## Liability for malfunction of AI systems

AI systems can cause damage through improper functioning. This does not only apply to self-driving cars that cause accidents due to driving errors, but also to erroneous assessments or predictions of any kind by AI systems.

In the current global wave of legislation on AI systems, the European Union is in the forefront. The European Commission has recently proposed, in addition to its proposal of an AI Act, two pieces of legislation that are of great importance for AI systems: A directive on liability for AI systems on the one hand and an amendment to the existing product liability directive, which will, according to the proposal, not least focus on liability for software including AI systems, on the other.

This contribution aims to identify the gaps in liability for malfunctions of AI systems in the current law, using the example of European law, and to evaluate the solutions proposed by the legal acts. The contribution will conclude that the proposals will not be able to close the existing gaps in liability.

The following aspects are in the focus of the contribution:

## Gaps in the current legal framework

There are key gaps in the liability framework for malfunctioning AI systems, in particular in traditional fault-based liability and product liability, as well as in evidentiary difficulties.

Fault-based liability, the globally applicable concept of tort law, is based on the behaviour of a human being. Insofar as an AI system permissibly acts independently and causes damage through such an act, there is no behaviour by a human being that causes damage.

Product liability, which applies in European law following the US model, starts with the defect of a product. The term "defect", however, is defined as a deficient characteristic of a product. A malfunction is not a property, so that it is currently unclear whether and under what conditions a defective property of an AI system is to be assumed in the event of a malfunction.

## The instruments of the AI Liability Directive and the Product Liability Directive

The proposed AI Liability Directive and the proposal for a new Product Liability Directive each contain two new instruments aimed at closing or reducing the liability gap altogether: a rule on disclosure of evidence and rules on shifting the burden

of proof. The rules on disclosure of evidence can only partially address the difficulties of proof.

The regulation that shifts the burden of proof in the AI Liability Directive only concerns a partial area, the causality of fault (of a human) for a malfunction of the AI system. The central question of fault is not addressed by the AI Liability Directive. The gap in fault liability is not closed.

The proposed Product Liability Directive establishes a presumption of a product being defective in the event of a malfunction. This is a necessary and seminal bridge between malfunction and defective quality. Thus, an essential part of the liability gap in the area of product liability is closed.