

Delhi Pollution Control Committee

Government of NCT of Delhi

EXPRESSION OF INTEREST

SUB: Expression of Interest for Hiring of Drone for Pilot Project for drone-based mapping at 17 hotspots with Ortho-Rectified Imagery (ORI)

Publish Date : 11.11.2024
Bid Submission End Date : 26.11.2024 at 12.00 noon
Bid Opening Date : 26.11.2024 at 12.30 noon

Introduction

For last 10-15 years the Capital of India, Delhi has been grappling with severe Air & Water Pollution. Industrial pollution significantly contributed to the deteriorating air and water quality. DPCC received various complaints regarding operating of industrial unit like Jeans Dyeing Unit, RMC & Electroplating in non-confirming areas. These illegal units, working in non-confirming areas, are damaging environment badly and are also one of the major sources of environmental pollution. To discourage such units DPCC conduct various drives from time to time by the way of joint survey of such areas in NCT of Delhi. DPCC has identified the need for innovative measures to address such units across the city. One such measure is the Drone Survey to detect illegal industrial activities in Delhi.

Drones or Unmanned Aerial Vehicles (UAVs) are emerging as a reliable technology for city planning and development, data collection, city modelling, mapping and spatial analysis. Drone-based surveys are helpful for conducting various types of mapping such as green cover mapping, corridor/road mapping, contour/terrain mapping, land use classification, flood plain mapping, identifying critical areas of pollution etc. Drone-based mapping can help develop the latest spatial database which can be valuable to government authorities for planning and evaluating ground level actions.

Objective:

Delhi Pollution Control Committee in their effort to strengthen the enforcement in respect of finding out discharges from the illegal polluting activities(Dyeing/Jeans washing etc.) in unauthorised areas/residential areas/non-confirming areas in NCT of Delhi, Drone survey is mandatorily required for effective Control of all illegal units operating in hotspots and outer boundaries of NCT of Delhi.

The Drone survey will include Identification of all illegal jeans dyeing units, Electroplating Units, RMCs etc., operating in unauthorised areas/residential areas/non-confirming areas in

NCT of Delhi specifically Hotspots (List enclosed as Annexure-I) through photography and other measures by adhering to the guidelines/standard operating procedure.

Scope of the work

The scope of work for this project includes the Identification of all illegal jeans dyeing units, Electroplating Units, RMCs etc., operating in unauthorised areas/residential areas/non-conforming areas in NCT of Delhi specifically Hotspots (List enclosed as Annexure-I) through photography and other measures by adhering to the guidelines/standard operating procedure.

Based upon the complaints received through social media i.e. Twitter etc., the major hotspot areas are vizTukhmeerpur, Karawal Nagar, GokulPuri, Ghazipur, AaliVihar&Meethapur. Vikaspuri, NangliSakrawati, Matiyala, Bindapur, Kirari, Rithala, Swaroop Nagar, Mukundpur, Budhpur, Alipur, Khyala, Vishnu Garden and adjoining areas where illegal operation of such industrial units of Dyeing units & Jeans Washing/Denim Washing units are being operated.

Operational Requirement:

1. Interested agencies have to submit concept plan, draft script, action plan, draft design of drone formation in their proposal within stipulated time.
2. Drone shall fly for a period of approximately 45-60 minutes.
3. Drone will have upto 3-5 km visibility range and will run upto 750 ft. altitude.

Terms of References:

1. The duration of project is of fifteen (15) Days after the signing of Contract with the Department.
2. A detailed written report to be provided after completion of the work to the Department.
3. The data sets/reports/ IEC materials/ documentaries or any other relevant document is to be owned by the Delhi Pollution Control Committee.
4. The final decision regarding the bid evaluation will be made by the Committee constituted by the Delhi Pollution Control Committee.
5. The final payment will be released by Delhi Pollution Control Committee based on the acceptance report of ORI area.
6. Applicant should not be declared blacklisted or put on holiday for last three years by any Govt. Department or by Public Sector Undertaking.
7. Applicant should not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons, for same self-certificate to be enclosed.
8. Applicant and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a

procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings; for same self- certificate to be enclosed.

9. Selected Agency would require to execute the work within a period of 15 days from the work award.

Bidder Responsibilities

1. The bidder must fulfill all the compliances including all approvals and permission from authorities.
2. The ORI image and data collected by the Drone should be transmitted online to the Delhi Pollution Control Committee and all data should be available with the Green War Room for evaluation of the same at any later date.
3. The offer asked is for pilot project of 15 days for 17 drones. The period and number can be extended on satisfactory trial as per the decision of DPCC with the consent of the vendor.
4. The bidder is responsible for generating Ortho- Rectified Images (ORI) using RPAS/Drone equipped with a 24 MP camera. The bidder must deliver ORI with a 5 cm Ground Sampling Distance (GSD), with an expected output of 2-3 square kilometers per day per drone under favorable weather conditions.
5. The firm should also have technical expertise for establishing Integrated Command and Control Centers (ICCC) for drone management, a dedicated lab and team for regular monitoring and analysis of data, updated GIS management, and trained personnel for operating and maintaining the drones. They may also obtain the necessary permissions for carrying out the pilot project.
6. All communications should be duly encrypted and should be available exclusively to the Delhi Pollution Control Committee.
7. All data generated during the operation of the system shall be the exclusive propriety of Delhi Pollution Control Committee and it should not be shared with anybody or any entity, whatsoever, without written permission of the Delhi Pollution Control Committee. Any violation shall lead to imposition of fine and blacklisting of the selected Agency.
8. All disputes shall be settled through mutual negotiations and decision of the DPCC shall be final in this regard.
9. Any litigation shall be in the Competent Court in New Delhi.

List of 17 Hotspots :-

1. Tukhmeerpur
2. Karawal Nagar
3. Gokul Puri
4. Ghazipur
5. Aali Vihar & Meethapur
6. Vikaspuri
7. Nangli Sakrawati
8. Matiyala
9. Bindapur
10. Kirari
11. Rithala
12. Swaroop Nagar
13. Mukundpur
14. Budhpur
15. Alipur
16. Khyala
17. Vishnu Garden and adjoining areas