

## **The connection between the quality of the periodic technical certification of lorries and the road traffic safety and other ecological and commercial aspects**

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### **Abstract**

The technical diversification of the current road traffic units in Romania is enhanced by the growth of the national fleet of road vehicles. According to APIA statistics, cars have the largest share in the volume of the car fleet in Romania. In 2019, the national car park increased by 7% compared to the previous year - 606,163 units, including 161,562 new and 444,601 used. The fleet of commercial vehicles registered an increase of 80,895 units (25,936 new and 54,959 used) or 6.1%, reaching a total nationwide at about 8 million units. The technical condition of these vehicles significantly determines road safety as well as the impact that road transport has on the environment. For each vehicle, the technical condition is validated by periodic technical inspection. In this paper, the findings of periodic technical inspections allowed the authors to develop significant scenarios related to road safety, environmental influences, but also related to commercial issues associated, for example, with the change of owner of the vehicle. The objectives we achieve in this paper are directly related to the direct link between the scope of European Union regulations certifying the compliant technical condition of a particular vehicle (result of periodic technical inspection) and road traffic safety in Romania today corroborated with projections of environmental influences and changes climate.

*Keywords: vehicles technical conditions, road traffic safety*

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