

NIT No: SOPC-IN012/2/2021-PB.OUTREACH-DAE/133

Date: 01.09.2021

Subject: **Notice Inviting Tender (NIT) for Procurement of Hardware Items**

On behalf of the President of India, the Department of Atomic Energy (DAE) invites sealed tenders for procurement of following Hardware items as per the specifications in the Annexures from all interested vendors.

#	Item Description	Technical Specifications	Quantity
1	360-degree camera and accessories	<i>Annexure-I:</i> Technical Specifications for 360-degree camera and accessories	1 Set
2	VR Headset and accessories	<i>Annexure-II:</i> Technical Specifications for VR Headset and accessories	1 Set
3	Drone for aerial videography and accessories	<i>Annexure-III:</i> Technical Specifications for Drone for aerial videography and accessories	1 Set

2. Financial Bid should be submitted as per the format in *Annexure-IV:* Format for Financial Bid. Tax registration document should be enclosed. Extra pages should be enclosed to mention the make/model of the offered item.

3. Bidders are requested to refer to *Annexure-V:* General Terms and Conditions and *Annexure-VI:* Instructions to Bidders.

4. Bidder will be finalised on the basis of lowest quotation for the technically suitable offer. Decision of the Department shall be final and binding in this regard.

5. Bids in prescribed format should be sent only in a sealed envelope superscribed 'Bid for SOPC Hardware Items'. Bids received in any other manner shall be summarily rejected.

6. Bid in sealed cover should be sent through Speed-Post / Courier so as to reach the undersigned by 1800 hrs, 07<sup>th</sup> September, 2021. Bids received after this deadline will not be considered. DAE reserves the right to reject any offer without assigning any reason thereof.

(Reetesh Chaurasia)  
Member, SOPC  
303, Anushakti Bhavan, DAE  
C. S. M. Marg, Mumbai– 400 001

## **Annexure-I: Technical Specifications for 360-degree camera and accessories**

#	Feature	Desired Technical Specification
<b>Camera and Lenses</b>		
1	Lenses	Wide angle and 360°
2	Resolution Wide angle Lens	Minimum 4K
3	Resolution 360° Lens	Minimum 5.7K
4	Aperture Wide angle Lens	Maximum f/2.8
5	Aperture 360° Lens	Maximum f/2.0
6	Memory	MicroSD Card, support up to 1TB
7	File Format	Photo: JPG, Raw; Video: H.264 / H.265
8	Stitching	In-camera stitching required
9	Stabilisation	In-built 6-axis Gyroscope
10	Operating Temperature Range	Minimum 0 °C – 40 °C
11	Satellite Positioning System	GPS or GLONASS
12	Hovering Accuracy (with Satellite Positioning System)	Vertical: ±0.5 m Horizontal: ±1.5 m
13	Waterproof	Minimum 5 m
<b>Connectivity</b>		
14	Bluetooth	Required, version 4.0 or above
15	Wi-Fi	Required
16	USB Interface	Required
<b>Accessories: Battery and Monopod Stick</b>		
17	Battery Type and Capacity	Lithium ion, Minimum 1000 mAh
18	Monopod Type	Telescopic, extendible
19	Monopod Material	Aluminium alloy
20	Monopod Length	Minimum 1 m (extended)
<b>Warranty</b>		
21	OEM Warranty for 1 year minimum	

## Annexure-II: Technical Specifications for VR Headset and accessories

#	Feature	Desired Technical Specification
<b>Headset</b>		
1	On-board processor	In-built processor required
2	CPU in-built features	Minimum 3Kx3K resolution per eye at 90 fps Minimum 5.7K 360° videos at 60 fps 3D spatial sound and AI acceleration
3	Display Type	Single Fast-Switch LCD
4	Display Resolution Per Eye	Minimum 1800 × 1800 pixel per eye
5	Interpupillary distance	Adjustable, Minimum 3 pre-set adjustments
6	Tracking	Inside out, 6 Degree of Freedom
7	Audio	Integrated, in-strap
8	Memory	Minimum 64 GB
9	Waterproof	Minimum 5 m
<b>Controllers</b>		
10	2 Controllers for left and right hands	Wireless controllers with in-built touch and motion sensors for both hands
<b>Connectivity</b>		
11	Bluetooth	Required, version 4.0 or above
12	Wi-Fi	Required
13	USB Interface	Required
<b>Accessories: USB Cable</b>		
14	Virtual Reality USB Headset Cable	USB Type C, length minimum 10 feet
<b>Warranty</b>		
15	OEM Warranty for 1 year minimum	

**Annexure-III: Technical Specifications for Drone for aerial videography and accessories**

#	Feature	Desired Technical Specification
<b>Drone</b>		
1	Weight (Battery & Propellers Included)	Maximum 1500 grams
2	Diagonal Size (Propellers Excluded)	Maximum 400 mm
3	Service Ceiling Above Sea Level	Minimum 5000 m
4	Flight Time	Minimum 20 minutes
5	Operating Temperature Range	0 °C – 40 °C
6	Satellite Positioning System	GPS or GLONASS
7	Hovering Accuracy (with Positioning)	Vertical: ±0.5 m; Horizontal: ±1.5 m
8	Battery Capacity	Minimum 5000 mAh
<b>Gimbal</b>		
9	Stabilisation	3-axis (pitch, roll, yaw)
10	Vibration	Maximum ±0.05°
<b>Camera</b>		
11	Sensor Type and size	Type: CMOS, Minimum 1-inch diagonal
12	Lens Field-of-View	Minimum 80°
13	ISO Range	Minimum 100-3200 for photo and video
14	Mechanical Shutter	Yes, required
15	Shutter Speed	Minimum 1/2000 s
16	Optical Resolution	Minimum 5472 × 3078
17	Output Formats	Video: MP4/MOV, Photo: RAW+JPEG
18	Memory	Minimum 64 GB
<b>Obstacle Sensing</b>		
19	Optical Awareness Directions	Forward, Backward, Downward
20	Optical Sensing Range	Minimum 1-25 m all directions
21	Infrared Sensing	Yes, required
<b>Remote Control</b>		
22	Transmission Distance	Minimum 5000 m
23	Battery Capacity	Minimum 6000 mAh
24	In-built Video Output	Preferred
<b>Accessories: Extra Battery, Memory Card and Protective Case</b>		
25	Battery compatible with Drone	Minimum 6000 mAh, Quantity 3 Nos.
26	Memory Card compatible with Drone	Minimum 128 GB, Quantity 1 No.
27	Protective case compatible with Drone	Hard ABS/Metallic exterior with foam-lined slots for stowing Drone, Gimbal, Camera and 4 propellers, 3 batteries and 1 Memory card
<b>Warranty</b>		
28	OEM Warranty for 1 year minimum	

## Annexure-IV: Format for Financial Bid

On Letterhead

1. Name of the Vendor:
2. Address:
3. Phone / Mobile No.:
4. GST/PAN/Udyog-Aadhaar No.: \_\_\_\_\_ (also enclose tax registration document)

#	Item Description	Cost (Rs.) A	GST (Rs.) B	Total (Rs.) A+B
1	360-degree camera and accessories as per <i>Annexure-I</i>			<u>In Figures:</u> <u>In Words:</u>
2	VR Headset and accessories as per <i>Annexure-II</i>			<u>In Figures:</u> <u>In Words:</u>
3	Drone for aerial videography and accessories as per <i>Annexure-III</i>			<u>In Figures:</u> <u>In Words:</u>

Enclosures:

- 1 Tax registration document
- 2 Attach extra sheets for each item for information on the offered make/model.

Date:

AUTHORISED SIGNATORY

**Name of the Authorized Signatory**  
**and Seal of the Firm**

## **Annexure-V: General Terms and Conditions**

### **A. Eligibility Criteria**

1. Bidder should be an authorized firm in India having valid Tax registration. Valid documentary proof of registration certificates should be provided.
2. In case of ambiguity, quotation will be rejected outright.

### **B. Contract Award Criteria:**

1. Vendors quoting the Lowest price (L1) shall be considered. However, the Department reserves the right to accept any Bid, not necessarily the lowest, reject any Bid without assigning any reason.
2. The contractor shall not assign or sub-let his contract or any substantial part thereof to any other agency. The contract shall be awarded to the bidder subject to the satisfaction of the Department.

### **C. Performance Security:**

1. Performance Security of 5% of order value is to be furnished within 15 days from the date of letter of acceptance. It should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the vendor. Performance Security is to be submitted in the form of Bank guarantee. It can also be accepted in the form of fixed deposit receipts of Scheduled Bank or in the form of Government Securities.
2. If the successful bidder, fails to furnish the prescribed performance security on or before stipulated date of commencement, the department shall without prejudice to any other right or remedy, be at liberty to suspend the bidder for one year from the date of issue of Suspension order.

### **D. Security Deposit:**

1. The vendor, whose bid is accepted, will be required to furnish by way of Security Deposit, for the due fulfilment of his contract, such sum, as will amount to 2.5% of the value of Purchase Order.
2. The Security Deposit will be collected by deductions @ 2.5 % of the gross amount of the bill of the vendor. The Security deposit will also be accepted in the form of Governments Securities, Fixed Deposit Receipts of Scheduled Bank and Nationalised Bank. These shall be endorsed in favour of the Accounts Officer, DAE, Mumbai.

### **E. Terms of Payment:**

1. Payment shall be released after satisfactory completion of the job on production of the Bill.
2. The payment shall be made on the basis of the certification by Member, SOPC, DAE.

### **F. Suspension & Cancellation of Contract:**

1. Department Of Atomic Energy will suspend the dealings for future enquiries with a vendor without issuing notice on any of the following circumstances/reasons:
  - a. On finding deviation in technical specification as given in **Annexure-I, Annexure-II** and **Annexure-III** or
  - b. Violation of any condition of the contract or part of any condition of the contract, or
  - c. Deviation found in quality of the service rendered.

2. As stopping the services and taking appropriate action in this regard is of an urgent and emergent nature, require to protect the interest of the Government, the Contract of the concerned will be first suspended without issuing any notice. However, before taking the final decision on the matter, the concerned party will be given reasonable opportunities to explain his stand. After enquiry, if the vendor is found guilty, the Contract of the concerned vendor for the product will be cancelled and other appropriate legal action shall also be initiated against all concerned. The decision of Department shall be final and binding.

**G. Delivery Period of the Purchase Order:**

1. Items have to delivered at Anushakti Bhavan, C. S. M. Marg, Mumbai 400 001 within 10 days of the receipt of Purchase Order.
2. No extension of Delivery Period shall be entertained. The Purchase Order will remain alive for purpose of delivery during the currency of the above period until deliveries have been completed.

**H. Other conditions:**

1. It will be as per DEPARTMENT OF ATOMIC ENERGY Standard Terms & Conditions.
2. The Purchase Order is likely to be terminated in case the conditions of the agreement are not fulfilled.
3. In case of any dispute, the area of jurisdiction will be at Mumbai only.
4. The acceptance of tender shall rest with Department which does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all of the tenders received, without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.
5. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.

**I. Penalty Clause:**

1. Refusal or inability or delay by the successful bidder to provide services as per scope of work at the contracted rate may result in termination of the contract and forfeiting of performance guarantee as well as disqualification of the bidder from participating in future tenders.
2. Penalty will be charged @ 0.5% per day subject to maximum of 5% of contract value, in case the services are not provided as per the scope of the work.

**J. Termination:**

The Contract may be terminated in case of the occurrence of:

- a) If the Vendor becomes insolvent or goes into compulsory liquidation.
- b) If the Vendor, in the judgment of Department has engaged in corrupt or fraudulent practices in competing for or in executing this Contract.
- c) If the Vendor submits to the Department a false statement which has a material effect on the rights, obligations or interests of the Department.
- d) If the Vendor places itself in position of conflict of interest or fails to disclose promptly any conflict of interest to the Department.
- e) If the Vendor fails to provide the quality services as envisaged under this contract. In such an occurrence, the Department shall give a written prior notice of 15 days to the Vendor before terminating the Contract.

#### **K. Forfeiture of Performance Security:**

Performance Security in full or part may be forfeited in the following cases:

- a) When any terms and conditions of the Contract are breached.
- b) When the Vendor fails to provide desired services satisfactorily.
- c) Notice of reasonable time will be given in case of forfeiture of Performance Security. The decision of the Department in this regard shall be final.
- d) If the Vendor requires an extension of time in completion of contractual service on account of occurrence of any hindrance, it shall apply in writing to the authority, which has placed the Work order for the same, immediately on occurrence of the hindrance but not after the stipulated time. The case will be examined and permission in writing will be necessary for the contractor.
- e) Any dispute settlement, difference or disagreement whatsoever, arising between the Contractor/Vendor and Department of Atomic Energy, out of or relating to the contract meaning, scope of work under this tender document or the validity or breach thereof, or Terms and Conditions or covering anything herein contained or arising out of this Tender document, shall be settled through mutual consultation. Where such dispute, difference or disagreement cannot be settled mutually or is not resolved by mutual consultation, either interested party may refer the dispute to Sole Arbitrator, under the Arbitration and Conciliation Act, 1996. Place of Arbitration shall be Mumbai. Language of Arbitration shall be English. Parties shall bear their own expenses, unless otherwise ordered by the Tribunal. The decision of Sole Arbitrator shall be final and binding on both the parties.
- f) The courts in Mumbai shall have exclusive jurisdiction with respect to any legal dispute, difference or proceedings instituted by the Parties under this Tender document.
- g) The Vendor shall be liable for forfeiture of its Performance Security or termination of contract for default, if any.
- h) The Undersigned, reserves the right to reject any or all the tender without assigning any reason(s) thereof.

#### **L. Confidentiality Clause:**

- a) No party shall disclose any information to any third party concerning the matter under this contractor generally. In particular, any information identified as "Proprietary" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.
- b) This clause shall apply to the vendors or the employees engaged by the party with equal force.
- c) 'Restricted Information' categorized under Section 18 of the Atomic Energy Act 1962 and 'Official Secrets' under Section 5 of the 'Official Secrets Act 1923'. Any contravention of the above-mentioned provisions by any contractor or the employees of Tenderer will invite penal consequences under the aforesaid legislation.

The Department of Atomic Energy reserves the right to reject any or all bids in whole or in part without assigning any reasons thereof. The decision of Department of Atomic Energy shall be final and binding.



## Annexure-VI: Instructions to Bidders

1. No conditional bid will be accepted.
2. Under no circumstances, the Department of Atomic Energy shall be made liable for additional monetary involvement besides that what has been mutually agreed.
3. The bid must be in the prescribed formats only and shall be accompanied with all other necessary documents. The financial bid has to be indicated in Indian Rupees both in words and figures (in the prescribed proforma of *Annexure-IV: Format for Financial Bid*) and there shall be no correction or overtyping etc. The offers with any corrections/deviation in prices with words/figures shall be summarily ignored. The conditional offer (s) shall, in no case, be accepted.
4. **MODE OF PAYMENT:** The Department of Atomic Energy shall make payment through PFMS/RTGS/Electronic mode in favour of the Vendor. However, taxes at the prevailing rates which are levied as per the rules of the Government shall be deducted at source from bills.
5. Income Tax as applicable shall be deducted from the Bills by this institute and would be directly remitted to the government exchequer as per Government of India orders in force and as amended from time to time. However, copies of challans for said Tax Deductions at Source (TDS) would be provided to the contractor.
6. The Bidder must possess a valid registration, PAN, Goods & Service Tax Registration etc. (as applicable) at the time of bidding and Bidder should provide all the copies of the same along with the bid.
7. The Department of Atomic Energy reserves the right to reject all or any of the bids, and decision of the Department in the matter shall be final and binding.
8. The successful bidder shall have to deposit Performance Security within the time frame as indicated by the Department.
9. The Vendor has to carefully assess the scope of work with specific reference and understand the details of the work to be done. For any clarification(s) as to the tender/scope of work, the prospective bidders may contact Department of Atomic Energy with prior appointment on any working day between 10.00 a.m. to 3.00 p.m.
10. No interest on Security Deposit shall be paid by the Department of Atomic Energy to the bidder. The Vendor is being permitted to give tenders in consideration of the stipulations on his part that after submitting his tenders, he will not rescind from his offer or modify the terms and conditions thereof.
11. The Security Deposit shall be valid till all contractual obligations are fulfilled by the firm. The same shall stand forfeited in case of cancellation of the contract for any breach of contract or for any deficiency in the performance noticed during the period of the contract.
12. The bid is liable to be ignored if complete information as required is not given therein or if the particulars asked for under *Annexure-IV: Format for Financial Bid* of this tender are not fulfilled/submitted. Person signing the tenders or other documents must ensure that he is an authorized person on behalf of the firm to do so. The person signing the tender form or any other document forming part of the contract on behalf of another person shall be deemed a warranty that the signatory has authority and if, on enquiry, it is found that the person so signing had no authority to do so, the Department of Atomic Energy shall without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all costs and damages. The required documents and Annexures, if any, are to be signed and submitted by the Bidder.

13. Acceptance by the Department of Atomic Energy will be communicated by E-mail, Speed Post or any other form of communication. Formal letter of acceptance and work order of the Tenders will be forwarded as soon as possible, but the earlier instructions in the E-mail, Speed Post letter, etc. should be acted upon immediately.
14. In case the successful bidder does not accept the work within 15 days from the date of receipt of work order, the offer made shall be deemed to be withdrawn without any notice.
15. If the contract is terminated on the grounds of shortcomings or deficiencies during its tenure including extended tenure, if any, the Department of Atomic Energy shall have all rights to make suitable alternative arrangements for a period of 45 days from the date of such termination or till a new tender is finalized, whichever is earlier, and the difference in cost, if any, will be borne by the Vendor.
16. The rates quoted by the bidder shall be fixed for the period of the contract and no request for any change/modification shall be entertained before expiry of the period of the contract.
17. The Department of Atomic Energy shall have no liability, financial or otherwise, for any harm/damage/injury caused to the staff deployed by the contractor/Vendor in the course of performing work of this Department of Atomic Energy. Neither the Vendor nor its staff shall have any claim on the Department of Atomic Energy for compensation or financial assistance on this account.
18. It shall be the responsibility of the Vendor to comply with all the provisions of Acts, statutory requirements and Government instructions. If any statutory provision of any statute is violated in general concerning the execution of the work and in regard to welfare of the staff engaged for the work in particular, then the Security Deposit will be confiscated and Vendor will be blacklisted.
19. The damage caused, if any, to the Department of Atomic Energy property through the acts of the Vendor and/or by its staff shall be made good by the Vendor and decision of the Department of Atomic Energy in this regard shall be final/binding. In case of any dereliction of duty, gross neglect and unintended damage caused by the vendor or his staff or otherwise any harm done to the Department of Atomic Energy properties, designated officials or other employees, the Vendor shall be liable to make good the loss or pay compensation, reimburse expenditure on legal/judicial proceedings as well as pay penalty which Department may deem fit.
20. The Vendor shall not appoint Sub-Contractor to carry out any obligation under the contract and under such case, this agreement will be declared as void and such act of contractor will be taken as breach of the Contract and resultantly his Security Deposit shall be forfeited and contract shall be terminated.
21. The Department of Atomic Energy reserves the right to reduce or terminate the period of contract or to extend its duration in the interest of the Department of Atomic Energy for any justifiable reasons, not mandatory to communicate to the Contractor. The Department of Atomic Energy will have no responsibility for any loss/ damage caused to them. This also cannot be challenged in any court of law.
22. Any dispute arising out of and in relation to this agreement shall be referred to the Department of Atomic Energy. Its decision will be binding on the vendor.
23. The Purchase order can be terminated even earlier by Department of Atomic Energy by giving one-month prior notice in writing on account of any of the following reasons:
  - a. On account of unsatisfactory performance
  - b. Breach of contract clauses(s)
  - c. Persistently neglecting to carry out his obligations under the contract

24. The contractor shall have no claim of compensation for any loss sustained by him by reasons of having deployed personnel on the job.
25. Under no circumstances, the Department of Atomic Energy shall be made liable for additional monetary involvement besides that what has been mutually agreed upon.