REPUBLIC OF CYPRUS

A Member of the European Union

DEPARTMENT OF CIVIL AVIATION

GUIDE FOR UAS OPERATORS AND REMOTE PILOTS

The need for new Drone Regulations

The rapidly evolving market of Drone Technology and the great difference between national regulations governing Drones across European Countries forced EASA (European Union Aviation Safety Agency) to create a common regulatory framework to ensure the same safety standards in all Member States. The new regulations simplify the rules for drone operations on the national territory and in the other Member States of the European Union.

When are the new regulations coming into force?

From 1st Jan 2021 the current national regulations will be replaced by the new drone regulations which will be the same across all EU member states.

Which aircraft does the regulation affect?

All of them. Any remotely piloted aircraft intended for civil use, regardless of its size and configuration.

In what way have the rules been simplified?

There is one important innovation: for the first time, the rules to respect will depend on the level of risk of each operation. Therefore, different operations may have different requirements to meet, although the drone might be exactly the same.

How many categories of drone operations will be introduced?

Three categories of operations will be introduced:

'Open' Category – Low risk operations which do not require prior authorizations. It can be as simple as 'Buy & Fly'. However, they are limited to operations: in visual line of sight (VLOS), below 120 m altitude, below 25kg MTOM (Maximum Take off Mass) and performed with a drone compliant with the technical requirements defined in the regulation. To demonstrate this compliance drones that can be operated in the Open category will bear a class identification (C0,C1,C2,C3,C4) label. Additional operational restrictions apply to each class of drone, in particular with regard to the distance that must be maintained between the drone and non-involved persons.

The Open category is divided into three main Subcategories of operations: drone operations over people (Subcategory A1), near people (Subcategory A2) and far from people (Subcategory A3).

Furthermore, Drones authorized to fly in the Open category will be divided into 7 classes (from C0 to C6) depending on their maximum take off mass (MTOM), technical specifications, automatic functions and performance of the aircraft. As you can see from the table below, the heavier the drone the more far away from people and infrastructures it will be allowed to operate:

Subcategory	UAS that comply with regulations	Drone Class
A1	< 900g Fly over people never over assemblies	< 250g < 900g
A2	< 4kg Min. 30m from people Min. 5m with low speed mode	< 4kg
A3	4kg < MTOM < 25kg Fly 150m away from residential,commercial areas	< 25kg

'Specific Category' - Medium risk operations that exceed the restrictions of the "open" category. Operations involving drones of more than 25kg MTOM and/or operated beyond visual line of sight (BVLOS) will typically fall under the "specific" category. In such a case, operators must either (a) perform a risk assessment using a standardized method called the SORA and define mitigation measures or (b) verify that they comply with a specific scenario defined by EASA (or the national aviation authority). On that basis they will be able to obtain an

authorization from the national aviation authority (in some cases a simple declaration may be enough). The authorization or the specific scenario will define the authorized operation and the applicable mitigation measures (drone technical requirements, pilot competence, etc.).

'Certified Category' - High risk operations involving large drones in controlled airspaces. Rules applicable to the "certified" category will be the same as for manned aviation: drones must be certified for their airworthiness, pilots shall be licensed, and safety oversight will be performed by the relevant National Aviation Authorities and EASA. The Certified category includes drones transporting dangerous goods or persons, and operations with drones flying over groups of people.

Do I need to Register?

YES. Starting from 1st January 2021 all drone operators shall register themselves before using a drone:

- In the 'Open' category with a Maximum Take off Mass (MTOM)
  - More than 250g or
  - Less than 250g when it is not a toy and is equipped with a sensor able to capture personal data
- In the 'Specific' category of any MTOM
- All certified drones (operated in high risk operations) shall be registered as well. The registration number needs to be displayed on the drone.

Do I need to Register my drone?

NO. It is the Drone Operator who registers, not the drone. The only case the drone is registered is when it falls in the 'Certified' category of operations.

Who must Register?

All drone operators, either a physical person or a legal person, have to register online. A drone operator is the person, natural or legal, who is responsible for the whole operation.

What do I need to do when I receive my registration number?

Every operator who registers will receive a unique registration number. The operator is obliged to affix the unique registration number on his/her drone(s). The registration number should be easily visible and indelible (cannot be erased) on the drones.

With this new regulations, how does one become a Drone Pilot

For the Open category, which includes most of the operations carried out today, the procedures for training pilots and issuing certificates will become easier. With the new European regulation, it will be possible to follow online courses on certified platforms, making it easier to become a pilot for low-risk operations. Someone who wants to operate in A1 or A3 subcategory the only

requirement is to follow an online training and pass a knowledge exam. The pilot certificate will be provided electronically. For someone who wants to operate in the A2 subcategory an extra knowledge exam will be required at an approved center.

What happens to my existing drones? Can I still operate them under the new regulations?

Yes. Operators whose drones do not comply with the new regulations will be allowed to operate in the 'Limited Open Category' and will have a transitional period of 2 years (up to 01/01/2023) in which they will be able to use their existing drones. However, the new regulations will be slightly more demanding here in terms of operational restrictions and limitations, as the diagram below shows:

SUBCATEGORY	"LIMITED" "OPEN" CATEGORY	"OPEN CATEGORY"	
	01/01/2021 - 01/01/2023	01/01/2023 ONWARDS	
FLIGHT CONDITIONS	UAS THAT DO NOT COMPLY WITH THE REGULATION (NO CLASS MARK, CE MARKING)		UAS THAT COMPLY WITH THE REGULATION
A1	< 500g Flights over people, never over assemblies of people	< 250g Flights over people, never over assemblies of people	< 900g Flights over people, never over assemblies of people
A2	< 2kg Keep safety distance 50m from peolpe		< 4kg Safety distance 30m from people and 5m with low speed mode
A3	2kg < MTOM < 25kg Fly 150m away from residential,commercial areas	250g < MTOM < 25kg Fly 150m away from residential,commercial areas	4kg < MTOM < 25kg Fly 150m away from residential,commercial areas

This transitional Period is between 1st Jan 2021 – 1st Jan 2023. The drone operator must determine in which Subcategory to operate based on the MTOM of the drone :

- MTOM < 500g to be operated in Subcategory A1
- 500g < MTOM < 2kgs to be operated in Subcategory A2 but 50 meters away from people
- 2kgs < MTOM < 25kgs in Subcategory A3

After 1st Jan 2023 these drones will be considered home built and can be operated under the following conditions:

- MTOM < 250g in Open Subcategory A1
- MTOM < 25kg in Open Subcategory A3
- In the Specific Category following an authorisation or submitting a declaration

Are there any new safety systems introduced ?

Yes, two in particular: (a) Electronic Identification (b) Geo-awareness system. If necessary, the first will allow the authorities to remotely identify the owner of the drone. The geo-awareness system, instead, will automatically block access of the aircraft to certain areas thanks to a software installed in the drone containing the coordinates of prohibited areas or high-risk areas.

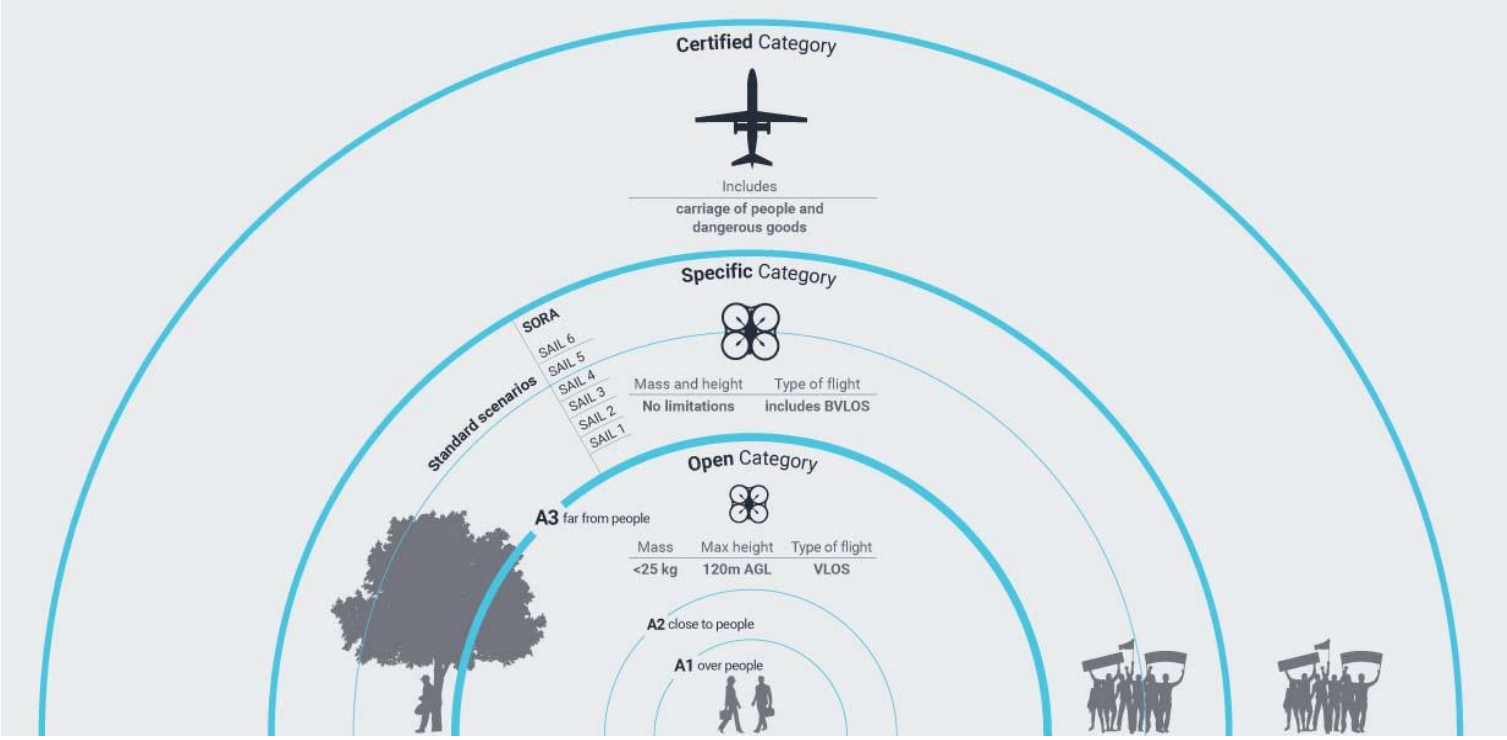
I want to use my drone for commercial work. How can I achieve this with the new regulations?

Actually, the new regulation will remove the distinction between commercial and hobby operations. Therefore, anyone who wants to use a drone will have to meet the same requirements. For recreational drones, the reference category will most likely be the Open category.

What will change for companies that want to use drones?

Companies will also have to understand which category each operation falls into. For example, large companies that use drones for infrastructure monitoring (such as roads or electricity transport networks) often need BVLOS flights, which will therefore fall into the Specific category. Companies will have to perform risk assessment analysis using the SORA methodology in order to define the requirements to meet, both technical and organizational.

THE 3 UAS CATEGORIES - OVERVIEW


Certified Category
Includes
carriage of people and dangerous goods
Specific Category
SORA
SAIL 6
SAIL 5
SAIL 4
SAIL 3
SAIL 2
SAIL 1
Standard scenarios
Mass and height
No limitations
Type of flight
includes BVLOS
Open Category
A3 far from people
Mass
<25 kg
Max height
120m AGL
Type of flight
VLOS
A2 close to people
A1 over people