@tropmet.res.in) on or before **19 Aug 2025 up to 1700 Hrs.** Queries if any, on this EOI may be submitted in writing on or before **19 Aug 2025 up to 1700 hrs.**

## 6.0 Addressed to

The Director,  
Indian Institute of Tropical Meteorology,  
Dr. Homi Bhabha Road, Pashan,  
Pune 411 008, Maharashtra, India  
Phone : +91-20-2590-4200  
Fax : +91-20-2586-5142

**Note:** For any clarification, the bidders are recommended contacting following authorized officials: -

Name of Official		Contact No.
1)	Dr. Mahen Konwar, Sc-E (For technical clarification)	020-25904489
2)	Smt. Yogita Kad, Administrative Officer (PSU) (For any other clarification)	020-25904483

**PROFOMA I**

**INDIAN INSTITUTE OF TROPICAL METEOROLOGY**

**(AUTONOMOUS INSTITUTE, MINISTRY OF EARTH SCIENCES, GOVERNMENT OF INDIA)**

<b>1. Particulars of Applicant Company</b>					
Name of the Company					
Registration No.					
Address				STD Code	
				Tel. No.1	
				Tel. No.2	
				Fax No.	
	City			Pin	
State			E-mail *		
Website Address					
Type of company	Government		Public Sector Undertaking	Private Limited	
	Partnership		Public Limited	Proprietorship	

\* Email sent on this address will be treated as valid communication. Add a separate sheet, if necessary

<b>2. Particulars of Managing Director/CEO/Proprietor/Managing Partner</b>					
Name & Designation	Address			STD Code	
				Tel. No.1	
				Tel. No.2	
				Fax No.	
	City			Mobile	
	State		Pin	E-mail	

<b>3. Particulars of Contact Persons</b>					
S No.	Name & Designation	Address		Numbers	
1.				STD Code	
				Tel. No.	
				Fax No.	
		City:		Mobile	
		Pin Code:		E-mail	

S No.	Name & Designation	Address	Numbers	
2.			STD Code	
			Tel. No.	
			Fax No.	
		City:	Mobile	
		Pin Code:	E-mail	
3.			STD Code	
			Tel. No.	
			Fax No.	
		City: Pin Code:	Mobile E-mail	

#### 4. Location of Offices in India

S No.	Name of Head	Address	Numbers	
1.			STD Code	
			Tel. No.	
			Fax No.	
		City:	Mobile	
		Pin Code:	E-mail	
2.			STD Code	
			Tel. No.	
			Fax No.	
		City:	Mobile	
		Pin Code:	E-mail	
3.			STD Code	
			Tel. No.	
			Fax No.	
		City:	Mobile	
		Pin Code:	E-mail	

#### 5. Turnover for last three years (All amounts in Indian Rupees and in Crores only)

Year	Period (Month/Year) From To	Total Turnover of the Company	Turnover from Hiring of Aircraft
2022-2023			
2023-2024			
2024-2025			

6. Certifications	Yes/No (Indicate the level wherever it is applicable)	Valid up to

7. Services provided for Hiring of Aircraft	Site	Details & period

Add separate sheet, if necessary

8. Details of sites/customers where similar solutions deployed						
Sr. no	Name & Address of Customer	Contact Person & Tel.No	Hiring of Aircraft details	Value in Crores (optional)	Applications being used (optional)	Date of Installation
<b>8.1 Projects successfully completed during last 3 years</b>						
1.						
2.						
3.						
<b>8.2 Projects successfully supported for minimum 3 years</b>						
1.						
2.						
3.						

Add a separate sheet, if necessary

Note: Attach explanatory note for each project in not more than two pages.

#### 9.0 Any other information that Applicant Company wants to give

Add a separate sheet, if necessary

10. List of Enclosures	
(i)	
(ii)	
(iii)	

### **Undertaking**

This is to certify that I have gone through all the pages of the document. The applicant company undertakes to abide by all the terms & conditions mentioned in the EOI tender document. It is further certified that the information furnished in the EOI documents is true and correct.

In the Event of any of above information found to be false, we understand that own EOI proposal can be rejected and not considered.

Date:

Signatures:

Place:

Name:

Seal

Designation:

**Undertaking**

It is hereby undertake that M/s.\_\_\_\_\_ has examined the EOI and unconditionally accepts the terms and conditions set in the EOI published.

We confirm that the information, documentation submitted in response to the EOI is true, accurate, verifiable and complete.

We understand and agree to comply that on verification, if any of the information, documentation submitted in response to the EOI is found to be misleading or false, we are liable to be rejected from the tendering process.

**Authorized Signatory**

**Name:**\_\_\_\_\_

**Designation:**\_\_\_\_\_

Seal:

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**Non-Black listing Self Certificate**

This is to certify that M/s. \_\_\_\_\_ has not been blacklisted by any Central / State Government Department / organization in last 3 years.

**Authorized Signatory**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

Seal :

**Annexure-III**

**Certificate of Authorized Signatory**

This is to certify that M/s. \_\_\_\_\_ nominates Mr. \_\_\_\_\_, (Designation : \_\_\_\_\_) who has signed this response to the EOI is authorized to do so and bind the company by authority of its board / governing body. The signature of the authorized signatory is appended below in presence of me. (Name and Sign of Authorized Signatory)

**Authorized Signatory**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

Seal :

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**Annexure-IV**

**Eligibility Certificate**

This is to certify that we are not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids / Tender No. \_\_\_\_\_ dated \_\_\_\_\_.

**Authorized Signatory**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

Seal :

**Undertaking for submission of EMD**

It is hereby M/s. \_\_\_\_\_ accept that if we withdraw or modify our Bid / response to the EOI during the period of its validity, or if we are awarded the contract and we fail to sign the contract, or to submit a performance security before the deadline defined in the EOI / request for bids document, We will be suspended for the period of one year for all the future tenders of MoES.

**Authorized Signatory**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

Seal :

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**Annexure-VI**

**Certificate of Compliance**

It is hereby confirmed that M/s. \_\_\_\_\_ comply with the Office Memorandum: F/No/6/18/2019-PPD dated 23rd July, 2020, issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, Government of India. We understand and agree that if the compliance provided by us found to be false, this will be a ground for immediate termination and further legal action in accordance with law.

**Authorized Signatory**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

Seal :

**Format of the Integrity Pact**

**PRE-CONTRACT INTEGRITY PACT**

**General**

This pre-bid-contract Agreement (hereinafter called the Integrity Pact) is made on \_\_\_\_\_ day of the month of \_\_\_\_\_ 2025, between, on one hand, the **Director IITM, Pune** acting through Shri \_\_\_\_\_, Designation of the officer, Ministry/Department, Government of Indian (hereinafter called the 'BUYER", which expression shall mean and include, unless the context otherwise required, his successors in office and assigns) of the First Part and M/s \_\_\_\_\_ represented by Shri \_\_\_\_\_, Chief Executive Officer (hereinafter called the 'BIDDER/Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure (Name of the Stores/Equipment/Item) and the BIDDER /Seller is willing to offer/has offered the stores and

WHEREAS the BIDER is private company/public company/Government undertaking/partnership/registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Ministry/Department of the Government of India/PSU performing its functions on behalf of the President of India

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERs to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto agree into this Integrity Pact and agree as follows: -

**Commitments of the BUYER**

- 1.1 The BUYERE undertakes that no official of the BUYER, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide and such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.
- 1.3 All the officials of the Buyer will report the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the BUYER with full and verifiable facts and the same is prima facie found to be correct by the BUYER, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceeding, or any other action as deemed fit, including criminal proceedings may be initiated by the BUYER and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted the BUYER the proceedings under the contract would not be stalled.

#### **Commitments of BIDDERS**

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following: -
  - 3.1 The BIDDER will not offer directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the BUYER, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration Reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement

to any official of the BUYER or otherwise in procuring the Contract or forbearing to do so having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favor or disfavor to any person in relation to the contract or any other contract with the Government.

- 3.3\* BIDDERs shall disclose the name and address of agents and representatives and Indian BIDDERs shall disclose their foreign principals or associates.
- 3.4\* BIDDERs shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5\* The BIDDER further confirms and declares to the BUYER that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity of the defense stores and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6\* The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the BUYER or their family members, agents, brokers or any other intermediaries in connection with the contract and the details if services agree upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness, and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means, and illegal activities.
- 3.9 The BIDDERS shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the BUYER as part of the business relationship, regarding plans, technical proposals, and business details, including

information contains in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.

- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the action mentioned above.
- 3.12 If BIDDER or any employee of the BIDDER or person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the BUYER, or alternatively, if any relative of an officer of the BUYER has financially interested/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filling of tender.

The term 'relative' for this purpose would be as define in Section 6 of the Companies Act 1956.

- 3.13 The BIDDER shall not lend to or borrow any money from or entire into any monetary dealings or transactions, directly or indirectly, with any employee of the BUYER.
- 3.14 Bidders shall not pass any information provided by the buyer as a part of business relationships to others and not commit any offence under the Prevention of Corruption Act/Indian Penal Code.

#### **4. Previous Transgression**

- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process.

4.2 The BIDDER agrees that if it makes incorrect statement on this subject BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

## 5. **Earnest Money (Security Deposit)**

5.1 While submitting commercial bid, the Bidder shall deposit an amount \_\_\_\_\_ (to be specified in RFP) as Earnest Money/ Security Deposit, with the BUYER through any of the following instruments:

- i) Bank Draft or a Pay Order in favor of \_\_\_\_\_
- ii) A confirmed guaranteed by an Indian Nationalized Bank. Promising payment of the guaranteed sum to the BUYER on demand within three working days without any demur whatsoever and without seeking any reason whatsoever. The demand for payment by the BUYER shall be treated as conclusion proof of payment.
- iii) Any other mode or through any other instruments (to be specified in the RFP).

5.2 The Earnest Money/ Security Deposit shall be valid up to a period of six months or the complete conclusion of the contractual obligation to the complete satisfaction of the both the BIDDER and the BUYER, including warranty period, whichever is later.

5.3 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining to performance Bond in the Purchase Contract that the provisions of Sanctions for Violation shall be applicable for forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

5.4 No interest shall be payable by the BUYER to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

## 6. **Sanction for Violations**

6.1 Any breach of the previously provisions by the BIDDER or any on employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the BUYER to take all or any one of the following actions, wherever required:

- i) To immediately call off the pre contract negotiations without assigning any

reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

- ii) The Earnest Money (in pre-contract stage) and/or Security Deposit/ Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the BUYER and the BUYER shall not be required to assign any reason thereof.
- iii) To immediately cancel the contract. If already signed, without giving any compensation to the BIDDER.
- iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereof at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the bidder from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.
- vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the BUYER resulting from such cancellation/rescission and the BUYER shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
- vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the BUYER.
- viii) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
- ix) In case where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.
- x) Forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

6.2 The BUYER will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

6.3 The decision of the BUYER to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

## **7. Full Clause**

7.1 The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the BIDDER to any other Ministry/Department of the Government or India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in cost would be refunded by the BIDDER to the BUYER, if the contract has already been concluded.

## **8. Independent Monitors**

8.1 The BUYER has appointed independent monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission. The details of Independent External Monitors are as below.

(1) Dr. Ajay Kumar Lal ,IRAS (Retd.), DDA, HIG,  
Block 3A/101 A.  
Motia Khan (Near Jhandewalan Temple),  
D.B. Gupta Road, New Delhi-110015  
[Email: ajayklal@yahoo.com](mailto:ajayklal@yahoo.com),  
Mobile No: 9560712003

(2) Shri. Pavan Kumar Jain, IDSE (Retd.)  
A-402, Shree Ganesh  
Apartments, Plot No. 12B, Sector-7 Dwarka,  
New Delhi- 110075  
[Email: mespkj@gmail.com](mailto:mespkj@gmail.com), Mobile No: 9313498388

8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

8.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.

- 8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of the meetings.
- 8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER.
- 8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the BUYER including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 8.7 The BUYER will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
- 8.8 The Monitor will submit a written report to the designated Authority of the BUYER/Secretary in the Department/ within 8 to 10 weeks from the date of reference or intimation to him by the BUYER / BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

## **9. Facilitation of Investigation**

In case of any allegation of violation of any provisions of this Pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

## **10. Law and Place of Jurisdiction**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

## **11. Other Legal Actions**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

## **12. Validity**

- 12.1 The validity of this Integrity Pact shall be from date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both the BUYER and the BIDDER/Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 12.2 Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

**13. The parties hereby sign this Integrity Pact at \_\_\_\_\_ on**

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### **BUYER**

Name of the Officer  
Officer

Designation

Dept./Ministry/PSU

Seal

Witness

### **BIDDER**

Name of the Officer: Chief Executive  
Officer

Designation:

Seal

Witness

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

1.

2.

\*Provisions of these clauses would need to be amended/deleted in line with the policy of the BUYER in regard to involvement of Indian agents of foreign suppliers.

### **Instruction to Bidders**

E-Procurement is the complete process of e-Tendering from publishing of tenders online, inviting online bids, evaluation and award of contract using the system. You may keep a watch of the tenders floated under <https://moes.euniwizarde.in>

These will invite for online Bids. Bidder Enrolment can be done using "Online Bidder Enrolment".

The instructions given below are meant to assist the bidders in registering on the e-tender Portal, and submitting their bid online on <https://moes.euniwizarde.in> the e-tendering portal as per uploaded bid.

More information useful for submitting online bids on may be obtained at:  
<https://moes.euniwizarde.in>

#### **GUIDELINES FOR REGISTRATION:**

1. Bidders are required to enrol on the e-Procurement Portal with clicking on the link "Online Bidder Enrolment " on the e-tender Portal by paying the Registration fee of Rs.2000/-+Applicable GST.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile. Or bidders can contact our help desk for getting the DSC.
5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.

7. The scanned copies of all original documents should be uploaded in pdf format on portal <https://moes.euniwizarde.com>

8. After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id [ewizardhelpdesk@gmail.com](mailto:ewizardhelpdesk@gmail.com) for activation of your account.

#### SEARCHING FOR TENDER DOCUMENTS:

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.
2. Once the bidders have selected the tenders they are interested in, you can pay the form fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through e-mail in case there is any corrigendum issued to the tender document.

#### PREPARATION OF BIDS:

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Colour option which helps in reducing size of the scanned document.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.

5. These documents may be directly submitted from the “My Documents” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### SUBMISSION OF BIDS

1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by Railtel.

3. Bidder has to select the payment option as “e-payment” to pay the tender fee / EMD as applicable and enter details of the instrument.

4. In case of BG bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official before the Online Opening of Financial Bid. In case of non-receipt of BG amount in original by the said time, the uploaded bid will be summarily rejected.

5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white Colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

6. The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the

bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

8. Upon the successful and timely submission of bid click “Complete” (i.e. after Clicking “Submit” in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.

9. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

For any clarification in using <https://moes.euniwizarde.in>

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.

Please feel free to contact (as given below) for any query related to e-tendering

**Mr. Shubhankar- +91 8076208996; Mr Awesh - 91 9205898224, Mr. Abhishek Kumar - 8210817180**

Mail id: - [ewizardhelpdesk@gmail.com](mailto:ewizardhelpdesk@gmail.com)