

# UPSC Preparation

## Draft Drone Rules, 2021

On July 15, 2021 the Ministry of Civil Aviation (MoCA) released the updated draft Drone Rules, 2021 for public consultation. Once it is approved, it is said to replace the Unmanned Aircraft System (UAS) Rules 2021 that was released on 12 March 2021.

The Ministry of Civil Aviation (MoCA) has highlighted that the number of forms to be filled to operate drones in the country have been significantly minimised to six in draft Drone Rules, 2021 in comparison to 25 forms endorsed in the Unmanned Aircraft System (UAS) Rules, 2021.

### Introduction

- In case of a drone with maximum all-up-weight more than 500 kilograms, the provisions of the Aircraft Rules, 1937 shall apply. Otherwise, the Aircraft Rules, 1937 shall not apply to drones and matters.
- These rules shall not apply to drones used by the naval, military or air forces of the Union.

**What is a drone?**

“Drone” is an aircraft that can operate autonomously or can be operated remotely without a pilot on board.

### Classification of drones

Based on the maximum weight (including payload), the drones can be classified into five categories as listed below:

Classification of drones	
Drone categories	Their weight range
Nano drone	Less than or equal to 250 gram
Micro drone	Greater than 250 gram and less than or equal to 2 kilograms
Small drone	Greater than 2 kilograms and less than or equal to 25 kilograms
Medium drone	Greater than 25 kilograms and less than or equal to 150 kilograms
Large drone	Greater than 150 kilograms

## Quality Council of India

- The Quality Council of India recommends to the Union government in regard to setting standards for obtaining a certificate of airworthiness for drones.
- It can issue a certificate of airworthiness for any particular type of drone, on an application filed by a manufacturer or importer on the digital sky platform.
- Also, any certification entity authorised either by the Quality Council of India or Central Government can issue certificate of airworthiness for drones.

### **Exemptions -**

No certificate of airworthiness shall be required for manufacturing, importing or operating a –

- prototype drone for the purpose of research and development;
- prototype drone for obtaining certificate of airworthiness; and
- nano drone

## Safety features

The safety features to be installed on a drone by the person owning the drone shall be notified by the Central government from time to time and certain time will be given for the installation of these features.

The safety features that may be notified in the future are listed below:

1. 'No Permission – No Takeoff' (NPNT) hardware and firmware;
2. Real-time tracking beacon that communicates the drone's location, altitude, speed and unique identification number;
3. Geo-fencing capability.

## Airspace map

The entire airspace of India has been segregated into three zones for drone operations and are published in the digital sky platform. The three different zones include:

1. **Green zone**

- i) This zone means the airspace from the ground up to a vertical distance of 400 feet (120 metre) above ground level (AGL) that has not been designated as a red zone or yellow zone in the airspace map for drone operations.
  - ii) The airspace from the ground up to a vertical distance of 200 feet (60 metre) AGL in the area located between a lateral distance of 8 kilometres and 12 kilometres from the perimeter of an operational airport.
  - iii) In the airspace above the designated green zone, the provisions of yellow zone shall apply.
2. **Yellow zone** - It is the controlled airspace where drone operations are restricted and shall require permission from the concerned air traffic control authority.
  3. **Red zone** - It is the airspace where drone operations shall be permitted only under exceptional circumstances by the Central Government.

No person shall operate a drone in a red zone or yellow zone without prior permission.

### Drone Promotion Council

- The Central Government may form a Drone Promotion Council for promoting the adoption and use of drones.
- The drone promotion council shall facilitate –
  - development of a business-friendly regulatory regime, including automated permissions;
  - establishment of incubators and other facilities for the development of drone technologies;
  - involvement of industry experts and academic institutions in policy advice;
  - organising of competitive events involving drones and counter-drone technologies.

### Other important highlights

- The Unmanned Aircraft System Rules, 2021 stand repealed.
- Import of drones and drone components shall be regulated by the Directorate General of Foreign Trade.
- No natural person other than a holder of a valid remote pilot licence enlisted on the digital sky platform shall operate a drone.

#### **Exemption -**

No remote pilot licence shall be required for a person –

- (a) operating a nano drone; and
- (b) operating a micro drone for non-commercial purposes.

- No person shall operate a drone which does not have a unique identification number, unless such drone is exempted under these rules.
- A person may generate the unique identification number of a drone by providing requisite details on the digital sky platform.
- The unique identification number of a drone shall be linked to the unique serial number provided by the manufacturer and the unique serial numbers of its flight control module and ground control station.
- The Central Government may publish the policy framework in respect of the **Unmanned Aircraft System Traffic Management (UTM) System** on the digital sky platform.
- The framework shall also provide for developing drone corridors for safe transfer of goods by drones.
- The draft rules have also prescribed easier process for transfer and deregistration of drones.
- The draft also highlighted that there would be no restriction on drone operations by foreign-owned companies registered in India.

### Way forward

- The Central Government may evaluate these rules on the basis of economic impact, which shall be documented in a six-monthly report that will list the achievements of the Indian drone sector and the measures taken to further the ease of doing business in the sector.
- The drones can offer immense opportunities for economic growth and employment generation. Therefore, there is need to regulate the drone related activities in a manner such that they do not pose any risk to safety or security of people and assets.

## FAQ about Draft Drone Rules, 2021

### What is “Digital sky platform”?

Digital sky platform means the online platform hosted by the Directorate General of Civil Aviation for various activities related to the management of drone activities in India. Director General of Civil

Aviation, is appointed by the Government of India. It will also be developed as a business-friendly single-window online system with minimal human interference, and most permissions will be self-generated.

What do you mean by geo-fencing?

“Geo-fencing” means restricting the movement of drone within a defined airspace.

