



Resolution 2346 (2020)¹

Legal aspects of “autonomous” vehicles

Parliamentary Assembly

1. The circulation of semi-autonomous vehicles on European roads is likely to increase significantly in the coming years, with some believing it possible that completely autonomous vehicles may become available within the next decade. These developments pose questions in relation to criminal and civil liability, the obligations of manufacturers and insurers and the future regulation of road transportation. Important ethical and privacy concerns also arise.
2. In the case of a semi-autonomous vehicle operating under the proper control of an automated driving system (ADS), or of a fully autonomous vehicle, criminal law is not designed to deal with the conduct of non-human actors. This may create a “responsibility gap”, where the human in the vehicle – the “user-in-charge”, even if not actually engaged in driving – cannot be held liable for criminal acts and the vehicle itself is operating according to the manufacturer’s design and applicable regulations. This may require new approaches to apportioning criminal liability, or alternatives to criminal liability in cases where no human can reasonably be held responsible.
3. Similar concerns apply to civil liability for damages incurred by a vehicle operating under the proper control of an ADS. Current fault-based liability regimes may leave the user-in-charge absolved of any liability, with responsibility being shifted to the ADS. This may require new approaches, such as strict liability, to ensure that injured parties receive compensation for the damage they suffer.
4. In cases where road traffic regulations are violated by a vehicle under the proper control of an ADS, whether it is the commission of a criminal offence or causing damage to third parties, the responsibility of the manufacturer may raise issues of product liability. The complexity of autonomous vehicles, however, may make it difficult to prove the existence and nature of any technical fault. Again, it is important that future regulations do not leave lacunae in this respect.
5. These concerns are closely related to ethical issues that arise in relation to autonomous vehicle technology. Human drivers are regularly required to make ethical decisions, including forced-choice decisions of life and death. ADSs will have to make the same decisions, but according to an ethical framework that was defined by their manufacturer. Given that the purchasers of autonomous vehicles may prefer that priority is given to their own safety, competitive market pressures on manufacturers may not generate outcomes that are optimal from a general utilitarian point of view. There may certainly be a need for government regulation to standardise the ethical choices implicit in ADS design, to ensure compatibility with the general public interest.
6. ADSs are data-dependent and data-generating, including sensitive personal data relating, for example, to an individual’s movements. The data from autonomous vehicles is automatically shared with other autonomous vehicles and with a central system and may, in certain circumstances, need to be shared with regulatory and law-enforcement bodies. Particular care will be needed to ensure a correct balance between data processing that is necessary for the safe operation of autonomous vehicles and respect for and protection of the privacy of drivers, passengers and other users.

1. *Text adopted by the Standing Committee*, acting on behalf of the Assembly, on 22 October 2020 (see [Doc. 15143](#), report of the Committee on Legal Affairs and Human Rights, rapporteur: Mr Ziya Altunyaldiz).
See also [Recommendation 2187 \(2020\)](#).



7. Modern ADSs are distinguished by their reliance on artificial intelligence (AI) systems; indeed, modern autonomous vehicles are, in effect, robots. The introduction of autonomous vehicles means putting AI-controlled robots in charge of fast-moving projectiles in a situation of proven, serious potential risk to their passengers and other road users. The expectation is that autonomous vehicles will have the potential to be significantly safer than those driven by humans. Appropriate regulation will be needed to realise this potential. As a starting point, this regulation must ensure full respect for the right to life; including positive obligations to prevent foreseeable and avoidable threats.

8. The Parliamentary Assembly considers that ethical and regulatory standards applicable to AI in general should also be applied to its use in autonomous vehicles. It therefore considers that the work of the Ad hoc Committee on Artificial Intelligence (CAHAI) on a possible legal framework for AI will be especially significant and notes the important contributions to work in this area of other international organisations, including the Organisation for Economic Co-operation and Development, the European Union and United Nations bodies.

9. Once fully autonomous vehicles, designed to respect road traffic regulations and avoid collisions, become available, the legislator will have to solve the problems resulting from their coexistence with vehicles driven by humans who may not always respect the rules. The democratic legislator will have to decide on the most appropriate balance between minimising the number of accident victims and allowing for an efficient flow of traffic.

10. The Assembly concludes that the above considerations give rise to a variety of novel challenges for regulatory regimes. It takes note of the work underway in specialised regulatory bodies, including the Working Party on Automated/ Autonomous and Connected Vehicles (GRVA) of the United Nations Economic Commission for Europe, which is addressing a range of essential technical issues, as well as the European Union and different national authorities. It further notes the work within the Council of Europe on “Artificial intelligence and criminal law responsibility in Council of Europe member States – the case of automated vehicles” underway in the European Committee on Crime Problems (CDPC).

11. The Assembly therefore calls on:

11.1. the member States of the Council of Europe to ensure that the criminal law, civil law and human rights implications of the development and introduction of autonomous vehicles are regulated in accordance with Council of Europe standards on human rights and the rule of law, including respect for the right to life, privacy and the principle of legal certainty;

11.2. the GRVA to conduct a human rights impact assessment as part of its preparatory work on the future regulation of autonomous vehicles, as part of a general, comprehensive framework for ensuring that safety is fully maximised during future development and production of autonomous vehicles;

11.3. the CDPC to ensure that possible lacunae in the applicability of criminal law to the operation of autonomous vehicles are identified and addressed;

11.4. the CAHAI to pay particular attention to the application of AI in ADSs, where there is a particular risk of adverse consequences for the enjoyment of fundamental human rights, in its mapping of the risks and opportunities of AI and its examination of the feasibility of a legal framework.