

NOTICE

INVITATION OF APPLICATION

FOR

Empanelment of Eligible Firms

To Undertake

UAS / UAV / Drone Imaging Services in Odisha

Notice No.07/2025 Dated 05.03.2025



ODISHA SPACE APPLICATIONS CENTRE (ORSAC)

Dept. of Science and Technology, Govt. of Odisha,

Plot no.45/48, Jayadev Vihar, Near GAA, Unit-16, Bhubaneswar-751023, Odisha

Tel : -0674-2300733,3293545, E-mail- orsac@odisha.gov.in / orsac.od@nic.in

<http://www.orsac.odisha.gov.in>



1. SCHEDULE OF EVENTS:

Sl. No	Information	Dates & Details
1	Notice Issuing Authority	Chief Executive, ORSAC, Bhubaneswar, Odisha
2	Hosting of the document on ORSAC Notice Boards / Govt. Websites / Newspapers	05.03.2025
3	Cost of Notice for Empanelment (Non-refundable)	Rs.5000/- in form of DD from any Nationalized Bank in favour of ORSAC Payble at Bhubaneswar.
4	Earnest Money Deposit (EMD)	EMD, only in the form of a Bank Draft, from any Nationalized Bank payable at Bhubaneswar for Rs. 50,000/- (Rupees Fifty Thousand) only in favour of ORSAC, Odisha Bhubaneswar, valid for 180 days from the date of opening of the technical bid.
5	Address for Submission of Bid	ORSAC, Plot No 45/46, Jaydev Vihar, Bhubaneswar, Odisha – 751023.
6	Last Date of Receipt of Pre-Bid Queries	11.03.2025, 5:00 P.M
7	Date of Pre-Bid Meeting	12.03.2025, 12:30 P.M at ORSAC Conference hall/ through VC.
8	Issue of Consolidated and Relevant Clarifications on the received Pre-Bid Queries.	13.03.2025, 5:30 P.M through ORSAC and Odisha Govt. Portal.
9	Last date of receipt of Bids	24.03.2025, 5.00 P.M through Post and in-person
10	Opening of General and Technical Bids	25.03.2025, 12.00 P.M , onwards at ORSAC
11	Physical demonstration for the Technical qualified Bidders & Declaration of Empanelment Results.	Date and time to be communicated after completion of evaluation of General and Technical Bids.



2 DISCLAIMER

All information contained in this Notice for Empanelment Document is in faith. This is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the preparation of this Notice for Empanelment Document, the interested firms shall satisfy itself that the document is complete in all respects. The information is not intended to be exhaustive. Interested firms are required to make their own enquiries and assumptions wherever required.

Odisha Space Applications Centre (ORSAC) reserves the right to reject any or all of the proposals submitted in response to this Notice at any stage without assigning any reasons whatsoever. ORSAC also reserves the right to withhold or withdraw the process at any stage with intimation to all who submitted the responses against the Notice for empanelment. ORSAC reserves the right to change/modify/amend any or all of the provisions of this Notice. Such changes would be posted only in its website (www.orsac.odisha.gov.in). Prospective bidders(firms) are requested to visit the website frequently to keep them abreast with the latest developments on this Notice.

Neither ORSAC nor its employees and associates will have any liability to any prospective respondent interested to apply or any other person under the law of contract, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this Notice , any matter deemed to form part of this Notice, the award of the Assignment, the information and any other information supplied by or on behalf of ORSAC or their employees and firm / consortium or otherwise arising in any way from the selection process for the Assignment.

Information provided in this document or imparted to any respondent as part of the Notice for Empanelment process is confidential to ORSAC and shall not be used by, distributed to, or shared with any other person or organization.



3 CHAPTER 1

INTRODUCTION, OBJECTIVE AND GOAL OF THE NOTICE

INTRODUCTION:

Odisha Space Applications Centre (ORSAC), the apex body of the State of Odisha for Space Technology Applications, was established in the year 1984. The Centre is located at Bhubaneswar in its own building at Jaydev Vihar. The Centre is equipped with sophisticated Remote Sensing, GIS & Computer laboratories with latest Photogrammetry, Digital Image Processing, GPS/DGPS Data Collection & Processing and RDBMS software of Enterprise as well as Desktop class under Commercial and Open Source environments. It has a team of well-experienced multidisciplinary application scientists to undertake Remote Sensing, GIS & GPS based projects.

The Unmanned Aerial System (UAS)/Unmanned Aerial Vehicle (UAV) is an aerial vehicle with no pilot to man controls. It can be remotely controlled by personnel on ground or by pre-programmed flight plans. Of late, the UAVs have become increasingly more sophisticated and the term UAV has been changed to UAS, an acronym for Unmanned Aircraft System. The change amplifies the fact that apart from being an aerial vehicle, this complex system is now able to carry different sensors like optical, thermal, microwave and LIDAR sensors to image the earth surface in mono, multispectral and stereo mode.

For Remote Sensing or Mapping and Surveying, these systems can be used effectively for preparation of Digital Elevation Model (DEM), contour, slope and Ortho-Image with the spatial resolution of the order of 3cm which may be used in case of disaster scenarios, slum survey, city planning, volume estimation of raw materials excavated from any mining lease area etc. Some of the more applications using UAS Image Service are given, which may be covered during the Project tenure.

Use of UAS for Cadastral Resurvey under DILRMP:

Recently Department of Land Resources, Govt. of India, Ministry of Rural Development introduced use of UAV in Cadastral Resurvey Project under Digital India Land Records Modernization Programme (DILRMP). It would facilitate to take the stereo image of the portion of Revenue Unit (District/Tahasil/Village) at instant of time with the spatial resolution of the order of 5cm to 10 cm and ortho image of the same area could be generated for generation of digital cadastral map. The Revenue & Disaster Management Department, Govt. of Odisha would be benefit by the acquisition of UAS by ORSAC.

USE of UAS for Disaster Scenarios in the State:

In any type of small-scale disasters like ash pond breaching, UAS could be utilized to take the image of the area in stereo mode for generation of ortho image and the compensation could be given to



the affected farmers by superimposing the geo-referenced cadastral record over the ortho image. Thus, it would give an impartial means to the administrators to take decisions using UAS data products.

Use of UAS for Mining area for Block allocation, Forest Clearance and volume change study for the Ore mining of the active mines:

The Block allocation of mines requires survey of mine areas as well as forest areas in conjunction with revenue record, where UAS would facilitate to image the area and the ortho image generated from that would facilitate to geo-reference the cadastral map and superimposition of DGPS surveyed co-ordinates relating to Forest as well as Mining area would facilitate the concerned Department to do necessary processing for getting Govt. approval.

The day to day mining of any active area could be studied with reference to volume change of the excavated area as well as the dumping area by taking the stereo image through the UAS and Digital Elevation Model (DEM) could be generated, where the difference of the DEMs of each day would give the volume change of the ore excavated and deposited in the nearby dumps.

Use of UAS for Habitation mapping in the Urban areas:

Direct ground survey of Urban habitations invites law and order problems. Those areas could be imaged using UAS using optical camera as well as LIDAR to generate Ortho Image which in turn would facilitate to map the Slum areas very accurately. The LIDAR survey would help to generate the image without vegetation and the clarity in image would facilitate to map each house hold precisely.

Use of UAS for Forestry Applications:

In forestry the possible applications are given below, which could be taken up in consultation with Forest Department.

- Forest fire detection
- Monitoring of encroachment & wild life violation
- Locating plantation sites and inspecting forestry operations
- Monitoring and change detection within natural forests, where trespassing is difficult or undesirable.

Use of UAS in Agriculture Sector:

In Agriculture, UASs may be used for:

- Field trials and research



- Determination of the biomass, crop growth and food quality
- Precision Farming, e.g. to determine the degree of weeds for site specific herbicide applications. Also, a reduction of fungicides due to site specific applications in potato production is of interest
- Senescence monitoring of cereals and maize for harvest and logistic optimization.

Use of UAS for Archeological Studies:

The recording and 3D modelling of complex archaeological sites is usually associated with high capital and logistical costs, because the data acquisition must be performed by specialists using expensive surveying sensors (i.e., terrestrial laser scanners, robotic total stations and/or ground-penetrating radar).

Now the acquisition of UAS would facilitate a novel, low-cost, user-friendly photogrammetric tool for generating high-resolution and scaled 3D models of complex sites. The literature study on UAS shows that Unmanned Aerial System (UAS) photogrammetry approach is semi-automatic, inexpensive and effective, and it guarantees quality.

Intent of the Notice:

As stated above, the applications and activities surrounding UAS for public use have quickly emerged over the past several years, and the technology, its use, and the governance and oversight for their use have evolved rapidly, and is expected to continue to do so for the foreseeable future. It is often not practicable or feasible for a public body that needs such technology and for any variety of specialized purposes, to acquire, maintain, or operate these products, and then to keep up with these rapidly changing aspects surrounding these products and their use.

ORSAC envisions the possibility that the use of UAS Image Services may be acquired and services performed through a contracted service provider, without the necessity of having to purchase products, maintain and operate a fleet of aircraft, train and hire specialized pilots or maintenance of staff, replace and frequently upgrade the equipment, become experts in this technology, or otherwise become an owner of such equipment and develop the necessary requirements to organize, and retain the requisite staff, train, license and certify such staff, and ensure the necessary technical expertise to maintain such equipment. ORSAC also desires to empanel the Vendors to deliver HRSI based Photogrammetric Services to process stereo images procured from NRSC, ISRO/DOS, Govt. of India at the time of requirement of ORSAC and other Departments of Govt. of Odisha.

The intent of the Notice is principally to support the needs of ORSAC and the state of Odisha in the area of using the UAS Image Services and integration of UAS Imaging Technology into the Development Programs taken up by the Govt. of Odisha for speedy implementation in the State.



However, and in the event of empanelment of UAS Image Services Providers by ORSAC, it will facilitate to ORSAC and the State of Odisha to obtain the most optimal cost savings and / or reductions in administrative relating use of UAS in various applications beneficial to the State.

Objective

The key Objectives of this Notice are as follows.

- ✓ Empanelment of the Vendors is aimed to provide UAS Image Services for acquiring stereo & mono images using optical MX Sensors / Cameras of specified specification, Thermal Images, Hyperspectral Images and LiDAR Survey following all the rules and regulations of DGCA, Govt. of India and the State Government.
- ✓ Processing of acquired UAS data inside ORSAC Campus following security norms of ORSAC and Technical Guide lines as specified by ORSAC:
- ✓ Establishment of Ground Control Points with respect to the PGCPs of SOI / ORSAC in the study area as per the grid interval specified by ORSAC.
- ✓ Ground Sampling Distance (GSD) or UAS Image Resolution requirement in case of use of optical sensors and Laser Point Density (No of dots per Sq. Mt) in case of LiDAR use by ORSAC as per the requirement of the Project.
- ✓ To provide HRSI / UAS based Photogrammetric Services to ORSAC to process high resolution Stereo/Mono Satellite Images procured from NRSC, ISRO/DOS, Govt. of India by ORSAC and other State Government Departments of Govt. of Odisha.
- ✓ If required, all the Processing are to be done only inside ORSAC Laboratory using UAS / HRSI Processing facility.
- ✓ The Photogrammetric or Imagery Service Outputs / Products generated by the SI are to qualify the QA & QC norms specified by ORSAC otherwise the SI has to re-fly UAS and redo the Processing job to qualify the QA & QC norms.

STATEMENT OF NEEDS

A. General Requirements

- Any and all photographs, videos, data gathered, data analyzed, and reports generated shall be the sole property of ORSAC / State of Odisha.
- The Survey Agency shall be able to provide support for a variety of missions within the below defined Service Categories. The missions will be defined and coordinated between ORSAC / Govt. Department under Govt. of Odisha and the Survey Agency.



The requested missions may require additional analysis or support to assist with the completion of the mission and will be coordinated between ORSAC / Govt. Department under Govt. of Odisha and the Survey Agency. These missions may include but not be limited to the following Service Categories:

B. Emergency Support Services:

- a) Emergency responses will fall within three (3) categories of response.**
1. Rapid response times shall be responses to emergency situations required within 1 to 4 hours or as quickly as possible.
 2. Priority response times shall be responses to emergency situations required within 24 hours or potentially more quickly.
 3. Routine response times shall be responses to emergencies, which shall normally occur within 72 hours.
- b) These response hours may vary based on the specific situation and require missions and should be discussed by the Survey Agency and ORSAC / Govt. Department under Govt. of Odisha depending upon the requirements that are to arise on general and emergency conditions. The decision of Chief Executive, ORSAC shall be binding to all the Vendors.**
- c) Active Natural Disaster Support Missions:**
- i. Active natural disaster support missions will involve active natural disasters as identified and declared by ORSAC / Govt. Department under Govt. of Odisha.
 - ii. Supporting these missions may require extended personnel support and may involve a greater degree of difficulty and danger posed to all personnel involved.
 - iii. These natural disasters may include but are not limited to:
 1. Forest fires
 2. Floods / Cloud Bursts
 3. Cyclones
 4. Ash Pond Breaching
 5. Drought
 6. Police Requirement for Videography during law & order situation.
 - iv. Natural disaster support services may also help bring situational awareness to First Responders and Disaster Relief teams actively working on the ground. Situational awareness may be coordinated efforts between ORSAC / Govt. Departments under Govt. of Odisha and the Survey Agency to warn those on the ground of potential hazards or threats that may be out of their immediate



line of sight.

- v. Survey Agency may also be requested by ORSAC / Govt. Departments under Govt. of Odisha to provide post disaster evaluation support services. This may involve the collection of stereo images and generation of ortho images and integration geo-referenced cadastral layers to generate Plot wise and stake holder wise information as well as photographs, videos, or other data in order to assess relief efforts or evaluate a disaster's effects on the area.
- vi. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 1. High definition cameras and video recording devices
 2. Radiation detection devices
 3. Aerial sonar devices
 4. Infrared and heat detection devices
 5. Night vision apparatus

c) Construction and Infrastructure Support Services:

- a. These services may include the collection of photographs, videos, and/or data for the purpose of evaluation, planning, and development of land. This land may have existing structures such as buildings and roads, or be undeveloped.
- b. Land Surveying and Aerial Mapping Missions:
 - I. As permitted by the state and laws of the land, Survey Agency may be requested to perform land surveying and / or aerial mapping of specific geographic locations.
 - II. If it is requested that the Survey Agency perform land surveying through the use of Aerial Lidar, then the Survey Agency shall perform all services in compliance with the appropriate standard unless otherwise specified by ORSAC / Govt. Department under Govt. of Odisha. Some of the standards are mentioned below for the reference of the prospective bidders.
 - a. American Society for Photogrammetry and Remote Sensing (ASPRS) – LAS Specification Version 1.4 – 2011 or most current version
 - b. US Geological Survey, National Geospatial Program (USGS NGP) – Lidar Base Specifications Version 1.2 – 2014 or most current version
 - c. DOS/ISRO/NRSC Specification if any used under any National Project.
 - d. Survey of India Specification if any used under the Project executed by Survey of India, Govt. of India.
 - e. BSI Metadata Standards – most current version
 - f. Standard and specification as required by the User Department



- g. Or Future Industry standards which may not yet be defined or accepted but become an accepted industry wide practice.
- III. If it is requested that the Survey Agency perform land surveying through the use of Digital Ortho Photography, then the Survey Agency shall perform all services in compliance with the appropriate standard unless otherwise specified by ORSAC / Govt. Department under Govt. of Odisha which includes but not limited to:
 - a. Survey & Resurvey Guide line & SOP of Revenue & Disaster Management Department, Govt. of Odisha.
 - b. BSI Metadata Standards.
 - c. Future Industry standards which may not yet be defined or accepted but become an accepted industry wide practice.
- IV. These missions may require specialized equipment in order to support the mission of the requesting public body. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices
 - b. Aerial Lidar imaging equipment
- d) Linear Surveying Missions:**
 - I. These missions may be used to support the surveying of existing road, pipeline, transmission line, railway line, canal improvement and assessment projects or support new road planning, design, and assessment projects.
 - II. This may also include missions related to traffic support studies.
 - III. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices.
 - b. Aerial Surveying using Thermal Sensor.
 - c. Aerial Surveying using PAN & MX cameras.
- e) Bridge and Tunnel Inspection Service Missions:**
 - I. These missions may be used to visually inspect existing bridges and support structures for structural deficiencies.
 - II. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices.
 - b. Unmanned aerial systems with top mounted cameras or video recording devices.
 - c. Thermal imaging cameras for the detection of surface defects.



f) Slope Stability Monitoring Missions:

- I. These missions may be used to monitor the movement of rock and soil associated with slope failures.
- II. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices
 - b. Stereo mode data acquisition to generate DEM & Contour, slope & aspect.

g) Stockpile Volumetric Assessment Missions:

- I. These missions may be used to estimate the volume of various stockpiles including but not limited to gravel, sand, salt, and reclaimed asphalt pavement.
- II. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices.
 - b. Stereo mode data acquisition to generate DEM for volume calculation with reference to a reference DEM.

h) Agricultural Support Services:

These services may include the collection of photographs, videos, and/or data for the purpose of evaluation and/or inspection of a variety of agricultural related fields. These terrains and requested missions may vary greatly.

I. Agricultural Inspection Service Missions:

- a. These missions may be used for the detection and/or monitoring of invasive species. These species may be animals, insects, or plants.
- b. Missions requested may also be related to overall crop health.
- c. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 1. High definition cameras and video recording devices.
 2. Use of Hyperspectral Sensor & Field Spectrometer for collection of spectral signatures.
 3. Use of LiDAR sensor to generate DEM/DSM/DTM & Ortho images for change detection studies.
 4. Use of MX Cameras for change detection studies.



i) Forest and Wildlife Management Service Missions:

- I. These missions may be used for the detection and/or monitoring of invasive species. These species may be animals, insects, or plants.
- II. Missions requested may also be related to overall forest health.
- III. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices.
 - b. Use of Hyperspectral Sensor & Field Spectrometer for collection of spectral signatures.
 - c. Use of LiDAR sensor to generate DEM/DSM/DTM & Ortho images for change detection studies.
 - d. Use of MX Cameras for change detection studies.

j) Mining Inspection Service Missions:

- I. These missions may be used for the inspection of active and inactive/abandoned/retired mines for structural integrity.
- II. Missions requested may also be related toxic gas levels within the mines.
- III. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices
 - b. Specialized sensors to measure gas levels

k) Fisheries Support Services:

- I. These missions may be used for the detection and / or monitoring of Fisheries.
- II. Missions requested may be related to the detection or location of illegal hunting, poaching, or fishing activities.
- III. These missions may require specialized equipment in order to support the mission of ORSAC / Govt. Department under Govt. of Odisha. Specialized equipment which may be requested includes but not limited to:
 - a. High definition cameras and video recording devices
 - b. Specialized GPS sensors

l) SURVEY AGENCY'S REQUIREMENTS:

- I. All Offerer shall provide DGCA certifications which provide proof that the Unmanned Aerial System (UAS) / Unmanned Aerial Vehicle (UAV) / Drone comply all the recent regulations of DGCA relating to purchase and operation. If an Offeror is awarded a contract,



then the Survey Agency, which perform UAS flight missions, shall be DGCA Certified, or as amended by DGCA. The Survey Agency are required to provide proof of certification and maintain all proper certifications during the entirety of the contract period. Upon request, the Survey Agency shall provide the most current certification to the requesting Agency / Agencies.

- II. All Offerer shall provide detailed information of all equipment they are currently using and their capabilities. They shall also provide detailed information regarding equipment which is owned and operated by any sub-Survey Agency that they intend to use to support the resulting contract. This shall include any and all sensors and attachments that may be used to support the Service Categories. All Offerer shall specify clearly under which Service Categories, the equipment owned by them belongs to or can be deployed & able to support.
- III. All Offerer shall submit the detail equipment maintenance plans to ensure equipment operability in the event of a service request made by ORSAC / Govt. Department under Govt. of Odisha.
- IV. All Offerer shall provide a brief history of the company and the company's areas of expertise related to this Notice.
- V. All Offerer shall provide examples of missions that have been performed with an emphasis on those performed for Public Bodies. The missions specified should also highlight the Service Categories the Offeror is seeking for qualification.
- VI. All Offerer shall provide resumes and DGCA certificate of the Pilot, who will operate the UAS/UAV/Drone for the mission assigned to the Survey Agency by ORSAC / Govt. Department under Odisha Government. The Pilot may have to update his / her certifications during the Project tenure, if that is required by DGCA. The Offerer shall submit the resumes of the key personnel that shall be assigned to work on the Contract relating to flight planning, DGPS Survey to establish the GCPs before flying UAS and processing of UAS data to generate products.
- VII. All Offerer shall specify which District of the State of Odisha or whole or part of the State of Odisha, they are able to support if requested by ORSAC / Govt. Department under Odisha Government. Along with this information, Offerer shall provide information on both standard and emergency response times within their specified areas of operation.
- VIII. Offerer shall understand that they may be required to receive training from State or Local Emergency Officials in order to understand the requirements and to provide UAS Image Service & Support in the event of a declared emergency.
- IX. Survey Agency shall maintain and provide current certificates of insurance of the equipment used under the work assigned by ORSAC / Govt. Department under Odisha Government, as and when required by the Organizations. Any damage, if occur during the operation shall be compensated by the Insurance Organization and it is the responsibility of the Survey Agency to see the recovery against the damage from the Insurance Firm.



Neither ORSAC nor Government Organizations of Govt. of Odisha will be responsible for any damage to UAV/Drone during the operation. The work shall not be halted due to any damage of the Drone / UAV, another Drone/UAV shall be replaced to resume the operation at the earliest.

- X. Survey Agency may be required to perform background checks on their employees or certify that their employees have already received a background check in compliance with the requirements of ORSAC / Govt. Department under Odisha Government's laws and/or statutes. Background check requirements may vary from Govt. organization to Organization based on each Organization's requirements, participating addendum, or orders. Survey Agency will be expected to comply with all background check requirements.
- XI. The Survey Agency has to fulfil the minimum specifications of **Professional Survey Grade UAS/UAV/Drone** with the Sensors conforming to the DGCA Guidelines issued time to time, in order to provide UAS Image service to ORSAC / any Govt. Department under Govt. of Odisha.
- XII. The Survey Agency will be asked to show the live demo for the UAS with the sensors they possess separately before the technical committee for evaluation. During the live demo evaluation, UAS and the Payloads / Sensors with Gimbal to be used by the Survey Agency shall comply DGCA Guidelines F. No. 05-13/2014-AED Vol. IV issued dated 27 Aug, 2018 and effective from 01 Dec, 2018 and the latest issued guide line by DGCA.
- XIII. The Empaneled UAS Image Service Providers have to use the Survey Grade UAS and the Payloads / Sensors with the following Minimum Technical Specification against the Purchase Order issued by ORSAC / User Departments of Govt. of Odisha for collecting High-Resolution Image Data. The Minimum Technical Specification of Professional Survey Grade UAS is given below for reference and any vendor's sensor may not be identical but should not be lower level than the specifications given below, Further, for specific requirements after empanelment, the specifications by the ORSAC as per state/user requirement will be modified.



Minimum Technical Specification of Professional Survey Grade UAS	
Housing	Carbon Fiber Reinforced Polymer
Average / Rated Payload	2- 5 kg (Micro, Mini, Small)
Max. Speed	< = 40 km/h
Flight Height	Up to 1,000 m ideal conditions, up to 3,000 m (9,842 ft.) above sea level
RC Range	Minimum 5,000 m
Flight Time	With Payload: Minimum 45 Minutes
Operating Temperature	-20° to 55°C
GPS-Receiver	DGNSS with RTK/RTX/ PPS/PPK
Gyroscope	yes
Accelerometer	yes
Barometer	yes
Magnetometer	yes
Ultrasonic Sensors	yes
Adaptable Sensors	flexible, according to current application
Control	Remote control with display (to get live feed from camera with aircraft parameters), automatic waypoint flight, GPS Tracking to locate the U.A.S at the time of crashing or going out of control through a mobile App.
Batteries	Lithium-polymer, Minimum 3 NOs/Sets
Service	Service team & Hotline service shall be made available by OEM.
On top Mounting	Camera can be mounted on top also for Bridge, Electrical inspection



Camera	20-50 Megapixels or better with option for on top mounting. The Camera shall be water and corrosive Proof in case of flying in marine environment i.e. adhering IP68 Standard.
Redundancy	Tolerant up to 2 nos. motor failure.
License	Vendor has to provide manufacturing/import licensing for the U.A.S as per DGCA latest guidelines.
Features	
Fully integrated geo-referencing	
High, flexible payload	
Anti-collision lighting and obstacle avoidance mechanism	
Accurate navigation and precise data	
Built-in automatic take-off and landing	
Reliable minimum altitude	
Dynamic waypoints (POI)	
Flight Planning Module Enabled (Manual/Auto)	
Position Hold function	
Easy orientation	
Automatic return function	
Software	
Flight Planning Software	Autonomous mission planning for aerial & linear missions. Ability to design waypoint-flights, which will be performed automatically by the UAS upon instruction. Waypoint planning is done on geo-referenced imagery. Additional features include: Automatic generation of raster flights in respect to photogrammetric requirements, Aerial Image Management Module, ideal for managing pictures, Map-caching and offline planning function, Extensive camera database for managing predefined camera configurations.



Compatible Sensors Specification with Gimbal		
Camera Sensor	Sensor resolution and	20-50MP with lens options
	ISO	100 to 25,600
	Focus	Contrast-detection AF
	Shutter speed	1/8,000 to 30 sec
	Weight	< 500 g (including battery)
	Interfaces	Multi interface connector

Multispectral sensor with RGB camera and Gimbal for given UAS	Resolution multispectral	1.2 MP, 8-10 spectral bands,
	Resolution RGB	Up to 20 MP
	Spectral range	4000-8000 A ⁰
	Weight (incl. sunshine sensor)	< 200 g
	DGPS Rover Enabled	Included, direct geo-referencing
	Interfaces	Wi-Fi, USB
	Storage	Min 128 GB, removable SD-card
	Specials	IMU, magnetometer

Thermal sensor with RGB camera, Gimbal for given UAS and with optional lens	Resolution thermal	300-650 x 256-512 pixels
	Resolution RGB	4K to 8,272 x 6,000 pixels
	Temperature range	-25°C to 55°C and -40°C to 55°C/-20°C to 50°
	Temperature sensitivity	0.05°C



	Accuracy	+/- 1°C
	Spectral range	7,500 - 13,500 nm
	Weight	< 500 g
	Interfaces	HDMI, USB
	DGPS Rover Enabled	GPS and RTK/RTX GNSS
	Storage	Min 128 GB memory
	Features	Zoom (Thermal and RGB), video, single image (thermal and RGB), spot detection, including software Core Player and Thermo Format for post processing

Hyperspectral Camera with Gimbal for given UAS, power supply, Memory device & Data processing software	Spectral range	400-1000 nm
	Spatial Pixels	1024
	Spectral Channels	270
	Sensor	CCD / CMOS
	Dynamic range	12 bits
	Data Rate	300 fps
	Exposure time	integration time 5 - 15 ms / band, 30 bands /s (1010*648 pixels)
	Weight	2-3 kgs, with battery, Gimbal, GPS and irradiance sensor
UAS Enabled LiDAR, Gimbal	10-20 mm survey grade accuracy	
	Measurement range 100-200m	



for given UAS& Processing S/W	Measurement rate 2-10 lakhs measurements per second	
	Rotating range 15Hz or more	
	Field of view up to 360 degree for practically unrestricted data acquisition	
	2-3 Kg total weight (including sensor, Gimbal, storage, battery, GPS unit) and rugged	
	Easily mountable on professional UAS / UAS / RPAS	
	360° Horizontal FOV +10° to -30° Vertical FOV	
	Up to 10,00,000 point per second	
	LAN-TCP/IP Interface-100Mbps	
	Scan data storage on internal 200 Gigabyte	
	Software for Ground LAS data output for Geospatial usage	
Field Spectro-radiometer with all Accessories	For Collection of Spectral Radiance in the Field for classification of Data collected using UAS	
	Spectral Range	350-2500 nm
	Spectral Resolution	3 nm @ 700 nm
		6 nm @ 1400/2100 nm
	Spectral Sampling (bandwidth)	1.0 nm @ 350-2500 nm
	Scanning Time	100 milliseconds
	Stray light specification	VNIR 0.02%, SWIR 1 & 2 0.01%

	Wavelength reproducibility	0.1 nm
	Wavelength accuracy	0.5 nm
	Maximum radiance	VNIR 2X Solar, SWIR 10X Solar
	Channels	2151
	Detectors	VNIR detector (350-1000 nm): 512 element silicon arrays
		SWIR 1 detector (1001-1800 nm): Graded Index InGaAs Photodiode, Two Stage TE Cooled
		SWIR 2 detector (1801-2500 nm): Graded Index InGaAs Photodiode, Two Stage TE Cooled
	Input	1.5 m fiber optic (25° field of view). Optional narrower field of view fiber optics available.
	Noise Equivalent Radiance (NEdL)	VNIR 1.0 X10 ⁻⁹ W/cm ² /nm/sr @700 nm
		SWIR 1 8.0 X10 ⁻⁹ W/cm ² /nm/sr @ 1400 nm
		SWIR 2 8.0 X10 ⁻⁹ W/cm ² /nm/sr @ 2100 nm
	Weight	< 6 Kg
	Calibrations	Wavelength, absolute reflectance*, irradiance*. All calibrations are NIST traceable. (*radiometer calibrations are optional)
	Computer	Compatible to instrument controller.

m) STUDY AREA:

The Study area covers the entire State of Odisha consisting of 30 districts. As UAV has the limitation to cover a small area in a day, the study area will be part of the state under certain District, which will be covered continuously till the completion of the complete study area. All necessary DGCA compliances and legal formalities are to be done by the Survey Agency before flying. The



Study area may cover beyond the State Boundary of Odisha and within the Country Boundary, if any specific State Government or Central Government Department ask ORSAC to carryout UAV/UAS/Drone Survey provided all facilitations supported by the concerned Departments for the same work.

n) DELIVERABLES:

All Deliverable shall be strictly as per the individual purchase order issued to the empaneled Survey Agency/Vendor by ORSAC/ Govt. Department. However, the deliverables as expected from empaneled Vendors/Survey Agency are given in the following table and all the deliverables shall be submitted in an external hard disk archived in different folders against the scopes mentioned below.

Sl. No	Scopes	Deliverable
1	Videography & Monitoring	Online feed to the port assigned by the User for live monitoring of the incident and archived Videos in compatible video format desired by ORSAC/ User Dept.
2	Putting up GCP reflector and DGPS survey for GCP locations networking with SOI GCPs, Bench Marks and ORSAC DGPS surveyed GCPs & Processing with network adjustment as per ORSAC specified parameters.	<ol style="list-style-type: none"> 1.Raw DGPS Surveyed RINEX files. 2.GCP location diagram with the Photographs taken from four directions. 3.Processing Co-ordinates (latitude, Longitude, Altitude) in GCS and UTM co-ordinate System. 4.Project file.
3	Multi Spectral Camera on Stereo / Mono mode of acquisition	<ol style="list-style-type: none"> 1.Raw stereo / mono images of the study area. 2.Ortho images in seamless mosaic format in Geo-Tiff format. 3.Mosaics of DEM/DSM/DTM file in Geo-Tiff format. 4.Any derived Product like slope & aspect in ARC File Geodatabase format.

4	Thermal Sensor Utilization	1.Raw image in Tiff format. 2.Processed orthorectified image with Brightness Temperature at the sensor level as well as Surface Temperature at the terrain level in GeoTiff format.
5	Hyperspectral Sensor Utilization	1.Raw image in Tiff format. 2.Ortho-rectified Images after applying atmospheric correction. 3.Collection of spectral signatures for the specified objects in different bands. 4.Classification of hyperspectral images based on spectral signatures collected from the field and submission of classified images with the area report.
6	LiDAR sensor utilization	1.Raw LAS file. 2.Processed geo-referenced LAS file. 3.DEM/DSM/DTM file in geo-tiff format. 4.Ortho-image in geo-tiff format.

o) ELIGIBILITY CRITERIA:

The Firms bidding for the empanelment to provide UAS/UAV/Drone Image services to ORSAC and the State of Odisha as a whole / part must meet the following Minimum Eligibility Criteria, failing which their bids shall not be taken into consideration.

1. General Eligibility Criteria

2. Technical Eligibility Criteria



1. GENERAL ELIGIBILITY CRITERIA:

The General Eligibility criteria shall carry a weightage of 40 marks. A Firm has to score mandatorily a minimum of 60% marks from 40 marks i.e. 24 Marks to get selected in the General Eligibility Criteria and further to be considered for the evaluation under Technical Eligibility Criteria.

Thus, the General Eligibility Criteria stands out to be the 1st screening of the empanelment. A Firm scoring below 24 marks will be outrightly disqualified from the Empanelment Process.

The General Eligibility Criteria of the Firms for bidding is strictly as under:

GENERAL ELIGIBILITY CRITERIA (WEIGHGHTAGE = 40 MARKS)

Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
1	The Applicants must be either a registered sole proprietorship / partnership firm or a Company Registered under the Indian Companies Act, 1956/2013 and should be operational minimum for last 3 years in the field of operation as listed in Section-3 above.	Company or Firm Registration Certificate / Certificate of incorporation.	Full Marks = 10 For 3 Yrs. it is 6 marks & Extra @ 1 marks / Yr. Maxed at 10 (Mandatory Requirement)
2	The service provider should be in the field of DGPS & ETS Survey, Survey Data processing using Industrial Grade S/W, Photogrammetric related Services / Processing using Industrial Grade S/W, Cadastral survey & GIS database generation for Central & State Govt. Departments & Organizations / Nifty Listed Organizations in India, for minimum 3 (Three) years.	Copy of the work orders with respect to the date of submission of Application.	Full Marks = 10 For 3 Yrs. it is 6 marks & Extra @ 1 marks / Yr. Maxed at 10. (Mandatory Requirement)



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
3	The Organization should have at least ISO 27001:2013 certification on Information security and ISO 9001:2015 Quality Certification.	Valid ISO Information Security and Quality Certificate.	Full Mark = 5 Producing Valid ISO Certificate= 5 Mark No Certificate=0 Mark
4	The Firm Should have a Physically Verifiable & Full-fledged Registered and Business class Office in Odisha or it shall establish a such a business class office at Odisha within three months after got empaneled through this Notice.	Detail of Business Premise address, landline Telephone Number, Geo-tagged Photos, and necessary legal documents etc. are to be provided to prove its existence. The Firms, those are not having permanent offices / Branch Offices at Odisha shall submit undertakings in non-judicial stamp paper of value Rs.100.00 to establish their branch Offices in Odisha within a period of three months after got empaneled in UAS Image services & HRSI Photogrammetric Services by ORSAC.	Zero Marks (Mandatory Requirement)
5	Company should have a valid Odisha Registered GST Number (OGSTN) or intend to register under Odisha Government to have a GST Number in Odisha.	OGSTN Details of Firm (OGSTN Registration Certificate) should be submitted. The Firm/Firms shall submit an undertaking in a non-judicial stamp paper of value Rs.100.00 to get registered under Odisha GST, once empaneled under UAS/HRSI Photogrammetric services by ORSAC within a time period	Zero (Mandatory Requirement)



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
		of three months of empanelment.	
6	The Firm should not be under a declaration of ineligibility for corrupt and fraudulent practices nor should have been blacklisted by any Govt. or Govt. undertaking organizations at the time of submission of the bid.	Self-declaration certificate signed by the authorized signatory.	Zero (Mandatory requirement)
7	The Firm should have valid Provident Fund Registration Certificate.	Copy of Provident Fund Registration Certificate along with copy of latest Provident Fund Return Certificate.	Zero (Mandatory Requirement)
8	The Firm should have valid ESI Registration Certificate or Employee Group Insurance Certificate as Applicable.	The bidding organization must submit copy of their ESI Registration along with copies of last Annual Return.	Zero (Mandatory Requirement)
9	<p>Consortium Bid is Allowed only involving maximum 2 (Two) partners i.e. Lead Bidder + One More, as per following conditions:</p> <p>Work components and the responsibilities of the parties shall be clearly defined and mentioned in the Consortium Agreement printed in Non-Judicial Stamp Papers costing Rs.100.00 /each stamp paper. The Consortium Bid shall declare the Lead Bidder and consortium partner with their responsibilities. The Lead Bidder must have competency in DGPS</p>	The signed Consortium Agreement printed in non-judicial stamp papers costing Rs.100.00 /each stamp paper.	Zero



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
	Survey and Photogrammetry Works and must own required equipment. Minimum it should have 35 % capabilities as defined in General and Technical eligibility criteria. All responsibility of timely work order execution lies with only with the lead bidder.		
10	The Bidder / Bidders should not have been blacklisted/banned by any Central/State Government (Central /State Government and Public Sector) and any Court of Law or under a declaration of ineligibility for corrupt or fraudulent practices as on date of Bid Submission.	Affidavit to this effect shall be submitted by all the Bidders and their consortium partners, as per the format given.	Zero (Mandatory Requirement)
11	The bidding organization / Organizations under Consortium must have Annual Average Turnover of Rs. 2.0 Crore (Rupees Two Crore only) in the last three financial years. The financial statement should reflect turnover.	Copies of audited Balance Sheet, Profit & Loss account and Auditor Certified Turnover statement indicating revenue for last 3 years must be enclosed as supporting for the Bidder / consortium Partners.	Full Marks = 5 For Rs 2.00 Crore, it is 3 marks & for each Rs 1.00 crore increase in turnover 1 mark shall be awarded. The maximum mark is 5. (Mandatory Requirement)
12	Bidder / Consortium Partners should have a positive net-worth for the last 3 financial years.	Certificate from CA for the Bidder /Consortium Partners.	Zero (Mandatory Requirement)



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
13	The bidding organization must submit the Notice Fee of Rs. 5000/-in form of Demand Draft drawn in favor of Chief Executive, ORSAC.	Original bank draft in favor of ORSAC towards cost of the Web Downloadable Notice for Empanelment.	Zero (Mandatory Requirement)
14	The bidding organization / consortium must submit the Earnest Money Deposit (EMD) for Rs. 50,000/- (Rupees Fifty Thousand only) in Shape of Demand Draft from a Nationalized Bank, BBSR drawn in Favor of ORSAC.	Original Demand Draft of Rs.50,000/- (Rupees Fifty Thousand only) from any Nationalized Bank drawn in favor of Chief executive, ORSAC.	Zero (Mandatory Requirement)
15	Service Provider intends to provide UAV/Drone Image Service should have at least one perpetual / leased licensed UAV Data Processing Software.	Purchase Order shall be provided for the perpetual license /Annual Leased agreement with the OEM.	Full Mark = 10 UAV Image Service <hr/> Photogrammetric Image Service Against one Perpetual / Annual Leased License = 6 Marks For additional one license = 2 Marks shall be awarded. Maximum Mark = 10

2. TECHNICAL ELIGIBILITY CRITERIA:

The Technical Eligibility Criteria for the **UAS/UAV/Drone** Image Services is as below.

A. TECHNICAL CRITERIA FOR UAV / DRONE IMAGING SERVICES:

Only the Bidders / Consortium Bidders who found eligible as per the above General Edibility Criteria, shall be evaluated through the Technical Eligibility Criteria. **The Maximum Marks /**

weightage under Technical Eligibility Criteria is 60 (Sixty) out of 100 (Hundred). The Service Provider /Vendor has to score minimum 60% of 60 (Sixty) i.e. 36 Marks out of 60 (Sixty), in order to be eligible in Technical Eligibility. The Service Provider scoring less than 36 marks in Technical eligibility shall not be evaluated for empanelment, though he might be eligible under general eligibility criteria.

It is to be noted that in case of consortium bid, the lead bidder must have capabilities as per the general & technical eligibility criteria.

The Technical Eligibility Criteria Table is given below.

Technical Eligibility Criteria of Drone / UAV Imaging (Maximum Mark = 60)

Sl. No	Technical Eligibility Criteria	Desired Documents	Marking Criteria
1	Service Provider should have completed minimum of 500 hectares of Geospatial Drone survey and Image Processing outputs with DTM / DSM / Contour for any of the Applications as mentioned in Section 3. This should be from any Central /State Govt or PSU or Corporate Sector / Agencies.	Copies of Work Orders / Agreement / Completion Certificate / Work in progress (WIP) certification. In case, it is WIP, same need to be notarized by competent Authorities.	Max. Marks = 20 500-600 ha = 12 marks Extra 2 Marks shall be awarded per each 100 Ha. Survey.
2	UAV Service Provider should have minimum two (2 Nos) DGCA certified Survey Grade Drones / UAV (owned/leased) in their possession with the Unique Identification Number (UIN) issued by DGCA, Govt. of India.	In case of owned, Service provides should submit invoice copy of the same from OEM of the drone along with valid DGCA UIN. In case of leased, same need to be notarized by competent Authorities with valid UIN issued by DGCA. The UIN certificate from DGCA is mandatory requirement.	Max. Mark = 20 Having Two (2) Nos of Survey Grade UAS/UAV = 12 Extra 2 mark shall be awarded for each one Survey Grade UAS/ UAV. Maxed at 20 Marks.



Sl. No	Technical Eligibility Criteria	Desired Documents	Marking Criteria
3	Employing Minimum 10 Numbers of IT & Geoinformatics /Photogrammetry Professionals on regular Payroll, valid EPF and ESI Numbers / Group Insurance Certificate.	Name & EPF Details with Latest EPF certificate is to be provided.	<u>Max. Mark =10</u> For 10 IT & Geomatics Personnel = 6 Marks For additional One IT & Geomatics Personnel = 2 More Mark. Maxed at 10 marks.
4	There should be at least 1 (one) DGCA certified Drone Pilot to fly the UAS/UAV/Drone in the Group.	Drone Pilot certificate shall be issued by the DGCA registered Organizations.	<u>Max. Mark =10</u> Minimum (1) one numbers of DGCA Certified Pilot – 6 Marks. For each increase of one Pilot 2 (Two) extra mark shall be awarded. Maxed at 10 marks.

*** ALL DOCUMENTS MENTIONED AS MANDATORY REQUIRMENT, MUST BE SUBMITTED FOR QUALIFING THE BIDDING PROCESS.**

**** All documents should be properly bound, page numbered with index etc. Documents submitted without the above format will be summerly rejected.**

COMBINED GENERAL & TECHNICAL EILIGIBILITY CRITERIA:

Bidders / Consortium Bidders scoring **minimum 60 marks** in the combined General and Technical Eligibility Criteria will be considered for Empanelment in Drone / UAV Imaging Services, and if unable to score minimum 60 marks combined, will be rejected from the empanelment process as the case may be.

For Startup/MSME companies, combined score of General and Technical of **minimum 40 Marks** shall be the selection criteria.



p) VALIDITY OF THE EMPANELMENT

The validity of the empanelment of UAS/UAV/Drone Image services shall be 2 (two) year from the date of empanelment. Chief Executive, ORSAC has the authority to extend/reduce the validity of this empanelment as per the requirement of ORSAC.

ORSAC reserves right to increase/decrease number of firms to be empaneled within the **validity period**. ORSAC may accept or reject one or all Application as well as to annul the entire empanelment procedure at any time without showing any reason thereof. **Renewal of empanelment may be done before completion of two years after evaluation.**

4 CHAPTER 2

INSTRUCTION TO BIDDERS

All Deliverables shall be strictly as per the Logic and Rationale of the Scope of the Works; as defined in the Section 5.

DEFINITIONS:

In this document, the following terms have respective meanings: -

- "ORSAC" means Odisha Space Applications Centre, Bhubaneswar
- "Acceptance" means the ORSAC's written certification that following installation, the system(s) (or specific part thereof) has been tested and verified as complete and/or fully operational, in accordance with the acceptance test defined in the Acceptance Test Documents.
- "Acceptance Test Documents" means a mutually agreed document which defines procedures for testing the functioning of the Proposed Application, against requirements laid down in the agreement. It should define tests to be carried out, test equipment and expected test results.
- "Contract Agreement" means the Agreement to be signed by the service provider and Odisha Space Application Centre (ORSAC).
- "Authorized Representative" shall mean any person/agency authorized by either of the parties.
- "Service Provider" means any firm or company offering the solution(s), service(s) and/ or materials asked for in the Notice.



- "Contract" is used synonymously with agreement.
- " Documentary evidence " means any matter expressed or described upon any substance by means of letters, figures or marks intended to be used for the recording of that matter and produced before a court.
- " Central/State/Government/Govt. of Odisha" shall mean Government of India and govt. of Odisha respectively.
- "SI" Shall mean System Integrator who will be selected through this Notice.
- "Law" shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Government of India or State Government or regulatory authority or political sub-division of government agency.
- "Lol" means Letter of Intent which shall constitute the intention of the Notice to place the purchase order with the service provider.
- "OEM" means Original Equipment Manufacturer company, that is incorporated in India or abroad, who has management control over the manufacturing/production process, Quality Assurance, Procurement of Raw materials/manufacturing process inputs marketing and warranty services of the resultant products, of at least one manufacturing facility /factory where the manufacturing of equipment, related accessories, as required for the ORSAC is carried out.
- "Party" shall mean ORSAC or service provider individually and "Parties" shall mean ORSAC and Service Provider collectively.
- "PBC" means Pre-Bid Conference.
- "Rates/Prices" means prices of supply of equipment and services quoted by the Service Provider in the Commercial Bid submitted by him and/or mentioned in the Contract
- "Notice " means Notice for Empanelment of System Integrators / Service Providers/Vendors for providing UAS/UAV/Drone Image Services as well as Photogrammetric Image.
- "Services" means the work to be performed by the Service Provider pursuant to this Contract, as detailed in the Scope of Work
- "Site" shall mean the location(s) for which the Contract has been issued and where the service shall be provided as per Agreement
- "Incidental services" shall mean for the purpose of the project activities which have dependencies on the activities mentioned in the scope of work for the service provider, for example coordination with different stakeholders, logistic support as required for



installation and commissioning etc.

Clarifications & Amendments:

Amendment of Notice for Empanelment: - At any time prior to the deadline (or as extended by ORSAC) for submission of bids, ORSAC, for any reason, whether at its own initiative or in response to clarifications requested by prospective service provider may modify the Notice document by issuing amendment(s). In order to allow service providers a reasonable time to take the amendment(s) into account in preparing their bids, ORSAC, at its discretion, may extend the deadline for the submission of bids.

PREPARATION OF PROPOSALS:

The Proposals should be complete in all respect as per the need of the Notice for Empanelment, the document should be well indexed and flagged. All necessary documents as per the requirements should be self-certified with company seal and authorized person signature and properly indexed.

Cost incurred for preparation of Proposals: - Service Provider shall bear all costs associated with the preparation and submission of the Proposals including demo surveys of UAS for evaluation of the Notice and ORSAC will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Notice process.

Language of proposal: - The proposal prepared by the service provider, as well as all correspondence and documents relating to the Notice exchanged between the service provider and ORSAC shall be in English. Information supplied in other language shall be rejected.

Bid currency: - Prices for services offered shall be quoted in Indian National Rupees (INR) only.

Correction of errors: - The person signing the bid must initial erasures or other correction. The Service provider further agrees that in the event of any obvious errors, ORSAC reserves the right to waive such errors in its sole discretion. However, ORSAC has no obligation under any circumstances to waive such errors.

Proposal validity:

- The bid shall remain valid for 180 days from the actual date of Bid Opening. Service Provider should ensure that in all circumstances, its Bid fulfils the validity condition. Any bid valid for a shorter period shall be rejected as non-responsive.
- In exceptional circumstances, ORSAC may solicit service provider's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing or by mail. Bid Security/EMD shall also be suitably extended. Service provider granting the request is neither required nor permitted to modify the bid.



Lack of information to service provider: -The service provider shall be deemed to have carefully examined Proposal document in response to the Notice to his entire satisfaction. Any lack of information shall not in any way relieve the service provider of his responsibility to fulfil his obligation under the Notice for Empanelment.

DOCUMENT COMPRISING THE SERVICE PROVIDER'S PROPOSAL

• TECHNICAL PROPOSAL

The technical proposal of the service provider (***WITH PROPER PAGE NUMBERING AND TAGGING***) shall contain detailed description on the approach and methodology on the Drone data acquisition, drone data processing and deliverables which will help ORSAC to achieve the desired objectives as specified in this document wherein the service provider shall describe in detail, the required services and articulate how the services offered by them shall meet the requirements within the scheduled timeline as specified in this Notice. The technical proposal shall also include the following: -

- Detailed Project Plan, Approach & Methodology
- Project governance structure describing project management processes, methodologies and procedures, risk and issue management. escalation mechanism, including team structure, capability and resource deployment plan.
- Detailed quality assurance processes, procedures, formal review to be adopted.
- Service provider's experience provided in the format specified.
- Proposed solution on monitoring and services utilization in real time.

COST OF NOTICE FOR EMPANELMENT:

Non-refundable bank demand draft of Rs. 5000/- (Rs. Five Thousand only) is to be submitted along with the bid towards the cost of the Notice. The demand draft is to be drawn in favour of Odisha Space Applications Centre, payable at Bhubaneswar, Odisha, from any scheduled Nationalized bank of BBSR. Bids received without or with inadequate Notice fees will be rejected.

APPLICATION SECURITY / EMD

- All proposals submitted in response to the Notice must be accompanied by an Earnest Money Deposit (EMD) of Rs. 50,000/- (Rupees Fifty Thousand only) in the form of a Bank Demand Draft drawn in favor of Odisha Space Applications Centre, payable at Bhubaneswar, Odisha from any Nationalized Bank. Bids submitted without EMD will be rejected.
- EMD of all unsuccessful service providers would be refunded by ORSAC within 90 days of



the service provider being notified as being unsuccessful.

- The EMD, for the amount mentioned above, of successful service providers would also be returned after completion of the Empanelment Process.
- The EMD amount is interest free and will be refundable to the unsuccessful service provider without any accrued interest on it.
- This empanelment will remain valid for the period of two years and it may be extended by Chief Executive ORSAC for certain time period, if next empanelment could not be held in time due to some exigencies.
- **Empanelment of Applicants**

ORSAC will notify the successful Applicants in writing. The successful Applicants will be asked to sign the Contract Agreement within 15 days of the notification. After signing of the Contract Agreement to finalize the empanelment procedure and submission of security deposit. No variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

- **Security Deposit**

The selected firms will be required to deposit an amount of Rs. 50,000/- (Rupees Fifty Thousand only) each in form of demand draft in favor of “ODISHA SPACE APPLICATIONS CENTRE” payable at Bhubaneswar as security deposit. This will be an **interest free** refundable deposit. In case of deviation of agreed terms & conditions, the security deposit will be forfeited. In case the firm/firms want(s) to withdraw themselves from the Empanelment list, the security deposit may be refunded to the firm/firms after deducting receivables of ORSAC if any. Security deposit shall be refunded on expiry of validity period unless renewed by ORSAC. In case of withdrawal by the firm/firms or rejected by ORSAC, the security deposit will be refunded after adjustment of receivable of ORSAC.

- **Allotment of project by Govt. Departments**

For execution of any project, Any Dept. of Govt. of Odisha / Business Organizations may select and invite firms independently or in consultation with ORSAC from the empanelment list, based on their suitability and capability, matching their requirement & the scope of the project as per terms and condition fixed by the department / Business Organizations. Details are explained in attached DGPS Survey SoP of ORSAC of this notice. SoP is subjected to continuous change by ORSAC. as per technological developments and changes

For some projects, if at all necessary, ORSAC may fix a price and ask empaneled vendors as per their empaneled class and categories to give their consent to work on that price or may ask to submit quotations to be selected on L1 basis.



POWER OF ATTORNEY:

The service provider must submit a power of attorney duly signed by a notary public confirming the authority of the authorized representative of the service provider to sign and act in all matters concerning the offer.

BID SUBMISSION:

Organizations conversant with the subject and having necessary infrastructure and resources including local mobilization may submit their proposal with credentials for evaluation. The envelope super-scribed as "***BIDS FOR EMPANELMENT FOR UAV IMAGE SERVICES FOR DIFFERENT APPLICATIONS AREAS OF ODISHA STATE***". ***The email-ID and mobile number of the Bidder shall be super-scribed on top of the envelope below the BIDS Nomenclature in order to send communication from ORSAC regarding Opening of BID dates and follow up actions to be taken by the Bidders.***

De-empanelment for cause of non-compliance:

De-empanelment process may be initiated for cause of non-compliance with the MoU, SOP and submission of false information.

ADDRESS FOR COMMUNICATION

The detail address for communication with ORSAC for this project is as follows:

Chief Executive, ORSAC

Odisha Space Applications Centre (ORSAC),

Dept. of Science and Technology, Govt. of Odisha,

Plot no.45/48, Jaydev Vihar, Near GAA, Unit- 16, Bhubaneswar-751023, Odisha.

Phone: +91-674-2303625, Cell: 6372909300, 9437284890,

Email: orsac@odisha.gov.in / orsac.od@nic.in



LATE BID:

- a) Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall be returned to the service provider, unopened.
- b) The bids submitted by e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
- c) ORSAC shall not be responsible for any postal delay or non-receipt / non-delivery or the documents. No further correspondence on the subject will be entertained.

MODIFICATION AND WITHDRAWAL OF BID: Bids once submitted cannot be modified in any circumstances. Withdrawal of a Bid during this interval may result in the service provider's forfeiture of its Bid security/EMD and /or any other action as per law.

RIGHT TO ACCEPT AND REJECT ANY OR ALL BIDS:

ORSAC reserves the right to accept or reject any proposal to annul the empanelment process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected service provider or service providers or any obligation to inform the affected service provider or service providers of the grounds for the ORSAC action. Incomplete bid will be straightaway rejected by ORSAC.

BID OPENING & EVALUATION

EVALUATION OF TECHNICAL BID

The Bids submitted up to last date will be opened at ORSAC by the Chief Executive, ORSAC or any other officer(s) authorized by ORSAC, in the presence of such of those service providers or their representatives who may choose to be present physically at the time of opening. The representatives of the service provider those who want to remain present physically are advised to carry a letter of authority from the appropriate authority of the bidding firm for attending the Bid opening. The Evaluation Committee will check the submission as per the eligibility criteria.

ORSAC may also seek written clarifications from the service provider soon after the bids submitted by them, during the evaluation process. The primary function or clarifications in the evaluation process is to clarify ambiguities and uncertainties. if any, arising out of the evaluation of the bid documents.

ORSAC may also call all the technically qualified Firms/Service Providers for technical demonstration of their services.

The service provider / bidder scoring a minimum of 60 marks out of 100 in the combined General & Technical Criteria, shall be declared as the Technically Qualified service provider.



List of Empaneled Vendors of UAS/ UAV / Drone Imaging Service:

The seriations of the Empanelment for the UAS/UAV/Drone Imaging Service shall be done based on the **combined (General + Technical) marks** scored by the Bidders.

Sl. No	Name of the Empaneled Vendor	Combined Gen & Tech Score of vendors.
1		
2		
3		
4		

FORFEITURE OF BID SECURITY:

The Bid security in the form of EMD may be forfeited either in full or in part, at the discretion of ORSAC, on account of one or more of the following reasons:

- The service provider withdraws his bid during the period of Bid validity specified by him on the Bid Letter Form.
- The service provider fails to co-operate in the Bid evaluation process.
- If the bid or its submission is not in conformity with the instruction mentioned herein.
- If the service provider violates any of the provisions of the terms and conditions of the Notice.
- If the service provider is non-responsive or does not provide appropriate response to any clarification sought by the ORSAC within the stipulated time during bid evaluation.
- In the case of a successful service provider fails to (a) accept award of work, (b) sign the Contract Agreement with ORSAC, after acceptance of communication on placement of award, (c) furnish performance security.
- The service provider violates any of such important conditions of this Notice or indulges in any such activities as would jeopardize the interest of ORSAC in timely finalization of this Empanelment.
- Service Provider denies to carryout demonstration of the services at ORSAC.



DISQUALIFICATION:

The proposal is liable to be disqualified in the following cases or in case service provider fails to meet the bidding requirements as indicated in this Notice.

- Proposal not submitted in accordance with the procedure and formats prescribed in this document or treated as non-conforming proposal.
- The service provider qualifies the proposal with his own conditions.
- Proposal received in incomplete form.
- Proposal received after due date and time.
- Proposal not accompanied by all the requisite documents.
- Information submitted in technical proposal is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the contract (no matter at what stage) or during the tenure of the contract including the extension period, if any.
- Bids not submitted with required certification.
- Service Provider trying to influence the proposal evaluation process by unlawful, corrupt or fraudulent means at any point of time during the bid process.
- In case any one party submits multiple proposals, the bids are likely to be disqualified, unless additional bids are withdrawn upon Notice immediately.
- Any deviations between technical and commercial proposals shall make the proposal as being unresponsive and may lead to disqualification of the proposal.

Service Providers may specifically note that while evaluating the proposals. if it comes to ORSAC's knowledge expressly or implied, that some service providers may have colluded in any manner whatsoever or otherwise joined to form an alliance resulting in delaying the processing of proposal, then the service providers so involved are liable to be disqualified for this contract as well as prohibited from participation in any of the Tender/RFP/RFA/Empanelment/EOI floated by ORSAC in future.



5. CHAPTER 3

Empanelment of Service Providers:

ORSAC will empanel the successful service provider / Providers having the best proposal with respect to the above-mentioned evaluation criteria.

- After expiry of the notified time period, ORSAC will notify the names of the Service Providers confirming to the Normalized Unit Rates of UAS Image Service under each category for preparing the Empanelment.
- The empaneled serial numbers are to be maintained based on the **Combined (General Criteria Score + Technical Criteria score)** secured by the Vendors.
- After verification and realization of the EMD, ORSAC will Prepare a ***Final Empanelment list of the UAS Image Service Providers*** and notify to all the empaneled Service Providers by Speed Post / email.
- This empanelment of UAS and Photogrammetric Service Image Service will remain Valid for a period of Two (2) year from the date of Publication.
- The validity of the empanelment and its extension is the prerogative decision of the Chief Executive, ORSAC. His decision on this matter will be binding to all the empaneled vendors under UAS Image Service Providers.

GENERAL TERMS & CONDITIONS

a. BID VALIDITY PERIOD

The Bid submitted by the bidder shall remain valid for 180 days from the date of opening of the Bid. Bids with validity period less than 180 days shall be treated as non-responsive and shall be rejected.

b. CORRUPT / FRAUDULENT PRACTICES

The Bidder is expected to observe highest standards of ethics during the procurement and execution of the assignment. In pursuance of this policy, ORSAC defines the terms set forth as follows:- "Corrupt Practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of the public official in the procurement process or in contract execution; and "Fraudulent Practice" means a misrepresentation of facts, in order to influence a procurement process or execution of a contract to the detriment of the Client, and includes collusive practice among Bidders (prior to or after bid submission), designed to establish bid prices at artificial non-competitive levels and to deprive the Client of the benefits of the free and open competition. In case the Bidder is found to be engaged in Corrupt/ Fraudulent practices before the contract award



or after award of the contract, such Bidder shall be declared ineligible and his/ her bid shall be rejected and the contract shall be terminated, as the case may be.

c. RIGHT TO ACCEPT / REJECT THE BID

Notwithstanding anything contained herein, Chief Executive, ORSAC reserves the Right to reject any Bid or all Bids without showing any reason thereof.

d. LATE BIDS

Bids received after the specified last Date and Time of receipt (including any extension of time for submission of bid thereof) for whatsoever reason, shall be rejected summarily. No further communications in this regard shall be entertained.

e. EXTENSION OF TIME

The date of completion of the contract may be extended due to force majeure or events beyond control of the selected Bidder. In such case, the Bidder shall be obliged to submit a claim for extension of time with due justification. The decision of the department on time extension shall be binding on the Bidder. Necessary amendment to the contract in accordance with the granted time extension will be done. Liquidated Damage shall not be applicable for the officially extended time period.

f. COPYRIGHT

The copyrights of all maps, documents and other materials containing data and information including plan/ design/ specifications/ database/ application software furnished by the selected Bidder to the ORSAC shall remain as Intellectual Property of the ORSAC.

g. INSURANCE & LIABILITY

The selected Bidder shall, at his own expense, arrange appropriate comprehensive insurance to cover all risks assumed by the vendor under this contract in respect of its personnel and equipment deployed under this contract. ORSAC shall not be liable for any incident relating to any damage to the machines/ persons involved during the survey/work.

h. ENTIRE CONTRACT AND T & C OF THIS NOTICE

The terms and conditions laid down in this document and all annexure thereto as also the forms and any attachment shall be read in consonance as an integral part of this contract. Confusions due to inadvertent omissions and commissions in this Notice shall be addressed and disposed under the object and reason of this Notice and matters are to be understood under common sense and logic.



i. DISPUTES & ARBITRATION

All disputes arising out of the contract shall be amicably settled by both parties. In the unfortunate event of any dispute or differences, breach and violation relating to the terms of this agreement, the said dispute or difference shall be referred to the sole arbitration of the Arbitrator appointed by Chief Executive, ORSAC for the purpose. The award of the arbitrator shall be final and binding on both the parties. The adjudication of arbitrator shall be governed by the provision of the Arbitration and Conciliation Act, 1996, or any statutory modification or re-enactment thereof or any rules made thereof. All legal disputes are subject to the jurisdiction of courts in Bhubaneswar.

j. GOVERNING LAWS

The contract between Chief Executive, ORSAC and the selected Bidder shall be governed by and interpreted in accordance with the laws for the time being in force in the state of Odisha. The courts at Bhubaneswar shall have exclusive jurisdiction in all matters arising under the contract.

k. FORCE MAJEURE

Neither party shall be liable to the other for any loss or damage occasioned by or arising out of acts of God such as unprecedented flood, volcanic eruption, earthquake or other convulsion of nature and other acts such as but not restricted to invasion, the act of foreign countries, hostilities, or war-like operations before or after declaration of war, rebellion, military power which prevent performance of the contract and which could not be foreseen or avoided by a prudent person.

L. PROFORMA/ BID SUBMISSION FORMAT

List of Proform Forms for The Bidder Firms:

GF-1: SERVICE PROVIDER'S PROFILE

GF-2: SERVICE PROVIDER'S UNDERTAKING STATEMENT

GF-3; CERTIFICATE OF COMPLIANCE (NO CONFLICT OF INTEREST)

GF-4: CONFIDENTIALITY/ NON-DISCLOSURE UNDERTAKING

GF-5: FORMAT FOR QUERIES

GF-6: FORMAT OF AGREEMENT (SHALL BE SIGNED AFTER AWARD OF THE CONTRACT)

TF-1: TECHNICAL BID LETTER

TF-2: DETAILS OF RELEVANT PAST EXPERIENCE IN EXECUTION OF SIMILAR PROJECTS

TF-3: FORMAT FOR PROJECT TEAM MEMBER'S RESUME

**GF-1: SERVICE PROVIDER'S PROFILE:**

Notice No.

Name of Project: -

Sl. No.	Required Details of the Service Provider	Service Provider Response
1.	Name of the company Firm	
2.	Company/Firm registered office address Telephone number Fax number/E -mail	
3.	Correspondence/ contact address	
4.	Details of contact person (Name, designation, address etc.) Telephone number Fax number e-mail	
5.	Is the company/firm a registered company/firm? If yes, "submit documentary proof. Year and place of the establishment of the company	
6.	Former name of the company/firm, if any.	
7.	Is the company/firm? ➤ A Government/ Public Sector Undertaking? ➤ A proprietary firm? ➤ A partnership firm (if yes, give partnership deed)? ➤ A limited company or limited corporation? ➤ A member of a group of companies (if yes, give name and address, and description of other companies)? ➤ A subsidiary of a large corporation (if yes give the name and address of the parent organization) If the company is subsidiary, state what involvement if any, will the parent company have in the project?	



	➤ A joint venture consortium (if yes, give name and address of each partner)?	
8.	Is the company/firm registered with OGST department? Submit valid OGST registration certificate.	
9.	Attach the organizational chart showing the structure of the organization including the names of the directors and the position of the key officers. What is the total number of employees?	
10.	Number of years in the relevant field?	
11.	Is the company/firm registered with any Government/ Department/ Public Sector undertaking? (if yes, give details)	
13.	How many years have your organization been in business under! your present name? What were your fields when you established your organization? When did you add new fields (if any)?	
14.	What type best describes your company/firm? (Documentary of proof to be submitted) - Manufacturer - Supplier System Integrator Consulting Firm Implementation Agency (pl. specifies details) Software Development Total Implementation Agency (Design, Supply, Integration, etc.)	
15.	Please give details with contact no. of staff those will be involved in this project.	
16.	Number of offices / project locations in <ul style="list-style-type: none"> • India: • Odisha: 	
17.	List the major projects of ORSACs with whom your organization has been/ is currently associated.	
18.	What is the total year of experience of handling Government projects?	



19.	Have you ever been denied for any bidding facilities by any Government' Department/ Public sector Undertaking? (Give details)	
20.	Submit receipt of latest Income Tax Return filed with Income Tax Department and PAN no.	

Name of the Authorized signatory:

Company Seal: -

Signature:



GF-2: SERVICE PROVIDER’S UNDERTAKING STATEMENT:

Selection of Service Provider for the project titled (Empanelment of UAV Image Services provider for the State of Odisha)” (Notice No..... /2025) We,

M/S

.....
..... hereby confirm that we have read and understood the entire Notice for Empanelment and accordingly submitted our Bid Proposals as follows:

1. Commercial Proposal (Format of Notice, Schedule of Prices) in hard copy.
2. —Ditto- digital word/excel format — Total Pages
3. Technical Proposal consisting of the following documents in digital pdf format and hard copy:
 - a. Total pages
 - b. Total pages
 - c. Total pages
 - d. Total pages
 - e. Total pages
 - f. Total pages
4. We understand that the entire Notice for Empanelment of Image Services and the technical and commercial proposal including Notice circulars and addenda shall form part of the Contract Document and we undertake to sign and stamp each and every page of these documents if our offer is accepted.

Signed by duly Authorized signatory On behalf of

M/S

.....
.....

Company Stamp

Signature



GF-3; CERTIFICATE OF COMPLIANCE (NO CONFLICT OF INTEREST)

Firm's Name...

Address:

.....

.....

.....

We hereby certify and confirm that the entity named above, including all members, partners and persons associated with it shall not have any corporate, commercial or other links, relationship or agreements with any of the entities who will be entrusted with Service Provider for the project titled "Empanelment of UAV Image Service provider for the State of Odisha" under" the scope of this Notice.

(Authorized signatory): Name:

Designation:

Signed this Day of 2025 For the entity

Seal



GF-4: CONFIDENTIALITY/ NON-DISCLOSURE UNDERTAKING

This Confidentiality Undertaking (this “Undertaking”) is made by [] a corporate entity registered under the laws of [], whose address is [] (hereinafter referred to as the “Recipient”).

WHEREAS, the Recipient is entrusted to Service Provider for the project titled “Empanelment of UAV Image Service provider for the State of Odisha “WHEREAS, ORSAC has agreed to make available to the Recipient certain information to enable the “Recipient” to carry out the required services;

NOW, THEREFORE, the Recipient undertakes the following:

1. The above preamble shall form an integral part of this Undertaking.
2. For the purpose of this Undertaking the term “Confidential Information” shall mean any and all information, data or records of ORSAC or entrusted to ORSAC by any third party presented, given, sent or delivered to the Recipient whether in print, text, writing, via computer diskettes, compact disks, computer files of all kinds, or through any other audiovisual, tangible or intangible medium whatsoever, and designated in writing by ORSAC or its affiliates or Employers or which, under the circumstances surrounding disclosure, ought to be treated as confidential and shall include but shall not be limited to, any and all information, data, records, statements, processes, formulae, techniques, financial, technical, operational, commercial, staff, management, sales strategies, desires, goals or expansions and other information, data and expertise of whatever kind of ORSAC, including all lists of potential or existing Employers or customers, organizational information, contracts or agreements, proprietary business or management methods, marketing data, fee schedules, know-how, designs, concepts, techniques, inventions and ideas, business plans, computer software and programs, database technologies, systems, structures and architectures, research projects or trade secrets of ORSAC or its affiliates or Employers and shall include all computer files, documents, data and analyses prepared by ORSAC or its agents or its affiliates or Employers, which contain or are based upon Confidential Information. Confidential Information shall also include any information which can be obtained by examination testing or analysis of any such hardware, any component or part thereof, and software or material samples, provided or given access to the Recipient by ORSAC.
3. The obligation to maintain the confidentiality of Confidential Information shall continue to apply for five years after signature of this Undertaking. However, the said obligation does not apply to Confidential Information:
 - a) If the Confidential Information is generally available in the public domain (unless available as a result of breach of this Undertaking);
 - b) If the Confidential Information is lawfully in the Recipient’s possession (as evidenced by the Recipient’s written records) and was not acquired directly or indirectly from ORSAC:
 - c) If the disclosure of Confidential Information is required by any applicable law or by any supervisory or regulatory body to whose rules the Recipient is subject, or with whose rules it is necessary for the Recipient to comply.
4. If any proceedings are commenced or action taken which could result in it becoming compelled to disclose Confidential Information, the Recipient will, to the extent that it is lawfully able, immediately notify ORSAC of such proceedings or action in writing and will take all available steps to resist or avoid such proceeding



or action, including all steps that may reasonably be requested by ORSAC and keep ORSAC fully and promptly informed of all matters and developments relating thereto. If the Recipient is obliged to disclose Confidential Information to any third party, the Recipient will disclose only the minimum amount of information consistent with satisfying its obligation. Furthermore, the Recipient will give prior written Notice of the information it proposes to disclose, the Notice containing a copy of the proposed disclosure, and will give ORSAC an opportunity to discuss the relevant Notice prior to any disclosure.

5. The Recipient will immediately upon receipt of a written demand from ORSAC:

- a) Return to ORSAC all Confidential Information (and all and any copies thereof or of any part thereof);
- b) Expunge all Confidential Information from any computer or other similar device and all documents, forms, diskettes, compact discs, computer files or other tangible or intangible item containing Confidential Information together with all relevant samples and models which it has in its possession into which it was entered by it or on its behalf or by its advisers or representatives or on their behalf; and
- c) Destroy all notes, analysis or memoranda containing Confidential Information prepared by ORSAC or on its behalf or by its advisers or representatives or on their behalf,

6. The Recipient hereby expressly, unconditionally and irrevocably agrees that it shall:

- i. Hold ORSAC's Confidential Information in strict confidence to itself and restrict access to such Confidential Information to only its employees who need to know it and shall further ensure that any such employees are bound by the obligations of confidentiality as stated in this Undertaking, and to hold all Confidential Information of ORSAC in strict confidence
- ii. Treat such Confidential Information with at least the same care and precaution that the Recipient affords to its most confidential, valuable, and secret information
- iii. Not use, exploits, access or benefit from such Confidential Information for any reason or purpose whatsoever
- iv. Not use such Confidential Information in any way detrimental to ORSAC (it being acknowledged that any use or exploitation by the Recipient of the Confidential Information for any purpose whatsoever other than its own internal and non-commercial use, will be deemed detrimental to ORSAC)
- v. Not to copy, keep, preserve, store or retain in any medium whatsoever any Confidential Information of ORSAC for any reason whatsoever, to that effect, the Recipient hereby expressly undertakes that it shall immediately upon the request of ORSAC, destroy any and all of the Confidential Information of ORSAC, which the Recipient has received from ORSAC
- vi. Release such Confidential Information to a concerned "Recipient Representative" requiring such information only after advance written notification to ORSAC stating the name, address, telephone number and relationship to the Recipient of such Recipient Representative, and notifying such Recipient Representative to whom any disclosure of the Confidential Information is made that the disclosure is made in confidence, that the Confidential Information must be kept in strict confidence by the Recipient Representative and that the Confidential Information as well as the Recipient Representative is subject to the terms of this Undertaking



vii. Not to release, circulate, publish, expose, distribute, reveal, issue or disclose such Confidential Information through any medium or means whatsoever to any other person, persons, entity or entities without the prior express and explicit written consent of ORSAC, in which event the Recipient shall require such person or entity to enter into a confidentiality agreement acceptable to ORSAC

viii. Take all reasonable steps to protect the Confidential Information from unauthorized access, production, publication, distribution, circulation, exposure, copying or disclosure by any party, in any manner, any means and any medium whatsoever.

ix. Comply with any and all instructions that ORSAC may issue in relation to the manner through which the Recipient may utilize the Confidential Information for the purposes of this article.

x. Notify ORSAC immediately upon discovery of any unauthorized use or disclosure of Confidential Information, or any other breach of this Undertaking by the Recipient, and will cooperate with ORSAC in every way to help in regain possession of the Confidential Information and prevent any further unauthorized use of such.

7. The Recipient hereby expressly and unconditionally agrees that any and all of the terms, conditions and provisions contained within this Undertaking relating to the Confidential Information are of the essence, reasonable and necessary in order to protect ORSAC's business, reputation, best interests and goodwill. To that effect, the Recipient hereby expressly and unconditionally declares, understands and accepts that should the Recipient breach any of the term's conditions and/or provisions of this Undertaking, ORSAC shall suffer grave loss, damage and lost profits to its businesses, reputation, best interests and goodwill.

8. The recipient acknowledges and agrees that damages would not be an adequate remedy for any breach of this undertaking and that either party shall be entitled to the remedies of injunction, specific performance and other equitable relief for any threatened or actual breach of any such undertaking.

9. The Recipient hereby expressly and unconditionally understands and accepts that nothing in this Undertaking is intended to grant the Recipient any form of right, title or interest in or to any of the Confidential Information of ORSAC whatsoever, or to any invention, trade secret or intellectual property based thereon. By disclosing, presenting or providing Confidential Information to the Recipient, the Recipient fully and unconditionally understands and accepts that ORSAC does not grant any express or implied right interest or title to the Recipient or the Recipient Representative to any Confidential Information.

This Undertaking shall be governed by and construed in accordance with the laws of Republic of India. Any dispute arising out of or in connection with this Undertaking shall be referred to the Hon'ble High court of Odisha.

.....Signed by authorized signatory of

M/S (The Service Provider)



GF-5: FORMAT FOR QUERIES:

Service Providers requiring specific points of clarification may communicate with ORSAC during the specified period using the following template in MS Word Files as per the enclosed format.

Notice No:

Name of Project: “Empanelment of UAV Image Service & HRSI based Photogrammetric Services provider for the State of Odisha”

Name of the Service Provider:

Contact Address of the Service Provider, with e-mail Id & Mobile No.

Sl. No.	Section No.	Page No.	Excerpt of NOTICE Clause	Query

Signature:

Name of the Authorized signatory:

Company seal:

Note: Consolidated and only Relevant Pre-Bid Clarifications shall be issued by ORSAC. ORSAC is not bound to issue Clarifications to Individual queries.



GF-6: FORMAT OF AGREEMENT (SHALL BE SIGNED AFTER AWARD OF THE CONTRACT)

1. THIS AGREEMENT made on the Day of
20__ BETWEEN; 1. ORSAC (hereinafter referred to as the “ORSAC”), having address at
..... represented by the (Which
expression shall, unless repugnant to the context meaning thereof, include his successors,
assignees) who is duly authorized by ORSAC to execute this agreement of the FIRST PART

a. M/S whose registered office is at
..... and are duly
registered as Implementation Firm under the laws of Republic of India hereinafter referred to as
“Service Provider (SP)” (which expression shall, unless repugnant to the context or meaning
thereof, include its successors and assigns) of the SECOND PART.

WHEREAS the ORSAC is desirous that the agreement be rendered in accordance with the
Conditions of this Agreement as contained herein and the SP is willing and capable to render the
said Services and has submitted an offer and the ORSAC has accepted the same for the following:
Services: Service Provider for the project titled “”. NOW THESE PRESENT WITNESSES and it
is hereby agreed and declared by and between the parties hereto as follows:

i. In this Agreement the words and expressions shall have the same meanings as are respectively
assigned to them in the Instruction to Service Providers & Notice Forms, Special Conditions of
Contract and General Conditions of Contract hereinafter referred to.

ii. The following documents shall be deemed to form and be read and construed as part of them
Agreement viz:

- a. The Notice issued by ORSAC
- b. The said Offer
- c. Conditions of the Contract
- d. The Appendices
- e. Letter of Acceptance/Award
- f. All pre-Notice circulars & addenda issued during the tendering stage
- g. All post-Notice clarifications, confirmations and correspondence (letters, faxes, emails)
and minutes of meetings, in consideration of the payment to be made by the ORSAC to the SP as



hereinafter mentioned, the SP hereby covenants with the ORSAC to perform the Services in conformity in all respects with the provisions of this Agreement.

IN WITNESS whereof the parties hereto have hereunder set their respective hands and seals on the day and year first above written.

Signed by a duly authorized signatory for and on behalf of the ORSAC

M/S

Chief Executive, ORSAC

Signature

Signature

(Name & Designation)

(Name & Designation)

Witness

Witness

Signature

Signature



TF-1: TECHNICAL BID LETTER

To,

The Chief Executive,

Odisha Space Applications Centre (ORSAC), Government of Odisha.

Reference. Notice No.

Letter no.

Dated

Sir,

- We do hereby undertake, that, in the event of acceptance of our bid, the Services shall be provided as stipulated in the schedule to the Bid document and that we shall perform all the incidental services.
- We enclose herewith the complete Technical Bid as required by you. This includes:
 - i) This Bid Letter
 - ii) Bid Particulars
 - iii) Documents in support of Technical Bid Evaluation Criteria
 - iv) Details of the proposed solution, proposed Methodology & Timeline We agree to abide by our offer for a period of 180 days from the actual date of opening of the Technical

Bids and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and conditions of the Notice and the conditions of the Contract applicable to the Notice and we do hereby undertake to provide services as per these terms and conditions. Certified that the Bidder is a Company and the person signing the Bid Proposal is the duly constituted attorney. Bid Security (Earnest Money) for an amount equal to Rs. _____ (Rs. _____ Only) is enclosed in the cover containing Part-I of the bid.

We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof or placement of letter of intent awarding the contract, shall constitute a binding contract between us.

Dated this Day of 2025 (Signature) (In the capacity of)

Duly authorized to sign the Bid Proposal for and on behalf of: (Name and Address of Company)

Seal/Stamp of Service Provider



Witness Signature:

Witness Name:

Witness Address:



TF-2: DETAILS OF RELEVANT PAST EXPERIENCE IN EXECUTION OF SIMILAR PROJECTS

Format for Relevant experience (If necessary, additional pages may be attached)

Sl. No.	Item	Details		
General Information				
1	Name of Project			
2	Customer Name			
3	Name, address and contact details of customer			
4	Project Start Date			
5	Project End Date			
Compliance Information				
6	Nature (Govt. / Govt. undertaking, PSU etc.)		Supporting documents provided	[Mention the documents from which it is evident, like work order, certificate etc. at page: (on which page of bid the document is provided)]
7	Nature of Project (UAV Image)		Supporting documents provided	[Mention the documents from which it is evident, like work order, certificate etc. at page: (on which page of bid the document is provided)]
8	Project Location (India or elsewhere)		Supporting documents provided	[Mention the documents from which it is evident, like work order, certificate etc. at



				page: (on which page of bid the document is provided)]
9	Value of Project		Supporting documents provided	[Mention the documents from which it is evident, like work order, certificate etc. at page: (on which page of bid the document is provided)]
10	Current Project Status (Completed / under execution)		Supporting documents provided	[Mention the documents from which it is evident, like work order, certificate etc. at page: (on which page of bid the document is provided)]
11	Project Completion / successful		Supporting documents provided	[Mention the documents from which it is evident, like work order, certificate etc. at page: (on which page of bid the document is provided)]

Signature

**TF-3: FORMAT FOR PROJECT TEAM MEMBER'S RESUME**

(Use the Format given below for each individual Resource)

1	Position to be Deployed				
2	Name of the Resource				
3	Designation in Current Organization				
4	Date of Birth(dd/mm/yy)				
5	Nationality				
6	Total Years of Experience				
7	No. of Years in Current Organization				
8	Education (Year in Which Various Qualifications were Obtained Must Be Stated)	Year	Degree / Diploma	Institution / University	
9	Other Training & Certifications				
10	Language & Degree of Proficiency	Language	Read (Excellent /Good/Fair	Write (Excellent /Good/Fair	Speak (Excellent /Good/Fair



		English			
		Odia			
		Any Other			
11	Country of Work Experience				
12	Summary of Experience				
13	Skill Sets				
14	Employment Record				
	From - To				
	Employer				
	Position Hold				
15	Work Undertaken That Best Illustrates Capability to Handle the Task Assigned				
A	Name of the Assignment				
	Year				
	Location				
	Main Project Features				
	Position Held				
	Activities Performed				

Signature

Seal



Note: No extra item or condition should be Furnished in the Bid. One has to follow strictly rows and columns of the bid format only.

End of Notice



Chief Executive, ORSAC



CHECK LIST FOR EMPANELMENT IN UAS/UAV/Drone Imaging Services				
Name of Firm:				
SL. NO.	No of the Items	Submitted or Not	Page No.	REMARK
1	Tender paper cost			
2	EMD			
3	Company Registration/Incorporation certificate			
4	Start Up/MSME firm			
5	Work Experience			
6	OGST			
7	ISO			
8	Geo-Tagged photo of Firm			
9	Self-declaration of ineligibility for corrupt and fraudulent practices			
10	EPF registration Certificate			
11	ESI registration Certificate			
12	The bidder should not have been blacklisted in any central/state Government and PSU			
13	Annual Turnover last 3 Year			
14	CA Certificate			
15	No of DGCA certified Drones			
16	No of Drone Pilots			
17	No of Drone Software			
Signature				