MADRID
inter.noise 2019
June 16 - 19
NOISE CONTROL FOR A BETTER ENVIRONMENT

Noise Mapping based on OpenStreetMap data

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ABSTRACT

Noise mapping relies on numerous input data concerning the territory, such as transport infrastructure and related traffic, buildings, land topography and use, or population distribution to determine the end-of-chain exposed population. Access to these data and their manual formatting can be time-consumming for the operators in charge of the production these maps and potentially error-prone. Nowadays, these data are mainly provided by the state services and sometimes unavailable. In recent years, other data sources have emerged in the form of open data. OpenStreetMap (OSM) has become one of the major project of free editable map over the world that relies on a wide community of contributors. The present work aims at investigating the use of OSM data for noise mapping purposes. Maps produced using "usual" and OSM data are compared in terms of deviation in the estimated exposed population.

Keywords: Noise mapping, Geographic Information System, input data, OpenStreetMap
I-INCE Classification of Subject Number: 76

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