



Call for Papers

ITS Bordeaux 2015



Call for Papers

22nd World Congress and Exhibition
on Intelligent Transport Systems and
Services

22nd
ITS World Congress

Bordeaux, France

5 to 9 October

2015

TOWARDS INTELLIGENT MOBILITY

Better use of space

Organised by

Co-Organised by

Hosted by

On behalf of

Partners



Table of Contents

Welcome Letters	3
The Event	9
Congress Format	10
Congress Topics	12
Call for Scientific/Technical/Commercial Papers	14
Special Interest Session Proposals	15
Exhibition, Sponsorship	16
Demonstrations, Technical Visits, Innovation Pavilion & Aerospace Area	17
General Information	18
International Programme Committee	19



Welcome Letters

The European Commission is very pleased to invite you to the 22nd ITS World Congress that is hosted by the city of Bordeaux from 5th to 9th October 2015, twenty one years after its first edition in Paris.

Innovation, and especially Intelligent Transport Systems, plays a significant role in preparing our transport system for the future. The Congress theme, 'Towards Intelligent Mobility - Better use of space', underlines the importance of a more intelligent use of the existing transport infrastructure.

Shifting from capacity to connectivity and achieving a co-operative and better interconnected transport system is a priority for public authorities and definitely one for the European Commission. We need to move towards multimodality.

The mobility needs of the society are evolving; they are becoming increasingly diversified. While people and businesses look for services more targeted to their own expectations, ways are being sought to reduce the environmental impact of the transport sector, minimizing the land use, as well as substituting finite fossil fuels.

Efficiently-used information and communication technologies can effectively reconcile the different streams. On the one hand they help people to move around more easily, safely and economically, as well as in a more environmentally friendly manner. At the same time, they can provide smarter mobility, transport options and other benefits for Smart Cities.

Reliable information based on widely available and accessible transport data is crucial to make the vision of a seamless transport system, as presented in the 2011 White Paper on Transport, a reality.

This is why innovation, and especially intelligent transport systems, plays a significant role in preparing our transport system for the future.

Better modal integration also requires the selection of the right financing instruments. Both Horizon 2020, the new framework programme for supporting research and innovation, and the Connecting Europe Facility, for large-scale deployment on the TEN-T network and beyond, will co-finance projects that will help us advance towards a seamless transport system.

The topics of the Congress, such as Cooperative ITS, Multimodality, Big Data and Smart Cities perfectly match the areas in which the European Commission is currently very active and engaged in a very fruitful cooperation with the ITS Community.

The 22nd World ITS Congress will be a great opportunity for all of us to turn into reality the vision of a seamless transport system for the benefit of society, the economy and the environment.

We would like to invite you to Bordeaux, and we look forward to meeting you there.

Vice President Siim KALLAS,
Commissioner responsible for Transport

Vice President Neelie KROES,
Commissioner responsible for the Digital Agenda

Máire Geoghegan QUINN,
Commissioner responsible for Research, Innovation and Science





It will be a great pleasure for both of us to welcome you in Bordeaux next year, 21 years after the first ITS World Congress held in Paris in 1994.

We are preparing this Congress with representatives of industry and territories, with transport operators and research laboratories, with experts of space, communication and information society, with academics and managers of big and small enterprises. All of them have already been working for months in liaison with ITS Europe, ITS America and ITS Asia-Pacific to prepare an attractive programme to allow you to meet the most reliable experts and to help you to build intelligent mobility policies able to provide efficient services to your citizens and your visitors and to contribute actively to a better environment.

This Congress will be an exceptional occasion to participate in demonstrations of the most promising ITS applications and to exchange good practice with foreign colleagues. The large deployment of the ITS systems, which is necessary for the efficiency and sustainability of all the modes of transport, needs to be made in consistent ways in our different countries. To achieve this goal we want to help all the participants discover the latest technical innovations and help to enlarge their personal network of people they trust.

All of your ideas, proposals and experiences are very welcome in this event, whose success will also be your success. French people have a long tradition of invention, evaluation and debate about transport and mobility. Many cities and territories, and especially those hosting the Bordeaux Congress, have launched mobility plans involving a large number of stakeholders with an ever renewable interest in the citizens. Do not hesitate to ask them about their day-to-day life and their mobility!

On behalf of the National Organising Committee and all the people preparing this major event, we can assure you, we will do our utmost to ensure you have a comfortable and friendly stay in France with numerous occasions to enjoy heritage, culture and wonderful urban and natural landscapes.

See you in Bordeaux!

Frédéric CUVILLIER, Secretary of State in charge of Transport, Sea and Fishing
French Ministry of Ecology, Sustainable Development and Energy

Fleur PELLERIN, Secretary of State for International Business Development and Tourism
French Ministry for Foreign Affairs



It is with great pleasure that I welcome you to Bordeaux and, quite naturally, with a certain pride. 21 years after Paris, where the very first World Congress was held in 1994, it is now the turn of Bordeaux to host the ITS 2015 World Congress.

Our city is one of the most widely known in the world. It owes this renown to the Bordeaux vineyards, of course, to their great wines and appellations, but also to its historic role as a crossroads between different spheres of influence for over 2,000 years, in particular since the 12th century, thanks to its ties with Britain and the Netherlands. The historic centre of Bordeaux is an outstanding urban and architectural ensemble featured on the UNESCO World Heritage List since 2007.

Bordeaux has long been a region with an international dimension, one that is open to the world and has launched a variety of innovations in transportation: the roll-out of Gertrude, one of the first urban traffic regulation systems, the complete reorganisation of the bus network linked in with the introduction of a self-service bicycle hire system - VCub – plus a boat service on the Garonne - BatCub – and more recently an electric vehicle sharing service – BlueCub. In 2003, the operational launch of the three tram lines was also the driver of a genuine cultural revolution in mobility, with the redevelopment and enhancement of the city's public spaces, backed by the introduction of a ground-level power supply system for the tram, a world first that has been widely exported around the world since then. In 2017, with the completion of the high-speed rail line, Bordeaux will be a key hub on the rail network, with a fully-renovated station just 2 hours from Paris. In 2018, a new bridge over the Garonne River, in addition to the one built in 2013, will bring the two banks of the river even closer together. Finally, the work to widen the ring road on the left bank to three lanes in each direction should be completed by 2020-2022.

Large-scale projects are also underway to boost the city and create jobs, representing exceptional amounts of public and private investment in coming years.

Our city must keep pace with the times by being an ambitious and innovative metropolis at the service of its citizens, yet with its sights set on Europe and the world. To achieve this, the CUB must provide easily-accessible, smoother-running, smarter mobility. This ambition implies restricting the use of cars in the city centre, pushing ahead with the development of urban transport of the highest standard and rethinking the way we move around the city to make sure that this mobility is sustainable.

To make our metropolitan area more attractive, we must achieve more seamless mobility, including digital mobility. Our objective is to support the multi-faceted development of digital technologies and their uses, and to place them at the service of the local territory and its power of attraction, of its users, businesses and quality of life. The metropolitan area of Bordeaux therefore plans to be at the forefront of the French Tech initiative, to boost the digital transition of our economy and support the emergence of “technological champions”.

The ITS World Congress is an event of prime importance to Bordeaux. It is the opportunity to harmonise our mobility policy with the digital revolution. The aim is to enhance modal shift, in particular via applications enriched with public mobility data, and to develop high-quality services for users in order to encourage them to change their mobility habits and behaviour.

The ITS sector can also be a driver for local expertise and business. We must boost the development of this new industry by fostering excellence and economic growth, promoting local know-how and innovation, supporting businesses and stimulating the creation of companies in the sector.



This Congress will provide an ideal opportunity to share our experience with that of other regions all over the world. I hope that all the participants will be able to make the most of their stay in Bordeaux, to discover or rediscover the city and its metropolitan area, its heritage, talent and culture, to savour some of the wine and food that have built its reputation and, of course, to make use of its transport system.

Alain JUPPÉ, President of Bordeaux Urban Community
Mayor of Bordeaux



Aquitaine is proud to host the ITS World Congress 2015.

Our region is a land of contrast, boasting an outstanding natural and cultural heritage that is recognised and acknowledged the world over.

Thanks to the appeal of its preserved coastline, the diversity of its landscapes, the wealth of its architecture and the reputation of its gastronomy, Aquitaine is indeed a region that offers a remarkable quality of life.

Aware of these assets, Aquitaine is first and foremost a region which looks resolutely to the future, placing research, innovation, economic development and employment at the heart of its preoccupations so that we may rise to the societal and environmental challenges that face us.

Consequently, transport and travel are key concerns. The complexity of issues to be solved and the pre-emption of future needs are major challenges for public authorities as transportation provides powerful leverage for the competitiveness and the renewal of a region.

Our region has already demonstrated its pioneering abilities in this field via numerous ground-breaking projects: traffic control system, ground-powered tram system, vertical-lift bridge, electric charging station, multimodal freight tracking ICT platform, etc.

Hence, a work-generating sector dedicated to intelligent transport systems and services has begun to emerge in Aquitaine.

Some noteworthy projects are becoming reality: in 2017, a high speed train line (LGV = ligne à grande vitesse) will place Bordeaux just 2 hours away from Paris. The new proximity between these two urban areas will be an advantage for our region's development, making it even more attractive. EURATLANTIQUE is a programme of national interest which will make Bordeaux and Aquitaine a hub of exchange and European mobility. In April 2014, work began to gradually equip the rolling stock of the regional "TER Aquitaine" network with 46 new carriages specially designed for daily travel. This work, which will continue until 2016, represents an investment of 400 million Euros.

The ITS World Congress 2015 should help to speed up the implementation of new services to the benefit of users, thanks to the enormous potential of new technologies in which Aquitaine is expert – space applications, driverless vehicles, cooperative systems, transport on demand, etc. – and I believe it is possible to design and create new types of vehicles, locally.

I will be delighted to welcome to Bordeaux in 2015, the entrepreneurs, researchers and decision-makers of the transport world and from all nations and, with them, to amplify this movement and invent the solutions of tomorrow.



Alain ROUSSET, Chairman of the Aquitaine Regional Council

Gironde County Council is very pleased to host – and sponsor - the 22nd World Congress on Intelligent Transport Systems.

Mobility is a major issue for Gironde, which is France's largest county. One of the many duties of our institution is to meet the transportation needs of Gironde's population. This is a real challenge to which the World Congress helps us to rise, by bringing together ideas and innovations from the ITS field, thus continually strengthening the links between citizens and regions.

During the Congress, you will have the opportunity to appreciate some of the initiatives which have already been implemented. The e-c@r, for instance, is the first intercity coach with a high quality service, including Wi-Fi onboard for passengers. We also have the TransGironde information system for all transport modes, as well as a carpool system and several eco-friendly maritime shuttles used for river links between both banks of Gironde estuary.

I am certain that you will be delighted by the attractive features of Gironde which include tourism, gastronomy, heritage, culture and architecture. We look forward to receiving you in October 2015 when you will join the success of this world event.



Philippe MADRELLE, President of Gironde County Council

On behalf of the ERTICO Partnership I am pleased to invite you to participate in the 22nd World ITS Congress to be held in Bordeaux. A Congress which will combine thought, leadership, market orientation, hospitality and outstanding facilities to achieve an unforgettable event.

The Congress has the theme of 'Towards Intelligent Mobility – Better use of space' and will focus on seven main topics – Space Technologies and Services, Cooperative ITS, Multimodality, Smart Cities, Sustainable Mobility, Automation and Big Data – Open Data. Bordeaux is the largest urban complex registered as a UNESCO World Heritage Site. It has 40 years of innovative work in ITS, a modern and highly sustainable public transport network and one of the earliest centralised traffic regulation systems in the world. In addition, the Aquitaine Region is globally recognised as a leader in aeronautics, space and embedded systems.

Congresses provide the perfect opportunity for the ITS Community to come together, exchange ideas and profit from new business opportunities as well as seeing the latest in new technologies. With its expertise and experience in ITS, Bordeaux promises to provide many such opportunities and is ideally placed to host the World ITS Congress.

I look forward to meeting you in Bordeaux in 2015 and to sharing in the exciting programme planned for this event.



Jean MESQUI, Chairman Supervisory Board, ERTICO – ITS Europe





On behalf of ITS Asia-Pacific, it's my great pleasure to invite you to the 22nd ITS World Congress in Bordeaux, France.

Safe and efficient transportation supported by Intelligent Transport Systems is a very basic foundation on which our society and daily lives run. Furthermore, innovations in technologies and social systems accelerated by ITS deployment are pointing towards the viable direction to tackle transportation challenges and to enhance mobility for economic growth and well-being, even under strong pressure on funding sources and environmental sustainability.

Recently, ITS big data and automated driving have been identified as the most important areas to be exploited and pushed forward for deployment to dramatically change transportation systems. Those areas involve renovation of legal framework and integrated efforts across the jurisdiction, which will create innovative business opportunities for a new generation of professionals.

The ITS World Congress in Bordeaux is where we find the right experts on a variety of issues. Policies, technologies, institutional issues, human factors and international collaboration are all covered with supporting facts and experiences.



I'm looking forward to seeing you in Bordeaux.

Hajime AMANO, Secretary General, ITS Asia-Pacific

On behalf of ITS America I am very pleased to invite you to join us in Bordeaux for the 22nd ITS World Congress.

The World Congress was first held in Paris in 1994. As it returns to France 21 years later, the advances and innovations in the transportation technology industry are nothing short of mind-blowing. The systems and ideas we were once discussing only in theory have been researched, developed, and deployed. As we focus on the future, I am delighted to continue working with our international colleagues to accelerate the spread of intelligent transportation systems worldwide.

Building on the wonderful experiences in Detroit, discussions will continue in Bordeaux on rethinking the way we move in the modern world. The theme 'Towards Intelligent Mobility' encourages all of us to reassess not only how we as individuals use transportation, but also how we can develop new systems and technologies that will increase connectivity, safety, efficiency, and sustainability.



We have a unique opportunity at these World Congresses to assemble the leading experts from around the globe to exchange ideas and share knowledge. My colleagues have been hard at work to ensure a robust and insightful conversation will take place in the beautiful setting Bordeaux offers us, and I very much look forward to seeing you there!

James BARBARESSO, Organising Committee Chair, ITS World Congress Detroit, 2014 Vice President, Intelligent Transportation Systems, USA

The Event



The ITS Congress & Exhibition is the world's largest event in Intelligent Transport Systems and Services.

Twenty one years after its creation and its first edition in Paris, the ITS World Congress returns to France, in the prestigious city of Bordeaux.

It is a unique opportunity to showcase European and France's value, its inhabitants, its competencies, its products and services.

Since 1994, the ITS Congress has grown phenomenally as now we expect more than 3,500 Congress delegates, 300 exhibitors and 10,000 visitors coming from more than 100 countries, to gather and exchange, debate, build networks of partnerships during the Congress, at the 20,000 m² of Exhibition hall to attend more than 20 live demonstrations and to participate in the technical visits.

All these impressive figures are the result of the strong and continuous support of three regional associations, the European Commission, national and regional local authorities, all National ITS Associations around the world and of course all the companies and organisations participating.

In the context of Bordeaux, we would like to thank the French Ministry of Transport, the City of Bordeaux, Bordeaux Metropolis, the Departmental Council of the Gironde and the Aquitaine Region for their strong support.

As the theme of this 22nd Congress, we have chosen: 'TOWARDS INTELLIGENT MOBILITY – Better use of space' and we will organise more than 200 sessions, allowing more than 1,000 experts to enrich all participants with the latest in ITS knowledge.

We are also building a social programme in line with France's renowned hospitable reputation to enjoy all areas of interest in and around Bordeaux, its region, products and services.

Looking forward to seeing you in Bordeaux,

On behalf of the Organising Committee,

FLORENCE GHIRON, President of the Bordeaux Organising Committee

ANDRÉ REIX, Director of the Bordeaux Organising Committee

BERNARD BASSET, President of ATEC - ITS France

DIDIER GORTEMAN, Director Congresses ERTICO - ITS EUROPE

Congress Format

PLENARY SESSIONS

All attendees are warmly welcomed to join the Opening and Closing Ceremonies as well as the Plenary Sessions in which major personalities from today's world of ITS will present their personal views on key ITS issues.

EXECUTIVE SESSIONS

In these Sessions a range of senior experts including high-level industry executives, public officials and academics will draw from their experiences to discuss key topical policies, problems and issues. As well as reviewing current challenges and achievements, these Sessions provide an exciting opportunity to learn about future ITS initiatives.

SPECIAL INTEREST SESSIONS

Arranged at the request of organisations or groups of experts developing and deploying ITS, these interactive, tailor-made meetings create an opportunity to explore specific topics in greater detail than a conventional paper session to offer fresh perspectives and insight.

Sessions that appear to be commercial sales pitches for a given product or company will not be permitted as Special Interest Sessions, but might be considered for the Industry Insight Stream (see next page).

INTERACTIVE SESSIONS

Interactive Sessions have proved to be very popular for facilitating information exchange on contentious subjects where the extra contact time and debate format permit vigorous examination of all aspects of a topic. Papers selected for an Interactive Session will be organised in a two stage, workshop-style format with an extended time frame to enable presenters to reach and exchange with appropriate audiences of interested delegates.

The Interactive Sessions will take place in a dedicated area in the Exhibition to encourage contact between paper authors and exhibitors and visitors.

TECHNICAL/SCIENTIFIC SESSIONS

These Sessions are composed of presentations by international experts on varying ITS related topics encompassing all technical, scientific, economic, organisational and societal aspects of ITS. Their aim is to encourage and enable the exchange of information on deployment ranging from improving the operational use of systems and services on the one hand to research and development in support of new applications on the other.

COMMERCIAL THEATRE SESSIONS

The Commercial Theatre, located in the Exhibition area, will house 3 different types of activity: Commercial Paper Sessions, Special Interest Sessions in the 'Industry Insight' Stream, and Commercial Presentation Sessions. Any registered attendee (ie including exhibitors and visitors) can attend any Session taking place in the Commercial Theatre. These Sessions present near-market material activity aimed at generating or improving a specific product, device or idea for the market, with a particularly strong commercial or deployment flavour. All Sessions are presented to a more commercial audience than usual, specifically targeted to exhibition participants and visitors, in an interactive format. All these Sessions are listed in the Congress programme.

COMMERCIAL PAPER SESSIONS

These are presentations of Technical or/and Scientific Papers judged by reviewers and the International Programme Committee to be near-market rather than pre-market, or where authors have specifically requested the specialised Commercial Theatre venue. Commercial Papers describe an activity aimed at generating or improving a specific product, device or idea for the market. Papers will be assembled around similar themes and presented in groups with a moderator. Each Session will last between 60-90 minutes.

SPECIAL INTEREST SESSIONS IN THE INDUSTRY INSIGHT STREAM

These are Special Interest Sessions with a particularly strong commercial or deployment flavour, as reviewed and accepted by the International Programme Committee. Special Interest Sessions are tailor-made meetings designed to create an opportunity to explore specific topics in greater detail than a conventional paper session and so offer fresh perspectives and insight. The sessions will follow an interactive debate/discussion format with full audience engagement rather than the old-style series of PowerPoint presentations. Each session will last between 60-90 minutes.

COMMERCIAL PRESENTATION SESSIONS

Commercial Presentations will take place in the exhibition and they are an opportunity for Exhibitors and Sponsors to provide you with more information about their commercial products and services. For more information please contact Benoit Augarde at b.augarde@mail.ertico.com or sponsor@itsineurope.com.



Congress Topics

To help us to classify the subject of your paper, when making your online submission we will ask you to select one of the following topics (1-7), and one subtopic (A-F) from the list.

TOPICS	Examples of ITS applications
<p>1. Space technologies and services for ITS</p> <p>Global Navigation Satellite System (GNSS) positioning and timing services are today widely used by all modes of transport. When combined with vehicle sensors and with V2X communication, future multi-constellation and multi-frequency receivers will dramatically improve positioning performance and contribute to the development of a wide range of innovative ITS applications. The European GNSS, Galileo, will bring additional services to improve performance, application reliability and position robustness. Satellite communications have the potential to provide secure links for police and emergency services and V2I communication in countries with incomplete terrestrial networks. Earth observation satellites provide additional sources of information for digital map updates, infrastructure and emissions monitoring, and weather forecasting.</p>	<ul style="list-style-type: none"> • Hybridisation of GNSS receivers with other sensors • Collaborative cloud-based mapping • Reliable positioning for critical ITS services • Solutions for regulated services (eg eCall, digital tachograph, dangerous goods) • New services from multi-constellation receivers • Monitoring transport infrastructures, emissions and air quality using Earth observation satellites • Traffic monitoring from satellites
<p>2. Cooperative ITS deployment challenges</p> <p>The infrastructure for mobility, transport, journeys and services is becoming increasingly intelligent. In addition the different aspects of infrastructure, such as roads, waterways, railroads, terminals, fixed and mobile communication networks, are becoming interconnected and integrated – as are vehicles and even travellers. It is already clear that the next generations of transport and communication infrastructures, vehicles and traffic management will be smarter, safer and much more efficient than the preceding ones. However their evolution is accompanied by new challenges related to security, privacy, liability, interoperability, business models, standardisation and institutional issues.</p>	<ul style="list-style-type: none"> • Communication technologies • Human Technology Interaction and User Interfaces • I2X, V2X, V2V applications for safety, comfort, traffic efficiency and energy efficiency • Security of communication infrastructure • Advanced Driver Assistance Systems • ITS for Vulnerable Road Users • Personal mobility services, mobility management • Traffic and demand management, and enforcement • C-ITS for freight, fleet management and logistics
<p>3. Multimodal transport for people and goods</p> <p>Enhancement and better use of multimodality can make transport systems more sustainable in terms of cost-effectiveness, efficiency and environmental-friendliness in order to fulfil Society's mobility and transport needs. To achieve multimodality for people and goods, a proper physical and information infrastructure, advanced transport systems and operations, as well as ad hoc and seamless services are required. This topic encompasses the challenges of multimodality, and best practices in inter- and intra-hubs (eg cities, [inland] terminals and ports) from various perspectives, including policy, traveller behaviour, productivity, economy, liability, business models and technology.</p>	<ul style="list-style-type: none"> • Mobility as a Service • Multimodal travel information and planning services • Public transport and a more inclusive mobility • Safe and secure data exchanges (for both passenger and freight transport) • Flexible mode choice ("Sychromodality") for ports and inland connectivity • ICT for logistics • Tracking and tracing of goods

TOPICS	Examples of ITS applications
<p>4. Urban trends driving ITS changes</p> <p>In a changing world cities are having to respond to multiple challenges (eg environmental, economic, demographic). At the same time demand for access to better, more resilient and more inclusive mobility services throughout cities and mega cities is increasing. Cities' transport problems are wide ranging and also involve water, waste, energy and information management. We need a new, 'smarter', approach to deliver gains in all these areas and to find better ways to use what is already in place. This means harnessing the full range of ITS tools to strike a balance between challenges and increasing demands, finding ways to integrate multimodal services to satisfy policy and community requirements, and developing innovative business models.</p>	<ul style="list-style-type: none"> • Travel demand management • Technologies and services supporting mobility for the elderly • Multimodal journey planners • Integrated ticketing and payment • Reducing transport's energy consumption • Integrating parking management and EV recharging infrastructure • Improving urban safety especially for pedestrians and cyclists
<p>5. Solutions for sustainable mobility</p> <p>It is an unwelcome fact that transport systems are significant contributors to greenhouse gases and air pollution. Travel time and costs have for a long time been the main decision criteria for mobility choices, without regard to the impact on land use or environmental factors such as air quality, noise reduction, energy usage or the scope for contributing to climate change mitigation. Mobility stakeholders are looking forward to offering alternative integrated solutions that simultaneously take account of economic, social and environmental impact as well as the major factor of climate change resilience. ITS is considered as a key enabler for a new generation of transport and mobility solutions including collective transport (eg dynamic car pooling and car sharing), electromobility, soft modes of transport, eco-driving, road pricing and predictive traffic management that provide concrete answers to achieve sustainable mobility.</p>	<ul style="list-style-type: none"> • Reducing noise and raising the quality of life • Car pooling/sharing • Demand-responsive public transport • Improving air quality • Paths to zero emissions • Traffic management • Encouraging mode shift especially to "soft" modes • Electro mobility; integrating EVs into transport infrastructure and smart grids • Evaluation of CO2 and greenhouse gases emission using ITS data
<p>6. Automated Roads, Automated Management, Automated Driving</p> <p>Automation is emerging as a key ITS innovation. It can improve efficiency, reduce fraud, help overall service management and contribute to service and policy outcomes. Automation of roads with effective incident detection and management can improve safety and efficiency. Automated management using decision support systems enables complex issues to be handled efficiently and effectively. Automation is a real focus for innovation that will not only lead to safer transport but also has the potential to change vehicle use and reduce individual vehicle ownership. This topic addresses the opportunities and challenges that automation in road transport is likely to bring to Society and Industry.</p>	<ul style="list-style-type: none"> • Highly/fully automated driving • Driverless vehicles (cars, trucks, drones, ships, metro, aircrafts) • User acceptance and human factors • Governance • Resilience and Security • Business cases • Reliability, Liability and Interoperability • Speed and payment enforcement systems
<p>7. Are Big Data and Open Data transport's "Silver Bullets" ?</p> <p>In the transport and mobility domains satisfying individuals' wishes for the best personal travel solution has long had priority over the needs of overall network management. Better access to traditional transport related data, combined with increasing availability of new sources of data coming from end users (eg smartphones, social media, crowd sourcing), transport and communication infrastructure and vehicles (probe data), creates a new paradigm for data sourcing, data sharing and data exchange. We may for the first time have the chance to satisfy the needs of both the users and the stakeholders in transport management. Big Data and Open Data can make the difference however data quality, privacy and ownership issues and technological aspects need to be considered.</p>	<ul style="list-style-type: none"> • Use of autonomous cellphone data to predict capacity and advise travellers • Social media sources • Regulation: legal aspects, policy issues, privacy, ownership, security • Technologies for gathering data; data fusion, analytics, management, sharing and exchange • Availability and quality of data, available data sets (statistical, actual, real time) • Implementation: for open data and big data • Using and applying open data: business cases, consumer products etc

SUBTOPICS

- A.** Interoperability, Standardisation, Testing
- B.** Institutional, Legal, Organisational issues; Policy, Privacy, Liability
- C.** Information: Data access, Service access; Big data, Open data

- D.** Financing: Procurement; Cost-benefit; Deployment strategies; Business cases
- E.** User acceptance; Behavioural issues; Education & Training; Dissemination.
- F.** Innovation and Technologies

Call for Scientific/Technical/ Commercial Papers

The International Programme Committee invites ITS experts to submit a paper to be considered for presentation and publication at the ITS World Congress in Bordeaux 2015.

Authors may submit papers for conventional presentations and Interactive Theatre Sessions, as being either Technical or Scientific.

Authors may submit Commercial Papers directly for Commercial Theatre sessions. It is not necessary to submit the same paper under different calls.

Technical Papers may address the institutional, business, societal and economic aspects of ITS as well as technical subjects.

Scientific Papers should concentrate on research and scholarship as they will be independently refereed in accordance with academic journal standards.

Commercial Papers are those describing near-market work. They should be specific rather than general and describe an activity aimed at generating or improving a specific product, device or idea for the commercial market.

All proposals must be **original** and report on **recent significant** and **substantive achievements**. Topics may address any mode of transport.

Any type of paper may be put forward for an Interactive Session, which are highly effective for establishing valuable contacts and exchanging information.

Papers from authors working for or in close collaboration with commercial companies are welcome; their presentation format will depend on their content. If a paper describes unspecified, open research or a pre-market activity, it will be assigned to a conventional 'Technical' Session. By 'pre-market' we mean work aimed at generating new knowledge which is not at present linked to the development of a specific product, although it is likely to be commercially exploitable in due course.

Papers that are near-market rather than pre-market will be presented in the 'Commercial Theatre' within the exhibition area. Papers judged by reviewers to be near-market or submitted by authors from the start as 'Commercial' will be referred to the Commercial Theatre for presentation in groups with a moderator.

Please note that **the official Congress language is English**. Papers that are not submitted in English will automatically be rejected. Please note that all speakers have to register and pay the speaker registration costs.

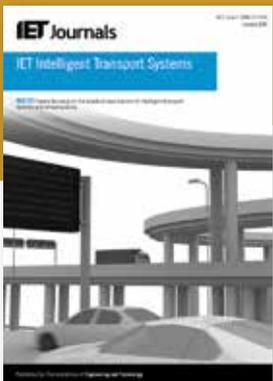
Detailed submission guidelines are available on the submission website via www.itsworldcongress.com

Contributions can only be submitted through the online submission website. You will be asked to provide the following information:

- Author's full contact details
- Co-authors and organisations
- Topic and subtopic from the lists and up to 3 keywords of your choice
- Paper title (maximum 70 characters with spaces)
- Paper abstract (maximum 930 characters with spaces)

To enhance the scientific quality of this event, the Congress Organizing Committee has entered into an agreement with the Editor-in-Chief of IET Intelligent Transport Systems (IET ITS), an SCI-E (ISI) and EI indexed peer-reviewed journal that has published papers from previous ITS World and European Congresses since 2006. See: <http://www.ietdl.org/IP-ITS>

Shortly after the close of the World Congress in Bordeaux, authors of scientific papers that are considered suitable for expansion and academic publication will receive a formal invitation to submit an updated and enhanced paper. Papers will go through the journal's standard peer-review process and, if accepted for publication, will be indexed in the citations databases.



SPECIAL INTEREST SESSION PROPOSALS

The International Programme Committee invites ITS experts to submit Special Interest Session proposals to be considered for organisation at the ITS World Congress in Bordeaux 2015.

GUIDELINES FOR SPECIAL INTEREST SESSION SUBMISSION

Detailed guidelines are available via the Congress website www.itsworldcongress.com

Contributions can only be submitted through the online submission website.

You will be asked to provide the following key information:

- Organiser's full contact details
- Topic, subtopic, and up to 3 keywords
- Session title (maximum 70 characters with spaces)
- Session description (maximum 1300 characters with spaces, as full text not bullet points)
- Name of the moderator and names of a minimum of 3 confirmed speakers including job titles, organisations, countries and e-mail addresses

Upon completion of your contribution, the system will generate an acknowledgment e-mail with your Session proposal number and confirming your contact details and chosen topic. This does not mean that the Session has been accepted. Please note that all speakers have to register and pay the speaker registration costs.

IMPORTANT DEADLINES

- Draft technical and full scientific papers must have been submitted by **19 January 2015**.
- Special Interest Session proposals must have been submitted by **19 January 2015**.
- Papers will be reviewed and all applicants will be notified of their paper status by early **April 2015**.
- Special Interest Session submissions will be reviewed and organisers will be notified by early **April 2015**.
- Resubmission of Conditionally Accepted papers deadline is **8 May 2015**.
- Authors whose papers have been selected must submit their final paper online by **3 August 2015** to allow for publication in the Congress Proceedings.
- Speakers at all sessions are also requested to have registered for the Congress no later than **3 August 2015**.



Exhibition and Sponsorship

EXHIBITION

Taking part in the Exhibition offers a unique opportunity to:

- Build meaningful customer relationships in person throughout the Congress
- Bring your story to life with onsite product demonstrations
- Secure qualified leads that could lead to new business
- Learn about each attendee's precise purchasing needs and processes
- Strengthen your brand and reputation with an exhibition presence and through highly visible sponsorships

Our focused environment gives you the venue to meet and network with key executives with purchasing responsibility and gives you the opportunity to have an interactive exchange with prospective customers and business partners from a variety of industries across the European region and beyond.

SPECIFICATIONS:

■ SPACE ONLY

Completely customise and develop your stand from start to finish by constructing your stand in a Space Only footprint. You have total control over design, materials, and layout to best promote your products and services or entertain prospective clients.

Exhibition space interior:

Space under 100 m ² :	€330/m ²
Space above 100 m ² :	€297/m ²
Vehicle display space interior:	€250/m ²
Exhibition space exterior:	Price upon request
Vehicle display space exterior:	Price upon request

■ ALL IN BOOTH

€6,000 / 9m² Booth

Includes: shell scheme package, profile system walls and fascia, dark grey carpet, one high table and 2 bar chairs, a welcome counter, 16A/230V 3-outlet socket, lights on fascia 3 pcs

€11,500 / 18m² Booth

Includes: shell scheme package, profile system walls and fascia, lockable storage room, dark grey carpet, two high tables and 4 bar chairs, a welcome counter, 2 x 16A/230V 3-outlet socket, lights on fascia 6 pcs

SPONSORSHIP

Becoming a sponsor of the 22nd ITS World Congress and Exhibition in Bordeaux is an excellent way for organisations to raise their profile, to promote specific messages to key players and to establish presence and position at the forefront of the dynamic ITS market place.

A wide range of sponsorship opportunities provides everything you need to interact with professionals who matter to your business.

For more information on the exhibition & sponsorship opportunities, please refer to the Congress website www.itsworldcongress.com or contact sponsor@itsineurope.com or exhibit@itsineurope.com

DEMONSTRATIONS

The concept of the demonstrations is to see in “close to real life” conditions some state of the art ITS solutions and evaluate for yourself the benefits of what you learn from the conference and what you discover in the exhibition. The demonstration goals are mainly to show scientific excellence and the state of the art of the technologies, but also to push the competitiveness/innovation of the transport industrials and the priorities of the transport policies (city, metropolis, region, state, continent). The desired impact of the demonstrations is to inform and convince politicians, decision makers, general public and media of the benefits of ITS solutions. The marketing possibilities will be high thanks to the participation of VIPs (Ministries, European Commission, CEOs etc).

A Call for Demonstrations document is published on the Congress website. For further information please visit our website: www.itsworldcongress.com and find all the documents in the Demonstration tab.

For further information about Demonstrations, please contact: bordeaux2015demos@mail.ertico.com

TECHNICAL VISITS (provisional list)

- ALIENOR: Regional traffic management system
- GERTRUDE: Urban traffic management system
- TRAMWAY: Management centre
- PORT DE BORDEAUX: Multimodality for goods transport
- EUROVIA: Intelligent roads laboratory visit
- SAFRAN: Aeronautics showroom-Link with ITS
- THALES: Aeronautics showroom- Link with ITS
- JACQUES CHABAN DELMAS BRIDGE: ITS Bridge
- AIRBUS barge: Multimodal transportation of the A380
- GIRONDE DEPARTEMENT COUNCIL: Intelligent and connected roads

INNOVATION PAVILION

The Innovation Pavilion offers a great venue for app developers, SMEs and Start-ups to demonstrate new concepts or other plans and ideas of a forward-thinking start-up company. Exhibiting in this setting opens your prospects to the larger ITS ecosystem while enabling networking with potential buyers and future business partners.

Conditions of participation:

- Company with less than 15 employees
- First time exhibitor at an ITS Congress and Exhibition
- Generating new technology and knowledge

If you want to have more information, please visit our website: www.itsworldcongress.com and select Exhibition and Sponsorship Brochure under the Sponsorship and Exhibition tab.

AEROSPACIAL AREA

In the Exhibition a dedicated area for the aerospace industry and stakeholders will be reserved to demonstrate how Intelligent Transport Systems could benefit from the wide range of innovative solutions developed in this industrial area: from high-end embedded systems developed for avionics, ranging to airport management solutions, UAV-borne services, to satellite based earth observation, communication or navigation applications.

If you want to have more information, please visit our website: www.itsworldcongress.com and select Exhibition under the Sponsorship and Exhibition tab.

PROVISIONAL DEMONSTRATION TIMELINE

- Call for demonstrations launch at the **end of April**
- Two stage demonstration reception **end of June/ end of September 2014**
- Technical and financial evaluation in **2014**
- Signature of demonstration contracts before **end of January 2015**
- Demonstration schedule according to demonstration capacities and targets in **March 2015**
- First preparation, test and dry run in **June 2015**
- Last dry run in **September 2015**
- Demonstration installations from **28 September to 5 October 2015**



GENERAL INFORMATION

CONGRESS AND EXHIBITION VENUE

The Congress activities will be held on two different areas: the Convention Centre and the Parc des Expositions, hosting 20,000m² of exhibition, 18 session rooms, more than 20 demonstrations, and 3,500 experts from 100 countries.

Both venues are approximately 10 minutes walking distance from each other, conveniently located at 15 minutes from the International Bordeaux-Mérignac airport and directly linked to the city centre by the tramway line C.

Find out more on www.bordeaux-expo.com

REGISTRATION

Registration information, including fees, will be available on the Congress website and published in the Preliminary Programme. Participants will be able to register as of **early 2015**

Publication in the event proceedings, presentation of papers, as well as Special Interest Session organisation are subject to the authors / speakers / moderators registration and payment by **3 August 2015**.

OFFICIAL EVENT PUBLICATIONS AND WEBSITE

The Preliminary Programme will be circulated in **April 2015**. The Final Programme will be available at the event. Information will be updated on the website at regular intervals www.itsworldcongress.com

CONGRESS LANGUAGE

The official language of the Congress is English and all mainstream sessions will be delivered in English.

A selected number of host sessions will be conducted in French.



International Programme Committee

EUROPE

Didier Gorteman, ERTICO - ITS Europe, **Chair**
André Perpey, Geoloc systems, France, **Vice-Chair**
Phil Blythe, Newcastle University, United Kingdom
Jean Coldefy, Grand Lyon, France
Marije de Vreeze, Connekt / ITS Netherlands, The Netherlands
Fiammetta Diani, European GNSS Agency - GSA
Frank Foersterling, Continental Automotive GmbH, Germany
Stephane Dreher, Belgium
Alexander Frötscher, AustriaTech, Austria
Norbert Handke, ITS Network Germany, Germany
Richard Harris, Xerox Services, United Kingdom
Jean-Michel Henchoz, DENSO INTERNATIONAL EUROPE, Belgium
Sampo Hietanen, ITS Finland, Finland
Donal Hodgins, ITS Ireland, Ireland
David Hytch, Worldline, United Kingdom
Christer Karlsson, ITS Sweden, Sweden
Frank Koester, DLR, Germany
Risto Kulmala, Finnish Transport Agency - FTA, Finland
Vladimir Kryuchkov, ITS Russia, Russia
Meng Lu, Dutch Institute for Advanced Logistics, Dinalog, The Netherlands
Colette Maloney, DG CONNECT, European Commission
Jennie Martin, ITS United Kingdom, United Kingdom
Jean-Philippe Méchin, Centre For Studies and Expertise on Risks, Environment, Mobility, and Urban and Country Planning – CEREMA, France, **Programme Adviser**
Patrick Mercier-Handisyde, DG RTD, European Commission
Roger Pagny, Ministry of Ecology, Sustainable Development and Energy, France
Stéphane Petti, Orange, Luxembourg
Reinhard Pfliegl, A3PS, Austria
Paul Potters, Cachelot B.V., The Netherlands
Theo Quick, CGI, United Kingdom
Christian Rousseau, Renault SAS, France
Mika Rytkönen, HERE, Finland
Eric Sampson, ERTICO - ITS Europe, **Senior Programme Adviser**
Malika Seddi, ASFA, France
Michael Sena, Michael Sena Consulting AB, Sweden
Delphine Soubies, ERTICO - ITS Europe
Amanda Stevens, ERTICO - ITS Europe
Pamela Valente, ERTICO - ITS Europe
Volker Vierroth, T-SYSTEMS, Germany
Jaap Vreeswijk, Imtech Traffic & Infra, The Netherlands
Paul Vorster, ITS South Africa, South Africa
Kees Wevers, Brightangel ITS, The Netherlands
Mihaela Williams, DG MOVE, European Commission

ASIA-PACIFIC

Yosuke Akatsu, Nissan Motor Co., Ltd., Japan
Shinya Omi, ITS Japan, Japan
S.K. Jason Chang, National Taiwan University, Chinese-Taipei
Edward Chung, Queensland University of Technology, Australia
Susan Harris, ITS Australia, Australia
Mohammed Hikmet, HMI Technologies Limited, New Zealand
Masahiko Ikawa, Mitsubishi Electric Corporation, Japan

Katsushi Ikeuchi, The University of Tokyo, Japan
Weiyun Jiao, China National ITS Center, China
Shunsuke Kamijo, The University of Tokyo, Japan
Jeong-Gyu Kang, Korea Expressway Corporation, Korea
Hiroyuki Kumazawa, Osaka Sangyo University, Japan
Der Horng Lee, National University of Singapore, Singapore
Siew Mun Leong, ITS Malaysia, Malaysia
Young-Jun Moon, The Korea Transport Institute, Korea
Brian Negus, RACV, Australia
Takashi Oguchi, The University of Tokyo, Japan
Nobuyuki Ozaki, Toshiba Corporation, Japan
Tongyan Qi, Chinese Science Center of International Eurasian Academy of Sciences, China
Takaaki Segi, ITS Japan, Japan
Seung-Neo Son, ITS Korea, Korea
Shigetoshi Tamoto, Sumitomo Electric Industries, Japan
Dean Zabrieszach, VicRoads, Australia

AMERICAS

Susan Bai, Honda R&D, USA
James Barbaresso, HNTB Corporation, USA
Hamed Benouar, Sensys Networks Inc., USA
Robert Bertini, Portland State University, USA
Richard Bishop, Bishop Consulting, USA
Armand Ciccarelli, Appian Strategic Advisors, USA
Stan Caldwell, Carnegie Mellon University, H. John Heinz III College, USA
Gerald Conover, PRC Associates, USA
Pete Costello, INRIX, USA
C. Douglass Couto, Public Sector Consultant, USA
Steven W. Dellenback, Ph.D., PMP, Southwest Research Institute, USA
Richard B. Easley, E-Squared Engineering, USA
John J. Funny, Grice & Associates, Inc., USA
Edward R. Griffor, Chrysler Group, LLC, USA
Dawn Hardesty, Noblis, USA
Jim Keller, Honda, USA
Manjunathan Kumar, California Center for Innovative Transportation (CCIT)/ University of California, Berkeley, USA
Jane Lappin, John A. Volpe National Transportation Systems Center, Research and Innovative Technology Administration, United States Department of Transportation, USA
Harry Lister, ITS Joint Program Office, Research and Innovative Technology Administration, U.S. Department of Transportation, USA
Bob McQueen, The O Cash Company, USA
Morgan Ouellette, ITS America, USA
Robert Rausch, P.E., TransCore Holdings, Inc., USA
Shelley Row, Shelley Row & Associates, LLC, USA
Louis F. Sanders, American Public Transportation Association (APTA), USA
Carol L. Schweiger, TranSystems, USA
Ed Seymour, Ph.D., P.E., Texas Transportation Institute (TTI), Texas A&M University, USA
Susan A. Shaheen, Ph.D., University of California, Berkeley, USA
Susan Spencer, Consultant, Canada
Peter F. Sweatman Ph.D., University of Michigan Transportation Research Institute (UMTRI), USA
James Wright, American Association of State Highway and Transportation Officials (AASHTO), USA
Wei-Bin Zhang, University of California, Berkeley, PATH, USA

CONTACTS

Europe

Congress Programme

Delphine SOUBIES
Tel: +32 (0)2 400 07 41
E-mail: d.soubies@mail.ertico.com

Amanda STREVS
Tel: +32 (0)2 400 07 54
E-mail: a.strevs@mail.ertico.com

Pamela VALENTE
Tel: +32 (0)2 400 07 85
E-mail: p.valente@mail.ertico.com

Press & Media

Carla COPPOLA
Tel: +32 (0)2 400 07 45
E-mail: c.coppola@mail.ertico.com

Conference Logistics

Michela MELIS
Tel: +32 (0)2 789 23 36
E-mail: logistics@itsineurope.com

Exhibition Logistics

Julen BASTARRIKA
Tel: +32 (0)2 743 15 70
E-mail: exhibit@itsineurope.com

Sponsorship & Exhibition Sales

Benoit AUGARDE
Tel: +32 (0)2 400 07 86
E-mail: b.augarde@mail.ertico.com

Lieven MARIEN
Tel: +32 (0)473 386 826
E-mail: lieven.marien@itsineurope.com

Demonstrations

Hanna-Kaisa SAARI
E-mail: bordeaux2015demos@mail.ertico.com

Host Coordinators

Roxanne VILLET
E-mail: roxanne.villet@topos-aquitaine.org
Aurélie PIET
E-mail: aurelie.piet@topos-aquitaine.org

Asia-Pacific

Congress Programme

Ikuko OKADA
Tel: +81 3 5777 1013
E-mail: i-okada@its-jp.org

Exhibition

International Affairs
Tel: +81 3 5777 1013
E-mail: exhibition-bordeaux@its-jp.org

Americas

Congress Programme

Morgan OUELLETTE
Tel: +1 202 721 4215
E-mail: mouellette@itsa.org

Exhibition

Valerie FORBAI
Tel: +1 202 721 4205
E-mail: vforbai@itsa.org