DIGITAL

# TRANFORMATION IN JOURNALISM AND NEWS MEDIA

## COMPARATIVE REPORT- R1: DRONE Survey for collection of Best practices

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# INTRODUCTION

A drone, in a technological context, is an unmanned aircraft. Drones are more formally known as unmanned aerial vehicles (UAVs) or unmanned aircraft systems (UASes). Essentially, a drone is a flying robot.

The aircraft may be remotely controlled or can fly autonomously through software-controlled flight plans in their embedded systems working in conjunction with onboard sensors and GPS.

In the recent past, UAVs were most often associated with the military, where they were used initially for anti-aircraft target practice, intelligence gathering and then, more controversially, as weapons platforms.

Drones are now also used in a wide range of civilian roles ranging from search and rescue, surveillance, traffic monitoring, weather monitoring and firefighting to personal drones and business drone-based photography, as well as videography, agriculture and even delivery services.

Drones, being one of the digital smart technologies, are a valuable learning opportunity that allow children and young people to become innovative designers (programming and design) and computational thinkers (computer experience).

As young people are the main users of advanced technology, it is also important to develop their skills in using DRONES, share information about professional areas where they can be used, namely in journalism, increasing their knowledge in the media and promoting their active participation in society in general.

For the DRONES project, the partner countries have done a survey and interviewed different organizations/experts working in this industry to better understand the main differences between them in this area. We have succeeded to have the point of view of various domains. All the questionnaires filled in and the conversations allowed us to gather a great amount of information.

The survey carried on, 10 questionnaires/interviews in total, aimed to collect the following information:

- current situation, in the project partner countries, regarding drone-based professions, education and training;
- experiences, best practices, success stories, use of drones / UAVs by media, press; communication, journalist/bloggers, professionals working with DRONES;
- relationship between UAV / drones and the job market and professions: best practices and success stories.

The following is the information collected by the partners.



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# LEGESLATIVE CONTEXT IN CONSORTIUM COUNTRIES

**What legislation regulates the use of drones? What are the main challenges and difficulties?**

**Portugal**

The European regulator's legislation requires drone pilots and operators to hold a certificate to fly drones more than 150 meters high, a document that can only be obtained in other European Union countries, such as Luxembourg.

To film lower than 150 meters high, the problem is aggravated because the certificate must be obtained in person, which forces pilots and operators to travel to other countries in Europe that provide this training.

In Portugal, the use of drones has always had strict rules. To capture and disseminate aerial video or photography it is necessary to request authorization from the Portuguese Air Force and, depending on the altitude and proximity of some locations, the approval of the National Civil Aviation Authority is required.

Portugal is governed by COMMISSION EXECUTION REGULATION (EU) 2019/947 of May 24, 2019, on rules and procedures for the operation of unmanned aircraft. This Regulation lays down detailed provisions for the operation of unmanned aircraft systems and for their personnel, including remote pilots and organizations involved in such operations.

The main difficulties and challenges for those who intend to fly a drone are:

- Insurance is expensive
- There are few insurance companies available for piloting drones
- Training certificates have to be obtained abroad.

**Cyprus**

Cyprus introduced regulations controlling the use of drones in 2015, by Ministerial Decree No. 402/2015 (the “Drones Decree”) and Decision No. 403/2015 (the “Drones Decision”), both issued pursuant to the provisions of the Civil Aviation Law of 2002, as amended.

Use of drones is shifting from predominantly recreational use to being an integral part of commercial processes and business operations. The European Commission predicts that by 2035 the European drone sector will directly employ more than 100,000 people and have an economic impact exceeding €10 billion per year.

This growth is largely due to innovation in the use of drones across a variety of sectors, including inspection and surveillance services (of for example construction sites, solar farms, power plants and oil rigs), retail and e-commerce operations, media and journalism, telecommunication platforms and others.

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The EU will be introducing new rules for dealing with safety, security and privacy and the protection of personal data, as well as regulating the noise and emissions generated by drones and registration aspects.

Cyprus introduced regulations controlling the use of drones in 2015, by Ministerial Decree No. 402/2015 (the "Drones Decree") and Decision No.403/2015 (the "Drones Decision"), both issued pursuant to the provisions of the Civil Aviation Law of 2002, as amended.

Under the applicable Cyprus framework, all drones must be registered by their owners or operators, regardless of their use. Depending on the category of drone, additional licenses and permits may be required.

The Drones Decree establishes two drone categories:

- Open Category; and
- Special Category

Open Category includes unmanned aircraft, having a total take-off mass of less than three (3) kg, which are not involved in commercial activities, and whose maximum flight-height does not exceed 50 m (170 feet) above the ground or water. Unmanned aircraft that fall into the Open Category are not required to hold an operating license.

The Special Category includes drones with a take-off mass in excess of 3kg (for either recreational or commercial purposes) and any drone used for commercial purposes regardless of take-off mass.

Drones, with their tremendous opportunities, come with a lot of challenges. A significant challenge that drones face today is that of improper air traffic management, especially in areas with higher air traffic concentration. Researchers are trying to keep manned vehicles distinct from the unmanned ones. However, this creates confusion for the traffic management systems as they cannot build a highly intensive system solely for a few drones nor can they let the drones interfere with the existing air traffic routes.

The growing popularity of these aerial vehicles is also posing multiple security threats. Many drones are now being fitted with cameras to enable video footage or live stream the flight. This application may turn out to be beneficial in some cases, but there has been an increase in using such drones to wrongly shoot in authorized locations, violating privacy policies. Along with cameras, criminals are also coming up with drones attached with weaponry. Terrorists are using such devices to organize crime, by targeting their victims with camera-enabled drones that provide them a live feed of the situation to deploy bombs to cause damage.

A coin has two sides. It is apparent that as useful and productive as these drones can be, they also come with a huge factor of risk. Like there are ways to enhance the beneficial features in them, regulatory laws and policies, strictly applied to manufacturers and suppliers can help in reducing the risks and building a better future for drone technology.

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**France**

The rules for drones in France are regulated by European law, especially for their conception, maintenance, and exploitation of them. However, some national laws stay practical, such as the safety or the use of the French airspace. The French legislation of drones was created in 2012.
In France, it is necessary to be registered with the DGAC (Direction Générale de l'aviation civile), to be declared as a company, a craftsman or a self-employed person, to have a Declaration of Level of Competence (high technical level + video editing skills), a MAP (Manual of particular activities), professional insurance, a declaration of aerial photography and cinematography activity and, depending on the case, to apply for administrative authorizations.
You also need a certified drone and depending on the flight scenarios (S1 / S2 / S3 / S4) these are devices that cost several thousand euros.
Concerning difficulties:

- Restrictions are more and more severe.
- Administrative management is really heavy
- Geographical restrictions
- The demand permission: many things are framed so it can be difficult to use drones or to sell images because it is not legal
- Requests to film with drones in hot sites cannot be always validated by the authorities. You have to ask 2 weeks before to have the authorisation, so when it is something happening that was not prepared, it can be impossible to reach.

However, European law should regulate all the administrative burden.

**Slovenia**

All rules governing the use of drones are set by the Civil Aviation Agency - CAA (https://www.caa.si ).
Unmanned aerial systems operators (individuals, modelers, organizations) must be registered if they operate any of the following unmanned aerial systems within the open categories:

- An aircraft with a maximum take-off mass of 250 g or more, or an aircraft capable of transferring more than 80 joules of kinetic energy to a person in the event of a collision;
- An aircraft equipped with a sensor capable of collecting personal data, unless it complies with Directive 2009/48 / EC (aircraft is a toy).

Registration must also be made if the weight of the drone is less than 250 g, if it is equipped with a sensor that can collect personal data, for example, DJI Mavic mini (249 g).
If several family members use a drone in the family, it is sufficient to register one family member as an operator. However, all others must undergo training and pass an exam.
There are several regulations for the use of drones in Slovenia. The most important are the mandatory deviations from the permitted area, the flight altitude required in certain locations (the flight map is published on the website), the flights of people and the locations for which a permit is required. This is especially true in populated areas. Proper observance of the rules of

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air traffic when encountering aircraft, helicopters, parachutists and other participants in air traffic.

Aircraft or drones are divided into three categories: open, special and authorized.

The open category includes aircraft weighing 250 grams to 25 kilograms that fly within visual range and up to an altitude of 120 meters and do not carry cargo or people. Each category also has subcategories that specify which aircraft belong to it, the conditions of use, and where they may be used.

Open category A1 includes aircraft weighing less than 250 grams that do not need to be registered or inspected, and aircraft up to 500 grams that already need to be registered and trained online.

Anything that weighs more than 250 grams or has more than 80 J of kinetic energy or is equipped with a personal data acquisition system must be registered.

Only the lightest aircraft (up to 250 grams) can fly over non-participants, but not over choirs. They must also be registered if they have personal data acquisition sensors (cameras, etc.).

All heavier aircraft may not fly over people, and the heaviest (2-25 kg) must be at least 150 meters from residential, commercial, industrial, and recreational facilities or areas.

The minimum age for aircraft use is 16, and more difficult subcategories require testing.

For all activities, a legal permit from the Civil Aviation Authority is required to take off with a drone. Sufficient knowledge of the rules for safe flight is required to use a drone in uninhabited areas where there are no facilities or people, or in areas with ancillary facilities. Recently, it has also been permitted to fly unmanned aerial vehicles over inhabited, populated areas. This type of drone use requires the submission of an operations manual detailing the procedures for handling unmanned aerial vehicles and conducting the flight activities specified in the regulation, and passing an examination. An official permit is required for flying over the most populated areas, which is issued for a period of one or two years.

**Malta**

Malta is a member state of the European Union and so it is covered by the two main regulations issued by the EASA (European Union Aviation Safety Agency) on the use of drones. These are the Commission Delegated Regulation (EU)2019/945 and Commission Implementing Regulation (EU)2019/947. Drones are separated in different categories depending on their size and intended use. For example, the open category (usually for leisure use or low risk commercial activity) is then divided in three classes which are:

- A1: fly over people but not over assemblies of people
- A2: fly close to people
- A3: fly far from people.

For each of these classes a set of requirements is available which must be followed. Drones also have a class identification label (C0, C1, C2, C3, C4), but if this label is not present on the drone EASA has issued a table to help users identify the drone class depending on its weight. This table is shown in Figure 1, and it is valid until 1st January 2023.

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Another category is the 'specific' category, this is for riskier drone operations which are not covered by the 'open' category. If the drone operator is going to operate under this category an authorization from the National Aviation Authority is required. A list of standard scenarios (STS) is provided by the NAA, if the intended use of the drone does not fall in the STS list a risk assessment has to be carried out and presented to the NAA for authorization to be granted. EASA has also published a list of predefined risk assessments so that the drone operator does not have to carry out the task from scratch. However, the necessary documentation should be presented before the activity starts.

All drones should be registered with the local authorities, except for those labelled as a toy (toy directive 2009/48/EC) or those that weigh less than 250 grams (and do not carry a recording device).

| UAS | | Operation | | Drone Operator/pilot | | |
|---|---|---|---|---|---|---|
| Class | MTOM | Subcategory | Operational restrictions | Drone Operator registration | Remote pilot competence | Remote pilot minimum age |
| Privately built | < 250 g | A1 (can also fly in subcategory A3) | - No flying expected over uninvolved people (if it happens, should be minimised)<br>- no flying over assemblies of people | No, unless camera / sensor on board **and** a drone is not a toy | - no training needed | No minimum age |
| Drones without class identification label | < 500 g | | | Yes | - read user manual<br>- complete the training and pass the exam defined by your national competent authority | 16* |
| Drones without class identification label | < 2 kg | A2 (can also fly in subcategory A3) | - no flying over uninvolved people<br>- keep horizontal distance of 50 m from uninvolved people (this can be reduced to | Yes | - read user manual<br>- complete the training and pass the exam defined by your national competent authority | 16* |
| Drones without class identification label or privately built | < 25 kg | A3 | - do not fly near people<br>- fly outside of urban areas (150 m distance) | Yes | - read user manual<br>- complete the training and pass the exam defined by your national competent authority | 16* |

*Figure 1: Guide on drones category without identification label*

Drone pilots are required to have a license depending on the type of drone that is used (class C1-C4). This is obtained by sitting for an online course and then passing a theory test.

Drones operated in Malta need to have a third-party insurance irrespective of the weight or type of operation as in Malta all airspace is controlled.

Flight authorization is also required depending on the type of drone operation. The request should include specific flight parameters such as date, time, altitude, and location.

All Maltese regulations regarding the use of drones can be found on the Transport Malta website.

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Italy

More and more drones are used in the Italian skies, in which they can be used to transport goods and people, which require common rules, in which conventional traffic control is destined to meet drone control. It is a fascinating challenge, and the integration of operations can take place in a safe and effective manner only if supported by the integration of services, **through the evolution of national and European regulatory and technological context**.

In fact, according to the survey, presented at the "*Rome Drone Conference*" last November 2021, organized by Ifimedia and Mediarkè, in collaboration with ENAC (Italian Civil Aviation Authority), AOPA Italy-APR Division and the European University of Rome, the entry into force of the **new European and Italian regulations on drones still have uncertain effects on the national market**: for 25% of the sample it improved it in terms of economic dimension and operational clarity, for 21,6% blocked it due to shortages and bureaucratic delays, for 17.0% it made it worse, while for 26.7% it was irrelevant. On the other hand, the forecasts for the future of the sector in Italy are optimistic: for 54.5% of the sample the evolution of the market will be growing, for 13.1% very growing, while for 21.0% it will be stationary and only 8.5% expect a decline.

The **new European regulation** is indeed an epochal transition, which transfers a large part of the legislation under the umbrella of EASA (European Union Aviation Safety Agency), harmonizing the regulations on the entire territory of the European Union, and which introduces significant changes on the duties of those who own and wants to use a drone, **abolishing the distinction between recreational and professional use, but also expanding the area of operation in low-risk use scenarios.**

The most important aspect is that the distinction between recreational or recreational and professional use to which ENAC (Italian Civil Aviation Authority) disappears**: the use of drones is now classified solely on the basis of the risk factor and the class of the aircraft, the definition of which occurs primarily based on weight**.

**The vast majority of recreational uses fall into the *new Open category*, which includes three sub-categories defined A1, A2 and A3, each with its restrictions on operation and the class of aircraft that can be used, but for which no specific authorization is required to fly your drone**. The consequence of this is that for low-risk operations, it will finally be possible to fly some drones even in urban areas, without the constraint of the distance of 150 meters required by current legislation, but always clearly respecting the rules on airspace, which they will continue to be defined and supervised by national bodies.

The *Open category* is accessible, in particular, if all the following requirements are met:

- maximum take-off mass less than 25 kg;
- maintenance of the safety distance from people and compliance with the absolute prohibition of overflight of gatherings of people;
- flight exclusively in direct visibility of the drone (VLOS, visible line of sight);
- maximum altitude of 120 meters from the surface;

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- prohibition of the transport of dangerous goods;

If until now the ENAC regulation distinguished, for the use of drones in non-critical activities, aircraft with a weight including the load below 250 grams and equal to or greater than 250 grams (and up to 25 kg), the new European regulation groups aircraft into classes C0 (<250 grams), C1 (<900 grams), C2 (<4 kg) and C3 (<25 kg). Depending on the class of the aircraft and the Open category there are different obligations and rules. From class C1 upwards, all drones must also be equipped with a transponder, which transmits data such as the aircraft identification, position and route throughout the flight. Drones placed on the market to be compliant must be equipped with a CE stamp and the symbol of the class they belong to, such as the one shown below relating to class C1:

***Basically, as today, for drones with a ground weight of less than 250 grams it will not be mandatory to have a certificate of competence or to register oneself and the drone, an operation that in Italy must be done exclusively on the D-Flight platform*** .

However, there is a cryptic rule: if the drone is "*equipped with a sensor capable of detecting personal data*", *then registration is mandatory, unless it is classified as a toy suitable for up to 14 years of age*. In conclusion, if a drone has a camera or a microphone, even under 250 grams the drone and its pilot must be registered on the D-Flight portal, to obtain the unique QR code to be applied on the aircraft. Above 250 grams registration on D-Flight is always mandatory. As per current legislation, it is also always mandatory to take out civil liability insurance, regardless of the class of the aircraft, even on private land.

Basically, as today, *for drones with a ground weight of less than 250 grams it will not be mandatory to have a certificate of competence or to register oneself and the drone, an operation that in Italy must be done exclusively on the D-Flight platform*. *However, there is a cryptic rule: if the drone is "equipped with a sensor capable of detecting personal data", then registration is mandatory, unless it is classified as a toy suitable for up to 14 years of age*. Translated, if it has a camera or a microphone, even under 250 grams the drone and its pilot must be registered on the D-Flight portal, to obtain the unique QR code to be applied on the aircraft. Above 250 grams registration on D-Flight is always mandatory. As per current legislation, it is also always mandatory to take out civil liability insurance, regardless of the class of the aircraft, even on private land.

From class C1 upwards, that is, for drones with a mass equal to or greater than 250 grams, *essentially, however, it is also mandatory to take the online course to acquire the Certificate of Competence, in order to certify that the pilot has basic knowledge on topics such as aviation safety, airspace restrictions, aviation regulation, GDPR and insurance obligations*. ENAC has already adapted to this point and as early as March 1st it is possible to take the online exam to obtain the certificate, which will last 5 years and which is mandatory from July 1st 2021. To obtain it, just downloading the teaching material, study it and then take the online test, which includes 40 multiple-choice questions on the various topics covered, with a maximum overall score of 80 points. In order to pass the exam it is necessary to score at least 60 points. The cost of the exam is 31 euros and payment is made only after the test is passed.

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In detail, Open flight operations are classified as follows:

- Category A1, Drones C0 (<250g): it will be possible to operate the aircraft even by flying over people not involved, but never gatherings, in compliance with the maximum altitude of 120 meters and in optical visibility. If the drone is equipped with Follow Me mode, when in use the pilot must keep a maximum distance of 50 meters;
- Category A1, Drones C1 (<900g): compared to class C0, a certificate of competence is required for the operator and it is necessary to avoid overflight of uninvolved people. If this happens, the pilot should try to reduce the overflight time as much as possible. Class C1 drones must also be equipped with transponders;
- Category A2, Drones C2 (<4kg): compared to category A1, it will be possible to operate class C2 aircraft while respecting a horizontal safety distance of 30 meters from people not involved. The pilot will be able to reduce the distance up to 5 meters as long as he maintains a maximum speed of 3 meters / s. Speed limited to 3m / s mode is an essential requirement of class C2 drones. Not only is the pilot's certificate of competence mandatory, but it is also required to certify practical training and further theoretical examination on meteorology, drone flight performance and ground risk mitigation measures. In the absence of this second certificate, it will be possible to fly only in category A3;
- Category A3, Drones C2, C3 and C4 (<25kg): additional limitations are introduced compared to A2. It is not allowed to operate the drone in spaces where there are people who are not involved. The horizontal safety distance of 150 meters from "residential, commercial, industrial or recreational areas" must be maintained. And of course the pilot must have completed the exam and obtained the certificate of competence.

Drones produced and distributed in compliance with the new European regulation, in addition to having the new CE stamp required by the legislation, must also bear the logo of the class they belong to (C0, C1, etc.). The regulation rightly provides a transitional period for all drone models placed on the market before the entry into force of the new rules, without the CE mark and valid until 1 July 2022 1 January 2023. For the timebeing:

- Drones with a take-off weight of less than 250 grams can be used in A1 C0 category operations;
- Drones with a take-off mass of less than 500 grams will be able to operate according to the requirements of category A1 C1, therefore requiring a certificate;
- Drones with a mass between 500 grams and 2 kilos will be able to operate according to the requirements of category A2, but with a minimum distance of 50 meters from people, instead of 30 meters and with the obligation of the double certificate;
- Drones with a mass between 2 and 25 kilograms will only be able to operate in category A3 and with the obligation of a certificate of competence.

The end of the transitional regime, all drones produced before 1 July 2022 January 2023 and not adhering to the requirements of the new regulation, will necessarily fall into one of the following two cases:

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- Drones with a take-off weight of less than 250 grams can be used in A1 C0 category operations;
- Drones weighing 250 grams or more and up to 25 kg can be used in A3 category operations.

Basically, starting from 1 July 2022 from 1 January 2023, all drones that do not comply with the new regulation cannot be used in the vicinity of uninvolved people and a distance of 150 meters must be kept from inhabited areas and buildings: in practice, the rules in force today will continue to apply and it will not be possible to benefit from the concessions offered by the European regulation.

On the other hand, the people involved, *such as assistants or subjects involved in the filming, must be informed about the operation of the activity and have given their explicit consent.*

The focus is **on the protection of personal data** collected through the drone. Its use is now within everyone's reach: enthusiasts, photographers, web directors, drone-racing sportsmen and many others, use this extraordinary vehicle more or less with the same purposes. For some time also the category of private investigators has been added to this list of users for their own professional purposes.

**From a privacy point of view, the law is incomplete,** also and above all due to the speed at which technological innovation proceeds, so much so that we find ourselves in the presence of a regulatory vacuum. Common sense and careful use are therefore recommended.

Moreover, the use of drones interests also the **personal data regulation**. As far as the **journalistic profession is concerned**, there are exceptions that also apply to occasional publications or / and for the free expression of thought. In any case, the essentiality of the news and the right to report must be respected. In recent times, drones have also been used illegally, such as those of the "paparazzi", who record the obvious invasion of people's privacy. In this case there are penalties. both administrative and criminal. Measures that also apply for non-insurance for the drone.

As a general guideline, pursuant to **GDPR EU 679/2016,** the processing of personal data by private parties using drones is allowed only with the consent of the data subjects. In cases where it is impossible to obtain the consent of all the subjects captured, the GDPR allows the use of images only if the people involved are unrecognizable due to the distance, or for having implemented the obscuring of faces.

The drone, therefore, cannot be used to shoot, record or disseminate images with elements useful to identify or make identifiable people in the normal operations of their routine, such as: vehicle license plate, person who hangs clothes on the balcony at the eighth floor, condominium courtyards, sports centers, etc.

Through the drone, therefore, it is not possible to acquire images of facts or people that take place in places considered to be of private use. In fact, it should be noted that in terms of privacy it is lawful to document everything that can be seen with the naked eye. It follows that the use

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of telescopes, zoom-optics for photo and video cameras, spotting scopes, night vision goggles, light intensifiers, thermal visors and the like, and therefore also of drones, that is all those instruments that allow you to see what the naked eye cannot be reached, it constitutes a violation of the legislation on the protection of personal data and a possible violation of domicile with unlawful interference in private life.

At this point it should be understood that the drone cannot be used to document what is happening inside an apartment on the fifth floor of a building, because it would not naturally be visible from the ground. Another case could be the case in which you want to see from above the area of a garden that from the outside, due to the perimeter structure (hedges, fences, other ...), is unreachable to normal view. Consequently, any action taken to circumvent or overcome the systems put in place to guarantee confidentiality constitutes a breach of privacy.

The legislation does not express itself explicitly. On the basis of the most accredited guidelines, the use of the drone as an alternative tracking system can be considered legitimate by ensuring the elimination of all data collected that are excessive and irrelevant to the purpose of the investigative activity. Therefore, once the drone has been used, not only information concerning third parties must be deleted, but also all the information that could not have been acquired with the use of GPS.

# 03

# QUESTIONS ANALYSIS

The following is a summary of the participants' answers, by country.

**Portugal**

The following 8 organizations, involving 10 people participated in the survey:

- Aveiro Mag
- AEVA – CanalCentral (2)
- Tendências e Argumentos, Lda (2)
- Konkrets - Consultadoria e Formação
- DRAGONPRXAIS
- Status - Escola Profissional da Lousã
- Miguelcordovil.com (expert in drones)
- Sky Photo Lda

**Cyprus**

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**France**

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**??**

**Slovenia**

??

**Malta**

??

**Italy**

??

**In relation to the question: How are drones used in jobs and occupations in your country? In what context or circumstance?**

The following was stated:

**Portugal**

- Journalism
- Institutional communication
- Event coverage
- Security prevention
- Maritime and forest surveillance
- Military Information
  Traffic analysis; Reconnaissance in catastrophe situations
- Leisure
- Industrial maintenance
- Fire prevention
- Technical reconnaissance flights; Land survey
- Engineering (inspections / construction monitoring / mapping / agriculture).

**Cyprus**

- To capture images of a specific area for the purposes of parties or other events
- For photography, videos and Photogrammetry. Therefore, for advertisement, weddings, coverage of an event
- Used by the Police in order to monitor road traffic and by the Fire Department in the effort to find missing persons during fire outbreaks
- To capture footage during special events (e.g. weddings, christenings, etc.), help locate and rescue missing person
- For military purposes

**France**

**Sectors**:

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- Reports
- Advertisements,
- Tourism,
- Communications (different from journalism),
- Industry,
- Primary sector (agricultural management, search for raw materials),
- Secondary sector (fault finding, construction site management, technical inspection, large structures (aeronautics), buildings, etc.),
- Archaeology,
- Pollution monitoring,
- Urban planning & architecture (3D models are implemented in drone plans),
- Cinema.

Drone users can use their own images or videos or sell them to other entities. They can also have agreements with some structures to collaborate with them.
Market prices are generally high, in the order of 5k€ for 90" of final video output.
The French audio-visual industry works in-house or with production companies (~ 150, very concentrated in Paris but there are exceptions, notably FR3 Régions).

**Slovenia**

Drones are used for various purposes in Slovenia. They are mainly used in video production, photography, construction and geodesy, as well as in the military. Drones are also used in agriculture and the energy sector. The drone has been used on a trial basis in mail delivery and for medical purposes. It is also used in ports: during interventions, searching for illegal immigrants, for security and technical reasons. The use of drones in the field of protection and rescue is very useful: rescue operations in case of missing persons, floods, fire hazards, landslides and other natural disasters. They are also used by the police in their work, especially in controlling the state border and searching for missing persons. In addition, drones are also used for scientific research, television and reporting purposes, or special events. Drone companies also use drones for their services. The use of drones in aerobatics (aerobatics with different models, races with drones) is also interesting. The use of drones for private purposes is increasing.

**Malta**

Drones are mainly used for:

- Photography
- Videography

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- Surveillance
- Search and rescue

**Italy**

**In relation to the question: Are you aware of any training courses in the area of DRONES? If so, in what sector or level of education? Can you indicate the name and qualification, please?** The following was answered:

**Portugal**

- Course provided by ANAC (Agência Nacional de Aviação Civil = National Civil Aviation Agency, but the interviewer did not know the details of it.
- GFS – Global Flight School - https://gfs.pt/
- Professional/Vocational Drone Pilot Courses - https://cursodedrones.pt/ - Level IV
- EASA (European Union Aviation Safety Agency), A1 and A3 open sub category
- Aeronautical Training - DGERT (Direção Geral do Emprego e das Relação do Trabalho = Directorate-General for Employment and Labour Relations - and ANAC certified

**Cyprus**

Participants reported the following:

- Aware of simple certificates for drone flights
- There aren't any training courses as far as they know except the Remote Pilot School which is a program from the CY Government in order to take online exams and get a drone license
- Existence of summer schools in Cyprus which provide different activities and one of them is teaching and practicing of Drones
- Certain governmental exams to assess their knowledge/expertise and be able to use the drones

**France**

Training is mandatory depending on the usage scenarios. There are 2 types of training:

- Theoretical (CATT: 30 €) for which you can either train yourself (you must be assiduous and have a theoretical technical level equivalent to that required of a 4-seater aircraft pilot) or follow a training course (which easily reaches 1500 €).

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- Practical: in an approved training centre, from 1600 € to 2000 € for 35 hours of training and this can go up considerably with specialisation (cinema/infrared etc).

Some concrete examples:

- Prodroner (gautier veltri on youtube)
- École Telepilote in the Yvelines (French Region)

Also, the DGAC opened a platform: AlphaTango. Everyone can use it to follow drone training.

**Slovenia**

There are different types of training for the use of drones, from a basic course to a multicopter flying course to individual flying lessons in the field. In accordance with Slovenian legislation, preparation for the exam and knowledge of flight rules for drone operators is also organized for a specific type of use. Aerial surveys, courses for autonomous flights, programming of autonomous flights in geodesy, aerial video surveillance, use of thermal imaging cameras, use of multispectral cameras, night flight, FPV flights, special courses for firefighters and civil defense.

In Slovenia, there are no drone courses on a formal educational level, they are offered by private organisations. They offer various courses:

- Flight course with multicopter models
- Basic course for drone operators
- Course for aerial photography,
- Course for aerial video surveillance
- Course for the use of multispectral cameras
- Night flight course...

**Malta**

2(a) For the first question opinions were divided:

- 50% only answered yes

2(b and c) Those who replied yes to 2(a):

- Drone Pilot Training with Transport Malta
- certification in Training for Subcategory A1/A3 and A2
- Courses from TM
- Malta drone centre

Malta Drone Centre and Transport Malta

**Italy**

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**In relation to question: In your opinion, how can smart technologies such as Drones be used to encourage students to learn or increase their employment opportunities?**
The following was answered:

**Portugal**
DRONES are complementary assets to several areas of professional intervention and, being a relatively recent technology, can easily met the students' 'appetite' to learn and follow the evolution of this tool. Nowadays, this type of technology can be used in various circumstances, and students can and should increase and deepen their knowledge in these types of tools. For example, Civil Protection and Fire Departments already make use of DRONES to support specific situations. Through the use of DRONES, students are stimulated to have ideas that can influence the emergence of resources and projects that can increase the quality of life in society. The single study of the technology and processes that are required to develop drone projects (mechanics, engineering, programming, physics, mathematics, etc...) naturally helps students create critical skills and competitive advantages for their future, while clearly increasing employment opportunities. However, before they start using drones, they must receive proper training according to aviation rules, as such they must take the A1 A3 Open training.

**Cyprus**
Participants reported that:

- Drones can be very useful to capture events for a business and could be an additional skill in order to attract employers in the relevant industries i.e. videography, item delivery, surveillance etc.
- Some job positions may require drone skills in order to provide good capture of image
- Drones can be used to make learning and training more interactive and applicable to real-time life. A participant reported a related example, a trainee police officer could attend a class where drones can be used to present that traffic situation real-time, for specific areas
- To introducing technology in the classroom teaching (e.g. in verbal skills, languages, math)

Participants reported that drones can provide immense, new learning opportunities, they can alter the teaching environment and open up a space for learners and students to explore within the classroom while completely shattering the notion of closed and limited spaces. They can be introduced in schools as part from courses, outdoor activity, part of workshop.

**France**

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Drone use is increasing in many media, the demand is high today. Therefore, to be trained to pilot and to know all the legislation is a strong point and can be an added value for employment.

**Slovenia**

Technology can motivate young people, but there is a risk that young people will use drones too quickly because they do not have the necessary experience. On the other hand, drone use is very expensive and therefore less accessible to young people.

By using drones safely, young people can practice their motor skills.

Drones as a technology could be used in technical industries, so the main issue is to educate and inform people about the benefits, such as inspecting forests, fields, or electrical facilities with drones.

With a drone and a special app, roofers could calculate how many tiles they need. Drones could be used to search for missing people.

There are many applications for drones, but it would be necessary to accept drones not only as an entertainment tool, but also to use them in technical areas.

Any new technology can arouse and stimulate the desire for new knowledge. The desire for a new perspective, new functions, a better result.

Drones can play a similar role as computer games - they can be used for entertainment or as a serious tool.

Employment opportunities for young people are not currently improved by the use of drones, as most of them are only used in filming, where employment opportunities are limited. They would improve if they had additional skills, such as civil engineering, geodesy, journalism ...

However, opportunities for self-employment could increase. In Slovenia, most drone operators are amateurs and do not work with them professionally. For the new technological knowledge to catch on, the use of drones would have to shift from entertainment industry to service activities, and then this could become an employment opportunity. Right now, however, there are not many professions where a drone could be a full-time job.

On the other hand, it is better for professional cameramen, photographers or journalists to know how to use a drone, especially if it is a small production where you are supposed to do everything yourself. In wedding coverage, for example, it's important to use as few cameramen as possible so they do not stand out too much. Even in journalism, it's better to have one person filming from both the air and the ground. As we saw in the case of TV SLO, in some cases a journalist also films with a drone. So, it would be very welcome if a journalist also has knowledge of drones.

It is important that young people are introduced to drones at an early age, as mass adoption of this technology can help develop new uses, which in turn contributes to job growth in this field. In addition, learning about the technology at an early age raises young people's awareness of the safe use of drones and the need to follow certain rules in aviation.

**Malta**

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For this question not all participants were sure about how drones can be used for student's benefit:

- Drone technology is a useful tool, that can help students further develop their skills in photography and film production. It can also be used for surveying purposes.
- Exposure to drones and their mechanical and electronic operation as well as the coding and software innovations in drone technology open the doors to creativity in both the artistic sphere as well the technical areas like Engineering & IT. At the very least they can help students identify where their aptitudes lie.
- Drones (or more technology) should be introduced for young children where they build, arrange, and even break so as to interest them in getting curious how things work
- Drones are useful to study locations which are not easily reachable physically.
- Drones are one of the newest and most interesting and versatile tools available today. It can be used for several applications from filming to land scaping and 3d mapping.
- By using drones, students can become more attracted to media industry
- Search and rescue, first aid, pharmaceuticals deliveries
- The study of electronic and mechanical parts used and their further uses apart from Drones
- I have nothing against students learning about drones as a hobby, but Malta is a small island for employment opportunities using drones.

In relation to the impact on the student's development and learning process if they are introduced to drone technology at an early stage, not all participants knew how to answer this question, but the following remarks are the ones that did:

- Getting more familiar with operating drones and flying rules and regulations. In some fields of study, like Geography, they can get a unique perspective of the landscape and topography of their areas of study.
- Sometimes technology can be a bit of a "black box" to people. Exposure to such technology early can help with understanding of it which can sharpen problem solving skills and comprehension. It would also be beneficial to those who are more inclined to learn by hands-on experience rather than from textbooks and theory.
- Can't really say, but I'm sure that any tech helps development
- An appreciation to the beauty of technology and how useful it can be to even appreciate the beauty of the world around us.
- It is a steep learning curve, and you need practice that we call stick time to improve your overall skills
- They become more proficient with using such technology and abiding to rules
- Better understanding of future drones

Early know-how of technology. not necessarily drones

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**Italy**

**Drones in journalism**

**In relation to the question: How important is the use of DRONES in journalism in your country? How do you use them? What are your sources?**

The following was shared:

**Portugal**

In journalism, drones have proven to be a tool of great importance, because it allows to give a different and more comprehensive point of view, compared to what we are used to. It has more importance in the greater ease of capturing aerial images, which offer another visual perspective to journalistic work. Previously, this type of images was collected by image operators, mostly in helicopters, which made the process bureaucratically time consuming, expensive and risky for operators and pilots. With drone technology, all that is required is a license and a remote-controlled device, thus making the cost and risk significantly lower, which allows the use of drones in fighting fires, monitoring crowds, in fairs and processions for example, in capturing images in places of difficult access (in the mountains, for example).

**Cyprus**

Participants reported that:

- Journalists can be used to capture important events at the news; a drone will capture impressive footage for photos and videos.
- Drone use for photographs and videos.
- Could provide a good view of a landscape. And, also, that are not so much for Cyprus because are very small and images can being capture by helicopters too.
- At the moment, drones are not used in Cyprus by big publishing companies. Very limited use of DRONES in journalism in Cyprus; drones are not a mainstream way of broadcasting new information yet
- Several telecommunication companies might occasionally use drones to provide wide angles of shots but the primary sources of documenting news-worthy events still rely on traditional audiovisual equipment and methods.

Use of drones is very important in journalism. Could be used almost in every big event by professionals, but also from young people who are recently engaged with this activity and is used to cover events and to supplement the usually video-camera, for political speeches, interviews, etc.

**France**

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Drones is more and more used in journalism in France, especially for risky events where it can be safer to use drones than to send reporters. However, the legislation restrains the use in journalism as it is complicated to have access to a specific area with drones, and when events are not scheduled, drone pilots cannot have their access for a few days. Therefore, it complicates the process, and to overcome this situation they use bank image.

**Slovenia**

The use of drones is widespread in Slovenia, but not among journalists.

A newspaper journalist usually takes photos himself and does not have enough time to deal with the drone.

The use of drones in journalism depends on the type of article. They are useful in covering mass events - showing the size of the event, the crowd attending the event, and putting the event in space. They are useful for sporting events - they allow you to observe athletes, for example, on a ski slope, on a football field, at a bike race...

They are not useful for interviews, as such photos do not have a deeper news value and therefore do not add value to the article.

In TV journalism, on the other hand, there is again only one journalist and one cameraman, who usually do not carry a drone. Of course, the use of drones on TV is also very important in sports. TV SLO (Slovenian public broadcaster TV) does not own a drone! The drones on TV SLO are used by three people who own the drone - but there are no specific relationships and rules for the use, e.g. who is responsible if someone reports abuse - TV or an individual. The problem is that it is not clear how drones should be used, where they should fly, and where they should transmit.

Drones are most often used during important mass events and natural disasters. They are used only in exceptional cases, for which a special cameraman is hired or the footage is purchased.

It is also common practise to take photos and recordings via social media. In this case, the consent of the copyright holder must be obtained so as not to infringe copyright.

**Malta**

In Malta news companies usually sub-contract photographers or videographers that use drones. Malta is too small for a person to have a career as a drone operator. Drones are still not widely used in journalism.

However, they are used for:

- For filming purposes.
- Ariel photography
- Filming mostly. And a little bit of coding
- Filming, photos, ArcGIS mapping
- For videography purposes mainly for TV documentaries and weddings
- One interviewed was a freelance drone videographer

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**Italy**

**In relation to the question: How are drones transforming journalism?**
**The following was said:**

**Portugal**

They are changing journalism, especially in terms of costs. Before, you would have to hire a helicopter to take aerial images. They are also an added value because they have substantially improved the quality of image capture in places of difficult access or in the capture of large images and aerial views, with relative ease, speed and in real time. However, in addition to the control of the aerial dimension, increased horizon and mobility, the drone confers an impunity to the journalist (maximized in areas of conflict and disaster) that should be accompanied by an accountability of the operator, particularly with regard to privacy.

**Cyprus**

Participants reported that:

- Drones are more effective to capture events with better visual performance and it gives a more realistic sense.
- There is a saying, one picture is worth a thousand words. So, using drones for photography and videography makes everything better for the viewer.
- For example, Drone technology allows journalists to take footage of news events such as volcanic eruptions, war-torn villages, and natural disasters.
- Drones are very important for the journalism because is something innovative
- A journalist can show more landscapes of a place and provide information about that place
- They are not transforming it they just make it easier for journalists to capture an image. They could offer real-time event/news presentations enabling the target group to better grasp and understand a situation/event or other happening
- Drones can provide new outlets for documenting news. The idea of a journalist sitting behind a desk or running with a camera to be close to updates can be completely replaced with remote and safe access to documentation through drones.

Drones are transforming a lot the journalism as they are the latest technology to transfer a virtually reality to the viewers.

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**France**

It has allowed a new form of journalism: now drones are a lot used whenever events that can involve dangers or risks (such as war, or violent demonstration…) as it can protect reporters and avoid critical situations. Moreover, the investment in drones is not very expensive as it is inferior to 5 000 euros. Also, it can provide a better image in terms of quality and precision. Information can be more precise, and reporters take fewer risks.

**Slovenia**

The use of a drone in journalism is not the most important thing, but it is crucial for creating a different dimension of the image, a view of a broader situation of the events captured. It helps the viewer understand the perspective of the place from a different angle. Drones have made it possible to show certain events, places and important scenes in completely different dimensions and in a simpler way. A drone is very useful for certain shots - for example, during a traffic jam.

Drone footage is used to place the journalistic piece in space. They are especially useful in places where you cannot take shots from a higher position.

However, the drone is also of great use because it can be used instead of a helicopter - it is cheaper and the shots are better because drones are made only for aerial photography.

**Malta**

- By getting more cinematic and creative footage.
- Less people and work needed to achieve arial shots
- Initially drones where in the hands of few, so drone shots were something of a special effect. As they have fallen into the hands of many, both amateur and professional, as social media has provided many platforms for this to thrive in, drone shots in filming has increased drastically, and given many the platform to be creative in. However, as countries are increasing their drone laws, this has become somewhat difficult again.
- Cheaper than helicopter, so footage is now more accessible to most people
- Drones gave space for more creativity in the media industry in general
- They are in high demand and a drone give you that impressive birds eye view perspective that in older days used to cost thousands to rent a helicopter and a camera crew to film from the air
- Making easier to get to remote areas
- Introduced affordable aerial filming
- I was the first person who started using drones in weddings, it transformed the filming sector by getting unique shots from a bird’s eye view of our island, ports, cities, fireworks etc.

**Italy**

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**In relation to the question: Can you mention some examples of how professionals in the media sector are using drones in their jobs and tasks?**
The following was mentioned:

**Portugal**

- Reporting on nature or more inhospitable locations
- Aerial videos and photos with faster execution.
- All national television stations are using this equipment.
- With the use of images captured by drones it is possible to create and develop work with more quality, differentiating images, thus providing a higher quality in the final work
- Event coverage with video transmission in real time.

**Cyprus**

Participants reported that:

- Drones are used to an event, professionals can capture pictures with drones with the people that attend the event, photography videography.
- Mostly is for advertisement and weddings:
    - Sell a building (Drone photos and videos)
    - Advertise an event
    - Wedding
    - Advertisement in general
    - In special occasions like big events

- Provide a picture of a bridge from above which has fallen due an event
- In a car accident they can provide a picture from above of the ground for better view
- Drones are replacing helicopters due to their low cost and lack of putting human life at risk (e.g. when capturing video/photo footage for accidents, natural disasters, active conflict areas, etc.)
- Drones are mainly used to capture events/moments with large crowds or in outdoor spaces where wide angles and overall shots of the place can be difficult to shoot
- News reporting, video-taping, taking aerial pictures

**France**

For example, NepTV was using drones during the quarantines: they were mapping the Lille region to give unique shots of the deserted cities. They also added a new subject to their magazine as they now take aerial shots of cathedrals for a specific program.

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**Slovenia**

Some media houses use drones only as a promotional tool, e.g., for beauty shots, others for visual representation of a particular problem or challenge, for views of natural landmarks or possible natural disasters, etc.

The use of the drone needs to be well thought out. At some point, you might overdo it and not give the viewer a true picture because we have a different field of view and it confuses us - just a few shots are great. Shots from human or frog perspective must be combined with drone shots.

**Malta**

- I use it in wedding videos.
- Filming & photography
- Drones have infiltrated almost all types of videos; from promotional product/service videos to e.g. wedding videos, vlogs and personal projects.
- Integration of video and sensors to solve mapping problems in various applications
- Fb videos for IM, most setting of the scenes in the beginning of videos on social media use first shot to attract viewers
- Drones give a quick establishing shot from a more interesting angle and perspective
- One of the interviewers used his drones in weddings, private events, commercials, festivals, documentaries, movies ECT
- Taking aerial shots and for following subjects such as moving cars, News reporting, environmental assessments

**Italy**

**In relation to the question: What is the legislation which regulates the use of drones? What are the main challenges and difficulties?**

The following was said:

**Portugal**

ANAC is the authority that regulates civil aviation in Portugal and has drawn up a regulation that sets the rules applicable to the use of unmanned civil aircraft, commonly known as "drones". The new drone law is creating difficulties for users, insurance is expensive, there are few insurance companies available and training certificates have to be obtained abroad. The biggest challenge is to create a law that covers existing and future drones and to define what types of licenses are needed to operate the different types of drones.

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Before flying over, a flight permit must be applied for from the AAN (Autoridade Aeronáutica Nacional - National Aviation Authority - https://www.aan.pt/ ), particularly in restricted areas.

**Cyprus**
none

**France**
None

**Slovenia**
**None**

**Malta**

- Regulations set up by Transport Malta.
- Safety regulations
- Drone usage has become highly regulated and enforced and this varies from country to country and various types of drones. In most cases some form of certification is required.
- Transport Malta
- Regulations by the European Union Aviation Safety Agency
- There is a whole lot of regulations that one needs to follow before flying a drone especially ceiling hight, category in which you are flying in, airport vicinity, manned aircrafts around ECT.
- Local regulations issued by TM
- As per Department of Civil Aviation and EU regulations
- No flight zones

ED Decision 2019/021/R

**Italy**

**In relation to the question: What skills does a professional in the field of journalism need to have in order to use DRONES?**

**Portugal**
In addition to the knowledge and scrupulous compliance of the legislation, namely the effective registration of the drone, the civil liability insurance, the limitations on flying over populated areas and forbidden zones, it must comply with the legislation on Data Protection and have a

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pilot with the necessary proficiency, as well as sensitivity in the image area in order to be able to bring the best image to the viewer.

**Cyprus**

Participants reported that you need:

- Ability to use and control the drone in any circumstances and weather conditions.
- Has to be technically savvy
- The professional has to know the legislation and have a license. Apart from this, he/she has to know how to fly safely and a little bit knowledge of taking photos and videos.
- Has to know from technology, learn as much as you can about photography, Learn as much as you can about videography
- Remote control of drone due weather conditions and photography
- Drone control and photography
- Communication, photography and videography and Drone Navigation skills
- Knowledge on how to operate a drone

They would need to pass the written exams and register their drone, given they have this, they would need to have a good perception of how to use drones effectively to benefit from their use 3D skills, IT skills, photography skills, etc.

**France**

A lot of experience in piloting. Sometimes you have to practice for 2 years to be really at ease with your drone. It can be compared to airplane pilots whose level is directly linked to their flight's number.

The experience teaches you the qualities of shots, while training teaches you safety rules and piloting techniques. Therefore, experience makes all the difference.

**Slovenia**

In order to use drones, a person must have the appropriate license.

The journalist must be clear about how he or she intends to use drone photos or footage so as not to confuse readers/viewers.

Especially in Slovenia, it can be observed that drones are used by people pursuing personal interests, as the use of drones in journalism is completely unregulated. Media houses do not have their own drones, individual journalists use their own drones or hire cameramen for special occasions.

Special knowledge, skills and behaviors are extremely important for drone use - you need to know the rules for safe drone use and practice a lot in areas where they do not compromise safety. It is also very important to master the filming language, take high quality shots and place them appropriately in articles.

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**Malta**

- Drone Pilot Licence by Tm.
- Flying skills, flying stability
- Creativity & the ability to think in 3D and to multitask on operation as well as getting the right shot at the right time.
- Training and ethics
- Creativity is a must apart from learning how to fly a drone which becomes better with more practice.
- You need to have simulator training and complete transport Malta's licences if you are flying drone over 250g in weight
- Computer skills, coordination, and discipline
- Able to fly in VLOS

Strong concentration skills, the ability to remain calm under pressure, the ability to make quick decisions in emergencies.

**Italy**

**In relation to the question: What are the learning results to be achieved by a young person who wants to pursue a career in journalism using DRONES? Please indicate the Knowledge, Skills and related Attitudes you should demonstrate.**

The interviewees, at a transnational level, have agreed that any person willing to pursue a career in journalism using DRONES need, first of all, to be resilient and able to life-long-learn. DRONES will improve a job in the journalism sector by enhancing better reporting and news writing. Experience in filming/shooting/photography on the ground is an advantage too. Then, it is necessary to practice a lot. It is very important, though, at the beginning, to practice in an uninhabited area.

It is important that the person learn the technical components of the Drones very well. It is very relevant to possess communication skills and communicate effectively when flying a drone for an efficient operation. Only this way, can they take photos and do videos using DRONES properly. Strong interest in aviation, good concentration skills, ability to remain calm under pressure, IT and math's skills, the ability to make quick decisions in emergencies, give accurate instructions and accept considerable responsibility when managing and using the drone, as well very good domain of its software pre-, during, and post-production is very important in any person willing to work using Drones. Last but not least, all interested parties in using Drones must be aware of the respective local laws which are usually covered in the courses available to complete license A1/A3 and A2.

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| Knowledge | Skills | Attitudes |
|---|---|---|
| Identifies the different visual workflow of journalistic pieces. | Manages and applies images, plane framing, image formats, photos, lighting, film language, basics of filming and editing.. | Shows capacity of adaptation to different settings and tools/resources |
| Lists the different pieces of the aircraft, its capabilities and limitations and respective software. | Manages and assemble the different pieces and/or tools/resources | Shows resilience and patience |
| | Performs calibration and system setting on set | Strictness<br>Persistente |
| Names the procedures of using drones properly. | Handles the aircraft properly (manages procedures such as not flying over a crowd, not exceed the maximum permissible flight altitude, avoid restricted zones, etc) | Communicates accurately for an efficient drone operation<br>Is careful and focused when using the drone |
| Gives instructions to cameramen when it is needed specific interaction. | Coordinates, pilots and guides drones, operates aerial videography.. | Is able to remain calm under pressure. Takes quick decisions in emergencies, gives accurate instructions and accepts considerable responsibility |
| Recalls the law governing the operation of drones and current data protection law.<br>Knowledge of the regulations and laws of the | Administrative skills (for the requests the authorization for public spaces)<br>For basic flight scenarios, beginners tend to | Respects people on the ground regarding privacy and does not create situations of physical danger on the ground and in the air. |

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| country where the drone will be used. | undercharge and underestimate the administrative preparation and editing time (which is a real professional skill) not to mention the charges. | Reveals resilience. Flies with the notion that the pilot is civilly responsible in case of an accident.<br>Shows Compliance with the rules for the use of drones<br>Shows responsibility in the use of drones |
| Lists ethics issues | Applies deontological procedures | Shows respect towards privacy and the others |
| Underlines the weather conditions | Recognizes suitable conditions to use the aircraft. | Shows responsibility for the environment where the drone is being operated, preventing possible situations (loss of GPS signal, loss of visibility of the aircraft to the naked eye).<br>Compliance with weather forecasts |

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# 04

# Relationship between UAV / drones and the labour market and occupations: best practices and success stories

**Portugal**

**Name of the Good Practice and/or success story**: Drones encourage agriculture in Tunisia.

**Description:** Use of drones in the agricultural sector to considerably optimize the work of Tunisian farmers in the near future.

**Objectives:** Enable farmers to make reliable and relevant decisions for better management of their land;

**Target group:** Farmers

**Name of the Good Practice and/or success story:** Aerial image capture in the implementation of awareness or social actions.

**Description:** Capture of aerial images in the realization of awareness actions or social content, particularly in raising awareness for children suffering from oncological diseases, autism, etc;

**Objectives:** To draw the community's attention to these causes, using impactful images;

**Target group:** The entire community

**Name of the Good Practice and/or success story:** Project SALAMANDRA, company DRAGONPRAXIS - timely detection of fire outbreaks, deterrence and communications support (Municipality of Sever do Vouga).

**Description:** This company is developing, with the support of IAPMEI and the University of Aveiro, an early forest fire detection system for immediate alarm and attack to an ignition through the use of a set of sensors that detect the smell of burning, when flying over the forest area of the county.

**Objectives:** To prevent the development and spread of forest fires, reducing the damage of ignitions; To contribute to the dissuasion of dangerous activities, to support combat operations, namely at night, and to land planning.

**Target group:** Population, residents.

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**Name of the Good Practice and/or success story:** The site "voa na boa".

**Description:** Provided in a simple way the rules of operation for drones in Portugal
**Objectives:** To inform pilots and future pilots about the rules.

**Target group:** Drones' pilots

**Cyprus**
**Name of the Good Practice and/or success story:** Drones to Fire Prevention
**Description:** Rescuers were the drone assistance of the Unmanned Systems Research Laboratory (USRL) of the Cyprus Institute (IKY), which during an observation flight for possible fires, spotted a malicious fire attempt in a rural area in Orunda.
With the help of a pilot of the Cyprus Institute, the drone approached the spot, as a result of which the perpetrator was forced to extinguish the fire, before it spread. At the same time, the drone operator informed the Police and pointed the spot to the members of the local Police Station Peristeronas, who undertook the further investigation of the case.
**Objectives:** Preserving cultural heritage in case of fire.
**Target Group:** ---

**Name of the Good Practice and/or success story:** Coronavirus: Thermal cameras and Drones to be used for traffic checks during curfew
**Description:** Police used a number of thermal cameras belonging to the national guard and drones to monitor traffic during the night-time curfew it was announced on newspaper.
**Objectives:** Used to monitor road traffic under the new stringent measures which ban traffic from 9pm until 6am.
**Target Group:** The entire community

**Name of the Good Practice and/or success story:** Coronavirus: police watched from the skies to enforce Easter lockdown
**Description:** Helicopters and drones used by police to check movement regulations over the Easter weekend as part of measures to stop the spread of coronavirus.
**Objectives:** To prevent the spread of the virus
**Target Group:** The entire community

**France**
**Name of the Good Practice and/or success story:** Taking advantage of empty streets during quarantine

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**Description:** NepTV were using drones during the quarantines: they were mapping the Lille region to give unique shots of the deserted cities.
**Objectives: To o**ffer a new perspective on the region
**Target Group: ---**

**Name of the Good Practice and/or success story:** Cultural preservation
**Description:** Archiving of images taken from the interior of several monuments to preserve the images. This initiative follows the fire at Notre-Dame de Paris.
**Objectives:** Preserving cultural heritage in case of any type of accident.
**Target Group: ---**

**Slovenia**
**Name of the Good Practice and/or success story:** Shooting a large hazardous waste fire in 2017

**Description:** Five years ago, in Zalog near Novo mesto, a major fire broke out in the company Ekosistemi, which dealt with the company's waste processing. Firefighters managed to contain the blaze at the plant, but the extent of the fire was unknown. Plastic waste was burning, mainly polyvinyl waste, as well as wood crisps and wood waste, and part of the solar panel plant also caught fire. The well-known Slovenian photographer Borut Peterlin, who lives nearby, immediately went to the scene to document the fire from the perspective of nature conservation. He took pictures with a drone he had only owned for a few months, even though he knew he was breaking the law. Fearing trouble, he published the photos under the pseudonym Manfred von Richthofen (Red Baron of World War I). The photos were picked up by the media and actually signed with a pseudonym, as many people did not even know who was behind the name. The most important result is that the factory was closed after this fire. Borut Peterlin, photographer, Borut Peterlin | Facebook Gallery of photos published in newspapers: Galerija: Požar do poldneva obvladali, a na požarišču še tli - title (zurnal24.si); Article with drone photos: Podjetje Ekosistemi ob okoljevarstveno dovoljenje | Žurnal24 (zurnal24.si). Cerar obiskal pogorišče v Zalogu | Žurnal24 (zurnal24.si)

**Objectives:** The goal was to inform the public about the environmental disaster and prevent it from happening again. He decided to make his photos available to all media houses.
**Target Group:** At first he took photos for himself as a professional photographer, later he made the photos available to a number of media houses.

**Malta**
**Name of the Good Practice and/or success story:**
**Description:**
**Objectives:**
**Target Group:**

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**Italy**

**Name of the Good Practice and/or success story:**

**Description:**

**Objectives:**

**Target Group:**

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05

# CONCLUSIONS

All partners agree that drones have revolutionized technology and have brought numerous advantages to different industries, including journalism. They allow the capture of images in real time, they are fast and reliable, they are also an important technology for the future of warfare and are about to become a major commercial industry.

The use of drones is constantly increasing in all partner countries, both for hobbyists and for professional use. While most drones are used by amateur photographers, videographers and flying enthusiasts, professionals are also using drones to capture images that would have been either too expensive or impossible to do without the use of drones.

Regarding legislation, Portugal is governed by COMMISSION EXECUTION REGULATION (EU) 2019/947 of May 24, 2019 on rules and procedures for the operation of unmanned aircraft. This Regulation lays down detailed provisions for the operation of unmanned aircraft systems and for their personnel, including remote pilots and organizations involved in such operations.

Cyprus introduced regulations controlling the use of drones in 2015, by Ministerial Decree No. 402/2015 (the “Drones Decree”) and Decision No. 403/2015 (the “Drones Decision”), both issued pursuant to the provisions of the Civil Aviation Law of 2002, as amended.

In France, it is necessary to be registered with the DGAC (Direction Générale de l’aviation civile), to be declared as a company, a craftsman or a self-employed person, to have a Declaration of Level of Competence (high technical level + video editing skills), a MAP (Manual of particular activities), professional insurance, a declaration of aerial photography and cinematography activity and, depending on the case, to apply for administrative authorisations.

In Slovenia all rules governing the use of drones are set by the Civil Aviation Agency - CAA (https://www.caa.si).

Malta is a member state of the European Union and so it is covered by the two main regulations issued by the EASA (European Union Aviation Safety Agency) on the use of drones. These are the Commission Delegated Regulation (EU)2019/945 and Commission Implementing Regulation (EU)2019/947.

As we can see, although all partner countries belong to the EU, only Portugal and Malta are governed by the regulation defined by the EU, all other countries follow their national laws. However, although the legislation is different, it can be seen that the main difficulties and challenges are broadly the same for all. The partners mention the following: administrative management is really heavy, the insurance is expensive; there are few insurance companies available; training certificates have to be obtained abroad; Geographical restrictions; the

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demand permission: many things are framed so it can be difficult to use drones or to sell images because it is not legal.

Through the interviews, we can see that the participants agree that in journalism, drones have proven to be a tool of great importance, because it allows to give a different and more comprehensive point of view, compared to what we are used to. It has more importance in the greater ease of capturing aerial images, which offer another visual perspective to journalistic work. Previously this type of images were collected by image operators, mostly in helicopters, which made the process bureaucratically time consuming, expensive and risky for operators and pilots. With drone technology, all that is required is a license and a remote-controlled device, thus making the cost and risk significantly lower, which allows the use of drones in fighting fires, monitoring crowds, in fairs and processions for example, in capturing images in places of difficult access. However, the legislation restrains the use in journalism as it is complicated to have access to a specific area with drones.

Thus, we can conclude that drones are here to stay and to increasingly improve journalism. It is also hoped that with the increase of the number of users the laws will become more accessible.

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