

Regulation Published in the Official Gazette on Fully Autonomous Vehicles of the Future and the Rules of the New Era!



Vehicles from science fiction movies are now subject to legal regulation!!!



"Many issues, ranging from the road usage of fully autonomous vehicles to the establishment of safety standards, are regulated by the 'Regulation on Type Approval of Motor Vehicles.' In this brochure, we will address both the operational principles of autonomous vehicles and the key provisions highlighted in the regulation.

Atty. Serdar KAYA

On December 1, 2024, the "Regulation on the Type Approval of Motor Vehicles Regarding the Autonomous Driving Systems of Fully Autonomous Vehicles," published in the Official Gazette under number 32739, represents a significant step for the legal future of autonomous vehicles in Turkey. This new regulation establishes the standards that autonomous vehicles must adhere to at various stages, from design and manufacturing to road usage. The regulation specifically addresses the test procedures and technical requirements necessary for type approval of vehicles equipped with autonomous driving systems, particularly for vehicles in category N (motorized vehicles designed for transporting goods, with at least four wheels) and category M (mopeds). It legally defines and organizes these processes from a general perspective. Furthermore, the methods and principles required for ensuring the suitability and safety of these systems have also been incorporated into the legal framework.

What is the Purpose of the Regulation?

- **Standardization:** To establish the standards for the autonomous driving systems (ADS) of fully autonomous vehicles in categories M and N and to outline specific test procedures and technical requirements for type approval of these systems.
- **Safety:** To implement the necessary legal measures to ensure the safe operation of autonomous vehicles on the road.
- **Legal Framework:** To create a legal framework for the use of autonomous vehicles.

What Issues Does the Regulation Address?

- **Autonomous Driving Systems:** The different levels of autonomous driving systems and the classification of vehicles according to these levels.
- **Type Approval:** The tests and evaluation processes required for the type approval of autonomous vehicles.
- **Technical Specifications:** The technical specifications that autonomous vehicles must have (sensors, cameras, software, etc.).
- **Driving Scenarios:** How autonomous vehicles should behave in various driving scenarios.
- **Liability:** Determining who will be held liable in the event of accidents involving autonomous vehicles.

OUR FULL LEGAL ASSESSMENT OF FULLY AUTONOMOUS VEHICLES:

Regulation on Autonomous Driving Systems of Fully Autonomous Vehicles, No. 32739: Legal Evaluation

This regulation establishes the legal framework for the use of fully autonomous vehicles on Turkish roads. The text, aligned with the European Union Regulation 2022/1426, integrates autonomous driving systems into the type approval processes for motor vehicles in Turkey. The regulation should be assessed within the following legal contexts.

Legal Framework and Compliance

By aligning with European Union legislation, the regulation aims to integrate Turkey into international trade and technological standards. This is crucial for manufacturers and importers to remain competitive in the global market.

Liability Regime

The boundaries of legal liability arising from potential accidents or system malfunctions in autonomous driving systems are not clearly defined in the regulation's provisions. Therefore, the allocation of responsibility between vehicle manufacturers, system suppliers, and users should be supported by other legal frameworks.

Testing and Approval Processes

Comprehensive technical evaluations are required to ensure that vehicles meet safety and environmental compliance standards. This regulation constitutes a legal obligation in terms of public safety. The execution of approval processes by authorized institutions will enhance the effectiveness of the regulation.

Traffic Law and Administrative Regulations

The regulation defines the legal status and operational limits of autonomous vehicles in traffic. In situations such as traffic violations or fines, the legal accountability of autonomous driving systems remains unclear, and additional regulations may be needed in these areas in the future.

Conclusion

Ultimately, while this regulation lays the legal foundations for autonomous driving technologies in Turkey, it also creates the need for further legal provisions in areas such as liability regimes, insurance regulations, and data security.

Liability Regime: In the event of accidents involving autonomous vehicles, the legal liability of manufacturers and software providers will become more pronounced. This could also impact insurance and warranty systems.

Legal and Technical Obligations: Under this regulation, vehicle manufacturers are subjected to comprehensive testing and approval processes to ensure that autonomous driving systems comply with the established standards. These processes may lead to increased costs and additional R&D investments.

What are the Legal Obligations Regarding Technical Requirements?

Autonomous Driving System Features: Vehicles must be equipped with systems capable of performing all dynamic driving tasks, such as acceleration, braking, lane-keeping, environmental sensing, and emergency maneuvers.

Testing and Approval Procedures: The autonomous driving systems of vehicles are subject to comprehensive procedures to test whether they comply with the established standards. For example, the operational limits of the system (Operational Design Domain) are defined.

Malfunction Scenarios: In the event of a system failure, the vehicle must transition to a safe position known as the "minimum risk condition."

Categories and Areas of Use:

- Human and cargo transportation in designated areas.
- Vehicles operating on fixed routes.
- Autonomous parking systems in parking lots.

Performance Monitoring and Reporting: The purpose of this regulation is to ensure the safe operation of autonomous vehicles on the road and to reduce accidents caused by human error. Therefore, the performance of vehicles during field use is regularly monitored and reported. Additionally, standards related to safety and system failures are implemented.



What Can Be Expected? How Might Users Be Affected?

With the adoption of this regulation, the testing and development processes for autonomous vehicles in Turkey will accelerate. In the coming years, steps may be taken to allow limited use of autonomous vehicles in certain areas. However, for the widespread adoption of fully autonomous vehicles, further development of infrastructure and legal regulations will be necessary. The consensus within our team is that a much more detailed legal framework will be required.