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Introduction

The rationale behind this publication was changing legislation, in particular new European regulations covering numerous aspects of activities related to the use, design and manufacture of unmanned aircraft. In addition, the current development of unmanned aircraft, a technology which was not known until a few years ago, can undoubtedly be regarded as unprecedentedly rapid. This is evidenced by the increase in the number of devices, their new applications and areas of economic activity where they are used. As an example, it is worth mentioning that until early 2020 it was estimated that over 100,000 unmanned aircraft with a mass between 0.25 kg and 600 kg were used in Poland. The dynamic development of various forms of economic activity using these devices is illustrated by the number of certificates of competency necessary for the legal operation of unmanned aircraft for purposes other than leisure or sport. Again, to illustrate the rapid increase of the usage of this technology, we can quote the example of Poland: in 2013, nine certificates of competency were issued, in the following year – 376, while in 2017 the number of new certificates reached 2,649, which means that at the beginning of 2016 more than 6,000 people were authorised to operate commercial drones.¹ At the end of July 2019, the number of certificates was almost 13,000 and has been growing every day. The proliferation of unmanned aircraft may lead to fundamental changes in the way goods are transported, comparable to those caused by motorisation. Enthusiasts of the use of drones claim that their development will lead to changes in the way of life of societies in industrialised countries, as was previously the case with the development and widespread use of cars and mobile phones or the Internet.

An analogy can be seen between the early stages of development of rail and road transport, on the one hand, and civil passenger aviation and unmanned aircraft on the other. Rail and air passenger and freight transport forms are of a mass nature, and operate to point facilities that require a delivery system and significant infrastructure outlays, which are borne by entrepreneurs active in this market. In the case of the automotive industry, we deal with individual transport, carried out in the ‘door-to-door’ mode, that is to say, without an expensive and time-consuming system of loading and unloading. As a rule, users of the linear road infrastructure do not bear the direct costs of its construction and maintenance, which are covered from public funds. It seems that the field of transportation with the use of unmanned aircraft has similar features. In the past, the expansion of motorised road vehicles raised concerns and in many countries faced the restrictive regulatory response of public authorities, which, in the case of England, led to a halt in the development of this industry. In the future, the scale and pace of development of UAV applications will depend on the response of public authorities in the area of law-making and law application.

There is no doubt that the legislation is not keeping pace with the changing social reality and dynamic technological development. The area of unmanned aircraft is the best example. The awareness of this fact in the European Union Member States was the impulse to work on a common regulation. The harmonisation of the rules of the drone use and marketing, which is the subject of analysis in this publication, should therefore, in principle, be assessed positively. The unification of the legal environment in which businesses and private users operate allows them to function in the common market; this makes the freedoms which are at the heart of the European Union a reality in this area. It can be noted, however, that the haste in the development of the regulations has resulted in imperfect legislation: numerous inconsistencies, omissions and incoherencies. The statement that the law is less than satisfactory refers to both European and national acts. It can also be argued, as confirmed by research, that normative acts – the emerging drone law – are intended by their creators as a safety mechanism to the detriment of promoting economic innovation.

This publication consists of five chapters. The conducted analysis of normative material is detailed, similar, at least in form, to a commentary or a review
of the most important concepts and issues contained in individual regulations. The rationale for such an approach is that there is a varying degree of detail in the legislation and a greater or lesser need of its application by the wide group of readers of the publication (unmanned aircraft operators and operators in the fields of use, design, manufacture and distribution), as well as its various content in terms of the particularity and scope of standards established based thereon.

Basic Regulation 2018/1139 and Implementing Regulation 2019/947 are discussed in greater detail, in the form of the presentation and analysis of their individual provisions. Their importance and the necessity of their application by a wide group of drone users justifies this approach. The adopted structure, following the consecutive provisions, will also facilitate it for the book readers to analyse the text. As far as Delegated Regulation and Polish national law are concerned, it was decided to focus on individual issues, which means that the analysis of the legal acts is not linear. For entities involved in specific activities in the field of design, production, import or distribution, such a structure will be more useful and will make it easier to locate the issue interesting to them.

The first chapter identifies the basic concepts relating to unmanned aircraft and discusses safety and innovation as values relevant to the subject matter of the regulation. This is a theoretical part of the book. The next two chapters deal with Basic Regulation 2018/1139 and Implementing Regulation 2019/947. These sections are similar in form to a commentary, although they go beyond that. Selected issues and considerations of a more detailed nature in particular areas of the regulations that may raise doubts as to their application are covered in Chapter 4, where Delegated Regulation 2019/945 is discussed. Chapter 5 deals with the protection of personal data and the right to privacy. The publication is concluded with a concise summary and schemes intended to facilitate the application of the regulations on unmanned aircraft.

In this publication, the term ‘unmanned aircraft’ or ‘unmanned aerial system’ will be used in the first place as legal terms present in normative acts, although drone, unmanned aircraft or unmanned systems will also be mentioned interchangeably, at least where justified by the content of the regulation or the issue in question.
The authors of the publication analysed the regulations in force in the legal state as of 1 September 2021, however, it should be stressed that some of the legal acts presented in the study are not yet in force, some will soon lose their validity and will be repealed to a certain extent. In the situation of fundamental legislative changes, it is inevitable that the publication on the evolving legal status will also describe legal solutions which will take effect in the foreseeable future. It should therefore be noted that:

- Basic Regulation 2018/1139 entered into force and replaced the previous Basic Regulation 216/2008 on 11 September 2018 (Article 141 in conjunction with Article 139(1) of Basic Regulation 2018/1139);
- Implementing Regulation 2019/947 entered into force on 1 July 2019, however, according to Article 23(1)–(5) of the amended act, it has been applicable since 31 December 2020, with some regulations to enter into force even in 2023 and 2025; for more details, see commentary on Article 23 of that act;
- Delegated Regulation 2019/945 entered into force on 1 July 2019.

The European Union law regulates the various types and hierarchy of legal acts. Before going on to describe it, it is worth considering what the European Union law is. In general terms, the EU law (also called European law by its authors) is issued by the European Union bodies in accordance with the treaties. The catalogue of sources of European law is as follows: primary law, which consists of acts of law developed by Member States, and secondary law formulated by the institutions and bodies of the European Union. Primary law includes the founding treaties (currently, these are the Treaty on European Union and the Treaty on the Functioning of the European Union, in addition to the founding treaties of the 1950s and 1992, historical revisions of these treaties, etc.) and the accession treaties (on the basis of which the countries joined the European Union), while secondary law covers binding regulations, directives, decisions, and non-binding (but having legal effects) recommendations and opinions. In addition, there are international agreements concluded by the EU or so-called mixed agreements, i.e. concluded by the EU and its Member States, which are placed in the hierarchy between primary and secondary law.

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In aviation law, being a branch of the European Union law, regulations are the basic type of legal acts. According to Article 288 TFEU, regulations have general application, are binding in their entirety and directly applicable in all Member States. It is worth pointing out, however, that all the EU regulations have such power, regardless of the body which issues them. The direct application of the EU regulations in Member States means that they are placed in the system of legal acts above laws and acts implementing them. What follows, in aviation law in cases where issues are regulated in a different manner, for example, in the national aviation laws or in each Member State than in the EU regulations, the latter have priority. National laws need to be brought in line with European rules and cannot be made more specific, except where the regulation explicitly stipulates so. As is further discussed below, before Regulation 2018/1139 came into force, the European Union legislation had covered unmanned aircraft with a maximum take-off mass (MTOM) of 150 kg for the first time. On the basis of the delegations contained in Basic Regulation, two Commission regulations have so far been issued, which regulate in detail the certification, placing on the market and operation of unmanned aircraft. Until now, this area of aviation has been governed exclusively by national law of Member States, which will have to be amended and adapted to the new rules.

This book is dedicated primarily to people who will apply European provisions governing the use, design, construction, marketing, etc. of drones in their professional practice. The group may include lawyers (legal counsellors, judges, public officials) but it is not only these professionals that the publication is addressed to. It is the authors’ intention, reflected in the structure of individual chapters and an overview of practical issues, that the book should be useful for people using unmanned aircraft in their business activities: entrepreneurs providing services with the use of such vehicles, dealing with design, construction, marketing, as well as those involved in the certification process.

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3 Legislative acts are issued by the European Parliament and the Council under the ordinary legislative procedure, while non-legislative acts are issued by the European Commission on the basis of delegations in legislative acts.
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