

Europe *Germany*

Drones in German skies: new EU regulations take flight

Introduction

Unmanned Aircraft Systems (UAS) – more commonly known as drones – have been in use for many years. For a long time, they were only used for experimental and military purposes. But as smaller, inexpensive devices have become more available, they've found a wider range of applications and potential users. Although mainly used by private individuals as cameras, drones are used by public institutions and private companies for transport and research, among many other applications.

In logistics, drones can provide a flexible, on-demand shipping method. Scientific institutions, meanwhile, may profit from new possibilities like airborne observation of wildlife behaviour. In their capacity as cameras, drones can be used for plant surveillance or intelligence reconnaissance. As such, they can also provide technical assistance in maintaining dangerous machines or reaching hard-to-access places. In agriculture, drones are already gradually replacing time-consuming human work such as monitoring the condition of fields and applying pest controllers.¹

As a consequence, there is – and will be even more – traffic in the sky. The number of private drones operating in the public space is soaring. Already in 2016, the European Drones Outlook Study estimated that the sector will see an annual turnover of €10 billion by 2035 and more than €15 billion by 2050.²

This trend has prompted activity and increased focus by legislators in Germany and the EU. Within a few years, both have created legal regimes to (further) define regulations for manufacturers, distributors and operators of drones. While manufacturers and distributors need to be particularly aware of updated product safety, product monitoring and notification obligations, operators will have to be prepared to accommodate updated requirements and obligations for the registration and use of UAS.

This article provides a high-level overview of the current and upcoming legislative framework, focusing particularly on two recent EU Regulations released in 2019.³

Resolving a hotchpotch of German and European rules

Historically, EU laws did not cover the production, distribution and operation of UAS in EU member states. That explains why – as the number of UAS used for commercial and private purposes continued to grow – several national legislators started developing their own national frameworks. For example, the German Air Traffic Act (*Luftverkehrsgesetz* or “LuftVG”), the German Air Traffic Regulation (*Luftverkehrs-Ordnung* or “LuftVO”) and some subordinate regulations cover discrete areas of UAS operation and use in Germany.

The resulting patchwork of laws had significant weaknesses, particularly with regard to cross-border operations and the coordination of UAS operations with EU civil manned aviation.

Realising these shortcomings, the EU legislator took the opportunity to revise its rules on civil aviation and simultaneously introduce an EU-wide, harmonised framework on the design, production, maintenance and operation of UAS.⁴ As such, Regulation (EU) No 2018/1139, which introduces common rules in the field of civil aviation and establishes a European Union Aviation Safety Agency⁵ (“EASA-BR”), serves as the regulatory basis for all major UAS matters in the EU.

Based on EASA-BR, the European Commission recently adopted two regulations on UAS in the civil aviation sector: Delegated Regulation No 2019/945 on unmanned aircraft systems and third-country operators of unmanned aircraft systems⁶ (“EASA-DR”) and Implementing Regulation No 2019/947 on rules and procedures for the operation of unmanned aircraft⁷ (“EASA-IR”). Both regulations are intended to further develop a uniform legislative framework for UAS and will gradually become applicable, fully entering into force by 2022.⁸

1 Cf. SESAR JU, *European Drones Outlook Study (November 2016)*, p52-70

2 Cf. SESAR JU, *European Drones Outlook Study (November 2016)*, p3.

3 Please note that this article will concentrate on UAS intended for commercial and private purposes. For military, police, disaster protection and further areas of UAS usage, diverging regulations may apply.

4 https://ec.europa.eu/transport/modes/air/uas_en, last visited 7 February 2020

5 Amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91, OJ L 212, 22.8.2018, p1.

6 OJ L 152, 11.6.2019, p1.

7 OJ L 152, 11.6.2019, p45.

8 See Art 20 et seqq EASA-IR

While EASA-DR differentiates between three categories of UAS operations, depending on the potential safety and security hazards involved, and defines respective operating requirements, EASA-IR provides for specific requirements on the production and distribution of UAS, starting with the “lightest” category.

UAS Operations: open, specific or certified?

The division of UAS operations into three categories may have the most far-reaching implications for UAS operators:

- **“Open” drone operations** generally cover operations believed to involve low safety and security risks. “Open” operations do not generally require prior authorisation or operational declaration prior to use.⁹
- **“Specific” drone operations** generally cover operations believed to involve higher safety or security risks. “Specific” operations generally require either prior authorisation by the competent authority¹⁰ or a declaration by the operator to remain within limits of specified standard scenarios with their operation.¹¹
- **“Certified” drone operations** generally cover operations believed to involve significant safety or security risks. “Certified” operations must therefore conform to a multitude of additional requirements, including operator certification and, potentially, the licensing of remote pilots.¹²

As well as taking into account the design of an UAS (i.e. its mass and measurements), the categories defined by the legislator also cover potential safety and security hazards presented by its intended use (e.g. flight altitude, proximity to assemblies of people, transport of dangerous goods or people, and operation within or beyond visual lines of sight).

⁹ See Art 3a and 4 EASA-IR

¹⁰ In Germany, the competent authority is generally the German Federal Aviation Authority (Luftfahrt-Bundesamt) and/or a subordinate state authority.

¹¹ See Art 3b and 5 EASA-IR

¹² See Art 3c and 6 EASA-IR



This graphic below provides an overview of the main criteria:

	Open	Specific	Certified
Requirements for respective category			
MTOM*	< 25 kg	n/a	n/a
Measurements	n/a	< 1m or < 3m, depending on operation	> 3m
VLOS** or BVLOS***	VLOS	VLOS or BVLOS, depending on operation	VLOS or BVLOS
Carriage of dangerous goods	not possible	not possible	possible
Carriage of people	not possible	not possible	possible
Operation above assemblies of people	not possible	depending on operation	possible
Maximum flight altitude	< 120m	n/a	n/a
Requirements for operation			
Prior authorisation or declaration required?	no	depending on operation	authorisation
Certification of the pilot	(Online) theoretical knowledge examination + potentially self-practical training	Training as identified by the operational authorisation or by respective standard scenario	High requirements – comparable to pilot licence in manned aviation

* Maximum Take-Off Mass; ** Within Visual Line Of Sight;

*** Beyond Visual Line Of Sight.

The devil is in the details

The current German operating laws generally regulate the operation of UAS in a similar way.¹³ However, the categorisation of drone operations differs from the categorisation introduced by the EU Regulations. The main similarities and differences are:

- drone operations without prior authorisation are generally allowed for drones that have a MTOM of less than 5kg;
- unlike under European laws, operating drones with a MTOM of more than 5kg but less than 25kg will usually be subject to a reservation of authorisation;
- as under European laws, operating drones with a MTOM of more than 25kg generally require prior authorisation;
- as under European laws, BVLOS operations and operation above assemblies of people generally require prior authorisation;
- unlike the situation under European laws, operations without prior authorisation are generally limited to a flight altitude of 100m above the ground (instead of 120m).

German and EU law provisions are already quite similar. However, the new EU regulations entering into force will introduce some specific changes to UAS operations in Germany. From a compliance perspective and in order to mitigate against unnecessary risks, operators should carefully consider the upcoming changes and make sure they revise their internal guidelines and procedures – preparing for new authorisation processes where needed.

Manufacturers: product safety and product compliance

UAS manufacturers already have to follow general EU product safety requirements (e.g. under the General Product Safety Directive 2001/95/EC¹⁴, the Machinery Directive 2006/42/EC¹⁵, the EMC Directive 2014/30/EU¹⁶, the Toy Safety Directive 2009/48/EC¹⁷, and the Radio Equipment Directive 2015/53/EU¹⁸).

But with the new regulations coming into force, UAS will for the first time be subject to a legal regime that corresponds to the already established general principles of European product safety and product compliance legislation.

Key impacts of the main provisions include:

- when EASA-DR comes into force, certain UAS will be subject to product-specific conformity assessment requirements, including CE marking requirements, and numerous technical requirements depending on the respective UAS construction category (Co-C4)¹⁹;
- in case of risks to the health or safety of persons or to certain other aspects of public interest, the so-called “economic operator” (i.e. the manufacturer, the authorised representative, the importer and/or the distributor) may be subject to certain corrective actions and/or notification obligations²⁰;

¹⁴ Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety, OJ L 11, 15.01.2002, p4.

¹⁵ Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast), OJ L 157, 09.06.2006, p24.

¹⁶ Directive 2014/30/EU of the European Parliament and of the Council 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast), OJ L 96, 29.03.2014, p79.

¹⁷ Directive 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the safety of toys, OJ L 170, 30.06.2009, p1.

¹⁸ Directive 2015/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC, OJ L 153, 22.05.2014, p62.

¹⁹ See Art 4 EASA-DR and the Annex to the EASA-DR

²⁰ See Art 36 and 38 EASA-DR.

¹³ See Sec 21a et seqq LuftVO.

- some cases of (merely) formal non-compliance may also lead to corrective action and/or notification obligations.²¹ For example, missing/improper CE markings, missing manufacturer's or importer's name, missing serial number, missing sound power level indication and manual/instruction issues may require corrective actions to be carried out. If non-compliance persists, the competent authority may even issue a (EU-wide) sales stop and/or a recall order.

Comment

After a period of regulatory uncertainty and patchwork national approaches, EASA-BR, EASA-IR and EASA-DR have set the foundation for an EU-wide harmonised UAS framework. In laying down this framework, the European legislator has taken into account not only decades-long experience of general product safety and product compliance law-making, but also issues unique to the civil aviation sector.

Even so, we anticipate numerous unresolved issues when EASA-IR and EASA-DR come into force. These could present legal and business challenges for both manufacturers and operators. Hogan Lovells will continue to actively monitor the upcoming implementation processes as well as ongoing legislative proceedings and will be happy to coordinate closely with all stakeholders involved.



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²¹ See Art 39 EASA-DR.

