

3<sup>ο</sup> ΔΙΕΘΝΕΣ ΣΥΝΕΔΡΙΟ  
ΑΣΦΑΛΤΙΚΑ ΜΙΓΜΑΤΑ ΚΑΙ ΟΔΟΣΤΡΩΜΑΤΑ  
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**RESEARCH ON THE EFFECT OF ROAD SURFACE IN THE  
FLUCTUATION OF THE ROAD TRAFFIC NOISE AT THE  
PALLINI-SPATA ROAD SEGMENT OF THE ELEYSINA-  
STAYROS-SPATA HIGHWAY**

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**ABSTRACT**

The present report concerns the evaluation of the impact of the implementation of asphalted concrete with elastomers at the Geographic Unities (G.U.) A14 & A16 (road segment Pallini-Spata), with ‘in situ’ execution of acoustic measurements (morning and noon peak), in time periods of 15’ in two intersections of the G.U A14 & A16 (residential boundaries of the municipality of Pallini and the area of tolls KES), in positions where noise barriers are expected to be implemented in the near future (see photos 1-4). Execution of wind speed measurements and humidity are executed at the same time with acoustic measurements, as well as road traffic load composition measurements (cars and heavy vehicles) and speed measurements, at the same time period basis of 15’.

This research includes simulation of the conditions of measurements of the noise model MITHRA of A.O with inserting all of the recorded variables measured at the above mentioned locations, (traffic load, composition, meteorological variables, etc.) by comparing the new road surface with the basic unfavorable acceptance of no slip asphalt with pebbles and conclusions extraction for all of the noise measurements in a basis of *rolling hours* (four consequent 15’ time periods).