

**INVESTIGATION AND INTERPRETATION OF THE  
RELATION AMONG QUALITATIVE, PHYSICAL AND  
QUANTITATIVE CHARACTERISTICS OF HEAVY VEHICLES  
IN THE MAIN GREEK ROAD NETWORK**

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***ABSTRACT***

This article is based on results of empirical studies and concerns the investigation of the relationships between physical characteristics and qualitative parameters of commercial vehicles that use the main national road network as time, space, vehicle class, gross vehicle weight, equivalent standard axle load etc through multiple analysis of variance. Additionally concerns the investigation of mathematical relationships via multiple regression analysis among explanatory dependent variables (factor of vehicle class equivalence) and static and dynamic characteristics of commercial vehicles as well as the definition of prediction models for the value of the above mentioned explanatory variables.

***KEY WORDS*** : ESAL, pavement design, road traffic surveys.