



### Questions and Answers: Drone Strategy 2.0

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#### 1. Have drone operations been regulated at EU level so far?

Following the [Commission's Aviation Strategy of 2015](#), the EU adopted a comprehensive drone regulatory framework, contributing to the development of this promising sector. Since 2018, all drones, irrespective of their weight, [are subject to harmonised safety rules regulating drone operations](#). In addition, to ensure safe drone operations in airspace, the Commission adopted several Regulations providing an air traffic management system for drones.

These rules are the cornerstone of the new EU drone regulatory framework, facilitating the development of the drone industry and the drone services market.

#### 2. For what kinds of operations are drones already used and why are they of economic importance?

Drones are already used as tools on a daily basis in an ever broadening array of economic sectors, such as agriculture, construction, surveillance, film-making, healthcare, emergency medicine, energy, the environment, public safety and security.

They are already used as daily tools for surveying infrastructure for safety improvements, monitoring of oil spills and crops, research data collection, and improving urban planning. Advanced projects on medical air mobility and testing of use case applications for search & rescue are also underway.

Drones could be used in the future as platforms for communication hubs, or for weather and pollution monitoring, for example, as well as for the maintenance of renewable energy installations, especially for offshore wind.

In the transport sector, the use of drones for deliveries is already being tested in many countries. The first pilot trials in passenger transport are expected to take place in the EU in just a few years.

With the right framework in place, the drone services market in Europe could by 2030 reach a value of €14.5 billion, with a compound annual growth rate of 12.3%. This would create 145,000 jobs in the EU. The different segments of this market are constantly growing, attracting new companies, including SMEs, and increasing operations.

#### 3. What has the Commission already done in support of the drone industry?

The Commission has since 2007 supported research and innovation to develop new drone technologies, including through the SESAR research and innovation programmes. Since 2021, thanks to a [European partnership between the private and the public sector](#), the EU is investing more than €1.6 billion to accelerate the creation of a Digital European Sky, contributing to the safe integration of drone traffic within European airspace.

#### 4. What could a future with drones look like?

The Drone Strategy 2.0 is guided by a 2030 vision for the use of drones in the lives of Europeans.

- Drones will be used to provide numerous services to the benefit of diversified civilian and defence end-users, including citizens, organisations, Member States and industry. Drone aerial operations will include emergency services, inspections and surveillance operations within the applicable legal frameworks, and will involve gathering data and goods delivery.
- Innovative Air Mobility services, such as air taxis, will start providing regular transport services for passengers, initially with a pilot on board, but with the ultimate aim to fully automate operations. Drone services will effectively integrate or complement existing transportation

systems and contribute to the decarbonisation of the transport system by providing an alternative to carbon-intensive modes of transport, while minimising their impact on the environment throughout their life cycle.

## 5. Why include defence aspects within the scope of the Drone Strategy 2.0?

The 'Action plan on synergies between civil, defence and space industries' adopted in February 2020 highlighted the importance of synergies between the civil and defence drone industries, including counter-drone technologies. This is an important success factor for the competitiveness of the European drone eco-system, as well as the EU's defence capabilities.

## 6. Does the strategy also address the security dimension?

The threat of non-cooperative drones is a serious concern in Europe. This is why the Commission introduced in 2020 new policy actions to counter these possible threats. They are foreseen in the [EU Security Union Strategy](#) and the [Counter-Terrorism Agenda](#). Moreover, the Commission proposed this year to introduce obligations for Member States and critical entities to conduct risk assessments and take appropriate measures to ensure their resilience against identified risks, such as terrorist attacks. To ensure a coherent technological development, the Commission will adopt a counter-drone package, to address malicious and non-cooperative use of drones in the EU airspace, which will tie together all the different counter-drone initiatives in the EU. Drones and related control units constitute highly advanced and complex platforms and, like any similar digital system, they are vulnerable to hacking and misuse. For this reason, the Commission will work towards increasing drone system resilience by defining criteria for a voluntary 'European Trusted Drone' label that would allow any end-user to operate such trusted drones in confidence. The label builds on and will be compatible with the Cyber Resilience Act proposal.

## 7. What are the main market segments of the EU drone services market?

The drone services market includes two interlinked areas:

1. On the civil side, the new Innovative Aerial Services (IAS), includes two segments:
  - 'Aerial Operations' (surveillance within the applicable legal frameworks, inspection, mapping, imaging, ...), and
  - 'Innovative Air Mobility' (IAM), covering international, regional and Urban Air Mobility. Although the first IAM operations are expected to be conducted with manned electric Vertical Take Off and Landing (eVTOL) aircraft, such operations will likely be performed on similar platforms that are remotely piloted in the future, and then fully autonomous.
2. The drone sector also includes the defence/military dimension with a view to creating technological synergies between civil, security and defence sectors.

## 8. Who are the main actors in the EU drone market ?

The drone industrial ecosystem comprises several, interlinked segments:

- **Drone operators** using drones to provide services or to transport goods or people.
- **Drone manufacturers** producing hardware, and producers of other payloads to be integrated within drones, e.g., for filming, inspection, cargo, monitoring or measuring purposes.
- **Technology providers** for the platform developing equipment and software systems for communication, flight control, situational awareness, or to enable autonomous operations.
- **Distributors selling or renting finished drones** to third companies.
- Ground infrastructure operators such as vertiports and airports, Air traffic management suppliers (e.g. ANSPs, U-space service providers, Common Information Service Providers) and finally,
- **Telecommunication infrastructure providers**, as well as navigation and surveillance infrastructure providers.

## 9. What is the U-space?

The 'U-space' ('U' for Unmanned) is a European system being developed to manage drone traffic. It will be operational as of January 2023, increase airspace management capabilities and ensure safe and efficient access to airspace for a large number of drones.

## 10. When will we see 'flying taxis' operating in urban areas?

Air taxis belong to the category of 'Innovative Air Mobility' (IAM) services. They provide regular transport services for passengers and goods and allow to cut down travel time. Until now, air taxis have been operated by a pilot but one of the key objectives of today's Strategy is to fully automate these small aircraft. The Olympic Games in Paris in 2024 is one of the target dates for certain operators to start such pilotless transport services, but other initiatives are already underway in several European cities.

## For More Information

[Press release](#)

[taff Working Document](#)

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