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## INTRO

### Intelligent Roads

Project details	
Domain	Road and Tunnel Infrastructure
Duration	from 01/03/2005 until 01/02/2008
Website	<a href="http://intro.fehrl.org">http://intro.fehrl.org</a>
Other sources	

INTRO ("Intelligent Roads") is developing innovative methods to increase the capacity of road infrastructure and to maximise the safety and well being of drivers, passengers, crew and pedestrians. These involve the use and combination of existing technologies as well as combining them with developing technologies.

Three main strands of research are being conducted:

#### Surface safety monitoring

- Integration and testing of real-time warning systems at network level to achieve a significant decrease in the number of accidents due to "surprise effects" from sudden local changes in weather resulting in low friction and hence skidding.
- Increasing drivers' attention to low road friction by only a few percent may result in significantly higher reduction of accident rates due to its non-linear relationship.
- Europe's most advanced driving simulator will be used to optimise for driver responses to new types of information.

#### Traffic and safety monitoring

- Combination of different sensor data will enable the estimations of entirely new real-time safety parameters and performance indicators to be used in traffic monitoring and early warning systems.

#### Intelligent pavement and intelligent vehicles

- Innovative use and combination of new and existing sensor technologies in pavements and bridges in order to prevent accidents, enhance traffic flows and significantly extend the lifetimes of existing infrastructure.

A prolonged lifetime of high capacity roads could thus be obtained using novel methods for early warning detection of deterioration and damage of road surfaces.

#### Coordinator

- [VTI - Swedish Road and Transport Research Institute](#) (SE)

## Partners

- [Austrian Institute of Technology](#) (AT)
- [Forum of European National Highway Research Laboratories](#) (EUR)
- [INRETS - Institut National de Recherche sur les Transports et leur Sécurité](#) (FR)
- [Egis Mobilité](#) (FR)
- [Prisma Solutions](#) (AT)
- [Rigobert Opitz Consulting & Engineering](#) (DE)
- [Ecole Polytechnique Fédérale de Lausanne - Laboratory of traffic facilities](#) (CH)
- [TRL - Transport Research Laboratory](#) (UK)
- [TSS](#) (ES)