



Forest, Environment and Climate Change Department, Odisha
OFFICE OF THE DIVISIONAL FOREST OFFICER
JHARSUGUDA FOREST DIVISION
Email - dfo.jharsuguda@odisha.gov.in
Ph - 06645 - 295040

Letter No. 976 1F(Acct)/Dated. 24.02.2025

To

The Deputy Director,
Information and Public Relation Department (Adv) &
Deputy Secretary to Govt. of Odisha, Bhubaneswar.

Sub:- Publication of Tender Notice for Procurement of One (01) UAV (equipped with Lidar and GNSS Receiver for Jharsuguda Forest Division -reg-


Sir,

Enclosed, please find herewith the details of advertisement for Procurement of One (01) UAV equipped with Lidar and GNSS Receiver for Jharsuguda Forest Division (in both hard & soft copy). The details tender documents & terms & condition shall be available on the website www.jharsuguda.odisha.gov.in & www.odishaforest.in from 25.02.2025 onwards.

Therefore, in enclosing herewith an abridged Notice of Jharsuguda Forest Division in English, I would request you to kindly publish the same in two leading Odia daily and One English Daily Newspapers of the State by 25.02.2025 positively and send a complimentary copy of the same to this office for record and reference.

Encls: As above.

Yours faithfully,


Divisional Forest Officer,
Jharsuguda Forest Division.


Memo No. 977 1F(Acct)/Dated. 24.02.2025

Copy along with its enclosures forwarded to the PCCF (Wildlife) Chief Wild Life Warden Odisha, Bhubaneswar/ Chief Conservator of Forests (IT& GIS) /Regional Chief Conservator of Forests, Sambalpur Circle, Sambalpur for favor of kind information and necessary action.


Divisional Forest Officer,
Jharsuguda Forest Division.


Memo No. **978** 1F(Acct)/Dated. **24.02.2025**

Copy along with its enclosures forwarded to the P.A to Collector & Dist Magistrate, Jharsuguda for favor of kind information of Collector, Jharsuguda. It is requested to display the above said Short Tender in their Office Notice Board.


Divisional Forest Officer,
Jharsuguda Forest Division.

Memo No. **979** 1F(Acct)/Dated. **24.02.2025**

Copy forwarded to All Asst. Conservator of Forests / All Range Officers, Jharsuguda Forest Division for information and necessary action. They are instructed display the above said Short Tender Notice in the Office Notice.


Divisional Forest Officer,
Jharsuguda Forest Division.

Copy to Notice Board and Website.



Forest, Environment and Climate Change Department, Odisha

OFFICE OF THE DIVISIONAL FOREST OFFICER

JHARSUGUDA FOREST DIVISION

Email - dfo.jharsuguda@odisha.gov.in/Ph - 06645 - 295040

TENDER CALL NOTICE

Tender Call Notice No. 9 /JSG/2024-25 Dated. 24.02.2025

The Divisional Forest Officer, Jharsuguda Forest Division invites sealed tenders from reputed intending Manufacturing Firms/ Dealers/Suppliers having valid GSTIN and PAN Registration No. for procurement of One (01) UAV equipped with Lidar and GNSS Receiver. So as to reach in the O/o the Divisional Forest Officer, Jharsuguda Forest Division at BTM Jharsuguda on or before 10.03.2025 upto 05.00 PM through Registered/Speed Post/Courier Service/ Drop Box in the Office.

The application form of Tender containing Technical Bid & Financial Bid information and terms and conditions for procurement of One (01) UAV equipped with Lidar and GNSS Receiver can be obtained from the Office of the Divisional Forest Officer, Jharsuguda Forest Division at BTM, from 25.02.2025 to 10.03.2025 during office hours on production of Tender Document Cost. Tender Document Cost as mentioned in Tender Documents in shape of Non-Refundable Demand Draft from any Nationalized Bank in favour of "**Divisional Forest Officer, Jharsuguda Forest Division**" payable at State Bank of India, Jharsuguda in the sealed bid document should be submitted

The **Technical bids will be opened on 11.03.2025 at 11.00 AM & Financial Bid will be opened on 12.03.2025 at 11.00 AM** in presence of the bidder or his authorized representatives in the office of the undersigned. Final selection of the bidder shall be done on L1 basis based on quality of work. The undersigned reserves the right to reject any or all tender without assigning any reason thereof. The details of works under Jharsuguda Forest Division.


Divisional Forest Officer
Jharsuguda Forest Division.

1. General Instructions (Necessary support documents are to be enclosed)

- A. The tender process will be of two bid system-Technical Bid and Financial bid process. The tenderer should submit two separate sealed covers mentioning Technical Bid & Financial Bid. The tenderer which qualifies in Technical Bid only will be eligible to participate in Financial Bid.
 - B. The Bid Must Contain the Requisite Tender Document Cost of Rs. 1000/- and EMD of Rs. 30,000/- as per the advised mode in the technical tender document. The Bid documents can be obtained from the office of the undersigned on payment of requisite fee or can be downloaded from website www.jharsuguda.odisha.gov.in and www.odishaforest.in from 11:00 AM of 25.02.2025 for bidding.
 - C. EMD should be in the shape of Demand Draft issued by a nationalized or scheduled bank in favor of " Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda" Payable at Jharsuguda. The bid document is available on working day in the office of the undersigned.
 - D. The bidder must have valid GSTIN and must furnish the GST Registration certificate, GST Clearance certificate, PAN, IT and GST return for 2021-22 to 2023-24 in the bid documents.
 - E. Last date of bid submission (by messenger/Courier/Post)- on 10.03.2025 before 05:00PM in the office of the Divisional Forest Office, Jharsuguda Forest Division, Jharsuguda.
 - F. Date of bid opening 11.03.2025 at 11.00 AM in the office of the Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda.
 - G. Tenderers have to mention the Company, Model, Manufacture year and detailed Technical Specifications of the Procurement of One (01) UAV equipped with Lidar and GNSS Receiver in the Technical Bid. The Tender Evaluation Committee will scrutinize and verify the model & Specifications on the same date and will open the Financial Bids of technically qualified bidders.
 - H. The decision of the Tender Evaluation Committee shall be final. The committee has right to alter/modify/add/delete any terms and conditions of the tender call notice. The committee also reserves the right to cancel the Tender process at any point of time without mentioning the reasons thereof.
1. The Cost of tender paper of Rs. 1000/- and EMD cost of Rs.30,000/- in the shape of Demand Draft issued by a nationalized or scheduled commercial bank should be enclosed in technical bid only and not in financial bid.

Terms & Conditions:

1. The bidders shall mention details of the Company, Model, Manufacture year and detailed Technical Specifications of the of One (01) UAV equipped with Lidar and GNSS Receiver sets in the Technical Bid.
2. The bidders can also indicate any superior technical specifications.
3. The successful bidder must give training for minimum 7 days to the staff for use of the Procurement of One (01) UAV equipped with Lidar and GNSS Receiver sets.
4. The Bidder must satisfy all the Eligibility Criteria to participate in the Tender Process.

Technical specification of UAV equipped with Lidar and GNSS Receiver

Ser No	Item	A/U	Qty
(a)	VTOL/Multirotor	Nos	01

Technical Specification	
Aerial Vehicle Characteristics	
UAV Weight with battery and max payload	< 10 kg
Endurance (up to 1000 m AMSL Take-off)	40 Minutes or more with full payload
Typical Cruise Speed	50 – 60 kmph
Propulsion	Battery Powered Electric Propulsion
Max Operating Altitude	5000 ft AGL (Above Ground Level)
Max Launch Altitude	19,500 ft AMSL (Above Mean Sea Level)
Functional Temperature Range	-10° C to 50°C
Dust & Drizzle Resistance	IP 55 Rating or more
Aural Signature	40 Db @300-meter AGL
Wind Resistance	(70 - 80 kmph or 38 - 44 knots) or better
Launch & Recovery	Autonomous Vertical Take-off & Landing (VTOL)
Max space required for recovery	2 m × 2 m open area
Autonomy	Fully autonomy from Takeoff to Landing without using any R/C controller
Flight Modes	Altitude Hold Hover at a defined waypoint Autonomous Waypoint Navigation Remotely Piloted Mode (RPV Mode) optional
Operating Crew	Max 2
Deployment Time	<5 minutes
IP Rating	IP55 (Rainproof)
Obstacle Sensing	360 ° obstacle avoidance
Packaging & Storage	Waterproof Carrying Case to carry all mission-critical components with IP66 or better rating for dust and drizzle protection
Fail-Safe Features	Auto Returns to Home and Lands on Communication Failure. Auto Return to Home and Land on Low Battery Multiple GPS on board for redundancy Auto Return to Home and Land on exceeding the wind limit of the system. Auto Return to Home and Land on Battery Imbalance Auto return to home and Land on exceeding the UAV Health parameters (Temperature, vibration & throttle limit of the system)
Navigation Light	Switchable (from GCS)

Payload Characteristics	RGB Camera: <ol style="list-style-type: none"> Effective Pixels – 20 mp or better Focus Points: 1 m to ∞ (with autofocus) Shutter Speed - Mechanical Shutter: 2-1/2000 s Electronic Shutter: 2-1/8000 s Photo Size - 5280×3956 Video Resolution – 4K@30 fps or better Lidar Sensor: <ol style="list-style-type: none"> Sensing: 400m range (80% reflectivity), 6 cm accuracy. FOV: 68° LiDAR scan field of view. IMU/GNSS: High-precision IMU and GNSS for georeferencing. Point Cloud Density: High-density, detailed 3D models. Point Cloud Rate: Min 600,000 pts/s
Video Stabilization	Electronic and Gimbal stabilization of video output at all zoom levels in real-time
GNSS Receiver	<ol style="list-style-type: none"> Accuracy: 1 cm + 1 ppm (RTK) and 5 cm (PPK) horizontal accuracy. GNSS: Supports GPS, GLONASS, Galileo. Connectivity: 4G LTE, Wi-Fi, and Bluetooth for flexible communication. Range: 5 km (RTK), 10 km (RTK with extended range). Battery: min 2.5 hours of battery life.
Payload Replacement Time	<3 minutes
Payload Control (in flight)	Pan: 360° continuous (with UAV) Tilt: 90°
<u>Ground Control Station (GCS)</u> <u>Software Features</u>	
3D Map	Optional (with 3D Capability) Switchable between 2D/3D map view, capability to tilt/rotate 3D map as per user input.

GUI Display parameter	<p>Geographical map along with UAV location, UAV trajectory, camera view polygon, waypoint, and flight Plan.</p> <p>Real-time video from the UAV with an on-screen display of important parameters like UAV co-ordinates, target (Payload) co-ordinates and range from UAV, to true North indication, Distance from Vhome (Applicable Only for surveillance payload). Real-time video display always during the flight Artificial Horizon indicating UAV attitude</p>
Map	Capability of working with some publicly available open-source maps. The application has the capability to download maps automatically after specifying location GPS co-ordinates.
Terrain	Detects and avoids natural terrain by using elevation data. The UAV should fly minimum of 50 mtr above the line of obstacles.
Free Hand Annotation	Capability to maintain uniform altitude separation from ground during navigation over non-uniform terrain.
No Fly Zone	Ability for user to mark zones which they do not desire the UAV to enter during flight. Also highlights airport in the vicinity and restricts UAV from entering those areas.
Channel Scan	Ability to estimate the best suitable channel for a desired location based on the color indication for effective flight operations.
Ground Control Station (GCS) Software Features	
Geo Fencing	Capability in creation a virtual fence/perimeter for a real-world geographical area. It enables the user in creating a predefined boundary to avoid RPA venturing beyond the defined area accidentally.
User Control	<p>Take-off/Land without any manual assistance</p> <p>Set altitude of the UAV</p> <p>Waypoint Navigation</p> <p>Dynamic flight plan adjustment</p> <p>Point payload to ground co-ordinate function</p> <p>RPV Mode which allow UAV to be flown in semi-autonomous mode</p>
Joystick Control	<p>Full Camera control, Pan/Tilt & Zoom In/Out.</p> <p>RPV mode</p> <p>Altitude control</p>
Video	<p>Video recorded on the GCS and exported in commonly portable video format.</p> <p>Video of the full flight is recorded by default with option to turn recording off.</p> <p>Capability to taking image snapshots with on-screen display parameters at any time during flight.</p>

Pre-flight checks	Capability to perform pre-flight check of the complete system before every flight.
Optional GCS Features	
Remote Video Streaming	Stream Live Video to GCS Optional of ONVIF stream and control at remote location for 3rd party VMS integration. Highlight moving object in Live video display.
Recommended GCS Controller Specification	
Type	Laptop, Tablet or Remote Controller
Screen Size	Min. 8" Diagonal
Functional Temp Range	-10° C to +50°C
GCS Controller Battery back-up	
IP Rating	IP53
Communication Link Characteristics	
Communication Link Capability	Transmit control commands from GCS to UAV Transmit elementary data from UAV to GCS Transmit day & night video UAV to GCS Secure Communication link between UAV and GCS with 128 bits AEC encryption Digital & Encryption
Auto Tracking Comm Box	Auto-tracking directional antenna
Frequency Band	2.4 GHz or 5 GHz
Battery (Preferable with the UAV Specification.)	
Capacity	16000 mAh solid state (preferred)
Nominal Voltage	22.2 w
Weight	1.5 kg
Discharge Rate	15 w
Charger	
Weight	4.2 kg
AC Input	100 – 240V
Charging Power	AC220V: 1500W AC120V: 600W
Type	Lithium Battery

Items list-

1. UAV - 1 pcs
2. Battery - 6 pcs
3. Charger - 1 pcs
4. Payload - Lidar and RGB (1 pcs)
5. GNSS Receiver - 1 pcs


 Divisional Forest Officer
 Jharsuguda Forest Division

Additional mandatory Terms and Conditions for qualifying in the Technical BID.

1. Income Tax return (Last three Financial Years) along with copies of PAN and Valid GST registration Certificate shall be submitted along with the technical BID.
2. EMD: The value of Earnest Money to be deposited by the bidder shall be Rs.30,000/-, EMD should be in the form of Demand Draft from any Nationalized Bank in favour of Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda and must be accompanied with the technical bid. For unsuccessful tenderer EMD shall be refunded immediately after Finalization of the bid. EMD shall be forfeited if the L1 bidder fails to accept the order within 5 days from the date of issue of contract order.
3. **Experience Criteria:** The Bidder should have supplied UAV (DRONE) to any Govt. Department of Odisha Government Central Government for 3 years before the bid opening date. Copies of relevant contracts to be submitted along with bid in support. (Copy of Purchase Order/Supply Order shall be submitted by the bidder for technical qualification). Tampering of Purchase Order/Supply Order by the sellers shall be rejected outrightly without assigning any reason thereof). Legible copy of the Purchase Order / Supply Order shall be submitted for technical qualification, if not the sellers shall be rejected outrightly without assigning any reason thereof.

4. Security Deposit/BG:


- a) The supplier shall be responsible for any rectification of problems within the warranty period of 01 (one) year. Replacement of any parts within the warranty period shall be on the part of the supplier.
 - b) The supplier should provide the service report to the purchaser. After Award of contract to the successful bidder, the supplier shall deposit 3% of the contract value in form of demand draft/FD Pledge in favour of Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda for Bank Guarantee/Security Deposit within 15 days of Award of contract. After receipt of the Security Deposit only payment shall be made to the supplier. The Security Deposit shall only be returned to the supplier on demand without interest after following all conditions mentioned above
5. Only OEM or Authorized Seller of OEM shall be allowed to participate in the BID. The certificate to this effect shall be submitted. Preference shall be given to gold partner and above. 6. Delivery: 15 days from issue of Contract Order. Non-delivery within the date as in the contract order shall attract penal charges as per Govt. Guidelines.
 7. Undertaking that all the certificates/permissions/documents are valid and current as on date and have not been withdrawn/cancelled by the issuing authority. The Authority have right to ask for original documents if any doubt arises.
 8. Only those bidders, who participate in the post-bid enquiry physically, shall be accepted for qualifying for the Technical BID if they are found to fulfil all the technical parameters as mentioned in the BID document. All bidders willing to participate in the Technical Bid physically shall have to attend the post-Bid enquiry. During post-bid enquiry meeting the Bidder shall make a PowerPoint Presentation about the equipment they will be quoting.
Bidders not attending the post-bid enquiry shall be disqualified in Technical Bid.
 9. The bidders are requested to submit the details about their product in their letter head, duly signed during submission of technical bid. Basing on their product specification, and other requirement as pre the terms and conditions in the BID technical evaluation shall be made, thereafter acceptance of technical BID, in the following format:

10. Bidder financial standing: The bidder should not be under liquidation; court receivership or similar proceedings should not be bankrupt. Bidder to upload undertaking to this effect with bid.
11. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.
12. Warranty period of the supplied products shall be 01 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods at consignee location. The seller should guarantee the rectification/replacement of goods in case of any break down during the warranty period
13. The successful bidder has to supply all essential accessories required for the successful installation and commissioning of the goods supplied. Besides standard accessories as per normal industry practice, following accessories must be part of supply and cost should be included in bid price.
14. Scope of supply includes Transportation, Installation (Installation shall be done at the Office of the Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda, Odisha), Commissioning and GST Charges to be included in the bid. The L1 bidder shall submit the equipment and the accessories to the Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda, Odisha physically by hand only or sealed pack. Tampering of packed in any form, the material shall not be accepted. No other modes shall be accepted for receiving the items. Only after successful operation of the item's payment shall be made. Field testing (both day and night) shall be done in presence of the supplier, if the equipment is found functioning in all aspect, then only the product shall be accepted else it would be rejected without assigning any reason thereof. Flying test shall be obligatory on the part of the supplier at the location within the jurisdiction of the Divisional Forest Officer, Jharsuguda Forest Division, Jharsuguda, Odisha
15. Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if i) The Seiler fails to comply with any material term of the Contract. ii) The Seller informs Buyer of its inability to deliver the Matretrial(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent. iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly. iv) The Seller becomes bankrupt or goes into liquidation. v) The Seller makes a general assignment for the benefit of creditors. vi) A receiver is appointed for any substantial property owned by the Seller, vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.
16. Non-compliance of any of the Terms & Conditions mentioned in the Bid. the bidder/seller shall be rejected


Divisional Forest Officer
Jharsuguda Forest Division.

Installation certificate to be submitted after installation by the supplier

Sl. No.	Name of the site	GPS Location	Range/Section/Beat	Name and designation of the Forest Staff Present during installation
Signature of authorized personnel involving in installation				


Divisional Forest Officer
Jharsuguda Forest Division.

FORM-A

Technical Bid for Procurement of One (01) UAV equipped with Lidar and GNSS Receiver for DFO, Jharsuguda Forest Division, Jharsuguda

1. Name of the Bidder/Organization:-

2. Detailed Address of Bidder:-

3. E-mail ID:

4. Telephone/Mobile No.:

5 PAN No.:

6. GST No.:

7. Period of clearance of GST:

8. Income Tax Clearance Enclosed in separate sheet.

9.

Sl. No	Name of the company	Model	Manufacture year	Warranty Period	Maintenance Services

Certified that the information provided above is true and the organization has never been debarred or black listed by any Government Organization.

Place :

Name & Signature of the Tenderer

Date :

FORM-B

Financial Bid for Procurement of One (01) UAV equipped with Lidar and GNSS Receiver for DFO, Jharsuguda Forest Division, Jharsuguda

1. Name of the Bidder/Organization
2. Detailed Address of Bidder
3. E-mail ID:
4. Telephone/Mobile No.:
5. Unit Cost of UAV equipped with Lidar and GNSS Receiver:
6. Admissible Tax per unit cost of material (in Rs):
7. Transport Charges of 01 UAV equipped with Lidar and GNSS Receiver if, any
(in Rs):
8. Total (SINo.5+6+7) unit cost of UAV equipped with Lidar and GNSS Receiver
(inclusive of all) (in Rs):
9. Total Financial bid amount for 1 no. UAV equipped with Lidar and GNSS Receiver
10. Amount of EMD in shape of demand draft enclosed:

Certified that the information provided above is true and the organization has never been debarred or black listed by any Government Organization.

Place :

Name & Signature of the Tenderer

Date :