

## ASCAM

### Asset Service Condition Assessment Methodology

#### 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 **ERA-NET 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

The aim of the transnational research program “effective asset management meeting future challenges” is to improve technical, economical and sustainable performance of the European road network. It focuses on a cross asset approach, key performance indicators and the incorporation of environmental issues. The program has recognised the availability of knowledge in this field.

#### Description

ASCAM will relate asset condition prediction to measures and network value. It will create a framework to connect existing asset management practices into a holistic, integrated cross asset, pro-active approach. It will relate technical and societal issues, like pavement degradation or failures in the “dynamic traffic management systems” to end-user service levels such as efficient traffic flow, safety, reliability of travel time, noise hindrance or environmental issues.

The added value of the research results is to:

- Connect (technical) measures to end-user service levels
- Add value by connecting inspection and monitoring information to the necessary measures
- Compare maintenance strategies (measures and costs) in terms of end-user service level.
- Add relevant topics like “grand societal challenges” (mobility, climate change) to the end-user service levels

Using this approach should lead to better service for the available (maintenance) budget.

#### Expected results

The ASCAM project will create a common ground for the communication about asset management methods, techniques and thoughts. This common ground is used to structure the existing knowledge and connect knowledge, tools and practices. The demonstrator will show the added value and proof the feasibility of the concept. The added value for national road administrations is that existing knowledge, tools and practices from all over the world are listed and connected to a common framework. The national road administrations can adopt the framework to fulfil their needs and connect their own practices to the framework. They can do that even without using new techniques or tools. In addition (if needed) they can adopt knowledge, tools and practices to improve their own system. Of course if necessary they can extend their methods with practices and knowledge from other countries. A framework could create a path for improvement of their practices, a strategy for framework could create a path for improvement. To have that common ground for asset management cross country and cross asset experience, implementation of new techniques, indication of knowledge gaps etc. will be facilitated.

Changes in society like increasing traffic, increasing demand for reliable traffic time expectations, citizens' expectations to link policy changes to explicit cost-benefit relations, the expectation to account for tax paid expenses etc. are demanding the governments to know what added value maintenance cost will have. Continuous improvement is necessary to meet grand social challenges. The management principles do need objective information to steer development and to increase the cost-benefit ratio of governmental expenses.

As transport is a very large sector, seen in an economical as well as a in (negative) environmental perspective and investments in infrastructure involve a large amount of money, small improvements in the infrastructure (e.g. to improve traffic flow, reduce the maintenance budget, improve the (negative) effect transport and infrastructure have on the environment) can have large benefits. The cost of development and implementation of a cross-asset integral and holistic asset management approach will be very beneficial to find ways to explicitly account for investments in improvements. It will certainly help to choose the best projects to invest in and to improve on mobility and environmental issues

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