

NOTICE

INVITATION OF APPLICATION

FOR

Empanelment of Eligible Firms

To Undertake

UAS / UAV / Drone Imaging Services

And

HRSI Photogrammetric Imaging Services

Notice No. 4134 Dated 20.11.2024



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- orsac2012@gmail.com,

<http://www.orsac.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 / ORSAC website/Govt Websites /	20.11.2024
3	Cost of Notice for Empanelment (Non-refundable)	Rs.5000/- in form of DD /from any Nationalized Bank in favour of ORSAC, Bhubaneswar.
4	Earnest Money Deposit (EMD)	EMD, only in the form of a Bank Draft, from a Bhubaneswar Branch of any Nationalized Bank, for Rs. 1,00,000/- (Rupees One Lakhs) only to bid for the empanelment of Vendors to provide UAS Image Services and related In-Premise HRSI and Drone Image Photogrammetric Services at ORSAC and the State of Odisha, 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 Bids	30.11.2024, 5.00 P.M through Post and in-person
7	Opening of General and Technical Bids	02.12.2024, 11.00 A.M , onwards at ORSAC
8	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.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 BIDDERS REQUIREMENTS

- I. All Offerors 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 Contractor and/or sub-Contractors, which perform UAS flight missions, shall be DGCA Certified, or as amended by DGCA. The Contractors are required to provide proof of certification and maintain all proper certifications during the entirety of the contract period. Upon request, the Contractors shall provide the most current certification to the requesting Agency / Agencies.
- II. All Offerors 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-contractors 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 Offerors shall specify clearly under which Service Categories, the equipment owned by them belongs to or can be deployed & able to support.
- III. All Offerors 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 Offerors shall provide a brief history of the company and the company's areas of expertise related to this Notice.
- V. All Offerors 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 Offerors shall provide resumes and DGCA certificate of the Pilot, who will operate the UAS/UAV/Drone for the mission assigned to the Contractor 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 Offerors 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. Contractors 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.
- VIII. Contractors 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. Contractors will be expected to comply with all background check requirements.



- IX. The Contractor 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.
- X. The Contractors 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 Contractor 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.
- XI. The Contractors, those are interested to be empaneled under HRSI Based Image Services only, they have to indicate the same specifically and they have to produce Completion Certificates of two Completed Photogrammetric Jobs from Govt. Departments / Public Sector Undertakings / Autonomous Bodies / Societies under Govt. Registrations of any State / Central Govt., issued by the Head of the Department.
- XII. 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 and processing the same inside ORSAC Campus. 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
Payload	0- 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 /without Payload: from 20 to 60 Minutes With Max (5kg) Payload: up to 30 Minutes
Operating Temperature	-20° to 55°C
GPS-Receiver	DGNSS with RTK/ 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 Software	Planning	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	Resolution multispectral	1.2 MP, 8-10 spectral bands,
	Resolution RGB	Up to 20 MP



and Gimbal for given UAS	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 150°C and -40°C to 550°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 bands	640
	Spectral bands	270
	Sensor	CMOS
	Dynamic range	12 bits
	Data Rate	300 fps
	Exposure time	integration time 5 - 15 ms / band, 30 bands (1010*648 pixels)
	Weight	2-3 kgs, with battery, Gimbal, GPS and irradiation sensor
UAS Enabled LiDAR, Gimbal for given UAS & Processing S/W	10-20 mm survey grade accuracy	
	Measurement range 100-200m	
	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 Spectroradiometer 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 s arrays
		SWIR 1 detector (1001-1800 nm): Graded InGaAs Photodiode, Two Stage TE Cooled
		SWIR 2 detector (1801-2500 nm): Graded InGaAs Photodiode, Two Stage TE Cooled
	Input	1.5 m fiber optic (25° field of view). Option 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, radiance irradiance*. All calibrations are NIST traceable (*radiometric calibrations are optional)
	Computer	Compatible to instrument controller.

4. 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 Contractor 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.

5. DELIVERABLES:

All Deliverable shall be strictly as per the individual purchase order issued to the empaneled Contractor/Vendor by ORSAC/ Govt. Department. However, the deliverables as expected from empaneled Vendors/contractors 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 GeoTiff format. 3.Mosaics of DEM/DSM/DTM file in GeoTiff format. 4.Any derived Product like slope & aspect in ARC File Geodatabase format.
4	Thermal Sensor Utilization	<ol style="list-style-type: none"> 1.Raw image in Tiff format. 2.Processed ortho-rectified image with Brightness Temperature at the sensor level as well as Surface Temperature at the terrain level in Geo-Tiff format.
5	Hyperspectral Sensor Utilization	<ol style="list-style-type: none"> 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.

6. ELIGIBILITY CRITERIA:

The Firms bidding for the empanelment to provide UAS/UAV/Drone Image services and HRSI based Photogrammetric 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.

a. General Eligibility Criteria

b. Technical Eligibility Criteria

a. 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 (WEIGHGTAGE = 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	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



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
	minimum for last 3 years in the field of operation as listed in Section-3 above.		(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)
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	Zero Marks (Mandatory Requirement)



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
		months after got empaneled in UAS Image services & HRSI Photogrammetric Services by ORSAC.	
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 of three months of empanelment.	Zero (Mandatory Requirement)
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)



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
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 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.</p>	The signed Consortium Agreement printed in non-judicial stamp papers costing Rs.100.00 /each stamp paper.	Zero
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)



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
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. (FY 2016-17, 2017-18 & 2018-19). 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)
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. 1,00,000/- (Rs. One lakh Only) in Shape of Demand Draft from a Nationalized Bank, BBSR drawn in Favor of ORSAC.	Original Demand Draft of Rs.1,00,000/- (Rupees One lakhs 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. The Service Provider intends to provide Photogrammetric Image Service should have at	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



Sl.	General Eligibility Criteria	Desired Documents	Marking Criteria
	least one perpetual / leased Photogrammetric S/W license to process stereo/mono HRSI / Aerial Images.		Against one Perpetual / Annual Leased License = 6 Marks For additional one license = 2 Marks shall be awarded. Maximum Mark = 10

b. 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.	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
		The UIN certificate from DGCA is mandatory requirement.	
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.	<p><u>Max. Mark =10</u></p> <p>For 10 IT & Geomatics Personnel = 6 Marks</p> <p>For additional One IT & Geomatics Personnel = 2 More Mark.</p> <p>Maxed at 10 marks.</p>
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.	<p><u>Max. Mark =10</u></p> <p>Minimum (1) one numbers of DGCA certified Pilot – 6 Marks.</p> <p>For each increase of one Pilot 2 (Two) extra mark shall be awarded.</p> <p>Maxed at 10 marks.</p>

7. TECHNICAL ELIGIBILITY CRITERIA FOR PHOTOGRAMMETRIC SERVICES USING HRSI IMAGERIES:

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 35% of the minimum capabilities as per the general & technical eligibility criteria.



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.

▪ COMMERCIAL PROPOSAL

Unless expressly indicated, service provider shall not include any technical information regarding the services in the commercial proposal. Prices shall be quoted entirely in Indian Rupees (INR) and must be arrived at after including all expenses, rates, and taxes.

The commercial Proposal must include the total price for all work components under two category Image services i.e. UAS/UAV/Drone Image Service & HRSI Photogrammetry services per unit area basis as specified in the Commercial Proposal. To be deemed responsive to this Notice, service providers must complete in detail all the Commercial Proposal Forms provided in this document.

Service providers are suggested not to use - 'To Be Determined' or similar annotations in the cells for cost estimates. It is suggested that the service providers need to specify prices for all categories.

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.. 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. The Financial bids shall be opened only for the Technically Qualified service providers.

8. PROFORMA/ BID SUBMISSION FORMAT

List of Proforma 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

TR-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 c 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 sales tax department? If yes, submit valid sales tax clearance certificate.	
9.	Is the company/firm registered for service tax with Central Excise Department (Service Tax Cell)? If yes, submit valid service tax registration certificate.	
10.	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?	
11.	Number of years in the relevant field?	
12.	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’SUNDERTAKING STATEMENT:

Selection of Service Provider for the project titled (Empanelment of UAV Image Services & HRSI based Photogrammetric Services provider for the State of Odisha)” (Notice No..... /2024) 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 & HRSI based Photogrammetric Services provider for the State of Odisha" under" the scope of this Notice.

(Authorized signatory): Name:

Designation:

Signed this Day of 2024 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 ONTRACT)

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

2. 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.



ii. The ORSAC hereby covenants to pay the SP in consideration of the above Services the remuneration at the times and in the manner prescribed by this Agreement.

iii. The Contract Sum for the Project has been agreed between the ORSAC and SP to be INR The same amount shall be the value for the purpose of furnishing Professional Indemnity Insurance by the SP.

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,

2. We hereby offer to provide the Services at the prices and rates mentioned in the Financial Bid
3. 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.
4. 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. _____ Lakhs 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 2020 (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

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 / HRSI Photogrammetric service)		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

**TR-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

SCIENTIST E, ORSAC