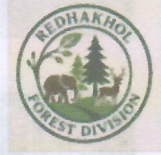


GOVERNMENT OF ODISHA
Department of Forest, Environment & Climate Change



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION
Redhakhol, Sambalpur District, Odisha – 768106
Email: dfo.redhakhol@odisha.gov.in

TENDER DOCUMENT

FOR PROCUREMENT OF

Enterprise Heavy-Lift Unmanned Aerial Vehicle
(Multi-Rotor UAV Platform)

WITH

High-Accuracy Aerial LiDAR Payload System
(Dual 100MP RGB + 950m Range LiDAR)

AND ALL ASSOCIATED ACCESSORIES

Tender Reference	F&E/RKL-004(Offline)/2026-27
Financial Year	2026 – 2027
Tender Mode	Offline – Double Cover System (Sealed Bids)
Bid Availability	17.04.2026 (11:00 AM) to 04.05.2026 (05:00 PM)
Last Date of Receipt	04.05.2026 by 05:00 PM
Date of Opening	05.05.2026 at 11:30 AM
Issued By	Divisional Forest Officer, Redhakhol Forest Division

Redhakhol Forest Division | Odisha Forest Department
www.redhakholforest.com | sambalpur.odisha.gov.in



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&E/RKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



NOTICE INVITING TENDER

Sl. No.	Name of the Work	Details
1	Purpose of the Tender	Supply, Delivery, Testing, Commissioning and Demonstration of Enterprise Heavy-Lift UAV Platform with High-Accuracy Aerial LiDAR Payload System and accessories for Redhakhol Forest Division during 2026-27
2	Estimated Cost	Based on fund allocation
3	Date & Time of availability of the bid document	17.04.2026 (11:00 AM) to 04.05.2026 (05:00 PM)
4	Last date & Time for receipt of bids	Up to 05:00 PM of 04.05.2026
5	Date & Time of bid opening	11:30 hours on 05.05.2026
6	Name & Address of the officer inviting Bid	Divisional Forest Officer, Redhakhol Forest Division, Odisha

PRE-REQUISITE FOR SUPPLY OF MATERIALS

01. The Bidders/Vendors/Suppliers should have valid GST Registration with the competent authority.
02. The Bidders/Vendors/Suppliers should have Permanent Account Number (PAN) registered with competent authority.
03. The Bidders/Vendors/Suppliers should have authorization from the concerned Dealer/Firm/Company to supply the goods/materials.
04. The Bidders/Vendors/Suppliers must have a valid Bank Account number in any scheduled Bank.
05. Bidders/Vendors/Suppliers must have an operational area/office within the State of Odisha.



TERMS AND CONDITIONS

1. Bid document consisting of Specification, the schedule of Quantities and the set of terms and conditions of contract and other necessary documents can be seen on the website: www.redhakholforest.com or <https://sambalpur.odisha.gov.in> or www.odishaforest.in.
2. The bidder shall have to deposit the cost of tender paper @ Rs.1000/- for participation in the bid in the shape of Bank Draft/Banker's Cheque etc. in favour of Divisional Forest Officer, Redhakhol Forest Division. The Tender cost is non-refundable in nature. Cheques will not be accepted.
3. The Bid documents will be available on the website from **17.04.2026 to 04.05.2026 up to 5.00 PM.**
4. Bids shall be received "OFFLINE" on or before **5.00 PM of 04.05.2026** in the Drop Box placed in the office or through postal/Courier.
5. Bids received shall be opened at **11.30 hours on 05.05.2026** in the office of the undersigned in the presence of the bidders who attend. If the office is closed on that date, bids will be opened on the next working day at the same time and venue.
6. Bidders are to submit the **TECHNICAL BID (ANNEXURE-III)** and **FINANCIAL BID (ANNEXURE-IV)** in two separate sealed covers quoting price in the Financial Bid of the article intended to supply out of the list in **ANNEXURE-I** and both covers shall be enclosed in one outer cover and dropped in the drop box or sent through postal/courier service.
7. The Authority will not be held responsible for any postal delay or other inconvenience during the bidding process.
8. The authority reserves the right to cancel any or all bids without assigning any reason thereof.
9. Any Addendum/Corrigendum will be hosted exclusively on the District Website. Bidders are requested to check it periodically during the bidding process.
10. The submitted bid shall be valid for the 90 days from the last date of this tender.
11. Mere quoting of the lowest price will not entitle any bidder to win the bid. The committee has the discretionary prerogative to finalize the bid with reference to quality and compliance.



**OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA**

Tender Ref: F&E/RKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



12. Selection will be made on a cost-effective basis i.e. lowest price for the same specification and model.

13. The bidders/Vendors/Suppliers have to submit a No-Relationship Certificate with their bidding documents as per ANNEXURE-IV.

14. The bidders must deposit a sample/demo unit of the product to the office of the undersigned with proper acknowledgement for quality assurance, which will be finalized by the committee after opening of the financial bids.

15. The bidders/vendors/suppliers will have to attend the office of the undersigned on the date to be intimated for checking of quality assurance by the committee.

16. The Tender Paper will be submitted in the Drop Box of DFO, Redhakhol Forest Division, by Post/Courier to reach the undersigned on or before **5.00 PM of 04.05.2026**.

17. The list of articles put to tender represents a tentative requirement for forestry management tasks and is subject to procurement based on need and availability of funds. Selection as a bidder for any article does not guarantee supply, as it depends on allocation of funds and may change according to guidelines issued by the Government of Odisha from time to time.


**Divisional Forest Officer,
Redhakhol Forest Division.**



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&E/RKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



ANNEXURE-I — LIST OF ARTICLES TO BE PROCURED

Sl. No.	Item	Specifications
1	Enterprise Heavy-Lift UAV Platform with High-Accuracy Aerial LiDAR Payload and Accessories for Redhakhol Forest Division	<p>1. Enterprise Heavy-Lift UAV Platform (Multi-Rotor) — Qty: 01 No.</p> <p>Aircraft & Flight Performance:</p> <ul style="list-style-type: none">• Max takeoff weight ≥ 15 kg; Maximum payload capacity ≥ 6 kg• IP rating: IP55 or better (dust & water-jet resistant)• Forward flight time (with payload) ≥ 55 min; Hover time ≥ 50 min• Max cruise speed ≥ 23 m/s; Max wind resistance ≥ 12 m/s• Operating temperature: -20°C to $+50^{\circ}\text{C}$; Service ceiling ≥ 4000 m AMSL <p>Obstacle Sensing:</p> <ul style="list-style-type: none">• Omnidirectional: Rotating LiDAR + mm Wave radar + full-color low-light fisheye vision• Power-line-level detection capability; ADS-B In receiver (range ≥ 20 km)• Real-Time Terrain Follow in any horizontal direction <p>Navigation & RTK Positioning:</p> <ul style="list-style-type: none">• Multi-constellation GNSS: GPS + GLONASS + Galileo + BeiDou• Built-in RTK module; RTK accuracy: H ≤ 0.1 m, V ≤ 0.1 m• Network RTK support via remote controller <p>Video Transmission & Remote Controller:</p> <ul style="list-style-type: none">• O4 Enterprise Enhanced or equivalent: ≥ 40 km LoS, 1080p/60fps live video• Built-in airborne relay module; Dual 4G/LTE cellular dongle support• Enterprise RC with integrated bright display (≥ 7-inch, ≥ 1000 cd/m²) <p>Payload Interface:</p> <ul style="list-style-type: none">• $\geq 4 \times$ E-Port V2 (or equivalent) external ports; up to 7 payloads simultaneously• Max payload: 6 kg; PSDK/open payload API support <p>2. High-Accuracy Aerial LiDAR Payload System — Qty: 01 No.</p> <p>LiDAR Sensor:</p> <ul style="list-style-type: none">• Wavelength: 1535 nm, Class 1 eye-safe laser• Max detection range: ≥ 700 m @10% reflectivity, 350 kHz; ≥ 900 m @10%, 100 kHz• Adjustable pulse rate: 100 kHz – 2,000 kHz; Returns per pulse: ≥ 16• Max point rate: $\geq 2,000,000$ pts/sec; Beam divergence: ≤ 0.3 mrad• Scanning modes: Linear + Non-Repetitive + Star-Shaped



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&ERKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



	<p>Dual RGB Mapping Cameras:</p> <ul style="list-style-type: none">• Two (2×) 100 MP Micro 4/3 CMOS sensors with mechanical shutter• GSD ≤ 3 cm at 300 m altitude; Horizontal FOV $\geq 100^\circ$• Shooting interval ≤ 0.5 sec; Pixel-binning for low-light performance <p>POS (Position & Orientation System):</p> <ul style="list-style-type: none">• Heading accuracy (post-processed, 1σ): $\leq 0.02^\circ$; Pitch accuracy: $\leq 0.01^\circ$• Ranging repeatability @ 150 m (1σ): ≤ 5 mm; Microsecond-level time sync <p>Accuracy & Mapping Scale:</p> <ul style="list-style-type: none">• Vertical accuracy: < 3 cm @120 m; < 5 cm @300 m; < 10 cm @500 m altitude• Supports 1:500, 1:1000 and 1:2000 mapping scales• Coverage: ≥ 8 km² per single flight @300 m; ≥ 80 km² per day <p>Physical & Environmental:</p> <ul style="list-style-type: none">• Weight ≤ 1.8 kg (without gimbal connector); 3-axis motorized gimbal• IP54 or better; Operating temperature: -20°C to $+50^\circ\text{C}$; Power: ≤ 70 W• Storage: CFexpress Type B card; LiDAR reconstruction free in compatible software <p>3. <u>Mandatory Accessories — Qty: 01 Complete Set</u></p> <p>UAV Accessories:</p> <ul style="list-style-type: none">• Intelligent flight batteries: 2 sets (hot-swap compatible)• Multi-battery charging hub: 1 unit (min. 2 batteries simultaneous)• Enterprise RC with integrated display: 1 unit• Spare propeller set: 2 sets (minimum 8 propellers)• Hard-shell transit case (aircraft + RC): 1 unit, IP54-rated• Helipad: 1 unit (min. 100 cm × 100 cm)• USB-C, data, and power cables: complete set <p>LiDAR Payload Accessories:</p> <ul style="list-style-type: none">• Single gimbal connector/mounting adapter: 1 unit• CFexpress Type B card ≥ 256 GB + card reader: 2 sets• Hard-shell protective case (LiDAR payload): 1 unit• DJI Modify or equivalent 3D editing software: 3-month subscription (activated at delivery)
--	---


Divisional Forest Officer,
Redhakhol Forest Division.



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&ER/KL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



ANNEXURE-II - AMC (ANNUAL MAINTENANCE CONTRACT) SERVICES

Overview: The following AMC terms are an integral part of this tender and the resulting supply contract. Bidders must quote AMC charges for post-warranty separately in the Financial Bid.

Clause	Subject	Description
AMC-1	Warranty Period (Free AMC)	The Supplier shall provide comprehensive Annual Maintenance Contract (AMC) services FREE OF CHARGE throughout the entire warranty period from the date of acceptance of the equipment. This free AMC covers all scope items under AMC-4 at nil additional cost to the Purchaser.
AMC-2	Mandatory Post-Warranty AMC	Upon expiry of the warranty, the Supplier shall mandatorily continue AMC services for 2 (two) additional years date of acceptance. The annual AMC charges for these two years shall be quoted separately in the Financial Bid (Annexure-III) and shall remain firm and fixed.
AMC-3	Extended AMC by Mutual Agreement	Beyond the mandatory covered period, both parties — the Divisional Forest Officer, Redhakhol Forest Division (Purchaser) and the Supplier — may mutually enter into a fresh AMC agreement for additional year(s). Such extension shall be executed in writing not less than 30 days before expiry of the preceding AMC period, on terms and conditions negotiated and agreed upon by both parties.
AMC-4	Scope of AMC Services	(a) Preventive Maintenance: minimum 2 scheduled visits per year; (b) Corrective Maintenance: repair/replacement of defective hardware — UAV airframe, motors, ESCs, gimbal, LiDAR sensor, cameras, POS/IMU, RC, and batteries; (c) All firmware and software updates during the AMC period; (d) On-call support: acknowledgement within 4 hours, engineer deployment within 24 hours; (e) Critical fault resolution within 72 hours; (f) Temporary replacement unit if on-site resolution exceeds 72 hours.
AMC-5	Spare Parts	The Supplier shall guarantee availability of genuine OEM spare parts throughout the AMC period. Spare parts consumed during post-warranty AMC are included in the quoted AMC rate. Parts required due to accidental damage outside normal wear are chargeable at actual cost with prior written approval of the DFO.
AMC-6	Service Documentation	A signed Service Report shall be submitted to the DFO within 3 working days of each visit (preventive or corrective), documenting: work performed, parts replaced (with serial numbers), system health status, calibration readings, and next scheduled service date. A Service Register shall be maintained at the DFO office.



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&E/RKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



ANNEXURE-III — TECHNICAL BID

Sl.	Particulars	Details / Document Reference
01	Name of the Bidder / Vendor / Firm	
02	Address for communication	
03	Permanent registered address	
04	Mobile No. (WhatsApp enabled)	
05	Valid Email ID of Proprietor / Authorized Contact	
06	Aadhar Card No. (Copy to be enclosed)	
07	Permanent Account Number (PAN) — Copy to be enclosed	
08	Income Tax Return filed for last 3 years — attach copies if yes	
09	GST Return filed for last 3 years — attach copies if yes	
10	GSTIN Registration Number — Copy to be enclosed	
11	Certificate of No Relationship — Copy to be attached (ANNEXURE-IV)	
12	OEM / Principal Authorizations Certificate for supply of quoted items	
13	Copies of previous Government supply orders for similar items (if any)	

Signature with seal of the
Proprietor / Vendor / Supplier



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&ERKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



ANNEXURE-IV — FINANCIAL BID

Note: Quotation shall be given separately for UAV Platform, LiDAR Payload System, AMC and Accessories for Redhakhol Forest Division.

(To be submitted in a separate sealed cover by the bidder — DO NOT include pricing in the Technical Bid envelope)

Sl.	Item	Specification	Brand (if any)	Unit Rate (Rs.)	Taxes (Rs.)	Total Rate per Unit (Rs.)
1.	Enterprise Heavy-Lift UAV Platform inclusive of two batteries(as per Annexure-I, Item 1)	As per Annexure-I				
2.	High-Accuracy Aerial LiDAR Payload System (as per Annexure-I, Item 2)	As per Annexure-I				
3.	Annual AMC Charges after warranty Period	As per Annexure-II				
4.	Extra Batteries exclusive of the two pieces (cost per piece)	As per Annexure-I				
GRAND TOTAL (all-inclusive, delivered & commissioned at site): Exclusive of the extra batteries and AMC Charges						
Amount in words (Grand Total): Rupees _____ only						

Note: The quoted price shall be firm and inclusive of all taxes, duties, packing, forwarding, freight, insurance, delivery, installation, commissioning, and training charges.

**Signature with seal of the
Proprietor / Vendor / Supplier**



OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA

Tender Ref: F&E/RKL-004(Offline)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



ANNEXURE-VI — AMC SERVICE AGREEMENT PROFORMA
(with L1 Bidder)

This AMC Service Agreement is entered into between:

Party A (Purchaser): Divisional Forest Officer, Redhakhol Forest Division, Odisha – 768036

Party B (Supplier): M/s _____ having its registered office at _____

in respect of the equipment supplied vide Purchase Order No. _____ dated _____, on the following terms:

Sl. No.	Subject	Terms & Conditions
1	Equipment Covered	This AMC Agreement covers: (a) Enterprise Heavy-Lift UAV Platform; (b) High-Accuracy Aerial LiDAR Payload System; (c) Enterprise Remote Controller; (d) all accessories supplied under Purchase Order No. _____ dated _____.
2	AMC Period	This Agreement is effective from _____ to _____.
3	Annual AMC Charges	The annual AMC charges are Rs. _____ (Rupees _____ only), inclusive of all applicable taxes.
4	Preventive Maintenance Schedule	Minimum 2 scheduled preventive visits per year at dates mutually agreed 15 days in advance. Each visit shall include full system inspection, firmware/software update, sensor calibration verification, gimbal servicing, battery health assessment, propulsion system check, LiDAR sensor alignment, and RC functional test.
5	Corrective Maintenance & Response SLA	Complaint acknowledgement: within 4 hours. Engineer deployment: within 24 hours. Critical fault resolution: within 72 hours of complaint.
6	Spare Parts Policy	All genuine OEM spare parts for normal wear-and-tear maintenance are included in the AMC rate. Accidental/physical damage parts are charged at actual cost with prior written DFO approval. The Supplier shall stock essential spares and supply within 15 calendar days of requisition.
7	Software & Firmware Updates	All firmware updates for the UAV platform, LiDAR payload, POS system, and Remote Controller shall be applied free of charge during the AMC period.
8	Service Documentation	After every visit (preventive or corrective), a signed Service Report is submitted within 3 working days to the DFO, covering: visit date, engineer name, work performed, parts replaced (part numbers and serials), system health, calibration data, and next scheduled service date. A physical Service Register is maintained at the DFO office.



**OFFICE OF THE DIVISIONAL FOREST OFFICER
REDHAKHOL FOREST DIVISION, ODISHA**

Tender Ref: F&ERKL-004(Online)/2026-27 | Email :- dfo.redhakhol@odisha.gov.in



9	Exclusions	(a) Damage from misuse, negligence, or unauthorized modifications; (b) Damage from natural calamities (flood, fire, lightning); (c) Consumables exhausted through normal use; (d) Third-party accessories not in the original supply order.
10	Extension / Renewal	Either party may initiate renewal discussions not less than 30 days before expiry. Extension shall be executed by a mutually signed written addendum specifying the new period and revised charges. Either party may choose not to renew.
11	Termination	Either party may terminate with 30 days written notice. On Supplier default resulting in Purchaser-initiated termination, the Supplier shall refund proportionate prepaid AMC charges for the remaining period within 15 days.
12	Governing Law & Disputes	Governed by the laws of India and the State of Odisha. Disputes shall be resolved per the dispute resolution mechanism in the main supply contract. Jurisdiction: Courts at Sambalpur, Odisha.

For Party A (Purchaser):

Signature: _____

Name: _____

**Divisional Forest Officer
Redhakhol Forest Division, Odisha**

Office Seal: _____

Date: _____

For Party B (Supplier):

Signature: _____

Name: _____

Designation: _____

Company Seal: _____

Date: _____

Place: _____