

CHHATTISGARH SWAMI VIVEKANAD TECHNICAL UNIVERSITY, BHILAI

Newai, P.O. Newai, Dist. Durg, PIN 491107 Ph. No.: 0788-2200062, Fax No.: 0788-22445020

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RFP for "Empanelment of Technical Partner for surveying through Vertical Take-off and Landing (VTOL) Hybrid Unmanned Arial Vehicle"

CHHATTISGARH SWAMI VIVEKANAD TECHNICAL UNIVERSITY, BHILAI

RFP for "Empanelment of Technical Partner for surveying through Vertical Take-off and Landing (VTOL) Hybrid Unmanned Arial Vehicle"

Ref No.	Date:-
Rei No	Date

The CSVTU is offering Request for Proposal (RFP) from interested firms/Institutions/ Organisations for "Empanelment of Technical Partner for surveying through Vertical Take-off and Landing (VTOL) Hybrid Unmanned Arial Vehicle" and an appropriate 4x4 SUV to be used as Survey Vehicle. Interested agencies may visit the website www.csvtu.in for information about CSVTU. Response to this Request for Proposal (RFP) shall be deemed to have done careful study and examination of this document with full understanding of its implication. This section provides general information about the issuer, important dates and addresses and the overall eligibility criteria for the parties.

RFP document can be obtained from CSVTU on any working day by submitting a Demand Draft of Rs 10000/- in favour of "Registrar, Chhattisgarh Swami Vivekanand Technical University" payable at Bhilai.

Last date of obtaining RFP Form-Last date of submission of RFP Form-

NOTICE INVITING REQUEST FOR PROPOSAL (RFP)

FACT SHEET

1.	Request for Proposal No.	
2.	Name of the Work	RFP for "Technical Partner for surveying through Vertical Take-off and Landing (VTOL) Hybrid Unmanned Arial Vehicle"
3.	Name of the issuer of this Request for Proposal	CSVTU, Bhilai
4.	Last Date for Submission of RFP	11 Sep 2018
5.	Address of Communication	CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI Newai, P.O. Newai Disstt. Durg, PIN 491107
6.	Proposal Fees	INR 10000/- in form of DD drawn in favour of Registrar, Chhattisgarh Swami Vivekanand Technical University

DEFINITIONS:

In this document the following words and expressions have meaning hereby assigned to them.

CSVTU: Means Chhattisgarh Swami Vivekanand Technical University

APPLICANT/ SURVEYORS /CONSULTANTS: Means the individual, proprietary firm, firm in partnership, Pvt. limited company, in the field of Survey, architecture, planners, with or without multidisciplinary firms of engineering, structural designers, landscape planner, phe/electrical expert, etc. individual/proprietary firm/all partners of firm in partnership/all directors of Pvt. limited company shall be an Architect and have registered from council of architecture/AIIA. (With up to date renewal) are eligible for Empanelment.

Joint venture & consortium are not allowed.

1. Background

CSVTU hereby invites interested and reputed Institutions/ organisations to submit a Request for Proposal (RFP) for the empanelment of surveyor, shall be based on the financial capacity, work experience and technical personnel available with the applicants. The CSVTU reserves all rights to invite offers for engagement of other surveyors /consultants from time to time for any work. The empanelment shall not bind the CSVTU in any way whatsoever.

The core objective of this project is to facilitate govt. departments like PHE, PWD, Irrigation, Forest etc. This facilitation can further expand to other needful non govt. organizations as well. This project will allow the surveying and landscaping in fast, accurate and cost effective manner.

2. Vertical Take-off and Landing (VTOL) Hybrid Unmanned Arial Vehicle (UAV) & Suitable 4x4 SUV: VTOL Hybrid UAV: Surveying the large areas with substantial endurance demands lot of efforts. UAVs with fixed wings are more preferable due to its aerodynamic design. However, for mapping applications, take-off and landing sites are hard to find and that too plain and obstruction free. Moreover, flying skills are required to safely land the UAV. In view of these challenges, Vertical Take-off and Landing (VTOL) hybrid Unmanned Arial Vehicle (UAV) provide better solution to our desired objective. This means that take-off and landing would be like a helicopter and the cruise would be using fixed wings.

Such solution eliminates the risk involved in take-off and landing of UAV. In addition to that advancement in Differential Global Positioning System (GDPS) technologies, such as airborne navigation on UAV ensures precise and accurate landing. This also reduces the landing vibrations which keeps electronic components safe and ready for multiple flight.

In order to fulfil desired functionality, the proposed VTOL hybrid UAV must consists of following technical specification –

Take-off and Landing	Vertical (VTOL)
Payload Capacity	1-2 Kg
Ceiling	Up to 5000 mtr
Take-off Altitude	Up to 4000 mtr
Power	Battery Powered
Endurance and Backup	Minimum 90 minutes
Cruise Speed	60-70 km/hr
Vertical Positioning Accuracy	2-3 cm
Horizontal Positioning Accuracy	1 cm + 1 ppm
Wind Resistance	Min 28 km/hr
Operational Temperature	-20'C to +50'C
Camera	Full HD, Min 42 Megapixel, 5 Axis
	stabilization with 35 mm prime lens.
Airborne Post Processing Kinematics Setup	As per Requirement
Complete Ground Control Station Setup	With appropriate laptop, RF communication
	and WIFI routers and battery backup
Software/s	As per Requirement (with License)
GPS System	As appropriate
Maneuver	Autopilot and Manual Cruise Control

Suitable 4x4 SUV: An appropriate 4x4 SUV is also required to carry the aforesaid and desired Surveying Setup. Following features are desirable in proposed vehicle –

- 1. Appropriate In-vehicle arrangements for transporting aforesaid UAV ground station setup.
- 2. Space for storage of supporting surveying equipment.
- 3. Seating capacity for 4+1 persons
- 4. 4 Wheel drive with high ground clearance
- 5. Service, maintenance and warranty statement.

3. Procurement of VTOL hybrid UAV & Suitable 4x4 SUV

Procurement of Vertical Take-off and Landing Hybrid Unmanned Arial Vehicle & Suitable 4x4 SUV for transportation of mentioned UAV will be carried by CSVTU in order to fulfil the desired functionality and overall quality. CSVTU will hold the ownership of these 2 items.

4. Requirements from Successful Empanelled Technical Partner

The Applicant is required to fulfil following requirements from their side after successful empanelment –

- I. The empanelled technical partner will be required to submit INR 2.5 Crore to CSVTU for procurement of VTOL Hybrid UAV and necessary setup, as CSVTU wish to purchase this device and setup on its own to hold the ownership of this device.
- II. The empanelled technical partner will also be required to submit INR 15 Lakhs to CSVTU for procurement of suitable 4x4 SUV for transporting of above mentioned UAV, as CSVTU wish to purchase this vehicle on its own to hold the ownership of this vehicle.
- III. To provide competent technical staff having capability to process the survey data as per need of client under technical supervision of CSVTU.
- IV. To provide staff for maintaining and operating the UAV. As in order to understand in depth functionality, handling and flight maneuver, approximately 5 designated persons will require onsite training.
- V. To act as consultant for acquiring survey projects from various entities.

5. Responsibility of CSVTU

- I. CSVTU intended to provide this highly technical and sophisticated facility to various Govt. & non Govt. entities in terms of fulfilling the requirements of those with speed and accuracy as this method can cover the surveying of 10 sq/km in just 90 minutes with accuracy of +/- 3 cms.
- II. CSVTU will procure the VTOL Hybrid UAV and suitable 4x4 SVU with the use of its technical expertise to meet the high end technical superiority.
- III. CSVTU will also involve its technically sound staff in process for supervision, guidance and control to meet the specific requirements of our client.
- IV. CSVTU will also assist to empanelled technical partner to expand the association of clients with our services as provided UAV and setup will be used for high end survey consultancy to various govt. / non govt. departments and organizations that includes departments like PHE, PWD, irrigation, forest etc.

6. Empanelment Category

CSVTU wishes to empanel, reputed consultants in the field Survey and related services to provide consultancy services. The empanelment means not a guaranty of to provide/allot works to the consultants.

Survey through VTOL Hybrid UAV

7. Empanelment of Consultant / Firm / Company

a. EMPANELEMENT PROCEDURE

The broad procedure for empanelment of consultants shall be as under.

- I. **Publication of Request for Proposal (RFP):** CSVTU invites the application from eligible consultants to submit their proposal to participate in the empanelment procedure.
- II. **Submission of RFP:** The participants will submit the RFP to CSVTU along with the details as required in the prescribed manner.
- III. **Scrutiny by the CSVTU** The CSVTU will scrutinize all the submissions and eligible firms shall be invited for presentation.
- IV. Final selection of the firm shall be done on the basis of technical competency and the financial proposal.
- b. PERIOD OF EMPANELMENT: The empanelment would be for a period of ten years and it should be get renewed after 5 years if it is not renewed then it will be expire itself. The renewal application shall be submitted 3 months before expiry date of empanelment to the Registrar, CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY Newai, P.O.-Newai, District-Durg, Chhattisgarh, PIN-491107 .The renewal fees will be Rs 50000 [Fifty thousands only] as D.D. in the favour of the Registrar, CSVTU.
- c. TERMINATION OF EMPANELMENT: If in the view of the VC of CSVTU, the performance of a consultant is not satisfactory, or if in his view the consultant has failed to safeguard the interest of CSVTU, the CSVTU may at his sole discretion, terminate the engagement of the consultant, for particular project as well as terminate /suspension his empanelment with the CSVTU by giving written notice by not less than 30[thirty] days to the consultants. The Vice Chancellor (VC) of CSVTU's decision in this matter shall be final and binding.
- 8. Award of Work: Procedure for the award of work shall be as follows:
 - **a.** CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY shall invite offers for the project from interested firms in CSVTU, in two separate sealed envelopes. All the received proposals shall be placed before a committee, which shall select one best suited proposal after presentation by eligible firms.
 - **b.** After selection of the consultants, if execution of agreement by consultants is due to some reasons like unavailability of land/fund or for others reasons projects will be cancelled / in this case and selected consultants will be terminated by VC of CSVTU with one month notice to the consultants.
 - c. In above scenario the next T2 and T3 firms may be called by CSVTU for same agreement.
 - **d.** The allotted work to the Consultant from CSVTU shall be not allowed to sublet the work.

9. SIGNING OF AGREEMENT:

a. A separate agreement shall be executed between the (CSVTU) and the consultant for each different project. Firm should provide time bar chart of services before agreement. Agreement shall be sign by main partner of consultancy.

10. DETAILED SCOPE OF WORKS:

a. SURVEY:

Survey shall be done by the prescribed method of CSVTU and must carried out in supervision and control of CSVTU. The following factors may include the scope of work -

- i. Survey should use scientific method, using latest instruments.
- ii. Survey would include: Site evaluation, Analysis and impact of existing and proposed development on its immediate environs.
- iii. Site survey including adjacent area (Site Plan)
- iv. Soil test: Type of soil, strata and its bearing capacity.
- v. Resistivity survey to find out underground water table.
- vi. Contour Survey at intervals as specified (by Total Station Survey minimum).
- vii. Location of all existing structures like, cannel ,nallah ,water bodies, trees, electric line, other buildings, tubewel, Approach to the site (Specify kachha/pukka road with width of existing road distance from main road), show state highway or NH or any main road if any, give max. flood level of nallah/canal/river/pond if any at site or near site, encroachment at site if any to be show properly, any ditch if any, etc. if any deep slope are in site show properly.
- viii. Show khasara Plan with no. in survey plan. (Separately)
- ix. Any other features as directed by engineer in charge.
- x. Survey plan and contour plan will be in scale 1:500, or as directed.
- xi. Geological Survey for water recharging.
- xii. Show availability of electricity and water.
- xiii. Surrounding Building or campus or other
- xiv. show co-ordinates of all corners of sites/boundary
- b. Vigilance Tasks
- c. Any other feasible survey

11. FINANCIAL MODALITY AND REVENUE SHARING

- A. The successful empanelled technical partner will provide funds for all these setup i.e. INR 2.5 Cr. for purchase of VTOL Hybrid UAV & INR 15 Lakhs for purchase of suitable SUV.
- B. The successful empanelled technical partner will borne the maintenance and salary of their designated staff for the project along with the transportation, travelling and any other cost arise and implied in the process.
- C. CSVTU will act as surveying agency for various govt. / non govt. departments and organizations and will borne the financial responsibility of its staff and internal process.
- D. Revenue generated by consultancy will be shared between CSVTU and empanelled technical partner as 30-70 ratio that is CSVTU will hold the 30% of net revenue from this project where empanelled technical partner will hold the 70% of net revenue from this project.
- E. Share may be finalized after negotiations between both the parties.
- F. CSVTU will return / pay back net 5% of each consultancy charges to the empanelled technical partner other than the above 70% of their sharing. This return / pay back to empanelled technical partner will get paid maximum up to 1.25 Crores in overall that is once the 1.25 crore will be returned to empanelled technical partner, this return / pay back clause concluded and considered to settled.

12. INFORMATION AND INSTRUCTIONS TO APPLICANTS.

a. GENERAL.

All information requested for in the enclosed forms should be furnished against the respective columns in the form. If information is furnished in separate documents, reference to the same should be given against respective column. If information is 'Nil' it should also be mentioned as 'Nil' or 'No such case'. If any particular query is not applicable in case of the applicant, it should be stated as 'Not applicable'. The applicants are cautioned that non submission of complete information called for in the required formats, or making any change in the prescribed forms may result in the application being summarily rejected.

- i. All the information must be submitted in English.
- ii. The documents should be sent by speed post / registered post or hand delivery. CSVTU will not entertain any application after the prescribed time limit on any grounds.
- iii. The application should be type written. The applicant's name & signature should appear on each page of the application form.
- iv. Overwriting shall be avoided and corrections, if any, shall be made by crossing out, initialling, marking the date and rewriting. All pages of the application shall be numbered and submitted as a package with signed letter of transmittal.
- v. References, information and certificates from the clients certifying suitability, technical know-how or capability of the applicant shall be signed by the respective client.
- vi. The applicant is advised to attach any additional information he thinks would be necessary in regard to his capabilities. No further information will be entertained after submission of application unless it is required by the CSVTU. The CSVTU reserves the right to call for additional information and clarification of information submitted from the applicants
- vii. The application form duly completed and signed shall be submitted in sealed cover. The sealed cover shall be super scribed as 'Application for Expression of Interest from Consultant/firm/company for Empanelment in CSVTU and shall be received by the Registrar, CSVTU, Newai, P.O.-Newai, District-Durg, Chhattisgarh, PIN-491107, INDIA on or before date & time mentioned in advertisement on newspaper or in the CSVTU website "www.csvtu.ac.in".
- viii. The cost incurred by applicants in preparing this application, in providing clarifications or attending discussions / conferences in connection with this document shall be borne by the applicant and the CSVTU in no case will be responsible or liable for these costs, regardless of the conduct or outcome of the process.

13. METHOD OF APPLYING:

- **a.** If the application is made by a proprietary firm, it shall be signed by the proprietor above his full typewritten name and current address.
- **b.** If application is made by a firm in partnership, it shall be signed by all the partners of the firm above their full typewritten names and current addresses, or alternatively by a partner holding special power of attorney for the firm in which case a certified copy of the partnership deed and the said power of attorney and current address of all the partners of the firm shall also accompany the application.
- **c.** If the application is made by a limited company, it shall be signed by a duly authorized person holding power of attorney for signing the application in which case a certified copy of the power of attorney shall accompany the application.
- **d.** The application shall be signed so as to be legally binding on all director.
- **e.** One of the director shall be nominated as being lead director and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the director.
- **f.** The lead director shall be authorized to incur liabilities and receive instructions for and on behalf of any and all director of the company.
- **g.** A copy of the agreement or memorandum of understanding of the company shall be submitted with the Application and complete information pertaining to each director of the company shall also be submitted.

14. ELIGIBILITY AND MINIMUM CRITERIA FOR PREQUALIFICATION:

- **a.** The applicant, individual/firm/company/society should be in india.
- **b.** To be eligible for Empanelment, the applicants shall provide satisfactory evidence of their eligibility, capability and adequacy of resources to carry out the project. In addition, all applications submitted shall include the following information:
 - Letter of Transmittal.
 - Copies of original documents defining the legal status, structure of organization, place
 of business of the company or firm or partnership or the individual in Format I, III & VI.
 - Information about Planning professionals and allied Technical staff in Format IV & V.
 - Any other relevant additional information in Separate sheet.
 - The applicant may be required to make a presentation covering the above aspects.

15. CORRUPT OR FRAUDULENT PRACTISES

- a) The organizations shall observe the highest standard of ethics during the selection process and execution of the contract.
- b) The selection Committee will reject a proposal if it determines that the applicant organization has engaged in corrupt or fraudulent practices while participating in the selection process.
- c) The applying Organization shouldn't be black listed anywhere in India for whatsoever reason and for project of any type & nature.

16. DISPUTE REDRESSAL AND POWER OF AMENDING THE RFP DOCUMENT

In the event of any dispute or difference arising regarding RFP document or any special condition of the document, the same will be refereed to VC, CSVTU for final decision and will be binding to all. VC shall also have the power to amend any clause of the document before opening of the proposals and the same shall be notified to publically via official website and leading News Papers.

17. ELIGIBILITY CRITERIA

a. Following is the eligibility criteria for the empanelment of the agencies

S. No	Basic Requirements	Specific Requirements	Documents Required
1.	Registration	The organization should be a legally registered entity - the individual, proprietary firm/ firm in partnership/ Pvt. limited company / Society. etc	
2.	PAN	Valid PAN No in the name of the organization	Photocopy of the Document
3.	Team Leader	With relevant experience	Profile in prescribed format
4.	Desired Size and Details of team members	The organization should have desired number of experts with relevant expertise	Profile of members in prescribed format
5.	Office in Chhattisgarh	Address of Office in Chhattisgarh	Must be furnished in prescribed Format
6.	Undertaking To declare that the applying organization is not Black listed anywhere in India.		Self-Declaration in prescribed Format
7.	Demand Draft (Must be kept inside a separate envelope)	DD of Rs 10000/- against Proposal Fee which is non refundable	Valid DD issued by any nationalised bank in favour of Registrar, Chhattisgarh Swami Vivekanand Technical University payable at Bhilai

The above mention table is also mentioned in Pro forma Format Section as Format II – Checklist, the applying organization is required to fill that format also.

b. The organization that does not satisfy any one of the criteria mentioned above will be considered ineligible to participate in the process of selection.

Format I – Details of Applicant.

Name and Details of the Applicant and Authorized Representative:				
Name of				
Organization/				
Institution				
Registered/ Head Office				
Address				
Phone Numbers				
Fax Number				
Mobile Number				
Email Address				
Website				
Name of Authorized				
Representative				
Designation				
Mobile				
Email				
	(2)			
For and on behalf of:	(Company Seal)			
Cianatura Naces				
Signature: Name:				
Designation:				
(Authorized Representative a	and Signatory)			

Format II – Checklist

S. No	Basic Requirements	Specific Requirements	Documents / Details Required	Format Reference	Availability (Yes / No)	Page No
1.	Registration	The organization should be a legally registered entity - the individual, proprietary firm/ firm in partnership/ Pvt. limited company / Society. etc	Registration			
2.	PAN	Valid PAN No in the name of the organization	PAN			
3.	Team Leader	With relevant experience	Format IV			
4.	Desired Size and Details of team members	The organization should have desired number of experts with relevant expertise	Format V			
5.	Office in Chhattisgarh	Address of Office in Chhattisgarh	Must be furnished in prescribed Format			
6.	Undertaking	To declare that the applying organization is not Black listed anywhere in India.	Self Declaration in prescribed Format			
7.	Demand Draft (Must kept inside a separate envelope)	DD of Rs 10,000/- (ten Thousands Only) against Proposal Fee which is non refundable, issued by any nationalised bank in favour of Registrar, Chhattisgarh Swami Vivekanand Technical University payable at Bhilai	Details of DD: DD No. Date of Issue Issuing Bank Name Amount			

Format-III Profile of Organization

Legal Constitution of Applicant (Registered Private Limited/ Public Limited Company/ Registered Society/Trust/ Association/ Trade Body/ Registered Educational Institution/ University/ Partnership Firm)					
Type of the Applying Entity					
Name of Registering Authority					
Registration Number					
Date of Registration					
Place of Registration					
Registered to operate in PAN India/					
State/s (In case of States – mention the					
names of all states)					
PAN No of Organization					
For and on behalf of:	(Company Seal)				
Signature:					
Name:					
Designation:					

Note:

- 1. Please provide copy of the registration certificate from the appropriate Registering Authority.
- 2. Please provide copy of PAN Card.

Format – IV

Profile of Team Leader

Name	
Date of Birth	Davida Davida
Educational	Paste Recent Passport Size
Qualification	Photograph
Total Year of	
Experience	
Years of Experience in	
Skill Development	
Projects Execution	Signature
Contact No	
Mail id	
Summary of Professional Qualification / Technica	al Expertise / Experience (100 words)

Personal Detail & Qualification

SN	Year of Passing	Degree / Certificate	School/College Name/ University Name	Board	City	State

Experience

SN	From	Till	Duration	Position	Project Perused	Employer Name
	(Date)	(Date)	(in Years)	Held		

Professional Experience

SN	Project	Project Description	Job Role & Responsibility	Sector	Duration
	Perused				(in Years)

Language & Degree of Proficiency

SN	Language	Speak	Write	Read
1.	Hindi			
2.	English			

knowledge & belief.	
Date:	
Place:	Signature

I hereby solemnly declare that the above mentioned information is true to my

Format - V

Profile of Team Members

Name	
Date of Birth	Doots Dooset
Educational	Paste Recent Passport Size
Qualification	Photograph
Total Year of	1110108.4811
Experience	
Years of Experience in	
Skill Development	
Projects Execution	Signature
Contact No	
Mail id	

Personal Detail & Qualification

SN	Year of Passing	Degree / Certificate	School/College Name/ University Name	Board	City	State

Experience

SN	From (Date)	Till (Date)	Position Held	Project Perused	Employer Name

I hereby solemnly declare that the above mentioned information is true to m	y
knowledge & belief.	

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Place: Signature

Note: Please attach resume with project description and duly signed by the same person.

Format – VI

Office in Chhattisgarh

Address of Head Office	
Contact No	
E mail	
Website	
Address of Office in Chhattisgarh	
City	
District	
Pin Code	
Land Line Number	
Mobile Number	
E mail Id	
Fax Number	
For and on behalf of:	(Company Seal)
Signature:	
Name:	
Designation:	

Format – VII

FORMAT OF UNDERTAKING

FORMAT OF UNDERTAKING, TO BE FURNISHED BY ORGANIZATION HEAD WITH REGARD TO BLACKLISTING/ NON- DEBARMENT, BY ORGANISATION UNDERTAKING REGARDING BLACKLISTING / NON – DEBARMENT

То,	
The Registrar	
CSVTU, Newai, P.O. Newai, Dist. Durg, PIN 491107	
We hereby confirm and declare that we, M/sblacklisted/ De-registered/ debarred by any Government de Undertaking/ Private Sector/ or any other agency for which Undertaken the works/ Services since the establishment of contractions.	partment/ Public Sector we have Executed/
For and on behalf of:	(Company Seal)
Signature:	
Name:	
Designation:	