

EVITA

Environmental Indicators for the Total Road Infrastructure Assets

A research project of the cross-border funded joint research programme “ENR04 – Effective asset management meeting future challenges”

The programme is a cross-border funded, transnational joint research programme that was initiated by **ERANET ROAD II** (ENR2).

The participating National Road Administrations (NRA) in this Joint Research Programme are Belgium (Flanders), Denmark, Finland, France, Germany, Ireland, Lithuania, Netherlands, Norway, Slovenia, Sweden, Switzerland, and United Kingdom.

The budget is EUR 2.85 million and the duration of this joint research programme is 30 months.

Intro

Road operators have to report more and more frequently and efficiently to all road infrastructure and transport stakeholders. This includes on one hand the road users and on the other hand the road owners, but also to an increasing extent, the people living adjacent to the road network and other objects in the road surroundings, which ultimately are influenced by the road network.

The needs and expectations go beyond the provision of satisfying structural and surface pavement conditions. Also it relates to asset (investment) preservation, safety, noise, air quality, security, socioeconomic and other environmental impacts, as well as operation and maintenance costs. Key Performances Indicators (KPIs) are necessary to exert this “reporting” function and to provide a basis for sound decisions on future investment.

Description

The main objective of the EVITA project is the development and integration of new and existing key performance indicators in the asset management process taking into consideration the expectations of the different stakeholders. The project is paying special attention to the development of easily understandable Environmental KPIs (E-KPIs). The project also aims at identifying existing best practice in the implementation of KPIs to manage the full range of road infrastructure components, (pavements, structures, road furniture etc.).

...Based on a comprehensive state of the art investigation, a recommendation of different E-KPIs for the following environmental areas will be given: noise, air and water, natural resources and GHG. Beside the definition of E-KPIs, a recommendation for the implementation and the use of E-KPIs will be included.

Expected results

The project will open the door to the development of broader Asset Management Systems.

The proposed KPIs, and the framework in which they will be incorporated and interact, will be available for advanced management processes. Thanks to these KPIs, the management of the Europe’s Strategic Road Network (ESRN) will be facilitated and improved by using an optimised asset management system, able to apply advanced management strategies.

Furthermore, since the European strategic road network covers a number of European states, KPIs will be designed to be consistently usable by the different operators on different road types. Also taking into account the fact that the priorities and approaches in different countries may be somewhat different.

It has to be mentioned that, reciprocally, in each country, the use of these KPIs could be extended to manage the national networks.

Duration	01/09/2010 - 31/08/2012
Project coordinator	Philippe Lepert, the French Public Works Research Laboratory, France
Project manager	Christian Cremona, Ministère de l'Ecologie, de l'Energie, du Développement durable et de la Mer, France
Partners	<p>The French Public Works Research Laboratory, France</p> <p>PMS-Consult, Austria</p> <p>The Transport Research Laboratory, United Kingdom</p> <p>Slovenian National Building and Civil Engineering Institute, Slovenia</p> <p>University of Belgrade, Faculty of Civil Engineering, Serbia</p> <p>Portuguese Laboratory of Civil Engineering, Portugal</p> <p>DDC Consulting & Engineering Ltd., Slovenia</p>