



EUROPEAN CONGRESS

TOULOUSE
30 May - 1 June 2022

Smart and Sustainable
Mobility for all.



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ITS European Congress Press Tool Kit

2022 ITS European Congress Overview

Practical Information

Congress Venue

MEETT Toulouse Exhibition and Convention Centre
Concorde Avenue
Aussonne
France

Official language

The official language of the Congress is English, and all speeches will be delivered in English.

Media Registration

All press must be registered. Please register at the Congress' [website](#). You will have to upload documentation, such as a Press ID. When you arrive at the Congress, please register at the registration desk in the lobby of the MEETT centre to get access to the Congress. Remember to bring your Press ID/documentation. Press are welcome to use the VIP registration desk.

Registration opening hours are:

Sunday 29 May: 15:00 - 18:00

Monday 30 May: 07:30 - 19:00

Tuesday 31 May: 07:30 - 19:00

Wednesday 1 June: 07:30 - 16:00

Press Conference

The Press Conference will take place on **Monday 30 May 2022 at 17:00 - 17:50** in room 10 in the MEETT Conference Centre.

Speakers will include:

- **Dominique Faure**, 1st Vice-President Toulouse Métropole
- **Jean-Claude Dardelet**, Deputy Mayor of Toulouse Métropole
- **Dr. Angelos Amditis**, Chairman, ERTICO – ITS Europe - The ITS Policy Summit Results
- **Herald Ruijters**, European Commission, Director of Investment, Innovative and Sustainable Transport
- **Stefan May**, CEO, Continental France
- **Joost Vantomme**, CEO, ERTICO – ITS Europe

Press Room

There is a dedicated press lounge at the MEETT Centre for Press and Media. It is located in the space opposite Room 4 on the first floor.

Opening hours:

Monday 30 May: 08:00 - 18:30

Tuesday 31 May: 08:00 - 18:30

Wednesday 1 June: 08:00 - 17:00

Media Lounge

There is a dedicated Media Lounge in the Exhibition Hall. Please feel free to conduct interviews and take pictures in the Media Lounge.

Press Releases from exhibitors

Please visit our online [Press Room](#) for all the latest press releases

Press Services

We are happy to provide you with latest press releases, photos as well as the daily highlight videos every morning from the ITS European Congress. Should you wish to conduct interviews and meet delegates, speakers and visitors during the Congress, please download the ITS Congress App for further networking opportunities. Should you have any questions, feel free to contact us at any time.

Congress App

The Congress App will keep you up to date on all Congress activities and events and gives you access to the interactive programme in your pocket. Find your way around the Congress centre, the exhibition hall and the demonstration area with all the necessary information at your fingertips. Search for "ITS Congress" on App Store or Google Play Store to download the Congress app.

Social Media

- [ITS Congress Twitter Account](#)
- [ITS Congress Webinar Recordings](#)
- [ITS Congress Flickr Account](#)
- [ITS Congress LinkedIn Group](#)
- [ITS Congress Facebook Group](#)

Logos, banners and visual material

Official Congress pictures will be uploaded to the [ITS Congresses Flickr account](#) every day of the event.

[Download the complete Communication Toolkit.](#)

[Download Banners and logo.](#)

ITS European Congress 2022 Facts

Date: 30 May - 1 June 2022

Location: MEETT Toulouse Exhibition and Convention Centre

The number of expected attendees: 3000 participants from over 50 countries

Who will attend? EU-Representatives, ministers, mayors, city officials, industry leaders, researchers, engineers, developers, students etc.

Bodies involved: ERTICO – ITS Europe, European Commission and Toulouse Métropole

Theme: Smart and Sustainable Mobility for all

Sessions: Over 100

Exhibitors: 90

Start-ups: 20

Demonstrations: 8

Technical Visits: 7

About the ITS European Congress

The ITS European Congress is part of a bigger cluster of ITS Congresses. It is organised in a European city in the years where there is no ITS World Congress in Europe. The ITS World Congress rotates between Europe, the Asia Pacific region and the Americas. For all European Congresses, ERTICO and its Partners work closely with the European Commission and the host city to deliver an outstanding event built around three pillars:

- International Programme sessions and presentations with top speakers from the industry
- Demonstrations of the current transport technologies developed and deployed throughout the world
- Exhibition of cutting-edge companies

These events are a strategic opportunity for the transport industry to come together and show the latest innovations, with a slightly different focus for each year. The Congresses display the host city's latest achievements in the field of intelligent mobility services, supporting the hosts in increasing the awareness of the importance of new solutions and investments in the host region and country.

About ITS (Intelligent Transport Systems & Services)

ITS - Intelligent Transport Systems and Services - integrates information and communications technology with transport infrastructure, vehicles and users. By sharing vital information, ITS allows people to get more from transport networks, in more excellent safety and less impact on the environment.

ITS help:

- Detect hazards on the road ahead and inform drivers of them even before they are visible; and keep vehicles at a safe distance from one another;
- Allow vehicles to communicate directly with the infrastructure around them and with one another - enabling drivers to make better decisions about their route and respond to warnings of congestion and accidents; and keep drivers informed of the local speed limit;
- Monitor drivers for signs of fatigue and tell them when it's time to take a break;
- Give public transport users real-time service information as well as smart and seamless ticketing solutions; and integrate public transport into traffic management systems, giving priority to buses and trams;
- Enable freight operators and customs authorities to share information about consignments and keep track of their position and status, as well as providing information on the most efficient, economical and secure routes for freight;
- Improving efficiency of passengers and goods transport to ease congestion - with obvious benefits for the environment, and; provide reliable real-time travel and traffic information, anywhere, anytime!

What will we see at the Congress in Toulouse?

The Congress will provide over 100 sessions and workshops where attendees will be able to attend a variety of discussions by high-level officials, as well as hear industry and academic leaders speak, a multitude of opportunities to experience outstanding demonstrations with cutting edge solutions, an exciting list of technical visits and tours, over 65 individual exhibiting companies showcasing the latest and most exceptional solutions and innovations in ITS, a start-up area with over 20 creative innovators, as well as a great networking and social programme. See the list of all [High-Level Speakers](#).

Highlights

- **The Official Opening Ceremony**
- **The Hall of Fame Awards**
- **The ITS Summit**
- **The Start-up village**
- **The Exhibition Area**
- **Demonstrations**
- **Public Day**
- **The Closing Ceremony**

Events during the Congress

- Press Conference, Monday, 30 May, at 17:00 in MEETT Room 10
- The Opening Ceremony, Monday, 30 May, from 10:30 - 11:30
- The ERTICO Cocktail (E11) Tuesday 31 May at 16:00
- European Startup Prize, ERTICO stand E11, Tuesday 31 May at 16:30
- ITS Dinner, Tuesday, 31 May, at 19:30, Espace Vanel
- ITS Public Day, Wednesday, 1 June - All Day
- Closing ceremony, Wednesday, 1 June, at 15:15

The ITS European Congress Programme

The five Congress topics have been chosen carefully to give you the opportunity to explore **Smart and Sustainable Mobility for all**. The latest technologies, the most innovative solutions for cities and citizens, the third mobility dimension, the integration of different forms of transport into a single, on-demand service: this and much more will be presented, discussed and showcased through live demos to create an unforgettable experience. ITS brings a piece of the future in the current times to experience what a smarter, cleaner and faster mobility looks like. Come and explore it with us! Access the [Programme at a Glance](#).

Congress Programme

- 100 + Sessions
- 4 Plenary sessions
- 2 High-level Summits
- 60+ Special Interest Sessions dedicated to specific themes
- 35+ Research Papers
- 100+ Technical Papers

Plenary sessions

All attendees are welcome to join the Opening and Closing Ceremonies and Plenary Sessions, where key personalities from the ITS world and beyond will address key ITS issues.

Four Plenary Sessions

1. Next Generation Mobility: Monday 30 May at 11:45 - 12:45
2. Deployment Challenges: Tuesday 31 May at 09:00 - 10:00
3. Sharing City Spaces: Tuesday 31 May at 14:00 - 15:00
4. Getting MaaS to Work: Wednesday 1 June at 14:00 - 15:15

Special Interest Sessions

These sessions are organised at the request of experts developing and deploying ITS and provide an opportunity for detailed discussions on specific topics of interest.

Technical Paper Sessions

These sessions are composed of presentations by international experts and address technical, economic, organisational and societal aspects of ITS with a strong focus on practical deployment.

Research Paper Sessions

Research papers describe work showing new learning that advances the state-of-the-art based on scholarship, innovation and analyses of new types of problems or solutions.

List of Congress Topic Experts at ERTICO - ITS Europe

Services for Citizens

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Cities as Logistics Hubs

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Demonstrations

The ITS Congress offers a large-scale and unique demonstration platform for the presentation of technological innovations in the field of ITS. Demonstrations present the highlights of the current technical possibilities within the framework of the ITS themes in an interactive way for the visitor.

At this year's European Congress, an area of 25,000 sqm will be entirely dedicated to demonstrations. Mobility professionals will showcase the performance, innovation of their products and solutions offered under real conditions of use. All participants in the ITS European Congress are invited to experiment with a variety of solutions, while accessing the expertise of the demonstrators.

Among our demonstrators are **Orange**, who will present an innovation in cooperative early collision avoidance. **Vicomtech** will offer a complete immersion in high-precision location systems and **Auve Tech**, which creates autonomous transport solutions to facilitate the last mile, will provide an autonomous shuttle that will operate on the demonstration area. Another player in the autonomous vehicle sector, **EasyMile**, will offer their shuttle from the entrance of the exhibition center to the entrance of the Congress.

Other mobility players will also be present in the outdoor demonstration area and will allow participants to test tele-operated driving, a "Battery-as-a-Service" system, drones, etc. Among the demonstrations, participant will experience innovative solutions including:

- Cross-border control
- High-precision location system
- Autonomous vehicles
- Driving Assistance
- Tele-operated driving
- Batteries as a Service
- Drone

The Demonstration area will be open for the duration of the Congress and will be freely accessible to all ITS European Congress participants.

[Click here for more information.](#)

Technical Visits

Technical visits are a unique opportunity to explore the most advanced ITS technical developments in real-life operations. Technologies will be shown in available locations, in and around Toulouse. Round trips from the MEETT Toulouse Exhibition and Convention Centre to the locations will be organised. The exact schedules are communicated in the detailed description of the visits.

- Technical Visit slots can be booked via online registration at the unique price of €45,00 excl. VAT per person, per visit. Seats are limited.

All participants in the ITS European Congress 2022 in Toulouse are welcome to participate in technical visits and discover remarkable innovations and sophisticated technologies in the smart and sustainable mobility domain.

This year's extensive program covers a broad range of exemplary innovation laboratories, production sites and centers of academic excellence. For instance, a visit of Renault Software Lab at Basso Cambo which develops software architectures and embedded systems integrated into connected, autonomous and electric cars. Continental's campus in Toulouse will take visitors from chip assembly to in-vehicle services, through product testing and validation, software development and service integration. Participants are also invited to board the largest French urban cable car Téléo inaugurated on 13 May 2022.

Other points of interest include, in particular, the Francazal base, which hosts promising innovations, such as driverless vehicles of EasyMile or futuristic supersonic train of Hyperloop. Autonomous driving technologies may be further explored at the Oncopole that serves as a testbed for the EZ10 first autonomous shuttle service of EasyMile which operates on public roads at level 4 of autonomous driving, without a human assistant on board, in Europe.

Finally, the B612 will demonstrate a vibrant ecosystem of collective intelligence in support of companies and innovative projects in the aeronautics, space and embedded systems sectors. The Hub Innovations AIT will offer a variety of innovative projects related to augmented reality, traffic flow management, road traffic order data hub and air traffic data visualization.

[Find out more about the Technical Visits here.](#)

ITS European Congress Partners

Presenting Partners:

Google Cloud | Qualcomm

Thematic Partners:

Michelin | ATEC ITS France | La Region Occitanie

General Partners:

SWARCO | T-Systems | Ubitransport | NXP | Sopra Steria | ITS World Congress 2022 Los Angeles

ITS European Congress Media Partners

Baltic Transport Journal | Cities Today | Cyber Defence Magazine | e-ITS Hub | Highway News | Infopro (Usine Digitale) | ITS International | La Depeche | La Lettre M | La Tribune | Mobility Makers | News tank Mobilités | Revolve | Smart City Magazine | Supply Chain Magazine | Traffic Technology International | Touléco

ITS European Congress ITS National Partners

ITS France | ITS Estonia | ITS Finald | ITS Germany | ITS Austria | ITS Denmark | ITS Euskadi | ITS Ireland | ITS Italy | ITS Mobility | ITS Norway | ITS Portugal | ITS Romania | SITS | ITS Spain | ITS Sweden | ITS Switzerland | ITS UK | SDT

More information

For more information on sessions, exhibition opening hours, demonstration reservations, and social programme, please visit the Congress website here: www.itseuropeancongress.com

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About ERTICO - ITS Europe

[ERTICO](#) connects public authorities, industry players, infrastructure operators, users, national ITS associations and other organisations in Europe, the United States of America, Japan, Russia, and China to innovate for tomorrow's journey.

ERTICO, together with more than 110 Partners, develops, promotes and deploys smart mobility solutions and services for the benefit of all. Since 1991, ERTICO has coordinated and worked on dozens of European projects, organised 38 ITS European and World Congresses, undertaken a central role in public consultations and policy agendas, and established long-term relations with key players worldwide. Since 1994, ERTICO has organised the World Congresses in Europe in cooperation with the European Commission, the local Host, ITS America and ITS Asia Pacific.

About the Host

Toulouse, Occitanie region's capital city is the fourth largest metropolitan area in France by population, and is also the leading city in terms of demographic growth and GDP. A dynamic and attractive European city that offers an excellent quality of life.

Toulouse, as world leader in aeronautics and European capital for the space sector, has an exceptional ecosystem in transportation of the future, with world-class academic labs such as LAAS-CNRS. Many institutional & structural projects are emerging in Toulouse: Neocampus for the demonstration of autonomous vehicles, Francazal airport for the experimentation of autonomous vehicles and drones, Vilagil, Commute, Urban Air Mobility and many more.

A new generation of artificial intelligence called hybrid AI is developing in Toulouse, in order to provide better guarantees in terms of reliability, robustness and the ability to explain the results of the algorithms used in particular by the intelligent transportation systems.

Leading companies in intelligent transportation systems that have chosen ITS Congress Toulouse to participate include Continental, Siemens Mobility, Renault, Actia, NXP, HyperloopTT and Easymile.

We look forward to welcoming you to the 2022 ITS European Congress in Toulouse!

Articles produced by the ITS European Congress

Article 1. Reconnecting for smart and sustainable mobility

Toulouse has an ambitious vision: working alongside citizens, industry and public authorities to build tomorrow's smart city. This means *connecting the dots* across people, infrastructure, modes of transport, technology, environmental concerns and decarbonisation to create a more fluid, friendly, innovative, dynamic, attractive and sustainable cityscape.

This vision is shared on an even larger scale by ERTICO-ITS Europe. These topics were discussed in the first of a new webinar series ahead of the 2022 ITS European Congress at the MEETT Exhibition and Conference Centre in Toulouse, from 30 May to 1 June. The congress theme is Smart and Sustainable Mobility for all.

Toulouse: towards the smart city

'The challenges we all face are not really new – the European Green Deal, digitalisation, resilience – but they are accelerating dramatically,' says **Jean-Claude Dardelet**, Deputy Mayor and VP of Toulouse Metropole, ERTICO partner and congress co-host. 'The resilience of our city can be summarised by the attention we give to our citizens' quality of life, on the outstanding smart services we want to deliver and a sustainable economy and jobs based on talent and our excellencies.' He points to the Toulouse 'magic triangle' that comprises domain excellencies in education, research and industry. So why, specifically, is the 2022 congress coming to the pink city? Toulouse also has what Jean-Claude calls 'the most important investment plan in transport': more than four billion euros for public transport infrastructure over the next decade. 'With four million individual displacements daily, the city is committed to integrated mobility,' he says. For example, this already includes an innovative new urban cable car system integrated into the public transport network.

'We focus on 'virtuous innovation' with exhaustive use of digital and climate-friendly solutions,' Jean-Claude continues. In fact, he calls Toulouse 'the home of smart and sustainable mobility' - given it is home to technology and innovations including underground metro lines, automotive manufacturing, overland rail, high-speed trains, civil aviation including drones and new hydrogen airplanes, Ariane launch vehicles, Galileo satellite navigation, and even driving missions on Mars every two weeks from the city, plus managing the Mercator Ocean sea-state forecasting system. A huge number of organisations and international partners involved in these activities are exhibiting and presenting at the ITS European Congress.

'Something for everyone'

'The congress is a wide-ranging event that includes a highly technical programme – with more than 100 sessions, there's something for everyone,' says **Lisa Boch-Andersen**, Congress Director, ERTICO-ITS Europe.

'While we will welcome visitors from around the world, reflecting the global and connected nature of supply chains, mobility, transport and logistics, this event is created by and for our European members, partners and stakeholders.'

The ITS Summit brings together public and elected officials from across Europe with industry leaders during the congress. At the same time, the Start Up Hub offers a dedicated exhibition area, pitching possibilities and awards. The popular Public Day invites local residents to explore smart mobility: services for citizens is a key theme, alongside next-generation mobility, green and sustainable mobility, moving from large-scale trials to deployment, and cities as logistics hubs.

Jean-Claude Dardelet adds, 'The congress will feature unique demonstrations including autonomous vehicles, driving assistance, teleoperated driving, managing crossroads with traffic lights for AV, and urban air mobility/drones. Technical visits include the 'factory of the future' (Actia), the innovation laboratory for mobility and industrial R&D (Continental, Renault), the mobility centre of excellence (UAM) at Francazal, and new public transport infrastructure with our Tisséo network.'

Moving closer to smart and sustainable mobility

'To help us move towards smarter and more sustainable mobility for all, ERTICO has defined roadmaps across the four focus areas of Connected & Automated Driving, Clean and Eco-mobility, Urban Mobility, and Transport & Logistics,' says **Johanna Tzanidaki**, Director of Innovation and Deployment, ERTICO-ITS Europe. 'These are reflected in interactive special interest sessions at the congress.' For example, 'Data exchange for interoperable mobility services in Europe' (services for citizens strand) covers multi-partner innovation platforms under the ERTICO umbrella, including TISA for traveller information, TM2.0 for traffic management, MaaS Alliance (Mobility as a Service), TN-ITS GO map exchange platform, and SENSORIS (SENSOR Interface Specification). The congress website will have details of all the special interest sessions as details are finalised.

'Together we are stronger'

'The congress will make ITS and smart mobility tangible,' says **Joost Vantomme**, CEO of ERTICO-ITS Europe. 'We are unique in running events of this nature: this is about innovation, creating tomorrow, and making the journey together with our partners, across many different modes of transport.'

Continental is one such partner and will present tangible innovations in Toulouse. 'We are a leader in access technology: almost 40% of all key fobs are produced by Continental, with many produced in Toulouse,' says **Bruno Krief**, Product Manager Europe - Key as a Service, Continental Automotive France. Continental's secure Key as a Service (KaaS) platform for vehicle access, start authorisation and vehicle data upload utilises cutting-edge electronics, cloud technologies, telematics, and cyber security. 'The purpose is to improve the user experience and serve current mobility trends, through selective sharing, for example,' Bruno says. 'This could mean providing access to trunk only for deliveries, friends and family car sharing, or programming key sharing for certain times only. We can give highly versatile access to a car using digital technologies like smartphones, smartwatches and NFC cards with a reader on the windshield.' The many applications include commercial fleet management, rental cars (Avis is already a customer), peer-to-peer car-sharing (e.g. Turo) and mobility service providers.

Joost Vantomme adds, 'Smart mobility can only really be achieved if we can effectively connect the dots, innovate across sectors, and deploy strong public/private partnerships for many projects and platforms. This world will be brought alive in Toulouse — I hope to meet you there!'

ENDS

Article 2: Next-generation solutions: mobilising the future

Smarter and more sustainable mobility will be achieved based on multiple inter-connecting factors, not least cutting-edge technology to support innovation and create next-generation solutions: from AI, automation and autonomous vehicles to mobility data and digital enablers such as 5G and 6G.

These topics were explored by an expert panel in the latest webinar ahead of the ITS European Congress, which takes place at the MEETT Exhibition and Conference Centre in Toulouse, 30 May to 1 June. Next-generation solutions is a main Congress theme.

‘Future smart mobility requires leading-edge technology and connecting the dots in terms of vehicles, technology, infrastructure, people and goods,’ says **Joost Vantomme**, CEO of ERTICO-ITS Europe. Solutions being developed, tested and deployed now - including projects and platforms managed by ERTICO - are shaping the future of traffic management and traffic efficiency, safer roads, logistics, and cleaner greener transport. Mobility data, edge computing, artificial intelligence and cyber resilient infrastructure are important elements in providing these solutions.

All about the data

‘In next-generation solutions, data is the common denominator: using data and information to benefit moving people and goods, in urban mobility, autonomous transport, platooning, and so on,’ says Coen Bresser, Senior Manager of Innovation and Deployment, ERTICO-ITS Europe. He points to the importance of FAIR Data Principles around data availability, accessibility, and interoperability and useability. ERTICO innovation platforms and partnerships cover all these areas.

The work of Dutch C-ITS data aggregator Monotch illustrates the critical role of data, plus the need to move from trials to mass deployment: ‘Next-generation Cooperative Intelligent Transport Systems mean serving a massive audience compared to previously, and having a far greater impact,’ says **Menno Malta**, Monotch CEO and founder. ‘This is a multi-stakeholder ecosystem, with many data providers and consumers. And while C-ITS has made huge progress, technical and organizational obstacles remain that can block large-scale deployment.’

Designed to overcome these barriers, the Monotch TLEX platform is, he says, a game changer. Three large-scale live use cases are deployed in 29 of the Netherlands’ 40 main cities, with two million active vehicles connected in the ecosystem and more than 1 billion C-ITS data exchanged every day. Benefits seen include a 15.5% reduction in CO₂ emissions, 10% reduction in travel times, and an estimated 4.4% reduction in fatalities and 4.8% reduction in injuries. Monotch is presenting and exhibiting in Toulouse.

Safer roads

Continuing the safety theme, ERTICO partner and Toulouse exhibitor PARIFEX has adopted 3D LiDAR (Light Detection and Ranging) tech to strengthen its speed control systems. Its approach combines 3D LiDAR with camera, image processing and AI to make roads safer in multiple settings, providing a 360-degree field of view, speed measurement, classification, identification, tracking and accurate data collection, all in real time.

‘We place great importance on innovation, and road accidents and mortality rates are a major concern: we want to protect all users and especially the most vulnerable,’ says **Nathalie Deguen**, PARIFEX speed enforcement department. 3D LiDAR provides increased control, with the multifunctional NANO-CAM sensing solution providing efficiency and precision. This approach can be applied in diverse applications including traffic management and autonomous vehicle projects, helping future mobility to be smarter *and* safer.

Towards CAD safety assurance

‘Connected & Automated Mobility has the potential to make transport safer, greener and more accessible, but only if it’s done right,’ adds **Tom Alkim**, Strategic Adviser CCAM at traffic and mobility management service provider MAPtm, which is part of the Traffic Management for Connected and Automated Driving (TM4CAD) project consortium. ‘Questions remain, including how to integrate connected and automated vehicles (CAVs) into broader transport systems, and how they interact with other forms of mobility.’

In this context, Operational Design Domain (ODD) describes the combination of operating conditions under which a driving automation system or feature is designed to function. Gaps emerge, however, usually due to changes in infrastructure, traffic conditions and weather. To help overcome those gaps, TM4CAD is exploring Distributed ODD Awareness for CAD systems. This means vehicles are aware of their surroundings - scenery, environments, dynamic elements – via maps, vehicle sensors, roadside equipment and more, with information about different attributes also coming from third parties. Data and connectivity are, again, core requirements.

Making ITS tangible in Toulouse

The three-day ITS European Congress combines high-level programme, comprehensive exhibition and detailed technical agenda, with more than 300 submissions received across the main Congress themes: next-generation solutions; services for citizens; green and sustainable mobility; from large scale trials to deployment; and cities as logistics hubs. ‘Our opening ceremony will feature a fantastic inspirational speaker, the Toulouse-based astrophysicist Dr Sylvestre Maurice, who discovered ice on the Moon and water on Mars,’ says **Lisa Boch-Andersen**, Director of Communications, Congresses & Events, ERTICO-ITS Europe.

The Congress also includes the ITS Summit: a rare opportunity for industry leaders and senior representatives from local and national government to meet and discuss ITS issues in roundtables. Topics to be explored include data ownership and access to data, inclusion and the digital divide, data sharing, and interoperability. Lisa adds, ‘Registration for the Congress is open now, and we hope to see you in Toulouse.’

ENDS

Article 3: Towards greener and more sustainable mobility

Concepts around traffic management are changing direction in favour of *mobility management*: a multimodal, digitally-enabled world that moves people and goods in more efficient ways and with positive impacts on air quality, emissions and use of space.

These ideas were explored during the third webinar in the run-up to the ITS European Congress 2022 in Toulouse. Indeed, Clean and Eco Mobility is one of ERTICO-ITS Europe's four priority areas. "This topic cuts across the congress programme, including plenary sessions, exhibitors and technical demonstrations, and in areas ranging from electro mobility and renewable energy to user engagement," says **Lisa Boch-Andersen**, Director of Communications, Congresses & Events, ERTICO-ITS Europe. The congress takes place at the MEETT Exhibition and Conference Centre, 30 May to 1 June.

'Toulouse is a great multimodal environment to showcase smarter, greener mobility,' says **Joost Vantomme**, CEO, ERTICO-ITS Europe. 'This subject is high on the agenda for European institutions and authorities everywhere. Indeed, the first findings of the ERTICO City Moonshot project, published this March, highlight Sustainability (air quality & climate change) as the number one issue for the 150 cities interviewed in phase one.'

EU urban mobility: healthier, safer, joined-up

The EU's proposed new urban mobility framework emphasises sustainability, improving life for commuters, and helping cities fulfil their roles as essential transport hubs. 'The focus has changed from traffic management to the movement of people and goods,' says **Isabelle Vandoorne**, Deputy Head of Unit, European Commission DG MOVE.

'This includes enabling stronger public transport networks, more active mobility such as walking and cycling, efficient zero-emission urban logistics and last-mile deliveries, and better management of mobility flows through multimodal hubs and digital solutions.'

Delivering this vision requires a holistic approach, connecting the dots across multiple disciplines and technologies. This will, for example, include a reinforced approach from EU institutions to TEN-T urban nodes: increasing from eight to 424 nodes by 2025, each with a Sustainable Urban Mobility Plan (SUMP), and promoting more efficient low-noise zero-emission transport, greening urban fleets, and increasing the modal share of public transport and more active modes. As Isabelle points out, 'ERTICO has previously helped us to draft SUMP guides on key areas such as MaaS and ITS.'

'A topic on everyone's lips'

'This is a subject everyone is talking about it: using ITS in clean mobility to reduce pollutants and noise, improving health and quality of life, and in eco-mobility to reduce greenhouse gas emissions and address the climate crisis,' says **Jean-Charles Pandazis**, Senior Manager of Innovation and Deployment, ERTICO-ITS Europe. In this area, he says ERTICO targeted activities include developing next-generation vehicles integrated into electrified transport infrastructure, deploying smart electro-mobility in cities and interurban corridors, a Europe-wide smart infrastructure for cleaner modes, and developing common methodologies to assess the impacts of ITS measures and solutions.

Global transport solutions provider Kapsch, an exhibitor at the congress, is measuring one such area: reducing traffic emissions through ITS, specifically tolling, traffic and demand management solutions. 'Our vision is to contribute to a healthy world without congestion,' says **Stefanie Gritzmann**, Environmental Sustainability & Corporate Innovation, Kapsch. Transport contributes to one-quarter of all emissions in the EU, with road traffic causing more than 70% of transport emissions. Globally, 80% of citizens are subject to bad air quality.

'We need the right policies to support the right technologies,' Stefanie continues. 'In our own fields of expertise, we've seen distance-based road charging save up to 20% in CO₂ emissions - the 'polluter pays' principle, underlined in EU law – and techniques like High Occupancy Vehicle (HOV) lanes reducing vehicles and congestion.' She points to other measures such as the impact of Low Emission Zones in cities such as London, Milan and Stockholm in reducing GHG emissions and particulates, and avoiding stop-and-go through improvements in traffic lighting and incident management. Fully connected vehicles and AI also have the potential to deliver further CO₂ reductions, with more studies and common methodologies required.

Tracking activity

Monitoring is critical to learn from experience, define the way ahead, and keep developments on track. With active mobility a hot topic, Eco-Counter is an innovative French provider of solutions to count and analyse how people and vehicles move. Its solutions for bicycle, scooter and vehicle counting include magnetic loops, 2D cameras and AI algorithms, with matrix and digital displays to communicate data with citizens.

'Bike usage and micromobility have increased a great deal,'" says **Philippe Delmas**, Client Consultant. He says Eco-Counter is increasingly engaged in data science, going further with the data. "For example: data extrapolation, combining count data with GPS tracers for scooter mobility in Lyons with crash data from Vancouver on collisions between cyclists and cars, performing correlation analysis, and arriving at a map showing risk exposure.' Eco-Counter is also exhibiting at the Toulouse congress.

Building on experience: autonomous driving on public roads

Toulouse-based EasyMile is also contributing to the sustainability agenda with software and solutions for driverless mobility and goods transportation. 'We partner with manufacturers to fully automate vehicles, with technology that's built on safety-by-design,' says **Olivier Pairot**, Product and Marketing Director. He says five years of deployment, with 180 shuttles running in locations worldwide, have meant significant learnings. 'These include evidence of the real global demand for shared autonomous mobility, with a desire for fewer cars on the streets, and a business case supported by benefits such as reduced pollution and a safer environment.' As regulation become more stable and public acceptance increases, he believes the stage is set for Level 4 fully driverless operations. EasyMile is exhibiting at the ITS European Congress, and is involved in three technical visits.

'Autonomous mobility is another part of the jigsaw, as we move towards a more holistic approach to green and sustainable smart mobility,' adds Joost Vantomme. 'And it is another example of innovation that visitors will see in action in Toulouse, alongside expert high-level speakers from Europe's institutions and across the ITS ecosystem, and a wide-ranging programme of technical sessions and demonstrations. I look forward to seeing you in May!'

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Article 4: Knocking at your door: mobility solutions for citizens and cities as logistics hubs

Cities are in the vanguard of smart and sustainable mobility, embracing diverse technologies and approaches to de-carbonise transport, combat congestion and improve air quality. This includes intelligent traffic and mobility management, new distribution hubs, Mobility as a Service (MaaS), multi-modality, using data in new ways, and eco-mobility for last-mile deliveries.

These topics and others were discussed during the fourth webinar ahead of the 2022 ITS European Congress in Toulouse, from 30 May to 1 June at the MEETT Exhibition and Conference Centre.

‘Properly understanding city and citizen perspectives is critical to delivering the most effective solutions,’ says **Joost Vantomme**, CEO, ERTICO-ITS Europe. ‘ITS today is not only about moving people and goods in smarter and greener ways, it is increasingly about moving data as well. The upcoming congress will reflect all these different angles and solutions, making them tangible.’

Two years ago, ERTICO launched its large-scale City Moonshot initiative to engage with cities to better understand their needs and what they are doing in mobility and transport. Phase one results are now available on the [ERTICO website](#). ‘This global initiative reaches out to cities in Europe and beyond across key themes including sustainability, air quality, data sharing, engaging citizens, electromobility and urban air mobility,’ says **Vladimir Vorotovic**, Director of Innovation and Deployment, ERTICO-ITS Europe. Importantly, these themes align with European Commission policy and plans.

The new EU Urban Mobility Framework

Zero-emission city freight logistics and last-mile deliveries feature in the European Commission’s new Urban Mobility Framework, published in December 2021. ‘We want people and goods to move more sustainably in our cities, to make life easier for commuters travelling to school or work, and support cities as essential transport hubs,’ says **Poala Chiarini**, Policy Officer Innovation and Research, European Commission DG MOVE. This includes promoting public transport and active mobility, and prioritising zero-emission solutions for urban fleets and last-mile deliveries.

In turn, this will require new multimodal hubs, improved mobility management, and innovation to address challenges such as congestion and emissions. Poala says ‘the Commission wants greater collaboration between local authorities and private stakeholders, improved integration of cities as logistics hubs with long-distance freight, more work at an EU level on data collection and sharing for urban freight, and accelerating development and deployment of sustainable solutions like cargo bikes’. Proposed actions include:

- Integrating sustainable urban logistics plans (SULPs) in the SUMP framework.
- Greater dialogue between parties.
- Possible revisions to CO2 emissions performance standards for heavy-duty vehicles.
- Speeding up digitalisation, including a common European mobility data space and a proposed revision of the ITS Directive.

If this is the policy context, what are companies and cities already doing to make it a reality?

Shaping the cities of tomorrow

'Google is helping to shape the cities of tomorrow, offering a scalable and secure unified Multimodal Management Platform,' says **Chacasta Pritlove**, Public Sector Account Executive at Google, a Presenting Partner at the European Congress. Google solutions include Android Auto for in-car connectivity, Waymo (autonomous driving), Waze (satellite navigation) and Wing (delivery drones).

A key goal is reducing traffic while ensuring businesses and individuals receive deliveries in a timely manner. It is possible, for example, to create a modern predictive platform including rail transport to integrate and orchestrate freight movements with passengers; logistics companies can plan, ship, track and pay for deliveries and shipments while simultaneously contributing to carbon reduction.

In addition, Urban Consolidation Centres are an increasingly popular concept: larger long-distance trucks delivered to a distribution hub on a city's outskirts where contents are unpacked and then delivered to their final destinations in smaller electric vehicles. Google innovations for last-mile deliveries include Sidewalk Labs' urban design platform Delve, Pebble for parking and curb management, and Google Maps' Last-Mile Fleet Solution.

Samuel Pierce of Cycling Industries Europe believes cargo bikes are a highly effective solution for zero-emission urban logistics, especially last-mile deliveries. Faster and cleaner than vans, 'Cargo bikes help de-congest cities, particularly where cycling-specific infrastructure exists. They are energy efficient, support active travel, reduce noise, and reclaim street space for people.' With air pollution Europe's most significant environmental health risk, responsible for 4000,000 premature deaths annually, plus the unstoppable rise of deliveries to the doorstep, their potential is clear. The Horizon2020 funded City Changer Cargo Bike project has been exploring opportunities presented by cargo bikes, micro hubs and micro consolidation centres.

A city perspective: data for sustainable urban mobility

As Finland's third-largest city and growing fast, Tampere wants to help people rethink mobility, optimise existing systems, improve quality, and 'build new' in ways that have the greatest impacts. In 2022, the city's Sustainable Urban Mobility Plan was recognised as the best in Europe. A key issue is how to collect, connect and utilise mobility data in the best ways and make it easily accessible to citizens as new City Hubs develop. 'We already have some data to support our efforts, particularly in terms of *rethink* and *optimise*,' says **Tiina Leinonen**, Mobility Coordinator Climate and Environmental Policy Unit at the City of Tampere, an ERTICO Partner. For example, a mobility CO2 calculator gives citizens personalised information on their journeys, emissions, most-used modes, etc. 'It makes people rethink how they want to live and move around,' Tiina says. It also provides information and mapping for traffic and city planning. Tampere also has an IoT platform that piggybacks on its streetlight infrastructure, providing a sensor network for data collection, with Traffic Monitoring using cameras and image analysis using pattern recognition tools. The insights gained can be shared to engage citizens and nudge their decision making towards more sustainable mobility.

Bringing it all together

'Our role is to connect the dots, harnessing all the talents and technologies and helping to focus development in the best ways,' says **Lisa Boch-Andersen**, Director of Communications, Congresses & Events, ERTICO-ITS Europe. 'The European Congress brings us together, demonstrating the diversity of our community and showcasing real-life innovation. It's an unmissable event for everyone involved in ITS, so please join us in Toulouse.'

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Article 5: Making it real: moving from large-scale trials to deployment

What does it take to deploy ITS solutions on European roads? Safety is a key requirement for successful rollout, alongside the right policy frameworks and new thinking, particularly in data collection and application. With the 14th ITS European Congress about to kick off in Toulouse, these themes were explored in the fifth and final webinar in the run-up to the event.

'How we get technologies and innovation to the market quickly and safely features prominently at the Congress, including the plenary 'Manoeuvring around obstacles on the road to deployment' and many special interest sessions,' says **Lisa Boch-Andersen**, ERTICO's Director of Communications, Congresses and Events.

Running from 30 May to 1 June at the MEETT Exhibition and Conference Centre, the 2022 Congress is set to welcome up to 3,000 people who will experience presentations, exhibitors, demonstrations and technical visits that showcase the entire ITS ecosystem.

Driving data: our ally in road safety

Safety is a top priority at all times but even more so when deploying solutions. As in so many areas, data can provide the key, helping reduce the 1.3 million annual deaths worldwide caused by road traffic accidents. 'We have unique expertise in using driving behaviour data to help prevent crashes,' says **Guillaume Puiseux**, Strategy & Marketing Director of Michelin DDi, a Thematic Partner at the Congress. 'This is about unlocking the potential of driving behaviour data to help optimise traffic infrastructure and deliver safer roads.'

With more than a billion kilometres analysed and tens of thousands of connected vehicles in Europe and the USA, Michelin DDI collects and combines different data types (e.g. GPS, driving events, speed) and then carries out advanced contextualisation (road, weather, time) to transform data into actionable insights. These feed into preventative road safety plans. Guillaume says authorities can benefit from the simplest digital safety diagnostics, such as identifying and ranking near-miss hotspots to plan corrective action.

Innovating to deploy

'Start-ups play an important role in getting smart mobility running live on Europe's roads, moving forward technology readiness levels,' says **Frank Daems**, Senior Manager Innovation & Deployment, ERTICO-ITS Europe. The 2022 Congress has a dedicated Start-up Hub and a full programme of activities, with 43 start-ups attending from 18 countries.

Austria's IoT Baseplate is an excellent example of a successful start-up. Founded in 2021, the multi-award-winning company provides onsite data intelligence for road traffic use. High-quality data is essential for digitising transport, but such data is often insufficient or non-existent, especially for temporary events like roadworks. This gap often results in unnecessary congestion and accidents. IoT Baseplate's solution is simple but ingenious: retrofitting the standard road K1 TL baseplate, turning it into an integrated hardware and software IoT solution to detect, analyse and communicate traffic data.

'It's robust, self-sufficient and extremely versatile,' says **Markus Dorn**, CTO of co-founder. Traffic events are transformed 'from an often poorly networked and analogue infrastructure into a valuable enabler for mobility megatrends.'

A six-month pilot in Graz, Austria's second-largest city, is evaluating issues such as time and cost savings, simplicity of set-up, and behaviour of the system in day-to-day life. The next steps are to synchronise planned versus actual traffic events and eventually create an ITS National Event Database.

'Making roads smarter and safer'

Operating in a similar space but focused on tracking and understanding road infrastructure, Spanish start-up ASIMOB has deployed an autonomous AI-based road inspection system in Cunit, a beach town 30km from Barcelona. During holidays and weekends, Cunit's population can increase by five times, placing huge pressure on road infrastructure, which has to be maintained effectively. Data gathering and analysis provide greater visibility, improved planning, and opportunities to prioritise activity, enabling a cost reduction in maintenance.

The solution has three elements: software onboard four police vehicles; cloud-based software for artificial vision and data analysis to detect and classify issues; and a web interface for the managers responsible for infrastructure. 'We deployed in only three months, monitoring vertical signage, lane markings and pavement irregularities, with a reliability rate of 97% in a single pass,' says Ibon Arechalde, CEO and co-founder, ASIMOB. The resulting 'heat maps' mean Cunit can see and understand areas with the greatest need and where budget and resources may be directed. This project received funding from EIT Urban Mobility, an initiative of the EU's European Institute of Innovation and Technology.

Driving deployment: the Commission perspective

More than a decade after it was adopted, what lessons have been learned under the ITS Directive in terms of moving from pilots into deployment? 'While ITS is a relatively young domain, it's come a long way in a short time,' says Edoardo Felici, Policy Officer, European Commission DG MOVE. Providing a legal framework to deploy ITS, the directive's goal was to enable people to be better informed and make safer, more coordinated and smarter use of transport networks. Efforts have continued to evolve. Today that includes updating the directive to reflect developments such as Mobility as a Service (MaaS) and Connected, Cooperative & Automated Mobility (CCAM), and creating a European Mobility Data Space.

While challenges remain, Edoardo says we have seen many important achievements under the directive. These include a more holistic approach that connects policy & governance with infrastructure, vehicles & energy sources and technology to deliver close-to-market-ready solutions. Examples of Horizon 2020 projects moving the ITS narrative forward include: MOVE21 to transform cities and their surroundings into smart zero emission nodes for mobility and logistics; the SCALE-UP project with 23 partners implementing 28 measures for improved mobility in European cities and regions; and the INDIMO co-creation community of user representatives, policymakers, operators and decision-makers working to deliver more inclusive digital mobility solutions.

Bringing it all together

'These are exciting times for the ITS community as we increasingly move to a deployment stance, something you can experience for yourself at the European Congress,' says ERTICO's Lisa Boch-Andersen. 'ERTICO is unique in our ability to connect the dots between all the different vertical players in the ITS ecosystem, across the public and private sectors, and our sister organisations in Asia-Pacific and North America. This integrated approach, bringing people together, is at the heart of what we do.'

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