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**DETERMINATION AND ASSESSMENT OF THE DYNAMIC
CHARACTERISTICS OF HGV AND THEIR IMPACT TO THE
NATIONAL HIGHWAY NETWORK**

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ABSTRACT

The work described in this paper concerns the first major study on heavy Goods Vehicles (HGV) operating on the national highway network. Data was collected at seven specific sites along two of the main national axes, namely Egnatia and PATHE. Around 3 million records were collected concerning all vehicles categories. Data was collected using permanent Weigh-In-Motion (WIM) technology. In addition, measurements were taken from high-speed and low-speed WIM systems in order to examine the validity of the systems. The analysis revealed that the initial sets included a series of counts that were not reliable. False data was detected by imposing various filters. The consistency of the remaining, good-quality, data was examined by using simple analysis techniques. In the final stage of the work emphasis was given in the development of a comprehensive database concerning the WIM measurements. This database is unique for the Greek national highway network and is a necessary step in order to support actions for pavement design and maintenance.

KEYWORDS: WIM, HGV, Pavement, Highway, Maintenance