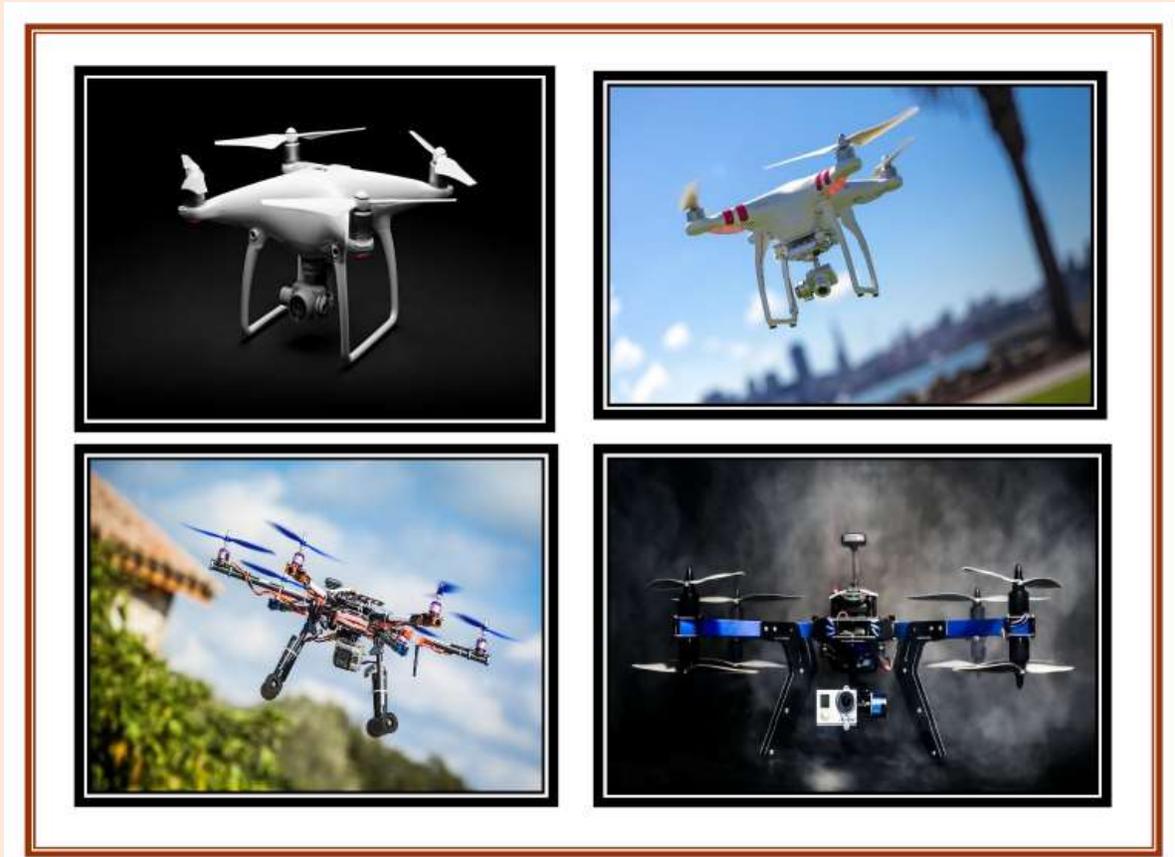


DRONE TECHNOLOGY PROJECT BROCHURE



“Partner with us for drone Projects”

ORGANIZERS:



**Engineering Council
of India**



**Construction Industry
Development Council**

OVERVIEW

An unmanned aerial vehicle (UAV) is defined as “an aircraft and its associated elements, which is operated with no pilot on board”. UAVs or drones have been widely used in several areas including agriculture and forestry, electrical power supply, geographical mapping, environmental monitoring and film shooting.

The global market has become a platform of activities for Drones. Overall investment in R&D shows healthy signs in emerging economies and enable them to enhance their growth. The global commercial drone market will grow at a CAGR of between 16% and 17% activities, and a focus on technological advancement are from 2017 to 2023.

The global UAV market will reach US\$ 21.47 billion, with the Indian market touching the US\$ 885.7 million mark; by 2021. This uptake is prompting governments to frame policies and regulations on use of drones.

Application of commercial drones cuts across various sectors construction, education, law enforcement, media and entertainment, precision agriculture, surveying and mapping, and inspection and monitoring.

Commercial use of UAVs was first recorded in the early 1980s in Japan, where they were used to spray pesticides on rice fields. Since then, drone technology had advanced significantly and provided new applications for all major industries. Drones have effectively disrupted business and operating models in key sectors including agriculture, urban development, traffic management, disaster management, forest and wildlife, healthcare, security and mining. They have empowered organisations and enabled them to capture real-time, highly accurate data.

OBJECTIVE

Construction Industry leverage UAV technology since 2014. It has opened up the opportunity for them to tap a huge untapped market. Most importantly, it has given new life to a number of drone start-ups that had been struggling to survive through the blanket ban on drones. The policy has also created a huge opportunity

for the largely untapped Business-to-Business (B2B) market in the country and given start-ups the opportunity to innovate.

The policy will also pave way for manufacturing of drones in India, especially under the Government's 'Make in India' scheme. Domestic manufacturing will help in moderating the market prices of drones and related appliances. Moreover, employment opportunities for skilled and trained professionals are expected to rise exponentially with the increase in adoption of drones in industry. An important part of the Internet of Things (IoT) ecosystem, drones have begun to boost the demand not only for the manufacturing and support they provide, but also opportunities. Moreover, the policy is forecast to make space for 'drone micro-entrepreneurs' who do not need to be experts in any specific sector such as construction or telecom, but know how to fly a drone expertly.

The Drone Industry is expanding rapidly. We at CIDC are committed to bringing the best of the professional applications of Drones to improve project management with particular emphasis to infrastructure industries. Keeping in line with this aim so far we have already executed following projects :

(a) Drone Technology survey of under construction railway track including road over bridges of Dedicated Freight Corridor Corporation of India Limited (DFCCIL) between Mugalsarai and Son Nagar.

(b) Drone Technology survey of Head Race Tunnel (HRT) area of Parbati - III Hydro Electric Power Plant of NHPC Limited located at Kullu in Himachal Pradesh.

The uses of Drone Technology will help in reaching the most inaccessible areas of the project for the purpose of inspection and giving the top management a detailed insight in the various aspects of project which will facilitate in reduction of cost of the project.

Expression of Interest (EOI) is hereby called from the interested industry for use of Drone Technology in management of their projects :

1. Inspection of Road Construction works.
2. Inspection of Rail Construction works.

3. Survey for Road alignment finalisation.
4. Examination of encroachments in project planning and execution.
5. Law Enforcement.
6. Disaster Management.
7. Security Surveillance.
8. Panoramic Aerial footage to show investors new opportunities.
9. Create marketing videos.
10. Power Plant inspections.

The interested industry / departments in government as well as private sector including Public Sector Undertakings (PSUs) are requested to convey their areas of interest for Drone Technology application to the under mentioned CIDC address. Any specific problem being faced by the project execution team may also please be conveyed with a brief to explore and suggest possible solutions by CIDC by use of Drone Technology.

EXPERTS

Team of Licensed, experienced and certified Drone Pilot by CASA, Australia under the course of Remotely Pilot License Conducted at Brisbane.