### **THE DRONE POLICY, 2018**

[The article discusses the flagship policy of the government to regularise the operation and registration of Civil Remotely Piloted Aircraft Systems i.e., the drones used for civil and for government purposes and excludes military drones from its ambit]

# **Background**

India has for long used drones in the form of Unmanned Aerial Vehicles for purposes of defence only. Now, owing to the global trend of investment in research and development of drones and using them for purposes other than the defence, there is greater awareness about this technology among Indians. Therefore, a need has arisen to regularise the flying of drones.

On August 27, 2018, the Directorate General of Civil Aviation ("**DGCA**") issued the Civil Aviation Requirements ("**CAR**") regulating the flying of drones in India.[1] It further released FAQs on operation of drones[2] and Do's and Don'ts for operation of drones.[3] The CAR will be effective from December 1, 2018.

India, first recognised the need to regularise the drones in 2014 when the DGCA issued a Public Notice stipulating that it is under process of formulating regulations for certifications and use of the drones. [4] It further stated that till such regulations are issued, no non-government agency, organization, or an individual will launch an Unmanned Aircraft Systems in Indian Civil Airspace for any purpose whatsoever.

DGCA, on two separate occasions, one in April 2016[5] and in November 2017[6] produced guidelines and invited opinions from the stakeholders. Ultimately, these drafts and the public opinions have been solicited to form the CAR.

### What are drones? What are they used for?

The CAR regularises the operation of Remotely Piloted Aircraft ("RPA") which are commonly known as drones. It defines RPA as "an unmanned aircraft, which is piloted from a remote pilot station. A remotely piloted aircraft, its associated remote pilot station(s), command and control links and any other components forms a Remotely Piloted Aircraft System ("RPAS")".

As defined under the CAR, a drone consists of two parts: the drone itself and the control system. Apart from their usage for military purposes, drones are also used, inter alia, for recreational purposes like photography, videography, site surveys, sports coverage. The drone industry is evolving and developing everyday with new innovations. Usage of drones is also contemplated in new fields like parcel deliveries. For instance, Amazon has stated that it is exploring the option of using drones for delivery of parcels to customers.

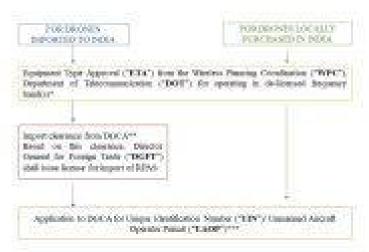


The CAR categorises drones in accordance with maximum 'All-Up-Weight' (including payload) as indicated below:

- 1. Nano: Less than or equal to 250 grams.
- 2. Micro: Greater than 250 grams and less than or equal to 2 kg.
- 3. **Small**: Greater than 2 kg and less than or equal to 25 kg.
- 4. **Medium**: Greater than 25 kg and less than or equal to 150 kg.
- 5. **Large**: Greater than 150 kg.

# What is the process of getting approvals and permits to fly drones in India? Can a drone be imported and flown in India?

The CAR provides the application process for drones purchased in India and drones imported to India. Such process must be fulfilled by the applicant operator (the qualification/criteria to be an applicant under the CAR is discussed in next question) importing or purchasing drones. The process is:



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#### What is a UIN and UAOP?

Every applicant operator needs to obtain UIN and UAOP before operating drones. The CAR defines operator as "A person, organization or enterprise engaged in or offering to engage in an aircraft operation".

**UIN** refers to a Unique Identification Number issued by DGCA for each drone seeking to operate in India. Every drone will be issued a separate UIN. The CAR provides that UIN will be issued in cases where drones are wholly owned by-

- 1. a citizen of India;
- 2. Government of India or State Governments or a company owned or controlled by these governments;
- 3. an Indian company or body corporate, which (i) has its principal place of business within India, (ii) its chairman and at least 2/3rd of board of directors are citizens of India, and (iii) its substantial ownership and effective control is vested with Indian nationals;
- 4. a company or corporation registered outside India, only if it has leased the drones to any organisation mentioned under (2) and (3).

Under (4) above, Indian organisations leasing drones shall apply for the UIN with the DGCA. UIN is not granted to any foreign organisation or entity to fly drones in India. They can only lease such drones to Indian entities.

UAOP refers to an Unmanned Aircraft Operator Permit to be obtained by the applicant from DGCA. The validity of such permit will be five years from the date of issue. UAOPs are non-transferrable.

Do all categories of drones require Unique Identification Number (UIN) and Unmanned Aircraft Operator Permit (UAOP)? Are there any other requirements to be fulfilled to fly drones in India?

No, not all drones require to get UIN and UAOP. The table below lists the categories of drones which require UIN and UAOP.

There are other requirements given under CAR to be fulfilled by the operators/ owners who are eligible to apply for UIN and UAOP as stated above-

- 1. **Security/ Safety Requirements**: The CAR stipulates that the operator shall be responsible for safe custody, security and access control of the RPAS. The relevant authorities as given in the CAR will be notified of any loss of the drone, any accident or any damage caused to drone which consequently cannot be restored.
- 2. Since, UIN and UAOP are issued to each individual drone in the name of the operator and are non-transferable, the operator cannot dispose or sell the drone in any way without the permission of the DGCA.
- 3. **Remote Pilot Training Requirements:** It provides for the operator or the Remote Pilot (person charged by the operator with duties essential to the operation of a drone)

- to undergo required ground and practical training before flying drones. The details of the training are provided in the CAR.
- 4. **RPAS Maintenance Requirements:** It requires operators to ensure maintenance of drones, conduct inspections of the system and ensure the safety of the drone before flying. It further requires the operator to maintain records of each RPA flight which must be available on demand for the DGCA's inspection.
- 5. **Equipment Requirements:** The CAR provides detailed specification for equipment and components for drones.
- 6. **Operating Requirements:** Some of the important provisions for operation of drones include, but are not limited to:
- Preparing Standard Operating Procedure containing the detailed procedure for take-off, landing, communication, etc.
- All drones are to be flown during the day only, within Visual Line of Sight (defined as "where the remote pilot can maintain direct unaided visual contact with the drone"). There are other meteorological conditions imposed on flying drones. However, an exception may be granted by DGCA to an operator on its satisfaction regarding the safe conduct of the drones.
- Certain categories of drones are required to obtain permission from DGCA on the Digital Sky Platform before flying, file a flight plan and inform the concerned local police about the operation.
- The take-off and landing areas should be away from public places. Further, a designated safe area should be established for emergency holding or landing of the drones.
- The drones shall not discharge or drop substances unless permitted under the UAOP.
- The drones shall not carry any hazardous substances, animal or humans.
- The operator must ensure that privacy of any individual on ground is not compromised in any manner while flying the drone.
- 7. **Minimum Manufacturing Standards:** The standards illustrated in Annexure XVI of the CAR apply to both Indian and foreign manufacturers of small and above categories of drones. For Nano or Micro categories, standards will be determined by the designer. Against it, all the manufacturers (except for Nano category) have to file a Certificate of Compliance along with No Permission No Takeoff ("NPNT") compliance with DGCA.

Provided below is a table summarising the requirements applicable for each category of drones:



	NANO	MICRO	<b>SMALL</b>	<b>MEDIUM</b>	LARGE
Obtaining Unique Identification Number	√ (Yes, if flight is beyond 50 feet	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$

	(15m) Above Ground Level (AGL) in uncontrolled airspace/ enclosed premises for commercial / recreational / R&D purposes)				
	$\checkmark$	$\sqrt{}$			
Unmanned Aircraft Operator Permit	(15m) Above Ground Level (AGL) in	(Yes, if flight is beyond 200 feet (60m) Above Ground Level (AGL) in uncontrolled airspace/ enclosed premises)	√	<b>√</b>	
	$\checkmark$	$\sqrt{}$			
Remote Pilot Training Requirements	(Yes, if intended to operate beyond uncontrolled airspace)	(Yes, if intended to operate beyond uncontrolled airspace)	$\checkmark$	$\checkmark$	V
	$\checkmark$				
Equipment Requirements	(Yes, if flight beyond 50 feet (15m) AGL in uncontrolled airspace)	$\checkmark$	$\checkmark$	$\checkmark$	V
Standard Operator Procedures	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$
Flight Plan+ ATC briefing + MET briefing+ ATC clearance from the nearest			$\checkmark$	$\checkmark$	V

ATC Unit + Air Defence Clearance (ADC) from the nearest IAF Unit + FIC Number from the Flight Information Centre Inform the concerned local police office in writing prior to commencing the (Yes, if

operating beyond 50 feet)

Certificate of
Compliance
along with
NPNT

compliance to
DGCA by the
manufacturer
Insurance to
cover for any
future damages
to third party

# What is the Digital Sky Platform?

operations

The Digital Sky Platform is a first-of-its-kind national unmanned traffic management (UTM) platform that implements the NPNT rule and provides a platform for obtaining the UIN/ UAOP. Users will be required to do a one-time registration of their drones, pilots and owners. For every flight (except for the Nano category), users will be required to ask for permission to fly on a mobile app, and an automated process permits or denies the request instantly. The UTM operates as a traffic regulator in the drone airspace and coordinates closely with the defence and civilian air traffic controllers ("ATC") to ensure that drones remain on the approved flight paths.[7]

The platform will be operational from **December 1, 2018.** 

# Are there any 'No- Fly' Zones for drones?

The Digital Sky Platform will show different colour zones visible to the applicant while applying the NPNT rule. The categories will be-

- 1. Red Zone: flying not permitted;
- 2. Yellow Zone (controlled airspace): permission required before flying; and
- 3. Green Zone (uncontrolled airspace): automatic permission.

The CAR provides a list of zones where operation for drones is restricted. A few examples are:

- Within 5Km of the perimeters of the airports in Mumbai, Delhi, Chennai, Kolkata, Bengaluru and Hyderabad and within 3 Km from the perimeter of any other airport.
- Within "permanent or temporary Prohibited, Restricted and Danger Areas" and within 25 Km from international border which includes the Line of Control (LoC), Line of Actual Control (LAC) and Actual Ground Position Line (AGPL).
- Beyond 500 m into sea from the coast line and within 3 Km from perimeter of military installations.
- Within a 5 Km radius of the Vijay Chowk in Delhi, within 2 Km from perimeter of strategic locations/ vital installations notified by Ministry of Home Affairs and within 3 Km from radius of State Secretariat Complexes.
- Eco-sensitive zones around National Parks and Wildlife Sanctuaries without prior permission.

Apart from the above, the CAR also stipulates that drones are not to be operated from a mobile platform such as a moving vehicle, aircraft or ship.

CAR also restricts aerial photography/remote sensing survey over the areas specified above. However, a person may apply to DGCA for approval to do so which will be authorised on case-to-case basis subject to approval of Ministry of Defence.



Are there any other legal obligations on the operator?

The registration with DGCA does not:

- Confer on the drone operator any right against the owner or resident of any land or building or over which the operations are conducted, or prejudice in any way the rights and remedies which a person may have in respect of any injury to persons or damage to property caused directly or indirectly by the RPA.
- Absolve the operator/ remote pilot from compliance with any other regulatory requirement, which may exist under the State or local law.

# What is the enforcement procedure adopted in case of non-compliance with the CAR?

The CAR provides that in the event of violation of any of its provisions, the Unique Identification Number (UIN)/ Unmanned Aircraft Operator Permit (UAOP) issued by DGCA will be suspended/ cancelled. Further, the breach of compliance to any of the requirements and falsification of records/ documents will attract penal action under the Indian Penal Code, 1860 and necessary actions shall be taken as per the relevant sections of the Aircraft Act, 1934 or any other statute.

#### Conclusion

The government of India seems to have developed a slightly lengthy process for obtaining approvals and fulfilling requirements to fly drones. This may stem from its duty to ensure security and privacy of its citizens while balancing the recreational use of small drones flying at low altitudes. However, the multiplicity of compliance requirements from various ministries appears to be a disincentive for owners and operators of drones. Further, the CAR restricts foreign players from operating drones in their own names, which might affect present and future investment in this sector. Crucially, the time limit for authorities to clear approvals have not been provided, which is likely to create further ambiguity in the minds of stakeholders.

However, the government has said that it is exploring new avenues to use and lease drones in the second generation of the licensing policy. We hope that the present CAR serves as a touchstone upon which India develops a more globally consonant drone policy.

By Akshita Goel with inputs from Pritika Kumar

### References

[1] CAR: Requirements for Operation of Civil Remotely Piloted Aircraft System (RPAS), DGCA, (August 27, 2018), available at <a href="http://dgca.nic.in/cars/D3X-X1.pdf">http://dgca.nic.in/cars/D3X-X1.pdf</a>

[2] Frequently Asked Questions Regarding Operation of RPAS, DGCA, available at <a href="http://dgca.nic.in/cars/RPS-FAQs.pdf">http://dgca.nic.in/cars/RPS-FAQs.pdf</a>

- [3] Do & Don'ts Regarding Operation of RPAS, DGCA, available at <a href="http://dgca.nic.in/cars/RPAS-Do's%20and%20Don'ts.pdf">http://dgca.nic.in/cars/RPAS-Do's%20and%20Don'ts.pdf</a>
- [4] Public Notice, DGCA, (October 7, 2014), available at

http://dgca.nic.in/public notice/PN UAS.pdf

[5] Draft Guidelines, DGCA (April 2016), available at

http://www.dgca.nic.in/misc/draft%20circular/AT\_Circular%20-%20Civil\_UAS(Draft%20April%202016).pdf

[6] Draft Guidelines, DGCA (November 2017), available at

http://www.dgca.nic.in/misc/draft%20cars/CAR%20-%20UAS%20(Draft Nov2017).pdf

[7] Press Information Bureau, Government of India (August 27, 2018), available at <a href="http://pib.nic.in/newsite/PrintRelease.aspx?relid=183093">http://pib.nic.in/newsite/PrintRelease.aspx?relid=183093</a>