



## Identifying ITS Opportunities for the HA Pilots Newsletter: July 2009

### ■ 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:

<http://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](mailto:ITSRadarInternational@trl.co.uk)

### ■ ABOUT PILOTS

Developments in innovative pilot projects for ITS technologies and services from around the world are monitored and reported here.

These pilots are used to test and assess the potential and impacts of newly developed services before they are deployed for widespread use by the travelling public and those who manage the transport system.

Intelligence on such pilots supports the development of new systems and services in the Highways Agency and on the road network.

Note that pilots and demonstrations which are part of European Research Programmes can be found in the European Research Newsletter.

### ■ PROJECTS

#### **Remote demonstration for new hazard alert**

Source: Traffic Engineering & Control, May 2009, pg. 228-230

The Co-driver Alert project is a safety system designed to inform UK road users of hazards in their vicinity via an in-vehicle device. The system communicates with a centralised system which collates information from a number of providers. Uniquely, the in-vehicle device is two-way, enabling drivers to report hazards by sending a verbal description to the control

centre. Ultimately, Co-driver Alert devices will be similar to personal satellite navigation devices, but as a proof of concept, a demonstrator system using laptops will be road-tested from spring 2009 onwards.

### **ITS Radar International will monitor Co-driver Alert**

Key words: Communications, Cooperative vehicle systems, Geographic information, In-vehicle systems, Safety

The Co-driver Alert project is a safety system designed to inform road users of hazards in their vicinity via an in-vehicle device. A demonstrator system will be road-tested from spring 2009 onwards.

### **TfL launches Intelligent Speed Adaptation trial**

Source: Local Transport Today, 22 May - 4 June 2009, pg. 5 and [Roadtraffic-technology.com](http://Roadtraffic-technology.com)

Intelligent Speed Adaptation (ISA) will be tested by Transport for London (TfL) during a six month period starting in the summer of 2009. As part of this trial, ISA will be installed in a London bus, a taxi and 20 TfL vehicles.

The technology will utilise satellite tracking and digital maps. Two modes will be available, an advisory mode and an automatic mode. An advisory mode simply tells the driver whether he is complying with the speed limit. The automatic mode will reduce the speed of the car to match the speed limit if the driver fails to do so, although this can be over ridden. There is also the option to prevent the vehicle from accelerating to a speed above the speed limit.

The whole of the London area inside the M25 motorway has been mapped. ISA will benefit from a digital speed limit map of London developed by TfL earlier in 2009. The trial will be concentrated on researching driver behaviour, effect of driving on emissions and journey times. Results of the trial will be published in spring 2010, when the technology will be made available to other organisations.

Southwark Council has expressed an interest in fitting ISA to more than 300 of its vehicles.

The LTT article also contains the personal opinion of the journalist who borrowed one of the TfL vehicles for a few days.

### **ITS Radar International will monitor ISA in London**

Key words: Environment, Geographic information, In-vehicle systems, Safety

Intelligent Speed Adaptation (ISA) will be tested by Transport for London (TfL) during a six month period starting this summer in the area within the M25.

## ■ NEWS

### **Ramp metering: delivering significant benefits to both the Highways Agency and road users**

Source: [Innovation and Research Focus](#)

Evaluation of thirty sites with ramp metering on the Highways Agency's network shows an average reduction in journey times of 13%. It is expected that the number of sites with ramp metering on England's roads will shortly reach 80.

A recent trial which linked the traffic light system installed on a grade-separated junction to the ramp metering system on one of its slip roads achieved a journey time saving on the main carriageway of 14.7% as well as significant improvements for local roads in the vicinity of the motorway.

### **ITS Radar International will monitor developments**

Key words: Traffic management

Evaluation of thirty sites with ramp metering on the Highways Agency's network shows an average reduction in journey times of 13%. It is expected that the number of sites with ramp metering on England's roads will shortly reach 80.

### **Scrap c-charge TIF rule says Cambridgeshire chief**

Source: Local Transport Today, 8 - 21 May 2009, pg. 6

Cambridgeshire is one of the last remaining councils still interested in obtaining support through the Department for Transport's Transport Innovation Fund (TIF). Councillor Matt Bradney, Cambridgeshire's cabinet member for transport, commented that the Government should remove the requirement that TIF bids must have a congestion charging element. Instead he is proposing that it be used to fund other innovative schemes that could also significantly reduce congestion but without the financial burden to motorists.

### **ITS Radar International will continue to monitor TIF developments**

Key words: Demand management, Payment

Cambridgeshire's cabinet member for transport has proposed that the congestion charging requirement for the Transport Innovation Fund scheme should be removed and that other innovative congestion-reducing schemes should be funded.

### **Weight-in-motion saves fuel and reduces pollution**

Source: [Oregon State](#)

A report on emission testing prepared by the Oregon State's Department of Environmental Quality revealed that Oregon's Green Light Weight-In-Motion (WIM) system provides a number of environmental benefits.

Heavy goods vehicles using the WIM system at highway speed have an improved fuel efficiency of 57% and a reduction in emissions of CO<sub>2</sub>, particulates, NO<sub>x</sub> and CO of between 36% and 67% compared with systems where vehicles are required to stop on a traditional weigh-bridge. The system also checks the vehicle's tax and registration records at the same time.

Key words: Environment, Freight

A report on emission testing prepared by the Oregon State's Department of Environmental Quality revealed that Oregon's Green Light Weight-In-Motion system provides environmental benefits.

## ■ RECENT PUBLICATIONS

### **Speed enforcement: average is more**

Source: [Thinking Highways](#)

'SPECS' average speed cameras are being used in an increasingly wide number of applications. As well as use as a temporary measure during motorway roadworks, there are pilot studies to use average speed cameras across urban areas and enforce 20mph zones. The article covers case studies using average speed cameras including use on the M1 and M4 during roadworks and on the A77 as an alternative to expensive route treatment works such as improvements to road and junction alignments. The case studies include accident statistics and speed compliance statistics. The article also mentions future features of the new 'SPECS3' system.

### **ITS Radar International will continue to monitor applications of average speed cameras**

Key words: Enforcement, Safety, Traffic management

Case studies of the impact of average speed cameras on motorways during roadworks and on an A road as an alternative to route treatment are reported in this article. Future applications are also discussed.

## ■ GLOSSARY

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| CBI | Confederation of British Industry  |
| FTA | Freight Transport Association  |
| ISA | Intelligent Speed Adaption   |
| TfL | Transport for London – the London transport authority  |
| TIF | Transport Innovation Fund – support for projects which would reduce congestion by developing road user charging or which would contribute to improving national productivity |
| WIM | Weigh in Motion  |