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**Noise mapping of public roads in Norway: New calculation tool  
based on the Nord2000 Road Engineering Method**

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To comply with requirements in the Directive 2002/49/EC on environmental noise (END) and to national guidelines on land use and transport noise, the Norwegian Public Roads Administration has developed the calculation tool called NorStoy, which is composed of two main modules: 1. A calculation module with the Nord2000 Road Engineering Method algorithms. 2. An ArcGIS module to arrange the input data, delimit the calculation area, locate the calculation points and report the results.

Nord2000 Road Engineering Model was completed in 2006, in cooperation with the Nordic countries. The model has very much in common with the coming joint European Harmonoise model. The challenge in using these models is to obtain an acceptable calculation time.

To prevent NorStoy from stopping every time insufficient data occurs, we use default values based on either a typical mean value or the nearest registered value. At the time preparing input data is quite time consuming. We are able to produce the noise maps for the EC directive, but NorStoy is not yet an efficient tool for noise mapping in general. The development of NorStoy is still in progress.