

## SaaS Noise Mapping with a Multi-National Team in Serbia

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## ABSTRACT

Strategic noise mapping across cities has been undertaken under EC Directive 2002/49/EC since 2006. Under EU Directive 2015/996 the new common methods have been introduced which are to be the methods of assessment to be used after 31 December 2018. Within the EuropeAid funded project to undertake strategic noise mapping in the City of Niš, Republic of Serbia, using the CNOSSOS-EU:2015 methodology, the project team were based in Serbia, Spain, Italy, Czech Republic and United Kingdom. This multi-national project team presented challenges to the traditional desktop-based approaches to data sharing, GIS and noise calculation software, particularly in collaborative working and version control. This paper presents an innovative solution to data management, environmental modelling, public consultation and reporting, based upon a hosted service solution delivered as Software-as-a-Service utilised for the first agglomeration noise mapping project in the Republic of Serbia. This provided a fully scalable solution, leveraging cluster and cloud compute techniques, which could be accessed by the Ministry and City authorities in Serbia, and the four project experts in different countries across Europe. It also provided a unified workspace to support public consultation and national training programmes undertaken within the project.

**Keywords:** CNOSSOS-EU, noise mapping, END, Directive 2002/49/EC, Directive 996/2015.

I-INCE Classification of Subject Number: 52, 76, 81, 84