

ANALYSIS OF URBAN TRAFFIC NOISE AT WEEKENDS – CASE STUDY

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The paper presents the analysis results of vehicle traffic and noise measurements. The traffic flow was measured in 2016. The measurements were documented at one hour intervals throughout the entire 24 hours of the day. The results of noise simulations were compared with the sound level calculated by permanent automatic sound and traffic volume monitoring station. Noise frequencies were calculated according to the Cnossos-EU model. The results was described using parameters such as the median (Q_{50}), average peak level (Q_{90}), average background noise level (Q_{10}). Analyzes carried out showed that the traffic of passenger - and medium heavy - vehicles are the main source of road noise. The maximum noise values were recorded between 14.00 and 16.00 and on Sundays they are only slightly smaller than on Saturdays. It has been shown that maximum values of the sound level occurs for the frequency of 1000 Hz. Heavy vehicles noise dominates only in the early morning hours.

Key words: urban traffic noise, variation of acoustic pressure

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