



Process for verification of performance requirements for transport infrastructure

Rasmus Rempling, Carlos Gil Berrocal, Ignasi Fernandez

Chalmers University of Technology, Gothenburg, Sweden

Mats Karlsson

Chalmers University of Technology, Gothenburg, Sweden

Swedish Transport Administration, Solna, Sweden

Contact: rasmus.rempling@chalmers.se

Abstract

In recent years, significant worldwide research has been conducted regarding the performance assessment of bridges and the concept of performance indicator has been introduced. However, there are still significant discrepancies in how these indicators are obtained and used.

Simultaneously, it is desirable to achieve processes and methods that are direct, i.e. that measured values are directly compared with projected values over time.

This project concerns methods for verification of technical performance requirements.

The feasibility study brought together interdisciplinary researchers, consultants, and entrepreneurs to gather knowledge, anchor the research agenda, and implement performance requirements.

The project concludes that there is a need for a “Holistic multi-parameter verification/validation system” that relies on the knowledge gained in structural health monitoring research.

Keywords: Structural Health Monitoring, Performance requirement, Bridges, Structural design, Structural Performance.