Aviation - Policies on drones in the transport sector: EASA delivers broker solution to enable European-wide sharing of drone registration data

Andrea Antolini Former Researcher JTTRI

However, due to the impacts of the COVID-19 pandemic, its applicability was postponed until the end of 2020. Accordingly, as of 31 December 2020, drone operators will have to be registered with national authorities. Furthermore, as of January 2022, national authorisations, certificates, and declarations must be fully converted to the new EU System.

In order to facilitate the transfer of drones’ information data between the EU Member States, the EASA announced the launch of a digitalised and secure system for the exchange of drones’ registration data among the national authorities of the EU Member States. Based on EASA’s drone registration data exchange system, operators of drones will be able to fly their drones anywhere in the EU, after they have registered with their national aviation authorities.
1. The new EASA Basic Regulation on the operation of unmanned aircraft

Unmanned aircraft systems (UAS) or “drones” are a fast-developing sector of aviation with great economic potentials. They are expected to offer many opportunities for new services and business models, particularly in the urban areas. However, at the same time, they can also cause safety problems for manned aviation and others. Since the drone market is developing rapidly, the EU has to harmonise its fragmented regulatory framework. Regulations need to cover safety rules for drones in order to achieve a safe utilisation of drones and the regulatory framework needs to be harmonised at EU level in order to create a level playing field within the EU.

The EU’s first-ever common rules for civil drones of all sizes were introduced in September 2018. The Regulation (EU) 2018/1139 empowers the European Aviation Safety Agency (EASA) to propose to the European Commission the technical expertise to regulate drones of all sizes.

This so-called new EASA Basic Regulation establishes the mandate for the EASA to cover EU aviation and drone standards and formalises EASA’s role in areas domain of drones and urban air mobility. The new Regulation (EU) 2018/1139 also gives EASA a greater role in areas such as coordinating cybersecurity in aviation, in environmental protection, research and development, or international cooperation.

The Regulation is meant to be a starting point for EU drone rules and for standards in EU Member States. A reform of the aviation rules was also necessary as EU air traffic is estimated to increase by 50% in the next 20 years.


As the use of drones is steadily increasing, there exists also an increasing need to regulate the issues regarding safety, data protection, privacy, noise and CO2 emissions. On 12 March 2019, the European Commission adopted EU-wide rules setting technical requirements for drones in its Commission Delegated Regulation (EU) 2019/945 on unmanned aircraft systems and on third-country operators of unmanned aircraft systems (C/2019/1821). In addition to the technical requirements for drones and the requirements for the design and manufacture of UAS adopted in the Delegated Regulation (EU) 2019/945 of 12 March 2019, the Commission intended to adopt provisions covering the operation of drones and operation conditions, which are defined in the Implementing Regulation (EU) 2019/947 of 24 May 2019. The Implementing Regulation (EU) 2019/947 on the rules and procedures for the operation of unmanned aircraft lays down detailed provisions for the operation conditions of unmanned aircraft systems as well as for personnel, including remote pilots and organisations involved in those operations.

The Commission Implementing Regulation (EU) 2019/947 and the Commission Delegated Regulation (EU) 2019/945 define the overarching subdivision of UAS operations into three categories including the Open, Specific and Certified Category and the thresholds between these categories. Thereby, the rules cover each operation type, from those not requiring prior authorisation, to those involving certified aircraft and operators, as well as minimum remote pilot training requirements, the remote pilots’ minimum age, rules for conducting an operational risk assessment, and the authorisation process of operations in the “specific” category. The Commission Implementing Regulation (EU) 2019/947 also defines the specifications of certified UAS and the Member States’ authority to establish no-fly zones, among others.

Finally, these technical and operational rules will also replace any national rules on drones that may currently exist in the different EU
Member States.

Since the national authorities will be responsible for the registration of drone operators, the rules will also help to protect the safety standards in airspace and at the same time enable the free circulation of drones and a level playing field within the entire EU. The Commission Implementing Regulation (EU) 2019/947 was planned to apply as of 1 July 2020. However, based on the new consolidation text of 6 June 2020, the regulation will apply from 31 December 2020, with certain paragraphs starting to apply in 2021. Paragraph 3 of Article 15 regarding the EU Member States’ definition of UAS geographical zones, for geo awareness purposes shall apply from 1 January 2022. This will ensure that the information on the UAS geographical zones, including their period of validity, is made publicly available in a common digital format.

3. EASA launches secure drone registration data system for Member States’ authorities

The drone’s regulation (EU) 2019/947 on the rules and procedures for the operation of unmanned aircraft (C/2019/3824) was planned to apply as of 1 July 2020. However, its applicability was postponed as a result of the COVID-19 pandemic. Initially, it calls for the mandatory registration of drone operators and of “certified” drones, which are typically the larger drones used for business purposes. The “certified” category of UA operation involves risks that require the certification of the UAS, a licensed remote pilot and an operator approved by the competent authority, in order to ensure an appropriate level of safety. Instead, the “open” category does not require a prior authorisation by the competent authority nor a declaration by the UAS operator before the operation takes place. The “specific” category is a category of UAS operation that requires an authorisation by the competent authority before the operation takes place, except for certain standard scenarios where a declaration by the operator is sufficient or when the operator holds a light UAS operator certificate (LUC) with the appropriate privileges. The regulation includes further provisions that will gradually become applicable in the next two years.

Due to the COVID-19 crisis, the start date of applying the EU Regulation 2019/947 has been delayed from 1 July 2020 to 31 December 2020. This means that with the delay of half a year, the registration of drone operators and certified drones becomes mandatory. Between 31 December 2020 and 1 January 2023, drone users operating drones without class identification label can continue to operate in the limited category under Article 22 of EU Regulation 2019/947. As of 31 December 2020, operations in the “specific” category may be conducted after authorisation has been given by the National Aviation Authority. Furthermore, as of 1 January 2022, national authorisations, certificates, and declarations must be fully converted to the new EU System.

EASA Member States must make available information on geographical zones for geo-awareness in a digital format harmonised between the EU Member States. As of January 2023, all operations in the “open” category and all drone operators must fully comply with the EU Regulation 2019/947 and EU Regulation 2019/945.

In order to facilitate the transfer of drones’ information between the EU Member States via the EASA, which will have the function of a hub, EASA launched a broker system based on open web technologies and secured standards. On 15 October 2020, EASA announced to have delivered a digitalised and secure system for the exchange of drones’ registration data among the national authorities of the EU Member States. Since drone users will be legally obliged to register as users of their drones with their national aviation authorities from 31 December 2020 onwards, when the European regulation on drones (EU) 2019/947
takes effect, the EASA’s drones registration data exchange system will allow users to fly their drones anywhere in the EU once they have registered with their national aviation authorities.

According to EASA Executive Director Patrick Ky, since drones are a new entrant to busy urban environments in particular, it is important that the aviation authorities know who is using the drones and for what purpose. The aim is to ensure that citizens are safe, even if drones are flying nearby. The EASA system will allow for the exchange of information registered with national authorities and it will create the basis for seamless drone usage across the EU, without the need to register in separate Member States.

The EASA broker system will also act as a test case for a larger project to create a fully centralised database of information at EASA. It will provide the basis for more effective cooperation between EASA and its Member States on certification, oversight and enforcement, as required by Article 74 of the Basic Regulation (Regulation (EU) 2018/1139). This database is planned to be launched between mid-2022 and end-2024. It will act as repository for certificates, approvals, licences, declarations and transfers of responsibilities, in addition to the system for the exchange of drones’ registration data.

References
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