

Provisions applicable to both ‘open’ and ‘specific’ category

Regulations on UAS (drone) explained

What are the applicability dates under EU regulation 2019/947 and 2019/945?

Answer

Due to the COVID-19 crisis, the applicability date of EU Regulation 2019/947 has been delayed from 1 July 2020 to **31 December 2020**, meaning:

- as of 31 December 2020, registration of drone operators and certified drones becomes mandatory;
- as of 31 December 2020, operations in the ‘specific’ category may be conducted after authorisation has been given by the National Aviation Authority;
- between 31 December 2020 and 1 January 2023, drone users operating drones without class identification label can continue to operate in the limited category under Article 22 of EU Regulation 2019/947 (see FAQ #x for additional information);
- as of January 2022, national authorisations, certificates, and declarations must be fully converted to the new EU System;
- from 1 January 2022, EASA Member States must make available information on geographical zones for geo-awareness in a digital format harmonised between the EU countries;
- as of January 2023, all operations in the ‘open’ category and all drone operators must fully comply with [EU Regulation 2019/947 and EU Regulation 2019/945](#).

Last updated:

13/10/2020

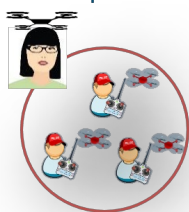
Link:

<https://www.easa.europa.eu/fi/faq/116446>

Who is a drone operator

Answer

UAS Operator



A drone operator is any person, whether natural or an organisation, **who owns the drone(s) or rents the drone**. You can be both a drone operator and a remote pilot if you are also the person who actually flies the drone. However, you could be the remote pilot without being a drone operator, if, for example, you are a pilot working for a company which provides services with drones. In that case, the company is the drone operator and you are the remote pilot.

If you bought a drone to fly it in your leisure time, you are both the drone operator and remote pilot.

If you bought a drone to give away as a gift, the person who will receive the gift and then fly the drone will be the drone operator and the remote pilot.

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Link:

<https://www.easa.europa.eu/fi/faq/116447>

Types of drone the Regulation refers to

Answer

‘Unmanned Aircraft’ means any aircraft operating or designed to operate autonomously or to be piloted remotely without a pilot on board;



Aerial Work



Urban air mobility



Leisure flights, including with model aircraft



International IFR flights

This definition includes all types of aircraft without a pilot on board, including radio-controlled flying models (powered fixed wing, helicopters, gliders) whether they have an on-board camera or not.

The Regulations use the term UAS, unmanned aircraft system, to refer to a drone, its system and all the other equipment used to control and operate it, such as the command unit, the possible catapult to launch it and others.

RPAS (Remotely Piloted Aircraft Systems) is a subcategory of UAS, which includes both RPAS and fully autonomous UAS. Fully autonomous UAS fly completely by themselves without the need for any pilot intervention.

Regulatory reference: paragraph 30 of Article 3 of Regulation (EU) 1139/2018 / Article 2(1) of EU regulation 2019/947 and article 3(3) of EU regulation 2019/945

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Link:

<https://www.easa.europa.eu/fi/faq/116448>

When is a drone considered to be a toy?**Answer**

A drone is considered as a toy when it could be attractive to a child. More precisely, products designed or intended whether or not exclusively, for use in play by children under 14 years of age should be considered as a toy and comply with the Directive 2009/48/EC on the safety of toys. The compliance of a drone with that directive is declared in the corresponding EU declaration of conformity. In case of doubts, the fact that a product should be considered as a toy is assessed by market surveillance authorities based on a number of characteristics related to the attractiveness of the product for kids, accessibility, etc.

However, manufacturers may clearly exclude their product from the application of the Directive on the safety of toys (when a confusion is possible) by indicating clearly a minimum age > 13 years on their product (packaging, manual etc.) (e.g; “not for use under 14 years”).

Regulatory reference: Article 2 of Directive 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the safety of toys.

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07/10/2020

Link:

<https://www.easa.europa.eu/faq/119218>

What is the difference between autonomous and automatic drone?

Answer

An **autonomous** drone is able to conduct a safe flight without the intervention of a pilot. It does so with the help of artificial intelligence, enabling it to cope with all kinds of unforeseen and unpredictable emergency situations.

This is different from **automatic** operations, where the drone flies pre-determined routes defined by the drone operator before starting the flight. For this type of drone, it is essential for the remote pilot to take control of the drone to intervene in unforeseen events for which the drone has not been programmed.

While **automatic** drones are allowed in all **categories**, **autonomous** drones are not allowed in the 'open' category.

Autonomous drones need a level of verification of compliance with the technical requirements that is not compatible with the system put in place for the 'open' category. Autonomous operations are, instead, allowed in the 'specific' category, where the Regulation includes a tool flexible enough to verify requirements with the appropriate level of robustness.

Autonomous operations are also allowed in the 'certified' category.

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Link:

<https://www.easa.europa.eu/faq/116449>

Who is an 'uninvolved person'?

Answer

'An uninvolved person is a person who is not participating in the UAS operation or who is not aware of the instructions and safety precautions given by the UAS (drone) operator'.

A person is considered involved if **he/she** decides to be a part of the operation, understands the risk and is able to check the position of the drone while it is flying.

Therefore, in order to be considered 'involved' in the operation, a person needs to:

- give consent to be a part of the operation (e.g. consent to be overflown by the drone); the consent needs to be explicit;
- receive from the drone operator/remote pilot instructions and safety precautions to be applied in case of an emergency situation; and
- not be busy with any other activities that would make the person unable to check the position of the drone and, in case of an incident, take action to avoid being hit.

Writing on a ticket that a drone will be used during an event is not considered sufficient, since the drone operator needs to receive individual explicit consent and make sure people understand the risk and the procedures to be taken in case of an emergency.

During the operation, it is expected that involved persons will follow the trajectory of the drone and be ready to take action to protect themselves in case the drone behaves unexpectedly. If, during the UAS operation, people are busy working or watching something that is not compatible with monitoring the trajectory of the drone, than they cannot be considered to be involved.

Examples of uninvolved people:

- spectators gathered for sport activities, concerts or other mass events;
- people in a beach or in a park, or walking on the streets.

An uninvolved person is not only a person who is directly exposed to a drone, but could also be a person who is in a bus, car, etc., and who is indirectly exposed. For example, if a drone is flying over a car, its driver should be considered to be an 'uninvolved person'. The reason is that a drone flying close to a car (even if it does not impact it) could possibly distract its driver and therefore cause a car accident.

Regulatory reference: GM1 Article 2(18) Definitions, ED Decision 2019/021/R.

Last updated:

13/10/2020

Link:

<https://www.easa.europa.eu/fi/faq/116453>

What is an 'assembly of people'?

Answer

An assembly of people is a crowd of people. It is not defined by a specific number of people, but is related to the possibility for an individual to move around in order to avoid the consequences of a drone which is out of control. If a group of people are so densely packed that their possibility to freely escape or move away from the drone is limited, then it is

considered to be an assembly of people.

Examples of assemblies of people are the people in:

- sport, cultural, religious or political events;
- beaches or parks on a sunny day;
- commercial streets during the opening hours of the shops; or
- ski resorts/tracks/lanes.

Regulatory reference: GM1 Article 2(3) Definitions, ED Decision 2019/021/R

Last updated:

13/10/2020

Link:

<https://www.easa.europa.eu/fi/faq/116553>

What is covered by the regulations?

Answer

These EU Regulations adopt a risk-based approach, and as such, do not distinguish between leisure or commercial activities. They take into account the weight and specifications of the drone and the operation it is intended to undertake.

The Regulations cater for drones sold on the market, meaning:

1. when operating in the 'open' category:

- i. those that will bear a class identification label (according to Regulation (EU) 2019/945) ranging from 0 to 6 from lighter to heavier models; or
- ii. those privately built; or
- iii. those placed on the market before 1 July 2022.

2. when operating in the 'specific' category, all drones falling under this category including those without a class identification label.

EU Regulation 2019/947 caters for most types of operation and their levels of risk. It does so through three categories of operations: the 'open', 'specific' and 'certified' categories.

Last updated:

30/07/2020

Link:

<https://www.easa.europa.eu/fi/faq/116445>

Is it possible for an EASA Member State (MS) to maintain its national drone regulation in parallel with the new European drone legislation?

Answer

No. The EU drone regulation is an act that became immediately applicable in all EU MSs since 31 December 2020 superseding national regulations and making them not applicable anymore. However the European drone regulations provide some flexibility for the MSs to develop acts to define certain aspects such as:

- Minimum age for remote pilot
- Conversion of certificates issued before the applicability of the EU regulation
- Authorisation of model club and associations
- Fines when breaching the regulation
- Use of geographical zones
- Insurance

The EASA MSs cannot develop any further regulations on drones on a topic that is already regulated by the European Drone regulation.

Last updated:

10/09/2021

Link:

<https://www.easa.europa.eu/fi/faq/131132>

Are the UK issued certificates for unmanned aircraft system, including training of remote pilot, accepted in EU after December 31, 2020?

Answer

This FAQ is placed in [Brexit - Aircraft Operations](#)

Last updated:

27/07/2022

Link:

<https://www.easa.europa.eu/fi/faq/136864>

Registration requirements

Do I need to register my drone?

Answer

Unless they are certified, drones do not need to be registered, but **you, as drone operator/owner, must register yourself**. You do so with the National Aviation Authority of the **EU country you residence in**. (<https://www.easa.europa.eu/domains/civil-drones/naa>)

You register once, independently of how many drones you have operating in the 'open' or the 'specific' category. Your registration will be valid for a period defined by your National Aviation Authority, after which you need to renew it.

However, you **do not need to register yourself** if your drone(s):

1. weighs less than 250g and has no camera or other sensor able to detect personal data; or
2. even with a camera or other sensor, weighs less than 250g, but is a toy (this means that its documentation shows that it complies with 'toy' Directive 2009/48/EC);

A drone is certified when it has a certificate of airworthiness (or a restricted certificate of airworthiness) issued by the National Aviation Authority. In this case, it requires a registration. A certified drone is needed only when the risk of the operation requires it. So certification is never needed for drones operated in the 'open' category.

Relevant regulation: article 21 of EU regulation 2019/947.

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Link:

<https://www.easa.europa.eu/fi/faq/116454>

What happens once I register?

Answer

Once registered, you receive a '**drone operator registration number**' that needs to be **displayed** with a sticker **on all the drones you own, including those privately built**. You must also, **upload it** into the '**Drone's remote identification system**'.

Regulatory reference: article 14 EU regulation 2019/947.

Last updated:

10/10/2020

Link:

<https://www.easa.europa.eu/fi/faq/116455>

Will my registration as drone operator be recognised throughout Europe?

Answer

Yes, you as drone operator, will receive a unique registration number and this will be valid in all other EASA member State. You cannot register twice.

Regulatory reference: article 14 of EU regulation 2019/947.

Last updated:

14/10/2020

Link:

<https://www.easa.europa.eu/fi/faq/116456>

I fly model aircraft

How can I fly my model?

Answer

Model flyers have the following options to conduct their operations:

(a) (a) They may operate as members of a model club or association that has received from the competent authority an authorisation, as defined in Article 16 of the UAS Regulation. In this case, they should comply with the procedures of the model club or association in accordance with the authorisation. The authorisation will define all the conditions to operate, and may deviate from the Regulation (for example it may allow operations with drones exceeding 25 kg, or flying higher than 120 m etc). Member States may enable model aircraft clubs and associations to register their members in the registration systems established in accordance with Article 14 on their behalf. If this is not the case, the members of model aircraft clubs and associations shall register themselves in accordance with Article 14.

(b) (b) If a person does not want to become a member of a club or association, they may use the special geographical zones defined by EASA Member States, in accordance with Article 15(2) of the UAS Regulation, where drones and model aircraft are exempted from certain technical requirements, and/or where the operational limitations are extended, including the mass or height limitations.

(c) Lastly, models may be operated in subcategory A3. Please refer to the FAQ

Regulatory reference: Art. 16 of EU regulation 2019/947.

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10/10/2020

Link:

<https://www.easa.europa.eu/fi/faq/116521>

Once in the air

Can I fly my drone anywhere I want to?

Answer

Flexibility for Member States

Geographical zones defined by Member States



Geo-awareness on drones to support remote pilots

Each EASA Member State will

determine drone geographical zones, which are areas where drones may not fly (e.g. national parks, city centres or near airports) or may fly only under certain conditions, or where they need a flight authorisation. Therefore, it is important for you to consult your National Aviation Authority to check where you can and cannot fly your drone.

These geographical zones apply to all categories.

In addition, you are not allowed to fly a drone close to or inside an area where there is an ongoing emergency response.

See the links to National Aviation Authorities at:

<https://www.easa.europa.eu/domains/civil-drones/naa>

Regulatory reference: Article 15 and UAS.OPEN.060 (4) of EU regulation 2019/947.

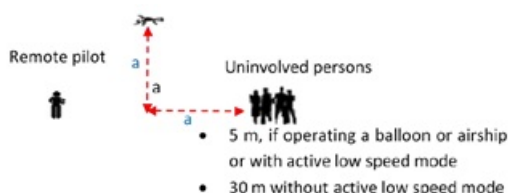
Last updated:

10/10/2020

Link:<https://www.easa.europa.eu/fi/faq/116463>**Can I fly over people?****Answer**

Generally when you operate in the 'open' category, you are not allowed to fly over uninvolved people, unless you have a privately built drone with a weight below 250 g or a drone purchased on the market with a class identification label 0 or 1 mark. In any case, try to minimise the time during which you fly over people.

If you have a drone with a CE class 2 mark, under subcategory A2, as a general rule, keep the UA at a lateral distance from any uninvolved person that is not less than the height at which the drone is flying (this is the '1:1 rule', i.e. if the UA is flying at a height of 40 m, the distance from any uninvolved person should be at least 40 m), and never fly closer than 30 metres horizontally from any uninvolved person. If your drone is equipped with a low-speed mode function and this is active, you can fly as close as 5 metres from uninvolved people.



Distance from uninvolved people in the case of flying with a class C2 drone

In all other cases (drones with class identification label 3, 4, 5 or 6 marks or privately built and heavier than 250 g), you need to ensure that no uninvolved people are present within the range of the operation.

Regulatory reference: article 4 (1) (c) and UAS.OPEN.040 of EU regulation 2019/947.

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14/10/2020

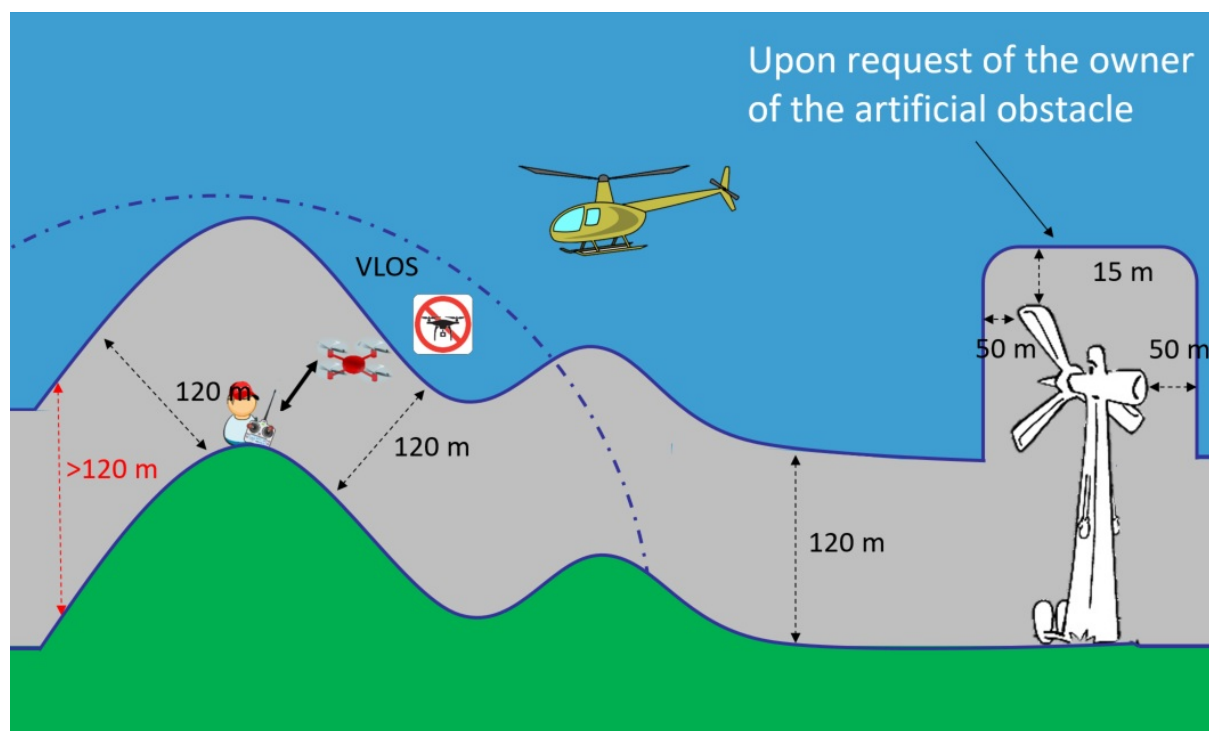
Link:<https://www.easa.europa.eu/fi/faq/116464>

How high can I fly my drone?

Answer

Your maximum flight height is generally 120 m from the earth's surface. Please check whether the National Aviation Authority imposes a geographical zone with a lower limit in the area where you fly. If you need to fly over an obstacle taller than 120 m, you are allowed to fly up to 15 metres above the height of the obstacle, but only if there is an explicit request from the owner of the obstacle (e.g. a contract with the owner to perform an inspection). In such a case, you may fly within a horizontal distance of 50 metres from the obstacle.

When you are operating in hilly environments, the height of the drone above the surface of the earth should be within the grey zone in the picture below: you need to keep the drone within 120 m of the closest point of the terrain. This means that there may be conditions such as on top of a hill where even if you keep your drone 120 m from the side of the hill, you are actually flying at a distance higher than 120 m above the bottom of the valley. So as long as you keep your drone within 120 m of the shoulder of the hill (as in the grey area in the picture below), your flight is legal.



Regulatory reference: UAS.OPEN.010 (2) (3) Annex Part A of EU Regulation 2019/947

Last updated:

13/10/2020

Link:

<https://www.easa.europa.eu/fi/faq/116465>

Geographical zones (where I can fly)

How do I know if can fly in a location?

Answer

All states are required to publish maps identifying geographical zones where all drone flights are forbidden or where you need to have a flight authorisation before starting the operation. In most of state, apps for mobile phones are available to easily identify where you can fly. Please check the website of your NAA (<https://www.easa.europa.eu/domains/civil-drones/naa>).

Flight authorisations are different from the operational authorisation required for the specific category. A flight authorisation is applicable to all operations in 'open' or 'specific' category and is issued by the authority/entity identified in the maps by the state. For example a state may want to restrict the flights over a natural park or a riskier area such as industrial area or over a prison etc. The state may then publish a geographical zone requiring that all drone operations conducted in these zones must have a flight authorisation issued by the authority managing the area (e.g the park authority or the owner of the industry etc..).

Other types of geographical zones are those where one or more of the limitation of the open category are alleviated. For examples area where the state may authorise all drones to operate up to a height more than 120m or with drones heavier than 25kg or in BVLOS etc., without the need for an authorisation or a declaration. This may be very useful to fly model aircraft for example.

Make sure you check the geographical zones before starting the operation and you always respect them.

Regulatory reference Article 15 of EU Regulation 2019/947

Last updated:

10/09/2021

Link:

<https://www.easa.europa.eu/fi/faq/131131>

Other requirements

Is there a minimum age to fly a drone?

Answer

The general rule mandates that the minimum age for remote pilots of drones in the 'open' and 'specific' categories is 16 years old. However, there are exceptions. There is no minimum age for remote-pilot requirements:

1. for flying in Subcategory A1 with a Class 0 drone;
2. for flying with a privately-built drone weighing below 250 g; or
3. for flying under the direct supervision of a remote pilot that has met the competency requirements — see the following link for more details on training: [Open Category - Low Risk - Civil Drones | EASA \(europa.eu\)](#).

Last updated:

08/05/2024

Link:<https://www.easa.europa.eu/fi/faq/116466>**Do I need insurance?****Answer**

You, as drone operator, are always required to have an insurance for your drone if you are using a drone with a weight above 20kg. However most of EASA Member States mandate a third party insurance also if you are operating a lighter drone. So please consult the national regulation.

Regulatory reference: Article 14 (2) (d) of EU regulation 2019/947.

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14/10/2020

Link:<https://www.easa.europa.eu/fi/faq/116469>**Are there any Brexit related regulations?****Answer**

For Brexit related questions please consult our [Brexit FAQs under Aircraft Operations](#).

Last updated:

20/01/2021

Link:

<https://www.easa.europa.eu/fin/faq/123802>