



Identifying ITS Opportunities for the HA ITS Research: February 2010

■ ITS RADAR INTERNATIONAL PROJECT

This project is providing intelligence for the Highways Agency on ITS developments in Europe and around the world. It is carried out by TRL and AECOM on behalf of the HA. The project summarises key information for decision makers and practitioners on activities related to Intelligent Transport Systems (ITS). The project covers specific areas of key interest to the HA.

Regular newsletters are being produced, covering information which is in the public domain. For more information about the project and the services provided, the web site can be reached at: www.highways.gov.uk/itsradar.

To contact us and let us know what you would like this project to deliver please email us at: ITSRadarInternational@trl.co.uk

■ ABOUT ITS RESEARCH

The research projects covered in the European Research newsletters are mainly those which receive funding from the European Commission, through programmes such as the Seventh Framework Programme, EasyWay (implementing ITS on the Trans-European Network) and the e-Safety initiative. Updates on European ITS research projects aim to inform the Highways Agency about project progress and notify when significant milestones and deliverables are achieved. News of newly launched and forthcoming ITS projects are reported to keep the HA up to date with the latest research being carried out in Europe.

■ MEETINGS

Co-operative mobility conference 23 - 26 March 2010

Source: [Thinking Highways](#)

The co-operative mobility conference and demonstrations will be held in Amsterdam over 23 to 26 March 2010; registration is now open.

During the event final results of the three major European integrated projects COOPERS, CVIS and SAFESPOT, co- financed by the European Union's Sixth Framework Programme for Research, will be demonstrated. The event, titled "Connecting Smart Vehicles with Intelligent Infrastructure - How the deployment of cooperative systems for Europe will enhance energy efficiency,

safety and mobility”, will include a public highway demonstration and a safety demonstration.

The public highway demonstrations will include the following services:

- real-time multimodal travel information for energy efficient journey planning
- road charging and access control
- in-vehicle display of traffic signs including fixed and changeable speed limits, lane closure and hazard warnings
- local route guidance and speed advice to avoid congestion and stops at traffic lights
- wrong-way-driver detection and alert
- service discovery and download, local advertising.

The safety demonstrations will include applications such as:

- hazard and incident warning
- safety at intersections
- safety margin for assistance and emergency vehicle
- lane change assistance
- head on collision warning
- frontal collision prevention.

Further information on the event and registration details can be found on the [event website](#).

HA recommended to attend

■ CALLS FOR PROPOSALS

EC call for proposals issued on cooperative transport management systems and eCall pilot

Source: [Europa](#)

On 21 January 2010 the European Commission issued a call for proposals on projects in the Information Technologies Policy Support Programme 2010 (ICT PSP). Two of the objectives of the call are relevant to the HA:

- Objective 1.3 Energy efficient cooperative transport management systems – support for up to 3 pilots with an EU contribution of up to €4m. Pilots should lead to a set of specifications for cities for procuring, testing, installing, operating and monitoring state of the art cooperative traffic management systems and services. These should be based on vehicle-to-vehicle and vehicle-to-infrastructure communications. There will be a focus on energy efficiency in some of the following areas: eco-traffic management and control systems, eco-demand and access systems, eco-navigation and travel information systems, driver behaviour change and eco-driving. Pilots should involve public authorities and road operators responsible for network operations.

- Objective 1.4 Support to eCall implementation – support for one pilot with an EU contribution of up to €5m. This pilot is intended to prepare for the deployment of the infrastructure needed for the pan-European eCall service. The pilot will involve upgrading Public Service Answering Points (PSAPs) so that they can handle the eCall messages and equipping vehicles which will be used to test the transmission of emergency messages to PSAPs, handling of those calls by the PSAPs and traffic management centres, and integration of other services within the eCall in-vehicle platform. The technologies used in the pilot will be based on eCall standards.

The closing date for the call is 1 June 2010.

More information about the call for proposals, including the work programme and the presentations at the recent information day, is available from the source link above. More information about eCall is available from the [ITS Radar International eCall Fact Sheet](#).

HA to consider possible role in the programme

ITS Radar International will monitor the outcome of the call

■ HOT TOPICS

ARENA project to hold RUC trials in Sweden

Source: [ERTICO](#)

The ARENA project started its Road User Charging (RUC) trials in Sweden in November 2009. ARENA is a Swedish Research and Development (R&D) project that aims to develop a RUC scheme for heavy goods vehicles based on the specifications of the European Electronic Tolling System (EETS).

As part of the project a test site was created for the purpose of demonstrating practical solutions and holding field trials. In November the project started trials of the concept it has developed for RUC scheme for trucks. As part of the trials, 5 different RUC devices were placed in trucks and tested in a real traffic environment. Through the equipment, the trucks could pay road charges and tolls, and gain access to telematics services coordinated with road user charging.

The trial will evaluate how different equipment for the collection of distance based road user charges for heavy goods vehicles performs in real traffic conditions in order to evaluate and verify the ARENA concept's viability. The goal is also to gather experience and knowledge to support political decisions.

The ARENA Field Trial is conducted in cooperation with EROAD, Fela Management, GMV, Octo Telematics, Skymeter Corporation and Telenor Sweden. Further information on the ARENA project and the field trial is available on the [ARENA website](#).

ITS Radar International will continue to monitor developments in ARENA

■ PROJECTS

iCar Support project launched

Source: [ERTICO](#)

Project iCar Support, launched in December 2009, is a 36 month Support Action funded by the European Commission that will support the implementation of actions and recommendations from the European eSafety Forum and the Intelligent Car Initiative. The iCar partners include: ERTICO, the European Automobile Manufacturers Associations (ACEA), Valtion Teknillinen Tutkimuskeskus, Ygomi Europe, Q-Free and Dekra Automobil.

Activities of the iCar Support project include:

- Supporting the eSafety Forum and related activities
- Strengthening the cooperation among stakeholders in eSafety
- Supporting the development of the Implementation Road Map for all eSafety systems
- Contributing to the implementation process of the European eCall system
- Supporting the i2010 initiative in particular the activities dealing with user outreach and the deployment of smarter, safer and cleaner vehicles in the future, and launching minor studies on topics identified and endorsed by the eSafety Forum.

For further information, please contact [Monica Schettino](#) at ERTICO.

ITS Radar International will monitor iCar Support

■ RECENT PUBLICATIONS

SARTRE project update. Autonomous vehicles breaking the rules?

Source: 'There to be broken?' Vision Zero International, January 2010, pg. 34-37 and [Thinking Highways](#)

Autonomous driving could become a reality as soon as the end of the next decade. Imagine you join a convoy of cars and are able to relax while your car is driven automatically by the SARTRE system.

The project team anticipate that commuters who make long motorway journeys would benefit most, but that the system would also be useful for buses, coaches, lorries and other commercial vehicles. Each convoy would be led by an experienced driver who is familiar with the route. Vehicle navigation systems would be used to link vehicles to the convoy and then autonomous driving would take over. On approaching the final destination, vehicles would each disconnect and continue to drive as usual to their separate destinations.

The SARTRE team believe that such technology could improve traffic flow, reduce journey times, increase road safety and reduce fuel consumption due to the lower air drag associated with vehicles travelling in convoy. However, the Vienna Convention from 1968, which says "that a driver must remain in control of a vehicle at all times", may restrict implementation.

ITS Radar International will continue to monitor SARTRE

CVIS project - to the next level and beyond

Source: [Thinking Highways](#) (Vol. 4, number 4, p14)

This article describes progress that was made by the CVIS (Cooperative Vehicle Infrastructure Systems) project in creating a framework for Co-operative transportation systems.

The CVIS project began in 2006. At the recent 2009 ITS World Congress in Stockholm, the project demonstrated a number of its most promising developing co-operative technologies. CVIS has developed a reference platform that supports the goals of the EC's ITS Action Plan and that could underpin the future European Wide Service Platform (EWSP).

As was reported in a previous [ITS Radar International news](#), a number of technologies were demonstrated during the ITS World Congress that highlighted the interoperability between CVIS, COOPERS and SAFESPOT projects. The technologies demonstrated aimed at:

- Increasing traffic efficiency
- Supporting intermodal travel
- Increasing road safety.

The project aims to create a framework that not only accommodates current and developing cooperative systems, but also enable it to be flexible enough to include future innovations and developments.

All demonstrations so far have used the experimental hardware platform "CVIS 1.0". Plans are currently under discussion for "CVIS 1.1" platform with smaller and well integrated onboard and roadside units.

ITS Radar International will continue to monitor CVIS developments

■ GLOSSARY

COOPERS	Cooperative Systems for Intelligent Road Safety: EC project on the development of innovative telematics applications on the road infrastructure with the long term goal of a "Co-operative Traffic Management"
CVIS	Cooperative Vehicle Infrastructure Systems
EETS	European Electronic Toll Service
EWSP	European Wide Service Platform
FOT	Field Operational Test
ICT	Information and Communication Technologies
R&D	Research and Development
RUC	Road User Charging

SAFESPOT European project identifying how intelligent vehicles and intelligent roads can cooperate to produce a breakthrough for road safety

V2I Vehicle to Infrastructure communication

V2V Vehicle to Vehicle communication