

## Programme

12th European Congress and Exhibition on Intelligent Transport Systems and Services

Strasbourg, France

19–22 June 2017 www.itsineurope.com









.....



STRASBOURG CONVENTION + EXHIBITION CENTRE





## ACKNOWLEDGEMENTS

The Organisers of the 12<sup>th</sup> ITS European Congress would like to thank the Sponsors and Partners for their contribution and support to make this Congress a success bringing forward the transportation and mobility sector.

Sponsors			
	Platinum	Diamond	
TOLL MO	SFA SFA	engi	2
	Gold		
CA	TAPULT Transport Systems	PTV GROUP	-
	Silv	/er	
CAR PROAD	<b>Ontinental</b>	<u>\$</u> orange <sup>™</sup>	PAS PORT AUTONOME DE STRASBOURG
Event Partners			
Connekt ITS Netherlands		LAND United Kingdom	
Media Partners			
CitiesToday Connecting the world's urbane headers	is a constant of the second se	ays Highways	<b>traffic</b> TECHNOLOGYINTERNATIONAL
Media Support	French Media Pa	rtners	Media Outreach
euro <b>transport</b> 🗾 future	PRAIL TEC	Navigation Ports & Intermodalité	S FRONTIGON

No.

ii ii

(CLEVER

CH HAR

CC.

RULL STREET STREET

Acknowledgements	
Organisers and hosts	4
Welcome letters.	5
Programme at a glance	10
Plenary sessions	12
Executive sessions	14
Special interest sessions	16
Project dissemination sessions	33
Technical/scientific sessions	36
Commercial paper sessions	48
Technical visits	50
Associated events	52
Demonstrations	54
General information	58
Congress & exhibition venue	60
Floorplan and exhibitors	62
Social events	64
Sponsors	66
Committees	68
Contacts	72

•

<u>ŝ</u>. 100

2.11

6666



#### **ERTICO – ITS Europe**

ERTICO – ITS Europe is a public-private membership-driven organisation promoting – and actively working on – the deployment of intelligent transport systems and services (ITS) in Europe through a variety of activities, such as interest groups, innovation platforms, events and projects to save lives, protect the environment and sustain mobility in the most cost-effective



way. ERTICO was founded in 1991 at the initiative of 16 leading members of the European Commission, Ministries of Transport and the European Industry. Now, with over 120 shareholders, ERTICO connects public authorities, industry players, infrastructure operators, users, national ITS associations and other organisations and works to bring "Intelligence into Mobility".

#### **European Commission**

The European Commission represents the general interest of the EU and is the driving force in proposing legislation (to Parliament and the Council), administering and implementing EU policies, enforcing EU law (jointly with the Court of Justice) and negotiating in the international arena.



#### **Strasbourg Eurometropolis**

Strasbourg's history makes it an international and cosmopolitan city, with a strong local tradition of knowledge and excellence. It shares, with New York and Geneva, the privilege of being the seat of international organisations, such as the European Parliament and some 90 diplomatic representations, without itself being a national capital.



The city and its surroundings are now facing new challenges with regard to attractiveness and competitiveness. The new status of Eurometropolis of Strasbourg, which came into being in January 2015, is unique in France and underpins the city's role as a European capital and cross-border territory, with its 33 municipalities and 477,000 inhabitants.

The Eurometropolis of Strasbourg, humanist and europtimist, is a city with its sights set firmly on the future. It plays a leading, innovation-led role in a number of sectors, including urban development (with the Ecocité programme), healthcare, medical technologies and innovative mobilities.



#### **European Commission**

The European Commission is very pleased to invite you to the 12th European ITS Congress, to be hosted in the city of Strasbourg from 19th to 22nd June 2017.

The main theme of the Congress, *ITS Beyond Borders*, is of the utmost relevance for all of us. The single market, an area without internal borders with the free movement of goods, persons, services and capital, can only be achieved when we work together to remove technical and regulatory barriers. Breaking down such barriers is also at the heart of the deployment of ITS. In order to be effective, the roll-out of ITS needs to be coherent and properly coordinated across the EU by public and private bodies. *ITS Beyond Borders* should not only represent the interoperability and continuity of ITS between regions and Member States but also between different modes of transport facilitating multimodality.

A wide range of innovative solutions are available, such as digitalisation in passenger and freight transport and connected and automated driving. To support their development and deployment across Europe cross-sectional and cross-border cooperation is indispensable. We need to fully tap the potential of digital technologies and let the Digital Society become a reality. It is not sufficient to respond only to current mobility demands, but also to be proactive in anticipating future needs, challenges and options. The ITS Directive, Digital Single Market and Energy Union along with funding instruments of Horizon 2020 and Connecting Europe Facility are essential in this regard.

In order to serve such discussions with stakeholders, Strasbourg will serve as an iconic hub at the heart of Europe on how to get 'Europe Connected'. The 12th ITS European Congress will be an ideal opportunity to share and enrich our knowledge as well as show our strong commitment to role and importance of Intelligent Transport Systems.

Yours sincerely,

Violeta Bulc, Member of the European Commission

**Carlos Moedas,** Member of the European Commission

**Günther Oettinger,** Member of the European Commission







#### **Minister of Transport, France**

It is my great pleasure to welcome you in France again this year, less than two years after the large success of the 22nd ITS World Congress in Bordeaux. This time Strasbourg Eurometropolis, as a major place of the evoluting European construction process, will offer the 12th ITS European Congress an ideal setting. More than a setting, a living laboratory of ITS deployment and a life-size showcase for solutions and projects that bring value-to-user and collective benefits throughout a wide transnational space.

For our part, all French key players in ITS and transport at large have been involved in preparing this Congress with ERTICO and the host city and partners. My own services, together with ATEC ITS France, are heavily mobilizing so to ensure that Strasbourg Congress is exceptionally rich in experience and innovation-sharing, and genuinely fruitful to all of you. And enjoyable too.

In 2015, all the transport ministers gathered in

Bordeaux at our invitation did state their confidence in IT solutions being able to help significantly preserving our planet through mobility reshaping. They called for multiplying local experimentations and projects. In Strasbourg, two years after the Paris agreement on climate, we should be able to ascertain the magnitude and impacts of this huge movement, provider of concrete and innovative solutions to address this universally recognized objective. A market-driven wave supported and called for by most mobility authorities of all levels around the world.

That is why all your ideas, proposals and experiences are very welcome to this event, the success of which will be yours.

Together, we intend to mark one more memorable milestone in the current ITS breakthrough.

Welcome in Strasbourg, where you will see for real how intelligence spans borders!

Elisabeth Borne, Minister of Transport, France





#### Mayor of Strasbourg

As Mayor of Strasbourg I am very pleased to welcome you in our cross-border region located at the heart of Europe.

How to present all of Strasbourg's various aspects?

Its more than two thousand years history; its geography in the heart of Europe on the Rhine valley; its culture at the cross roads of Germanic and Latin influences and their traces on the architectural heritage recognised by the UNESCO.

How to introduce the 7th French city that besides Geneva and New York, is one of the world only international capital city without holding a state capital status?

How to refer to its centre place in the heart of Europe?

How to tour the various European institutions that she hosts and bring to mind its cosmopolitan character, its university of excellence, it strategic location in the intersection of multiple transports and communication networks?

How to portrait this avant-gardist city for urban mobility giving its inhabitants an exceptional quality of life where a certain "art-de-vivre" can be experienced in parks and gardens, through museums and auditoriums or in its gastronomic restaurants?

At last but not least, how to explain the genesis of our brand "The Europtimist" that sums up in one

word the audacity of the innovations generated on our territory, its entrepreneurship spirit as well as its economic and scientific inventively?

Strasbourg is also part of the Eurodistrict-Ortenau. As a European Grouping of Territorial Cooperation (EGTC) the Eurodistricts' main objective is making fall barriers between countries and being a laboratory of European citizenship. Which topic could be more helpful than intelligent transport systems which help persons to optimize trips in both countries and to find solutions to improve security and accessibility?

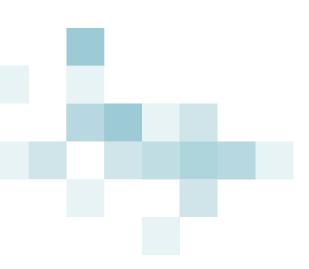
Our region is an important European transport hub where several axes cross. Intelligent systems are necessary for making traffic fluent, efficient and environmentally-friendly.

Here, the "land of cars" (Baden-Württemberg) meets the "land of storks" (Alsace). So, ideas get wings! Together, most innovative and sustainable solutions are developed, tested and implemented.

We are very proud to welcome you in 2017 for the 12th ITS European Congress and show you the richness and enthusiasm of our city and our region.

Enjoy Strasbourg where intelligent transport systems know no limits!

Roland Ries, Mayor of Strasbourg, France





#### President Eurometropolis of Strasbourg and Economic Development Vice-President for the Eurometropolis of Strasbourg, President of Strasbourg Autonomous Port

It is with great pleasure that we welcome you in Strasbourg, just a couple of years after the successful ITS World Congress in Bordeaux. Strasbourg considers it is a real opportunity to host the 12th ITS European Congress and present the specificities in mobility of a cross-border region.

For more than 20 years the city of Strasbourg and its metropolis, in association with other partners, have been leaders in innovative mobility. During the 90's, Strasbourg was the first city in France to reintroduce the tramway in order to change the way the city operated and to contribute to the improvement of the environment. In 2017, Strasbourg tramway network will be the first transborder system offering a couple of stations in the border city of Kehl and providing access to the transportation system of the German side.

Strasbourg Eco 2030 roadmap pinpoints digital as a crucial driver for economic development and more specifically for the deployment of intelligent mobility. High investments and large scale projects based on public/private partnerships are being deployed on our territory such as the construction of a connected urban highway contouring Strasbourg city that aims to manage traffic in transit through the urban area as well as to become one of the biggest "open road living lab".

Such projects as well as the ITS Congress will help Strasbourg transition from a "mobility laboratory" into an "open territory living lab" both as a project generator and as an incubator which benefit the entire Upper Rhine region.

The 12th ITS European Congress will give companies the opportunity to focus on the people and the users of these systems as intelligent mobility becomes more and more a service. Strasbourg strategic location in the intersection of multiple transports and communication networks makes it a wonderful site to share experiences on topics and projects as diverse as MaaS, urban logistics, inland waterway transport or environment impact of smart mobility.

*ITS Beyond Borders* is a theme for sharing, experiencing and challenging what ITS have been so far.

With you we will continue to build Strasbourg for the future: a human city, attentive to social innovations and its environment and cradle of Europe experienced by its citizens.

We hope all the participants will have a wonderful time here .... Strasbourg is yours to discover!

**Robert Herrmann**, President Eurometropolis of Strasbourg, France

**Catherine Trautmann,** Economic Development Vice-President for the Eurometropolis of Strasbourg, President of Strasbourg Autonomous Port, France







#### President of Strasbourg Transport Company (CTS)

I am delighted to welcome you to the 12th ITS European Congress in Strasbourg.

As Strasbourg Transport Company (CTS) President, one of my key responsibilities is to build, in association with the local authorities, an efficient transport network for Strasbourg and its surroundings.

Strasbourg has a long history in the use of Intelligent Transport Systems (ITS). Innovation and creativity are the drivers of the City's ITS successes.

The CTS also contributes to build the city of the future with our cross-border metropolis. As a project manager for the extension towards the German city of Kehl, we also took under consideration the environment and quality of life aspects. The results are two beautiful and avant-garde bridges transforming the urban face of both sides of the Rhine River.

Beyond this spectacular outcome, the CTS participates in the development of new products and services for the everyday life of all users with a customer-centric strategy. Thus the user is put in the centre of the organisation and at the heart of the innovations.

For example, I can mention the NFC Mobile App for travellers (called UGO and transfer to the industry) or the "Mobility Pass", our very unique multimodal service presented as a public transport pass giving access to several services such as park and ride parking, bus and tramway, car- and bikesharing, etc.

We are working on developing clean, ecological relevant and economical effective solutions. Based on users' feedbacks we believe we are succeeding in reaching these goals ... most of the time.

During your stay, our services will be more than happy to welcome companies, projects holders on our transport network to share and experience together.

I hope you will find Strasbourg to be a fertile ground for your experiments and new horizons and look forward to seeing you taking *ITS Beyond Borders*.

Alain Fontanel, President of Strasbourg Transport Company (CTS), France



#### **ERTICO – ITS Europe**

On behalf of the ERTICO – ITS Europe Partnership, I would like to invite you to attend and participate in the 12th ITS European Congress which will be held in Strasbourg, France, from 19–22 June 2017. Hosted by the City and Eurometropolis of Strasbourg, this event promises to deliver an exciting and informative programme under the theme *ITS Beyond Borders*.

The Congress will focus on intelligent mobility users, crossing borders in their daily lives and on a number of topics exploring the many facets of ITS including mobility services, next generation goods delivery, the evolution of transport networks, connected and automated transport, satellite technology applied to mobility and ITS and the environment. The extensive Exhibition will showcase technologies and services designed to enhance mobility at all levels and across all borders.

The Congress will also host the second Mayor's

summit which will bring together city mayors and leaders from across Europe, enabling them to share experiences, best practices and opportunities for delivering seamless travel through sustainable, efficient and innovative mobility solutions.

Strasbourg occupies a strategic position in the heart of Europe and is a pioneer of urban travel boasting the largest tram system in Europe as well as providing a benchmark for sustainable and innovative mobility through its improvement of walkability, extensive network of cycle tracks, car sharing schemes and a new road code, thus delivering an excellent quality of life for its inhabitants.

I very much look forward meeting you at the greatest gathering of the ITS community in the heart of Europe.

**Cees de Wijs,** Chairman Supervisory Board, ERTICO – ITS Europe









#### **Congress format**

#### **Plenary sessions**

All attendees are welcome to join the Opening and Closing Ceremonies and 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**

Organised at the request of organisations or groups of experts developing and deploying ITS, these interactive, tailor-made meetings create an opportunity to explore in-depth specific topics.

#### **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. They aim 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 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. 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.

#### **Project dissemination sessions**

These are Special Interest Session proposals which the Programme Committee considered had significant emphasis on presentation of results from one or more important projects.

#### **Google Play**





**App Store** 



Get up-to-date congress information straight to your Apple or Android smart phone

## Strasbourg 2017 Congress App

Now available on Google Play and the App Store. Search for: ITS 2017 Strasbourg

#### PROGRAMME AT A GLANCE

Cassin

 MOBILITY SERVICES - FROM TRANSPORT
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

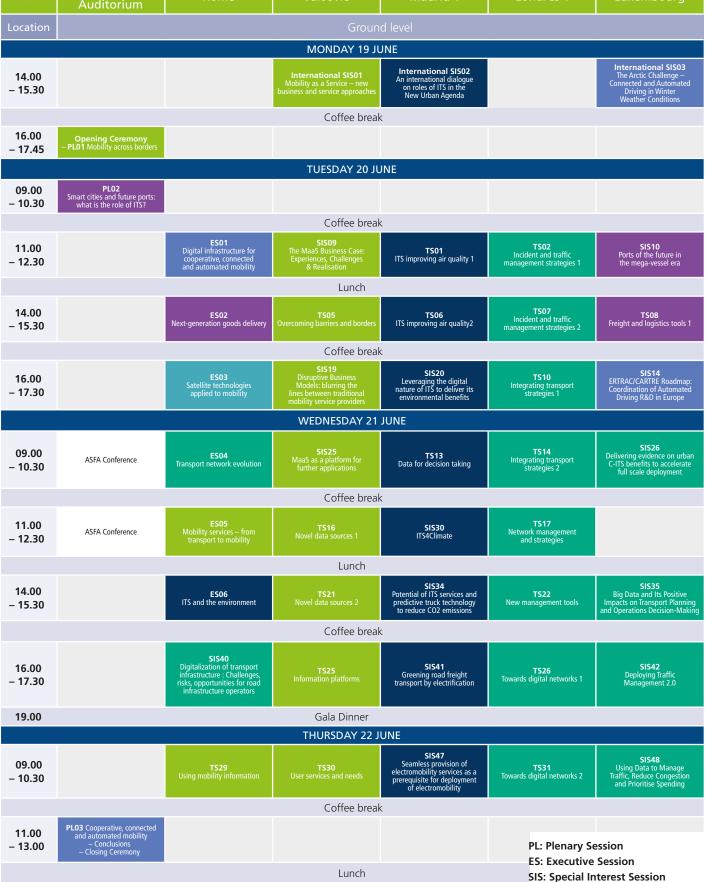
 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Construction of the services - from transport
 Image: Construction of the services - from transport

 Image: Constructio

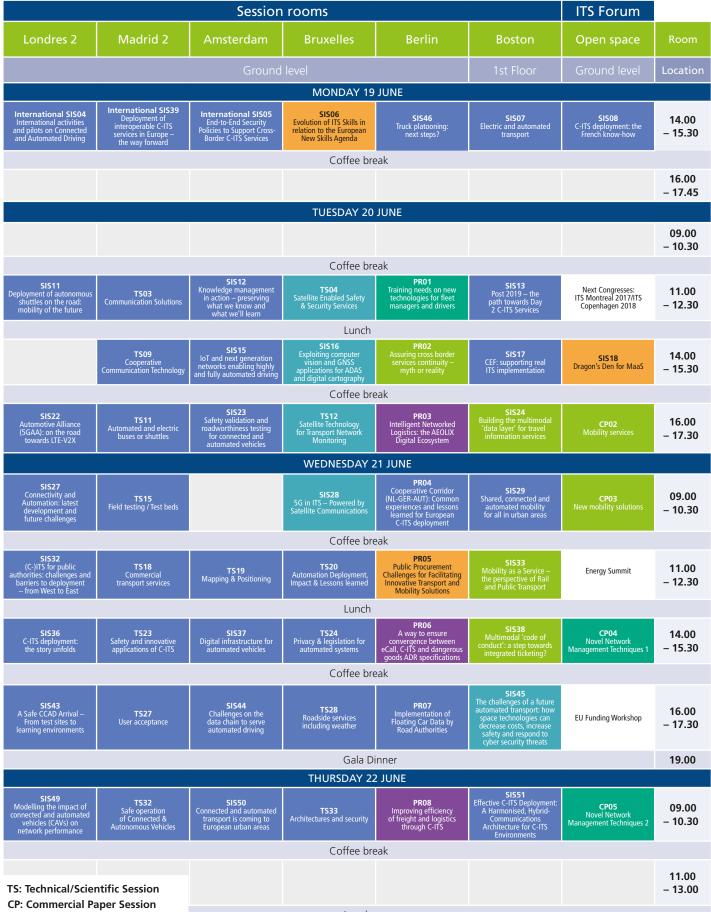


#### PROGRAMME AT A GLANCE



SATELLITE TECHNOLOGY APPLIED TO MOBILITY

ITS AND THE ENVIRONMENT



FREESTYLE - YOUR NEW IDEA

PR: Project Dissemination Session

Lunch

#### PLENARY SESSIONS



#### **Opening Ceremony**

You and your accompanying person(s) are cordially invited to attend the Opening Day of ITS Strasbourg 2017. The Ceremony will start with opening remarks from key personalities and a keynote speech by ASFA.

The Opening Ceremony will include:

- Best Paper awards
- Tango & Scan awards

The Ceremony will close with some entertainment and it will be immediately followed by the first Plenary Session 'Mobility across borders'.

The Opening Day will finish with the official Exhibition Ribbon Cutting Ceremony and the Welcome Reception in the Exhibition.

#### 16:00 – 16:40 (Cassin Auditorium)

Master of Ceremonies: Anette Burgdorf

Opening remarks from: Cees de Wijs, Chairman Supervisory Board, ERTICO – ITS Europe Roland Ries, Mayor of Strasbourg Robert Herrmann, President Eurométropole de Strasbourg Violeta Bulc, Commissioner for Transport, European Commission Jean Mesqui, President of the French Motorway Companies (ASFA)

#### Plenary session 1 – Mobility across borders

This session will explore how transport networks are affected by borders. Master of Ceremonies: Two key questions will be asked: 'How can ITS enable goods and people to travel seamlessly across different transport networks with potentially different regulatory regimes?' and 'How can ITS break down boundaries between different modes of transport?' Key opinion-formers will tackle issues surrounding cross-border infrastructure and mobility, as well as hot topics like Mobility as a Service (MaaS) and transport-sharing. Speakers will also discuss strategies for overcoming the challenges faced by intermodal transport networks. The session will emphasise the potential of ITS as a cross-border tool, helping participants develop strategies to go beyond borders and maximise interconnected and intermodal mobility.

## Anette Burgdorf

#### **Invited Speakers:**

Maja Bakran Marcich, Deputy Director General, DG MOVE, European Commission Olivier Biancarelli, Managing Director, Decentralized Solutions for Cities and Territories, ENGIE, France Umberto de Pretto, Secretary General, International Road Transport Union (IRU), Switzerland Catherine Trautmann, Economic Development Vice-President for the Eurometropolis of Strasbourg / President of Strasbourg Autonomous Port

#### Plenary session 2 – Smart cities and future ports: what is the role of ITS?

#### TOPIC: 2. Next generation goods delivery

The relationship between ports and cities is changing. Ports tend to be located further from cities than in the past, while logistics functions have moved further inland. This has led to a reduction in shared economic benefits between the two. Digitalisation is playing a growing role in the evolution of transport networks, but digital networks have had different focuses for cities and ports. As a result the link between them has become weaker, rather than stronger. This session will discuss the benefits of 'the port of the future', and explore smart integration of port activities within cities. It will examine emerging concepts like dry ports and inland ports, alongside opportunities to develop improved social integration. Several key questions will be asked: How can smart cities and the 'port of the future' deliver better productivity and service? Will this depend on significant investments in new technology? Will it require a rethink of existing technologies and operational mindsets? Can passengers and freight share the same mobility services? The answers to these key questions will help identify strategies for harnessing the potential of connected and integrated ports and cities.

09:00 - 10:30 (Cassin Auditorium)

Master of Ceremonies: Anette Burgdorf

#### **Invited Speakers:**

Jean-Louis Jerome, CEO, Autonomous Port of Strasbourg, France

Marco Lüdtke, Head of Vertical Unit Integrated Logistics Solutions, SIEMENS, Germany

Steffen Rasmussen, Head of Department, Traffic and Urban Life, City of Copenhagen

Daniela Rosca, Head of the Unit Ports & Inland Navigation, DG MOVE, European Commission

	ø		စ္ဝို		Ser.		
--	---	--	-------	--	------	--	--

#### Plenary session 3 – Cooperative, connected and automated mobility

#### TOPIC: 4. Connected and automated transport

Fully connected and automated driving are fast becoming a reality. The potential benefits for providers, governments and society extend beyond borders and are likely to influence safety, efficiency and mobility. Its impacts go beyond road transport, with opportunities to link with maritime transport and aviation too. This session will address key deployment questions including: How will connected and automated technologies benefit public transport? What are the new scenarios and key deployment challenges? What are the technological and regulatory issues? Key issues like digitalisation and Big Data will also be discussed, along with a review of new initiatives in the pipeline from the European Commission. It's an exciting time for the transport industry, with fast-paced technological developments prompting constant change and innovation.

#### 11:00 – 12:15 (Cassin Auditorium)

Master of Ceremonies: Katrina Sichel

#### **Invited Speakers:**

**Erik Jonnaert**, Secretary General ACEA, Chairman Steering Committee, European Automotive Telecom Alliance (EATA)

Edwin Fischer, Alliances & Business Development /Technology Innovation, Deutsche Telekom, 5G Automotive Association (5GAA)

Mathieu Flonneau, Lecturer, Université Paris I Panthéon-Sorbonne, France

Representative from the European Commission

#### **Conclusions & Closing Ceremony**

The Congress Conclusions will summarise the key topics of the week. The report is based on inputs prepared by a team of Rapporteurs and presented by Professor Eric Sampson, Chief Rapporteur.

The Closing Ceremony will include:

- Strasbourg 2017 highlights video
- Best session awards
- Boost-up startup award

#### 12:15 – 13:00 (Cassin Auditorium)

Master of Ceremonies: Katrina Sichel

#### Closing remarks from:

Catherine Trautmann, Economic Development Vice-President for the Eurometropolis of Strasbourg / President of Strasbourg Autonomous Port Jacob Bangsgaard, CEO, ERTICO – ITS Europe

Michael De Santis, Director, ITS Canada, representing the 2017 ITS World Congress in Montreal, Canada Steffen Rasmussen, Chair of 2018 ITS World Congress in Copenhagen, Head of Department, Traffic and Urban Life, City of Copenhagen

PLENARY SESSIONS

Thursday 22 June



#### TOPIC: 4. Connected and automated transport

Connected and automated vehicles need an accurate, real-time picture of the world around them to operate safely. Digital infrastructure can provide this by generating a live, dynamic mirror of the physical environment. But while this makes sense in theory, there are many practical hurdles to overcome. There's a need to identify which elements of digital infrastructure are most critical to the safe operation of autonomous vehicles. And there are unanswered questions about which features of digital infrastructure are critical for different levels of automation. Other questions include how the quality of information within the digital infrastructure can be guaranteed, and where it should come from. Will some of the data be generated by vehicles, and how should changes to the physical infrastructure be incorporated into the digital model? Who will pay to develop and maintain the system? This session will examine these questions from the perspective of key stakeholders, including public bodies, transport authorities, traffic managers and the private sector.

#### ES02 – Next-generation goods delivery

#### TOPIC: 2. Next generation goods delivery

The way we travel is changing. Pressures on road space are fuelling a move towards more public transport and fewer private cars. Heavy goods vehicles aren't welcome in cities during the day, but consumers still expect an uninterrupted supply of goods and services. Devices of all types are now connected to the web, providing new data sets that are improving freight tracking. At the same time, the traditional passenger and freight transport network is undergoing a revolution. Truck platooning, trials of autonomous cars and developments in electric vehicles all have the potential to turn the logistics landscape on its head. It's time for a radical rethink of how people and freight are moved, particularly in urban environments. The transport of goods and people is now interconnected and can't be separated. New logistics networks must span multiple cities, but also look at novel ways of achieving 'last mile' delivery. In this rapidly changing landscape, the key question is how to create a future-proof and sustainable logistics system.

#### ES03 – Satellite technologies applied to mobility

#### TOPIC: 5. Satellite technology applied to mobility

aniology applied to mobility

Moderator

**Paul Febvre**, Chief Technology Officer, Satellite Applications Catapult, United Kingdom

#### **Speakers**

Andrew Faiola, Director Mobility Solutions, Intelsat, United Kingdom

Fiammetta Diani, Deputy Head of Market Development, European GNSS Agency – GSA

Barnaby Osborne, Professor of space applications, International Space University (ISU) Strasbourg, France Joel Schroeder, Vice President, Strategy & Business Development Connected Car Program, Inmarsat, United States

Margriet van Schijndel-de Nooij, Secretary General, - EARPA

#### Speakers

Moderator

Claire Depré, Head of Unit, DG MOVE, European Commission

Olle Isaksson, Head of Strategy Business Line Industry & Society, Ericsson AB, Sweden

Klaas Rozema, CTO, Dynniq, The Netherlands Jan Hellåker, Program Director, Drive Sweden, Sweden Abayomi Otubushin, Corporate and Governmental Affairs, BMW Group, Brussels

**Bruno Jansem**, Innovative mobility councellor, Strasbourg Eurometropole

#### Moderator

Margriet van Schijndel-de Nooij, Secretary General, EARPA

#### Speakers

**George de Boer**, Leader of Connected Car Initiatives, TomTom, The Netherlands

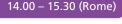
Jean-Bernard Kovarik, Deputy Director General, IFSTTAR, France

Sascha Westermann, Project Management Office ITS, Hamburger Hochbahn AG, Germany

Mats Rosenquist, Director External Research

Collaboration, Volvo Group Trucks Technology, Sweden

Are satellite technologies ready to support next-generation transport services? The latest space technologies powering the communication revolution such as 5G and OneWeb have the potential to drive a new wave of ground-breaking innovation in ITS. Seamless and affordable connectivity for both infrastructure and vehicles can be realised. The benefits of satellite-based positioning and navigation are well-understood. But key developments in ITS – particularly autonomous vehicles – require more accurate, robust and scalable positioning. This can be made possible by the combined use of sensing technology on the vehicle and new satellite services. Equally, the fusion of earth observation and terrestrial sensor data should deliver a comprehensive picture of network usage and traffic flows, along with environmental data like greenhouse gas monitoring and weather data. This session will explore the opportunities and challenges in detail.



16.00 - 17.30 (Rome)

11.00 - 12.30 (Rome)

Moderator

Speakers

Germanv

Agency – FTA, Finland

Relations, HERE, Germany

transports and rails (UTP)

# PLENARY

**EXECUTIVE** 

SESSIONS

Wednesday 21 June

#### ES04 – Transport network evolution

#### TOPIC: 3. Transport networks evolution

Until recently, transport networks were defined by physical elements like roads, tracks and waterways. But new technology has created digital networks which complement this physical infrastructure, offering both opportunities and challenges. Most people are connected to the world around them through their smart devices. As more those become part of the Internet of Things, everything and everyone is becoming increasingly interconnected. Digital networks that exploit Big or Open Data are now opening up opportunities to enhance and redefine transport models. The world is moving fast and we need to rethink existing plans to take this transformation into account. This session will address key guestions including: How will connected and automated vehicles link to both types of network? What data streams can we can expect from these new technologies? Are interfaces available to integrate the Internet of Things with our current services, and if not, what is required? How will the new hybrid networks support the development of Smart Cities? What benefits will these changes bring to typical public transport users?

#### ES05 – Mobility services – from transport to mobility

#### TOPIC: 1. Mobility services – from transport to mobility

Mobility as a Service (MaaS) is one of the hottest topics in intelligent transport. But with very few live schemes, it's currently more of an aspiration than a reality. MaaS has the potential to break the traditional link between mobility and vehicle ownership. It offers the promise of 'pure movement', where customers tap into different modes of transport and purchase journeys on demand. But the challenges underpinning MaaS are enormous. Service providers need to deliver reliable travel in real time without controlling the means of transport. Transport providers must offer responsive services that will compete with private cars using collective or shared transport. A large dose of innovation is needed, and it's not clear where this will come from. But whether start-ups or existing providers take the lead, the prize on offer is huge. Successful operators will learn about the entire end-to-end journey plans of their customers, creating a potential treasure trove of marketing information. So while the challenges of delivering MaaS are significant, the benefits are equally large.

#### ES06 – ITS and the environment

#### TOPIC: 6. ITS and the environment

Demand for mobility is growing, and a new report predicts that policies for reducing transport-related CO2 emissions will fall far short of international targets. The most optimistic outcome is that transport CO2 emissions will still be at 2015 levels by 2050. So are we in denial, or do we lack the tools to tackle the problem? Unsustainable ways of travelling are currently the only option for many people. At the same time, information about environmentally friendly alternatives isn't always presented clearly and convincingly. This makes it harder for governments and cities to make the long-term strategic decisions and investments required to tackle the problem. How can CO2 emissions be made to matter when choosing transport options? Should a new 'currency' be introduced to buy or sell kilogrammes of CO2? A radical move like that would have the potential to change behaviour, but is it a realistic option? This session will examine all these questions as it explores whether ITS can contribute to game-changing reductions in urban greenhouse gas emissions of between 20% and 50%. It will also look at whether personal choices and changes in behaviour have the potential to deliver the promised targets.

#### Moderator

Roger Pagny, ATEC – ITS France

#### Speakers

Johan Ransquin, Sustainable Cities and Territories Division Deputy Director, The French Environment and Energy Management Agency – ADEME, France José Viegas, Secretary-General, International Transport Forum, France

Mathias Lelievre, Sustainable Mobility Director, ENGIE, France

Erik Jonnaert, Secretary General, ACEA

Mads Gaml, Program Manager, Traffic Unit, City of Copenhagen

11.00 – 12.30 (Rome)

14.00 - 15.30 (Rome)

09.00 - 10.30 (Rome)

#### Moderator

Richard Harris, Director Europe, HMI Technologies, United Kingdom

Risto Kulmala, Principal adviser, Finnish Transport

Mika Rytkonen, Director Industry & Government

Michel de Mathelin, Director, ICube laboratory -

Representative from the French Union of public

Traffic Management, SWARCO AG, Italv

Professor, Strasbourg University, France

Manuel Milli, Solution Manager Smart Mobility & Urban

Hermann Meyer, VP Smart City Solutions, Continental,

#### Speakers

Alan Peters, Principal Technologist Autonomous Transport Systems, Transport Catapult, United Kingdom Andy Taylor, Strategy Director, CUBIC, United States Peter Ummenhofer, Vice-President Solution Center Intelligent Mobility Services, Kapsch, Austria Claire Depré, Head of Unit, DG MOVE, European Commission

Miller Crockart, Vice President Global Sales and Marketing Traffic Software, PTV Group, Germany

#### International SIS01 – Mobility as a service – new business and service approaches

#### TOPIC: 1. Mobility services – from transport to mobility

Mobility as a Service solutions will put users at the heart of the transport network, offering tailor-made travel services based on their preferences. MaaS has the potential to become the mobility service of choice for future generations. This session will consider the current status of MaaS and the latest progress from the MaaS Alliance. It will also consider the data sharing aspects that will be essential for effective MaaS services. It will also discuss the industry and city and regional perspectives of MaaS. This session will discuss how MaaS can deliver the smarter, simplified transportation landscape envisioned and expected by future users.

## 14:00 – 15:30 (Varsovie)

Organiser Richard Harris, HMI Technologies, United Kingdom

#### Moderator

Thomas Kern, Cavita, United States

#### Speakers

Krista Huhtala-Jenks, Ministry of Transport and Communications, Finland

Marko Javornik, Comtrade Digital Services, Slovenia Jana Sochor, Chalmers University of Technology, Sweden Jukka Lintusaari, University of Tampere, Finland Carme Fàbregas, Autoritat del Transport Metropolita, Spain

#### International SIS02 – An international dialogue on roles of ITS in the New Urban Agenda

#### TOPIC: 6. ITS and the environment

The United Nations Conference on Housing and Sustainable Urban Development (Habitat III) held in October 2016 in Quito, Ecuador, successfully concluded with the adoption of the New Urban Agenda which defines all future lines of action in regards to the urban context for the UN Sustainable Development Goals leading up to 2030. ITS is a key enabler in achieving the high standards in sustainable urban development set by the New Urban Agenda, such as data driven transport policy and planning, new sustainable mobility solutions, automated vehicles for safer and more efficient driving, Mobility as a Service, dial-a-ride for disabled and elderly citizens. This session gathers various stakeholders from government, inter-governmental bodies and academia from all around world to set up an international dialogue to discuss current practices of ITS in sustainable urban development in various countries and potentials of ITS applications in addressing social, economic, environmental sustainability.

As the race towards connected and automated driving gains speed, more

attention needs to be paid to performance of new technologies in all

possible weather conditions. Winter and its extreme weather conditions

pose a specific challenge for automated driving with snow and ice reduc-

ing visibility on the roads, covering lane-markings and road signs as well as narrowing the lanes and making them slippery. The challenge is in

ensuring that automated vehicles can navigate and stay on the road in

snowy and icy conditions, but also in ensuring real-time monitoring of

road conditions, proper timing of maintenance actions and possibilities

to inform road users of road condition changes or hazards on the road

ahead. The session takes a specific look at the challenge posed by the

Arctic climate to automated driving performance and showcases poten-

tial solutions to ensuring road traffic safety in winter time through trials,

14:00 – 15:30 (Madrid 1)

#### Organiser

Yanying Li, ERTICO – ITS Europe

Moderator

Patrick Mercier-Handisyde, European Commission, DG Research & Innovation

#### Speakers

Tom Voege, OECD, France Stephane Dreher, United Nations Development Programme, France

Bahar Namaki Araghi, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark Caio Fontana, Federal University of Sao Paolo, Brazil

Siegfried Rupprecht, RUPPRECHT CONSULT – Forschung & Beratung GmbH, Germany

#### International SIS03 – The Arctic Challenge – connected and automated driving in winter weather conditions

#### **TOPIC: 4. Connected and automated transport**

road design and C-ITS deployment.

#### 14:00 - 15:30 (Luxembourg)

Organiser Alina Koskela, Finnish Transport Agency – FTA, Finland

Moderator Ilkka Kotilainen, Finnish Transport Agency – FTA, Finland

#### **Speakers**

Torgeir Vaa, Norwegian Public Roads Administration – NPRA, Norway

Alina Koskela, Finnish Transport Agency – FTA, Finland Erik Israelsson, Zenuity, Sweden Matti Kangas, HERE, Germany Timo Sukuvaara, Finnish Meteorological Institute, Finland

16 12th European Congress and Exhibition on Intelligent Transport Systems and Services

Monday 19 June

#### International SIS04 – International activities and pilots on Connected and Automated Driving

#### TOPIC: 4. Connected and automated transport

Connected and Automated Driving (CAD) is high on the agenda of the EU and national governments. There is increasing awareness amongst decision makers that action from public authorities is needed to create the right conditions for safe deployment of CAD. Several national and regional plans have been launched in Europe and at international level.

A large number of European Member States and other countries around the world are running or planning to soon undertake large scale testing of CAD functions on public roads.

This session will provide an overview of current policy measures adopted by European Member States including available funding programmes and support to large-scale testing and facilities. It will also include an overview of the main issues to be addressed at international level and also of the initiatives to establish a dialogue with main international actors (US DoT, MLIT) and other regions (e.g. China, Australia, others).

The main objective of the session is to support mutual understanding of current initiatives, to discuss alignment between national, EU and international initiatives and to identify possible areas of cooperation.

#### 14:00 – 15:30 (Londres 2)

Organiser Davide Brizzolara, ERTICO – ITS Europe

#### Moderator

Maxime Flament, ERTICO – ITS Europe

#### Speakers

Takahiko Uchimura, ITS Japan, Japan Tom Alkim, Ministry of Infrastructure and the Environment – Rijkswaterstaat, The Netherlands Ludger Rogge, European Commission, DG Research and Innovation

François Fischer, ERTICO – ITS Europe

Anna Schirokoff, Finnish Transport Safety Agency Trafi, Finland

#### SIS39 – Deployment of interoperable C-ITS services in Europe – the way forward

#### TOPIC: 4. Connected and automated transport

In November 2016 the European Commission published "A European Strategy on Cooperative Intelligent Transport Systems, a milestone towards cooperative, connected and automated mobility" following a request of the European transport ministers written down in the Declaration of Amsterdam. In parallel the European industry stated its intention to start full scale deployment of C-ITS enabled vehicles in 2019. In December 2016 the C-Roads Platform was officially launched to link C-ITS deployment activities across Europe. Member States agree to work together to achieve deployments that enable interoperable and seamless cross-border C-ITS services for European travellers.

This session will bring together key stakeholders from the European Commission, Industry as well as Member States to discuss the feasibility of having first C-ITS services available for European travellers in 2019. 14:00 – 15:30 (Madrid 2)

Organiser Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

#### Moderator

Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

#### **Speakers**

Claire Depré, European Commission, DG MOVE Karl-Oskar Proskawetz, ITS Automotive Nord, Germany Jan Willem Tierolf, Ministry of Infrastructure and the Environment – Rijkswaterstaat, The Netherlands Manfred Harrer, ASFINAG Maut Service GmbH, Austria Joost Vantomme, ACEA, Belgium Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

#### International SIS05 – End-to-end security policies to support cross-border C-ITS services

TOPIC: 4. Connected and automated transport	14:00 – 15:30 (Amsterdam)
This session will present the work of the Harmonization Task Group that analysed the benefit of harmonization to end-to-end security policies to support cross-border Cooperative-ITS Services.	Organiser Suzanne Sloan, US Department of Transportation, United States
	Moderator Wolfgang Hoefs, European Commission, DG CONNECT
	Speakers Suzanne Sloan, US Department of Transportation, United States Gianmarco Baldini, European Commission's Joint

Research Centre, Italy Philip Lloyd, Transport Certification Australia, Australia William Whyte, Security Innovation, United States



#### TOPIC: 7. Freestyle – Your new idea

The recent new European Skills Agenda launched in 2016 is in the list of major initiatives in the EU Commission Work Programme. This SIS aims to provide the opportunity to researchers, industry and practitioners to present and discuss the future and the evolution of the ITS skills through examples of initiatives and best practices that may be implemented in the near future. With fast evolving and growing ITS markets, connected and autonomous vehicles, big data and simulation in several cases the lack of expertise and skills in the job market will potentially determine gaps and mismatches between supply and demand with serious consequences. This SIS is structured in a panel types format, aiming to stimulate discussion and support a shared commitment and works towards the definition of a common vision about the strategic importance of skills for sustaining jobs, growth and competitiveness in the ITS sector.

#### 14:00 – 15:30 (Bruxelle

Organiser Fabio Galatioto, Transport Systems Catapult, United Kingdom

#### Moderator

Michael Synodinos, Transport Systems Catapult, United Kingdom

#### Speakers

Monica Giannini, IRU Projects, Belgium Florin Nemtanu, Politehnica University of Bucharest, Romania

Yolande Herbath, Transport Systems Catapult, United Kingdom

Davide Lo Presti, Nottingham University, United Kingdom Ludovic Drouin, French Embassy in London, United Kingdom

#### SIS46 – Truck platooning: next steps?

#### TOPIC: 4. Connected and automated transport

The truck platooning is progressing since many years and addresses many major challenges of the long distance road freight transport: emissions/ decarbonisation, logistics chain improvement, road safety and infrastructure capacity. The emerging technologies of cooperative and automated vehicles are used. However, some pending issues remain under investigation: user acceptance, impact on traffic and infrastructure, operation and business models. The full implementation requires actions of all the stakeholders, technologies providers, OEMs, roads operators, designers and construction companies, as well as regulators and public authorities. 3 or 4 keynote speakers will briefly introduce the main lessons learned from case studies and planned experiences in the EU member states and the US. A debate between panellists and the audience will deal with the next challenges of truck platooning, the implementation issues, the benefits assessment, and the combination of different approaches of connected vehicles.

#### Organiser

Odile Arbeit de Chalendar, Ifsttar, Belgium

#### Moderator Bernard Jacob, Ifsttar, France

#### **Speakers**

Jean François Aguinaga, European Commission, DG Research & Innovation Servi Beckers, EReg, The Netherlands Jack Martin, ACEA, Belgium Steve Phillips, CEDR, Belgium Tom Voege, OECD/ITF, France Joris Cornelissen, Ministry of Infrastructure and the Environment – Rijkswaterstaat, The Netherlands Bastiaan Krosse, TNO, The Netherlands Bernard Jacob, Ifsttar, France

#### SIS07 – Electric and automated transport

#### **TOPIC: 4. Connected and automated transport**

The automotive industry is witnessing some profound changes. Automation, ITS and electrification each bring their own unique approach on how the automotive landscape will look like in the next coming years. While in the past vehicle automation, (C)-ITS and electrification have developed in relative isolation – combined they can significantly contribute to bring sustainable mobility to the next level. Starting with the end in mind: where do we envisage ourselves in the next 20 years? And coming slowly back in time: where will be stand in the next 10 ? And what about the next 5 years?

#### Organiser

Alain Van Gaever, European Commission, DG MOVE

Moderator Alain Van Gaever, European Commission, DG MOVE

Speakers

Joseph Beretta, AVERE, France Michał Sierszyński, Solaris, Poland Abayomi Otubushin, BMW, Germany Angelo Meuleman, TaxiStop, Belgium

#### 14:00 – 15:30 (Berlin)

14:00 - 15:30 (Boston)

14:00 - 15:30 (ITS Forum)

Monday 19 June

Tuesday 20 June

#### SIS08 – C-ITS deployment: the French know-how

#### TOPIC: 4. Connected and automated transport

This session will present the French know-how in the field of C-ITS deployment developed in projects SCOOP@F, C-Roads France and InterCor. What is very specific in the French approach is to have road operators and car manufacturers working together in close cooperation in order to develop a fully integrated system taking the whole information chain into account. The session will show concrete achievements directly replicable by any C-ITS deployment initiative in Europe.

#### Organiser

Eric Ollinger, Ministry of Ecology, Sustainable Development and Energy, France

#### Moderator

Eric Ollinger, Ministry of Ecology, Sustainable Development and Energy, France

#### Speakers

Marie-Christine Esposito, Ministry of Ecology, Sustainable Development and Energy, France Christine Tissot, Renault, France Guillaume Lavenir, DIR Ouest, France Delphine Duperray, PSA Groupe, France Guilhem Autret, Cerema, France Hacène Fouchal, URCA, France Houda Labiod, Institut Mines-Télécom, France

#### SIS09 – The MaaS Business Case: experiences, challenges & realisation

#### TOPIC: 1. Mobility services – from transport to mobility

Throughout Europe the recent past has brought a number of promising projects in the field of MaaS, e.g. services or applications like Whim (Helsinki); Ubigo (Gothenburg), Green Class (Switzerland) or Wien Mobil Lab (Vienna). Although this topic is high on the agenda, a genuine basis on how to calculate a successful business case is still lacking. This session wants to distil the most decisive challenges from gained experiences through already realized projects, field trials and business cases. The most important stakeholders such as public transport operators, governmental authorities, industry and the academia are going to draw an updated picture of their current activities, pointing out the most pressing questions to be overcome in the next future. Next to the technical and organizational aspects of a future MaaS Business Case, relevant findings on mobility behaviour and behavioural change are to be considered in this discussion. 11:00 – 12:

#### Organiser

#### Susanna Hauptmann, Kapsch TrafficCom AG, Austria Moderator

Ralf Baron, Arthur D. Little, Germany

#### **Speakers**

Jana Sochor, Chalmers University of Technology, Sweden Michael Kieslinger, Fluidtime, Austria Claus Unterkircher, Uber, Austria Gerhard Wennerström, Samtrafiken, Sweden Richard Harris, HMI Technologies, United Kingdom

#### SIS10 – Ports of the future in the mega-vessel era

#### TOPIC: 2. Next generation goods delivery

Ports are essential for the European economy; 74% of goods exported or imported to the EU are transported via its seaports. At the same time, the challenges they are facing are only getting greater: Volumes of cargo are increasingly higher – a 57% rise by 2030 – while they are also arriving in a shrinking number of vessels: the next generation of Post-Panamax vessels have a capacity of more than 18k containers. This session will investigate how enabling cutting-edge technologies such as C-ITS, IoT and 5G may assist modern ports to handle upcoming and future capacity, traffic, efficiency and environmental challenges. Main focus will be on the port links with the hinterland and multimodal traffic.

#### Organiser

Angelos Amditis, Institute of Communication and Computer Systems – ICCS, Greece

#### Moderator

Angelos Amditis, Institute of Communication and Computer Systems – ICCS, Greece

#### Speakers

Sascha Westermann, Hamburger Hochbahn AG, Germany Paolo Pagano, Consorzio Nazionale Interuniversitario per le Telecomunicazioni – CNIT, Italy Panagiotis Lytrivis, ICCS, Greece Meng Lu, Dynniq Nederland B.V., The Netherlands

11:00 - 12:30 (Luxembourg)

#### SIS11 – Deployment of autonomous shuttles on the road: mobility of the future

#### TOPIC: 4. Connected and automated transport

Autonomous mobility is a reality. Today, autonomous vehicles are being commercialized and piloted on public roads based on their level of automation (e.g. 4, 5). These vehicles, without human inputs, can autonomously drive safely, locate themselves and adhere to traffic rules. However, they alone cannot be used as a mobility service, since they cannot adapt to networks disruptions. Thus, optimization must take place at the fleet level in order to create a coordinated and efficient mobility service and to determine the optimal "solution" for the whole system, i.e. dispatching vehicles to match the demand. Provisioning a complete autonomous mobility system involves the interaction of all players of the autonomous mobility ecosystem: fleet automation platforms, data suppliers (e.g. High Definition 3D map, road network, traffic information), Mobility providers, autonomous vehicles manufacturers and, end users.

#### 11:00 - 12:30 (Londres 2)

Organiser Gonzalo Alcaraz, BestMile, Switzerland

#### Moderator

Gonzalo Alcaraz, BestMile, Switzerland

#### Speakers

Damien Declercq, Local Motors, Germany Luc Texier, BestMile, Switzerland Frank Hunsicker, InnoZ, Germany Christophe Sapet, NAVYA, France

#### SIS12 – Knowledge management in action – preserving what we know and what we'll learn

#### TOPIC: 4. Connected and automated transport

Today's transportation leadership is faced with squeezing the most out of limited resources, fixing aging infrastructure, deploying transformational technologies for Smart Cities and ITS, and dealing with a massive brain drain caused by large employee turnover. Some transportation leaders are finding that these issues and more can be helped by deploying knowledge management programs. This session will look at how to develop a knowledge management program, challenges and opportunities, and lessons learned from deployments.

#### 11:00 - 12:30 (Amsterdam)

#### Organiser C Douglass

C. Douglass Couto, Consultancy, United States

#### Moderator

Thomas Kern, Cavita, United States

#### Speakers

C. Douglass Couto, Consultancy, United States Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria Eric-Mark Huitema, IBM, The Netherlands Paul Kompfner, ERTICO – ITS Europe

#### SIS13 – Post 2019 – the path towards Day 2 C-ITS Services

#### **TOPIC: 4. Connected and automated transport**

services and what Day 2 should and should not include.

#### Organiser

Geert Van-der-Linden, European Commission, DG MOVE

#### Moderator

Geert Van-der-Linden, European Commission, DG MOVE

#### Speakers

Eric Ollinger, Ministry of Ecology, Sustainable Development and Energy, France Richard Lax, Kapsch TrafficCom AG, Austria Bahar Namaki Araghi, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark Additional speaker (TBC)

Connected vehicles are projected to land on our roads by 2019 which will be a key moment and milestone for Intelligent Transport Systems

in Europe. The list of Day 1 services that were defined in the European

Commission's C-ITS Platform will be the basis of the first deployment of

C-ITS but do we already have an idea of what Day 2 C-ITS services will

look like ? This session will explore how public and private stakeholders

from both urban and inter-urban networks view the evolution of C-ITS

20 12th European Congress and Exhibition on Intelligent Transport Systems and Services

11:00 – 12:30 (Boston)

# Tuesday 20 June

Tuesday 20 June

#### SIS15 – IOT and next generation networks enabling highly and fully automated driving

#### TOPIC: 4. Connected and automated transport

IoT promises a widely distributed network of cheap, efficient and pervasive sensors. Automated Driving demands a rich sensing capability to maximally inform the automated decision making process; thus, exploiting IoT technologies for Autonomous Driving applications seems a very opportune area of investigation. There are, however, significant challenges – AD demands highly reliable solutions, IoT presents a much more ad hoc sea of data. AD solutions must be secure, yet IoT has already demonstrated significant security weakness. In this session we will investigate the promise that IoT offers, while trying to understand the ways in which its performance must be improved, or it's weaknesses mitigated.

#### 14:00 – 15:30 (Amsterdam)

Organiser Xavier Aertsens, ERTRAC, Belgium

#### Moderator

François Fischer, ERTICO – ITS Europe

#### Speakers

Stella Nikolaou, Centre for Research & Technology Hellas – CERTH, Greece Ralf Willenbrock, T-Systems, Germany Benoit Baurens, AKKA, France Miodrag Djurica, TNO, The Netherlands Dave Marple, Technolution, The Netherlands

#### SIS16 – Exploiting computer vision and GNSS applications for ADAS and digital cartography

#### TOPIC: 5. Satellite technology applied to mobility

Fusing video data with data from other sources will significantly increase the environment perception for automated driving vehicles. However performance of computer vision or video analysis systems is inherently restricted by the quality of the available training data. Achieving improvements in any application domain – e.g., ADAS, intelligent transport systems, advanced manufacturing, digital cartography – requires the availability of labelled realistic video datasets of sufficient size. Similarly, lane-level positioning and map matching are big challenges for navigation systems and for feeding data in the sensor fusion components. Highly automated driving vehicle will be rapidly deployed, requiring lane level positioning information and vehicle control. The session will address the challenge of quality of data, coming from computer vision, positioning and other sensors, which will contribute through sensor fusion to deliver a reliable and precise perception of the driving environment, being critical to enable highly automated driving. 14:00 - 15:30 (Bruxelles)

14:00 - 15:30 (Boston)

#### Organiser Oihana Otaegui, Vicom, Spain

Moderator

Rita Bhandari, ERTICO – ITS Europe

#### Speakers

Suzanne Little, DCU, Ireland Oihana Otaegui, Vicom, Spain Xavier Rouah, Intempora, France Cristian Olariu, IBM Research, Ireland Alan Peters, Transport Systems Catapult, United Kingdom Fabian Pütz, University of Limerick, Ireland

#### SIS17 – CEF: supporting real ITS implementation

#### TOPIC: 4. Connected and automated transport

INEA is the Executive Agency in charge of the Connecting Europe Facility (CEF) programme. This special interest session will provide an insight on how INEA works, what CEF is and how it supports the deployment of ITS in the EU. Practical examples and work experience will be presented with beneficiaries of CEF funds and debated along with representatives of the European Commission.

#### Organiser

Eva Boethius, European Commission, INEA

Moderator Pierpaolo Tona, European Commission, INEA

#### Speakers

Stephanie Kleine, Landes Betrieb Mobilität Rheinland-Pfalz, Germany Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria Andy Rooke, ERTICO – ITS Europe

Andy Rooke, ERTICO – ITS Europe Isabelle Vandoorne, European Commission, DG MOVE



#### TOPIC: 7. Freestyle – Your new idea

Mobility as a Service has taken the world by storm, at least on a concept level. Since 2014, MaaS has been quoted as a future megatrend changing the mobility landscape for the better. Is it hype or can MaaS live up to its promises? The first MaaS operators have only begun their operations. They show a lot of promise but are competing against slowly changing consumer habits and legacy institutions. If you've ever had a suspicion that MaaS might be too good to be true, this session is for you. If you've had that nagging feeling that no-one's asked the really tricky questions yet, you need to attend. This session will bring together the leading MaaS experts to answer your questions. This is the event where we implore you to play devil's advocate. We will put MaaS concept and business models in the pressure chamber.

#### ViaaS

#### 14:00 – 15:30 (ITS F

Krista Huhtala-Jenks, Ministry of Transport and Communications, Finland

#### Moderator

Organiser

Catherine Kargas, Marcon, Canada

#### Speakers

Richard Harris, HMI Technologies, United Kingdom Sampo Hietanen, MaaS Global, Finland Krista Huhtala-Jenks, Ministry of Transport and Communications, Finland Susan Zielinski, University of Michigan, United States Søren Sørensen, SFMCON Smart Ticketing Consulting, Denmark

#### SIS19 – Disruptive business models: blurring the lines between traditional mobility service providers

#### TOPIC: 1. Mobility services – from transport to mobility

Major advances in technology – the internet of things, big data and the consumerisation of technology – are blurring the lines between vehicles, infrastructure and mobility services for end users. This session brings together speakers who work at varying stages of mobility services to discuss different challenges and approaches from technological, economic and political angles. Difficult questions around disruptive business models will be debated, such as how well can/does MaaS scale, particularly in the complexity of cities? And how are stakeholders across automotive, infrastructure and mobility services planning to overcome their challenges and work toward a technology-led future that delivers for consumers?

#### Organiser

Pamela Oldfield, INRIX, United Kingdom

#### Moderator

Adrian Ulisse, INRIX, United Kingdom

#### **Speakers**

Mads Gaml, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark

Andrea Petti, Ericsson, United Arab Emirates Scott Sedlik, INRIX, United States Serge van Dam, Ministry of Infrastructure and the Environment – Rijkwaterstaat, The Netherlands Hermann Meyer, Continental Automotive GmbH, Germany

#### SIS20 – Leveraging the digital nature of ITS to deliver its environmental benefits

#### TOPIC: 6. ITS and the environment

Throughout the world, an ambition has emerged to improve air quality by reducing congestion, spurred by the effect on life expectancy, quality of life, and health care costs. ITS are a crucial tool to realize this ambition, today. They incentivise the use of clean transportation, reduce pollution emitted by other transport modes, and help changing mobility patterns. Authorities however sometimes struggle to make investments in ITS improving air quality, especially in times of budget constraint. Opportunities to make our cities smoother and our air cleaner pass by because of uncertainty on benefits, the abundance of scenarios of action, and a fear of side effects. This session will expose how ITS can reduce congestion and improve air quality, and how its digital nature can help building consensus and choosing the best path reconciling environmental concerns and mobility needs. A focus will be put on actual ITS realizations by inviting practitioners.

#### 16:00 - 17:30 (Madrid 1)

16:00 - 17:30 (Varsovie)

Organiser Arno Amabile, ENGIE, France

#### Moderator

Jean-Charles Pandazis, ERTICO – ITS Europe

#### **Speakers**

Laurent Bouillot, SIRADEL, France Steffen Rasmussen, City of Copenhagen, The Technical and Environmental Administration, Centre for Traffic and City in Use, Denmark Meng Lu, The International Benefits Evaluation Community – IBEC

Tuesday 20 June

#### SIS14 – ERTRAC/CARTRE Roadmap: coordination of Automated Driving R&D in Europe

#### TOPIC: 4. Connected and automated transport

In order to overcome fragmentation, Europe needs one reference docu- Organiser ment and one clear roadmap for the development of Automated Driving. The ERTRAC Roadmap, developed with the support of the European project CARTRE, provides a status of the current initiatives in Europe, by the European Union and by national authorities. Its overall objective is to identify the challenges for implementation of higher levels of automation in Road Transport, and to promote cross-industry collaboration and international coordination. The Roadmap provides milestones of Research and Development efforts towards 2025 and 2030. The goal is to support the market deployment of automated driving applications for the different vehicles and environments: for passenger cars, for commercial vehicles (trucks and buses), and for urban environment systems. Besides this mapping of medium-term R&D efforts, the document provides short-term recommendations for the content of European projects by the Horizon2020 programme, for the funding years 2018-2020.

16:00 - 17:30 (Luxembourg)

Davide Brizzolara, ERTICO – ITS Europe

#### Moderator

Bastiaan Krosse, TNO, The Netherlands

#### Speakers

Armin Graeter, BMW, Germany Risto Kulmala, Finnish Transport Agency - FTA, Finland

Eckard Steiger, Bosch, Germany

Mats Rosenquist, Volvo, Belgium

Jean-François Aguinaga, European Commission, DG Research and Innovation

#### SIS22 – 5G Automotive Alliance (5GAA): on the road towards LTE-V2X

TOPIC: 4. Connected and automated transport The mobile network as enabler for direct Vehicle-to-Vehicle (V2V) commu-Organiser Sander Maas, Ericsson, The Netherlands nication - fact or fiction? With the advent of LTE V2X standardization, this may become a reality. Join this session and learn more about the status and Moderator roadmap plans of LTE V2X and its relevance for current and future challenges Dino Flore, Qualcomm, Spain in urban and inter-urban mobility. Representatives from Ericsson, Qualcomm, **Speakers** Vodafone and the Dutch Ministry of Infrastructure and the Environment share their view on the matter. The session is moderated by a representative from Qualcomm who is the chairman of the 5G Automotive Alliance (5GAA).

#### 16:00 - 17:30 (Londres 2)

Stefano Sorrentino, Ericsson, Sweden Vincent Habers, Ministry of Infrastructure and the Environment - Rijkwaterstaat, The Netherlands Ralf Weber, Qualcomm, Germany Eric Gaudillat, European Commission, DG CONNECT Edwin Fischer, Deutsche Telekom, Germany

#### SIS23 – Safety validation and roadworthiness testing for connected and automated vehicles

TOPIC: 4. Connected and automated transport	16:00 – 17:30 (Amsterdam)

Safety validation and roadworthiness testing involve the definition of a comprehensive set of methodologies and tools aiming to verify whether vehicles comply with regulatory and technological requirements. This verification is one of the building blocks for the safe deployment of automated road transport on public roads. These methodologies and tools must take into account both regulatory and technological requirements and should address the whole vehicle lifecycle. This session will present the challenges on the topic for connected and automated driving as well as the current international activities that support its definition and widespread adoption fostering the debate on views and recommendations among stakeholders.

#### Organiser

Alvaro Arrue, Applus IDIADA, Spain

#### Moderator

Álvaro Arrúe, Applus IDIADA, Spain

#### **Speakers**

François Fischer, ERTICO – ITS Europe Marco Pillados, Applus IDIADA, Spain Arjan van Vliet, The Netherlands Vehicle Authority -RDW, The Netherlands Bastiaan Krosse, TNO, The Netherlands



Data exchange protocol standards are a key enabler of seamless data exchange across different transport and support the provision of comprehensive travel information services. In the transport sector a number of European standards and technical specifications exist namely NeTEx, DATEX, TAP-TSI EDIFACT and IATA. However, all of the aforementioned standards are modal specific. Member States are in the process of setting of National Access Points as a result of the various delegated acts of the ITS Directive. Increasingly they will combine different types of data across different transport modes. To what extent can the different standards co-exist? Could efforts in the standardisation sphere focus on integrating the different standards together to one format? This technical session will explore all of the aforementioned questions from a panel of experts working in the domain.

#### SIS25 – MaaS as a platform for further applications

TOPIC: 1. Mobility services – from transport to mobility

After a few years of hype, discussion and great promises, we are finally seeing actual MaaS products and services. MaaS is not the end target itself, but rather a means to achieve something. In a similar manner as ITS it can and should be considered as a tool. In this session we 1) probe into the possibilities MaaS itself enables for e.g. mobility management, incentives, innovative procurement and traffic data. And 2) we will find out what are the critical elements - such as open traffic data - needed as input or a framework for MaaS to successfully become that platform for those further applications. We will hear public sector, research and MaaS developers alike sharing their perspective and visions for future MaaS-enabled applications.

#### Organiser Sami Sahala, Forum Virium Helsinki, City of Helsinki, Finland

Organiser

Moderator

**Speakers** 

Moderator

Laura Eiro, Ministry of Transport and Communications, Finland

Pedro Barradas, European Commission, DG MOVE

Pedro Barradas, European Commission, DG MOVE

Marjolein Masclee, Ministry of Infrastructure and the

Environment – Rijkswaterstaat, The Netherlands

Stefan Jugelt, European Railway Agency, France

Christophe Duquesne, NeTEx, France

Henry Coles, IATA, United Kingdom

#### Speakers

Filippo Logi, Siemens, Germany Anna Mayerthaler, New Urban Mobility Vienna, Austria Gerhard Wennerström, Samtrafiken, Sweden Jari Paasikivi, City of Turku, Finland Sami Sahala, Forum Virium Helsinki, City of Helsinki, Finland

#### SIS26 – Delivering evidence on urban C-ITS benefits to accelerate full scale deployment

#### TOPIC: 3. Transport networks evolution

#### Organiser

Vincent Blervague, BLERVAQUE Sprl, Belgium

with a special focus on how to bridge the gap between local pilots and full scale deployment. Speakers will share knowledge from European most advanced urban C-ITS service implementation and operations from the point of view of local authorities but also the industry in order to stimulate transfer of results and to foster replication in other European cities. This session will also report on the latest developments made by the C-ITS Platform, especially from Urban and Enhanced Traffic Management working groups that are the most relevant to actively support European-wide urban C-ITS deployment.

This session is dedicated to C-ITS services relevant to urban environment

#### Moderator Vincent Blervaque, BLERVAQUE Sprl, Belgium Speakers

Pedro Barradas, European Commission, DG MOVE Eric Monceyron, Bordeaux Métropole, France Gert Blom, Gemeente Helmond, The Netherlands Nuno Rodrigues, Dynniq, The Netherlands Lionel Prevors, Cerema Sud-Ouest, France Bahar Namaki Araghi, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark

24 12th European Congress and Exhibition on Intelligent Transport Systems and Services

Wednesday 21 June

#### 09:00 - 10:30 (Varsovie)

09:00 - 10:30 (Luxembourg)

Wednesday 21 June

25

#### SIS27 – Connectivity and automation: latest development and future challenges

#### TOPIC: 4. Connected and automated transport

Automation and connectivity in road transport is one of the top ranked research topics worldwide. The role of ICT and the use of advanced technologies is increasingly important and it is anticipated to play a key role in the near future to boost the deployment of connected and automated road transport. The role of ICT and alternative architectures will be presented in this session. Additional topics such as hybrid communications taking into account ETSI ITS G5, cellular and ad hoc networks, mobile edge computing, fog and cloud computing, cyber security, data privacy and localisation will be also tackled during the presentations and the related discussion. The goal of this session is to gather key players from industry and academia in the field of connected automated road transport and present the current status and latest developments while at the same time highlight relevant challenges and the outlook of those technologies.

#### SIS28 – 5G in ITS – Powered by satellite communications

#### TOPIC: 5. Satellite technology applied to mobility

Cross border transportation poses an interesting challenge for ITS connectivity. With 5G and new satellite constellations (OneWeb, Iridium Next, etc.), along with the convergence of terrestrial and satellite technology, the provisioning of seamless connectivity on the move – in urban, rural and wilderness – will become a reality and pave the way for richer ITS services. 5G has the ambition to enable harmonious integration of heterogeneous networks whether terrestrial and satellite. It is forecasted that by 2025 around 27.2% of automotive use cases will use satellite connectivity. Through its global reach, satellite communication plays a key role in creating a seamless and affordable connectivity fabric for both infrastructure and vehicles. Vehicular connectivity can be achieved through satellite using devices no larger than a smart phone. Such connectivity is sufficient for the deployment of essential ITS services such as emergency calls, fleet management, remote diagnostics and road tolling.

## 09:00 – 10:30 (Londres 2)

Organiser Davide Brizzolara, ERTICO – ITS Europe

#### Moderator

**Panagiotis Lytrivis**, Institute of Communication and Computer Systems – ICCS, Greece

#### Speakers

Volker Fricke, IBM, Germany Luc Jansseune, ERTICO – ITS Europe Guillame Trehard, AKKA, Belgium Francisco Sanchez Pons, CTAG, Spain

#### ed to mobility

Organiser Ashweeni Beeharee, Satellite Applications Catapult, United Kingdom

09:00 - 10:30 (Bruxelles)

09:00 - 10:30 (Boston)

#### Moderator

Ashweeni Beeharee, Satellite Applications Catapult, United Kingdom

#### Speakers

Joel Schroeder, Inmarsat, United Kingdom Dan Mercer, Iridium, United States Andrew Faiola, Intelsat, United Kingdom Tristan Wood, Livewire Digital Ltd, United Kingdom

#### SIS29 – Shared, connected and automated mobility for all in urban areas

#### TOPIC: 4. Connected and automated transport

Mobility in urban and suburban areas faces significant challenges with respect to accessibility, safety, security, environment, service quality of public transport and financing. Shared and automated mobility services have the potential to address these challenges and to offer concrete solutions which are not technically or economically feasible with conventional public transport systems. This session will report on expectations from local authorities to meet policy goals in cities, strategies developed by transport authorities to facilitate integration of automated vehicles and associated shared mobility services in existing public transport systems, and lessons learnt from trials and commercial operations by public transport operators and mobility service providers.

#### Organiser

Patrick Mercier-Handisyde, European Commission, DG Research and Innovation

#### Moderator

Patrick Mercier-Handisyde, European Commission, DG Research and Innovation

#### Speakers

Umberto Guida, UITP, Belgium Luc Marbach, VEDECOM, France Siegfried Rupprecht, RUPPRECHT CONSULT – Forschung & Beratung GmbH, Germany Jean-François Argence, LOHR Industrie/CRISTAL, France



#### SIS30 – ITS4Climate

Wednesday 21 June

#### TOPIC: 6. ITS and the environment

This session will present ITS4Climate that is an international initiative Organiser aiming to show the benefits on the environment by the implementation of ITS projects.

#### 11:00 - 12:30 (Madrid 1)

Simone Stevanin, TOPOS Aquitaine, France

Moderator Jean Bergounioux, ATEC – ITS France, France

#### Speakers

Evangelos Mitsakis, CERTH-HIT, Greece Ørjan Tveit, Norwegian Public Roads Administration – NPRA, Norway Gino Franco, SWARCO, Austria Florence Ghiron, TOPOS Aquitaine, France Margaret Bell, Newcastle University, United Kingdom Jean-Bernard Kovarik, Ifsttar, France Driss Samri, Cerema, France

#### SIS32 – (C-)ITS for public authorities: challenges and barriers to deployment – from West to East

#### TOPIC: 4. Connected and automated transport

#### 11:00 – 12:30 (Londres 2)

Finding best solutions for deploying C-ITS services is the focus of several European co-funded initiatives. The European Commission has created the C-ITS platform bringing together private and public stakeholders. The latter are increasingly invited to know further and be pushed in the use of C-ITS solutions. However, not always have the necessary resources and differences are remarkable. For instance, Western European countries are forerunners in C-ITS deployment while in Eastern Europe ITS deployment issues are diverse and C-ITS is less relevant. Thus, it is of primary importance to raise awareness through initiatives that focus on education such as the EU project CAPITAL while on parallel make a detailed comparison of stakeholder needs from West to East, barriers and challenges in (C-)ITS deployment and look at existing initiatives to overcome these. Many public authorities are involved in CEF projects such as CROCODILE 2 focussing on ITS deployment on Eastern Europe's corridors for overcoming challenges.

Organiser Manuela Flachi, ERTICO – ITS Europe

#### Moderator

Pedro Barradas, European Commission, DG MOVE

#### Speakers

Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria Gert Blom, Gemeente Helmond, The Netherlands Graham Hanson, Department for Transport – DfT, United Kingdom

Martin Pichl, Ministry of Transport, Czech Republic (TBC) Mihai Niculescu, ITS Romania, Romania

Wednesday 21 June

#### SIS33 – Mobility as a service – the perspective of rail and public transport

Mobility as a Service (MaaS), if implemented appropriately, can help transport work as a system. Providing travellers with tailor-made mobility solutions based on their individual needs, it can be an effective tool to encourage modal shift. To work to the best effect, all relevant stakeholders must be involved in Mobility as a Service - but what is the view from rail and public transport on this latest initiative?

Organiser Stephanie Leonard, European Commission, DG MOVE

Moderator

Stephanie Leonard, European Commission, DG MOVE **Speakers** 

Sylvain Haon, UITP, Belgium Rahul Kumar, Transdev, United States Begoña Delicado, SNCF, France Ruetger Fenkes, Deutsche Bahn, Germany

#### SIS34 – Potential of ITS services and predictive truck technology to reduce CO2 emissions

#### TOPIC: 6. ITS and the environment

This session will present an overview of ITS measures with the greatest potential for reducing CO2 emissions from Heavy Goods Vehicles. It will present key results from recent studies and demonstrations demonstrating the impact of ITS services in freight transport and logistics, as well as recent innovative activities using ITS data for Predictive Powertrain control in intelligent trucks leading to optimal fuel consumption. It will include a panel discussion on the way forward in terms of bringing together ITS measures and innovative truck technology to improve fuel efficiency, to reduce emissions and to allow the freight transport industry to meet its targets.

#### 14:00 - 15:30 (Madrid 1)

14:00 - 15:30 (Luxembourg)

Organiser

Jean-Charles Pandazis, ERTICO – ITS Europe

Moderator

Jean-Charles Pandazis, ERTICO – ITS Europe

#### Speakers

Andrew Winder, ERTICO – ITS Europe Josep Maria Salanova Grau, CERTH-HIT, Greece Iraklis Stamos, IRU Projects, Belgium Kerem Koprubasi, Ford Otosan, Turkey Alois Danninger, AVL/AT, Austria

#### SIS35 – Big Data and its positive impacts on transport planning and operations decision-making

#### TOPIC: 3. Transport networks evolution

Crowd sourced data such as Floating Car Data, Internet of Things sensors and cloud-based processing and storage solutions are rapidly changing how transport professionals monitor, measure, operate and improve their transport network. This session will include experts from across Europe and North America. They will provide case studies of ongoing projects and deployments where Big Data is providing visibility and improvements to the Transport Network more quickly and cost-effectively than ever before. Topics to be discussed range from European-wide freight and vehicle movement modelling leveraging FCD data for origin-destination, and path routing, to arterial corridor performance monitoring and improvement.

#### Organiser

Pamela Oldfield, INRIX, United Kingdom

#### Moderator

Rick Schuman, INRIX, United Kingdom

#### Speakers

Darcy M. Bullock, Purdue, United States Olaf Vroom, National Data Warehouse for Traffic Information – NDW, The Netherlands Graham Hanson, Department for Transport – DfT, United Kingdom

Angelo Martino, TRT Trasporti e Territorio srl, Belgium



#### TOPIC: 4. Connected and automated transport

The story of Cooperative ITS in Europe is unfolding. Based on the strategy on Cooperative Intelligent Transport Systems, the European Commission will present the shared vision and roadmap for C-ITS deployment in Europe towards and beyond 2019. The Amsterdam Group facilitates cooperation between infrastructure organisations and automotive industry for corridor-based harmonised deployment of C-ITS services. In doing so, it promotes interoperable deployment and provides an essential strategic cooperation element among implementers which complements the C-ITS Platform and C-Roads. In this session, European Commission and Amsterdam Group will provide their view on the status of overarching open issues which are crucial to ensure interoperability. Representatives from C-ITS deployment initiatives all over Europe (e.g. C-roads, France, Austria, Germany, The Netherlands, Nordic countries) will briefly present the current status of their initiatives, lessons learned from deployment preparation and future plans. The representatives will continue to share experience and knowledge in a subsequent Q&A slot.

#### SIS37 – Digital infrastructure for automated vehicles

#### TOPIC: 4. Connected and automated transport

Digital Infrastructure indicates the static and dynamic digital representation of the physical world with which the automated vehicle will interact to operate. It is essential to support the deployment of highly automated vehicles. The activities related to Digital Infrastructure address several aspects such as for instance standardized representations, content types, guarantee quality, collection and minimum requirements. In this Special Interest Session, the discussion will be focused on implementation aspects and technological issues, including the presentation of several use cases. The activity of the MAVEN project (Managing Automated Vehicles Enhances Network), aiming to provide solutions for managing level-4 automated vehicles (HAV) at (urban) signalised intersections, will be discussed. The discussion in this session will benefits from the contribution of the European Project CARTRE (http://connectedautomateddriving.eu/) Thematic Discussion Groups on Digital Infrastructure and of the Trilateral Automation in Road Transportation WG which fosters the international cooperation, between US, Japan and Europe on this point.

Organiser Davide Brizzolara, ERTICO – ITS Europe

#### Moderator Maxime Flament, ERTICO – ITS Europe

Speakers Jaap Vreeswijk, MAP Traffic Management, The Netherlands Ahmed Nasr, HERE, Belgium Armin Graeter, BMW, Germany Jun Shibata, Japan Digital Road Map Association - DRM, Japan

#### SIS38 – Multimodal 'code of conduct': a step towards integrated ticketing?

#### TOPIC: 1. Mobility services – from transport to mobility

The internet has revolutionised the way journeys are planned and tickets

are reserved; increasingly, it has replaced the traditional travel agency

as a means to obtain information and book journeys. For the moment,

EU policy has concentrated on solving the barriers associated with mul-

timodal travel information. However, there are limitations on ticketing that may need to be addressed. For many destinations, it is still not pos-

sible in to book an integrated ticket for long-distance journeys between

different cities using different transport modes. The connection with and

first and/or last part of the journey is also missing. Most stakeholders

agree that barriers and limitations in providing integrating ticketing solu-

tions across the EU are increasingly less of a technical issue and are more

concerned with organisational, legal and institutional issues. Could the

aviation sector's code of conduct for computerised reservation systems

be a model that could be applied in a multimodal context?

#### Organiser

Isabelle Vandoorne, European Commission, DG MOVE Moderator

Isabelle Vandoorne, European Commission, DG MOVE

#### Speakers

Sylvain Haon, UITP, Belgium Martyn Lewis, Stagecoach, United Kingdom Henry Coles, IATA, United Kingdom Begoña Delicado, SNCF, France Ruetger Fenkes, Deutsche Bahn, Germany Nick Books, Trainline.com, United Kingdom

14:00 – 15:30 (Amsterdam)

Risto Kulmala, Finnish Transport Agency – FTA, Finland

Maarten Amelink, Arcadis, The Netherlands

Martin Böhm, AustriaTech – Federal Agency for

Vincent Blervaque, BLERVAQUE Sprl, Belgium

#### Eric Ollinger, Ministry of Ecology, Sustainable Development and Energy, France Pedro Barradas, European Commission, DG MOVE Karl-Oskar Proskawetz, ITS Automotive Nord, Germany

Sandro Berndt, BASt, Germany

Torsten Geissler, BASt, Germany

Technological Measures Ltd., Austria

Organiser

Moderator

**Speakers** 





14:00 - 15:30 (Londres 2)

Wednesday 21 June

29

## SIS40 – Digitalization of transport infrastructure: challenges, risks, opportunities for road infrastructure operators

#### **TOPIC: 3. Transport networks evolution**

Digitalization of infrastructure is on the way and is part of the solution to the challenges faced by all countries in guaranteeing the provision of a safe and efficient road network but also to improve mobility services. Challenges are funding and the maintenance of the road assets. Developing innovative predictive maintenance tools (example use of drones, intelligent equipment connected to management centre to assess the pavements...) will be of high priority in order to safeguard the infrastructure assets and avoid them to deteriorate and therefore to prevent important costs to rebuilt them if destroyed.

This session will also explore on the challenges related to the digitalization of transport infrastructure to better monitor and manage the traffic flow and 'digitalized' their operations but also to enhance customer experiences and provide opportunity to have fruitful discussion with all the stakeholders involved in the process to meet this challenges. 16:00 – 17:30 (Rome)

16:00 – 17:30 (Madrid 1)

16:00 - 17:30 (Luxembourg)

#### Organiser Malika Seddi, ASFA, France

Moderator

Kallistratos Dionelis, ASECAP, Belgium

#### Speakers

Organiser

Moderator

**Speakers** 

Innovation

Bernard Jacob, Ifsttar, France

Bernard Jacob, Ifsttar, France

Patrick Duprat, Alstom, France Patrik Akerman, Siemens AG, Germany

Tom Voege, OECD/ITF, France Pierre Lussier, Daimler, France

Philippe Redoulez, ATMB, France

Andrea Manfron, AISCAT, Italy Marko Jandrisits, ASFINAG, Austria Valérie Dagand, VINCI, France Patrick Vial, SPIE Sud-Ouest, France Jorge Alves Lopes, BRISA, Portugal

#### SIS41 – Greening road freight transport by electrification

#### TOPIC: 6. ITS and the environment

Decarbonisation of long distance freight transport requires actions of all the stakeholders, technologies providers, OEMs, highways and roads operators, designers and construction companies, as well as regulators and public authorities. After a brief introduction on the main challenges of long distance freight transport decarbonisation and ITS solutions, the developing or implemented technological solutions will be presented, such as ground or overhead electrical supply by the infrastructure, and the vehicle electrification. Case studies and planned experiences will be reported by Swedish and French highway owners and operators. The discussion between the panellists and the audience will address implementation issues, benefits assessment, combination of electrification with other greening approaches such as advanced eco-driving using ITS, routing of connected vehicles, etc., and assess the cost/benefit and economical challenge of implementing electrification.

#### SIS42 – Deploying traffic management 2.0

#### TOPIC: 3. Transport networks evolution

Traffic management aims to improve traffic flow leading to safer, cleaner and more efficient road traffic. Traditionally, TM is mainly the area of road authorities. However, service providers provide more and more services to road users via in-car/mobile systems. Currently various and unsynchronized messages are provided to road users. A major transition in traffic management is envisaged by the exchange of TM plans and individual route information between traffic centres and service providers and deployment of interactive TM strategies, leading to harmonized messages, optimal use of the network and better individual route advice. This SIS presents the concept of this transition to interactive traffic management and accompanying policy making. AustriaTech will be sharing their view on that. The Dutch Ministry (RWS) and the City of Ghent will present their activities in deploying interactive traffic management. Involved service provider Be-Mobile will give more insight on the position of service providers and their thoughts on the role of data. Finally, MaaS will help bridge the 'TM 2.0' concept with that of Mobility as a Service.

#### Organiser

Tiffany Vlemmings, National Datawarehouse for Traffic Information – NDW, The Netherlands

Frédéric Sgarbi, European Commission, DG Research &

Jan Nylander, County Council of Gävleborg, Sweden

Nils-Gunnar Vagstedt, Scania, Sweden

#### Moderator

**Olaf Vroom**, National Datawarehouse for Traffic Information – NDW, The Netherlands

#### Speakers

Martin Dirnwöber, AustriaTech – Federal Agency for Technological Measures Ltd., Austria Tiffany Vlemmings, National Datawarehouse for Traffic Information – NDW, The Netherlands Pieter Morlion, City of Ghent, Belgium Mark Grefhorst, Be-Mobile, Belgium Richard Harris, HMI Technologies, United Kingdom

www.itsineurope.com 🔰 #ITSStrasbourg17



#### TOPIC: 4. Connected and automated transport

Currently test-environments for automated driving are set-up in several countries. As the mobility system shows a lot of complexity, which is even increased by the introduction of CCAV, it is very difficult to cover all the different aspects and to answer the open questions in one test environment. It is therefore essential to align the activities in the different test environments and to learn from each other. This special interest session is focused on how test environments can be set-up in an effective way and how links between different test environments can be established. Experts representing different test environments and experts from the field of automated driving will discuss topics like organisational and legal framework for test environments including financing and funding from public institutions, models of operation of test environments, test scenarios and use cases, data exchange and interoperability, impact assessment, and open access to test environments.

#### 16:00 - 17:30 (Londres 2)

#### Organiser

Martin Dirnwöber, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

#### Moderator

Martin Russ, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

#### **Speakers**

Organiser

Panagiotis Lytrivis, Institute of Communication and Computer Systems – ICCS, Greece Martin Fischer, German Aerospace Centre – DLR, Germany Richard Ladstaedter, Joanneum Research, Austria

Jan Hellaker, Drive Sweden, Sweden

#### SIS44 – Challenges on the data chain to serve automated driving

#### **TOPIC: 4. Connected and automated transport**

Many initiatives/groups in Europe and in the world are rapidly developing automated vehicle technologies involving data from different sources (digital map, sensors, traffic information, traffic management information, etc.), but there is a need for coherency and for a careful look at the whole data chain that will enable automated driving. This session will focus on presenting an overview of the different element of this data chain. The challenge of this data chain for automated driving, its consistency and the way forward will be discussed by international experts representing different organisations, in particular ADASIS, SEN-SORIS, NDS, TM2.0, TISA, TN-ITS.

#### 16:00 – 17:30 (Amsterdam)

Jean-Charles Pandazis, ERTICO – ITS Europe

Moderator Jean-Charles Pandazis, ERTICO – ITS Europe

**Speakers** Michael Klingsoehr, Bosch SoftTec GmbH, Germany Prokop Jehlicka, HERE, Germany Matthias Unbehaun, TISA, Belgium Stephen T'Siobbel, TomTom Group, Belgium

SIS45 – The challenges of a future automated transport: how space technologies

#### can decrease costs, increase safety and respond to cyber security threats

#### TOPIC: 5. Satellite technology applied to mobility

#### 16:00 - 17:30 (Boston)

Current technological capabilities for autonomous vehicles, self-driving cars, and highly automated vehicles are expanding rapidly. For instance, new, more intelligent Advanced Driver Assistance Systems (ADAS) have recently been introduced to the automotive industry; these represent the ultimate step in the path towards the implementation of autonomous vehicles. In spite of these developments, challenges do exist. Manufacturing costs and safety achievable by such automated vehicles is among the most critical aspects for both type approval and future user adoption. Large amounts of data generated by and for transportation must be used innovatively by leveraging on recent developments in big data analytics and optimisation. Cyber security is crucial; secure data encryption and communication must ensure adequate protection against manipulation and misuse of data and processes. This session will address how terrestrial, in-vehicle, and space systems may be used to enhance mobility and autonomy in transport. Experts from the transport sector will share their experiences of using space technology for navigation and communication, and current projects will be presented.

Roberta Mugellesi Dow, European Space Agency – ESA, United Kingdom

#### Moderator

Organiser

Fiammetta Diani, European GNSS Agency – GSA

#### **Speakers**

Chris Kettel, Transport Research Laboratory – TRL, United Kingdom

Xiaolin Meng, Tingham University, United Kingdom Angelos Amditis, Institute of Communication and Computer Systems – ICCS, Greece Filippo Visintainer, Centro Ricerche FIAT, Italy Jessica García Soriano, Ficosa, Spain Patrick Henkel, ANavS, Germany

09:00 - 10:30 (Madrid 1)

#### SIS47 – Seamless provision of electromobility services as a prerequisite for deployment of electromobility

#### TOPIC: 6. ITS and the environment

The lack of standardisation regarding information exchange and services provision for electromobility makes communication among involved actors very difficult. This limits the potential for interoperable and seamless electromobility services to a wider public, a wider range of actors, and a wider geographic area, thus hindering wider EV market introduction. The goal of this session is to gather key services providers to present the current status and latest developments towards the seamless interoperability of electromobility services aiming to create an open and widely accepted ecosystem for electromobility. The presenters will present among others the customers' needs for interoperable services, the efforts for creation of common information models for electromobility, the works towards the establishment of a pan European eRoaming framework based on a common and open European Inter-Roaming protocol and the establish- Jean-Marc Rives, Gireve, France ment of an open market place of electromobility services.

#### Organiser

Angelos Amditis, Institute of Communication and Computer Systems – ICCS, Greece

#### Moderator

Angelos Amditis, Institute of Communication and Computer Systems – ICCS, Greece

#### **Speakers**

Sébastien Albertus, Renault, France Christian Hahn, Hubject GmbH, Germany Volker Fricke, IBM, Germany Jean-Charles Pandazis, ERTICO – ITS Europe

#### SIS48 – Using data to manage traffic, reduce congestion and prioritise spending

TOPIC: 3. Transport networks evolution

With limited budgets and the need to prioritise investment decisions across cities and strategic road networks, this session will bring together a new study from INRIX Research - which identified and measured 220,000 congestion incidents (or traffic jams) across 19 European countries - and real-world use cases from Denmark and Germany where they will share learnings and best practices from their experience in tackling congestion and roadway performance.

#### 09:00 - 10:30 (Luxembourg)

#### Organiser

Pamela Oldfield, INRIX, United Kingdom

#### Moderator

Andy Graham, White Willow Consulting, United Kingdom

#### Speakers

Holger Hochguertel, INRIX, United Kingdom Daniel Weber, TraffGo Road GmbH, Germany Ake Egemalm, Danish Road Directorate, Denmark

#### SIS49 – Modelling the impact of connected and automated vehicles (CAVs) on network performance

#### **TOPIC: 4. Connected and automated transport**

It is generally accepted that connected and automated vehicles could improve road capacity and safety, and offer new mobility models. But the levels of benefits, how they evolve over time and deployment of vehicles, and the impact on network management are unclear which has large impacts on future investment and policy making. Much work to date around the World assumes a high uptake of CAVs, but what will be the impacts in the early days with only a few vehicles deployed? To explore this key question the United Kingdom studied the effects of different types and penetrations of CAVs on both safety and capacity, and on how roads are managed. This SIS will describe the key research findings and invite road operators, CAV providers and others to discuss what this means for networks in the short, medium and long-term future. Future research needs will also be presented for discussion.

#### 09:00 - 10:30 (Londres 2)

#### Moderator

Organiser

Gavin Jackman, Aimsun, United Kingdom

Jill Hayden, Atkins, United Kingdom

#### **Speakers**

James Padden, Department for Transport – DfT, United Kingdom

Jill Hayden, Atkins, United Kingdom Daisuke Oshima, Pacific Consultants, Japan



#### TOPIC: 4. Connected and automated transport

#### 09:00 - 10:30 (Amsterdam)

09:00 - 10:30 (Boston)

This special session takes stock of latest achievements in connected and automated driving in urban metropolitan areas in Europe. Several new projects started digging into automated and connected driving in urban areas for improved energy efficiency. DG Mobility and Transport co-funds Maven, Volvo explores user patterns in Gothenburg; Tampere, Aachen, Vienna or Baden-Württemberg several cities are setting-up testing locations. In Vienna (Austria) Zukunft Wird Automatisiert brings automation to the C-ITS hotspots in and around Vienna (to be demonstrated at TRA2018 as an open living lab for Europe). Copenhagen adds perspective to our selection of pioneering initiatives at these newly emerging opportunities for Europe. Some OEMs' announcements suggest that automated transport might quickly become available. However, this brings an enormous need for rapid learning to all of us. Are transport authorities and city administrations ready for concurrent learning in times of rapid technological progress? Or will Europe risk its technological strength by trying to implement and learn abroad?

Organiser Walter Aigner, HiTec, Austria

#### Moderator

Stephanie Leonard, European Commission, DG MOVE

#### Speakers

Robbin Blokpoel, Dynniq, The Netherlands Marko Jandrisits, ASFINAG, Austria Bahar Namaki Araghi, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark Walter Aigner, HiTec, Austria Daniela Patz, Austrian Road Safety Board, Austria Martin Böhm, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

## SIS51 – Effective C-ITS deployment: a harmonised, hybrid-communications architecture for C-ITS environments

TOPIC: 4. Connected and automated transport

This session will present the work of the Harmonisation Task Group that is analysing a harmonised architecture to identify standards gaps for a complete Cooperative-ITS environment.

#### Organiser

Wolfgang Hoefs, European Commissio, DG CONNECT

#### Moderator

Suzanne Sloan, US Department of Transportation, United States

#### Speakers

Tom Lusco, Iteris, Inc., United States Knut Evensen, Q-Free, Norway Gianmarco Baldini, European Commission's Joint Research Centre, Italy

## PROJECT DISSEMINATION SESSIONS

Tuesday 20 June

#### PR01 – Training needs on new technologies for fleet managers and drivers

#### TOPIC: 3. Transport networks evolution

Use of on-board technologies and cooperative systems is becoming more important in commercial vehicles for passenger and in freight road transport. Currently there is a gap between the use of ADAS systems and the learning and training packages available for drivers and operators on how to use them effectively. Research and development of training programmes as to how drivers interact with and use these advance driver assistance systems is therefore required. Another subject requiring adaptation of training is cooperative ITS. A coordination and support action funded by the EC, CAPITAL project - Collaborative cApacity Programme on Its Training-educAtion and Liaison, will deliver a collaborative capacity building programme (including training and further education) for cities and for fleet managers. The goal of this session is to have a better understanding of needs and requirements for the development of better training on the use of technology for fleet managers and drivers.

11:00 - 12:30 (Berlin)

Organiser Monica Giannini, IRU Projects, Belgium

Moderator

Monica Giannini, IRU Projects, Belgium

Speakers

Jacques Marmy, International Road Transport Union, Switzerland Evangelos Mitsakis, CERTH-HIT, Greece

Oihana Otaegui, Vicom, Spain

Roxana Ilie, UNTRR, Romania Mark Sullman, Cranfield University, United Kindgom

#### PR02 – Assuring cross border services continuity – myth or reality

#### TOPIC: 1. Mobility services – from transport to mobility

Are we on the right direction to reach the objective to have harmonised ITS deployment beyond borders ? The European Commission is active in boosting Member States cooperation. The session will present successful cross border ITS implemented in MedTis and Arc Atlantique project (co-financed by the European Commission). These deployments will consist of a series of proven ITS technologies and services which have known and proven impacts on the efficiency of the road network as well as successful cross border services. It will include traffic management systems and services and traffic information services that support traffic managers in directing traffic operations.

14:00 - 15:30 (Berlin)

#### Organiser

Malika Seddi, ASFA, France

#### Moderator

Paul Wadsworth, Capita, United Kingdom **Speakers** Cédric Petitcolin, Autoroute et Tunnel du Mont Blanc -ATMB, France

Pierpaolo Tona, European Commission, INEA Annie Canel, ASFA, France Steve Narroway, Highways England, United Kingdom Beatrice Touvenin, VINCI AUTOROUTES, France Pietro Contegno, Sinelec, Italia Rudi Tegenbos, Tractebel, The Netherlands Yann Briand, Algoe, France

#### PR03 – Intelligent networked logistics: the AEOLIX digital ecosystem

#### TOPIC: 2. Next generation goods delivery

The Logistic Industry of the future is evolving very quickly due the impact of trends like IoT, Cybersecurity or Big Data. Nowadays, the logistics systems are dealing with distributed resources, interconnecting with more and more systems, services and objects, causing technical, economic and organisational challenges for all of them. One of them is dealing with the data, which come in many forms: from usage data collected automatically by sensors for products and services, through data collected during the transport operations or customers feedback. The data is the key for enabling Logistics Visibility demanded by the stakeholders. AEOLIX proposes a digital ecosystem to deal with the complexity of the connectivity of the logistics systems and devices and their communication with any other system or device, enabling information visibility to better manage, plan and synchronise freight and logistics operations across logistics collaborative networks in Europe.

#### 16:00 - 17:30 (Berlin)

Organiser Manuela Flachi, ERTICO – ITS Europe

Moderator Iraklis Stamos, IRU Projects, Belgium

#### **Speakers**

German Herrero, ATOS, Spain Nik Delmeire, European Shippers' Council – ESC, Belaium

Evangelos Mitsakis, CERTH-HIT, Greece

33

Wednesday 21 June



#### TOPIC: 4. Connected and automated transport

The Cooperative ITS Corridor from Rotterdam (The Netherlands) via Frankfurt/M (Germany) to Vienna (Austria), initiated by the ministries of transport in the three countries, is the first initiative to deploy common C-ITS services in an operational transport environment. This session provides insights into the C-ITS Corridor and the lessons learned for C-ITS deployment in Europe. The session includes a short introduction to the C-ITS Corridor, common and specific project experiences of the front runners in the three countries, complemented by specific presentations regarding 1) C-ITS Service Harmonisation, Validation and Testing 2) IT Communication Security 3) Conformance Assessment, Living Lab's 4) International Cooperation, results & achievements. High level representatives will report on these topics and the contributions of the C-ITS Corridor towards a successful C-ITS deployment in Europe. This concerns common service specifications, but also testing and validation with industry partners and the approach for addressing communication security and data privacy.

#### Organiser

Alexander Froetscher, AustriaTech – Federal Agency for Technological Measures Ltd., Austria

#### Moderator

Torsten Geissler, BASt, Germany

#### **Speakers**

Manfred Harrer, ASFINAG Maut Service GmbH, Austria Ralf Meschede, BASt, Germany Helge Molin, Austrian Federal Ministry of Transport, Innovation and Technology BMVIT, Austria Christian Leitzke, Hessen Mobil, Germany Serge van Dam, Ministry of Infrastructure and the Environment – Rijkswaterstaat, The Netherlands

#### PR05 – Public procurement challenges for facilitating innovative transport and mobility solutions

#### TOPIC: 7. Freestyle – Your new idea

Traditionally the transport sector developments and implementations of new services dominantly depend on public investment. However, the fast development of technologies and complexity of the new services creates many challenges for public authorities to invest and use the traditional public procurement for accommodating the complexity of the new solutions and services. The innovative solutions are difficult to be purchased within the traditional procurement framework, as well as handling the risk associated with the innovation is not well determined in the traditional framework. The new services require new partnership model and new investment strategy. There is thought about new investment strategies to accommodate complexity of new procurement methods, where instead of using the public fund to purchase transport services, these resources should be used as an enabler to motivate the market to act as a self-driven engine. This session invite national, regional and city government to share their experiences and ideas.

#### Organiser

Bahar Namaki Araghi, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark

#### Moderator

Sabine Hilfert, Free and Hanseatic City of Hamburg – Senate Chancellery, Germany

#### Speakers

Mads Gaml, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark

Sami Sahala, Forum Virium Helsinki, City of Helsinki, Finland

Fred Zijderhand, Ministry of Infrastructure and the Environment – Rijkswaterstaat, The Netherlands Bianca Kapl, AustriaTech – Federal Agency for Technological Measures Ltd., Austria Mika Kulmala, City of Tampere, Finland Lasse Stender, North Region Denmark, Denmark

09:00 - 10:30 (Berlin)

## PROJECT DISSEMINATION SESSIONS

Wednesday 21 June

#### PR06 – A way to ensure convergence between eCall, C-ITS and dangerous goods ADR specifications

#### TOPIC: 2. Next generation goods delivery

Dangerous Goods Inland Transport (DGT) is regulated at international level by UNECE for 48 countries and endorsed by the European Union. UNECE Telematic working group has defined a proposal for an architecture in order to introduce electronic document and to replace paper on board document. eCall and DGT description could be integrated (e.g. linking the location of an accident to the dangerous goods information available, for a more effective emergency intervention). Moreover ETSI standards for C-ITS introduce such a description in Cooperative Awareness Message (CAM) related to the exchange of information between the infrastructure and the road users and in the Decentralized Environmental Notification Messages (DENM) that support road hazard warnings. The session will offer an overview of the topic through different projects that will explain the solutions they implemented. It will help the participants to take into account the best integration to minimise redundancy and to discuss the best way for implementation.

#### 14:00 – 15:30 (Berlin)

#### Organiser Fiammetta Diani, European GNSS Agency – GSA

Moderator

Fiammetta Diani, European GNSS Agency – GSA

#### Speakers

Antonella Di Fazio, Telespazio, Italy Harry Evers, ITS Deutschland GmbH, Germany Miroslav Haltuf, H-Comp Consulting, Czech Republic Nicola BASSI, UIRNET, Italy Jean-Philippe Méchin, Cerema Sud-Ouest, France

#### PR07 – Implementation of Floating Car Data by road authorities

#### TOPIC: 4. Connected and automated transport

Floating Car Data is being procured by road authorities on an ever-growing scale. It appears that the use of mobile sources to produce traffic data is starting to become a commodity and is able to serve a variety of processes and applications. Which challenges have road authorities faced in the past years while researching FCD and preparing for their tenders? Which issues are they still dealing with, and which opportunities lie ahead? This session will offer four different perspectives on the procurement and implementation of FCD by road authorities. Contributions will be given by organizations from the The Netherlands, Denmark, Sweden and Austria, where FCD has been implemented by road authorities. 16:00 – 17:30 (Berlin)

09:00 - 10:30 (Berlin)

#### Organiser

Edoardo Felici, National Data Warehouse for Traffic Information – NDW, The Netherlands

#### Moderator

**Olaf Vroom**, National Data Warehouse for Traffic Information – NDW, The Netherlands

#### Speakers

Charlotte Neumanen Holstrøm, Danish Road Directorate, Denmark Karl Rehl, Salzburg Research, Austria Edoardo Felici, National Data Warehouse for Traffic Information – NDW, The Netherlands Per-Olof Svensk, Trafikverket, Sweden

#### PR08 – Improving efficiency of freight and logistics through C-ITS

#### TOPIC: 2. Next generation goods delivery

A vast amount of technologies is already available today to manage different aspects of goods movement, but these existing systems are currently not always linked to each other, missing the opportunity to optimise their performance through coordination, above of individual business requirements. This session will prove the value of C-ITS in optimising goods movement in urban and suburban areas by reporting on the results of the 5 services deployed by European project CO-GISTICS in 7 logistics hubs, some of them also part of the COMPASS4D network, having tested similar services for passengers. The services deployed by CO-GISTICS and the project partners have proven good results in increasing efficiency of logistics operations such as port loading/unloading optimisation, last mile delivery and automation as well as reducing CO2 emissions correlated to large fuel savings and full transparency of use of vehicles.

#### Organiser

Manuela Flachi, ERTICO – ITS Europe Moderator

Iraklis Stamos, IRU Projects, Belgium

#### Speakers

Josep Maria Salanova Grau, CERTH-HIT, Greece Andre Perpey, Geoloc Systems, France Klaus Grabert, T-Systems, Germany Stephen George, City of Birmingham, United Kingdom Thursday 22 June

35

## TECHNICAL/ SCIENTIFIC SESSIONS

Tuesday 20 June



11:00 - 12:30 (Madrid 1)

Moderator

Syvlain Belloche, Cerema, France

#### TS01 – ITS improving air quality 1

#### TOPIC: 6. ITS and the environment

TP0806 – Ground-level feeding systems: from rail to road transport Patrick Duprat, *Alstom, France* 

TP0831 – Changing the behaviour of travellers in urban areas using Smart Multimodal Route Detection

Ward Koopmans, CGI Netherlands, The Netherlands

SP0839 – Node: Transport, urban and energy policies for an efficient multi-modal station? Anne-Sophie Fulda, *EIFER*, *Germany* 

TP0882 – Development of Real-World Driving and Battery Predictions for Electric Buses by Using Big Data Analysis Models

Erdem Ünal, Temsa, Turkey

TP0896 – Intelligent Traffic Solutions for sustainable urban mobility in Copenhagen Mads Gaml, City of Copenhagen, The Technical and Environmental Administration, Traffic Department, Denmark

TP0975 – Radar detection of traffic queues in PPA-Noord Anna Cristofoli, ARS Traffic & Transport Technology, The Netherlands

#### TS02 – Incident and traffic management strategies 1

TOPIC: 3. Transport networks evolution	11:00 – 12:30 (Londres 1)
TP0764 – Predictive Maintenance – Operative implementation in an inhomogeneous fleets/ operational network Manfred Bock, T-systems International GmbH, Germany	Moderator Andrew Winder, ERTICO – ITS
TP0921 – Travel time data – Experiences and challenges Torbjørn Haugen, NTNU – Norwegian University of Science and Technology, Traffic Engineering Rese Centre, Norway	Europe Parch
TP0956 – Wrong-way drivers: Detect And warn Ghislaine Baillemont, <i>APRR, France</i>	
TP0968 – An innovative SIL2 full-web Traffic Management System and an intelligent decision tool for the new beltway of Marseille Sylvain Nachef, <i>Bouygues Energies &amp; Services, France</i>	support

TP0979 – RESOLUTE approach for building resilient UTS Laura Coconea, SWARCO, Italy

#### **TS03 – Communication solutions**

TOPIC: 4. Connected and automated transport	11:00 – 12:30 (Madrid 2)
SP0771 – Improving supply chain processes by subscription to milestones. Wout Hofman, TNO, The Netherlands	Moderator Jean Michel
TP0773 – RFID based vehicle-infrastructure communication system for road maintenance Salim Srairi, Cerema, France	<b>Henchoz</b> , Denso, Belgium
TP0795 – ITU-T Connected Vehicle Gateway Platform Romain Rollet, Mitsubishi Electric R&D Centre Europe, France	
SP0837 – Packet Relay-Assisted V2V Communication with Cooperative Relay Stations in Urban Environment Tien Trien Le, The University of Electro-Communications, Japan	n
TP0988 – Latest achievements in connected driving in the Vienna metropolitan area Thomas Novak, SWARCO Futurit, Austria	

36 12th European Congress and Exhibition on Intelligent Transport Systems and Services

TS04 – Satellite enabled safety & security services		Tue
TOPIC: 5. Satellite technology applied to mobility	11:00 – 12:30 (Bruxelles)	esday
TP0746 – Implementation and development of the "GLONASS+112" system in the Republic of Tatarstan Maria Dagaeva, Road Safety Organization, Russia	Moderator Giovanni Huisken, MAPtm, the	20 Jun
TP0811 – EGNOS added value in ITS applications Virginia Anton Sastre, ESSP SAS, Spain	Netherlands	Ø
TP0814 – Functional Safe Integration of GNSS for Safety Critical Driving Functions and Automat Driving – The NAVENTIK approach Robin Streiter, NAVENTIK GmbH, Germany	ed	
TP0815 – "NAVI CAMPUS": an enhanced GPS navigation app for university campuses Jesus Zegarra Flores, Altran Reseacrh Medica, France		
SP0886 – Weighting-function based map-matching algorithm for a reliable wrong-way driving detection Jinyue Wang, Institute of Engineering Geodesy, University of Stuttgart, Germany		

00

#### TS05 – Overcoming barriers and borders

TOPIC: 1. Mobility services – from transport to mobility	14:00 – 15:30 (Varsovie)
TP0753 – Moveus Project: Ict Cloud-Based Platform And Mobility Services Sergio Fernandez Balaguer, Empresa Municipal de Transportes de Madrid (EMT), Spain	Moderator Paul Kompfner,
TP0803 – More Than the Sum of Its Parts? The Finnish Public's Perspectives on Mobility-as-a-Ser and ITS Jana Sochor, Chalmers University of Technology, Sweden	rvice ERTICO-ITS Europe
TP0825 – Business model and contractual framework for implementing a pan-European e-mar place of mobility services Meng Lu, Dynniq, The Netherlands	ket
SP0851 – Mobility as a service business and operator models Jenni Eckhardt, VTT Technical Research Centre of Finland Ltd, Finland	
TP0938 – Linking services – a chance to leave the shores of stranded investments Alexander Hausmann, AustriaTech – Federal Agency for Technological Measures Ltd., Austria	
TP0953 – Cross-border Travel Time continuity between Italy, France, and Spain in MEDTIS corrido Frederic Ambleton, VINCI AUTOROUTES, VINCI, France	or
SP0990 - Which husiness models for autonomous vehicles?	

SP0990 - Which business models for autonomous vehicles? Jaâfar Berrada, VEDECOM – LVMT, France

#### TS06 – ITS improving air quality 2

TOPIC: 6. ITS and the environment	14:00 – 15:30 (Madrid 1)
TP0755 – IKAAS project: "Intelligent Knowledge-as-a-Service Platform"	Moderator
Sergio Fernandez Balaguer, Empresa Municipal de Transportes de Madrid (EMT), Spain	Jean-Philippe , Mechin, Cerema,
TP0802 – A novel concept of "Low Emission Corridor" empowered by ITS: the BrennerLEC project Roberto Cavaliere, IDM Südtirol / Alto Adige, Italy	t France

SP0858 – Cycle2Work: An Empirical Study on Potential Personalised Rewarding Schemes Delivered via Smartphone Technologies

Bingyuan Huang, University of Twente, Centre for Transport Studies, The Netherlands

TP0999 - How ITS can contribute to reducing CO2 emissions of road transport: The quick wins Andrew Winder, ERTICO – ITS Europe

**Tuesday 20 June** 



#### TS07 – Incident and traffic management strategies 2

TOPIC: 3. Transport networks evolution	14:00 – 15:30 (Londres 1)
TP0774 – Improving winter road management with variable messages signs Alexis Bacelar, Cerema, France	Moderator Jill Hayden, Atkins
SP0786 – Traffic condition detection in freeway by using autocorrelation of density and flow Hamid Torfehnejad, <i>RMTO</i> , <i>Iran</i>	United Kingdom
TP0892 – Improve the Road Safety with a Predictive Incident Software Richard Lengrand, EGIS, France	
TP0049 Traffic safety performance monitoring using hidden Markov models	

TP0949 – Traffic safety performance monitoring using hidden Markov models Kaan Ozbay, New York University, United States

#### TS08 – Freight and logistics tools 1

TOPIC: 2. Next generation goods delivery	14:00 – 15:50 (Luxembourg)
TP0789 – Intelligent transport systems in the Republic of Tatarstan: Integrated solutions of Weight Control, Toll Roads and video enforcement Rifkat Minnikhanov, "Road Traffic Safety" state-financed institution, Russia	Discussion Session Moderator Eric Louette,
SP0862 – Impact assessment of cooperative services for freight transport Josep Maria Salanova Grau, CERTH-HIT, Greece	Ministry for Ecology and Transportation,
TP0870 – Sensor Evaluation for high vehicle occupancy lane David Gil, Cerema, France	France
TP0874 – Exploring the commercialization potential of freight transport services the CO-GIS Iraklis Stamos, <i>IRU Projects, Belgium</i>	TICS project
TP0875 – Key messages for the logistics and road freight transport sector the AEOLIX proje Iraklis Stamos, IRU Projects, Belgium	ect
TP0901 – Heavy Vehicle Access Control Using Present C-ITS Standards Jo Skjermo, <i>SINTEF, Norway</i>	
TP0910 – A methodological approach for a Cost-Benefit Analysis of cooperative freight tra services Selini Hadjidimitriou, ICOOR, Italy	ansport
SP0914 – Trust in horizontal collaboration toward freight and logistics operations Gideon Mbiydzenyuy, NetPort Science Park and Borås University, Sweden	
CP0792 – Making the most of the new generation of Port Community Systems Marie Pavesio, MGI, France	
CP0869 – Truck Parking Coordination at Hamburg Port Oliver Strop, BLIC GmbH, Germany	

TS09 – Cooperative communication technology		Tuesday
TOPIC: 4. Connected and automated transport       1	4:00 – 15:30 (Madrid 2)	day
TP0808 – Connected Intelligent Transport Environment (CITE) Clifford Lunnon, Highways England, United Kingdom	Moderator Thomas Kern,	20 Ju
TP0843 – Managing Automated Vehicles Enhances Network: findings from stakeholder consulta Jaap Vresswijk, MAP Traffic Management, the Netherlands	tion Cavita, United States of America	une
TP0877 – Towards 5G : An experimental connectivity platform for V2X communications Bernadette Villeforceix, Orange, France		
TP0925 – Analysis of 802.11p safety messaging in a real world environment Peter Vermaat, TRL, United Kingdon		
TP0940 – Hybrid Communication in ITS Paul Spaanderman, InnoMo, Monaco		
TP0984 – Coexistence tests on test site between ETC CEN DSRC 5.8 GHz and cooperative system ITS-G5 5.9 GHz Gwenaëlle Toulminet, ASFA, France	ns	

2

O

#### TS10 – Integrating transport strategies 1

TOPIC: 3. Transport networks evolution	16:00 – 17:30 (Londres 1)
TP0775 – The satellite navigation for the transport of dangerous goods: improvement of sa and contribution to the coordination of transport modes Antonella Di Fazio, <i>Telespazio, Italy</i>	David Hytch, Parkgate
TP0785 – Traffic Management 2.0, Contractual agreements and schemes Tiffany Vlemmings, National Datawarehouse for Traffic Information (NDW), The Netherlands	Consultants, United Kingdom
TP0812 – Cycle Detection using Piezo-Electric Arrays Colin Reekie, TDC, United Kingdom	
TP0841 – Why is ITS evaluation important for public authorities? Barbara Flechl, AustriaTech, Austria	

TP0855 – Cross-modal challenges and opportunities in transport safety Isabela Erdelean, AIT Austrian Institute of Technology GmbH, Austria



# **Tuesday 20 June**

#### TS11 – Automated and electric buses or shuttles

#### **TOPIC: 4. Connected and automated transport**

TP0768 – Citymobil2: San Sebastian ARTS demonstration Jesus Murgoitio, Tecnalia Research & Innovation, Spain

TP0784 – Autonomous Shuttles on Public Roads; Lessons Learned Jan Willem van der Wiel, Spring innovation management BV, The Netherlands

TP0794 – Open road piloting of automated electric busses – first experiences and lessons learned Harri Santamala, Metropolia University of Applied Sciences, Finland

TP0909 – The Role of Cooperative ITS in Supporting Electric Buses Marcin Seredynski, E-bus Competence Center, Luxembourg

TP0923 – First autonomously driving city bus with maximum speed of 70 km/h Frans van Waes, Vialis B.V., The Netherlands

#### TS12 – Satellite technology for transport network monitoring

TOPIC: 5. Satellite technology applied to mobility	16:00 – 17:30 (Bruxelles)
TP0743 – Automation of control processes and acceptance on construction, repair and the maintenance works of highways and road constructions in the Republic of Tatarstan Sadykov Airat, Ministry of Transport and Road Economy of the Republic of Tatarstan, Russia	Moderator Giovanni Huisken, MAPtm, the
SP0847 – Small satellite solutions for land transport monitoring Aki Aapaoja, VTT Technical Research Centre of Finland Ltd, Finland	Netherlands

SP0866 – Opening up Danish FCD – examples of use cases Niels Agerholm, Department of Civil Engineering, Aalborg University, Denmark

#### 16:00 - 17:30 (Madrid 2)

Moderator Simon Edwards, University of Newcastle upon Tyne, United Kingdom

#### TS13 – Data for environmental decision taking

June	TS13 – Data for environmental decision taking	
/ 21	TOPIC: 6. ITS and the environment	09:00 – 10:30 (Madrid 1)
esday	TP0834 – Floods-prone community's perceptions towards using ITS technologies Izza Anwer, Institute for Transport Studies, University of Leeds, United Kingdom	Moderator Paul Hutton,
Wednesday	TP0894 – Better, cheaper, more reliable data as the key to evaluation for more sustainable transport systems Emeli Adell, <i>Trivector Traffic AB</i> , <i>Sweden</i>	ITS UK, United Kingdom
	TP0912 – Bridging the gap between service providers and people Marieke Martens, TNO, The Netherlands	
	TP0916 – Real-time V2I Communication Based CO2 and NOx Emission Monitoring Ernst Pucher, <i>TU Wien, Austria</i>	

		ిర్తి		Ser.		
--	--	-------	--	------	--	--

## Wednesday 21 June res 1)

TOPIC: 3. Transport networks evolution0	9:00 – 10:30 (Londres 1
TP0781 – Bus priority in Nantes – reaching tramway standards with a radio system Olivier Nau, Setec its, France	Moderator Jaap Vreeswijk,
TP0796 – Exploiting data for better Urban Mobility Richard Harris, HMI Technologies, United Kingdom	MAPtm, the Netherlands
TP0797 – Adaptive traffic management system in Kazan – priority for public transport and emergency vehicles – implementation and perspectives Roman Egorov, LLC Inspectra, Russia	
SP0878 – Uppaal Stratego for Intelligent Traffic Lights Ian Kildebogaard, ÅF Infrastructure Planning & Marco Muniz, Aalborg University, Denmark	
TP0879 – Innovative traffic management strategies in Europe: lessons learnt from a benchmark Sylvain Belloche, Cerema, France	

TP0950 – Developing a framework to model advanced priority strategies for emergency vehicles Fabio Galatioto, Transport Systems Catapult, United Kingdom

#### TS15 – Field testing / test beds

TS14 – Integrating transport strategies 2

TOPIC: 4. Connected and automated transport	09:00 – 10:30 (Madrid 2)
TP0816 – Verification of Automated Driving Based on Real-World Driving Data Christian Roesener, ika – RWTH Aachen University, Germany	Moderator Ludger Rogge,
SP0849 – Interoperable architecture between simulation and pilots for cooperative and autom driving	ated European Commission
Robbin Blokpoel, Dynniq, The Netherlands	
TP0854 – Development of an Urban Test Site for Automated and Connected Driving in Tamper Finland	e,
Johan Scholliers, VTT Technical Research Centre of Finland Ltd, Finland	
TP0922 – Delivering the National Connected Multi-modal Transport Test Bed in Melbourne, Au Dirk Van de Meersche, Cubic Transportation Systems, Australia	ıstralia
TP0996 – Autonomous driving is coming to town: Vienna Zukunft Wird Automatisiert Walter Aigner, <i>HiTec, Austria</i>	
TP1008 – Software architecture methodology for field operational test beds Dirk Beckmann, German Aerospace Center (DLR), Belgium	
TS16 – Novel data sources 1	
TOPIC: 1. Mobility services – from transport to mobility	11:00 – 12:30 (Varsovie)
TP0820 – Automated smartphone based travel data collection from citizens – experiences an results of a trial implementation in Finland Laura Niittylä, <i>Mattersoft Ltd, Finland</i>	d Moderator Reinhard Pfliegl, A3PS, Austria
results of a trial implementation in Finland	Reinhard Pfliegl, A3PS, Austria
results of a trial implementation in Finland Laura Niittylä, <i>Mattersoft Ltd, Finland</i> TP0829 – How to use Internet of Things in vehicles massively to improve the transport infrastru	Reinhard Pfliegl, A3PS, Austria
results of a trial implementation in Finland Laura Niittylä, <i>Mattersoft Ltd, Finland</i> TP0829 – How to use Internet of Things in vehicles massively to improve the transport infrastru Ibon Arechalde, <i>ASIMOB, Spain</i> SP0857 – Inferring scholar mobility flows from census data: a multi-task learning approach	Reinhard Pfliegl, A3PS, Austria

TP1004 – Deriving transport benefits from Big Data and the Internet of Things in Smart Cities James Padden, Department for Transport, United Kingdom

**TECHNICAL/SCIENTIFIC** 

EXECUTIVE

SPECIAL INTEREST

**PROJECT DISSEMINATION** 

Wednesday 21 June



#### TS17 – Network management and strategies

#### TOPIC: 3. Transport networks evolution

TP0810 – Observations on the evolution of the EU transport regulation – past, present and future Piia Karjalainen, European Parliament, Belgium

TP0822 – Planning ITS deployment within the European Union Richard Bossom, Richard Bossom ITS Consulting Limited, United Kingdom

SP0893 – Assessment of UK and US traffic control methods in microsimulation Cameron Kergaye, Utah Department of Transportation, United States

TP0931 – Developing an ITS Strategy for Scotland Paul Grayston, Jacobs, United Kingdom

TP0942 – Use of new data bases for demand modelling Florian Koppelhuber, *IKK ZT-GmbH, Austria* 

#### **TS18** – Commercial transport services

TOPIC: 4. Connected and automated transport	11:00 – 12:30 (Madrid 2)
TP0756 – Introducing ATN to the sustainable city Dennis Mica, 2getthere, The Netherlands	Moderator Douglass C Cuoto,
TP0826 – Truck Platooning: an update after the European Truck Platooning Challenge Arjan van Vliet, RDW, Netherlands Vehicle Authority, The Netherlands	Consultancy, United States of America
TP0838 – INTRALOG – Intelligent Autonomous Truck Applications in Logistics; Autonomous readocking maneuvering on distribution centers Lejo Buning, HAN Automotive Research, The Netherlands	arward
TP0933 – How does connected and automated driving change professional drivers' training ne Merja Penttinen, VTT Technical Research Centre of Finland Ltd, Finland	eeds

TP0955 – Video Transmission for Autonomous Truck Platoons using WLAN Broadcast Simon Ellwanger, Daimler, Germany

#### TS19 – Mapping & positioning

TOPIC: 4. Connected and automated transport	11:00 – 12:30 (Amsterdam)
TP0754 – ETC service in C-ITS with high-precision of vehicle location Malalatiana Randriamasy, Normandie Univ/Sanef, France	Moderator Roger Pagny,
TP0787 – Computer vision and automated traffic sign updates from commercial fleets Markus Melander, Vionice Itd, Finland	ATEC-ITS France, France
TP0918 – "Where in the lane" positioning for autonomous vehicles Felipe Jimenez, Technical University of Automobile Research, Spain	
TP0929 – Facilitating automated driving: Identification of requirements towards network op Thomas Courbon, Cerema, France	perators

Moderator Eric Louette, Ministry for Ecology and Transport, France

11:00 - 12:30 (Londres 1)

TS20 – Automation deployment, impact & lessons learned		Wed
TOPIC: 4. Connected and automated transport	11:00 – 12:30 (Bruxelles)	Ines
CP0777 – Do we need control of the new "sharing industry" in cities ? Roman Himmler, Kapsch TrafficCom AG, Austria	Moderator Giacomo Somma,	day
TP0844 – Beyond Traffic Jams: C-The Difference Patrick Hofman, MAP Traffic Management, The Netherlands	ERTICO-ITS Europe	21 Jui
SP0913 – TRL and MRL of C-ITS as lessons learnt from the Austrian C-ITS Corridor ECo-AT Wolfgang Schildorfer, <i>HiTec Marketing, Austria</i>		ne
TP0972 – Infrastructure-based cooperative, connected and automated driving in a transition p Meng Lu, <i>Dynniq</i> , <i>The Netherlands</i>	hase	

TP1000 - Navigating the European road automation scene: an overview of current and upcoming activities in Europe and beyond Davide Brizzolara, ERTICO – ITS Europe, Belgium

00

#### TS21 – Novel data sources 2

TOPIC: 1. Mobility services – from transport to mobility	14:00 – 15:30 (Varsovie)	
TP0799 – Data Curation in an IoT based transport data sharing environment Neil Hoose, Bittern Consulting Ltd, United Kingdom	Moderator Andy Rooke,	
TP0819 – Light scale real-time public transport information system – making passenger informa available for smaller regions Laura Niittylä, Mattersoft Ltd, Finland	mation ERTICO-ITS Europe	
TP0830 – Interoperability Framework and Governance enabling Mobility as a Service Guido Di Pasquale, UITP, Belgium		
SP0876 – Constraints for a large-scale ITS data-sharing system: a use case in the city of Ghent Pieter Colpaert, Ghent University – imec – IDLab, Belgium		
TP0905 – Investigating Transit Passenger Arrivals using Wi-Fi and Bluetooth Sensors Kaan Ozbay, New York University, United States		

TP0998 – Framework for modelling MaaS using ABM and real-time data from ride-sharing services Kristoff Van Leuwen,, Transport Systems Catapult, United Kingdom

#### TS22 – New management tools

TOPIC: 3. Transport networks evolution       1	4:00 – 15:30 (Londres 1)
TP0741 – Traffic Management as a Service Pieter Morlion, City of Ghent, Belgium	Discussion Session Moderator
SP0852 – Emerging Hot Spot Analysis of Tracking Data from a Logistics Company: How fast doe freight move? Kristian Hegner Reinau, Department of Civil Engineering, Aalborg University, Denmark	
SP0881 – Optimizing urban highway through on-ramp traffic light control Yaroslav Kholodov, Innopolis University, Russia	
TP0885 – Blue Wave – the sequel: a multi-modal approach to network optimisation Giovanni Huisken, MAPtm, The Netherlands	
TP0967 – Increasing congestion and traffic patterns knowledge with the use of archived traffic databases Thomas Courbon, <i>Cerema, France</i>	
TP0970 – Recent Results of All Lane Running (ALR) in England with reference to Stakeholder Feed Joe Castle, <i>Atkins, United Kingdom</i>	lback
TP0980 – Centauro: Connected Environments for Negotiated Traffic Control and Urban Optimizat Laura Coconea, SWARCO, Italy	ion
TP0982 – Simulation Network-Level Relationships of Traffic Flow Vladimir Zyryanov, Don State Technical University, Russia	

Wednesday 21 June



#### TS23 – Safety and innovative applications of C-ITS

#### TOPIC: 4. Connected and automated transport

TP0751 – Analysis of Pedestrian Fatality Statistics and Vehicle-to-Pedestrian Communication for Crash-Warning

Hirofumi Onishi, Alpine Electronics Research of America, United States

TP0793 – Map information, path planning and vehicle control for an automated valet-parking system Sebastian Klaudt, *ika* – *RWTH Aachen University*, *Germany* 

TP0823 – Connectivity will make motorcycling safer Hennes Fischer, Yamaha Motor Europe N.V., The Netherlands

TP0919 – Assessing opportunities and threats of autonomous vehicles to non-equipped, active modes in urban areas

Niccolò Panozzo, European Cyclists' Federation, Belgium

TP0986 – Off-road autonomous vehicle for military missions Felipe Jimenez, Technical University of Automobile Research, Spain

TP0995 – Innovative Demonstrated C-ITS Use Case: V2X Pedestrian Warning Solution Stephane Gervais, *NEAVIA Technologies, France* 

#### TS24 – Privacy & legislation for automated systems

TOPIC: 4. Connected and automated transport	14:00 – 15:30 (Bruxelles
TP0761 – The legal challenges of the connected vehicle Iolande Vingiano-Viricel, VEDECOM, France	Moderator Josef Czako,
TP0770 – Deployment of connected and automated vehicles: a service of general interest Guillaume Farny, ITS Bretagne, France	Moiving Forward Consultancy, Germany
TP0873 – Legalisation for automation: A governmental roadmap Gerben Feddes, RDW, The Netherlands Vehicle Authority, The Netherlands	connany
TP0880 – Context, please! Privacy as Influential Factor of Autonomous Driving Teresa Schmidt, RWTH Aachen University, Germany	
TP0900 – Data Protection and C-ITS – Personal Data Wouter van Haaften, University of Amsterdam, The Netherlands	

#### **TS25** – Information platforms

TOPIC: 1. Mobility services – from transport to mobility	16:00 – 17:30 (Varsovie)
SP0758 – Certification approach for ITS data and services marketplace Risto Öörni, VTT Technical Research Centre of Finland Ltd, Finland	Moderator David Hytch,
TP0765 – Automated system of towed vehicles registration and mobile application in the Rep of Tatarstan Maria Dagaeva, "Road Safety" Organization, Russia	public Parkgate, United Kingdom
SP0805 – Architecture and use cases of the mobility service platform MOBiNET Tobias Schlauch, German Aerospace Center (DLR), Germany	
TP0962 – Platform e-BUS for touristic buses access Paolo Guarnieri, Autostrade Tech S.p.A., Italy	

Moderator Anthony Ferguson, Department for Transport, United Kingdom

les)

14:00 - 15:30 (Madrid 2)

44 12th European Congress and Exhibition on Intelligent Transport Systems and Services

TS26 – Towards digital networks 1		Wec
TOPIC: 3. Transport networks evolution16:00	) – 17:30 (Londres 1)	dnes
TP0809 – Exchanging Traffic Management Plans data between Traffic Management Centres and Service Providers in Traffic Management 2.0 Jop Spoelstra, Technolution, The Netherlands	Moderator Joe Castle, Atkins, United Kingdom	Wednesday 21 June
TP0821 – Traffic Management of the future and Autonomous Vehicles Evangelia Portouli, ICCS, Greece		June
SP0908 – Improving of the road network efficiency by traffic flow formation management Alexander Belov, University of architecture and civil engineering, St. Petersburg, Russia		
CP0934 – Tolling smaller roads Bernhard Minge, Vitronic, Germany		
TP0982 – Simulation Network-Level Relationships of Traffic Flow Vladimir Zyryanov, Don State Technical University, Russia		
TP0989 – Solid-State LiDAR: Enabling high-volume optical sensor deployments in ITS applications Fréderic Gagnon, LeddarTech, Canada		
TP0992 – Collaborative Traffic Management (CTM) Larry Foister, Atkins, United Kingdom		
TS27 – User acceptance		
TOPIC: 4. Connected and automated transport 16:00	0 – 17:30 (Madrid 2)	
TP0804 – C-ITS Deployment Programme Framework	Moderator	
Simon Edwards, Newcastle University, United Kingdom TP0902 – Automated vehicles – a perfect transport solution for the ageing society?	Moderator Jill Hayden, Atkins, United Kingdom	
Simon Edwards, Newcastle University, United Kingdom	Jill Hayden, Atkins,	
Simon Edwards, Newcastle University, United Kingdom TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, ERTICO – ITS Europe TP0961 – Workers Mobility in Montpellier area: the relationship with the information	Jill Hayden, Atkins,	
Simon Edwards, Newcastle University, United Kingdom TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, ERTICO – ITS Europe TP0961 – Workers Mobility in Montpellier area: the relationship with the information Jade Guyon, LAMETA, France TP0974 – Scoping the key social and behavioural research questions associated with autonomous vehicles Samuel Omolade, Department for Transport, United Kingdom	Jill Hayden, Atkins, United Kingdom	
Simon Edwards, Newcastle University, United Kingdom TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, ERTICO – ITS Europe TP0961 – Workers Mobility in Montpellier area: the relationship with the information Jade Guyon, LAMETA, France TP0974 – Scoping the key social and behavioural research questions associated with autonomous vehicles	Jill Hayden, Atkins, United Kingdom	
<ul> <li>Simon Edwards, Newcastle University, United Kingdom</li> <li>TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, ERTICO – ITS Europe</li> <li>TP0961 – Workers Mobility in Montpellier area: the relationship with the information Jade Guyon, LAMETA, France</li> <li>TP0974 – Scoping the key social and behavioural research questions associated with autonomous vehicles</li> <li>Samuel Omolade, Department for Transport, United Kingdom</li> <li>TP0981 – User Acceptance of Driverless Shuttles Running in an Open and Mixed Traffic Environment</li> </ul>	Jill Hayden, Atkins, United Kingdom	
Simon Edwards, <i>Newcastle University, United Kingdom</i> TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, <i>ERTICO – ITS Europe</i> TP0961 – Workers Mobility in Montpellier area: the relationship with the information Jade Guyon, <i>LAMETA, France</i> TP0974 – Scoping the key social and behavioural research questions associated with autonomous vehicles Samuel Omolade, <i>Department for Transport, United Kingdom</i> TP0981 – User Acceptance of Driverless Shuttles Running in an Open and Mixed Traffic Environment Sina Nordhoff, <i>Delft University of Technology, Germany</i> <b>TS28 – Roadside services including weather</b>	Jill Hayden, Atkins, United Kingdom	
Simon Edwards, <i>Newcastle University, United Kingdom</i> TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, <i>ERTICO – ITS Europe</i> TP0961 – Workers Mobility in Montpellier area: the relationship with the information Jade Guyon, <i>LAMETA, France</i> TP0974 – Scoping the key social and behavioural research questions associated with autonomous vehicles Samuel Omolade, <i>Department for Transport, United Kingdom</i> TP0981 – User Acceptance of Driverless Shuttles Running in an Open and Mixed Traffic Environment Sina Nordhoff, <i>Delft University of Technology, Germany</i> <b>TS28 – Roadside services including weather</b>	Jill Hayden, Atkins, United Kingdom t 0 – 17:30 (Bruxelles) Moderator Graham Hanson,	
Simon Edwards, Newcastle University, United Kingdom TP0902 – Automated vehicles – a perfect transport solution for the ageing society? Davide Brizzolara, ERTICO – ITS Europe TP0961 – Workers Mobility in Montpellier area: the relationship with the information Jade Guyon, LAMETA, France TP0974 – Scoping the key social and behavioural research questions associated with autonomous vehicles Samuel Omolade, Department for Transport, United Kingdom TP0981 – User Acceptance of Driverless Shuttles Running in an Open and Mixed Traffic Environment Sina Nordhoff, Delft University of Technology, Germany <b>TS28 – Roadside services including weather</b> TOPIC: 4. Connected and automated transport TP0757 – Successfulness of link-based road weather forecasts in Finland	Jill Hayden, Atkins, United Kingdom t 0 – 17:30 (Bruxelles) Moderator	

Ö.

TP0915 – Towards Intelligent Real-Time Road Weather Services Utilizing Mobile Vehicular Data Pertti Nurmi, Finnish Meteorological Institute, Finland

#### TP0926 – Autonomic road side ITS systems

Florin Nemtanu, Politehnica University of Bucharest, Romania

TP0994 – OBU and RSU receipt and acceptance testing in the Scoop project Guillaume Boussiron, Cerema, France

www.itsineurope.com 🎽 #ITSStrasbourg17 45



# TS29 – Using mobility information TOPIC: 1. Mobility services – from transport to mobility TP0782 – Multimodal real time information between urban and long-distance networks in Bordeaux Valérie Rosselet, Setec its, France

TP0842 – Best Practices on Traffic Management 2.0 Evangelos Mitsakis, CERTH-HIT, Greece

TP0848 – Integration and homogenization of public transport data of Madrid Region public transport system on the open data portal of CRTM – Towards a smart mobility concept Nuria Blanco, Consorcio Regional de Transportes de Madrid, Spain

CP0859 – Smart traffic management by means of smart Paul van Beek, Goudappel Coffeng, The Netherlands

TP0889 – Implementing nationwide harmonized road traffic information for Austria Tobias Schleser, ASFINAG, Austria

TP0937 – Application of Artificial Intelligence Techniques to Traffic Prediction and Route Planning: the vision of TIMON project Pedro Lopez-Garcia, University of Deusto, Spain

#### TS30 – User services and needs

TOPIC: 1. Mobility services – from transport to mobility	09:00 – 10:30 (Varsovie)
SP0788 – User-Centred Design in Public Transport: Discovering Mobile User Needs	Moderator
Yuval Cohen, Cubic Transportation Systems Ltd., United Kingdom	Jaap Vreeswijk,

TP0891 – Raising Awareness of Using Public Procurement as an Instrument for Implementation of ITS in EU

Bahar Namaki Araghi, City of Copenhagen, Denmark

TP0904 – ASFINAGs' mobility service "unterwegs" – state of play Martin Nemec, ASFINAG Maut Service GmbH, Austria

TP0941 – Incidents Influence on Travel Times Lars Randleff, Hermes Traffic Intelligence, Denmark

TP0946 – Social Traffic Management: Livecrowd Ruud van der Dries, MAP Traffic Management, The Netherlands

TP0958 – Experiencing a carpooling line on the A43 Highway to increase mobility on the east side of

LYON Christele Million, APRR, France

TP0965 – Deployment of an universal contactless payment facility on VINCI Autoroutes tollgates Frédéric Vautier, VINCI, France

#### TS31 – Towards digital networks 2

TOPIC: 3.	Fransport networks evoluti	on

TP0790 – The Competitive Environment of the EETS Cornelie van Driel, Rapp Trans (DE) AG, Germany

TP0813 – Hands-on experience: Implementing EETS Backoffice communication Volker Vierroth, *T*-systems International GmbH, Germany

TP0868 – Cabotage Enforcement Solution for European highways on the example of France Stefan F.A. Daxberger, *Kapsch TrafficCom AG, Austria* 

TP0906 – Variable Message Signs for Bicyclists – How to deliver traffic information to bicyclists safely and in real time

Jos van Vlerken, City of Copenhagen, The Technical and Environmental Administration, Denmark

TP0932 – Implementation of a Digital and Cooperative Infrastructure in Hungary Tamas Tomaschek, Hungarian Public Road Non-profit Pte Co. LTD, Hungary

TP0947 – Classification of Vehicles Using Speed and Location Information Jørgen Bundgaard Wanscher, Hermes Traffic Intelligence, Denmark

09:00 – 10:30 (Londres 1)

Moderator

Jean Michel Henchoz, Denso,

Belgium

Moderator Reinhard Pfliegl, A3PS, Austria

46 12th European Congress and Exhibition on Intelligent Transport Systems and Services

Thursday 22 June

<b>\\$</b>	్రం	Ser-	
Ŀ	0 0		<b>Y</b>

TS32 – Safe operation of connected and autonomous vehicles

# Thursday 22 June

TOPIC: 4. Connected and automated transport	09:00 – 10:30 (Madrid 2)
TP0748 – System validation of highly automated vehicles with a database of relevant traffic scenarios Alfons Julian Bock, <i>RWTH Aachen University, Germany</i>	Moderator Richard Tusting, Transport Systems
TP0798 – Design and Verification of Secure Autonomous Vehicles Letitia Li, Telecom Paristech, France	Catapult, United Kingdom
TP0832 – Operational Safety for Autonomous Vehicles Sven Maerivoet, Transport & Mobility Leuven, Belgium	

SP0884 – Remote Sensing and Functional Safety in ITS Henrik Eriksson, RISE Research Institutes of Sweden, Sweden

TP0935 - Road safety contribution request and implications to connected vehicle Philippe Chretien, CEESAR, France

#### TS33 – Architectures and security

TOPIC: 4. Connected and automated transport	09:00 – 10:30 (Bruxelles)
TP0850 – Public Transport: accelerating the deployment of a standardised ITS architecture (EN13149) Emmanuel de Verdalle, <i>ITxPT Association, Belgium</i> TP0853 – Cross-border interoperability of C-ITS services transmitted over cellular networks	Moderator Richard Harris, HMI Technologies, United Kingdom
Johan Scholliers, VTT Technical Research Centre of Finland Ltd, Finland TP0911 – Cyber-secure internal architecture and materials for automotive	
Alexandre Tranchant, Cerema Sud-Ouest, France TP0927 – Cooperative automation through the cloud: The CARMA project Alan Stevens, TRL, United Kingdom	

TP0960 – An Overview of Security Ongoing Work in Cooperative ITS Ines Ben Jemaa, Irt-SystemX, France

TP0978 – C-ITS security insights: a practical example of TVRA analysis Thomas Novak, SWARCO, Austria

#### **COMMERCIAL PAPER SESSIONS**



#### **CP2 – Mobility Services**

	TOPIC: 1. Mobility services – from transport to mobility	16:00 – 17:30 (ITS Forum)
coudy -	CP0827 – LaSDIM: Optimized data infrastructure for Mobility Thierry Glais, Thales, France	Moderator Juhani
5	CP0836 – Interoperability of electric vehicle charging infrastructure Arnaud Mora, Freshmile, France	Jääskeläinen, ITS Advisor, Finland
	CP0930 – Weather and Road Condition Notifications for Road Users Janne Miettinen, Finnish Meteorological Institute, Finland	
	CP0943 – Intelligent mobility in cities – The Urban Mobility Assistance (UMA) Gerrit Schroedel, Wolfsburg AG, Germany	

CP0948 - Merging real-time and ticketing into the cloud; lessons learned Josef Salpeter, FARA AS, Norway

#### **CP3** – New mobility solutions

TOPIC: 1. Mobility services – from transport to mobility	09:00 – 10:30 (ITS Forum)
CP0742 – Co-created autonomous vehicle system for an implementation in the EMEA region Maud Chidiac, Local Motors, Germany	David Hytch,
CP0762 – Commercial Mobility as a Service: A West Midlands Case Study Chris Lane, West Milands Combined Authority, United Kingdom	Parkgate, United Kingdom
CP0807 – MASAI: overcoming mobility barriers via a digital concierge in everyone's pocket Jorge Vieira da Silva, M2C – MASAI Mobility Community, Belgium	
CP0860 – EC2B – Mobility as a Service connected to accommodation Emeli Adell, <i>Trivector Traffic AB</i> , <i>Sweden</i>	

CP0861 – Carpooling with Kapsch Connected Next George Kreuch, Kapsch TrafficCom, Austria

CP0944 – Creating a global incentive strategy for sustainable mobilities Tronchon Nicolas, TransWay, France

TP0951 – PTV Mobility As A Service Paul Speirs, PTV Group, United Kingdom

CP1011 – Mobility and Digital ITS : The opportunity for medium-sized municipalities Sebastien de Longeaux, Ubi Transports, France

Wednesday 21 June

### COMMERCIAL PAPER SESSIONS

The

CP4 – Novel network management techniques 1		Wed
TOPIC: 3. Transport networks evolution	16:00 – 17:30 (ITS Forum)	weanesday
CP0776 – Decision Support Tool for traffic management centre in urban environment Jonathan Robert, SPIE Sud-Est, France	Moderator Sylvain Belloche,	aay 2
CP0791 – Has the EETS any Market Potential? Robert Yen, Rapp Trans AG, Germany	Cerema, France	June
CP0800 – Enabling Traffic Management 2.0 with TomTom City Barry Tremeer, <i>TomTom, Netherlands</i>		le
CP0920 – Using Floating Car Data to optimize the traffic in Strasbourg Eurometropole Thierry Glais, Thales Communications & Security, France		
CP0963 – Application of Adaptive Signal Control in developing countries Florian Weichenmeier, <i>PTV Group, Germany</i>		
TP0983 – Improving Pedestrian Comfort in Public Spaces with Data Analysis:		

 $\delta_{i}$ 

O

Raphaël Cherrier, Qucit, France

#### CP5 – Novel network management techniques 2

TOPIC: 3. Transport networks evolution	09:00 – 10:30 (ITS Forum)	ursday
CP0928 – Digital asset management log for SmartCity maintenance John Poole, Vionice Itd, Finland	Moderator Thomas Kern,	lay 22
CP0976 – SYMMON project Thomas Epp, <i>PTV Group, Austria</i>	Cavita, United States of America	June
CP0985 – Intermodality, innovative mobilities and technologies on the "Contournement Oue Strasbourg" Allix Margaux, Vinci Autoroutes, France	est de	
CP0987 – Automated Roadworks Validation with Floating Car Data James Harris, Elgin, United Kingdom		
CP1001 – Detecting over-height and ADR vehicles on the new Marseille L2 outer ring Stephen Collins, Macq, France		
CP1002 – Vehicle Recognition for Smarter Cities Alexandra Zozulia, Survision, France		
TP1014 – Crowd-based Benchmarking of Construction Site Information Quality on German F Gerhard Hermanns, TraffGO, Germany	lighways	

#### **TECHNICAL VISITS**



#### **Technical Visits**

#### **PAS – Strasbourg Autonomous Port**

Being the first inland port community system of its kind, the Rhine Ports Information System (RPIS) represents a state-of-the-art traffic management platform designed to connect all major stakeholders in container barge handling and boost their efficiency.

The recognition of the need to implement a common digital infrastructure has been a fundamental motivation behind the development of the RPIS, as the latter owes its success to the close collaboration between Rhine Ports Basel-Mulhouse-Weil, Port of Strasbourg, Rheinhäfen Karlsruhe and 4 other Upper Rhine Ports.

The visit of the Port of Strasbourg will comprise a visit of the container terminal and on-site demonstrations, mainly focusing on the Rhine Ports Information System (RPIS) for inland ports barge reservation.

#### IoT-Lab by ICube

As a part of its "smart city" approach, the Eurometropolis of Strasbourg has implemented a low-speed communication network dedicated to the experimentation of IoT (Internet of Things) applications. This initiative, set up in partnership with ICube Laboratory of the University of Strasbourg and the start-up Stratagem located in Strasbourg, will enable Eurometropolis of Strasbourg to develop a wide range of solutions in mobility, public lighting, air quality, etc. This project supports the French Tech Alsace, as a member of the thematic network #IoT #Manufacturing.

During the ITS congress, this network can be provided to companies and start-ups that would like to experiment and demonstrate innovative solutions at early stages of their development.

#### SIRAC Strasbourg Traffic Management Centre

The visit at the Automated Traffic Information and Control Service, SIRAC is aimed to present the way SIRAC regulates the traffic flow within the agglomeration of Strasbourg, provides effective traffic speed increase through equipment at the cutting edge of innovation, predictive approach of events management and 24-hour service for users.

Apart from its traditional traffic management activities and maintenance missions, the scope of action and missions of SIRAC have expanded over time and it currently extends to providing the protection of pedestrian areas, real-time information for users, tunnels and passenger stands management and the implementation of the road safety policy and public transport priority in the Eurometropolis.

In addition to the discovery of the traffic management centre, the visit will focus on the feedback from the organization of the WTC car rally in the streets of the Eurometropolis of Strasbourg and its impact on the city traffic management system.

#### Price

16,67 € Excl. VAT

#### **Dates and Times**

Tuesday 20 June 2017 – Meeting in the lobby of the Congress Centre at 10:30 AM

Wednesday 21 June 2017 – Meeting in the lobby of the Congress Centre at 15:30 PM

#### Note

Maximum 40 Participants

#### Price

16,67 € Excl. VAT

#### **Date and Time**

Wednesday 21 June 2017 – Meeting in the lobby of the Congress Centre at 10:30 AM

#### Note

Maximum 30 Participants

#### Price

16,67 € Excl. VAT

#### **Dates and Times**

Tuesday 20 June 2017 – Meeting in the lobby of the Congress Centre at 10:30 AM

Thursday 22 June 2017 – Meeting in the lobby of the Congress Centre at 10:30 AM

#### Note

Maximum 20 Participants



#### **TECHNICAL VISITS**

#### **Strasbourg NFC Guided Tour**

Strasbourg is one of the first cities in France that deploy NFC Services. This technical visit offers the opportunity to discover and practice the versatility of the NFC services rolled out in the city.

Services include:

- the public information service of Strasbourg Eurométropole accessed via NFC tags and QR codes StrasPlus – "four leaf clover" stickers in civic buildings, in car parks and at transit stops provide smartphone users with links to real time and location-based transportation and "what's on" information across the city
- the U'GO ticketing application launched by the transportation company of Strasbourg (CTS). The U'GO mobile app enables the purchase and the validation of tickets using the NFC technology
- **Orange Cash** is a NFC payment service launched by the Mobile network operator, Orange, enabling NFC phone owners to use a prepaid card stored on their handset to pay for goods at contactless terminals

During your visit you will also enjoy a guided tour of Strasbourg's Petite France quarter which is an integral part of the city's UNESCO World Heritage site.

#### Price

16,67 € Excl. VAT

#### **Dates and Times**

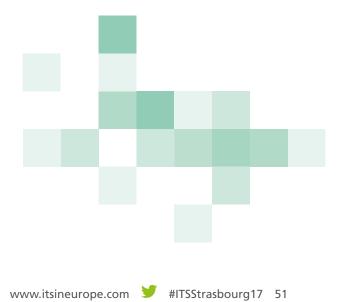
Monday 19 June – Meeting in the lobby of the Congress Center at 14:00 PM

Tuesday 20 June – Meeting in the lobby of the Congress Center at 13:00 PM

Wednesday 21 June – Meeting in the lobby of the Congress Center at 13:00 PM

#### Note

Maximum 20 Participants



#### ASSOCIATED EVENTS

If you wish to attend any of these public Associated Events, please register in advance. To allow access to the event venues, you **must be registered to the Congress as well** (minimum as Exhibition Visitor which is **free of charge** prior the event), via the website: **www.strasbourg2017.itsineurope.com**.

#### Next Congresses: ITS Montreal 2017/ITS Copenhagen 2018

Come and join us to find out more about the upcoming World Congresses in 2017 and 2018! With the theme "Next Generation Integrated Mobility: Driving Smart Cities" the ITS Congress in Montreal will feature a Smart Cities Pavilion which will highlight Smart Cities from around the world.

The theme of the ITS Congress in Copenhagen "ITS – Quality of Life" supports the Copenhagen belief that ITS should enhance people's daily life through seamless, smart and sustainable mobility solutions.

#### **ASFA Conference**

ASFA and its members are investing in the Motorway of the future. As structuring road infrastructure operators, they are one of the major mobility actors. New mobility needs are emerging, especially in suburban areas that haven't been well connected up to now. Digitalization will make new transportation models possible: co-modality, car sharing, carpooling, buses, autonomous and electric vehicles.

Innovative mobility services will emerge to solve daily commuter difficulties and to provide better access to work, health and leisure. Motorway companies are convinced that the infrastructure operator will be at the heart of these innovations and the deployment of intelligent transport systems is an integral part of the response to new mobility needs.

The 12th European congress of intelligent transport systems to be held in Strasbourg is an opportunity for ASFA and its members to highlight their know how, to establish solid partnerships and exchange with all the different stakeholders. It is in this context that ASFA will organize its annual conference at the European ITS Congress on Wednesday 21st of June for a very exciting and intense debate with leading experts on mobility issues about the future of infrastructures that will help us to shape the Motorway of the future.

#### **Energy Summit**

The four major organisations in the field of energy in France (AFG, SER, UFE and UFIP) are working more closely to deliver complementary messages on the energy transition. They consider that all energy resources are needed, even if the share of renewables will increase steadily in the near future and that of fossil fuels will be progressively reduced. To support the development of electricity based on renewables, we have to reconsider the appropriate share of every other energy source.

Notwithstanding the one to one competition in specific sectors, such as natural gas versus electricity in households, fuel oils versus natural gas in power generation or gas oils versus natural gas in mobility, electric mobility, our priorities must be clearly to sustain energy efficiency and incentives for the development of renewables. The European Commission has a key role to play by introducing regulations and a price for CO2 emissions to reduce harmful emissions and help move forward towards a greener environment. We are evidently in favour of a strong European energy policy for the security of supply, the reduction of carbon emissions, common regulations and competitive challenges.

#### Date and Time

Tuesday 20 June 2017 11:00 – 12:30





#### **Date and Time**

Wednesday 21 June 2017 09:00 – 12:30

Location

Cassin Auditorium

**Note** Translation French/English will be provided

#### Registration

Dedicated registration via the congress website



#### **Date and Time** Wednesday 21 June 2017 11:00 – 12:30

Location ITS Forum





#### 5G enabled Connected and Automated Driving – powered by Satcom

On the occasion of the next ITS Congress in Strasbourg, ESOA and ERTICO are pleased to invite you to participate in a workshop: '5G enabled Connected Vehicles - powered by Satcoms'. 5G will create infinite opportunities for the fast development of the connected market and will eventually become indispensable to it. In this regard, satellite brings unique capabilities and will play a key role to achieve the expected goals. This workshop will bring together relevant actors from different sectors to discuss the limitations of a single network to meet the requirements of an evolving connected car market and how only cross-sector collaboration will ensure success.

No single network can meet the requirements of the evolving connected car market so that Satellite is a key component of a 'network of networks' working alongside 3/4/5G, WiFi, DSRC and other technologies. Satellite brings unique capabilities that offer more efficient and secure means of supporting safety and operational requirements, as well as a network extension for nearly any requirement. However success in the market requires partnerships with key players in the connected car ecosystem (OEMs, Tier 1s, service providers) to enable integration to systems onboard the vehicle. The workshop program will be divided in two sessions focusing on business models and product development to present current connected car challenges and how a partnership between the different stakeholders can ensure the automotive industry to reach the next challenging Connected Car targets.

#### **EU Funding Workshop**

A number of different EU funding instruments exist that can be used to support the development and deployment of innovative solutions in transport. Each of the EU funding instruments are needed at the different stages of the overall development process but often moving from research funding to full scale commercial deployment is the biggest and most difficult step. The EU Funding Workshop organised by the European Commission is a dedicated event to explore which existing EU funding mechanism is the right help at the right time for the right purpose and how stakeholders can take the big step and move from funding to financing.

Date and Time Wednesday 21 June 2017

Location

Leicester room

14:00 - 17:30





#### Date and Time

Wednesday 21 June 2017 16:00 - 17:30

Location **ITS Forum** 





Commission

European

#### **DEMONSTRATIONS**



#### **Demonstrations**

This year's Demonstrations will push the boundaries of modern mobility, so be sure not to miss the innovative services that will be showcased in our Demonstration area. Delegates and visitors get the chance to experience exciting current and future mobility options and learn about pioneering ventures. Local Strasbourg start-ups will also have a dedicated space to demonstrate the city's vitality in terms of mobility innovation.

For more information please click on to the Demo button on the ITS Strasbourg App or visit us at the Demonstration Desk at the Congress Centre. The map shows the location of the demos on site and below is a summary of each.



#### The eCall Journey

The eCall Journey will show live demonstrations of eCall, the emergency call system, from car to control room. For the first time, this demonstration will also show the potential future of eCall for powered two-wheelers (motorcycles), lorries and coaches as part of the I\_HeERO project, funded by the European Commission and the demonstration coordinated by the Satellite Applications Catapult. The I\_HeERO team will present an update on eCall development progress including the challenges they have addressed in developing the system for particular vehicles, such as those carrying hazardous loads or locations where terrestrial communication is not possible as well as the integration of Earth observation data with PSAP software. Visitors will be able to see the features that the next generation of e-Call may include and experts will be on-hand to answer questions. Demonstration vehicles including trucks, bikes and cars will be on the stand showcasing e-Call and a demonstration system for the control room (PSAP) linked to Earth observation software.

#### Location

Large tent at the eastern entrance of the Exhibition Hall

#### Format

30 minutes in groups of 10-40 people

#### **Schedule**

Tuesday 20 June and Wednesday 21 June 2017 09:00 – 18:00

Thursday 22 June 09:00 – 14:00





#### **Cross-border autonomous mobility service by VEDECOM**

A cross-border, autonomous and on-demand mobility service: might be a myth for people but it will be soon a reality thanks to, a project of the VEDECOM institute: GoSmart!

To go beyond the limits of autonomous vehicles two advanced technologies will be demonstrate: autonomous driving and monitoring with centralized control station.

For the congress, VEDECOM will showcase its new service, on public road, between France and Germany on The Europe Bridge. VEDECOM welcomes the participants every day, from 09:30 to 11:45 and 13:30 to 15:30.



#### Location

VEDECOM welcomes the participants at its departure village located near the "Pont de l'Europe" in Strasbourg. A shuttle service will be available. Please refer to Car2Road's desk in the entry hall for further information.

#### Format

60 minutes (with shuttle included) in groups of 10 people

#### Schedule

Monday 19 June – Thursday 22 June 2017 09:30 – 11:45 and 13:30 – 15:30





#### SCOOP@F vehicles available!

Since 2014, France has invested in a big C-ITS deployment project called SCOOP@F. With 3000 vehicles to be deployed on 2000 km of roads, this is the biggest pilot deployment project in Europe.

After 3 years of common work, the final vehicles from Renault and PSA will be available soon for consumer. You will be able to experience them in this demonstrator. During a 20 minutes ride in a Renault and a PSA equipped car, the benefits of C-ITS technologies for drivers and road managers will be shown to you through several interactive use cases presented along a trip on the Strasbourg road network.

Though the road operators DIR-EST and Strasbourg metropolis are not part of SCOOP@F, they are part of C-ROADS France, which is a son project built on SCOOP@F.

The demonstration relies on ITS G5-communication between equipped cars and road side units piloted and monitored by a platform settled in the DIR-EST traffic control center. Both projects SCOOP@F and C-ROADS France, supported and co funded by the European Commission, involve car manufacturers, road operators and various academic partners. France is a core member of the C-ROADS platform which gathers ongoing C-ITS deployment activities in Europe. The work is lead by the French Ministry of Transport. It will feed thoughts about ways for the development of connected cars and the deployment of C-ITS across Europe.

#### Location

South to the Exhibition Hall – angle in the Richard Strauss' street

#### Format

30 minutes in groups of 6 people

#### Schedule

Monday 19 June 2017 19:00 – 20:00

Tuesday 20 June – Wednesday 21 June 2017 10:00 – 12:00 and 14:00 – 16:00

Thursday 22 June 2017 10:00 – 12:00



#### **CO-GISTICS: Cooperative ITS applied to logistics services**

CO-GISTICS is proposing a Cooperative ITS interoperability demonstration of 2 services: Speed advice (also called GLOSA) and Cargo Transport Optimisation.

The GLOSA (Green Light Optimal Speed Advisory) service, when approaching one of the 5 equipped traffic lights in Strasbourg, will give a speed advice to the driver in order to reach the intersection with a green light.

GEOLOC SYSTEMS has developed its own V2X facilities integrating the most recent version of SPAT/MAP and most recent security standards. Our GLOSA application has been adapted and receives real-time information from the traffic light controllers adapted for the occasion by Fareco. The demonstration is completed by a second vehicle provided by Euro Metropole of Strasbourg. Cargo transport optimisation has been added to our product by integrating these services to the GLOSA interface. The driver receives and sends information concerning the delivery and pick up of goods. He will also have access to an appointment management and an eCMR for paperless management of dangerous goods.

Finally our demo has the ambition of being interoperable with another GLOSA application developed in the frame of the European project MOBiNET by Dynniq which is demonstrated in a third vehicle.

#### Location

South to the Exhibition Hall – angle in the Richard Strauss' street

#### Format

20 minutes in groups of 9 people

#### Schedule

Monday 19 June 2017 18:00 – 20:00

Tuesday 20 June – Wednesday 21 June 2017 09:00 – 18:00

Thursday 22 June 2017 09:00 – 14:00



#### **DEMONSTRATIONS**



#### **BSmart**

This demonstration will be showcasing a global mobility service using Hybrid and connected bikes with electric assistance.

To overcome the energy storage challenges during the energy transition process, this innovation combines two complimentary energy storage systems: low pressure hydrogen and electric vehicles. VEDECOM Tech will also present their connected apps for users and for fleet management. The Bsmart demonstration is coordinated by VEDECOM Tech.



#### Location

South to the Exhibition Hall – angle in the Richard Strauss' street

#### Format

15 minutes in groups of 5 to 10 people

#### Schedule

Monday 19 June 2017 18:00 – 20:00

Tuesday 20 June – Wednesday 21 June 2017 09:00 – 18:00

Thursday 22 June 2017 09:00 – 14:00





#### Boulevard of start-ups & innovative companies

Boulevard of start-ups & innovative companies is unique presentation of know-how that was developed on the territory of Strasbourg to reply to the new questions of mobility. Start-ups Prends ma place, Awaken, Knot, Strataggem, Bikerr and Freshmile with innovative companies Novea and Citiz will present their offers in the field of mobility thanks to one game, a game with cards.

The visitor, who is professional or part of the general public, will meet partner companies mentioned above thanks to this game and he/she will find a solution for problems of mobility. Even more, he will find out new and original solutions! This game is made out of cards, with 7 different possibilities of profile: tourist, family, geek, car lover, person needing personal assistance, chef of the company, and eco-friendly person.

For example, the visitor could find himself in a situation like having an accident, or his car has broken down, or he's searching a very specialized bicycle to rent. With each card he'll be put in 3 different situations for which he can find solutions by seeing our start-ups or innovative companies who are providing services in the field of mobility.

Come to visit our Boulevard of start-ups during the Congrès ITS to see all the possibilities in the field of mobility today and in the future, and to try it out first-hand.

#### Location

Galerie Erasme inside the Exhibition center

#### Schedule

Monday 19 June 2017 18:00 – 20:00

Tuesday 20 June – Wednesday 21 June 2017 09:00 – 18:00

Thursday 22 June 2017 09:00 – 14:00







#### **Better Mobility TODAY, by ENGIE**

To accelerate the deployment of Intelligent Transportation Systems (ITS), an effort is needed to both better explain the benefits of ITS – justifying investment – and design well-thought interconnexion between transportation systems.

A tool developed by ENGIE Siradel with the Eurometropole Strasbourg displays how the digital tools of ITS enable the citizen to visualize the impact of mobility changes, and to be included in the design process. Come explore in 3D the impact of reclaiming the embankment of Strasbourg on pollution and noise!

A full scale demonstrator installed by ENGIE Ineo aims at showcasing how well-chosen interconnexion between ITS can deliver concrete value with real use cases. The precious services already provided by smart parking, carsharing and traffic management systems can upgrade each other. On an evening night, a citizen is incentivised to use a shared car, as she gets priority at traffic lights. When she opens her carsharing application, she visualizes the available parking spots at destination, so she can ride surely without the angst of full parking. As traffic is smoother and cars are shared, the city becomes greener, and mobility is better. Come take a ride and experience those services with us!

#### Location

South to the Exhibition Hall – angle in the Richard Strauss' street

#### Format

15 minutes in groups of 3 people

#### Schedule

Monday 19 June 2017 18:00 – 20:00

Tuesday 20 June – Wednesday 21 June 2017 09:00 – 18:00

Thursday 22 June 2017 09:00 – 14:00





Find out about the work of Transport Systems Catapult, the UK's Technology and Innovation centre for Intelligent Mobility on **stand C10** 

To find out more go to ts.catapult.org.uk

Follow us
OTSCatapult

#### GENERAL INFORMATION



#### **General information**

#### Internet access

Wireless internet connection is available in all the areas of the Strasbourg Convention Centre.

#### Language

English is the official language of the Congress. All spoken presentations, printed material and online information will be available in English only.

#### **Travelling to Strasbourg**

#### Travel by air

The airport is located roughly 30 minutes by car from the "Strasbourg Convention and Exhibition Centre". Taxis are available at the Airport until the last flight: http://www.taxiproxi.fr/taxi-proxi-et-aeroport-de-strasbourg?lg=en. Should you prefer another mean of transportation, you can take the tram or the bus.

A shuttle train stops at the airport up to 4 per hour, allowing you to be in Strasbourg station in 9 minutes. For more information on the shuttle: http://strasbourg.aeroport.fr/EN/Passengers/ Access/Shuttle-train.html

With the new multi-transport Tram+TER (regional train service) Airport ticket you can travel between the airport and the Eurométropole (Urban Community of Strasbourg) with just one ticket for only  $\notin$ 4.30. TER ticket only from the Airport to Strasbourg station:  $\notin$ 2.60 one way.

Strasbourg is also located in close proximity to 3 other airports:

- Airport Baden Airpark (45 min by car)
- EuroAirport Basel Mulhouse Freiburg (1,5h by car)
- Frankfurt International Airport (2,5h by car/bus)

#### By public transport

Strasbourg is most easily explored on foot, and the historic city centre can easily be explored in a day or two. To be able to cover more ground, you should consider hiring a bike or using the public transport network. Buses and trams in Strasbourg are operated by the Compagnie des Transports Strasbourgeois (CTS). For more information on the shuttle buses please go to http:// www.cts-strasbourg.eu/en/.

#### **Trams**

Tram is the most popular, most effective and by all means the most comfortable way of transport in Strasbourg. Seven tram lines (A, B C, D, E, F and G) connect all corners of the city from Monday to Sunday from 4.30 till 0.30.

The Strasbourg Convention Centre is very well-connected and just a few minutes away from the historic city centre. Tram lines B and E are reaching the venue at "Wacken" or "Kléber" stop stations.

#### Trains

After Paris, Strasbourg has the second largest railway station in France and it is well served by regional, national and international train services, predominantly by SNCF (French Railways), but also by Deutsche Bahn (German Railways).

#### **Insurance and security**

Kindly note that all attendees are requested to wear their badge for admission at all times. In case of a badge loss, a  $35,00 \in$  fee will occur.

Please do not leave your personal items or coats unattended. There will be a cloakroom at your disposal. In addition, regular badge control will take place throughout the Congress.

TGV trains offer a wide range of connections with other parts of the country, as well as with Germany, Switzerland, Belgium, Netherlands and other European countries, in shorter journey times.

Train services operate from the Gare de Strasbourg, the city's main station, which is located in the city centre, just 12 minutes away from the Conference Centre.

#### **Buses**

There are 27 bus lines in Strasbourg and most of them operate until 23.00 every day of the week. Tickets can also be bought from the bus drivers.

#### By car

Strasbourg can be reached from various directions:

- from the west (Paris, Benelux) taking the A4 highway (E25). About 4 hours from Paris and 2 hours 15 minutes from Luxembourg
- from the south (Switzerland, Lyon), taking the A35 highway (E25). About 5 hours from Lyon
- from the north and east (Germany), taking the A5 highway (E35)

The Strasbourg Convention Centre is located 2 min away from all the motorway roads.

#### Park & Ride

With the Park & Ride system, cleverly combine car and bus-tram network. You can get a roundtrip bus-tram ticket\* for all the passengers of your vehicle. Read more here: http://www.cts-strasbourg.eu/en/getting-around/park-and-ride/

#### **Congress shuttle**

The innovative shuttle, Cristal from the local industrial LOHR, will be available to travel from the train station to Strasbourg convention center and back. The shuttle is reserved to the ITS Congress delegates and free of charge. For more information download the app at **www.cristal-lohr.eu** 

#### Taxis

If you arrive at the railway station, there are connections to the tram system and buses, with many taxis waiting outside (to the left of the station forecourt)

MM.Taxi Strasbourg, +33 6 75 59 66 83
 Mondial Taxi, +33 3 88 23 10 10

	<ul> <li>Mondial laxi,</li> </ul>	+33 3 88 23 10 10
• Taxi Oberlin, +33 3 88 36 20 7	• Taxi David,	+33 3 88 96 96 96
	• Taxi Oberlin,	+33 3 88 36 20 74



### BETTER MOBILITY TODAY



iMPROVING EXISTING INFRASTRUCTURE



**ENCOURAGING THE DEVELOPMENT OF GREEN FUELS** 



SMOOTHING TRAFFIC FLOW



SiMPLiFYiNG URBAN LOGISTICS

#### CONGRESS & EXHIBITION VENUE



#### Congress and exhibition venue

The 12th ITS European Congress will be taking place in the Strasbourg Convention + Exhibition Centre (SCEC)

Address: Place de Bordeaux, 67082 Strasbourg, France

#### **Cassin Auditorium**

The Opening Ceremony, the Closing Ceremony and the Plenaries will be taking place in the Cassin Auditorium located on the ground floor of the SCEC.

#### Speaker ready area

The speaker ready area is located on the ground floor of the SCEC in the open area between the Session Rooms Rome and Amsterdam.

#### Speaker ready area opening hours

Date	Opening hours
Monday, 19 June	13:00 – 18:00
Tuesday, 20 June	08:00 – 17:30
Wednesday, 21 June	08:00 – 17:30
Thursday, 22 June	08:00 – 12:00

#### The exhibition

The exhibition will be taking place in the Rhin Hall and Schweitzer Gallery. These areas are located on the ground floor of the SCEC

#### **Exhibition opening hours**

Date	Opening hours
Monday, 19 June	18:00 – 20:00 Welcome reception *
Tuesday, 20 June	09:00 – 17:30
Wednesday, 21 June	09:00 – 17:30
Thursday, 22 June	09:00 - 14:00

\* Due to space and security reasons, entrance will be granted on a first-come first-served basis – pre-registration required



### NEXT GENERATION MOTORWAY MOBILITY AS A SERVICE



### French tolled motorway companies are developing digital infrastructure to enhance mobility as a service



Operating company members: EGIS EXPLOITATION AQUITAINE – A63 / EGIS ROAD OPERATION – A88 / ROUTALIS – A28

Wednesday, June 21<sup>st</sup> - 10 am Join us for an interactive discussion Cassin auditorium

### FLOORPLAN AND EXHIBITORS



COMPANY NAME	NUMBER
Algoé Consultants	C20
Arcos – Vinci	P7
Aselsan	E32
ASFA	D10
ATEC ITS France	C20
Autopilot	C12
BANNER Engineering Europe	P10
BestMile	53
bmt-Bayerische Medien Technik	B22
Brainport	S2
Calypso Networks Association	S14
CAPITAL	C12
Cegelec	P4
Cerema Est	C30
CGI Finland	S20
Cityway	520
City of Tampere	S20
Clemessy	P2
COLAS	D22
Connecting Mobility	S2
Connekt/ITS Netherlands	S2
Continental	D30
DORA – Door-to-Door Information for Air Passengers	S5
Dynniq	S2 & S22
EFKON	E22
EGIS	C20
ENGIE	E10
	C12
ERTICO – ITS Europe ERTRAC	S4
Eurodistrict Strasbourg-Ortenau	C30
Eurometropolis of Strasbourg	C30
European Commission	B10
European Commission for the Transport Research Arena (TRA) 2018	S21
FARECO	C20
Finnish Transport Agency	S20
Finnish Transport Safety Agency	S20
Finnish Ministry of Transport and Communications	S20
Finpro	S20
Fraunhofer ESK	D30
Freie und Hansestadt Hamburg	D30
GEVAS software	D30
GEWI	B22
Goudappel Coffeng	52 S2
Graphmasters Hamburger Hochbahn	D30 D30
HERE	D30
IDNOMIC	S12
lfsttar	C30
IFP Energies nouvelles	S7
IGN	C30
I_HeERO	C30
Infotripla	S20
informula	C12
INRIX	B20
	S10
IRT SystemX	
ITS Deutschland	D30

[	
ITS Finland	S20
ITS Observatory	C12
ITS Oulu – The City of Oulu	S20
ITS United Kingdom	S6
ITS World Congress Copenhagen 2018	C12
Kapsch TrafficCom	A12
Leti	S9
LEVEL Systems	S11
LOGMA	C20
MACQ	C20
MI Conseil	C20
Ministère de la Transition Ecologique et Solidaire	C30
Moovit	S13
NDW	S2
Nicander	S6
NNG Kft.	B22
Nordsys	D30
OpenDataSoft	\$5
Orange Business Services	C20
Partnership Talking Traffic	S1
PayiQ	S20
Pôle Véhicule du Futur	C30
Port Autonome de Strasbourg	C30
PTV Group	A22
Press Village	E30
RDW	S2
Roadscanners	S20
SAENA	D30
	A30
Satellite Applications Catapult SatNav-Forum	D30
Setec ITS	E20
	S19
SIMPHA Project	P1
Siqura B.V. Solita	\$20
SWARCO	A20
Thales	C20
Two Media	S16
TISA-Traveller Information Services Association	B22
TNO	S2
TomTom	A14
Topos Aquitaine	C20
Transport Systems Catapult	C10
TSS-Transport Simulation Systems	E12
T-Systems	D30 & B30
UbiTransport	S5
VEDECOM	A10
Vialis	S2
Vionice	S20
Vision Components	P8
VITRONIC	P5
Volkswagen	D30
V-Traffic	B22
VTT Technical Research Centre of Finland	S20
	C20
VTT Technical Research Centre of Finland	

62 12th European Congress and Exhibition on Intelligent Transport Systems and Services



Strasbourg Convention + Exhibition Centre (SCEC) plan



#### **SOCIAL EVENTS**



#### **Social Events**

#### Welcome reception – 19 June

Immediately after the Opening Ceremony and Plenary session, you as well as your accompanying person(s) are cordially invited to the welcome reception taking place in the Exhibition Area in the Rhin Gallery and the Schweitzer Gallery.

The reception is an excellent opportunity to meet all your ITS Colleagues and network with our sponsors as well as exhibitors.

This networking experience is included in your registration fee and we kindly ask you to register for it.

#### Gala evening at La Villa Quai Sturm – 21 June





### **Next Generation Integrated Mobility:**

### **Driving Smart Cities**

**Opportunity exists on transportation's cutting edge.** Tap into the potential by attending ITS World Congress 2017, where the newest information—on connectivity, infrastructure, Smart Cities, security, systems integration, business models and more—will provide the advantage needed to anticipate change, respond to demand and navigate effectively in the rapidly moving marketplace.

Gain insights, exchange ideas, work through solutions and acquire strategies for deploying technology at dynamic education sessions, presented by the industry's best thought leaders, transportation experts and technology pioneers.

**REGISTER TODAY AND SAVE UP TO 20%:** www.itsworldcongress2017.org | #THISisITS



ITS WORLD CONGRESS 2017 Montréal | OCTOBER 29 - NOVEMBER 2





Platinum



ASFA is the professional Association of road concessionaries and operating companies. It gathers 23 members operating 9111 km of toll motorway network. The concessionary companies are fully dedicated and committed to make the motorway a place for safety and mobility services. They implement advanced technology across a wide range of applications, including real time incident detection and traffic information services, alert, automatic emergency call, nationwide full interoperable ETC system. ASFA members are actively participating in European projects. They were involved in COOPERS, CVIS, SAFESPOT, Safetrip, Scoref projects for cooperative system developments; Ecomove for improve eco driving; CESARE, REETS projects for full deployment of a European Electronic Toll Service. They are presently participating in MedTIS, Arc Atlantique, EU EIP projects aiming to deploy harmonized ITS services in Europe. They are also in Scoop@F project and C-Roads for connected roads. Digitalized infrastructure is on the way, Companies are definitely on the move to design the motorway of the future to be ready to welcome the autonomous vehicle and to work in strong partnerships with all stakeholders to always provide best services to their customers.

#### Diamond



ENGIE develops its businesses (power, natural gas, energy services) around a model based on responsible growth to take on the major challenges of energy's transition to a low-carbon economy: access to sustainable energy, climate-change mitigation and adaptation and the rational use of resources. The Group provides individuals, cities and businesses with highly-efficient and innovative solutions largely based on its expertise in four key sectors: renewable energy, energy efficiency, liquefied natural gas and digital technology. ENGIE employs 153,090 people worldwide and achieved revenues of €66.6 billion in 2016.

Gold



The Transport Systems Catapult the UK's technology and innovation centre for Intelligent Mobility – using new and emerging technologies to enable smarter and more efficient transportation of people and goods. The TSC is here to catapult new and innovative transport ideas from conception to commercialisation. We act as a catalyst, bridging the gap between academia and industry, encouraging collaboration and leading cutting edge transport projects and initiatives. We have extensive expertise in areas including customer experience, information exploitation, autonomous transport systems, modelling and visualisation and smart infrastructure; and we work across all modes of transport.



the mind of movement

PTV Group improves mobility and transport – by using world-class software, data and scientific know-how gained from four decades of experience in planning and optimising the movement of people and goods. Recognised as a global market player with German technology, we help cities, companies and people save time and money, enhance road safety and minimise the impact on the environment. Based on our unique expertise in every facet of mobility, we support smooth traffic flow. In the Traffic business field, we offer technologies for traffic planning and simulation, real-time traffic management as well as Mobility-as-a-Service solutions. In the Logistics business field, our portfolio ranges from software for scheduling transport routes and trips to distribution planning and fleet management.



#### **SPONSORS**

Silver



Bringing together French and German specialists, Car2Road offers engineering services in ITS and embedded connectivity. Specialising in testing, the company has a unique 45 ha site near the borders of France, Germany and Switzerland, equipped with, among other things, a private cellular network. Thanks to its strong technological expertise and a site totally dedicated to tests and experimentation, Car2Road supports industrialists and scientists by testing, developing and consulting to implement and roll out their innovations. Strasbourg Eurométropole is a long-standing partner of Car2Road and places its expertise at the service of the technical demonstrations organised around the congress.





### Ontinental 🏂

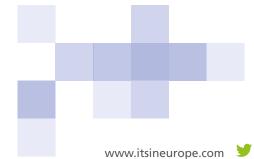
The Port of Strasbourg is a major logistics and industrial hub. Initially started as an agreement between the State and the City of Strasbourg, the Port of Strasbourg is a public organisation granted financial independence. It is responsible for dealing with the development and management of the geographical area occupied by the port. With 320 companies and 10 000 jobs, the Port is central to economic activity in the area. Since the 1st of January 2016, it owns two subsidiaries:

Rhine Europe Terminals (RET) for port handling (cranes, gantry cranes, particularity terminals for containers and heavy lift) and Batorama, a daytrip boat service for tourists or residents visiting Strasbourg.

Orange is one of the world's leading telecommunications operators with sales of 40,9 billion euros in 2016 and 154,000 employees worldwide at 31 March 2017, including 95,000 employees in France.

Present in 29 countries, the Group has a total customer base of 265 million customers worldwide at 31 March 2017, including 203 million mobile customers and 19 million fixed broadband customers. Orange is also a leading provider of global IT and telecommunication services to multinational companies, under the brand Orange Business Services. In March 2015, the Group presented its new strategic plan. "Essentials2020" which places customer experience at the heart of its strategy with the aim of allowing them to benefit fully from the digital universe and the power of its new generation networks.

Continental develops pioneering technologies and services for the sustainable and connected mobility of people and their goods. In 2016, Continental generated sales of  $\notin$ 40.5 billion and currently employs more than 227,000 people in 56 countries. At Continental mobility in cities is transforming rapidly. The challenge in the past was to enable citizens to be mobile so that they have appropriate access to food, education, work, shopping and leisure. The challenge today is to use the opportunities provided by digitalization, electrification, automation and sharing providing new services which make mobility more efficient, cleaner, more comfortable and safer. The product portfolio of Continental includes today smart parking, eBike sharing, public fleet management and smart intersections.



neurope.com 🎔 #ITSStrasbourg17 67

#### COMMITTEES



#### **Committees**

#### **National Host Committee**

Ghislaine Baillemont, APRR Olivier Biancarelli, ENGIE Laurent Briant, CITYWAY Benoit Chauvin, GART Martial Chevreuil, EGIS France Patrick Coutant, RENAULT Christian Cure, CEREMA Arnaud De La Fortelle, MINES paristech François Duquesnoy, ORANGE BUSINESS SERVICES Robert Herrmann, Strasbourg Eurométropole, (Chair) Jean-François Huere, PSA Jean-Bernard Kovarik, IFSTTAR Jean-Philippe Lally,CTS, Compagnie des Transports Strasbourgeois Fabrice Luriot, COLAS Anne Meyer, UTP Eric Perard, SETEC ITS Denis Perret, THALES Benoit Perrin, ALSTOM Alain Pittavino, TRANSDEV François Poupard, MEEM/DGITM Denis Reze, Véhicule du futur Roland Ries, City of Strasbourg Malika Seddi, ASFA Catherine Trautmann, Strasbourg Eurométropole Patrick Vial, SPIE David Zambon, IDRRIM

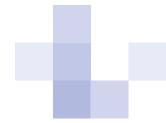
Meng Lu, Dynniq, The Netherlands

#### European Programme Committee

Angelos Amditis, ICCS, Greece Benoit Augarde, ERTICO – ITS Europe Ashweeni Beeharee, Satellite Applications Catapult, United Kingdom Jean Bergounioux, ATEC – ITS France, France Charlotte Vernegren Christensen, City of Copenhagen, Denmark Marije de Vreeze, Connekt / ITS Netherlands, The Netherlands Fiammetta Diani, European GNSS Agency – GSA Stephane Dreher, UNDP Nour-Eddin El Faouzi, IFSTTAR, France Frank Foersterling, Continental Automotive GmbH, Germany Alexander Frötscher, AustriaTech, Austria Mads Gaml, City of Copenhagen, Denmark Didier Gorteman, ERTICO – ITS Europe, (Chair) Norbert Handke, ITS Network Germany, Germany Richard Harris, HMI Technologies, United Kingdom Jean-Michel Henchoz, DENSO International Europe, Belgium Sampo Hietanen, MaaS Finland, Finland Wolfgang Hoefs, DG CONNECT, European Commission Andrea Hržić, ERTICO – ITS Europe David Hytch, Parkgate Consultants, United Kingdom Christer Karlsson, ITS Sweden, Sweden Paul Kompfner, ERTICO – ITS Europe Delphine Krieger, City and Eurometropolis of Strasbourg, France Risto Kulmala, Finnish Transport Agency – FTA, Finland Stephanie Leonard, DG MOVE, European Commission

Stephen Lynn, Transport System Catapult, United Kingdom Jennie Martin, ITS United Kingdom, United Kingdom Jean-Philippe Méchin, Cerema, France Patrick Mercier-Handisyde, DG Research and Innovation, European Commission Ahmed Nasr, HERE, Germany Celine Oppenhauser, City and Eurometropolis of Strasbourg, France, (Co-Chair) Roger Pagny, ATEC – ITS France, France André Perpey, Geoloc systems, France Stéphane Petti, EIB, Luxembourg Paul Potters, Cachelot B.V., The Netherlands Theo Quick, Atos, United Kingdom Christian Rousseau, Renault SAS, France Eric Sampson, ERTICO – ITS Europe Malika Seddi, ASFA, France **Delphine Soubies**, ERTICO – ITS Europe Alan Stevens, TRL, United Kingdom Johanna Tzanidaki, TomTom, The Netherlands Pamela Valente, ERTICO – ITS Europe Margriet van Schijndel-de Nooij, EARPA, Belgium Volker Vierroth, T-Systems, Germany Paul Vorster, ITS South Africa, South Africa Jaap Vreeswijk, MAPtm, The Netherlands

Sascha Westermann, Hamburger Hochbahn AG, Germany Kees Wevers, Brightangel ITS, The Netherlands





### THE KEYS TO SUCCEED IN BUSINESS.

### #4: Multiply the opportunities

#### AIR FRANCE & KLM Global Meetings

Benefit from discounted fares<sup>\*</sup> on AIR FRANCE and KLM flights when travelling to international events for which AIR FRANCE and KLM are official carriers. And this while still making the most of your personal Flying Blue loyalty program privileges.

LEARN MORE ABOUT THIS PROGRAM ON www.airfranceklm-globalmeetings.com



#### Meet the winners of the European Transport Innovation Challenge 2017 at the European ITS Congress!

Tuesday 20 June, 12:30 – 14:00, at the European Commission stand



Twelve winners were selected from over 110 applications for the European Transport Innovation Challenge 2017 from across Europe. They will pitch their project at the EC's stand during the lunch break (12.30 –14.00) on Tuesday 20 June.

Projects offer innovative solutions for decarbonising EU transport all modes, passenger and freight, and looking at vehicles, services and Apps. Applicants are Masters and PhD students, NGOs, start-ups and larger SMEs, aged between 18–35.

The European Commission also organises a mentoring workshop for the winners on 19 June. Although places are limited, you could contact the European Commission if you would like to participate (email **MOVE-TRANSPORT-INNOVATOR@ec.europa.eu**).



European Transport Innovation
Challenge 2017

Creating Mobility Solutions



the mind of movement

### HARNESSING THE POWER OF MOBILITY

Imagine a city where people change seamlessly between multiple modes of transportation, from cycling to walking, and using shared cars and rail based transport. But how do you make it seamless? This is where we come in. We specialize in solutions that help optimizing transport networks and transforming cities to make them more livable. Technology is a force that is intertwined with the evolution of urban environments and it is leading cities to more dynamic transportation systems. Our MaaS Accelerator Program allows you to create a balanced ecosystem of new mobility services and public transport.

So while we're paving the way to smarter cities, it all starts with you. How? Join us at ITS Europe at booth A22 and www.ptvgroup.com



Scan this page to experience the future of mobility!





Quality of life

The world's largest event in Intelligent Transport Systems and Services www.itsworldcongress.com

Co-organised by:

ITS AMERICA

Organised by:

Hosted by:

Supported by:

#### For more information please contact:

#### Programme

Pamela Valente p.valente@mail.ertico.com

Delphine Soubies (Special interest sessions) d.soubies@mail.ertico.com

Andrea Hržić (Technical/Scientific/Commercial papers) a.hrzic@mail.ertico.com

#### **Exhibition & sponsorship**

Benoit Augarde

Jasvinder Sidhu

strasbourg.exhibition @mail.ertico.com

#### **Press and media**

Carla Coppola c.coppola@mail.ertico.com

#### **Demonstrations**

Tahina Rakotoarison strasbourg.demos@mail.ertico.com

Céline Oppenhauser

#### **Registration**

ITS Congress Registration Secretariat Registrations@itsineurope.com

#### **Conference logistics**

Julen Bastarrika

Sophie Thaon

strasbourg2017@itsineurope.com

#### **Exhibition logistics**

Hannah Webb h.webb@hgluk.com

Julie Pollet j.pollet@hgluk.com

#### **Host Coordinator**

Delphine Krieger delphine.krieger@strasbourg.eu

