Product safety and IT security in unmanned aviation – consequences of product liability

15 November 2021

Dr. Thomas Grünvogel
Martin Launer

About us

Dr. Thomas Grünvogel
Partner
Germany

+49 89 5434 8086
thomas.gruenvogel@osborneclarke.com

Thomas is a well-versed product liability lawyer, having coordinated several German and European-wide recalls. He regularly trains employees in distribution and competition compliance.

He specializes in drafting and negotiating R&D, purchasing, project and distribution agreements in a German and international context. He also advises clients on industry issues like the connected car, autonomous driving, carsharing and modern distribution concepts.

Thomas also has particular experience in all competition law matters that arise from distribution agreements, advising on distribution models and cooperations between competitors, as well as in coordinating complex cross-border projects, such as new product launches. He regularly represents his clients – mainly automotive, chemicals and consumer goods companies – in proceedings in and out-of-court, in particular in complex supply chain disputes involving claims for damages.

Martin Launer
Partner
Germany

+49 40 55436 4126
martin.launer@osborneclarke.com

Due to his technical background (he is not only a lawyer but also a graduated ships engineer), Martin Launer mainly advises clients in the area of technical law, especially in the engineering and construction sector. Here, he advises over the whole life cycle of projects from first contract negotiations, over project execution to arbitration and litigation. Further, he deals with product liability, product safety, transportation and logistics law.

Martin mainly advises on complex plant construction and logistic projects especially in FIDIC, NEC3, LOGIC, VOB/B and BIMCO contract drafts. In such projects, he further supports our clients in contract- and claims-management and is involved in arbitration and litigation (both as party advisor and arbitrator). In this sector he provides seminars together with the VDMA and VDI.

He further acted as party representative and arbitrator in several large scale litigations in the power plant-, transportation-, and rail-way sector.

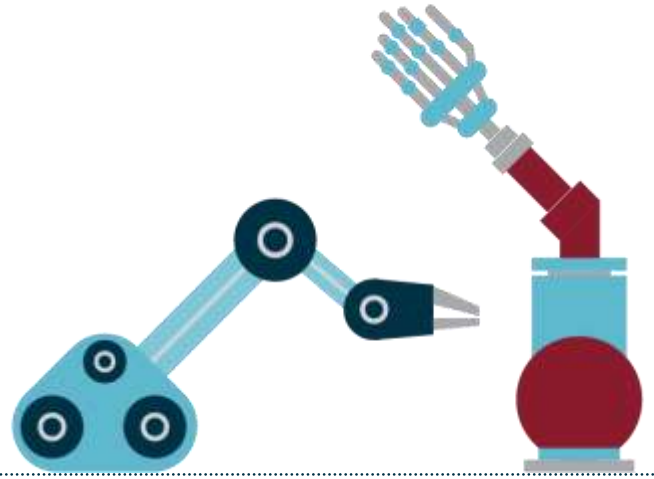
Agenda

I. Introduction: Usage of drones = Unmanned Aircraft Systems (UAS)

II. Legal provisions

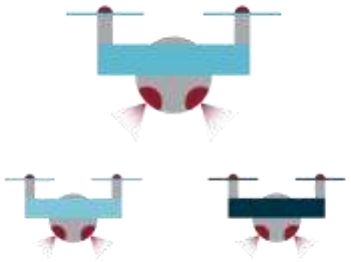
III. General product liability and product safety law

IV. Liability for the use of artificial intelligence



Introduction: Usage of drones = Unmanned Aircraft Systems (UAS)

I. Introduction: Diverse use of UAS



Usage of UAS

- Experimental and military purposes
- Private individuals as cameras
- Public institutions and private companies for transport and research
- Technical assistance in maintaining dangerous machines or reaching hard-to-access places, e.g Construction of wind turbines
- Plant surveillance or intelligence reconnaissance
- many other applications

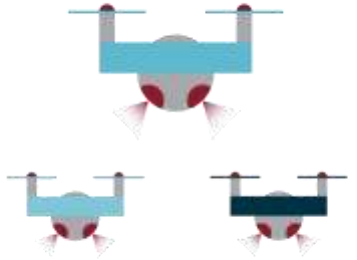
In demand-oriented logistics as a flexible, shipping method

Scientific institutions, may profit from new possibilities like airborne observation of wildlife behaviour.

I. Introduction: diverse use of UAS

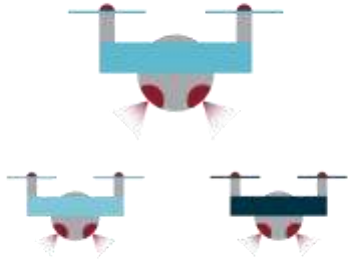
Legal provisions

II. Legal provisions



- Until now: A collection of national and European regulations.
- For example, the **German Air Traffic Act („deutsches Luftverkehrsgesetz“, LuftVG)**, the **German Air Traffic Regulation („deutsche Luftverkehrs-Ordnung“, LuftVO)** and some subordinate regulations cover individual areas of the operation and use of UAS in Germany.
- In the past, EU legislation did not cover the production, distribution and operation of UAS in EU Member States.
- Consequence: Regulatory gaps, especially with regard to cross-border operation and coordination of UAS operations with EU manned civil aviation

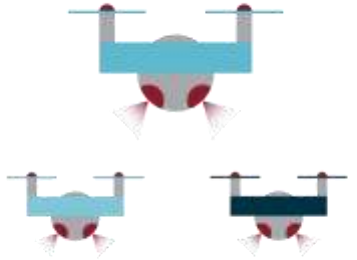
II. Legal provisions



Introduction of an EU-wide regulatory framework

- **Regulation (EU) No 2018/1139**, which introduces common rules in the field of civil aviation and establishes a European Union Aviation Safety Agency (“EASA-BR”), serves as the regulatory basis for all major UAS matters in the EU.
  - Delegated **Regulation No 2019/945** on unmanned aircraft systems and third-country operators of unmanned aircraft systems (“EASA-DR”)
  - Implementing **Regulation No 2019/947** on rules and procedures for the operation of unmanned aircraft (“EASA-IR”)

II. Legal provisions – EU Drone Regulation



EU Drone Regulation ((EU) 2019/947 and (EU) 2019/945)

- The new EU guidelines for UAS provide for three application scenarios (Open, Specific and Certified), which have been given different further requirements.

1. **„Open“**: low risk, does generally not require authorisation or operational declaration prior to use

2. **“Specific”**: higher safety risks, require either prior authorisation by the competent authority or a declaration by the operator to remain within limits of specified standard scenarios with their operation

3. **“Certified”**: significant safety or security risks, a variety of additional requirements must therefore be met including operator certification and possibly the licensing of remote pilots.

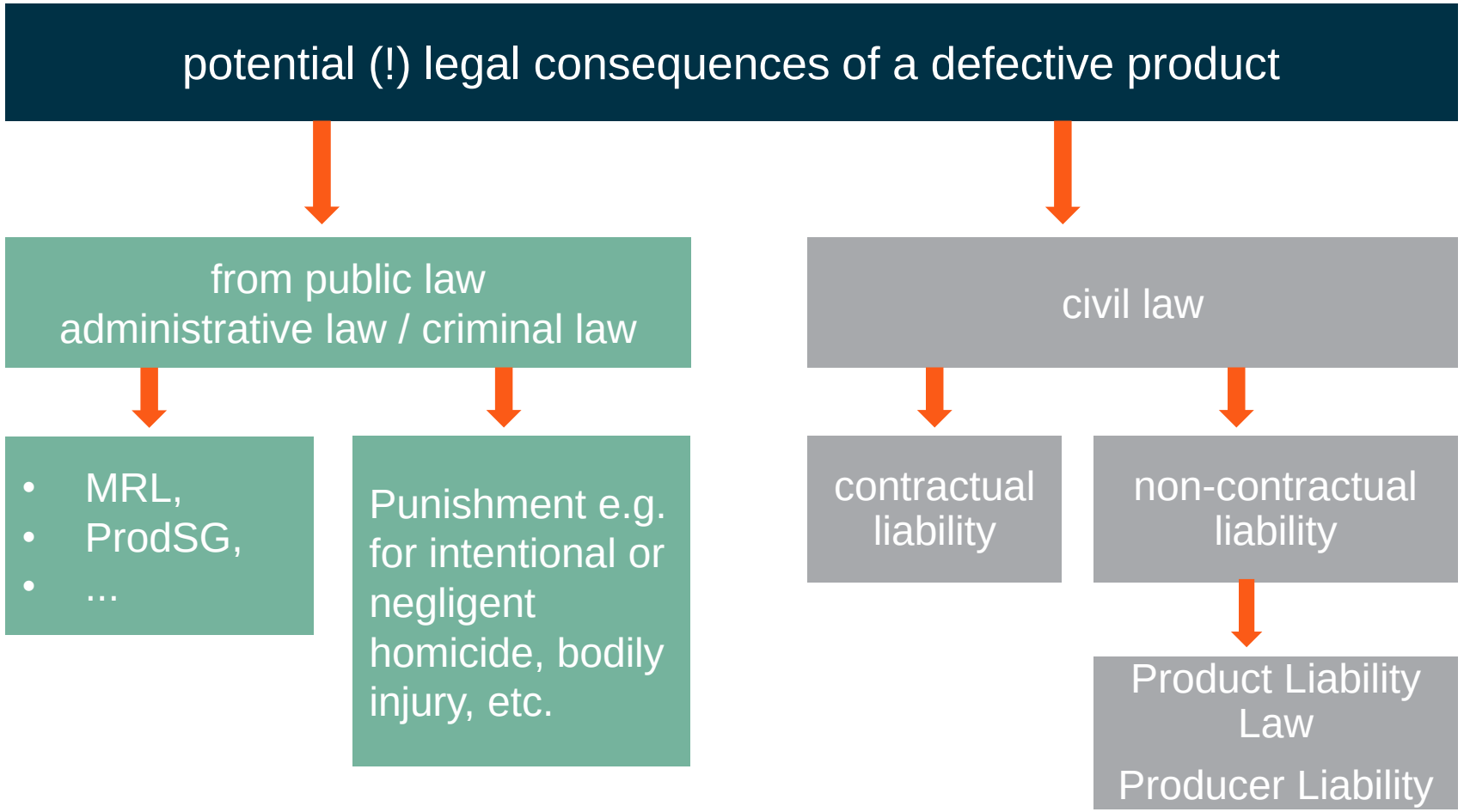
II. Legal provisions – EU Drone Regulation

In the future, new drones will be divided into **5 risk classes (C0, C1, C2, C3 and C4)**. Manufacturers must have their drones certified for one of the respective categories and clearly mark them with a corresponding label.

The classification must not only consider the **design** of a UAS (i.e. its mass and dimensions), but also **potential safety risks** arising from its intended use (e.g. flight altitude, proximity to crowds, transport of dangerous goods or people, and operation within or beyond the line of sight).

General product liability and product safety law

III. General product liability and product safety law

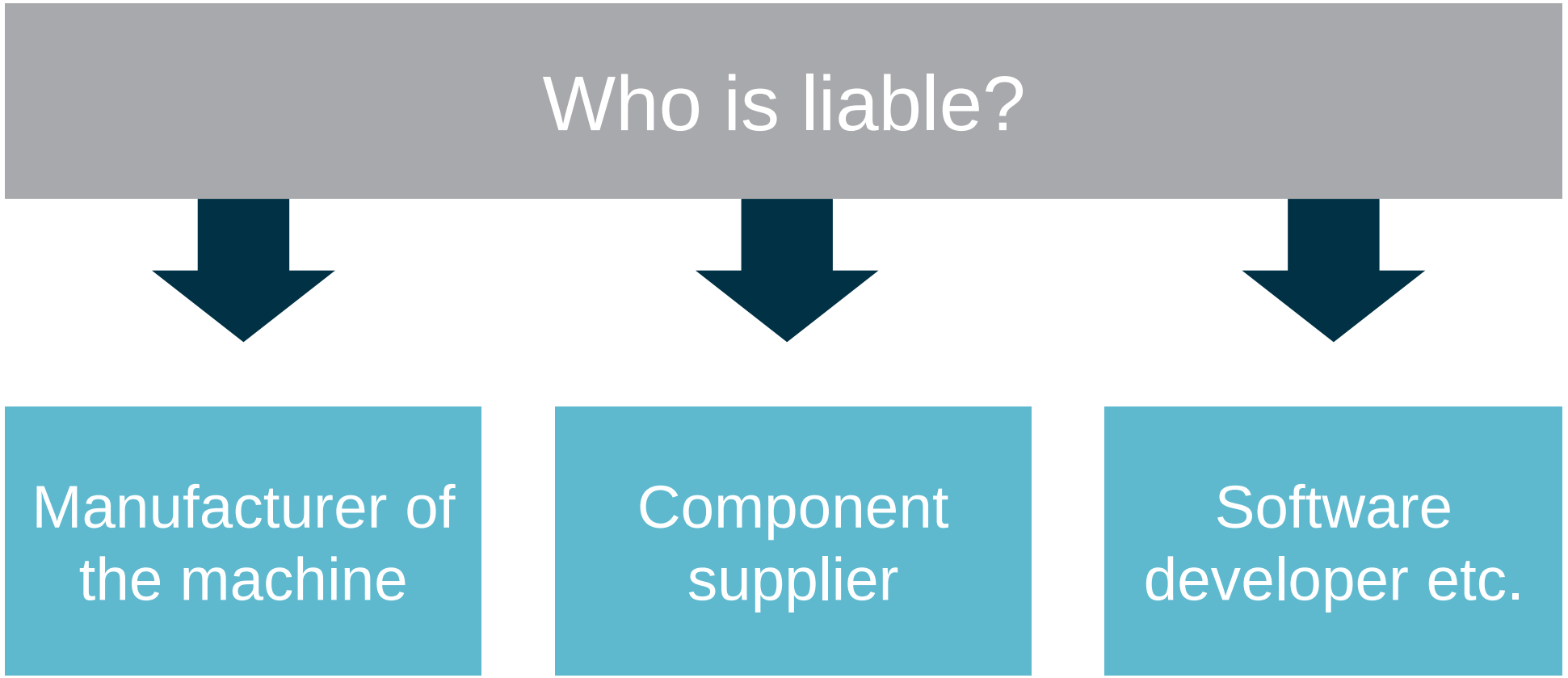


III. General product liability and product safety law

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.

III. General product liability and product safety law



IV. Liability for the use of artificial intelligence

IV. Liability for the use of artificial intelligence (AI)

The applicable liability law is technology-neutral and thus also covers products in which AI components are integrated. Product safety law therefore also fulfils its **preventive function** for products with AI components by aiming to ensure that only products that **fulfil the conformity assessment procedures** and the **essential safety requirements** - also taking into account the use of AI components - may be placed on the market and distributed.

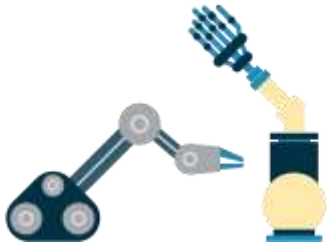
IV. Liability in the use of artificial intelligence – Legislative initiative of the **European Parliament**

February 2017: Resolution on "Civil Law Regulations in the Field of Robotics": so-called "ePerson" abandoned

October 2020: Resolution with recommendations to the Commission in a **draft EU Regulation**:

- Civil law liability as the primary mode of conflict resolution remains.
- Liability of the operator (manufacturer has more responsibility/control; user has less influence on the "behavior" of the system)
- Division into two parts between frontend and backend operators (also developers and support service providers, cf. Art. 3 f) of the draft regulation)

IV. Liability in the use of artificial intelligence
Legislative initiative of the European Parliament

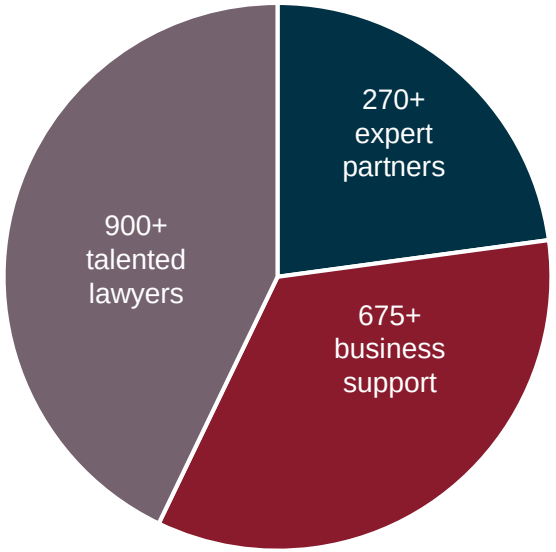


- **No-fault liability for operators with a high risk profile** (Art. 4 of the draft regulation) with a capped scope of compensation (Art. 5 of the draft regulation),
- otherwise, fault-based liability with a reversal of the burden of proof (Art. 8 No. 2).
- For the high-risk area, comparably **long limitation periods** (30 or 10 years depending on the type of damage) will be applied.
- The coexistence of product liability and AI liability is addressed in the proposal, namely for the purposes of liability recourse of the operator of the AI system against its manufacturer (Art. 12)
  → **Requires a clear allocation of liability at the level of the manufacturer.**
- **Definition of "AI system"**: a software-based or hardware device-embedded system that exhibits intelligence-simulating behavior by, among other things, collecting and processing data, analysing and interpreting its environment and taking action with some degree of autonomy to achieve specific goals

About Osborne Clarke

1,850

employees and counting



25

international locations*

Europe

Belgium: Brussels
France: Paris
Germany: Berlin, Cologne, Hamburg, Munich
Italy: Busto Arsizio, Milan, Rome
The Netherlands: Amsterdam
Spain: Barcelona, Madrid, Zaragoza
Sweden: Stockholm
UK: Bristol, London, Reading

Asia

China: Shanghai
India*: Bangalore, Mumbai, New Delhi
Singapore

USA

New York, San Francisco, Silicon Valley

*Services in India are provided by a relationship firm

Questions?


Osborne Clarke
Helping you succeed in tomorrow's world.
Making unmanned aviation happen
Combining transformational insight, sector knowledge and legal expertise to deliver results.
osborneclarke.com
Contact us on all drone-related regulatory, product liability and IT security issues.
Thomas Grünvogel
Martin Launer
Thomas Stables

Thank you!

Time for a break