

Methodology for Spatial Classification of Transport Routes in the View of their Impact on the Acoustic Climate of the Environment – Janusz Kompała

Summary

The above-presented methodology for spatial classification of roads in relation to their acoustic annoyance can be used in preparing acoustic maps of towns. The classification of roads with the view of the level of acoustic hazard enables, just in the initial phase of acoustic map preparation, to identify the areas potentially endangered with excessive noise. These areas need taking immediate corrective actions, aimed at reducing the noise level. An important problem, when analyzing the propagation of noise in a highly urbanized area, is the selection of locations in which the measurements of emission of the noise source are performed with the aim to determine its acoustic parameters for calibration of the assumed methodology. Solving this problem makes it possible to use uniform methods of computation. The development of the proposed method and supplementing the layers with next ones, containing information about the range of influence of vibration generated by roadway transport routes, or information on the effects of mining on the roads and building structures, using the proposed methodology, will enable to make an unambiguous categorization of transport routes in the aspect of their vibro-acoustic impact on the environment.