

**HLL Infra Tech Services Limited**

**On behalf of the**

**Indian Council of Medical Research, New Delhi**

**Invites**

**Expression of Interest (EOI)**

**For**

**Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at  
selected locations in India**

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## 1. INVITATION FOR EXPRESSION OF INTEREST

HLL Infra Tech Services Limited (Procurement Support Agency) for and on behalf of Indian Council of Medical Research, New Delhi, invites Expression of Interest (EOI) through Central Public Procurement Portal (<https://eprocure.gov.in/eprocure/app>) from experienced Indian agencies for **Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at various locations in India.**

The EOI requisition document containing the details of qualification criteria, submission details, brief objective & Scope of work and evaluation criteria etc. can be downloaded from the websites of Central Public Procurement Portal and HLL Infra Tech Services Limited.

Schedule is as under:

EOI Document Number	HITES/ICMR/EOI/DRONE/2021 Dated 11 <sup>th</sup> June 2021
Date of Publication	11 <sup>th</sup> June 2021
Last date/Time of submission of online bids	22 <sup>nd</sup> June 2021 at 1300 hrs
Opening date/Time of online bids	22 <sup>nd</sup> June 2021 at 1330 hrs
Email/ Phone	pcd@hllhites.com; div.itr.icmr@gmail.com/ 0120-4071500

**Note:** All documents shall be submitted in the e-procurement portal of Central Public Procurement Portal (<https://eprocure.gov.in/eprocure/app>) and there is no requirement for any physical submissions.

## 2. Background

The Indian Council of Medical Research (ICMR), New Delhi, the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world. The ICMR has always attempted to address itself to the growing demands of scientific advances in biomedical research on the one hand and to the need of finding practical solutions to the health problems of the country, on the other.

Current pandemic situation, different agencies are helping the Government to prevent and control the transmission of COVID-19. ICMR as a part of Department of Health Research (DHR) is one of the leading agency in the country giving solution to various issues encounter i.e. Diagnosis, Vaccines, Treatment etc. Vaccines are the foremost preventive tool to mitigate the COVID-19 transmission apart from Covid-19 Appropriate Behaviour. To strengthen the delivery of vaccines, ICMR successfully conducted a feasibility study to deliver vaccines by Unmanned Aerial Vehicle (UAV) in collaboration with IIT, Kanpur. Based on the preliminary results of the study, ICMR has developed a standard protocol for successful delivery of vaccines using a UAV. Now, based on the experience gained in the feasibility study ICMR is keen to develop a model for vaccine delivery by UAV in the field practice area to reach areas to cover last-mile coverage at difficult terrain in selected locations.

## 3. Objective

The main objective of the proposed work is:

To develop a Medical Supplies delivery model and its feasibility in the field practice area by using UAVs in remote inaccessible (hard to reach) areas in selected locations in India

#### 4. Broad Scope of Work

Subject to the terms and conditions of an Agreement, ICMR shall engage UAV operators to operate Beyond Visual Line of Site (BVLOS) in fixed pre-defined/ pre-approved flight paths and deliver Medical Supplies (vaccines/ Drugs) payload at selected locations in India and return to the command station. The UAV operator shall be responsible for establishing, installing, operating and maintaining UAV based system for delivery of medical supplies (vaccines/ drugs). Also, the UAV operator must adhere to safety guidelines as per the regulations by Directorate General of Civil Aviation, Govt of India for operating BVLOS- UAV. ICMR may support in getting DGCA approval only for this activity however a prior approval from DGCA for BVLOS will be preferred.

#### 5. Specification of UAV requirement:

Based on the ICMR experience while conducting the feasibility study the UAV of following specifications is required:

Parameters	Description	Remarks
Range	<ul style="list-style-type: none"> <li>● The UAV should be able to cover a minimum aerial distance of 35 Km</li> <li>● Vertical altitude of minimum of 100 meters</li> </ul>	<p>Should be capable of BVLOS flight.</p> <p>The UAV should be capable of returning to home/ command station after delivery of the payload.</p>
Payload	UAV Shall Take off vertically and carry minimum payload of 4Kgs	Preferably overboard mounting of the payload.
Take off and Landing	VTOL as per DGCA guidelines for BVLOS	Parachute based delivery will <u>NOT</u> be preferred.
Communications		Constant tracking/navigation/ communicating with the base station
Safety feature and weight of UAV	As per DGCA/MOCA guidelines	

#### 6. Flight path specification

- a) UAV should be able to follow a pre-defined flight plan and must have real-time visibility of adherence to the flight plan. The UAV must follow fully autonomous take-off, flight, and landing along GPS way-points.
- b) The ability for dynamic reconfiguration of the flight path from Ground Command Station.
- c) Vertical take-off and reverse pick up capability are recommended
- d) Multiple Fail-safe options available.
- e) Third-party insurance is mandatory.

## 7. Agreement

Subject to the terms and conditions of an Agreement, ICMR may give a non-exclusive agreement to the companies to deploy the command station, fly UAV and deliver the payload in the designated territory. An agreement is proposed to be executed on “Non-Exclusive” basis with multiple UAV operators, due to the large quantity demand of Medical supplies (vaccine/ drug delivery) that is being envisaged.

## 8. Tenure of engagement

The tenure of engagement shall be initially for a period of **90 days**, extendable further, depending upon the performance of the UAV operator and need of the program. The engagement shall be only as per the terms & conditions of the Agreement.

## 9. Royalty(if applicable)

Revenue sharing will be as per ICMR Technology Transfer and revenue sharing guidelines.

## 10. Instructions to Proponents

### 10.1 Documents to furnish

Proponents are requested to go through all pre-qualification requirements, the scope of work for execution & requirements w.r.t technical/financial capabilities for acceptance and submission of documents.

The offer(s) shall only be submitted online in Central Public Procurement Portal in      Covers as below:

Cover 1 (Unpriced offer)

- a. Authorization Letter (Format – 1)
- b. Declaration - Expression of Interest (Format – 2)
- c. Undertaking with regard to Blacklisting (Format-3)
- d. Undertaking with regard to Non-Litigation (Format – 4)
- e. Undertaking with regard to capacity of deployment (Format-5)
- f. UAV Specification (Format-6)
- g. EOI document with each page duly stamped and signed by the Authorized signatory.
- h. Supporting documents, as mentioned in Format-2
- i. MSME Certificate (if applicable)
- j. DGCA approval (as mentioned in Point No. 4)
- k. Any other information which proponent may like to provide.

Cover 2 (Price) - As per the format provided in Part - B (To be submitted in excel and declaration to be submitted in pdf)

HITES/ICMR reserves the right to call for any clarifications confined in the broad scope, wherever such a clarification become necessary for proper judgment in evaluation.

### 10.2 Rejection Criteria

The application is liable to be rejected if:

- a. The proposal is not submitted as per the requirements indicated in the EOI.
- b. Not in the prescribed format.

- c. Not properly stamped and signed as per requirements.
- d. Received after the expiry of due date and time.
- e. All relevant supporting documents are not furnished with the PQC.
- f. The proposal shall be substantially responsive without any material deviation, failing which the proposal shall be summarily rejected.

Note: ICMR reserves the right to cancel this request for EOI and/ or invite afresh with or without amendments, without liability or any obligation for such request for EOI and without assigning any reason. Information provided at this stage is indicative and ICMR reserves the right to amend/add further details in the EOI.

#### **Disclaimer**

- a. ICMR shall not be responsible for any late receipt of applications for any reasons whatsoever.
- b. ICMR reserves the right to reject all applications without assigning any reasons thereof.
- c. ICMR may relax or waive any of the conditions stipulated in this document as deemed necessary in the best interest of the ICMR without assigning any reasons thereof.
- d. To include any other item in the Scope of work at any time after consultation with proponents or otherwise.

#### **10.3 Evaluation Methodology**

- Screening of EOIs shall be carried out as per Pre-Qualification criteria mentioned in the EOI document and based on verification of documents submitted.
- Shortlisted proponents may be called for a technical presentation through video conferencing.
- Shortlisted proponents shall be sent the Memorandum of Agreement (MoA) and other required documentations.

#### **10.4 Penalty for Non – Performance**

- a. In any of the defaults, ICMR/HITES reserves the right to get the work done through alternate sources at the cost and risk of the defaulting agency and resort to any other actions deemed fit like debarment from participating in any future tenders, etc.

#### **11. Pre-Qualification Criteria (PQC)**

The following will be the minimum Pre-Qualification Criteria (PQC). Responses not meeting the minimum PQC will be summarily rejected and will not be evaluated further:

<b>Sl. No.</b>	<b>Pre-Qualification Criteria</b>	<b>Supporting copy of documents required (All documents must be self-attested by the authorised person of the proponent).</b>
1	The proponent shall be a legal entity, registered as a Company/LLP/Society/ partnership firm/ proprietorship firm under respective acts in India.	Company Incorporation Certificate from ROC/Partnership deed etc.

2	The proponent must be registered in India with taxation and other administrative authorities.	GST Registration or GST exemption certificate/ PAN Card/ Current Bank Account
3	The proponent should have experience in development and deployment of UAV in three (3) immediate preceding years (2018-19 to 2020-21).	Pamphlet / brochure of the product and proof of previous work experience
4	The proponent has to be profitable and should not have incurred loss at least in three (3) immediate preceding years (2018-19 to 2020-21).	Certificate from the Chartered Accountant of the Organization/ Audited Balance sheets for last three financial years or Income Tax return.
5	The proponent should not have been black-listed by any Central /State Government / Public Sector Undertaking, Govt. of India, at least in three (3) immediate preceding years (2018-19 to 2020-21).	Undertaking on the Letter Head of the Proponent duly signed & Stamped by Authorized Signatory (As per format – 3).
6	The proponent should have a registered office in India	Registration copies of both
7	The proponent should not be involved in any major litigation that may have an impact of affecting or compromising the conditions required under this EOI and in the MoU.	Undertaking on Proponent's Letter Head, duly signed and stamped by the Authorized Signatory (As per format – 4)
8	DGCA Certification licensing (if applicable)	Registration copies of both
9	UAV Specification	(As per format-6 with supporting documents like technical literatures, certifications, etc.)
10	Capacity to undertake at least 10 sorties in a selected location	As per format-5, duly certified by a chartered accountant

**PART A**

For

Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at selected locations in India



**Authorization Letter**

(To be submitted on Agency's Letter Head)

To,

The Director General,

Indian Council of Medical Research,

Ansari Nagar, New Delhi.

Subject: Letter for Authorized Signatory

Ref. No. EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

This has reference to your above mentioned Expression of Interest (EOI) for Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at selected locations in India

Mr./Miss/Mrs/Dr \_\_\_\_\_ is hereby authorized to submit the EOI documents and participate in the processing on behalf of M/s \_\_\_\_\_ (Agency Name).

The specimen signature is attested below:

Name: \_\_\_\_\_

(Specimen Signature of Representative)

\_\_\_\_\_

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Date:

Place:

**Expression of Interest**

*(To be submitted on Agency's Letter Head)*

To

The Director General

Indian Council of Medical Research,

Ansari Nagar, New Delhi.

Subject: Submission of Expression of Interest (EOI) for Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at selected locations in India

Ref: EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

The undersigned having read and examined in detail all the EOI documents pertaining to your transfer of technology, do hereby express the interest to undertake the manufacture of the product as mentioned in the EOI document. The details of the Company and contact person are given below:

1	Name of the Proponent	
2	Address	
3	Name, designation & address of the person to whom all references shall be made	
4	Telephone No. (with STD code)	
5	Mobile No. of the contact person	
6	Email ID of the contact person	

The following documents are enclosed:

Sl. No.	Documents required	Type of document attached	Page No.
1	Company Incorporation Certificate from ROC/Partnership deed etc.		
2	GST Registration or GST exemption certificate/ PAN Card.		
3	Letter for past experience and Pamphlet or Brochure		
4	Certificate from the Chartered Accountant of the Organization/Audited Balance sheets for last three financial years, Income Tax return.		
6	Proof of a registered office and a manufacturing Unit in India.		
8	DGCA Approval (if applicable)		
10	Authorization Letter	As per format – 1	
11	Expression of Interest	As per format – 2	

12	Undertaking on the Letter Head of the Proponent duly signed & Stamped by Authorized Signatory (As per format – 3).	As per format – 3	
13	Undertaking on Proponent's Letter Head, duly signed and stamped by the Authorized Signatory	As per format – 4	
14	UAV Specification	As per format -5	
15	MSME Certificate (if applicable)		

I/we hereby declare that my/our EOI is made in good faith and the information contained is true and correct to the best of my/our knowledge and belief.

Thanking you,

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Place:

**Undertaking with regard to blacklisting**

*(To be submitted on Agency's Letter Head)*

To,

The Director General,

Indian Council of Medical Research,

Ansari Nagar, New Delhi.

Subject: Undertaking regarding Blacklisting / Non-Debarment

Ref: EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

It is hereby confirmed and declared that M/s \_\_\_\_\_ is not blacklisted/debarred by any Government Department/Public Sector Undertaking/Private Sector/or any other agency for which works/assignments/services have been executed / undertaken.

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Date:

Place:

**Undertaking with regard to Non-Litigation**

*(To be submitted on Agency's Letter Head)*

To,

The Director General,

Indian Council of Medical Research,

Ansari Nagar, New Delhi.

Subject: Undertaking regarding Litigation

Ref: EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

It is hereby confirmed and declared that M/s -----, does not have any litigation / arbitration history with any Government department/ Public Sector Undertaking/ / or any other public authority with which any MoU was / has been executed / undertaken.

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Date:

Place:

**Undertaking with regard to deployment capacity**

*(To be submitted on Agency's Letter Head)*

To,  
The Director General,  
Indian Council of Medical Research,  
Ansari Nagar, New Delhi.

Subject: Undertaking regarding Deployment Capacity

Ref: EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

It is hereby confirmed and declared that M/s -----, does have the capacity (including operational cost etc.) to provide and deploy ..... number of UAV command stations within one (1) month in different parts of the country (subject to approval of DGCA) after getting the Notification of Award.

Further, M/s -----, does have the capacity to conduct at least ..... number of sorties (of range as defined in the specifications) per day at a selected location.

Note: This document is to be attested by a chartered accountant (UDIN shall also be mentioned).

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Date:

Place:

To,  
The Director General,  
Indian Council of Medical Research,  
Ansari Nagar, New Delhi.

Subject: Undertaking of UAV specification

Ref: EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

This has reference to your above mentioned Expression of Interest (EOI) for Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at selected locations in India

The M/s ----- agreed to provide the UAV with following specification as mentioned in annexure I:

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Date:

Place:



### Annexure I

UAV DETAILS	
UAV make and hardware specifications	
DAN, OAN, DIN	
DGCA compliant (NPNT) certificate (Yes/ No/ In process) (attach copy)	
Type of UAV (fixed-wing/ multi-rotor/ hybrid)	
Category of UAV (Nano /Micro / Small/ Large)	
Maximum aerial distance and coverage area (in single sortie)	
Operating altitude and maximum altitude	
Maximum wind speed handling limit	
Capability to operate in all weather conditions (Yes/ No)	
Maximum and average speed of UAV's	
Battery charging duration (Minutes / fuel capacity (in litre)	
No. of batteries required per UAV	
Battery Specifications	
Battery voltage (V) at each launch and landing	
Take-off and landing requirements	
Payload delivery mechanism: Top load/Side load/ Bottom load	
Payload capacity (KG)	
Temperature maintenance and sensors that communicate with the base station	

Time to setup base stations / landing points + capability of dynamic starting / ending points	
<b>SAFETY FEATURES</b>	
Third Party Insurance (Yes/No/In Process)	
Geo-fencing return home and flight termination capability (Yes/No)	
Live trajectory information and monitoring features (Yes/No)	
Explain mechanism of safe UAV landing in case of geo-fencing breach	
Flight Logging (Yes/No)	
Safety requirement as per DGCA (Yes/No)	
<b>COMPANY CAPACITY TO PROVIDE THE SERVICES</b>	
Capacity to provide Number of Drone(s)/ UAVs	
Capacity to cover number of Sites in India	
Minimum time required to establish Command center at the selected site	
Minimum time required for delivery of drones	

**PART B**

For

Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at selected locations in India

**Financial Declaration**

(To be submitted on Agency's Letter Head)

To,

The Director General,

Indian Council of Medical Research,

Ansari Nagar, New Delhi.

Subject: Submission of Part B for the EOI No. ICMR / EOI / DRONE / 2021 dated 22nd May 2021

Sir,

With reference to ICMR communication dated..... regarding the short listing of our PART A application for the Expression of Interest (EOI) for Delivery of Medical supplies (Vaccines/ Drugs) by Unmanned Aerial Vehicle (UAV) at selected locations in India

I/ We Mr./Miss/Mrs/Dr \_\_\_\_\_ hereby submit the PART B documents of the ICMR -EOI for your kind perusal.

I/we hereby declare that my/our financial commitment provided in PART B is true and correct to the best of my/our knowledge and belief.

Yours faithfully,

(Signature of the Authorised signatory)

Name:

Designation:

Seal:

Date:

Place:

Sl. No.	COST/TARIFFS/CHARGES IN RS.	
	Characteristics	Values
1	Cost per km	

Note:

- (1) The logistic cost, travel cost and accommodation cost will be reimbursed on the actual basis on the submission of valid vouchers/ bills as per ICMR rules.
- (2) The above offered rates shall be valid across the country

(Signature of the Authorized signatory)

(Signature of the Accountant/financial authority)

Name:

Designation & Seal:

Date: .....

Place: .....

Name:

Designation & Seal:

Date: .....

Place: .....

\*\*\*\*\**END OF THE DOCUMENT*\*\*\*\*\*