STARS
Scoring Traffic at Roadworks

a research project of the
cross-border funded joint research programme
"ENR2011 DESIGN – Rapid and durable Maintenance Method and Techniques"

1) Introduction

"ENR2011 DESIGN – Rapid and durable Maintenance Method and Techniques" is a trans-national joint research programme that was initiated by "ERA-NET ROAD II – Coordination and Implementation of Road Research in Europe" (ENR2), a Coordination Action in the 7th Framework Programme of the EC. The funding partners of this cross-border funded Joint Research Programme are the National Road Administrations (NRA) of Belgium, Germany, Denmark, Finland, France, Netherlands, Norway, Sweden, Slovenia and United Kingdom.

2) Project Facts

Duration:	01/10/2011 – 31/04/2013
Budget:	EUR 314,777
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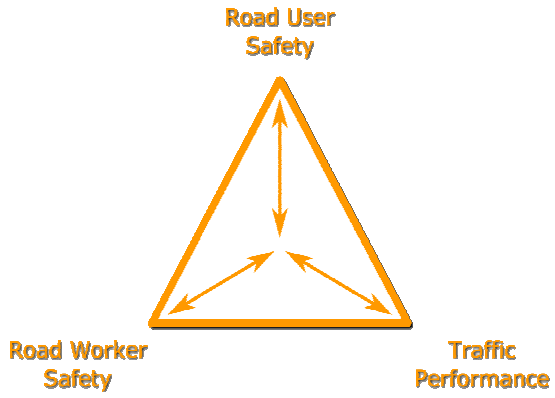
3) Project Description

The aim of the Scoring Traffic at Roadworks (STARs) project is to enable NRA maintenance contracting authorities across Europe to set appropriate and effective contractual limits for the impacts of road maintenance and construction works on traffic, and to enable consistent benchmarking of roadworks safety across Europe.

Differing traffic management practices, born of differing approaches to addressing safety, result in variation across the European Union. In order to understand these national differences this study aims to generate a common method and standard to assess contractor performance.

The main elements of the proposed study are:

- To use existing and new evidence and experience to construct three comparable outcome-based scoring scales for performance at roadworks. The scales will reflect road worker safety, road user safety and traffic performance.
- To calibrate the three scales to account for international variability using scheme specific data from across Europe with a focus on roadworks on the Trans-European Road Network.



- To develop a single, unified metric based on the premise that the three scales are interdependent, as shown in the above triangle figure. This scale will be developed from unbiased rating of sample schemes and the performance of various nations and will highlight specific traffic management techniques that score highly across the three scales.
- To produce a practical tool for use by procurement officers and contracting authorities in setting contractor targets.

The proposed method for this study uses a mixture of information collection and theoretical models. By drawing upon the strengths of six EU research institutions the project will be able to deliver a practical evidence-led scoring method.

4) Expected Results

A number of standardised measures for roadworks are in partial use across Europe, for example the EuroTest programme. The STARs project aims to take this a step further by building a unified set of scales that take account of traffic safety, road user safety and traffic performance under one scoring system, building on a solid foundation of data and analysis.

The main output of the project will be a Contracting Authority Toolkit, a tool to help a procurement officer or contracting authority specify the level of performance required for a scheme, reflected in light of the total scheme cost and output scheme-wide performance targets for use in contractual documentation. It is expected that this will take the form of a web mounted service.

An additional benefit of this approach is that it will allow for direct comparison between roadworks schemes on an international level. This will highlight not just differences but also identify specific areas for improvement.

A complimentary benefit that will be exploited through the study is the overall reduced costs of highway construction and maintenance. This has the potential to be achieved by the wider use of standardised contract requirements across Europe. Common construction practice standards reduce duplication and wasted effort by contractors resulting in cost savings across the board.