BLF 2024

# STRICT LIABILITY IN AUTONOMOUS VEHICLES: EUROPEAN LEGAL PERSPECTIVES

Associate Professor Marija Ampovska
Faculty of Law, Goce Delcev University,
Stip, North Macedonia

E-mail: marija.ampovska@ugd.edu.mk

# Strict liability regime in EU

- A strict liability regime is introduced in all Member States laws and the concept on which this regime is based involves the establishment of liability regardless of fault and/or even when there is no fault within the liable person. Therefore, the basis for this liability is found in the "risk theory" as the most accepted theory in legal doctrine. Within this theory, there is an understanding that a person is permitted to use dangerous objects or to pursue a risk-prone activity for his/her purposes and consequently, this person is obliged by law to compensate for the loss if such risk should materialize.

# Differences when introducing strict liability in EU

| SINGULAR INSTANCE | GENERAL CLAUSE |
| --- | --- |
| • This is the case of the Germanic legal systems (Austria, Germany, Liechtenstein and Switzerland) where risk-based liability is regulated exclusively by special legislation that covers particular dangerous objects or activity.<br>• Law on nuclear energy, Law on electricity, etc. | • Croatia, Czech Republic, Hungary, Estonia, Slovenia and others that prove a general clause of strict liability in the legal system and set the basis for the application of the standards "dangerous thing" and "dangerous activity" on behalf of the national courts. |

# Example for general clause

- For the damage caused in connection with an object, mobile or immovable, whose position, use, characteristic or its very existence poses an increased risk of damage to its surroundings (dangerous object) or the activity of which poses an increased risk of event damage to the environment – its surroundings (dangerous activity) is assumed to originate from that object, i.e. that activity, unless it is proven that the cause is on the side of the damaged or third party, or resulting from a force major (grounds for exclusion of liability).
- The liable person for this damage is the object's holder or the person dealing with the dangerous activity

# Assessment of the possibility of application of a strict liability regime to AI-inflicted damages

- Differences between Member States will be present with regard to the possibility of extending strict liability by analogy to AI system or AI technologies as dangerous things or activities. In this regard, "civil law jurisdictions that do not foresee a general risk-based liability clause, but which have nevertheless introduced at least some instances thereof linked to specific, peculiar risks, will invariably face the problem of incompleteness." But, when it comes to the legal systems that contain the general clause of risk-based liability, then the theoreticians do not see obstacles from legal point of view to apply it on AI, as long as the courts find that the AI technology or the AI system falls under the standards "dangerous thing" or "dangerous activity", with the notion that "...due to the wide range of possible applications of AI, it is clear from the outset, though, that not all of them may be deemed sufficiently dangerous to qualify as an obvious candidate for risk-based liability.

# The presumption that the AI system caused the damage and the standard “dangerous”

If there were strict liability for some AI-driven system, presumably proof of harm resulting from its mere operation would already trigger its keeper’s (or operator’s) duty to indemnify the victim (unless some defence applies). The victim would therefore not have to explain to the court what exactly went wrong within the AI system and why, and how this can be traced back to the operator, developer, or programmer, and she also need not show that it was the software rather than the hardware that was flawed. If strict liability is attached to a more generic risk or ‘dangerous activity’, proving causation is more demanding as such a rule does not statutorily define a specific object or activity as dangerous and proceed from such a presumption, but requires the claimant to first prove that whatever caused her loss was indeed as ‘dangerous’ as required by the general clause.



The less experience there is with a novel AI system, the more (or less) difficult this first hurdle can be cleared, depending upon the court’s perception of such technology. This inter alia also depends upon the degree of trust that can be established when introducing such AI systems onto the market. After all, autonomous systems, for example, are promoted as safer than systems under human control, so are they still as ‘abnormally’ or ‘extraordinarily’ dangerous as to justify that they fall within the scope of the general clause? Only if this question is answered in the affirmative (which will at least initially require expert evidence on the inner workings of the AI system) can the victim proceed to prove that the operation of the AI system as such caused her loss, which may even have been seen with the naked eye and without technical expertise.

# Strict traffic liability regime

- The high number of accidents and the relatively large potential for harm in this area have led to the development of more efficient forms of loss distribution in many legal systems. *A particularly noteworthy example, widespread across Europe, is a strict, risk-based liability, which provides for a distribution of risk that is more advantageous for traffic accident victims and promises more efficient compensation*. Most Member States that have introduced such a strict traffic liability regime so far also allow concurrent (parallel) or alternative claims based on the traditional fault theory instead. Bearing in mind that risk-based liability tends to be beneficial for the claimant, it is obviously by far the more attractive option in practice for victims of a traffic accident to seek compensation. If that route is available, the role of fault-based liability is often merely a secondary one, unless the strict liability regime is limited and the victim pursues her claims on a fault theory instead to bypass such limitations. Otherwise, fault liability is often limited to recourse claims that might be brought by the liability insurer of the vehicle's keeper against the driver, for example, or comes into play indirectly in the decision-making process when contributory negligence by the claimant is at stake.
- *Idea: strict liability should be limited to losses incurred by particularly vulnerable parties (such as non-motorised participants in traffic) or to the infringement of legal interests that are deemed worthy of special protection (such as the life or bodily integrity of a person).*

# Differences in EU

- Liability rules in Europe show very significant differences even in relation to risk-based liability. In some of the Member States, such as in Austria, Germany, and France, risk-based liability for motor vehicles is rather comprehensive. Such a broad strict liability for motor vehicles is by no means universally acknowledged throughout Europe, however.
- Other Member States provide for sometimes very significant exceptions to risk-based liability for motor vehicles, and, in particular, *limit its sphere of application or the range (scope) of compensable losses*. Foe example, in Greece, the risk-based regime solely applies to damage caused outside of the vehicle (thereby excluding damage to passengers and items transported), and also harm resulting from collisions is only subject to fault liability. . In Spain, only personal injury is recoverable.
- Some Member States – such as Ireland, Malta, or Cyprus – *do not even foresee strict (risk-based) liability* at all for traffic accidents. In all of these jurisdictions, though, injured parties can nevertheless at least resort to traditional fault liability if flawed conduct contributed to causing their harm (or pursue a product liability theory in case the source of their damage was some defective product).
- Precisely because of future increases in automation in the traffic sector, such gaps place difficulties in the path towards allocating the risks of motor traffic that must be taken seriously.

# AUTONOMOUS VEHICLES ARE USUALLY SEPARATED INTO FIVE LEVELS BASED ON THE SOCIETY OF AUTOMOTIVE ENGINEERS CLASSIFICATION SYSTEM

- Level 0: no driving automation
- Level 1: driver assistance
- Level 2: partial driving automation
- Level 3: conditional driving automation
- Level 4: high driving automation
- Level 5: full driving automation
- Assisted driving technology refers to technology that assists humans in the driving process, but still requires a driver to make judgments and operate a vehicle (levels 1 and 2). Automation driving technology refers to artificial intelligence (AI) technology that vehicles use to intervene, make decisions, and control operations (levels 3-5)

# Automatization in traffic

- Generally, it can be presumed that the existing risk-based liabilities for motor vehicles in the Member States will be applicable to autonomous vehicles as well. The legal systems analyzed do not distinguish between conventional or self-driving cars when it comes to determining their involvement in an accident. However, differences between existing strict liability regimes will also impact upon the handling of accidents involving self-driving cars. None of the applicable definitions of a motor vehicle in France, Germany, or Austria exclude automated vehicles.
- *As already emphasised, gaps in protection do not just emerge where a risk-based liability regime for motor vehicles is entirely absent, but also where a strict (risk-based) regime is restricted in scope. This is often the case in Europe, though. In particular, liability can be limited to the protection of non-motorised actors or to the compensation* of personal injuries.
- *Strict liability triggered merely by the operation of the vehicle will significantly relieve the victim of such complications*. The vehicle's keeper and the car's liability insurer will typically be easily identified, considering also the *comprehensive system of car registration in place*, and even if that should fail, compensation may instead be claimed from a guarantee fund as foreseen by art 25 MID.

# Absence of risk-based traffic regime – meaning for automatization in traffic

- The peculiar problems of fault-based liability in increasingly automated motor traffic show particularly in those jurisdictions which have so far abstained from introducing strict liability, as victims not only need to show the mere involvement of the vehicle in the accident as under the latter regimes, but identify some specific human conduct that was flawed and thereby triggered the accident despite the fact that the operation of an autonomous vehicle by definition will not depend on human steering.
- As explained before, establishing misconduct in such cases can lead to serious evidentiary problems. The behavioral patterns of autonomous systems are often only predictable to a limited extent and hence more difficult to control ex ante as compared to conventional technologies. Moreover, the ability to explain the operation of such systems is often also limited from an ex post perspective.

# FAULT BASED REGIME IN TRAFFIC

Fault-based liability refers to a legal framework where a party can be held responsible for damages or injuries only if it is proven that they acted negligently or wrongfully. Key aspects include:

Negligence Requirement-The injured party must demonstrate that the defendant failed to exercise reasonable care

Evidential Challenges-Victims often face difficulties in proving the specific misconduct that led to the accident, especially in complex cases involving automation

Human Conduct: Liability is based on identifying a specific human action or inaction that caused the accident.

Applicability to Autonomous Systems-Fault-based liability rules are applicable to autonomous vehicles unless strict liability regimes are established

Standard of Care-The standard of care may be adjusted as automation increases, shifting responsibilities from manual control to monitoring the automated system

Gaps in Protection - Victims may experience significant gaps in protection when fault-based liability is the only recourse available in accidents involving automated vehicles

# Case study*(Germany, France, Austria).*

| HYPOTHETICAL 1. | HYPOTHETICAL 2. |
| --- | --- |
| A PEDESTRIAN IS SERIOUSLY INJURED IN AN ACCIDENT WITH A SELF-DRIVING CAR. HER BICYCLE, WHICH SHE HAD INTENDED TO PUSH ACROSS THE ROAD, IS ALSO DAMAGED | IN A COLLISION BETWEEN A SELF-DRIVING CAR AND A CONVENTIONAL CAR, BOTH THE DRIVERS AS WELL AS THE PASSENGERS ARE INJURED. THE CARS ARE DAMAGED |
| • *The pedestrian can seek compensation for both her personal injuries as well as her property loss* ***from the keeper*** *of the self-driving car irrespective of fault* | • *both keepers can sue each other on the basis of the applicable strict liability regime in respect of their reciprocal property damage, and the passengers can pursue their personal injury claims on the same basis* |

# Keeper

the person who is able to decide on time, place, form and means of use for the vehicle and who is held liable. Alongside the keeper, in some legal systems the driver is also held liable on a strict basis. Apart from France, this is true for Greece, and to a certain extent also for Italy (conducente).

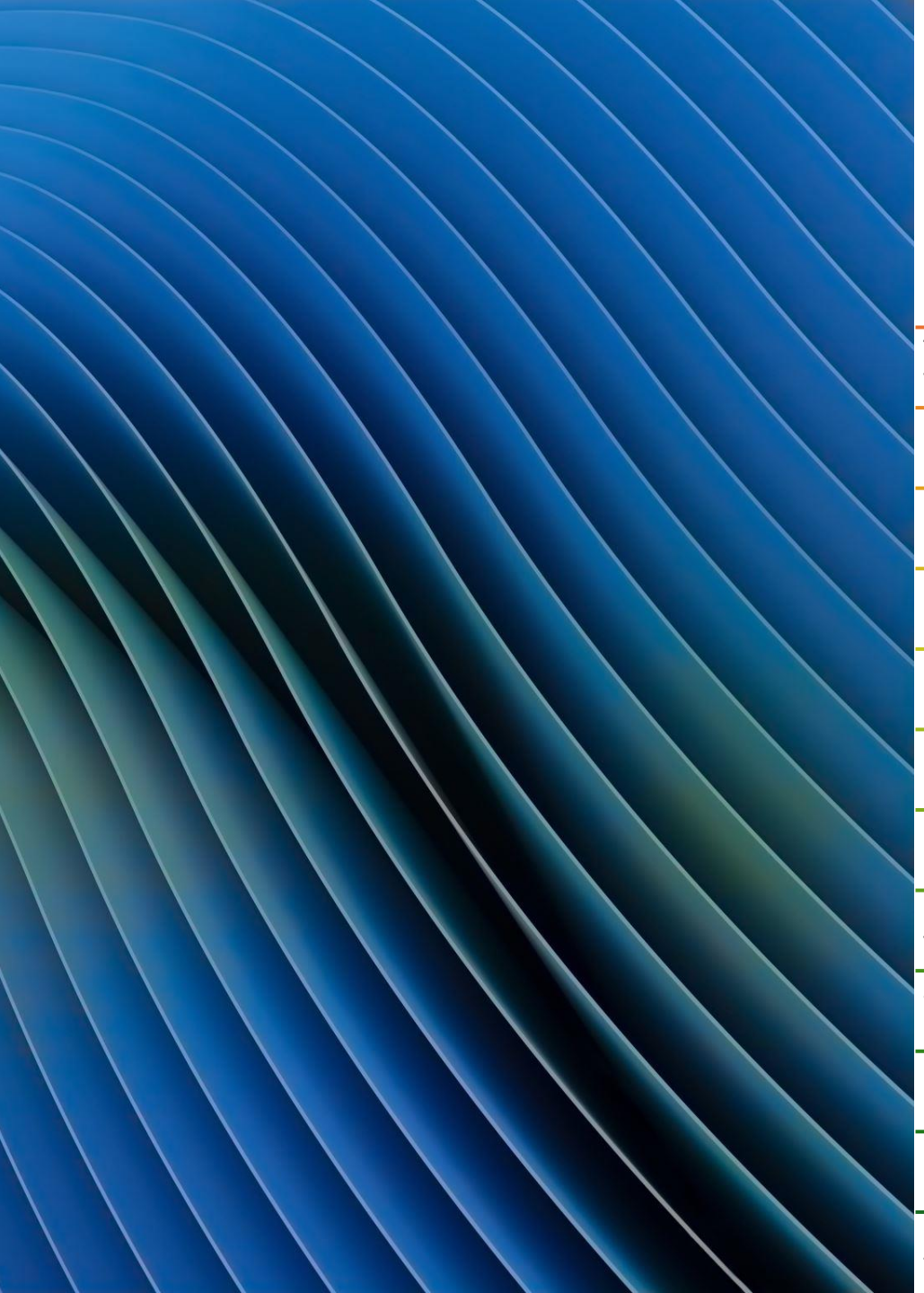
Considering the highly or fully automated vehicles discussed in this case study, this raises the issue, though, of whether it is even still possible to speak of a ‘driver’ if the driving is conducted entirely automatically.

# Caps and limits

- Unlike France, keeper's strict liability is limited by caps (amount limit) both in Austria and in Germany (§ 12 StVG, § 15 EKHG), so losses exceeding these limits can only be claimed under a fault theory. In Germany, the liability caps were significantly increased recently, specifically (and exclusively) for accidents with autonomous motor vehicles.
- By contrast, several Member States limit their respective motor vehicle liabilities to accidents between motorised and non-motorised parties. This is true, for example, in the Netherlands, where the relevant risk-based liability only applies to accidents involving a motor vehicle driving on a public road on the one hand and a non-motorised traffic participant (such as a pedestrian or cyclist) on the other. Damage caused to other moving or parked vehicles, or to persons or property transported by them is explicitly excluded from the strict liability regime, as are accidents involving stray animals.

# Other examples

- Polish law also explicitly provides that damage arising out of a collision of motor vehicles can only be claimed on the basis of *fault liability*. This not only affects losses caused by the vehicles to each other, but also damage caused to persons transported gratuitously (such as friends, colleagues, guests, or hitchhikers)
- Other European legal systems provide for similar or other restrictions on strict liability for motor vehicles. Thus, for example, in Greece, the risk-based regime solely applies to damage caused outside of the vehicle (thereby excluding damage to passengers and items transported), and also harm resulting from collisions is only subject to fault liability. In Spain, only personal injury is recoverable. Therefore, the injured pedestrian of Hypothetical 1 can claim compensation for her injuries regardless of any fault on the driver's part both in Greece and in Spain. However, the damage to the bicycle is only covered by the Greek, but not the Spanish strict liability regime. Injuries inflicted upon the drivers and passengers in Hypothetical 2 fall under the Spanish risk-based liability, but not in Greece, and any property damage must be pursued on a fault theory in both countries. *Such limitations may be traced back to the underlying idea that strict liability should be limited to losses incurred by particularly vulnerable parties (such as non-motorised participants in traffic) or to the infringement of legal interests that are deemed worthy of special protection (such as the life or bodily integrity of a person).*



# Defenses Related to Technical Defects

The defenses against strict liability claims due to technical defects in autonomous vehicles involve considerations of whether the defect was predictable and whether the keeper or driver took necessary precautions.

1. Force Majeure:

- Generally accepted as a defense in several jurisdictions, but limited in France.

- In Germany and Austria, force majeure applies unless the accident is due to vehicle defects .

2. Unavoidable Event:

- An event that could not be prevented despite exercising utmost care. This is recognized in both Germany and Austria, but specifics about vehicle defects limit its applicability .

3. Product Liability:

- In cases of inherent defects, victims may seek recourse under product liability laws, shifting the burden of proof to the victim to show the defect existed at the time of circulation.

4. Technical Failures

- Accidents caused by software or hardware failures are generally not exempt from liability unless classified under unavoidable events or if the keeper maintained proper safeguards

5. Joyriding and Unauthorized Use:

- Liability may be excluded if the vehicle was operated without the keeper's consent, provided the keeper did not facilitate this through negligence

# Exclusion of liability

- With respect to autonomous motor vehicles specifically, particular significance attaches to how a technical failure (resulting from a hardware or software defect) plays out in the context of strict motor vehicle liability. In order to assess whether accidents involving autonomous vehicles are subject to risk-based liability, the question thus arises whether a technical failure falls under one of the relevant defences to liability – which are, again, regulated very differently across Europe. Several Member States provide for a defence in cases of force majeure/unavoidable event.
- If explicitly provided that there is no *unavoidable event* if the accident is caused by a defect inherent in the vehicle or a failure of its mechanisms, the defence does not apply in cases where hard- or software of an autonomous vehicle are flawed or fail for other reasons (eg if a person crossing the road is not identified by the algorithm).
- *Allocating the risk of vehicle defects and sudden technical failures to the keeper's sphere is of considerable significance in cases involving autonomous vehicles as discussed here*. With decreasing influence of human conduct, accidents will increasingly be attributable to technical failures or design or construction defects. It is entirely unclear yet whether courts would determine, for example, a *complete network failure, cutting of autonomous vehicles from backbone data* while on the road, as force majeure or as an unavoidable event, bearing in mind that such vehicles should be prepared for such situations, if only by providing for safe emergency stops in such cases.