



## Implementation of Noise Directive needs harmonising

**New research has analysed** some of the issues around the implementation of the EU's Environmental Noise Directive (END)<sup>1</sup> by Member States. It demonstrated large differences in the way noise levels are calculated and geographically mapped between countries and called for more standardised and clearer guidelines.

**Environmental noise** can have a number of negative effects on health, ranging from sleep disturbance to cardiovascular disease. The main aim of the END is to provide a common basis for tackling noise problems across the EU through monitoring and mapping noise levels and drawing up subsequent action plans. However, there are large differences between Member States in how these tasks are carried out. The European Commission has contracted a project to review the experiences of Member States in implementing the Directive (2002/49/EC) and the final report is due to be published in May this year<sup>2</sup>.

This study, conducted by Irish researchers, focused on the calculation and mapping methods in use in Member States. It identified a total of 25 different calculation methods used across Europe for estimating noise levels from road transport, rail transport, industry and air transport. Further analysis of these methods suggested that, although the methods shared the same underlying mechanisms for calculating noise generation and spread, the details and formulae differed considerably per Member State. For example, different methods measure noise from different distances and different heights. One method includes noise from car parks in its calculations, while other methods do not.

In addition, the different software packages used to calculate noise may produce different results. Although the EU IMAGINE project<sup>3</sup> is developing new standardised calculation methods, the study suggested there could be problems switching to a different method and converting previous results.

The study identified a number of problems that make standardising noise mapping difficult. Different software packages are used by different Member States and the way in which space is described in terms of scale varies. In addition, the ways in which maps are graphically illustrated differs between countries.

Measuring public exposure to noise is also part of the mapping process and currently this does not have a standardised method. Again methods vary, for example, if the method focuses on the individual it can overestimate noise exposure as it assumes all individuals in a household are exposed to a level experienced at the most exposed side of a building.

The study highlighted several policy implications of these issues. There is a need for more standardisation of calculation methods, mapping methods and estimates of population exposure to provide comparable results. This could involve developing a common software package. To do so the Commission is preparing 'Common NOise aSSessment methOdS' (CNOSSOS) which involves various experts from Member States. The first draft of the methods will be available in May-June this year.

Clear guidelines on public consultation are needed to ensure that consultation is more prioritised within planning actions around noise, rather than conducted as an afterthought. In addition, policy to reduce environmental noise needs to occur at a number of different levels. For example, each Member State should develop a national noise strategy as well as a relevant policy at a regional and local level.

1. See <http://ec.europa.eu/environment/noise/directive.htm>

2. See [www.milieu.be/noise/index.html](http://www.milieu.be/noise/index.html)

3. IMAGINE was supported by the European Commission under the Sixth Framework Programme. See: [www.imagine-project.org](http://www.imagine-project.org)

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