CALL FOR CONTRIBUTIONS

ITS EUROPEAN CONGRESS

LISBON, PORTUGAL
18-20 MAY 2020

ITS: The Game Changer

Organised by:

ERTICO
ITS EUROPE

Hosted by:

LISBOA

ITS
PORTUGAL

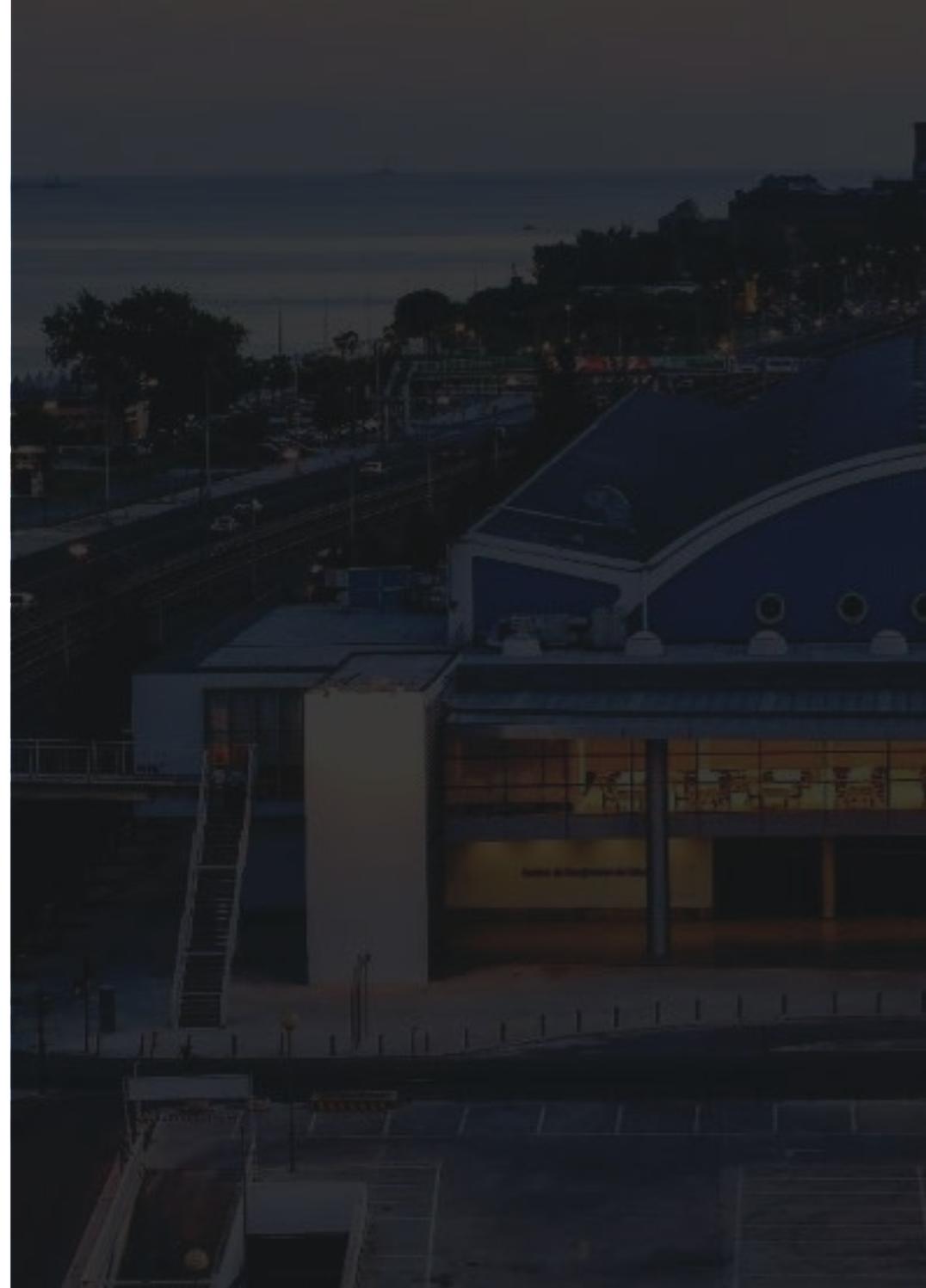Supported by:

Turismo
de
Lisboa

ITS: THE GAME CHANGER

Welcome to Europe's hub for innovation and smart mobility.

With the theme ITS: The Game Changer, the 14th ITS European Congress, organised by ERTICO – ITS Europe and the European Commission, will showcase the latest technologies adopted by the Lisbon Region, host of the event, together with all the available ITS services and solutions in Europe.

Lisbon is part of Europe's entrepreneurial and innovation ecosystem and enjoys global recognition as a welcoming destination. This, combined with ERTICO's mission and work on promoting and developing smart mobility services, promises a fantastic programme, innovative live demos and a great experience overall.

The sheer speed and scope of ITS, propelled by technological developments and social and environmental needs, are unprecedented. ITS has already made transportation much more efficient, demand-responsive and safe. And more is to come. The innovative potential of ITS is too vast to foretell our mobile future. We only know that ITS, The Game Changer, will keep changing the game – and us.

On behalf of ERTICO – ITS Europe and our 120 Partners, I would like to invite you to the 2020 ITS European Congress, which will take place in the vibrant city of Lisbon from 18 to 20 May.

Lisbon is one of the oldest cities in the world, firmly placed at the crossroads between tradition and innovation, blending historic areas with a modern forward thinking business district on the waterfront. Lisbon is a dynamic city, possessed with a rich cultural past with two historic landmarks listed by UNESCO as World Heritage sites (Belém Tower and Jerónimos Monastery). Yet, Lisbon is also a major European economic centre with a busy transport network and one of the largest container ports on Europe's Atlantic coast.

The ITS Congress will be held at the Lisbon Congress Centre – CCL; located close to the river Tagus and to the historic and cultural heritage of Belem. CCL will provide sponsors, exhibitors and participants with a total area of 29.000sqm to explore ITS at its very best. The 2020 Congress theme is "ITS the Game Changer", which highlights the significant changes the mobility sector is undergoing and the key role that intelligent transport services play in shifting the way we move and consume mobility.

The Congress will look at automation, digitalisation, new mobility services, but also focus on transport network design and operations optimisation as well as freight and logistics. These are all areas that we at ERTICO drive forward with our Partners and through all our activities and projects.

I look forward to meeting many of you and having the chance to share ideas at this not-to-be-missed event for the entire mobility community.

Jacob Bangsgaard
CEO, ERTICO - ITS Europe

The European Commission would be very pleased to welcome you to the 14th ITS European Congress, to be hosted in Lisbon from 18 to 20 May 2020.

The main theme of next year Congress, "ITS — The Game Changer", illustrates the capacity of Intelligent Transport Systems, digitalisation and automation to play a radical role for climate change mitigation, enhancement of safety and efficiency in the mobility and transport sector. Given the maturity of Intelligent Transport Systems, this year's discussions will present a holistic perspective of how ITS is changing mobility and life.

The Congress constitutes the perfect place for stakeholders to share experiences and develop their knowledge on the latest technology and policy developments in the field. It also offers a great opportunity to start partnerships to change mobility together. Being awarded Green Capital 2020, our host city is the new champion of urban sustainability: with best practice on environmental management, good urban and mobility planning, and citizens at the heart of this transformation, Lisbon is a perfect example of how to turn challenges into opportunities. This year, the event will display the host city's latest achievements in the field of intelligent mobility services and their link to the city's changing mobility vision and strategy.

In this context, the Congress will dive deeper into critical issues, such as connected and automated mobility, new mobility services, transport network design and transport network operations. The Congress will also specifically look at other topical issues such as digitalisation and data value chain, freight and logistics, illustrating how ITS can be the link between the various modes of transport and the "game changer" for the different stakeholders.

We truly hope you will participate and enrich the Congress with your experience, enthusiasm and knowledge on how to ensure that Intelligent Transport Systems can bring better services, new solutions and business cases to support European economy.

Yours faithfully,

Violeta BULC
European Commissioner for Transport

It will be a great pleasure for us to welcome you next year, for the European Congress on ITS 2020 to be held in Lisboa for the first time.

This Congress is being prepared with representatives of the industry and cities, with transport operators and research laboratories, with experts of space, communication and information society, with academics and managers of large, medium and small companies.

All of them have already been working for months in liaison with ITS Portugal and ERTICO - ITS Europe to prepare a very attractive programme allowing you to meet the most reliable experts and to help you to build intelligent and sustainable mobility policies able to provide efficient services to your citizens and/or your customers and to contribute actively to a better environment.

This Congress will also be an exceptional occasion to participate in technical visits and demonstrations of the most promising ITS applications and to exchange best practices with foreign colleagues. The large deployment of the ITS systems, which is necessary for the efficiency and sustainability of all the modes of transport, needs to be made in a consistent way in each country. To achieve this objective, we expect that

all the participants can share and discuss the latest technical innovations and enlarge their personal network of people they trust and know. All the ideas, proposals and experiences are very welcome in this event, whose success will also be your success.

Many cities, and especially those hosting this Congress, have launched mobility plans and services involving a significant number of stakeholders with a renewed and increased interest in citizens. This Congress will be the perfect place to talk to them about their day-to-day life and their mobility problems and solutions.

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

See you in Lisbon next year!

Jorge Delgado
Secretary of State for Infrastructure, Portugal

Climate change and road safety are the two main concerns in urban mobility. Technology and smart solutions will play a central role to help cities and countries to address these major problems.

The ITS European Congress is the event of excellency for stakeholders, users and policy makers, developers and investors, it is the opportunity to reunite the best practices with the most hi-end solutions.

In the last 10 years, Lisbon has led a comprehensive set of policies regarding climate change mitigation and adaptation action that position us as a leading capital city in this debate. The city has set ambitious targets and is involved in the establishment of agreements for the next steps of climate policy, following the UN sustainable development goals and the Paris Agreement.

Regarding road safety, the City of Lisbon has also an ambitious plan to reach zero deaths, severe injuries in road accidents by 2030. Although cars are safer and roads are better, road fatalities are still growing every year, and that is a challenge for all the companies of mobility ecosystem.

Urban mobility has a critical role in the pursuit of carbon neutrality by 2050, and a revolution is needed in the transport sector to achieve such an ambitious goal. The vision to achieve this is clear: creating a people centric mobility ecosystem, one that is accessible, efficient, reliable and safe, based on an integrated public transport network, complemented by innovative solutions, that allow for informed and sustainable choices, and which positions Lisbon as the reference European capital in the mobility field by 2030.

In 2020, Lisbon will be European Green Capital which is also an opportunity to celebrate mobility, smart mobility.

You are all invited to be part of the change.

Miguel Gaspar
Deputy Mayor for Mobility & Saftey, City of Lisbon

Today Intelligent Transport Systems and Services are designed to improve those topics contributing to a better life of citizens, at present, with safer roads and increased mobility, and, on the long run, improving climate change with reduced GHG emissions and fuel consumption. Portugal, and Lisbon in particular, are deeply committed to those objectives and during the last years have been doing important investments to achieve them.

The 14th ITS European Congress in Lisbon in 2020, will show what ITS has been achieved so far and, at same time, open the space to the latest technological developments. We will look at air, maritime and rail transport and will try to contribute to people and goods transport including the role of logistics and its development.

The increased role of digitalization and the impact of 5G in the future transport will be one of the key points on debate by the experts and we hope a reinforced way on the communications supporting transport will start to emerge. Also, the role of autonomous vehicles and all the implications coming up from their introduction on the roads will be further discussed to achieve

higher safety levels on the roads and on public transport, besides the improvements in the environment.

Innovation will play a great role at this Congress where startups devoted to ITS will be most welcomed and we expect a significant participation from university students and young entrepreneurs giving a contribution with new ideas and solutions for the next years.
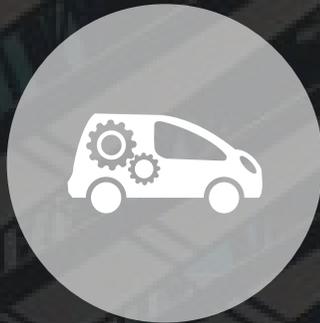
So, very interesting times are ahead of us till the 14th ITS European Congress and I expect that all our colleagues and friends will find most useful their participation and visit in Lisbon that, I'm sure, will welcome you warmly.

I look forward to meeting you next year from 18th to 20th May in Lisbon.

Rui Camolino
President ITS Portugal

Help us to classify the subject of your paper or session proposal by selecting one of the following topics when making your online submission.

AUTOMATED, COOPERATIVE AND CONNECTED ITS

NEW MOBILITY SERVICES

FREIGHT & LOGISTICS

DIGITALISATION AND THE DATA VALUE CHAIN

TRANSPORT NETWORK DESIGN AND OPERATIONS

Automated, cooperative and connected ITS

Quite soon almost every vehicle and every traveller will be **connected**. Being always aware of what is going on in transport and surrounding sectors will have profound effects on mobility and its users. All kinds of transport modes and related offerings of **personalised services** will be based on **data sharing** and **connectivity** anytime, everywhere.

At the same time highly automated driving changes the role of a driver from active vehicle occupant to a passenger being transported in an extremely safe and efficient manner to the destination. The main problems of the transport system will not be accidents or emissions, but **cybersecurity** and maintaining **human control**.

How do we guarantee the **backwards compatibility** and the **cooperative** dimension during then transition period? How do we synchronise the investments necessary in the communications, physical and **digital infrastructure** as well as new transport system policies, new **business models**, **new technology** and services? How should we move forward with **institutional**, **regulatory and legal issues**, including **liability**? In short, what are the best ways to get there?

Digitalisation and the data value chain

Satellite and terrestrial telecoms are giving us fast and affordable **connectivity** plus precise location referencing; **data from vehicles**, other **sensors and network operations** are allowing everyone real-time information and multimodal mobility opportunities that can be accessed from a range of mobile devices. Today's **"digital generation"** companies and users are learning how to integrate and use this data and move the focus from collecting, storing and owning it to processing and using it.

We are unclear how best to develop, deploy and operate digital infrastructure and we know that cities often own a great deal of **mobility data** but hesitate to share it with transport suppliers because of concerns about **privacy, safety, liability**. Similarly suppliers are concerned about maintaining **commercial security and competitiveness**. We need to speed up moves to bring the parties together for cooperative, shared, innovative solutions that bring benefit to the entire value chain.

Achieving integrated ITS across Europe for seamless multimodal transport and mobility services, operating on digital infrastructure, relies on digital **data exchange without borders**, on discoverability, **harmonisation** and rapid access to any data, publicly / privately generated and owned.

Do we have the right **data platforms, standards and legal frameworks** to deliver truly game-changing services to users at affordable prices? What more needs to be done and who should take the lead?

New mobility services

The mobility sector is changing as **end-users** are playing a more centric role while providers, continue to launch new services. But not all new suppliers have successfully adapted to **cities' expectations** and some solutions, *eg* **shared micro-mobility** or **urban air mobility**, challenge traditional policies and markets.

Only open schemes, such as Mobility as a Service (MaaS), involving public and private entities cooperating will deliver high value and move us towards the reconfiguration and long-term stability of urban mobility. New business and governance models are urgently needed, for both public and private sectors, to make the operation of all types of solutions economically viable and societally sound.

Interoperability and backwards compatibility are key to integrate both MaaS and newer services into existing strategies, systems and infrastructure, not only for technical specifications but also for commercial, operational and regulatory requirements.

Who will or should take the first step to bring all stakeholders together? How can we integrate new services into long-term transport and **urban planning** when the benefits and disadvantages are not yet fully known ? How do we support innovations and new businesses while simultaneously safeguarding **safety, accessibility, sustainability** and **environmental** policies that match the ambitions of cities and users?

Transport network design and operations

Transport network management has developed in capabilities from the reactive control of small areas to the **predictive management** of large regions. The key next steps are **integration of network management** with connected, cooperative and automated mobility, with timetabling and routing of public transport, with MaaS platforms, with freight & service delivery, and with policies on air quality, noise and sustainability. In this way public policy objectives regarding health, safety, equitable access and efficiency can be effectively pursued while preserving individuals' choice of mobility options.

The technologies are available, but how to use them efficiently to better **manage city space** for a mixed population of freight and passenger vehicles? How can we encourage **enhanced cooperation** between the parties **and co-creativity** to ensure that future mobility services will be provided as safely, efficiently and effectively as possible?
What changes are needed to transport networks in order to enable electrification of all vehicles?

Freight & Logistics

While freight transport and wider logistics often have been seen as a highly "traditional" field current developments are leading the sector into a new era. Goods will be transported by driverless vehicles – fully **driverless trucks**, as well as **platooning** are attracting high media attention, raising questions on the future of truck drivers' skills and jobs but also how automation can mitigate current and future increase in driver shortage. As well as **deliveries by drones and robots** of various sizes and shapes will bring goods to the customers where and when needed, promising multiple new benefits to the users and society and at the same time coming up with a number of new business, policy and technical challenges.

However the largest developments in the sector are happening "under the media radar". New **freight platforms** are being deployed, connecting freight and logistics stakeholders across Europe. Many companies use fleet management solutions to optimise operations but usually the associated data stays within companies so it cannot be used to optimise operations at ports, rail terminals and airports, limiting effectiveness of such **intermodal transport** and **cooperation** with other relevant stakeholders. Such platforms are enabled by the wide uptake of new technologies and **digitalisation** of all freight transport documents, which nevertheless are not allowed everywhere in Europe as the industry has not yet embraced them whole-heartedly.

On another aspect, what could the industry learn from existing ITS implementations such as smart tachographs, European Electronic Tolling System (EETS) and fleet management systems? How can digitalisation and electrification of freight deliveries directly reduce CO2 emissions?

Finally, change is on the horizon also in **maritime transport.** Digital information and automation are opening up new business opportunities and new possibilities to optimize cargo flows. How can maritime transport adapt to a changing world and face new threats like **cybersecurity** and human-machine interaction challenges?

WHAT WILL I LEARN ABOUT AT THE CONGRESS

The 14th ITS European Congress will host various sessions with top mobility experts speaking about key topics in the transport industry today. The event presents a strategic opportunity for all mobility stakeholders to come together, share knowledge, exchange best practices and make the necessary contacts to develop their businesses.

Streams

Plenary and Executive sessions will be organised in streams focussing on topical mobility issues. All attendees are welcome to join these sessions featuring start-ups talks, dialogue and panel discussions addressing challenges and opportunities in the mobility sector. Policy makers and executives from the industry will exchange practices on how to prepare cities and regions for transition into smart mobility, while moving people and goods efficiently, safely and cleanly. In these sessions, invited high level international industry executives, public officials and academics from around the world will draw from their experiences to share their views on ITS achievements, opportunities and challenges.

Proposed sessions (ex SIS)

Organized at the request of groups of international experts developing and deploying ITS, these sessions provide the opportunity to focus on specific topics of interest.

Technical / Scientific sessions

These sessions are composed of presentations by international experts and will includes topics encompassing all technical, scientific, economic, organisational and societal aspects of ITS.

Business presentations

Business presentations describe a service aimed at generating or improving a specific product, device or idea for the market.

DATA ACCESS

URBAN MOBILITY

AUTOMATION

INNOVATION

PUBLIC/PRIVATE PARTNERSHIP

SUSTAINABLE CITIES

USER-CENTRIC

CONNECTIVITY

SHARED-MOBILITY

TRANSPORT & LOGISTICS

MULTIMODALITY

DIGITALISATION

CALL FOR CONTRIBUTIONS

The European Programme Committee invites ITS experts to submit their contributions to be considered for presentation and publication at the ITS European Congress. The Congress host city of Lisbon has been chosen as *European Green Capital for 2020*. To contribute to this initiative and to reflect the overall Congress theme "ITS: the game changer" authors of Papers and organisers of Proposed Sessions will be asked during the on-line submission process to explain how their paper or session contributes to the above.

Call for proposed sessions

A limited number of Proposed Sessions will be included in the programme, and due to the increased competition for slots, to ensure as a wide a range of session topics, and to give an equal opportunity to all potential session submitters, the European Programme Committee will apply the following criteria:

- Proposals will not be considered unless the complete contact details of the organizer, moderator and at least 3 confirmed speakers are identified
- By submitting session proposal, you or the identified organizer are committing to organize the session content and participants (if accepted)
- If a majority of speakers named in the preliminary program are not registered and fees paid by the speaker registration deadline, the session will be removed, and the slot given to a candidate from the reserve list
- Session proposals that address a single project will be given low priority compared to those that tackle a broad area
- All session proposals must be submitted online. E-mail contributions cannot be accepted

  During the submission process you will be asked the following information:
- Organiser's contact details
- Topic and Keywords
- Session title and session description (long version for the review and short version for the programme)
- Name and contact details of the moderator and of a <u>minimum</u> 3 confirmed speakers
- Description of the speakers' individual contributions
- Description of the planned session format (eg debate, keynote, interaction etc) and scope

Key dates

Submission deadline for all type of Papers and Sessions proposals: **16 December 2019**

Notification of status to paper authors and Session proposals: **March 2020**

Deadline to submit final version of the full paper and register for the Congress: **9 April 2020**

Call for Papers

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

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

General guidelines:

- A draft submission is required for all types of paper but the reviewers will need enough content to be able to judge your paper appropriately.
- For Scientific Papers we require a minimum of 9 pages and a maximum of 12 pages.
- For Technical Papers we require a minimum of 5 pages and a maximum of 10 pages.
- You will have to indicate if your papers is
  - **Operational:** *for the geeks, how it works*
  - **Functional:** *for the users, what it does; how it can be used*
  - **Systemic:** *how it integrates in wider mobility systems*
- Papers which are submitted as Scientific Papers, but which are not judged to be of this top rating standard or relevance, may still be accepted as Technical Papers.
- Technical and Scientific papers will be put to a review and authors will be notified of the status.
- For accepted papers there will be no requirement to make a further submission unless the authors wish to update their paper, add diagrams or tables of results etc.
- If requested, authors may need to revise their paper addressing the reservations of the reviewers while submitting in final version of the paper.
- All proposals must be original and report on recent significant and substantive achievements.
- Topics may address any mode of transport.
- The official Congress language is English. Papers not submitted in English will automatically be rejected.
- We will not normally allow authors to submit more than 2 papers. Also, we will not normally allocate more than 2 speaking opportunities for presenting papers.
- Contributions can only be submitted through the online submission system.
- Paper submissions that are an abstract only or do not meet the minimum requirements will be rejected without review.

IET:

To enhance the scientific quality of this event, the Congress Organising Committee has entered into an agreement with the Editor-in-Chief of IET Intelligent Transport Systems (IET ITS), an SCI-E (ISI) and EI indexed peer-reviewed journal that has published papers from previous ITS World and European Congresses since 2006. See: **http://www.ietdl.org/IP-ITS** Shortly after the close of the ITS European Congress, authors of scientific papers that are considered suitable for expansion and academic publication will receive a formal invitation to submit an updated and enhanced paper. Papers will go through the journal's standard peer-review process and, if accepted for publication, will be indexed in the citations databases.

HOW TO BE PART OF THE
ITS EUROPEAN CONGRESS?

EXHIBITION & COMMERCIAL PARTNERSHIP

The Congress gives you exceptional access to the entire ITS community. Attracting everyone from the most established and recognisable companies to new players and industry influencers.

By exhibiting, you position yourself among the latest ITS solutions and most advanced technologies that delegates look for, putting you in the marketplace for the future of mobility.

Most of the commercial partnership options are in a classic package. However, we provide flexibility to best fit your strategic needs and marketing budget.

DEMONSTRATIONS

The purpose of the ITS Congresses is to push the boundaries of modern mobility.

Demonstrations offer delegates and visitors an exciting experience and the opportunity to learn about groundbreaking ventures and current and future mobility possibilities.

At ITS Lisbon 2020, demonstrations will take place close to the venue.

Demonstrators will have a unique opportunity to bring governmental, public and media attention to their brands and products with this ephemere test bench for smart mobility solutions.

PROGRAMME

The Congress Programme offers delegates an unparalleled opportunity to learn about the latest ITS technologies and new mobility concepts.

Experts from the mobility sectors (and beyond!) are invited to submit contributions for various type of sessions to share innovative ideas and lessons learnt, discuss mobility challenges that cities are facing today and how they can be addressed through ITS solutions.

Join the discussion on policy issues, research findings and industry best practice around the Congress main theme and related topics.

EUROPEAN PROGRAMME COMMITTEE

DIDIER GORTEMAN
ERTICO – ITS Europe (Co-chair)

JOSÉ M. VIEGAS
Consultant and former ITF Secretary General,
Portugal (Co-chair)

ANGELOS AMDITIS
ICCS, Greece

GÁBOR BARTHA
European Commission, DG CONNECT

ASHWEENI BEEHAREE
Satellite Applications Catapult, UK

GERT BLOM
City of Helmond, The Netherlands

RUI CAMOLINO
ITS Portugal, Portugal

VICTOIRE CHAMPENOIS
European Commission, DG MOVE

FIAMMETTA DIANI
European GNSS Agency – GSA, Czech Republic

FRANK FOERSTERLING
Continental Automotive GmbH,
Germany

NORBERT HANDKE
ITS Network Germany, Germany

JANINE HÄRTEL
ITS Hamburg 2021 GmbH, Germany

JEAN-MICHEL HENCHOZ
DENSO, Belgium

DAVID HYTCH
Parkgate Consultants, UK

ZELJKO JEFTIC
ERTICO – ITS Europe

CHRISTER KARLSSON
ITS Sweden, Sweden

DELPHINE KRIEGER
City and Eurometropolis of
Strasbourg, France

STEPHANIE LEONARD
TomTom, Belgium

MENG LU
Dynniq, The Nethelands

STEPHEN LYNN
Connected Places Catapult, UK

PATRICK MERCIER-HANDISYDE
European Commission, DG RTD

VASCO MÓRA
Lisbon Municipality, Portugal

AHMED NASR
HERE, Germany

ROGER PAGNY
ATEC – ITS France, France

ANDRÉ PERPEY
NeoGLS, France

STÉPHANE PETTI
European Investment Bank
Luxembourg

EETU PILLI-SIHVOLA
Finnish Transport Safety Agency
(Trafi), Finland

CHRISTIAN ROUSSEAU
Renault SAS, France

ERIC SAMPSON
ERTICO – ITS Europe

FRANCISCO SANCHEZ PONS
CTAG, Spain

MALIKA SEDDI
ASFA, France

DELPHINE SOUBIES
ERTICO – ITS Europe

PAMELA VALENTE
ERTICO – ITS Europe

MARGRIET VAN SCHIJNDEL-DE NOOIJ
EARPA, The Netherlands

JOOST VANTOMME
ACEA, Belgium

INÊS VIEGAS
TIS, Portugal

VOLKER VIERROTH
T-Systems, Germany

SASCHA WESTERMANN
Hamburger Hochbahn AG, Germany

For further information please contact:

ERTICO:

Programme
Pamela Valente
T: +32 (2) 400 0785
E: p.valente@mail.ertico.com

Delphine Soubies
T: +32 (2)400 0741
E: d.soubies@mail.ertico.com

Exhibition
Jasvinder Sidhu
T: +44 (0) 2079 734 700
E: lisbon.exhibition@mail.ertico.com

Commercial Partnership
Marketing & Media
Danielle McDonald
T: +32 (2) 400 0754
E: d.mcdonald@mail.ertico.com

HOST:

ITS Portugal
Inês Viegas
E: ines.viegas@its-portugal.com
T: +351 213 504 400

See you in Lisbon!
#ITSLisbon2020
www.itseuropeancongress.com