



OFFICE OF THE DIVISIONAL FOREST OFFICER, REDHAKHOL DIVISION
Mobile No:-9437054951, Email ID:-dfo.redhakhol@odisha.gov.in

Short Notice


Notice No. 002 Dated – 13.04.2026

**Procurement of Drone Photogrammetry & 3D Mapping Software
(Perpetual License) for Redhakhol Forest Division**

Divisional Forest Officer, Redhakhol Forest Division invites intending suppliers/software vendors/ suppliers / manufacturers/agencies for supply of Drone Photogrammetry & 3D Mapping Software (Perpetual Licence) during the year 202627. The details of tender document is also available on the district website <https://tendersodisha.gov.in> or <https://sambalpur.odisha.gov.in> or www.redhakholforest.com .

You may submit your responses in online portal in prescribed format to the undersigned latest by 21.04.2026 on or before 05.30 PM.

| SI No. | Critical Dates | Date | Time |
|--------|---------------------------|------------|----------|
| 1 | Publishing Date | 14.04.2026 | - |
| 2 | Bid Submission Start Date | 14.04.2026 | 11.00 AM |
| 3 | Bid Submission End Date | 21.04.2026 | 05.30 PM |
| 4 | Bid Opening Date | 22.04.2026 | 11.00 AM |


Divisional Forest Officer,
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LIMITED TENDER NOTICE

Whereas quotation from intending suppliers/software vendors for supply of Drone Photogrammetry & 3D Mapping Software (Perpetual Licence) to Redhakhol Forest Division during the year 2025-26, are invited from the intending suppliers / manufacturers/agencies through issue of quotation call notice for supply of the same within 7 days from the publication of this notice.

1. The sealed quotations accompanied by technical brochure / documentation of the Drone Photogrammetry & 3D Mapping Software (Perpetual Licence) should reach the undersigned within 15 days from the date of publication of this notice.
2. The purchase order may be placed in full or part thereof as per availability of funds.
3. The quotation must be submitted from **date 14.04.2026 to 21.04.2026 (5.30 PM)** by the bidder.
4. The quotations will be opened on dated **22.04.2026 at 11.00 A.M** in this Office & lowest bidder (L1) selected by a committee constituted for this purpose.
5. The Drone Photogrammetry & 3D Mapping Software (Perpetual Licence) should be supplied / activated within 07 days of placement of the order.
6. The Perpetual Licence activation key/certificate should be delivered to the O/o the DFO, Redhakhol Forest Division at their own cost.
7. Any licence supplied in non-activatable / defective condition should be replaced within the next 07 days at the vendor's own cost.
8. All the Software Licences should be supplied as per specifications selected by the Limited Tender Notice or else the order deems to be cancelled.
9. The price quoted should be inclusive of all taxes (GST, etc.).
10. Payment will be made through RTGS / Account deposit after receipt of valid Perpetual Licence keys and satisfactory activation as per placement order.
11. The authority reserves the right to accept or reject the quotations without assigning any reason thereof.

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Technical Specifications of Drone Photogrammetry & 3D Mapping Software **(Perpetual Licence)**

1. Licence Type

- a. Perpetual / Permanent licence (one-time purchase with no recurring annual subscription fees).
- b. Licence must be bindable to a single computer / device and transferable to other computers on need basis.
- c. Offline activation mode must be supported (i.e., the software must be operable without continuous internet connectivity).

2. 2D Reconstruction & Mapping

- d. Generation of high-resolution True Digital Orthophoto Map (TDOM) from visible-light imagery.
- e. Generation of Digital Surface Model (DSM) and Digital Elevation Model (DEM).
- f. Support for 1:500 mapping accuracy standards when paired with RTK-equipped mapping drones.
- g. Radiometric correction and generation of reflectance maps for remote sensing applications.

3. 3D Reconstruction

- h. Photogrammetry-based 3D mesh model generation from aerial photographs.
- i. Point cloud generation and export in standard formats (LAS, PLY, PCD).
- j. Support for 3D Gaussian Splatting or equivalent photorealistic 3D model generation technology.
- k. Import support for third-party LAS point cloud files.

4. LiDAR Data Processing

- l. Deep integration of LiDAR point cloud data and visible-light imagery.
- m. Simultaneous generation of high-precision point clouds, 2D orthomaps, and 3D mesh models from a single LiDAR acquisition.
- n. LiDAR point cloud accuracy optimisation support.

5. Multispectral Reconstruction

- o. Processing of multispectral imagery to generate vegetation index maps including NDVI (Normalized Difference Vegetation Index) and NDRE (Normalized Difference Red Edge).
- p. Radiometric calibration and reflectance map generation for agricultural and forestry applications.
- q. Compatible with multispectral drone payloads operating in relevant spectral bands.

6. Mission Planning & Data Acquisition

- r. Integrated mission planning module with Waypoint, Area, and Oblique flight modes.
- s. Configurable parameters including altitude, speed, gimbal tilt, heading, and camera settings.
- t. Real-time live orthomosaic (2D map) generation during active drone flight.
- u. KML file import support for area delineation.

7. Measurement & Analysis Tools

- v. Linear distance, area, and volumetric measurement tools on 2D and 3D outputs.

- w. Photo inspection and annotation tools for multi-team data communication.
- x. AI-assisted object classification and machine-learning pipeline support.

8. Output Formats

- y. 2D outputs: GeoTIFF (orthomosaic / TDOM), DSM/DEM rasters.
- z. 3D mesh outputs: OBJ, PLY, B3DM (3D Tiles), S3MB.
- aa. Point cloud outputs: LAS, PNTS, PLY, PCD.

9. Drone / Payload Compatibility

- bb. Must support data processing from enterprise-grade mapping drones equipped with full-frame / large-format cameras
- cc. Must support LiDAR data from compatible airborne LiDAR payloads
- dd. Must support data from RTK-enabled survey drones for high-accuracy GCP-free mapping.

10. Minimum System Requirements

- ee. Operating System: Windows 10 (64-bit) or above.
- ff. RAM: Minimum 32 GB.
- gg. GPU: NVIDIA dedicated graphics card with minimum 4 GB VRAM and compute capability ≥ 6.1 (NVIDIA GTX 1060 class or above).
- hh. Storage: Minimum 500 GB free SSD space for project data.

11. Warranty & Support

- ii. Free software updates / upgrades must be included for a minimum period of 1 (one) year from the date of activation.
- jj. Technical support and valid software documentation to be provided along with the licence.
- kk. Vendor to demonstrate software functionality before final acceptance of supply order.


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