GOVERNMENT OF INDIA MINISTRY OF CIVIL AVIATION

Rajya Sabha

UNSTARRED QUESTION NO.: 1468

TO BE ANSWERED ON THE 9th December 2024

ALLOWING OF DELIVERY BY DRONE

1468. SHRI S NIRANJAN REDDY

Will the Minister of CIVIL AVIATION be pleased to state:-

- (a) whether Government is considering allowing 'beyond visual line of sight operations' for drone deliveries;
- (b) if so, the details thereof;
- (c) whether Government is considering any new regulations for Alpowered drone deliveries and if so, the details thereof;
- (d) the safety measures in place for drone deliveries in overcrowded urban spaces and the details thereof; and
- (e) the steps in place to ensure privacy and prevent surveillance during drone deliveries and the details thereof?

ANSWER

Minister of State in the Ministry of CIVIL AVIATION (Shri Murlidhar Mohol)

- (a) & (b) Beyond Visual Line of Sight (BVLOS) operations of drone is evolving worldwide, and the Directorate General of Civil Aviation (DGCA) has established a Working Group for preparing a regulatory framework.
- (c) Unmanned aviation is evolving worldwide and DGCA is keenly following developments happening globally by other civil aviation regulatory authorities for developing consensus on development of regulations and integration of Al-powered drone into national airspace.

- (d) The following safety measures are in place for drone operations which includes drone deliveries as per Drone Rules, 2021:
- 1. As per the Drone Rules, 2021, each drone type has to be type certified as per the certification scheme for Unmanned Aircraft System (UAS) issued on 26th January, 2022 unless exempted (Nano and R&D).
- 2. Geo-fencing is a mandatory requirement for the type certification which restricts the movement of UAS within a defined airspace.
- 3. As per the certification scheme for UAS, the scope for issuance of Type Certificates of UAS is restricted to Visual Line of Sight (VLOS) presently.
- 4. An interactive airspace map has been made available, designating low-level airspace as red, yellow, and green zones for drone operations, with the cooperation of Ministries/Agencies concerned.
- 5. Operation of drones in green zones does not require permission. In yellow zones, approval from the relevant Air Traffic Control (ATC) authority is needed. For red zones, permission must be obtained from the Ministry of Civil Aviation and the concerned Ministries/Departments/Agencies controlling the red zone.
- 6. Each drone irrespective of weight and use-case, has to be registered on the single window platform called Digital Sky Platform.
- 7. The remote pilot (the person operating the drones) must have undergone training from any DGCA authorised Remote Pilot Training Organisation, must have passed the test, and have obtained the Remote Pilot Certificate.
- 8. All the responsibilities for safe operation of the Drone lies with the remote pilot.

- 9. Insurance is mandatory for all drones except Nano and R&D purpose drones.
- (e) The following steps are in place to ensure privacy and prevent surveillance during drone deliveries:
- 1. All UAS type certified under the Certification Scheme for UAS must include tamper avoidance mechanism for "Firmware" as well as "Hardware" to protect onboard computer from tampering (unauthorised access). The continued compliance by the manufacturer (Type Certificate Holder) for the same is ensured through surveillance audit by DGCA.
- 2. Presently, the operation of the UAS has been restricted to VLOS conditions only and responsibility of safe operation is entrusted to the trained and certified remote pilots.
- 3. No drones are allowed to operate in red zone unless specifically permitted by the Ministry of Civil Aviation and the concerned red zone owner. Unauthorised access into red zone is made as cognizable offence in the Drone Rules, 2021.
