Punjab Remote Sensing Centre (PRSC)

INVITATION OF E-TENDER

FOR

SUPPLY,INSTALLATION,COMMISSIONING,TESTING & TRAINING OF MULTISPECTRAL DRONE WITH CAMERA,CONTROL SYSTEM AND PROCESSING SOFTWARE

Document Download/Start, Bid: 06-03-2024 11.00 AM

Submission Start Date

Date & Time of Pre-Bid Meeting : 13-03-2024 11.00 AM

Document Download/Sale End, Bid: 26-03-2024 11.00 AM

Submission Last Date

Date & Time of Opening of Technical : 26-03-2024 3.00 PM

Bid

Date & Time of Opening of Financial : To be notified later to technically

Bid eligible bidder



Punjab Remote Sensing Centre (PRSC)

PAU Campus, Near Kitchlu Nagar Block 'F' end, Ludhiana, Punjab (India) – 141004 Phone: 91-161-2303484

Email: contact@prsc.gov.in

Punjab Remote Sensing Centre (PRSC), A Government of Punjab Enterprise, is the apex body in the State for all Remote Sensing (RS), Geographic Information System (GIS) and Global Positioning System (GPS) related works. It is designated as a Nodal Agency by the Govt. of Punjab for geospatial needs of the State and acts as the centralized hub for the geo-spatial data to all the user departments. It is situated in PAU Campus, towards Kitchlu Nagar, Block F End.

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NOTICE INVITING E-TENDER

Punjab Remote Sensing Centre (PRSC) PAU Campus, Ludhiana - 141004

PRSC, Ludhiana intends to invite bids through E-Tendering under Two Bid System i.e. Technical Bid and Financial Bid for Supply, Installation, Commissioning, Testing & Training of multispectral drone with camera, control system and processing software on e-

Procurement portal of the Government of Punjab i.e. https://eproc.punjab.gov.in

Sr	Particulars	Date and time of	Tender Fee	EMD (Rs.)
No		Submission of	in Rs.	
		Bids	(Non-	
			Refundable)	
1	SUPPLY,INSTALLATION,COMMISSION	From 06-03-24	2,000	100,000
	ING, TESTING & TRAINING OF	11.00 AM		
	MULTISPECTRAL DRONE, WITH	to 26-03-24 till		
	CAMERA, CONTROL SYSTEM AND	11.00 AM		
	PROCESSING SOFTWARE.			

The detailed terms & conditions of the tender can be downloaded from e-Procurement portal of the Government of Punjab i.e.https://eproc.punjab.gov.in or PRSC website www.prsc.gov.in

Note: The tenders will be accepted through e-Tendering only. Any further communications will be done through e-Tendering site in the form of addendum/ corrigendum.

Director Punjab Remote Sensing Centre

KEY DATES

1	Date of Publication of Notice Inviting Tender	06-03-2024
2	Document Download/Start Date	06-03-2024 11.00 AM
3	Bid Submission Start Date	06-03-2024 11.00 AM
4	Date & Time of Pre-Bid Meeting	13-03-2024 11.00 AM
5	Document Download/Sale End Date	26-03-2024 11.00 AM
6	Bid Submission End Date	26-03-2024 11.00 AM
7	Date & Time of Opening of Technical Bid	26-03-2024 3.00 PM
8	Date & Time of Opening of Financial Bid	To be notified later to technically eligible bidder
9	Bid Validity	90 Days from the last date of submission of Bids.

INVITATION OF BIDS

From:	
	Director,
	Punjab Remote Sensing Centre,
	Ludhiana
To	

Dear Bidder

Director Punjab Remote Sensing Centre invites bids from Indian bidders through E-Tendering under Two Bid System i.e. Technical Bid and Financial Bid for Supply, Installation, Commissioning, Testing & Training of multispectral drone with camera, control system and and processing software.

1. Tender Document Contents:

- Notice Inviting Tender
- Key Dates
- Invitation of Bids
- Terms & Conditions
- Technical Qualifications
- Other Terms & Conditions
- Bidder Profile Sheet (Annexure-A)
- Technical specifications and requirements (Annexure B- B.1 to B.4)
- Performa of Indemnity (Annexure-C)
- Checklist Performa (Annexure-D)
- **2. Tender Fee:** A non-refundable Tender Fee of Rs. 2000/- (Rs. Two Thousand Only) to be paid through the online payment gateway of the e-portal at the time of submission of the tender.
- **3. Earnest Money Deposit:** Bidders have to pay Earnest Money as per clause(i)of the Terms &conditions.
- **4. Submission of Tender:** The tender must be submitted through E-procurement portal of Government of Punjab i.e. **https://eproc.punjab.gov.in** . All the documents as required under this Tender Document along with BOQ (Financial Bid) must be uploaded at the time of submission of bid.
- **5. Evaluation and Award of Tender:** The Technical bids submitted by bidders will be opened first and evaluated by committee and price bid of only technically eligible bidders shall be opened. The date and time of opening of price bid shall be intimated later to the technically eligible bidders through E-Tendering portal.

Note: Director, PRSC reserves the right to accept or reject/cancel the tender without assigning any reason.

Director, Punjab Remote Sensing Centre **TERMS** AND CONDITIONS OF E-TENDER **FOR** SUPPLY, INSTALLATION, COMMISSIONING, TESTING & **TRAINING OF MULTISPECTRAL** DRONE, WITH **CAMERA, CONTROL SYSTEM** AND PROCESSING SOFTWARE:

- a) E-Tender has to be submitted in two bid system i.e. "Technical bid and financial bid" for which every bidder will have to upload separate Technical and Financial bids. Financial bids of only those bidders shall be opened who qualify in the technical bid.
- b) A pre-bid meeting with the prospective bidders shall be held through online mode on 13-03-2024 at 11:00 AM for any queries of bidders. The prospective bidders those want to attend pre-bid meeting may send their request on PRSC email contact@prsc.gov.in till 4.00 PM on 12-03-2024 The link of web meeting shall be shared through email by 13-03-2024.
- c) The E-Tender for Supply, Installation, Commissioning, Testing & Training of multispectral drone with camera, control system and processing software can be submitted from 06-03-2024 (11.00 AM) to 26-03-2024 till 11.00 AM. The Technical Bids shall be opened at 3.00 PM on 26-03-2024. In case this date happens to be a public holiday, it shall be opened on same time on next working day. The financial bids of only technically eligible bidders shall be opened on the date & time to be notified later only to technically eligible bidders through the web portal https://eproc.punjab.gov.in
- d) The bidder must have to fulfil the Technical Qualifications and must upload all the documents as required under this tender document at the time of submission of E-Tender.
- e) The rates quoted will be including of all taxes & other levies etc at FOR destination at PRSC Ludhiana.
- f) The Technically eligible bidder, who is found to have quoted the minimum rate shall be declared as L-1.
- g) L-1 bidder may be called for further negotiation of rates. Mere qualifying as L-1 does not entitle the bidder for award of tender.
- h) The Bidder shall have to pay non-refundable tender fees of Rs. 2000/- (Rs Two Thousand Only) through the online payment gateway of the e-portal at the time of submission of the tender.
- i) The Bidder except Micro and Small Enterprises (MSEs) as defined in the MSE Procurement Policy issued by Department of Micro, Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organization or the concerned Ministry or Department or Startups as recognized by Department of Industrial Policy & Promotion (DIPP) shall have to pay Earnest Money Deposit of Rs. 100,000/- (Rs One Lakh Only) through the online payment gateway of the e-portal at the time of submission of the tender. Bidders seeking exemption from deposit of EMD shall have to upload 'Bid Security Declaration' accepting that if they withdrew or modify the bids during the period of validity or if they are awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline

in the tender document, they will be suspended for a period of 2 years for contracts with this entity. In case of other than exempted bidders, the tenders with less EMD or Without EMD shall be summarily rejected without any further consideration.

TECHNICAL QUALIFICATIONS:

- a) Bidder may be individual/sole-proprietor, partnership firm, body corporate or any other institution duly registered under appropriate law In India. Consortium may also apply; however sole responsibility lies with the lead bidder. A letter of authority to create the terms and agreement from all consortium members is must. All members of a Consortium should be registered legal entity in India.
- b) If the bidder is a group of legal entities that will form or have formed a joint venture, consortium or association at the time of the submission of the bid, they shall confirm in their bid that they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the joint venture jointly and severally, and this shall be duly evidenced by a duly notarized Agreement among the legal entities, which shall be submitted along with the bid. Bid must be presented by lead entity, but of course it shall include data of all consortium members in manner that gives evaluation committee possibility to separately identify data relevant to each member of consortium. Tax Registration/Payment Certificate, Certificate of Registration of the business, Financial Statement and Bank References of all consortium member entities are also required to be uploaded.

Only lead company's, i.e submitter of bid, experience and track record is evaluated against technical proposal.

The individual signing the bid or other document, in connection with the bid must certify as to whether he or she has signed as:

- A "Sole-proprietor "of the firm or constituted attorney of such sole proprietor.
- A partner of the firm, if it be partnership, in which case he must have authority to refer to arbitration disputes concerning the business partnership either by virtue of the partnership agreement or a power of attorney. In the alternative, all the partners should sign the bid.
- Constituted attorney of the firm if it is a company.
- Lead partner of the consortium.
- c) Bidder must be competent to enter in to contract as per Indian Laws.
- d) In case bidder is other than Individual/sole-proprietor, it must upload its valid registration certificate.
- e) Conditional Bids shall not be considered.
- f) The bidder shall not sub-contract any part of the contract without written permission of the client.
- g) Bidders should have valid PAN Number and GST Number. Bidder must upload a copy of PAN and GST Number.

- h) The Bidder or any or its director(s)/partners/members should not have been debarred/ blacklisted by any Government/Semi-Government organization.Bidder must upload a declaration in this regard.
- i) Bidders must upload all the documents (including this tender document with all annexures) signed by duly Authorized Persons.
- j) Bidders must have to pay non refundable Tender Fee of Rs. 2000/- (Two Thousand only) through the online payment gateway of the e-portal at the time of submission of the tender.
- k) The bidders except Micro and Small Enterprises (MSEs) as defined in the MSE Procurement Policy issued by Department of Micro, Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organization or the concerned Ministry or Department or Startups as recognized by Department of Industrial Policy & Promotion (DIPP) shall have to pay Earnest Money Deposit of Rs. 1,00,000/- (Rs One Lakh Only) through the online payment gateway of the e-portal at the time of submission of the tender. Bidders seeking exemption from deposit of EMD shall have to upload 'Bid Security Declaration' accepting that if they withdrew or modify the bids during the period of validity etc, they will be suspended for a period of 2 years. In case of other than the exempted bidders, the bidders with less EMD or Without EMD shall be summarily rejected without any further consideration.
- Ninimum Annual Turnover for Supply, Installation, Commissioning, Testing & Training of Multispectral Drone, with Camera, Control System And Processing Software should be at least 5 crores during the last three financial years i.e. 2020-21, 2021-22 & 2022-23. The bidder should submit GST return for the turnover verification along Copy of Audited Balance Sheets, Profit & Loss Accounts as well as copy of ITRs of last 3 financial years also need to be uploaded "Other Income shall not be considered for arriving at annual turnover". However, all startups recognized by Department of Promotion of Industry and Internal Trade subject to meeting of quality and technical specifications are relaxed from the condition of prior turnover and experience.
- m) Experience: The Bidder/ OEM for Supply, Installation, Commissioning, Testing & Training of Multispectral Drone, with Camera, Control System And Processing Software must have executed at least three similar products during the last three financial years for Multispectral drone supply (Include camera, control system and image processing software) and Maintenance support in Govt. Sector organisation / Govt. Universities/ PSUs during the last three years. Bidders have to upload proof i.e. Certificates of running / completion satisfactorily of these projects from respective clients. However, all startups recognized by Department of Promotion of Industry and Internal Trade subject to meeting of quality and technical specifications are relaxed from the condition of prior turnover and experience.

- n) The member of the consortium who is providing Supply, Installation, Commissioning, Testing & Training of Multispectral Drone, with Camera, Control System And Processing Software should be OEM or authorized distributer / dealer / business partner. An authorized Signatory of the OEM as per its internal regulations should sign this undertaking. This authorization must be valid at least till 3 months beyond the last date of submission of bids. The OEM can give authorization to more than one company. The Bidder should have a centralized toll-free call centre for after sales support. If toll free number facility does not exist, the bidder will arrange the facility before supply of equipment.
- o) As per the Drone Rules 2021, "Type certificate" is issued for specific type of Unmanned Aerial Vehicle (UAV) or drone by the Directorate General of Civil Aviation (DGCA) on the recommendation of the Quality Council of India (QCI) or an authorized testing entity", the supplier needs to provide the details of model and make along-with the corresponding type certificate by the DGCA.
- p) The supplier should provide UAV (drone) with UIN or assist in obtaining the UIN.
- q) All DGCA guidelines must be fulfilled.
- r) The bidder should support to PRSC in complying with the DGCA operational guidelines.
- s) An agreement is also to be signed by the bidder at their cost on non-judicial stamp paper of appropriate value.
- t) The bidder would indicate Catalogue/ Original pamphlets/ references clearly mentioning the **make and model of all systems, sub systems and additional items** with the complete technical details in the form of Brochures and write-ups **on the letter head** of firm/company in the Technical offer sheet to be uploaded (As per Annexure-B1 to B4)
- u) The catalogue should substantiate the technical specification of the equipment/item quoted by the supplier so as to enable the indentor/committee to evaluate the technical bids without any ambiguity
- v) Technical Brochures of the product quoted, and current certifications asked for in the detailed technical specifications should also be enclosed.
- w) The bidder shall have to upload duly filled profile sheet mentioned as Annexure A duly signed by authorized person.
- x) Technical Compliance Sheet & Technical Specifications should be signed and stamped by authorized company officials are given in Annexure-B (B.1 to B.4)
- y) All the documents should be signed and uploaded by the authorized person as per Tender Form (Checklist Annexure-D).

OTHER TERMS & CONDITIONS

1. Clarification regarding Bid Document

A prospective Bidder requiring any clarification of the Bid Document may notify PRSC in writing at the PRSC's mailing address **contact@prsc.gov.in** till 12thMarch 2024 or may raise his queries in Pre-Bid meeting.

2. Amendment of Bid Document.

On the basis of submissions and discussions in pre-bid meeting, the client, may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective Bidder, modify the requirements/conditions as mentioned in Bid Document by issuing a corrigendum/addendum only on e-portal https://eproc.punjab.gov.in and website of PRSC www.prsc.gov.in

3. Language of Bids

The Bids prepared by the Bidder and all correspondence and documents relating to the bids exchanged by the Bidder and PRSC, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern.

4. Documents Comprising the Bids

The Bids prepared by the Bidders shall comprise of following components:

Technical Bid:

- Annexure A (Profile of Bidder)
- Technical offer sheet (Technical Compliance Sheet) with complete details of product/components being offered. (As per Annexure B)
- All the required documents as per this Tender Document.

BOQ (Financial Bid) in downloaded excel sheet only.

Bidder quoting NIL, negative values in price bid shall not be considered.

- 5. Performance Security: After award of supply order, the successful bidder (supplier) shall have to deposit a Performance Security equal to 3% of the contract value in the shape of Bank Guarantee in favour of Director Punjab Remote Sensing Centre, Ludhiana issued through any commercial bank within 7 days of award of supply order. The validity of such Bank Guarantee shall be 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.
- **6. Default by bidder after award of supply order:** In case the successful bidder after award of tender fails to fulfill any of the tender's terms & conditions relating to supply, installation, integration and On-site support of final product, his security including EMD shall be forfeited and the bidder may be blacklisted for a period of two years at the discretion of Director PRSC.
- 7. Packaging: The UAV / drone is to be securely packed as per appropriate standard to avoid damages in transit. The packaging charges, if any should be included in total cost.

- **8. Transportation charges:** The delivery needs to be FOR destination and all corresponding transportation charges should be borne by the manufacturer / supplier.
- **9. Delivery and Installation:** The products as per desired quantity and specifications as mentioned in Tender Document must be delivered within 4 weeks of award of supply order and further installation, commissioning, testing and training must be completed within 15 days of acceptance of delivery.
- **10.Penalty**: Penalty @ 0.5% of the total value of supply order per week or part thereof shall be levied for delay in delivery up to maximum of two weeks. In case of delay in supply of goods beyond 2 weeks, the order is liable to be cancelled and entire security amount including EMD shall be forfeited. Further, the supplier may be blacklisted for a period of 2 years at the discretion of Director PRSC.
- **11.Payment Terms:** The payment shall be released after verification of goods and complete installation, commissioning, testing & training to the satisfaction of PRSC committee. All the payments shall be made after deduction of statutory taxes, liabilities etc as applicable at time of payments.
- **12.Duties & Taxes:** The supplier (Successful bidder) shall be entirely responsible for all taxes, levies, cess, Octroi, Licence fees and any other expenses up to the delivery, installation, commissioning, testing & training.
- 13. Standard of performance: The successful bidder shall carry out the supply order and carry out its obligations under the contract with due diligence, efficiency, and economy in accordance with generally accepted norms techniques and practices used in the industry. The agency shall also adhere to professional implementation and onsite support services during the execution of the project. The client shall carry out benchmarking of supplied equipment to be provided by the selected supplier before and / or immediately after the delivery of equipment. It shall employ appropriate advanced technology and safe and effective equipment, machinery, material, and methods. Supplier shall always act in respect of any matter relating to this contract, as faithful advisors to the PRSC and shall, always, support and safeguard the client's legitimate interests in any dealings with the third party.
- **14. WARRANTY PERIOD:** The supplier will be responsible for a comprehensive warranty of minimum One year AMC for all equipment and maintenance of all those products and smooth running of integrated systems up to warranty period. The response time for attending the faults will be three to four days after they are reported to the supplier. The supplier will rectify the faults within 7 days after reporting, failing which the service provider will arrange on site replacements within next 15 days.
- **15. Confidentiality:** The supplier (Successful Bidder) and their personnel shall not, either during the term or after expiration of this contract, disclose any proprietary or confidential information relating to the services, contract or the PRSC's business or operations without the prior written consent of PRSC.
- **16. Force Majeure:** Notwithstanding the provisions of the bid, the bidder shall not be liable for forfeiture of its EMD, performance security, liquidated damages, or termination for default,

if and to the extent that, its delay in supply/performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event beyond the control of the bidder and not involving the bidder and not involving the bidder's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the PRSC either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

If a Force Majeure situation arises, the bidder shall promptly notify to the PRSC in writing of such conditions and the cause thereof. Unless otherwise directed by the PRSC in writing, the bidder shall continue to perform its obligations under the contract as far as reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. The PRSC may terminate this contract, by giving a written notice of minimum 30 days to the bidder, if as a result of Force Majeure, the bidder being unable to perform a material portion of the services for a period of more than 60 days.

- **17. Governing Language:** The contract shall be written in English Language. All correspondence and other documents pertaining to the contract which are exchanged by the parties shall be written in that same language.
- **18. Patent Rights** The Bidder shall indemnify the Purchaser against all third-party actions/claims of infringement of patent, trademark or industrial design rights arising from the use of goods or any part thereof.

19. Disputes/Arbitration:

- a) In the event of any dispute arising between Purchaser and the Suppliers in any matter covered by this contract or arising directly or indirectly there from or connected or concerned with the said contract in any manner of the implementation of any terms and conditions of the said contract, the matter shall be referred to "The Director, Punjab Remote Sensing Centre, Ludhiana (India)-141004, who may himself act as sole arbitrator or may name as sole arbitrator an officer of PRSC notwithstanding the fact that such officer has been directly or indirectly associated with this contract and the provisions of the Indian Arbitration Conciliation Act, 1996 shall apply to such arbitration. The contractor expressly agrees that the arbitration proceedings shall be held in Ludhiana.
- b) The proceedings of arbitration shall be in English language.
- **20. Jurisdiction:** The contract shall be deemed to have been entered into at Ludhiana and all causes of action in relation to the contract will thus be deemed to have arisen only within the Jurisdiction of Ludhiana Courts to the exclusion of all other courts.
- **21.** The bidder must not be disqualified in terms of 'The Punjab Transparency in Public Procurement Act-2019', 'Punjab Transparency in Public Procurement Rules, 2022' the copy of which is available on e-procurement web portal https://eproc.punjab.gov.in and PRSC website www.prsc.gov.in. Various terms & conditions of the 'The Punjab Transparency in Public Procurement Act-2019' shall also be applicable.

Annexure-A

BIDDER PROFILE

1	Name of the Bidder	
2	Constitution of the Bidder	
	(Individual/Partnership	
	Firm/Company/Consortium etc)	
3	PAN No of Bidder	
4	GST Number of the Bidder	
5	Registered Address of the Bidder	
6	Correspondence Address of the	
	bidder	
7	Name, Email ID and Mobile	
	Number of Contact Person	
8	Bank Account Details along with	
	IFSC Code	
9	In case Bidder is other than	
	Individual, its Registration	
	Certificate Number	
10	In case bidder is other than	
	Individual, Name of Authorized	
	Signatory and copy of	
	resolution/Authorization	
	Certificate regarding	
	participation in bidding and	
	signing the bid documents	
11	In case of Consortium (Specify	
	Detail of Members and their	
	specific share)	
12	Whether Startup/MSE as per	
	Central Govt. Norms	
13	"Type" certificate issued by	
	DGCA	

TECHNICAL SPECIFICATIONS (TECHNICAL COMPLIANCE SHEET)

Ver 4.0

(Dated: 06-March-2024)

Punjab Remote Sensing Centre

Summary of the Items required

S.No.	Item	Quantity	Annexure
1)	Drone/UAV	1	Annexure- B-1
2)	Ground Control System	1	Annexure- B-2
3)	Sensor/Camera Technical Specifications(Multispectral)	1	Annexure- B-3
4)	Drone Image Processing Software (Professional) – Perpetual License	1	Annexure- B-4

1) Drone/UAV (1 Nos)

S.No	Specifications	Parameters / Value	Complied Yes/No
1.	UAV Type	Fixed Wing/ Multi-Roter	
2.	Maximum operating altitude	Upto 200m (above AGL)	
3.	Flying Endurance:	40 - 60 minutes or more	
4.	Takeoff Weight:	5.0 - 10.0 kg	
5.	Payload/Sensor Weight (Weight of Camera/Sensor, Battery and Memory Storage)	700 gm or more	
6.	Transmission range	2-3 km (radius)	
7.	Obstacle avoidance system	Required	
8.	Ground control system	Required	
9.	Operating power supply:	Battery-powered (Rechargeable Lithium based batteries) Two sets of Rechargeable battery extra	
10.	Wind Resistance	8 m/s or higher	
11	Operational Temperature	Upto 50 degree C	
12.	Position and Orientation	PPK enabled onboard GNSS Receiver and IMU for Direct Georeferencing of images	
13.	Launch and	Vertical Takeoff and	
	Recovery	Landing (VTOL)	
14.	Safety features	Return to Home (RTH) on communication failure, loss of GPS position, low battery in UAV and GCS, high wind conditions etc.	
15.	Transportation Container	Portable storage box/boxes (shock/rain proof) for carrying UAV and its accessories.	
16	Flight Modes	 Position Hold Mode Autonomous Waypoint Navigation Mode (AUTO Mode) Emergency Return to Launch Mode 	
17	Demonstration and Training	Demonstration and On site-Training	
18.	Warranty	1 years minimum	
19	Type Certificate	issued by DGCA	

2) Ground Control System (1 nos)

S.No	Specifications	Parameters / Value	Complied Yes/No
1.	Ground Control System Hardware	Radio Controller/Tablet	
2.	Display	Geographic Map along with UAV location, • Flight plan • Display of important parameters: • Battery capacity • Distance from home • Waypoints • Artificial Horizon indicating UAV attitude, etc.	
3.	Maps	Standard Google /Open Street Map/ Mapmyindia maps with selectable layers of satellite, street view etc.	
4.	User Control	Set altitude of the UAV •Waypoint navigation •Dynamic flight plan adjustment •Position hold mode which allows UAV to be flown in semi autonomous mode etc.	
5.	Flight Planning Software	Flight Planning Software (Professional) -Perpetual license	
6.	Warranty	1 years minimum	

3. Sensor/Camera Technical Specifications (Multispectral) (1 Nos.)

S. No	Specifications	Parameters / Value	Complied Yes/No
1.	Spectral Bands	Blue, Green, Red, Red edge, Near Infrared	
2.	Sensor Resolution (Multispectral)	1280 x 960 (1.2 MP or better) for Blue, Green, Red, Red edge, Near Infrared	
3.	Frame Rate	1 Frame per second	
4.	Interfaces	USB/Ethernet/WiFi	
5.	Format	Raw/JPG/TIFF	
6.	Storage	SD card/ USB with storage capacity 64 GB or more. Three SD cards/ USBs with storage capacity 64 GB or more have to be supplied.	
7.	Power	The sensor has to be powered through UAV power source / battery. (In case of battery, 3 sets of battery to be supplied along with two chargers)	
8.	Sensors Weight (includes weight of Sensors, its battery and its Memory Stick/Card)	Less than 700 g	
9.	Geotagging Images	Assignment of UAV GPS location to Images to generate geotagged images (During Acquisition or Ground Processing).	
10.	Trigger	The camera shall have self timer, predefined or external trigger mechanism using UAV Flight Management System.	
11.	Others	Calibration panels, Pre- Processing software, if any.	
12.	Warranty	1 years minimum	

4) <u>Drone Image Processing Software (Professional) – Perpetual License (1 nos)</u>

S. No	Specifications	Parameters / Value	Complied Yes/No
1.	Drone Image Processing Software (Professional Edition) – Perpetual Licence (1 nos) with Media	Capabilities: Georeferenced orthomosaic generation Digital elevation model: DSM/DTM generation and editing Measurements: distances, areas, volumes Stereoscopic measurements Panorama stitching Tools to generate indices like NDVI etc. Multispectral imagery processing about model: generation and texturing LIDAR data support Support for Windows operating system etc.	
2.	Software Demonstration and Training	Software Demonstration and Onsite- Training	
3.	Minimum Warranty	1 years minimum	

Annexure-C

Performa of Indemnity

This	is	to cer	rtify that	M/s					Vho	have	sup	plied
	AT	PRSC,	Ludhiana,	vide	order	· n	o _					dated
			2024	have a	ll requir	ed ri	ghts fo	r the Drone	with i	mage _I	proce	ssing
Softv	vare. T	he softwa	are supplied b	y us is l	legal/lice	ensed	copies	S.				
Furth	ner, M/	s			_ is willi	ng to	inden	nnify PRSC	agains	t any c	laim	s due
to vi	olation	of any p	atents and co	pyrights	s for the	softv	vare so	old under lie	ensing	agree	ment	from
us.	The	above	indemnity	is 1	limited	to	the	software	supp	lied	by	M/s
				o	nly.							
For N	M/s											

Signature with seal, name, designation and date (Authorized Bidder)

Annexure-D

CHECK LIST

S. No	Document	Uploaded Yes/No
1	Bidder Profile Sheet	Tes/No
2	Copy of PAN Number and GST Number	
3	If other than Individual (Copy of Registration Certificate)	
4	If other than Individual (Copy of Resolution/Authorization Certificate regarding bid submission). In case of consortium, authority letter and Agreement among consortium members also to be uploaded.	
5	Whether Tender Fee and EMD deposited as per Tender Requirement	
6	If exempted from deposit of EMD whether proof of MSE/Startup uploaded	
7	Proof of Turnover as per requirement (Copy of Audited Balance sheets, P& L Accounts and copy of ITRs). In case of Consortium upload the copies of Audited Balance sheets, P&L Accounts, copy of ITRs of all consortium members	
8	Proof of Experience as per requirement. Also uploaded details of orders (products) supplied to other organizations.	
9	If Exempted from requirement of Turnover and prior experience whether proof of MSE/Startup uploaded	
10	Tender if being submitted as Consortium, the turnover and experience documents of Lead partner and other consortium partners	
11	If exempted from deposit of EMD whether Bid Security Declaration uploaded	
12	Whether Self declaration as to competency as per Indian Laws and Non-blacklisting by any Govt./Semi Govt. organization uploaded.	
13	Item wise detail along with complete specifications relating to product under tender uploaded or not (Annexure-B)	
14	OEM Authorization (S)	
15	Detail of Toll-free Number	
16	Detail of Service Centre with Manager Details and Number	
17	Signed copy of each page of tender document/corrigendum issued, if any.	
18	"Type" certificate issued by DGCA.	
19	Performa of Indemnity signed by authorized person.	
20	Any other documents related to articles to be procured through this tender or required as per above.	