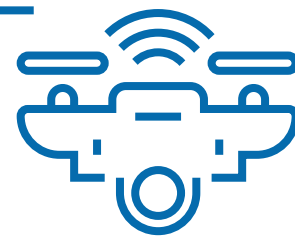


# WE ARE ALL ONE IN THE SKY



There is only one sky and all stakeholders, new and traditional, need to collaborate to keep it safe, secure, efficient and fair.



The Signatories support the European regulatory authorities in producing a robust, harmonised, EU-wide regulatory safety framework that enables the safe, secure, efficient and fair integration of drones in the aviation system, and fosters broad public acceptance.

Since the Drones Helsinki Declaration in 2017, which called for simple and performance-based rules for drones, significant progress has been made in developing and delivering a regulatory framework that will support the safe and sustainable growth of the drone industry.

However, in order to facilitate the integration of drones in very low-level airspace (i.e. below 500 ft) and preserve the high level of safety in the entire European airspace, we jointly call to accelerate the implementation of the following measures.



## 1 Extensive public awareness campaign

The general public, including recreational/occasional drone users, as well as commercial clients, must be aware of the safety risks, duties, liabilities, insurance requirements, responsibilities and third-party privacy issues associated with drone operations. These are essential requirements as lack of awareness and negligence could result in safety incidents and accidents. Therefore, more resources must be dedicated to this aspect of drone integration in the airspace.

## 2 Mandatory training and certificate/license relevant to operations

The obligation for drone pilots to obtain a certificate or license aligned with EU regulation – depending on the properties, performance and features of the drone – creates awareness and mandates knowledge of the applicable regulations and restrictions as well as helping to develop the necessary skills. Practical training and theoretical knowledge requirements for unmanned aircraft pilots constitute an important safety net to prevent drone incidents or accidents. A solid knowledge and skills base is therefore a must, considering the complexity of the national and European airspaces and related aviation regulations.



### **3 Airport protection from Drone intrusions**

Drone related disruptions<sup>1</sup> (e.g. at Gatwick/LGW, Heathrow/LHR, Dublin/DUB) to traditional aircraft operations and their impact on airport operations and aviation safety have raised significant questions about how to handle such situations. It is incumbent on all industry stakeholders – from both manned and unmanned aviation – to be prepared to protect the security of aircraft operations in coordination with their competent authorities and law enforcement agencies. All these parties, including recreational drone operators, must be aware of operational requirements and national laws and regulations pertaining to manned and unmanned aviation.

Our common and primary concern are drones flying at low altitudes near airports and helicopter landing sites that could threaten aircraft taking off or landing. Regulation must be in place for countermeasures and a safety case must be produced to determine the level of ‘power’ given to the security forces.

It is essential to clearly define the roles and responsibilities of each stakeholder (e.g. airports, air navigation service providers and authorities) with regards to the detection, identification and neutralisation of drones.

Members States must ensure that all drones operate within clearly defined and known limitations taking into account existing/traditional aviation procedures. Enforceable and strict legal and/or administrative sanctions must be ensured in each State when users of drones endanger aviation by violating the existing rules.

### **4 Incident reporting**

To ensure the utmost in safety and security, it is vital to capture as much safety/security related information as possible. Reporting any incidents/accidents surrounding drone-operations is an invaluable tool in this context. Everyone, including non-involved persons, should be able to report such occurrences based on a non-punitive system, similar to the philosophy of Just Culture<sup>2</sup>. It is paramount

to convey to operators, legislators and general public that the focus is improvement in safety levels through safety investigation and learning from these occurrences, and not to pass blame. An easy-to-use reporting system should be available for this purpose. For maximum safety it should facilitate the use of existing reporting lines/databases and be harmonised across Europe.

### **5 Increase in the effectiveness of enforcement**

It is essential that States have the appropriate resources, power and means to enforce regulation. To guarantee the safety of manned aviation and third parties on the ground, enforcement bodies must receive training and technical equipment to monitor regulatory compliance.

Also, the registration of drones/drone operators as well as the requirement for a drone pilot certificate/license will greatly facilitate such enforcement. If the operators/pilots can be traced, they will comply with rules and regulations.

### **6 Situational awareness of all manned aircraft**

There is currently no defined path for the integration of manned and unmanned aircraft in uncontrolled airspace, i.e. the airspace in which users are not mandated to use air traffic control services. One of the greatest challenges is that there are presently no adequate technologies (or spectrum) for users to make themselves visible (i.e. transmit electronically their identity or location).

As long as there is no international consensus on how this should be worldwide implemented and addressed, situational awareness of all drones and manned aircraft will not accommodate complex drone operations such as BVLOS and autonomous flights.

We support the ongoing efforts by the European Aviation Safety Agency (EASA), EUROCAE and other standardisation organisation and offer our support in addressing this issue.

<sup>1</sup> – [https://www.womenwhodrone.co/single-post/2019/02/05/Drones-are-the-New-UFOs---the-lasting-impact-of-Gatwick-and-Newark?fbclid=IwAR3MVO\\_Sna5hsVijn-T6adVQI2yXlwnqI-Up1r110imH6mBYc7VxmDI2aU](https://www.womenwhodrone.co/single-post/2019/02/05/Drones-are-the-New-UFOs---the-lasting-impact-of-Gatwick-and-Newark?fbclid=IwAR3MVO_Sna5hsVijn-T6adVQI2yXlwnqI-Up1r110imH6mBYc7VxmDI2aU)  
<sup>2</sup> – [https://www.canso.org/system/files/Regions\\_and\\_Programmes/Just%20Culture%20Toolbox%202018.pdf](https://www.canso.org/system/files/Regions_and_Programmes/Just%20Culture%20Toolbox%202018.pdf)

## 7 Traffic management for drones – UTM/U-Space

The European Commission's 'U-space' initiative provides a policy framework for the safe integration of drones. U-Space systems are being designed to support safe, efficient and secure access to airspace for large numbers of drones and ensure a proper interface between the drone world and manned aviation, ANSPs and other relevant authorities.

The evolution of U-Space systems relies on greater digitalisation, automation and higher pace compared to conventional air traffic management evolution. U-Space systems must be interoperable with existing air traffic management (ATM) systems and must demonstrate that they provide an equivalent level of safety and compliance with the applicable and forthcoming rules. As in ATM, a collaborative approach between stakeholders is essential in ensuring efficient and effective services.

ANSPs are best placed to provide a number of essential U-space services critical to its success, while ensuring safe integration with ATM. ANSPs have the appropriate safety, airspace and traffic management culture, expertise and skills as well as the means to implement key U-space services. Many ANSPs are proving this already through the delivery of UTM-related projects, often in partnership with new drone technology companies.

## 8 Further research into essential areas

We welcome and actively support the European Commission's initiative to create the U-Space Demonstrator Network, a forum dedicated to sharing knowledge and accelerating the safe and fair integration of drones. Concerted research action is needed to allow all stakeholders to maximise and best exploit their research efforts.

Additional research is still required on essential areas like contingency procedures, geofencing, surveillance, ATM-drone pilot communication and impact of collisions between drones and all types of manned aircraft.

While the risks related to bird strikes are well known, it is still unclear what damage smaller drones could cause to manned aviation. Also, there is little scientific insight

and research into which type of drones would cause only limited or no harm to people on the ground. Hence, there is a need for scientific research and testing in order to understand which mitigating measures can be taken or if new regulation can be made more proportionate. We therefore welcome the EASA Research Agenda 2018-2020 which announces a research project on vulnerability of manned aircraft to drone strike, including engine impact tests.<sup>3</sup>

**The Signatories are committed to supporting and working with Authorities and all the stakeholders in the implementation of the above measures in order to foster the safe and fair integration of drones in our skies.**

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