Future **U**rban **T**echnologies: **U**ndertaking **R**esearch to **E**nhance **S**ustainability

FUTURES Workshop – ITS in the Urban Environment

29th February 2008
Royal Society for the encouragement of Arts,
Manufactures & Commerce,
8 John Adam Street
London WC2N 6EZ
020 7930 5115
http://www.rsa.org.uk
(Delegates are requested to enter the RSA via the Durham House Street entrance)
See: http://www.thersa.org/hospitality/about/findus.aspx

WORKSHOP INFORMATION PACK

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Introduction to the Event

Welcome to the FUTURES workshop – ITS in the Urban Environment. We hope you will find the event interesting and useful. This workshop is designed to engage local authority stakeholders and other key players in the ITS sector in an informal environment to debate the issues associated with the contribution that Intelligent Transport Systems can make to sustainable urban mobility in the UK.

The workshop is divided into two sessions. In Session 1, a series of presentations from leading figures in the ITS community will be delivered alongside an introductory presentation on the FUTURES programme followed by a panel discussion. Session 2 will involve three parallel streams of workshop discussion followed by plenary feedback around the subject of the deployment of ITS in the urban environment and the strengths, weaknesses, opportunities and threats associated with that deployment.

The workshop is also designed to promote the work of the FUTURES programme. FUTURES (Future Urban Technologies: Undertaking Research to Enhance Sustainability) is an EPSRC funded Sustainable Urban Environment project which explores the degree to which transport and transport-related technologies can contribute to more sustainable mobility in the urban environment. The project is supported by a range of stakeholders from local and national government and the transport industry. It is intended that a follow-up conference will take place in the autumn of 2008 to showcase the outcomes emerging from the FUTURES research activities.

Introduction to FUTURES

FUTURES

Future **U**rban **T**echnologies: **U**ndertaking **R**esearch to **E**nhance **S**ustainability

Introduction

The information age and technological advances are presenting substantial opportunities (and threats) concerning the design of our transport services, management of our transport systems, design and operation of vehicle fleets and the way in which people gain access and participate in society. The FUTURES programme is concerned with research into the role of new technologies in progressing towards more sustainable urban mobility. The research programme focuses on people, systems and vehicles as key elements which, in combination, result in the levels and patterns of urban mobility and the associated economic, social and environmental impacts.

FUTURES involves academic expertise drawn from seven research groupings in four universities and which spans engineering, technology, environmental science and social science. The consortium benefits from the involvement of a number of leading stakeholder partners drawn from central and local government, transport operators, service providers and other industry players. The results of the research will be used to advise policymakers and those responsible for transport delivery, enhance the base of research knowledge, contribute to teaching, and inform the population more widely.

The FUTURES research programme includes seven research activities and three PhD research projects which are briefly described below with contacts provided for more detailed information:

The research activities

Navigating the city – supporting the unfamiliar traveller
FUTURES is advancing understanding in the field of wayfinding and identifying appropriate opportunities and advances that can be made in the provision of wayfinding aids. The research and examination of opportunities has centred upon evidence gathered in the cities of Bristol and Manchester. The principal focus of the research is about people, understanding what their needs, capabilities, limitations and concerns are in relation to how they travel within urban areas and reach their intended destinations for unfamiliar journeys. For more information please contact Glenn Lyons: Glenn.Lyons@uwe.ac.uk

Bespoke services for personal travel and goods movement
Developments in technology to enable the location of people and of vehicles in real time and to have two-way communication with a service provider will enable a range of new bespoke services to develop. Such services should enable travellers to meet their journey needs using a mixture of collective and individual modes in ways which, overall, lead to a more sustainable environment. The focus of this research activity is centred upon the role of lift sharing in supporting more sustainable urban mobility. For more information please contact Andy Richards: acr@soton.ac.uk

Environmental assessment of new vehicle technologies with improved confidence
Given the potential for future developments of in-vehicle technologies and the increasing number of system management measures to tackle congestion problems, environmental assessment methodologies must evolve. FUTURES is collating micro-scale driving parameters and emissions factors for vehicles equipped with selected technologies to assess potential impacts, the sensitivity of the roadside environment to changes in emissions and the overall range of uncertainty in impact assessments. Determination of uncertainties will allow confidence in assessment of impacts leading to better informed policy decisions. For more information please contact Margaret Bell: Margaret.Bell@newcastle.ac.uk

Traveller information services: assessing barriers to their use
Substantial progress in the field of traveller information services in the UK and elsewhere is not being matched by attainment of desired or expected levels of use. FUTURES is identifying, understanding and prioritising barriers to use in order to better understand the opportunities that may exist to encourage greater levels of information services use. The research is especially focusing upon online public transport journey planning. For more information please contact Sendy Farag: Sendy.Farag@uwe.ac.uk

Teleworking: trends in and causes of location independent working
FUTURES is gathering empirical qualitative and time-series quantitative evidence concerning teleworking. In particular it is examining the phenomenon of part-day homeworking which may have significant implications for commute patterns alongside opportunities for more flexible patterns of working, higher productivity and improved wellbeing. The intention is to assess the extent to which (transport) policy and strategy can influence or positively exploit location independent working.
For more information please contact Hebba Haddad:
Hebba.Haddad@uwe.ac.uk

Innovative uses of roadspace
There has been a gradual realisation that urban roadspace may not always be best used by giving priority to motorised vehicles. Pedestrianisation, access control, speed control and congestion charging have all been used to reconstitute travel priorities in urban environments, often with positive environmental results. FUTURES is exploring how the use of roadspace may be prioritised, specifically in the form of 'Bus & Toll' and 'Bus & HOV lanes', to meet current and potential sustainable policy objectives.
For more information please contact Nick Hounsell:
N.B.Hounsell@soton.ac.uk

Impacts of new technology on Urban Traffic Management
New vehicle location and control technologies can enable radical new approaches to traffic management with improvements in capacity, safety and efficiency. FUTURES is exploring the extent to which vehicle technologies, specifically in-vehicle satellite navigation systems, will develop for use in urban environments, and how traffic management technologies may be changed to make best use of the opportunities which will be available. Such research is critical to ensuring that such technologies contribute to sustainability.
For more information please contact Adrian Hickford:
a.j.hickford@soton.ac.uk

PhD research projects

The three research studentships reflect the inter-disciplinary nature of the FUTURES programme and its emphasis on People, Systems and Vehicles as the key elements in future urban mobility:

Michelle Heward is a social scientist whose interests lie in the relationship between transport, technology and older people. She is exploring the role that technology could play in assisting the mobility of older people. For more information please contact: M.Heward@soton.ac.uk

Max Wilson is a computer scientist whose research interests lie primarily in the usability for predictive modelling of rich interfaces for exploring/querying information in a user interface. This research has been applied to transport through research on the usability and functionality of internet-based traveller information services. For more information please contact: mlw05r@ecs.soton.ac.uk

Glynn Rhys-Tyler's research is focussed upon understanding the relationship between driver behaviour, vehicle dynamics, and tail pipe emissions. He is working on the development of a UK tail pipe emissions model for light vehicles, and its application in future UK transport scenarios. For more information please contact: glyn.rhys-tyler@newcastle.ac.uk

Event Programme

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10:30 - 11:00	**Registration**	Suthers Court
10:30 – 11:00	*Tea & Coffee*	*Vault room 2*
11:00 - 12:30	**Session 1**	Tavern Room
11:00 - 11:10	Chairman's welcome, opening remarks and introduction to the day – David Quarmby	
11:10 - 11:25	Presentation - Louise Barnett, Head of ITS Policy Co-ordination, Department for Transport	
11:25 - 11:40	Presentation - Andy Graham, Managing Director of White Willow Consulting Ltd	
11:40 - 11:55	Presentation - Eric Sampson, Visiting Professor of Transport at Newcastle University and Chairman of ITS United Kingdom	
11:55 - 12:10	FUTURES introductory presentation – Mike McDonald	
12:10 - 12:30	Questions to panel of speakers	
12:30 - 12:40	Introduction to workshop activity – Mike McDonald	
12:40 - 13:40	*Fork Buffet Lunch*	*Vault room 2*
13:40 -15:00	**Session 2: Workshop parallel sessions**	
	Stream 1 – Session Chair Mike McDonald	Tavern Room
	Steam 2 – Session Chair Glenn Lyons	Adelphi Room
	Stream 3 – Session Chair Margaret Bell	Romney Room
15:00 – 15:20	*Tea & Coffee break*	*Vault room 2*
15:20 – 16:05	Plenary feedback	Tavern Room
16:05 – 16:15	Chairman's final remarks – David Quarmby	
16:15	Close	

Speaker biographies

David Quarmby CBE is a Director of Colin Buchanan and Partners, a Director of NedRailways UK, Chairman of the Transport Research Institute, Napier University and Chairman of the Independent Transport Commission. He was Deputy Chairman and Chairman of the Strategic Rail Authority (1999-2006), Chairman of the Docklands Light Railway (1999-2001) and a Board Member of Transport for London (2000-2004). He was Chairman of the British Tourist Authority from 1996 to 2003. From 1984 to 1996 he was a Main Board Director then Joint Managing Director of Sainsbury's; from 1970 to 1984 he was at London Transport - the last six years as Managing Director of bus operations. In the 1960's he taught at Leeds University where he took his PhD, he then spent four years as an Economic Adviser at the Ministry of Transport.

Louise Barnett is Head of ITS Policy Co-ordination in the Transport Technology and Standards Division at the Department for Transport. Louise is responsible for the development of the Department's National Technical ITS Framework. Prior to this role she worked in the Department's Transport Direct team in a number of roles including Data Manager and Real Time Information Manager.
Louise will be presenting on the Department's strategy "Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World" and providing an update on progress on the Technical Framework.

Andy Graham has extensive experience in ITS, both at technology and policy level. He founded White Willow Consulting 3 years ago after leading Faber Maunsell's ITS team. He has wide-scale experience of the wider picture of in-vehicle technology. This is through developing the UK's RDS-TMC Demonstration Plan, leading research projects for DfT in Co-operative Vehicle Highway Systems and the UK business case for eCall. He also has detailed experience of Local Authority systems, being part of the original UTMC development team.
Andy will offer a customer perspective on the deployment of Intelligent Transport Systems in the urban environment paying particular attention to local political issues surrounding ITS deployment

Eric Sampson worked for the Department for Transport in the Marine, Public Transport, Network Management, Chief Scientist's and Railways Directorates and the Coastguard Agency. In 1997 he was appointed Director of Road User Charging research and in 2000 set up the Transport Technology and Standards Division working on information systems, road user charging, smart cards, vehicle safety and innovative transport technologies. Eric has a strong interest in developing academic–industrial collaboration. In 1992 he convened the Waterloo Conference which led to the formation of ITS (UK); he was also a founder member of ERTICO – "ITS-Europe" – and Chairman of its Supervisory Board. In 1999 he set up the Transport Card Forum, 100+ academic and industrial bodies working together on common problems. Eric theoretically retired in November 2006 but was elected Chairman of ITS (UK) in May 2007. He is a Fellow of the Transport Research Foundation and a Visiting Professor at Newcastle University.
Drawing on many years of managing (and observing) in the public sector Eric Sampson will review what factors he feels have helped or hindered the deployment of ITS systems by national and local Government and offer some lessons for those planning future deployments.

Mike McDonald has been Director of the Transportation Research Group at the University of Southampton since 1982. He has undertaken research covering many aspects of transport planning, traffic engineering and control, application of new technology, safety, highway design, economic appraisal and evaluation. He has been a member of several professional and government committees and advisory bodies including the Research Councils and the Technology Foresight Programme. He has been significantly involved with the EC Transport Telematics programmes and has international recognition as an expert in Intelligent Transport Systems and is a past Chairman of ITS UK.
Mike will give a presentation introducing the FUTURES programme.

Introduction to Session 2

Session 2 involves parallel streams of workshop discussion followed by plenary feedback around the subject of the deployment of ITS in the urban environment and the strengths, weaknesses, opportunities and threats associated with that deployment. The approach to be taken is an objective-led SWOT analysis.

Objective: 'Realising the potential of Intelligent Transport Systems to support more sustainable urban environments'

	HELPFUL to achieving the objective	**HARMFUL** to achieving the objective
INTERNAL ORIGIN Attributes of the organisation	**STRENGTHS**	**WEAKNESSES**
EXTERNAL ORIGIN Attributes of the environment	**OPPORTUNITIES**	**THREATS**

Delegates are encouraged to prepare for this exercise by considering their own institutions strengths and weaknesses with regard to **any application area** of ITS deployment and also the external opportunities and threats from National Government, local politics, the media, the public, etc. which influence the degree to which the potential of ITS to support local sustainability objectives is realised. Delegates are encouraged to bring their own experience and examples (good and bad!) in regard to ITS deployment and any lessons learnt from experience to inform the discussions.

Delegate list with workshop stream allocation

Name	Affiliation	Workshop Stream
Marc Allen	Reading Borough Council	1
Rod Anderson	Swindon Borough Council	2
Louise Barnett	Department for Transport	1
Mark Beecroft	University of Southampton	1
Margaret Bell	Newcastle University	3
Kris Beuret	Social Research Associates	2
Tony Brown	Hampshire County Council	1
Peter Bull	Sheffield City Council	3
John Carr	Elan PTC	2
Mark Cartwright	Centaur Consulting	1
Dave Cherry	Leeds City Council	3
Robert Cone	Welsh Assembly Government	2
Heather Cruickshank	University of Cambridge	1
Andrew Davies	Bristol City Council	2
Jo Dicks	Cambridge City Council	2
David Evans	WSP Group	3
Keith Gardner	Transport for London	3
Paul Glover	Transport for London	3
Paul Goodman	University of Leeds	3
Andy Graham	White Willow Consulting Ltd	2
Hebba Hadadd	University of the West of England, Bristol	2
Richard Harris	WSP Group	2
Mike Hayward	Logica CMG	3
Nick Hodges	Leicester City Council	3
David Hytch	Logica CMG	1
David Jeffery	Atkins	2
Glenn Lyons	University of the West of England, Bristol	2
Mike McDonald	University of Southampton	1
Bill McDowell	Glasgow City Council	3
Tom Magrath	CENTRO	3
John Morley	Liverpool City Council	2
Phil Pettitt	InnovITS	3
Marshall Poulton	Transport for London	1
David Quarmby	Colin Buchanan & Partners	1
Iain Reeve	Surrey County Council	1
Glyn Rhys-Tyler	Newcastle University	3
Doug Robinson	University of Southampton	
Eric Sampson	Newcastle University	3
Liz Saville	Essex County Council	1
Neal Skelton	ITS UK	1
Dave Stoner	Kent County Council	2
Bill Tyson	Greater Manchester PTE	2
Matthew White	Department for Transport	1
Jacqui Wilkinson	Department for Transport	2
Martin Wylie	Southampton City Council	1
Ian Yarnold	Department for Transport	3

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