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SECTION 3, SUB-SECTION (i)]

**GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION**

**NOTIFICATION**

New Delhi .... July, 2021

**The Drone Rules, 2021**

**Preamble**

**G.S.R.... (E).**—Whereas, Unmanned Aircraft System (hereinafter referred to as drones) offer immense opportunities for economic growth and employment generation;

And whereas, 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;

And whereas, the Central Government promulgated the Unmanned Aircraft System Rules (UAS Rules), 2021, which came into force on 12<sup>th</sup> March, 2021; and received valuable feedback from academia, industry and other stakeholders;

Now, therefore, the Central Government proposes to make certain rules in supersession of the UAS Rules, 2021, in exercise of the powers conferred by sections 5, sub-section (2) of section 10 and sections 10A, 10B and 12A of the Aircraft Act, 1934 (22 of 1934).

The said draft rules are hereby published as required by section 14 of the said Act, for information of all persons likely to be affected thereby; and notice is hereby given that the said draft rules will be taken into consideration after **5<sup>th</sup> Aug 2021**;

Suggestions or objections, if any, should be addressed to Shri Kameshwar Mishra, Ministry of Civil Aviation, B Block, Rajiv Gandhi Bhavan, New Delhi-110003 or mailed to [sdit.div-moca@gov.in](mailto:sdit.div-moca@gov.in) with the subject line: “Suggestions for draft Drone Rules, 2021”. Any suggestion or objection received with respect to the said draft rules before the expiry of the period specified above may be considered by the Central Government.

## Draft Rules

### PART I PRELIMINARY

1. **Short title, commencement and application.** — (1) These rules may be called the Drone Rules, 2021.
  - (2) They shall come into force on the date of their publication in the Official Gazette.
  - (3) They shall apply to, –
    - (a) All persons owning or possessing or engaged in exporting, importing, manufacturing, trading, leasing, operating, transferring or maintaining a drone in India; and
    - (b) all drones that are being operated for the time being, in or over India.
  - (4) The provisions contained in the Aircraft Rules, 1937 shall not apply to drones and matters connected therewith or incidental thereto except for those provisions whose application is specifically provided in these rules.
  - (5) In case of a drone with maximum all-up-weight more than 500 kilogram, the provisions of the Aircraft Rules, 1937 shall apply.
  - (6) These rules shall not apply to drones used by the naval, military or air forces of the Union.
  - (7) No person shall carry out any activity in contravention of these rules.
2. **Definitions.** — (1) In these rules, unless the context otherwise requires, –
  - (a) “Authorised remote pilot training organisation” includes any organisation authorised by the Director General for the purpose of imparting training prescribed under these rules;
  - (b) “Automatic drone operation” means a drone operation with pre-programmed instructions wherein the drone pilot is able to intervene at any time;
  - (c) “Autonomous drone operation” means a drone operation that does not allow intervention of a drone pilot in the management of the flight. This shall not include phases of drone operation during which the drone pilot has no ability to intervene in the management of the flight, either following the implementation of emergency procedures, or due to a loss of the command and control connection;

- (d) "Certificate of airworthiness" means a certificate issued by the Quality Council of India or any other certification entity authorised by the Quality Council of India or the Central Government, certifying that the drone of a specific type meets the requirements specified under these rules;
- (e) "Controlled airspace" means the airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification;
- (f) "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;
- (g) "Director General" means the Director General of Civil Aviation appointed by the Government of India;
- (h) "Drone" means an aircraft that can operate autonomously or can be operated remotely without a pilot on board;
- (i) "Drone Acknowledgement Number" means the unique number issued by the digital sky platform under the voluntary disclosure scheme for drones in India;
- (j) "Drone pilot" means the natural person responsible for operating a drone who manipulates the flight controls during a drone operation;
- (k) "Geo-fencing" means restricting the movement of drone within a defined airspace;
- (l) "Green 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; and 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 kilometre and 12 kilometre from the perimeter of an operational airport. In the airspace above 400 feet (120 metre) AGL in a designated green zone and the airspace above 200 feet (60 metre) AGL in the area located between the lateral distance of 8 kilometre and 12 kilometre from the perimeter of an operational airport, the provisions of yellow zone shall apply;

- (m) "Person" includes an individual or a company or a firm or an association of persons or body of individuals or a local authority or any legal entity, whether incorporated or not, Central Government or State Government or an entity thereof;
  - (n) "Prototype drone" means a drone developed for the purpose of research and development or obtaining a certificate of airworthiness
  - (o) "Red zone" means the airspace of defined dimensions, above the land areas or territorial waters of India, or any installation or notified port limits specified by the Central Government beyond the territorial waters of India; within which drone operations shall be permitted only under exceptional circumstances by the Central Government;
  - (p) "Remote pilot licence" means the permission issued by an authorised remote pilot training organisation to any natural person for operating a particular class or classes of drones;
  - (q) "Type of Drone" means all drones of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics;
  - (r) "Unmanned Aircraft System Traffic Management System" means a system that provides traffic management for drone through the collaborative integration of persons, information, technology, facilities and services; supported by air, ground or space-based communications, navigation and surveillance;
  - (s) "Unique identification number" means the unique identification number issued for registering a drone in India;
  - (t) "Yellow zone" means the controlled airspace of defined dimensions above the land areas or territorial waters of India within which drone operations are restricted and shall require permission from the concerned air traffic control authority.
- (2) The words and terms used but not defined in these rules shall have the meanings respectively assigned to them in the Aircraft Act, 1934 and the Aircraft Rules, 1937.

**PART II**  
**CLASSIFICATION OF DRONE**

3. **Classification of drones.** — Drones shall be classified based upon the maximum all-up weight including payload as under –
- (a) Nano drone: Less than or equal to 250 gram;
  - (b) Micro drone: Greater than 250 gram and less than or equal to 2 kilogram;
  - (c) Small drone: Greater than 2 kilogram and less than or equal to 25 kilogram;
  - (d) Medium drone: Greater than 25 kilogram and less than or equal to 150 kilogram; and
  - (e) Large drone: Greater than 150 kilogram.

**PART III**  
**DRONE CERTIFICATION**

4. **General.** — No person shall operate a drone in India unless it conforms to a certificate of airworthiness or is exempted from the requirement for a certificate of airworthiness under these rules.
5. **Certification entities.** – The Quality Council of India or a certification entity authorised by the Quality Council of India or the Central Government may issue a certificate of airworthiness for any particular type of drone, on an application filed by a manufacturer or importer of that type of drone on the digital sky platform, if such type of drone meets the specified certification standards.
6. **Certification standards.** – On the recommendation of the Quality Council of India, the Central Government may specify the standards for obtaining a certificate of airworthiness for drones. These standards may promote the use of made-in-India technologies, designs, components and drones; and India's regional navigation satellite system named Navigation with Indian Constellation (NavIC).

7. **Procedure for application.** – Any manufacturer or importer seeking a certificate of airworthiness shall apply through Form D-1 on the digital sky platform, to Quality Council of India or any other certification entity authorised these rules, providing the following:
- (a) Name, contact details and GSTIN of the applicant;
  - (b) Details and required documents in respect of the prototype drone;
  - (c) Proof of payment of the prescribed fees; and
  - (d) Prototype drone that shall be physically handed over to the certification entity.
8. **Restriction on imports.** – Import of drones and drone components shall be regulated by the Directorate General of Foreign Trade.
9. **Acceptance of approvals given by foreign regulators.** – The Quality Council of India may certify drones based on approvals granted to that type of drone by other international aviation regulators, as may be specified by the Central Government.
10. **General safety.** – No person shall, operate a drone in any manner, either directly or indirectly, so as to endanger the safety and security of any person or property.
11. **Mandatory safety features.** – (1) The Central Government shall notify safety features to be installed on a drone by the person owning the drone.
- (2) All persons owning a drone shall adopt the said safety features within such period as may be specified by the Central Government, which shall not be less than six months from the date of such notification. Such safety features, that may be notified in future, may include as under –
- (a) ‘No Permission – No Takeoff’ (NPNT) hardware and firmware;
  - (b) Real-time tracking beacon that communicates the drone’s location, altitude, speed and unique identification number; and
  - (c) Geo-fencing capability.

12. **Exemptions.** — No certificate of airworthiness shall be required for manufacturing, importing or operating a –
- (a) prototype drone for the purpose of research and development;
  - (b) prototype drone for obtaining certificate of airworthiness; and
  - (c) nano drone.

#### **PART IV DRONE REGISTRATION**

13. **Unique identification number.** – (1) No person shall operate a drone which does not have a unique identification number, unless such drone is exempted under these rules.
- (2) A person may generate the unique identification number of a drone by providing requisite details in Form D-2 on the digital sky platform.
  - (3) 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.
  - (4) No person shall replace the flight control module or ground control station of a drone, whose serial number is linked to such drone's unique identification number, without updating on the digital sky platform, the unique serial number of the new flight control module or ground control station, within a period of seven days from the date of such replacement.
14. **Registration of existing drones.** – A person owning a drone manufactured in India or imported into India on or before 31 December 2021 shall generate its unique identification number by providing requisite details in Form D-2 on the digital sky platform:
- Provided that such drone has a valid Drone Acknowledgement Number (DAN) issued by the digital sky platform on or before the above-mentioned date and the type of drone conforms to a certificate of airworthiness issued by the Quality Council of India.

15. **Transfer of drones.** – (1) A person may transfer a drone to another person by giving the requisite details of the transferor, transferee and unique identification number of the drone in Form D-3 on the digital sky platform.
- (2) Such transfer shall be effected in the records and a transaction number shall be generated by the digital sky platform after electronic verification of the transferor, transferee and the unique identification number.
16. **Deregistration of drones.** – (1) A person owning a drone, on arriving at a reasonable conclusion that a drone registered in the person's name is either permanently lost or permanently damaged, shall apply for the deregistration of such drone by submitting an application in Form D-3 on the digital sky platform.
- (2) Such deregistration shall be effected in the records and a transaction number shall be generated by the digital sky platform.

## **PART V DRONE OPERATIONS**

17. **Airspace map.** – The Central Government may, within 30 days of the date of notification of these rules, publish on the digital sky platform, an airspace map for drone operations segregating the entire airspace of India into red, yellow and green zones, with a horizontal resolution equal or finer than 10 metre.
18. **Interactive maps.** – The airspace map for drone operations shall be designed to be programmatically accessible through a machine readable Application Programming Interface (API) and interactive so that drone pilots will be able to plot their proposed flight plan and easily identify the zone(s) within which it falls so as to assess whether or not they need to make an application for prior approval.
19. **Requirement of prior permission.** – No person shall operate a drone in a red zone or yellow zone without prior permission.
20. **Mandatory pre-flight verification of zonal restrictions.** – Before commencing a drone operation, a drone pilot shall mandatorily verify the digital sky platform for any notification or restriction applicable to drone operations in the intended area of operation.

21. **Dynamic nature of zoning:** (1) The Central Government may update the airspace map on digital sky platform for drone operations from time to time to change the status of an area from one zone to another.
- (2) Any such change shall come into effect no sooner than seven days after the date of such update.
22. **Temporary red zone.** – (1) If there is an urgent need to temporarily prohibit drone flights in a specified area, the concerned State Government, Union Territory Administration or law enforcement agency may declare a temporary red zone over such specified area, for a period not exceeding 48 hours at a time, by notifying it through the digital sky platform and highlighting it on the airspace map.
- (2) The temporary red zone shall be declared by an officer not below the rank of Superintendent of Police or its equivalent. Such officer shall endeavour to keep the size of the temporary red zone reasonable and not excessive.
- (3) The digital sky platform shall endeavour to inform, through electronic means, holders of unique identification number within a distance of five kilometre from the perimeter of the temporary red zone of such a restriction, provided that the lack of receipt of such information shall not absolve a drone pilot of the responsibility to verify the zonal restrictions on the digital sky platform before commencing a drone operation.
23. **Access to data.** – All State Governments, Union Territory Administrations and law enforcement agencies shall be provided direct access to the data available on the digital sky platform.

## **PART VI REMOTE PILOT LICENCE**

24. **Remote Pilot Licence.**— (1) **General.** – No natural person other than a holder of a valid remote pilot licence enlisted on the digital sky platform shall operate a drone.

**(2) Classification. –**

- (a) Remote pilot licences shall specifically mention the class of the drone that the natural person has successfully completed the prescribed training for.
- (b) The remote pilot licence shall specifically mention if the said natural person has successfully completed the prescribed training for automatic or autonomous drone operations.

**(3) Eligibility. –** The following natural persons shall be eligible for a remote pilot licence:

- (a) not less than eighteen years of age and not more than sixty five years of age;
- (b) have passed class tenth or its equivalent examination from a recognised Board; and
- (c) have completed the training prescribed by the Director General for the applicable class of remote pilot licence from an authorised remote pilot training organisation.

**(4) Procedure for obtaining remote pilot licence. –**

- (a) After completing the prescribed training and passing the prescribed proficiency test conducted by an authorised remote pilot training organisation, the natural person shall be issued a remote pilot certificate by such authorised remote pilot training organisation through the digital sky platform, within seven days of the successful completion of such proficiency test.
- (b) The authorised remote pilot training organisation shall pay the applicable fee for each remote pilot certificate issued through the digital sky platform.
- (c) The Director General may issue the remote pilot licence to any applicant who satisfies the criteria set out in sub-rule (4)(a), through the digital sky platform, within fifteen days from the date of issue of the remote pilot certificate by the authorised remote pilot training organisation.

**(5) Validity. –**

- (a) A remote pilot licence shall be valid only if it is enlisted on the digital sky platform.
- (b) A remote pilot licence shall, unless suspended or cancelled, remain valid for a period of ten years, and may be renewed by any authorised remote

pilot training organisation for the period specified therein, subject to a maximum period of ten years:

Provided that the holder of the remote pilot licence undergoes such refresher courses as may be specified by the Director General on the digital sky platform from time to time.

- (6) **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.

## **PART VII REMOTE PILOT TRAINING ORGANISATION**

25. **Remote pilot training organisation.**— (1) **General.** – No person other than an authorised remote pilot training organisation shall impart training to a person seeking a remote pilot licence.
- (2) **Eligibility.** – No remote pilot training organisation shall be authorised unless the following eligibility criteria have been met:
- (a) The remote pilot training organisation is operating from a plot of land that has minimum dimensions of 50 metre by 50 metre;
  - (b) The remote pilot training organisation has an adequate number of classrooms to ensure that there are not more than 30 students in a classroom at any point in time;
  - (c) The remote pilot training organisation has a requisite number of drones and related equipment in good working condition so as to ensure that each student has adequate opportunity for hands-on practical training; and
  - (d) The remote pilot training organisation has a requisite number of instructors with valid remote pilot licences who shall be responsible for training the students.
- (3) **Procedure for obtaining authorisation.** –
- (a) Any person who has met the eligibility criteria set out in sub-rule (2) and is seeking authorisation to establish a remote pilot training organisation shall submit an application to the Director General in Form D-6 on the digital sky platform, along with the specified fee.

- (b) The Director General may issue the authorisation for the remote pilot training organization to any applicant who satisfies the criteria set out in sub-rule (3)(a), within sixty days from the date of such application.
- (4) **Validity.** – An authorisation to establish a remote pilot training organisation shall, unless suspended or cancelled, remain valid for a period of ten years, and may be renewed for the period specified therein, subject to a maximum period of ten years at a time.
- (5) **Training requirements.** –
- (a) The authorised remote pilot training organisation shall ensure strict compliance with the requirements prescribed by the Director General on the digital sky platform in respect of training, proficiency testing and issue of remote pilot certificates.
  - (b) The prescribed training requirements shall be specific to a class or classes of drone.
  - (c) There shall be prescribed training requirements for automatic and autonomous drone operations.

## **PART VIII RESEARCH AND DEVELOPMENT**

26. **Drone operations for research and development.** – The following persons shall not require a certificate of airworthiness, unique identification number, prior permission and remote pilot licence for operating drones for research and development purposes –
- (a) Research and development entities under the administrative control of, or recognised by the Central Government, State Governments or Union Territory Administrations;
  - (b) Educational institutions under the administrative control of, or recognised by the Central Government, State Governments or Union Territory Administrations;
  - (c) Startups recognised by Department for Promotion of Industry and Internal Trade; and
  - (d) Any drone manufacturer having a Goods and Service Tax Identification Number:

Provided that such drone operations take place within a green zone and within the premises of the person where such research and development is being carried out; or within an open area in a green zone under such person's control.

## **PART IX DRONE TRAFFIC MANAGEMENT**

27. Drone traffic management. – (1) The Central Government may, within sixty days of the date of notification of these rules, publish the policy framework in respect of the Unmanned Aircraft System Traffic Management (UTM) System on the digital sky platform.
- (2) Such policy framework shall be in alignment with these rules and shall facilitate automated permissions as required under these rules.
- (3) The framework for developing drone corridors for safe transfer of goods by drones shall be specified in the said policy framework.
- (4) The roles, powers and responsibilities of State Governments and Union Territory Administrations shall be specified in the said policy framework.

## **PART X INSURANCE**

28. The provisions of the Motor Vehicles Act, 1988 and rules made there under shall apply, *mutatis mutandis*, to third party insurance of drone and compensation in case of damage to life and/or property caused by such a drone.

Notwithstanding anything contained in this rule, a nano drone may operate without third party insurance.

## **PART XI DRONE PROMOTION**

29. **Drone promotion.**— (1) The Central Government may promote the adoption and use of drones through the creation of a Drone Promotion Council.
- (2) The drone promotion council shall facilitate –
- (a) development of a business-friendly regulatory regime, including automated permissions;

- (b) establishment of incubators and other facilities for the development of drone technologies;
  - (c) involvement of industry experts and academic institutions in policy advice; and
  - (d) organising of competitive events involving drones and counter-drone technologies.
- (3) 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.

## PART XII GENERAL

30. **Fee.**— The fee for services rendered by the Central Government under these rules shall be payable as specified under –

S No	Service	Fee (Rupees)
1	Issuance of certificate of airworthiness	100
2	Issuance or transfer of unique identification number	100
3	Listing or renewal of remote pilot licence	100
4	Authorisation or renewal of authorisation of remote pilot training organisation	1,000

Note: Entities such as Quality Council of India, certification entities and authorised remote pilot training organisations etc. may charge market-linked fee for their services.

31. **Directions.**— The Central Government may, if required, issue general or special directions related to drones, not inconsistent with the Aircraft Act, 1934 or these rules.
32. **General power to exempt.** – The Central Government may, by a general or special order in writing, exempt any person or class of persons from the operation of these rules, either wholly or partially, subject to such conditions, as may be specified in that order.

33. **Prosecution for offences.** – (1) A person who has contravened or failed to comply with these rules shall be punishable by the Court in accordance with the provisions of sub-section (2) of Section 10 of the Aircraft Act, 1934 and such contraventions or non-compliance shall be compoundable in accordance with the provisions of Section 12A of the Aircraft Act, 1934.
- (2) The provisions of these rules shall be in addition to, and not in derogation of the provisions of any other law, for the time being in force.
34. **Penalties.** – Where the Director General or an officer authorised by the Central Government, State Government or Union Territory Administration; after giving an opportunity of being heard, is satisfied that a person has contravened or failed to comply with the provisions of these rules, he may, for reasons to be recorded in writing, levy a penalty not exceeding rupees one lakh in accordance with the provisions of Section 10A of the Aircraft Act, 1934.
35. **Cancellation or suspension.**— Where the Director General or an officer authorised by the Central Government, State Government or Union Territory Administration; after giving an opportunity of being heard, is satisfied that a person has contravened or failed to comply with the provisions of these rules, he may, for reasons to be recorded in writing, cancel or suspend any licence, certificate, authorisation or approval granted under these rules.
36. **Saving.** — Nothing in these rules shall limit or otherwise affect the power of the Central Government with regard to any order issued in the interest of public safety or for safe operation of all manned or unmanned aircraft.
37. **Repeal.** — The Unmanned Aircraft System Rules, 2021 stand repealed.

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(Amber Dubey)  
Joint Secretary to the Government of India