

The SilVia Round-Robin Test on measurement devices for road surface acoustics

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One of the key objectives of the EU 5th framework project SilVia is to generate a classification system for road surfaces with respect to their influence on the production of road traffic noise. Standardised measurement methods are essential for the assessment of the acoustic properties of road surfaces. These methods can be used for classification of road surfaces, for checking the conformity of production and for monitoring.

In July 2003 a round-robin test was carried out with participants from France (LCPC), Germany (BASt), the Netherlands (DWW and M+P), Poland (TU Gdansk), and the UK (TRL). The objective of this measurement program was to compare measurement devices for tyre/road noise, surface texture, sound absorption, and mechanical impedance measurements and to assess their representativity, reproducibility, and repeatability.

The goal, design and some preliminary results of this measurement program will be presented in the paper. Final results will comprise recommendations for the application of the different measurement methods for classification purposes.