THE PULSE

Drone Policy 2.0: From Food to Medicines, Government Set to Commercialize Drones

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One of the major hazards caused by an ever-increasing population is heavy traffic. At a time when the country is high on technological transformation, the future of an enhanced quality of life revolves around a holistic drone policy in place.

In January 2019, India unveiled a new drone policy. The country could soon see far-reaching changes in the way human organs are transferred between hospitals as the government proposes to permit the use of drones for speedy transportation of these organs. Quick transportation of harvested organs could save more lives. In cases of organs like heart, sooner the transplantation takes place; higher are the chances of success.

Presently, transfer of organs between hospitals is done using the Green Corridor. Chennai is considered to be one of the few cities which took the unique initiative of creating a green corridor to ensure smooth and speedy transfer of human organs from one hospital to another for transplant surgery.

The Tamil Nadu Organ Transplant Program was started in 2008. Since then, the Green Corridor has played a crucial part in successful heart transplantations in major hospitals of Chennai. Traffic police and local authorities, together with hospital authorities play an active role in creating a Green Corridor. Based on the success of the Chennai city traffic police's Green Corridor scheme, a Malayalam film, Traffic, was made on a real-life story. Later, it was remade in Tamil as Chennaiyil Oru Naal (A day in Chennai).

Meanwhile, if the use of drone gets a green signal for transporting human organs, more lives and more time could be saved. In fact, with the launch of the Drone Policy 2.0, India is set to become a global leader within the drone ecosystem across the globe.

Prashant Prakhar, a senior member of Regulatory and Public Policy Practice at New Delhi-based law firm Nishith Desai Associates, was closely involved in preparing the draft of drone policy 2.0. He goes on to state that the Drone Policy 2.0 is going to have a huge economic and social impact on the next generations of Indian civil aviation industry. Further, by allowing 100% FDI under the automatic route, it ensures that the Indian drone market will receive the much-needed support for developing all elements of the drone ecosystem, as envisaged under the policy.

Drone Policy 2.0 would create more job opportunities and will simultaneously boost India's technological advancement in drone technologies. In addition, it will also promote major infrastructural developments and introduce new vocations such as UAS Traffic Management (UTM) system and drone-port service providers, within the ecosystem. This is bound to increase the demand for a highly skilled workforce, along with trained remote pilots and drone-port operators.

What does the Drone Policy 2.0 state?

The drone policy 2.0 is policy roadmap for establishing a fully functional drone ecosystem that would allow commercial usage of drones in India. It expands the scope of the operational airspace for drones by allowing them to operate beyond the visual line of sight and fly above the current limit of 400 ft.

The policy seeks to establish segregated airspace, namely the Drone Corridor, to keep commercial drone operations away from airspace where manned aircraft operate. This will be enabled through a UTM system, responsible for managing drone induced traffic. The policy also envisages laying down new principles for enhanced airworthiness requirements keeping in mind commercial operations that the drones may be engaged into.

Apart from the inclusion of improved pilot training requirements, it also permits the use of algorithms for piloting a drone, by removing the compulsory requirement of a human remote pilot itself. However, such an autonomous drone will only be allowed, if the manufacturers of such drone can demonstrate the inclusion of principles such as safety, security and privacy in the design of the drone.

New stakeholders have also been introduced in the form of DigitalSky Service Providers (DSPs). These DSPs will provide services to all other players in the drone ecosystem over the DigitalSky Platform. This ecosystem is further supplemented by the creation of drone ports, which will be designated areas dedicated to facilitating take-off and landing of the drones.

Based on the recommendations made by the members of the task force, Drone Policy 2.0 was released by the Ministry of Civil Aviation on January 15, 2019, during the recently concluded Global Aviation Summit, 2019. Presently, the Drone Policy 2.0 has been made public, inviting comments from various industry stakeholders, technology experts, and public policy architects.

Further, Prakhar elaborates that the new policy envisages allowing commercial operations using a drone and that it would open new avenues of service provisions in India. Such activities may include, among others, transportation of bodily organs or non-living medical products, discharge of materials for supplementing agricultural irrigation, surveying landscapes and active monitoring of rail/road traffic.

T he policy further envisages allowing night operations of drone in India, subject to operators having completed a proof of concept to the satisfaction of the concerned authorities. Currently, night operation of a drone is a rare phenomenon across the world. Thus, it is allowed under drone policy 2.0 would set an example to the world.

Drone policy 1.0 essentially allowed hobbyists and recreational flyers to operate drones in the Indian airspace. Soon after its release on Dec 1, 2018, a basic framework for drone regulations was established. On the other hand, Drone Policy 2.0 encompasses regulations for enhanced operations viz. flying beyond visual line of sight, commercial usage by way of cargo delivery and autonomous operations without active human intervention.

Challenges Ahead

No tried-and-tested approach is present anywhere around the world, for India to follow. Therefore, it is difficult to anticipate where the technology will go and what problems it could potentially cause in the future. However, it is necessary that local governments take up a more proactive approach to managing the rapid adoption of drones. Moreover, help will be needed in the form of public and private partnerships to gain the much-needed experience and provide the necessary impetus to the nascent industry.