



August 2008 Newsletter

Welcome to new Corporate Members **Loughborough University** (www.loughborough.ac.uk), **Sybernautix** (www.sybernautix.com), and **Greater Manchester Passenger Transport Executive (GMPTE)** (www.gmppte.gov.uk)

Thank you to Foundation Members **Transport for London** for hosting a technical framework discussion meeting, and to Corporate Members **Vehicle Occupancy Ltd** for hosting the Enforcement Interest Group at Loughborough University.

News from ITS United Kingdom

The First Report of the DfT's **Technical Framework** project was released in July and ITS United Kingdom convened a workshop in London to prepare a response to the report. A panel of about twenty experts assembled to discuss the report's findings and the ITS (UK) recommendations for the next steps of the project. Those present included veterans with a working knowledge of the US national ITS framework architecture, which was launched in the mid-nineties and experts who took part in the KAREN and FRAME EC projects which designed the European technical framework in the early noughties.

The last ITS (UK) event of the spring/summer season was the **Enforcement Interest Group** meeting in Loughborough, when the EIG were the guests of Vehicle Occupancy Ltd at Loughborough University. VOL are, of course, Members of ITS (UK) and fellow Members have been interested to follow the company's progress towards a solution to detecting occupants in moving vehicles to a level of accuracy which would suffice for the automated enforcement of High Occupancy Vehicle (HOV) lanes. VOL presented their latest results to the meeting, and there was also an in-depth look at the approval of civil enforcement equipment, with presentations from Nottingham, London, DfT, and the Vehicle Certification Agency.

In July's addition for the Newsletter we reported that "Gary Jackson" had joined TRL as its new Head of Software with a remit to increase and expand TRL's software business internationally. TRL's new Head of Software is, of course, **Gavin Jackman**. We apologise for the error.

ITS United Kingdom Calendar

Thursday 4 September	Smart Environment Interest Group - visit to MESSAGE, Gateshead
Tuesday 9 September	Public Sector Liaison Group - innovITS, Oxford
Friday 19 September	Standard & Communication Interest Group - London
Monday 22 September	Annual Golf Day The Celtic Manor Resort, South Wales
Wednesday 24 September	Road User Charging Interest Group - London, NW1

TRL – Recently published titles

- PPR345 Scoping study of driver distraction**
by D Basacik and A Stevens (Price £35, code 3X)
- CT109.3 Vehicle communication and vehicle highway communication - Update (2006-08)** (Price £30)

News from ITS (UK) Members

London Technology Trials Report

Foundation members Transport for London recently published their Congestion Charging Technology Trials Stage 3 Final Report. This can be found at:

<http://www.tfl.gov.uk/assets/downloads/stage-3-final-report.pdf>

The report includes results from the DSRC mini-zone trial, the integration of DSRC with Congestion Charging Western Extension ANPR, a summary of tests on mobile positioning systems, an

update on inter-scheme interoperability and the results of the 2007 streetscape study.



Olympic stadium webcam gives the wider picture

Recently joined Member Smart CCTV Ltd, a specialist in video analytics, has supplied a special wide angle, 5 megapixel IQeye IP camera to Essex Security Services Ltd as an Olympic Stadium Webcam installed for H.Forman & Son, a salmon smokery based in Fish Island, Stratford, East London. The webcam can be



viewed by the public at www.formanandfield.com/fisheyeview . The IQeye camera

delivers low-bandwidth video images to a server for remote viewing, whilst simultaneously recording megapixel images onboard the camera. Essex Security Services Ltd wanted to create a time-lapse video, so Smart CCTV's application engineers customised the camera's software code to record a photograph at 2pm every single day of one particular scene, transferring the video image via FTP to the company's hosting server. In four years' time a film of the whole building process from start to finish will be created to coincide with the London Olympics in 2012.

Cityspace wireless network goes live at St Pancras International - Europe's showcase interchange boasts UK's first free broadband internet station service

The wireless broadband network at St Pancras International is now live, enabling the 45 million people who travel through the station every year to take advantage of fast, free internet access throughout the station. Covering approximately 2km², the showcase project sees two floors of the £800m redeveloped St Pancras International flooded with Wi-Fi, enabling passengers and visitors to enjoy high



speed connectivity as well as a range of useful travel and information services on their mobile devices. "St Pancras International is leading the way in creating a new experience in rail travel for the 21st Century," said Stations Marketing Manager, Dominique Didinal. "This station is more than a place to catch a train; it's a state of the art destination station. With over 50 restaurants, bars and shops, and with the launch of our new free Wi-Fi service, the entire customer experience is underpinned by superior technology and service excellence." Having installed the network, Cityspace will manage the service on behalf of LCSP. "Cityspace is focused on transforming the passenger experience through real-time information delivered at the point of need. With St Pancras International, we aim to do just that whilst making the service totally integrated into the lifestyle feel of one of Europe's busiest passenger hubs." The network will facilitate staff and operational functions within the station by this autumn.

Kapsch TrafficCom is delighted with its new UK base. The new office near Ely will be used to support and develop the UK operations of Kapsch. The new office details are Kapsch TrafficCom Ltd – Unit 2, St Thomas's Place, Ely, CB7 4EX – Tel: 01353 644010 www.kapsch.net



The Kapsch team - Pictured are (left to right) – Carol Edge, Bob Muddle and Sharon Kindleysides

Siemens links Comet to journey and network monitoring

Siemens' market leading Comet UTMC system, an advanced traffic management and information system with a scalable, modular design has been further developed to include the complete integration of journey time monitoring (JTM). Linking directly to ANPR cameras, the company's latest generation of Comet now includes the ability to monitor the network performance and enhance the integration of urban traffic management information.

According to the company's Systems Marketing Manager, Mark Bodger, the information generated by using the new Comet UTMC system allows network managers to monitor long term trends in network performance more easily, and the data can be used by operators to improve day-to-day network management. 'The enhanced JTM module also includes the ability to create and update Origin-Destination matrices within the



system to provide the ability for accurate modelling of traffic flow patterns and providing information to microsimulation tools', he said. Additionally, the release of a new tool within Comet allows detailed reporting and analysis of data stored within the UTMC database. Network journey times, car park usage and congestion levels are just some of the parameters which can be analysed in real time, as well as modelled against baseline performance levels for trend analysis of overall network performance. Comet remains the key component of a modern integrated traffic control centre that ensures the effective management of traffic flow through towns and cities in the UK and around the world. Developed in conjunction with local authorities to ensure that user

requirements are addressed, Comet meets the actual day-to-day challenges and changing needs of traffic managers. The system's ongoing development is facilitated

through a dedicated user group, and this combined with Siemens' extensive knowledge of real time traffic management and control systems, such as SCOOT, has resulted in a reliable, flexible and expandable system. With the Comet user group meeting twice a year, system developments are constantly being planned as a result of customer feedback, and are made available to all supported Comet customers. Last year, the company introduced GIS digital mapping as standard to add more functionality and further enhance the proven facilities offered by Comet, as well as additional components for car park guidance and VMS management. Network monitoring, incident and event management, and strategic control for consistent, repeatable traffic management and control can also be incorporated to further enhance functionality. With internet services supporting journey planning and information publication, together with integration with other authorities and network managers, Mark Bodger adds: 'The scalable, modular design of the Comet system allows users to invest in a system initially addressing a particular need, whilst allowing future expansion as requirements change and evolve. In this way it is possible to invest for the future now, maximising the benefits that Comet can provide to address the needs of traffic management within the UTMC environment'.

New HASMOS Contract Award

SEA has been awarded a contract to develop a radar based version of its HASMOS hard shoulder monitoring software as part of a demonstration system being implemented by the Highways Agency and WSP. The system will be installed on a single link of the Northbound M42 and will process data from eight radar sensors in real-time. HASMOS data fusion algorithms will detect incidents on the hard shoulder and minimise false alarms by combining measurements from adjoining radars.

Whilst installed, the system will be assessed for accuracy using a video based ground truth system.



Vehicles in the hard shoulder pose a danger in all circumstances but are of particular interest on carriageways which employ hard shoulder running. Where the hard shoulder is to be opened as a running lane, operators must ensure that this lane is clear of obstructions. HASMOS has the potential to support operators both in preparing for, and performing this task.

TfL's VMC system arrives at SEA

SEA has recently taken delivery of a Toyota Prius fitted with a Vehicle Mounted Camera (VMC) system. The VMC is a key deliverable of the Digital Traffic Enforcement System (DTES) project for Transport for London (TfL).

TfL will use the VMC for the enforcement of a number of traffic contraventions, including

parking and driving in bus lanes and red-route parking on TfL's road network. It is one of a number of systems to be supplied by SEA that will replace TfL's analogue traffic enforcement system, reducing the cost of collecting, processing and storing evidence for TfL while improving the quality and reliability of future enforcement operations.



Green enforcement – DTES system has just been installed into this hybrid Prius prior to being liveried in TfL graphics



Main on-board electronics housed in the boot

The University of Leeds launches new Driving Simulator

The University of Leeds invited Nick Ross to officially launch the new Driving Simulator on Monday 7th July 2008 in front of a group of invited guests who were present as the replacement driving simulator 'cut the ribbon' by transiting across its axis tracks. Thereafter Nick and the other invitees were permitted to 'drive' the car donated by Jaguar. The University of Leeds Driving Simulator represents a major investment and is one of most advanced worldwide in a research environment; it allows research into driver behaviour to be performed in accurately controlled and repeatable laboratory conditions. The driving simulator has been designed to create maximum realism thereby enabling researchers to test drivers' responses to certain



situations that cannot be replicated on the highway. The driving simulator is managed by the Institute for Transport Studies and is intended to undertake research studies on behalf of organisations that have a research requirement. Current examples include Intelligent Speed Adaptation, interactions between speed choice and road environment, effects of automated systems on Safety, improved driver comprehension of traffic management signing and CityMobil towards advanced road transport for the urban environment that are being conducted on behalf of organisations including DfT, EPSRC, Highways Agency and the EU.

Thanks to the simulator, the ITS Safety Group, an independent, multidisciplinary team of researchers can undertake research that would be impossible



to do on the road. The attached photographs give an indication of the scale and nature of the driving simulator however for further information view the following link:

<http://www.its.leeds.ac.uk/facilities/uolds/index.php>

International News

European Commission allocates single radio frequency for cooperative systems

As part of its overall fight against road accidents and traffic jams, the Commission decided on 5 August to reserve, across Europe, part of the radio spectrum for cooperative systems. Smart vehicle communication systems have the potential to make safer and ease the lives of Europe's drivers: in 2006, more than 42,000 people died in road accidents in the European Union and more than 1.6 million were injured while every day there are some 7,500 km of traffic jams on the EU's roads. Today's Commission Decision also intends to foster investment in smart vehicle communication systems by the automotive industry, at the same time spurring public funding in essential roadside infrastructure. "Today's Commission decision is a decisive step towards meeting the European goal of reducing road accidents. Getting critical messages through quickly and accurately is a must for road safety," said Viviane Reding, EU Telecoms Commissioner. "We should also keep in mind that with 24% of Europeans' driving time spent in traffic jams the costs caused by congestion could reach €80 billion by 2010. So clearly saving time through smart vehicles communications systems means saving money." This Commission Decision provides a single EU-wide frequency band that can be used for immediate and reliable communication between cars, and between cars and roadside infrastructure. It is 30 MHz of spectrum in the 5.9 Gigahertz (GHz) band which will be allocated within the next six months by national authorities across Europe to road safety applications, without barring other services already in place (such as radio amateur services). A typical example is the case of a vehicle detecting a slippery patch on a road: if it is equipped with a cooperative car-to-car communication device, it can deliver this information – thanks to the 5.9 GHz band – to all cars located nearby. If a traffic management centre needs to inform drivers about a sudden road closure, the alternative

route to take or speed limits, it will also be able to send this information to a transmitter detector along the respective road, which then passes it on to the vehicles driving by.

**For more information about any of the items in this Newsletter,
contact mailbox@its-uk.org.uk**

**News from Members for inclusion in the September issue should be sent to
rlouis@its-uk.org.uk**

**Please distribute this Newsletter to all colleagues and contacts whom you think
might be interested! Why not add it to your intranet?**