



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

शिक्षा मंत्रालय, भारत सरकार द्वारा स्थापित
सैक्टर 81, नॉलेज सिटी, प. ओ. मनोली, एस. ए. एस. नगर, मोहाली, पंजाब 140306
INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI
(Established by Ministry of Education, Govt. of India)
Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab
PAN No. - AAAAI1781K GSTIN – 03AAAAI1781K2ZS

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CPPP/Institute Website

IISERM (1556)22/23-Pur

Dated: 29th June 2022

ई - निविदा आमंत्रण सूचना

NOTICE INVITING E-TENDER

आरजीबी, एलआईडीएआर और थर्मल सेंसर से लैस व्यावसायिक सर्वेक्षण ग्रेड मानव रहित हवाई वाहन (यूएवी / ड्रोन) की आपूर्ति, स्थापना, कमीशनिंग, प्रदर्शन और प्रशिक्षण और उड़ान योजना और डेटा प्रोसेसिंग के लिए समर्पित सॉफ्टवेयर के लिए दो बोली प्रणाली में निदेशक, आईआईएसईआर मोहाली की ओर से ऑनलाइन निविदाएं आमंत्रित की जाती हैं। तकनीकी विनिर्देश और नीचे दिए गए विवरण के अनुसार और सीपीपीपी पर मूल निर्माता/आपूर्तिकर्ता से बीओक्यू सूची अर्थात् <https://eprocure.gov.in/eprocure/app> निविदा दस्तावेज ई-प्रोक्योरमेंट पोर्टल की वेबसाइट <https://eprocure.gov.in/eprocure/app> और संस्थान की वेबसाइट www.iisermohali.ac.in से डाउनलोड किए जा सकते हैं।

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply, Installation, Commissioning, Demonstration and Training of Professional Survey Grade Unmanned Aerial Vehicle (UAV/Drone) Equipped with RGB, LIDAR and Thermal sensors and dedicated software for flight plan and data processing** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website www.iisermohali.ac.in.

सहायक कुलसचिव (क्रय तथा भंडार)

Assistant Registrar (Stores & Purchase)

NOTE: This is a domestic Tender according to the DPIIT Order dated 15/07/2017 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. The bidder required to declare on the letter head the percentage of Local content for the quoted instrument and submit with the Technical Bid. Bidder should also give details of the location(s) at which the local value addition is made.



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ई - निविदा आमंत्रण सूचना / E-TENDER NOTICE

Tender Ref.- IISERM(1556)22/23-Pur

Dated : 29th June 2022

Critical Date Sections

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	29 th June 2022	6:00pm
2.	Tender Document download start Date & Time	29 th June 2022	6:00pm
3.	Bid Submission start Date & Time	29 th June 2022	6:00pm
4.	Bid Submission End date and Time	28 th July 2022	Upto 11:00am
5.	Tender opening Date and Time	29 th July 2022	At 11:30am

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for following item(s) from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website www.iisermohali.ac.in. Online Tender fee of Rs 590/- (Non-refundable) should be submitted by bidder in favour of IISER Mohali through Online mode in Institute Account (Canara Bank Saving Account Number 4790101001912 and IFSC Code CNRB0004790). However, scanned copy of the Tender fee/UTR copy should be uploaded on website along with technical bid. **Micro & MSME/NSIC and Firms registered and the firms registered with concerned Ministries/ Departments, the bidders are exempted from payment of Tender Fee as per GOI notifications/GFR (2017) and Ministry of Finance OM No. F.9/4/2020-PPD dated 12 November 2020.**

Bidders will also be required to execute bond/undertaking Bid Security Declaration Form attached as ANNEXURE-I for availing exemption to submit Tender Fee.

ITEM WISE DETAILS

Sr. No.	Description	Qty. (in units)
1.	<p>Supply, Installation, Commissioning, Demonstration and Training of Professional Survey Grade Unmanned Aerial Vehicle (UAV/Drone) Equipped with RGB, LiDAR, and Thermal Sensors and dedicated software for flight plan and data processing.</p> <p><u>TECHNICAL SPECIFICATIONS:</u> As per ANNEXURE III</p> <p># The attached ANNEXURE - Column-4 (Compliance / Deviation Statement) must be filled by the bidder.</p>	01 Set

A) IMPORTANT NOTES:-

- I. **This is a domestic Tender according to the DPIIT Order dated 15/07/2017 and subsequent amendments to the order for Public Procurement Preference & PROVISION FOR LOCAL SUPPLIERS TOWARDS PREFERENCE TO MAKE IN INDIA. Bidders should also give details of Localities(s) ;at which the local value addition is made. Bidders are requested to furnish the declaration regarding local content/locations in Annexure II through CPPP portal.**
- II. **Restriction under Rule 144 (xi) of the General Financial Rules (GFRs). 2017 under sub clause 3, in terms of DOE, MoF No. F.18/37/2020-PPD dated: 8th February, 2021:**
 - (i) A bidder is permitted to procure raw material, components, sub-assemblies etc. from the vendors from countries which shares a land border with India. Such vendors will not be required to be registered with the Competent Authority, as it is not regarded as "sub-contracting".
 - (ii) However, in case a bidder has proposed to supply finished goods procured directly/indirectly from the vendors from the countries sharing land border with India, such vendor will be required to be registered with the Competent Authority.
- III. **The online updated Price BOO is in INR format. Bids are invited in INR only against domestic tender.**
- IV. **The Online bids should be submitted directly by the original manufacturer/supplier/OEM. the OEM is required to furnish certificate to this effect. If quotation is submitted/filled by any representative/ agent/dealer then they must upload a Authorization Authority certificate from the principal company/OEM.**
- V. **All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.**
- VI. **Auto-extension of last date for E-Tenders has been activated by CPP Portal which has participation 2 bids or less.**
- VII. **Warranty: Minimum one year, if not mentioned above.**

B) SUBMISSION OF TENDER

- I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal

i.e. <https://eprocure.gov.in/eprocure/app> only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and Annexure I (Bid Securing Declaration Form). Late tenders will not be accepted.

- II. The online bids shall be opened at the office of the Assistant Registrar (S&P), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. **The bidder shall upload the tender documents/NIT duly filled in and stamped by the authorized signatory on each and every page along with all necessary Annexures as per NIT. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.**
- IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. **Also bidders applying against “MSME/NSIC Certificate” issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for “supply & installation of Desktop” the certificate should be issued for activity/area of “Computer supply and services activities etc” otherwise bid will be REJECTED without notice.**
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

C) INSTRUCTIONS

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected. Institute may opt for demonstration of product/quoted items as per NIT.
2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.
3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Conditional tenders will be summarily rejected.
4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
5. THE INSTITUTE IS EXEMPTED FROM CUSTOM DUTY under notification no- TU/V/RG-CDE(1062)/2016 CUSTOM DT. 12.10.2018.
6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of GST should be clearly indicated included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.
7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.
8. Bidder/s quoting in currency other than **Indian Rupee (INR)** should explicitly mention the currency in which tender quoted wherever applicable in Technical Bid along the tender documents.
9. The delivery period should be specifically stated. Earlier delivery will be preferred.

10. **The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets & literature of the article quoted** and also should enclose **Technical Compliance Sheet**. The name of the manufactures and country of manufacture should also invariably be stated. In the absence of these particulars and documents, the quotation is liable for rejection. Tenders not accompanied by detailed information as required, are liable to be rejected.
11. If any information furnished by the bidder is, at any stage found to be incorrect, false or fabricated, the Institute/purchaser shall have the absolute right to forfeit the security deposits, in addition to cancellation of contract, forfeiting the warranty/performance Guarantees and other action in accordance with law, such as black-listing, risk & cost etc.
12. Validity of offer: 90 days.
13. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/Performance Bank Guarantee @ 3% of the value of supply order, in terms of *Ministry of Finance, DoE, GOI, OM. No. F.9/42020-PPD dated 12-11-2020 and extension of vide circular no. F.9/4/2020-PPD dated: 30th December 2021* as per norms may be sought from the firms.
14. The right to reject all or any of the quotation and to split up the requirements for itemized L-1 or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website <https://eprocure.gov.in/eprocure/app> and <http://www.iisermohali.ac.in>
15. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

सहायक कुलसचिव (क्रय तथा भंडार)
Assistant Registrar (Stores & Purchase)

ANNEXURE-I

Bid Securing Declaration Form

Date: _____ E-Tender No. _____ E-Tender ID _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or

b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders. I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)

in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

PS: *Furnish the above in original stationary/letter head with signed and sealed.*

ANNEXURE-II

SELF DECLARATION

[For Local Content of Products, Services or Works]

File No.

To,

The Director

Indian Institute of Science Education and Research
(Established by Ministry of Education, Govt. of India)
Sector-81, Knowledge city, PO-Manauli,
SAS Nagar Mohali-140306, Punjab

1. With reference to Order no P.-45021/2/2017 PP (BE-II) dated 04.06.2020 and No. P-45021/2/2017-PP(BE-II) dated 16-09-2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India, we fall under the following category of supplier (please tick the correct category) for the items for which this tender has been floated and being bided.

- ☐ Class I local supplier – has local content equal to more than 50%. Local contents added at _____ (name of location).
- ☐ Class II local supplier – has local content more than 20% but less than 50%. Local contents added at _____ (name of location).
- ☐ Non-local supplier – has local content less than or equal to 20%. Local contents added at _____ (name of location).

2. We are solely responsible for the abovementioned declaration in respect of category of supplier. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which we may can be debarred for up to 2 years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Signature & seal of the company

Name and address of the organization

.....
.....
.....

Date:

Note: In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier' / 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

ANNEXURE–III

{Column-4 (Compliance / Deviation Statement) must be filled by the bidder.}

(i) Technical Specification of Unmanned Aerial Vehicle (Drone) :

S. No	Parameter	Required Specification	#Compliance /Deviation Statement (To be filled by Bidder)
1	UAV/Drone type	Vertical Take-off and Landing (VTOL) (Micro/Small Category) – Compliant to Professional Grade Surveying and Mapping.	
2	Takeoff weight	6 Kg or more	
3	Flight Height above Ground Level	At least 120 m AGL with terrain tracing capability. 4000 m ASL and more	
4	Endurance	40 Minutes or More	
5	Gimbaled Sensor Housing with 3 axis stabilization support, and configuration	Single/Dual downward and upward	
6	Sensor support in UAV	Should be able to support survey grade RGB, LiDAR and Thermal sensor/camera systems	
7	Operating Temperature	-10 ° to +50° C	
8	IP rating	45 or higher	
9	Max speed	15 m/s or higher	
10	RTK Positioning Accuracy, and Hovering Accuracy	Vertical: ±0.1 m (RTK enabled) Horizontal: ±0.1 m (RTK enabled)	
11	GNSS	GPS+GLONASS	
12	Wind speed limit during operation	Minimum 8 m/s or higher	
13	Max Wind Resistance	12 m/s	
14	Max Transmitting Distance	10 km or higher	
15	Obstacle Sensing Range	0.1 – 8 m	
16	Emergency Recovery Mode	Ability to return back to home with landing accuracy of 1 m or better in case of communication failure, low battery/power and high wind (more than operational wind speed), obstacle sensing, and during rainy weather.	
17	Battery Type	LiPo, Swappable	
18	Storage	64Gb or Higher	
19	Warranty & CMC	1 Year (mandatory) + 2-year extendable warranty + 3 Year optional CMC plan post-warranty which includes replacements of parts and repair of the UAV must be quoted. the yearly rates	

		quoted for the 3- year CMC plan will be frozen and accepted by OEM/vendor in case IISER Mohali opts for additional CMC coverage in future, if additional funds become available.	
20	Security	128 bit encryption or higher	
21	Flight planning, control software	A navigation software package that enables the user to plan and perform complex flight patterns for different surveying applications and should allow the combination of telemetry data with the recorded images/data. The software should feature the functions that enable to plan, fly and prepare the data for post-processing for different applications. Package should include: Flight plan editor Flight book Photo tagger Database Should permit use of 3D data for flight planning in hilly/rolling terrain. Real time tracking Real time image count display	
22	Charging station for batteries	Portable; Dual battery charging station	
23	Additional battery units	LiPo, Swappable – 2 Nos.	
24	Insurance	Comprehensive insurance of 1 year for UAV and its payloads for accidents (extendable to 3 Years): IISER Mohali opts for insurance coverage, if additional funds become available.	

(ii) Technical specification for LiDAR sensor:

S. No	Parameter	Required Specification	#Compliance /Deviation Statement (to be filled by bidder)
1	Detection Range	100 m and more	
2	Point Rate	240,000 or higher points / second	
3	Minimum Returns Supported	2	
4	Ranging Accuracy	5 cm at 100 m minimum	
5	Real-time Point Cloud Coloring	Compatible with an RGB camera	
6	Laser safety	Class 1	
7	Weight	Less than 3 kg	
8	Gimbal	Detachable, Angular Vibration Range of $\pm 0.01^\circ$	
9	Operating Temperature Range	-10° to 50° C	
10	Warranty & CMC	1 year (mandatory) + 2-year extendable warranty +	

		3 Year CMC plan post-warranty which includes replacements of parts and repair of the LiDAR sensor must be quoted. the yearly rates quoted for the 3- year CMC plan will be frozen and accepted by OEM/vendor in case IISER Mohali opts for additional CMC coverage in future, if additional funds become available.	
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(iii) Technical specification for RGB sensor:

S. No	Parameter	Required Specification	#Compliance /Deviation Statement (to be filled by bidder)
1	Pixels	20 MP or higher	
2	Weight	Less than 2 Kg	
3	Supported Image format	JPEG/TIFF	
4	Supported Video Format	MP4	
5	Gimbal	Detachable, Angular Vibration Range of $\pm 0.01^\circ$	
6	Warranty	1 year (mandatory) + 2-year extendable warranty + 3 Year optional CMC plan post-warranty which includes replacements of parts and repair of the RGB camera must be quoted. the yearly rates quoted for the 3- year CMC plan will be frozen and accepted by OEM/vendor in case IISER Mohali opts for additional CMC coverage in future, if additional funds become available.	

(iv) Technical specification for Thermal sensor:

S. No	Parameter	Required Specification	#Compliance /Deviation Statement (to be filled by bidder)
1	Sensor Type	VOx Microbolometer	
2	Radiometric image resolution	640×512 px or higher	
3	Spectral Band	7.5 –14 μm	
4	Sensitivity	Less than 85mK @ f/1.0	
5	Scene Range	-20 °C to 100 °C	
6	Gimbal	Detachable, Angular Vibration Range of $\pm 0.01^\circ$	
7	Weight	Less than 2 kg	
8	Operating Temperature Range	-10° to 50° C	
9	Output format	Image format with embedded temperature information	
10	Warranty & CMC	1 year (mandatory) + 2-year extendable warranty + 3 Year optional CMC plan post-	

		warranty which includes replacements of parts and repair of the Thermal sensor must be quoted. The yearly rates quoted for the 3- year CMC plan will be frozen and accepted by OEM/vendor in case IISER Mohali opts for additional CMC coverage in future, if additional funds become available.	
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(v) Additional requirements:

1. Registration of UAV as per DGCA guidelines.
2. Software for post-processing LiDAR, RGB and Thermal images.
3. Mobile base station for RTK.
4. On-site demonstration and training of UAV with payloads and software has to be provided by the vendor during the installation stage.

Note: Vendors will be expected to demonstrate all features in compliance with the mentioned specifications. Demonstration and training site may be mutually decided, based on site suitability for UAV operation.

(vi) Evaluation Criteria:

Evaluation shall be done on “Overall – L1” based on:

Total landed cost to IISER Mohali on equipment (all items included) with standard warranty + 2-year extended warranty + insurance + 3-year CMC Plan.

IISER Mohali reserves the right to strike off items in the following sequence, and re-determine L1 in case all quotations exceed the sanctioned amount.

- (i) 3-Year CMC plan.
- (ii) Insurance.
- (iii) Extended warranty.