

The opinions expressed in the studies are those of the consultant and do not necessarily represent the position of the Commission.

## SILVIA

### Sustainable Road Surfaces for Traffic Noise Control

| Project details |  |
|-----------------|--|
| Domain          | Road and Tunnel Infrastructure   |
| Duration        | from 01/09/2002 until 01/08/2005   |
| Website         |  |
| Other sources   | <a href="#">Cordis</a><br><a href="#">Transport Research &amp; Innovation Portal</a> |

This project aims to provide decision-makers with a tool allowing them to rationally plan traffic noise control measures. To this end, the work will aim at filling three major knowledge and technical gaps, namely by: setting up classification and conformity-of-production procedures of road surfaces with respect to their influence on traffic noise; investigating and improving the functional and structural durability of low-noise pavement construction and maintenance techniques; and developing a full life-cycle cost/benefit analysis procedure for traffic noise abatement measures. The main final product will be a "European Guidance Manual on the Utilisation of Low-Noise Road Surfacing" integrating low-noise surfaces with other traffic noise control measures including vehicle and tyre noise regulation, traffic management and other noise abatement measures.

The first objective is to develop a classification procedure for noise reducing road surfaces combined with a conformity-of-production testing method. This will start from existing measurement methods, improve some of them and possibly develop new ones. The second objective is to test and specify road construction and maintenance techniques that would achieve satisfactory durability of the acoustic performance while complying with other requirements for safety, rolling resistance and maintenance. The third objective is to develop a procedure for cost/benefit analysis of noise abatement measures. The fourth objective is to issue a "European Guidance Manual on the Utilisation of Low-Noise Road Surfacing" to help decision-makers to rationally plan noise abating or preventing measures integrating low-noise surfaces with other noise control measures.

#### Coordinator

- [Belgian Road Research Centre](#) (BE)

## Partners

- [BAST - Federal Highway Research Institute](#) (DE)
- [Stichting CROW - kenniscentrum voor verkeer, vervoer en infrastructuur](#) (NL)
- [Danish Road Directorate](#) (DK)
- [Danish Transport Research Institute](#) (DK)
- [INRETS - Institut National de Recherche sur les Transports et leur Sécurité](#) (FR)
- [Italgrip SRL](#) (IT)
- [Laboratoire Central des Ponts et Chaussées](#) (FR)
- [M+P Raadgevende Ingenieurs](#) (NL)
- [Ministerie van Verkeer en Waterstaat - Dienst Weg- en Waterbouwkunde](#) (NL)
- [Skanska AB](#) (SE)
- [TØI - Institute of Transport Economics](#) (NO)
- [TRL - Transport Research Laboratory](#) (UK)
- [Gdansk University of Technology](#) (PL)
- [Vienna University of Technology](#) (AT)
- [VTI - Swedish Road and Transport Research Institute](#) (SE)