



**Better transport through technology**

## January 2010 Newsletter

**ITS (UK) wishes all the Newsletter readers a happy and successful New Year**

**Welcome** to new Corporate Members **DSTA S.L.** ([www.dsta-sl.com](http://www.dsta-sl.com))

**Thank you** to Foundation Members **Logica** for hosting the ITS & rail discussion meeting at their office near Kings Cross Station in London, and to Foundation Members **Atkins** for providing a meeting venue for the Enforcement Interest Group in Bristol.

### **ITS United Kingdom Calendar-**

Thursday 4 February 2010	<b>Members Breakfast Meeting</b> , WSP, Bristol
Wednesday 3 March 2010	<b>Public Sector Liaison Group</b> , GMPTE, Manchester (tbc)
Monday 15 March 2010	<b>Council Meeting</b> - Atkins, Birmingham
Thursday 18 March 2010	<b>Smart Environment Interest Group</b> , Arup, Leeds

### **ITS United Kingdom Interest Group News**

**The PIIG has a new name . The Passenger Information Interest Group** is now the **Public Transport Interest Group**, to reflect that from its beginnings when real time information became a key topic with the support of DfT, it has reflected the interests of its participants and moved on to cover many other ITS applications for public transport, including ticketing technology, public transport security, vehicle location systems, and still all the latest in passenger information of course. The PIIG acronym will be missed for obvious reasons, but the new name is a more accurate reflection of what actually happens within the Group. The PTIG is still led by Chairman Dr Chris Querée, assisted by Yuelin Liang of Egis Mobility as Hon. Secretary.

**Andrew Pickford** and **Keith Mortimer** of the **Road User Charging Interest Group** put together a very well received programme for the annual RUCIG conference during January. They secured a keynote address by **Lord Bradshaw, Liberal Parliamentary Spokesman on Transport**, and **Sharon Kindleysides** of **Kapsch** helped them to end the day with a lively debate *KISS (Keep ITS Simple, Stupid!) - Is complexity getting in the way of implementing effective solutions? Overcoming misconceptions, demystifying RUC and the way forward in 2010*

Other presentations now available on the RUCIG page in the Membersqarea of [www.its-uk.org.uk](http://www.its-uk.org.uk) are:

- **Bern Grush, Skymeter** - GMAR's Performance Analysis Framework (GPAF) for Road User Charging: Initial progress
- **Philip Hayes, ParkMagic/Tolltag.ie** - The role of pervasive technology in ETC

- **Trevor Ellis, Trevor Ellis Consulting Ltd** . New thinking in enforcement of time-distance-place RUC systems
- **John Walker, Thales Transport & Security Ltd** . The CEDAR project: Charging Electronically by Distance And Road
- **Grant Klein, Detica** . From Pragmatism to Utopia: The Journey to Fully Flexible Road Pricing Starts Simple
- **Howard Potter, Green Light Group & Transportation Planning International** . Update from the Green Light Group

The conference day was also a day of snow, meaning some interesting journeys for speakers and delegates, but nearly everybody made it, showing the popularity of this Interest Group and the pull of the excellent programme.

The RUCIG Conference was generously sponsored by **Kapsch TrafficCom**.

One of the objectives for ITS (UK) during 2010 is to engage more with the **rail** sector, not least because many Members are already active there, or working on ITS for modes that intersect with rail, from car park systems to station security. In order to establish a strategy for this, many Members sent their rail experts along to a discussion meeting at one of Logica's offices in London, co-organised by the Public Transport Interest Group and the Public Sector Liaison Group. Staff from ITS (UK) Member organisations with an interest in rail are encouraged to sign up to the PTIG which is where this activity will be located.

## News from ITS United Kingdom Members

### Enforcement and safety ...

#### Reading Records Benefits of Siemens LaneHawk

Reading Borough Council, the first local authority in the country to deploy Siemens LaneHawk, has revealed the initial results of operating the company's new fully-automated, bus lane enforcement system over the past six months. Since going live, the new technology has captured more offences than existing CCTV systems (on average 24 offences per weekday) and generates far more reliable evidential records, significantly reducing appeals, administrative costs and resources. According to Elizabeth Round, representing Reading Borough Council, LaneHawk is operating extremely well on the Southcote Road site, a notorious short cut for motorists heading into Reading on weekdays during the morning rush hour, resulting in significant congestion at the end of the bus lane when vehicles try to re-enter the main traffic. LaneHawk enables us to automatically detect violations for a specific timetable period of 75 minutes only each morning, and the current number of appeals is very low at less than 1%, thanks to the quality of the LaneHawk evidential images which form part of every penalty charge notice, she said. Often when vehicles are close together CCTV struggles to identify the registration plates and misses some offences but LaneHawk can identify all vehicles and therefore capture more offences. LaneHawk compares potentially violating vehicles against a dynamic white list of allowed vehicles such as buses, taxis, and emergency vehicles. It's much easier and quicker to process offences as LaneHawk automatically prepares evidential records for unauthorised vehicles and sends them directly to the enforcement back-office for operator review, she added. Helping to dramatically reduce the number of appeals compared to other systems, penalty charge notices (PCN) include Reading's web address and a PCN identification number to allow access to video evidence of the offence (from LaneHawk). Additionally,

LaneHawk can be used to process offences from other enforcement systems. As a result, Reading Borough Council is planning further LaneHawk installations and will be considering the technology for enforcing moving traffic offences once legislation is in place, commented Liz. LaneHawk interfaces easily with existing enforcement back office facilities providing a high performance solution that is simple, quick, efficient and unattended. High resolution evidential images and increased capture rate greatly improves the cost effectiveness of bus lane enforcement and the work of traffic managers and parking enforcement officers - and in turn the operation of public transport and the road network generally. Based on Automatic Number Plate Recognition (ANPR) technology, Siemens LaneHawk is the first unattended, digital installation to be approved by the Vehicle Certification Agency (VCA).

### SafeWalk designed to protect the most vulnerable road users

Leading video detection specialist Traficon is introducing a brand-new sensor to better protect the most vulnerable road users. This intelligent sensor, called SafeWalk, is designed to detect waiting pedestrians at curbsides. Launched in Kortrijk, Belgium, to an international audience at the Design at Work & Innovation Exhibition, SafeWalk takes Traficon's established video detection technologies to a whole new level. Vulnerable road users such as pedestrians, cyclists and riders of powered two-wheelers (PTWs) and their passengers account for around 46% of the 1.3 million global road traffic deaths every single year. In fact, according to figures sourced from the World Health Organization's recently published Global Status



Report on Road Safety, in low-income countries in South East Asia, for example, over 80% of those killed are vulnerable road users. As a result of these shocking statistics, there is an increasing focus on vulnerable road users in terms of urban design, traffic management as well as automotive safety. In the field of intelligent transport systems, SafeWalk, the latest video detection solution from Traficon, has been designed to buck this worrying trend. Integrating stereovision technology and intelligent detection for pedestrian presence detection at curbsides, the main goal of this new smart innovation is to improve pedestrian operations and safety at traffic signals. By detecting

waiting pedestrians and, at the same time, by managing and controlling traffic lights more dynamically, this intelligent sensor reduces unnecessary delays to both pedestrians and motorists, says Lode Caenepel, Traficon's Sales Director. By using two CMOS cameras in parallel, SafeWalk converts two-dimensional images into three-dimensional information. Such three-dimensional information is useful and necessary as it enables to distinguish between real objects and irrelevant background information (shadows, reflections). Based now on this 3D information, embedded and field-proven Traficon algorithms are able to analyze more in depth delivering accurate information on pedestrian presence and pedestrian behaviour. Next to its high detection rate and high immunity to false calls, the real strength of this sensor is its higher level of logic. This product not simply senses something or an object - such as many alternatives systems do - but SafeWalk detects pedestrians. It is capable of tracing these pedestrians into the



predefined detection zone.

As such you know when the pedestrian enters the zone, when he leaves and what exact movements he makes. All this information allows you to come to a much more intelligent system. +says Michael Deruytter, Product Manager at Traficon. SafeWalk focuses on more efficient and safer crossings at intersections and better protection of midblock crossings e.g. near schools, shopping centres and hospitals. %By adding this innovative pedestrian detection concept to the Traficon product range, it means we now have a complete video based solution to make any intersection more intelligent.+concludes Mr. Caenepeel.

### **Traffic management ...**

#### **IMTRAC software available now from TRL**

TRL has announced that it has joined forces with fellow ITS (UK) Members the Ian Routledge Consultancy to collaborate on the promotion and resale of IMTRAC software to traffic engineers around the world. Information about traffic control equipment is a vital asset for many Local Authorities, municipalities and consultants. However, mishandled information can lead to lengthy and costly preparation time, which can in turn lead to real world traffic delays and congestion. IMTRAC (Information Management for Traffic Control) has been developed by the Ian Routledge Consultancy to provide a solution to the myriad problems of out-of-date, inaccessible, badly filed or misplaced information. It does this by storing information on-line and allowing direct or map based access to crucial information, as well as data management and export tools: in effect, an %atelligent+filing cabinet. The software incorporates an on-line database with map based user interface, with access (in the office or on street) to all pertinent site information via a map icon for all equipment types. With access levels for different users and detailed information for each site included, IMTRAC is an invaluable tool to share information as well as facilitating easy identification and management of assets, managing faults and facilitating replacement planning. IMTRAC also provides various tools including support for development, roll out and management of IP communication, which, given the potential to significantly reduce operating costs, will be of interest to all Local Authorities / municipalities. Gavin Jackman, Head of Traffic and Software at TRL said: %TRL provides a wide range of tools for traffic engineers that are in daily use around the world. However, if an engineer for whatever reason mishandles the information generated, then the process becomes inefficient. This is where IMTRAC provides the solution. As our products expand their use, it's important that we consider how an engineer uses our software tools. In times of recession, solutions that provide cost effective process savings gain an even greater significance.+Ian Routledge commented: %IMTRAC provides the means to make the most of available assets such as traffic signals and this is vitally important as pressure on the road network increases, but available funding decreases. The ability to access and share data, from the office or site and when working from home, provides greater flexibility and improves efficiency. Partnering with TRL allows us to provide IMTRAC to a wider base. We will continue to support our existing customers, but utilising TRL's expanded geographical reach gets a much wider customer base. With this we can build the product even further and we have some exciting plans for it.+TRL will be developing links to IMTRAC from within its software to allow direct export allowing even greater time savings efficiencies.

## Road User Charging ...

### **Egis wins two toll motorway turnkey system contracts in Poland**

Egis has signed two contracts of fixed operating equipment, one for the A4 Wrocław-Katowice motorway and one for the A2 Świecko to Nowy Tomysl motorway in Poland. The A4 Wrocław-Katowice toll motorway, This 162 km toll free section between Wrocław and Katowice is part of the A4 Trans European Network (corridor Dresden . Wrocław . Kraków . Lviv) and has to be upgraded to toll motorway standards. The A4 contract consists in designing, supplying and installing:

- ~ 14 tolling stations with a total of 68 lanes and associated toll central computer
- ~ 3 maintenance centres
- ~ 162 road emergency phone boxes and associated call central computer
- ~ 162 km of optic fibre with associated telecommunication equipment and network management system
- ~ 2 traffic statistical stations, 1 Weight In Motion station and associated traffic central computer.

This contract includes also a 36 month maintenance period for all the supplied equipment following the 24 month construction period. The Client (GDDKiA, the Polish road directorate) awarded this project to the consortium EGSTRA (Egis Projects and Strabag Sp z.o.o.) with Egis Projects as leader of the consortium. Within this consortium, Egis Projects is in charge of designing, supplying, delivering, commissioning and maintaining all fixed operating equipment (toll, traffic and telecommunication systems) and Strabag Sp z.o.o. is in charge of the buildings including canopies for toll plazas. The total value of this contract is approx. " 50 million.

The Świecko-Nowy Tomysl section of the A2 motorway is the second segment of Autostrada Wielkopolska concession contract which reached financial close on June 30 2009. It is a 149 km stretch between Świecko at the Polish-German border and the existing motorway from Nowy Tomysl to Konin and Łódź. The A2 motorway is part of the A2 Trans European Network (corridor Berlin-Warsaw-Minsk. Moscow), aiming at connecting Poland with the European motorway network. The contractor A2 Strada Sp z.o.o (Strabag group) awarded to Egis Projects the contract for the design, supply, installation and commissioning of the toll, telecommunication and traffic equipment and systems for this motorway section, including:

- ~ 1 mainline toll plaza to build and one existing toll plaza to be upgraded
- ~ 5 toll stations with the associated toll booths and equipment
- ~ 1 operation centre including toll and traffic monitoring
- ~ Weather stations and traffic counting equipment
- ~ 1 operation radio network covering the whole stretch, and
- ~ 100 road emergency phone boxes.

The total value of this contract is approx. " 27 million. The construction works and commissioning of all equipment for this toll motorway section will be completed at the end of November 2011, before the European football championship of 2012 in Poland.



## Location based services ...

### **Envitia Showcase Powerful Geospatial Solutions at Civil Contingencies 2010**

Envitia will be exhibiting at Civil Contingencies, 2010 at the QEII Centre London, January 26<sup>th</sup>. Our new integrated geospatial solutions are particularly relevant in these challenging times when disasters and emergencies seem more frequent and involve many organisations, each with a valuable contribution to make. The common problem is access to and coordination of, not only critical personnel and resources, but as importantly the critical information that allows them to be deployed rapidly and effectively. Envitia provides quick, deployable solutions for the integration of many disparate sources of geographic and location based information, specifically to serve these urgent requirements. Our standards based services provide the ideal platform for a rapidly configurable system, providing intuitive and flexible tools for the delivery of critical spatial data clearly and quickly. Whether mobile or control room based, Envitia solutions can save precious minutes. Dr Sharon Cooper, Envitia's Marketing Director commented, "Our exciting new developments in the established Defence and Security sector have specific relevance in this all important Civil Contingency domain. We are seeing the same operational challenges now in the emergency services and we are confident of providing efficiencies in situation awareness through the timely presentation of critical data, which ultimately will result in lives saved." Envitia already provides expertise on geospatial architectures and solutions for a range of significant defence and security users with research, consultancy and deployed applications.

### **Public transport systems ...**

#### **DfT publishes ticketing strategy**

Following the consultation it undertook during the second half of last year, Foundation Member the Department for Transport published its Smart and Integrated Ticketing Strategy in December. The document is available on the DfT website, <http://www.dft.gov.uk/pgr/regional/smart-integrated-ticketing/> ITS (UK) is pleased to note that the spirit of our response to the consultation is very much present in the published strategy. Many of the ITS (UK) Public Transport Interest Group participants will welcome the strategy the Department is adopting to ensure the creation of London-style integrated, smart ticketing in the other major urban conurbations in England by 2015, which comes with £20 million of funding to make the strategy a reality. Also particularly welcome is the emphasis on new ticketing media such as EMV bank cards, and using mobile phones to store and use tickets. There are many types of ticket which require the user to be able to access information about the product they have bought while on the move . anything involving a fixed departure time, restricted times of availability, a seat reservation, and so on. Smart card type media will never be the only answer. The declared intent of integrating NFC mobile phone ticketing with ITSO standards will be very helpful. Another welcome boost for ITS in public transport is the commitment to paying higher rates of Bus Services Operators Grant (BSOG) to operators whose buses are GPS equipped, as long as one of the uses of this equipment is to provide real time information accessible to passengers. The focus of the strategy is firmly on improving the deal for transport users, as is evidenced by the commitment to consider legislation if operators and local authorities do not make sufficient progress towards integrated ticketing.

### **International News**

**Road User Charging & Electronic Toll Collection – A course presented by ITS South Africa and ITS (UK) Members Newcastle University, UK**

**17-18 February 2010**

**SANRAL, Ditsela Place, Hatfield, Pretoria**

The policies that underpin a user pays culture on our national road network are facing some of their greatest challenges in the coming years. The enhancement and maintenance of an efficient public road network are critical to the economic well-being of South Africa. The Gauteng Freeway Improvement Programme (GFIP) and similar upgrade schemes in Cape Town and Durban, alongside enhancements in rail and taxi operations are already demonstrating how broad-based social benefits can be delivered by applying best practice information technology, payment and communication techniques to our transport networks. On our roads, our life is already being made easier through electronic toll collection and automated payment systems. The relationship with road users is also changing from conventional cash payment in toll lanes to unimpeded free-flow charging and back office infrastructure that collects payments and administers evidence-based enforcement effectively and fairly.

ITS South Africa, ITS United Kingdom and Newcastle University, UK, are pleased to present a course on electronic toll collection and road user charging with the support of SANRAL. The course aims to link policy direction with operations and technologies for charging and enforcement in a variety of policy areas from tolling to congestion charging and Time Distance Place (TDP) charging. Finally, international case studies will be provided to show what works - and what doesn't.

Find out more about the course and how to book a place, at <http://www.itssa.org/>



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## **Competition - Who is this.....?**

Identify this well known UK ITS professional and enter our prize draw. Closing date **15th February 2010**.

All readers of the Newsletter except the person concerned are welcome to enter. Send your answers to [mailbox@its-uk.org.uk](mailto:mailbox@its-uk.org.uk)



**For more information about any of the items in this Newsletter,  
Contact [mailbox@its-uk.org.uk](mailto:mailbox@its-uk.org.uk)**

**News from Members for inclusion in the February issue should be sent to  
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