

CALL FOR PAPER

Submit your presentation

ASECAP DAYS



MADRID 2025



Challenge of Future Mobility The Role of Road Infrastructure

26 -28 May 2025

Madrid, Spain

Organized by



*Association Européenne des Concessionnaires
d'Autoroutes et d'Ouvrages à Péage*

Hosted by



*Asociación de Empresas Constructoras
y Concesionarias de Infraestructuras*

ASECAP DAYS



MADRID 2025

European Motorway operators have started for several years the shift to greener mobility. More investments for mobility are needed to make successful green transition including in the EU policy road map with the Green Deal and fit for 55 strategy. To face those challenges, toll road infrastructure operators propose to foster green projects, including the transformation of the infrastructure to host electric car, buses and trucks to contribute developing safe, inclusive and green mobility solutions to all.

The 52nd ASECAP Study & information days will focus on how it would be possible to foster safe and mobility solutions by stimulating investments aimed at reaching the EU objectives of vision zero in terms of fatalities and vision zero in term of CO2 emissions. It will also discuss sustainable financing scheme to support these transformations and developments without burdening public budget, solutions exist.

Abstract not exceeding **400 words** should be submitted using online facility: [CLICK HERE TO SUBMIT YOUR PAPER](#)

Timeline

Deadline for submission of abstracts

September 27th 2024

Notification of acceptance of abstract

15th of November 2024

Organized by



Sponsored by



A – SUSTAINABLE ROAD FINANCING SCHEMES

Accelerating carbon free mobility projects delivery that meet the climate change challenges.

Demographic growth, economic globalisation and other social trends mean that we need to modernise our infrastructure in compliance with EU objectives to make them greener and more sustainable, to enhance people's quality of life, to provide equal access to all citizens whether they are living in remote territories or in urban areas, to improve resilience of road mobility and to support the smooth functioning of our economies.

Which measures could increase the resilience of road mobility in times of crises? The changes are so important that these simple questions are critical for private investors. The session will explore how to adapt the infrastructure and which conditions are needed to convince policymakers and to attract investors to implement sustainable financing schemes.

Topics

- ***Existing European frameworks for road infrastructure financing***
- ***New perspectives for mature concessions***
- ***Financing solutions for green mobility solutions***
- ***Recovery financing***
- ***Investments on the resilience of the road mobility***
- ***Opportunities and challenges of the concession model***
- ***Congestion charging schemes***
- ***New tolling Systems***
- ***Requirements and conditions from private investors and financial institutions***
- ***Financing alternatives for low-traffic road sections***
- ...

B – DRIVING INNOVATION: NEXT GENERATION OF TRAFFIC MANAGEMENT

The Framework for the deployment of Intelligent Transport Systems has been amended by Directive (EU) 2023/2661 of 22 November 2023. It has updated the scope of the ITS Directive and its priority areas & actions, highlighted emerging services, particularly MaaS and CCAM and mandate deployment of ITS data and services. The session will shed light on the existing regulatory framework and its impact on the advancement of intelligent transportation systems and how regulations can effectively adapt to the rapidly evolving landscape of transportation technology or have negative impacts. Experts will identify key areas for improvement and suggest strategies to foster innovation in roads and traffic management. Gain insights into emerging trends, explore innovative solutions, and discover how collaboration between industry stakeholders and regulators can shape the future of mobility in Europe.

Topics

- ***Evolution of road infrastructure and the importance of digitalisation***
- ***New services and the future of traffic management***
- ***Digitalisation of the infrastructure to foster greener, smarter, and automated mobility***
- ***Digitalisation of traffic management***
- ***Digitalisation for connected and automated mobility services***
- ***Digital transformation, ranging from political, legal, financial, technical to societal dimensions.***
- ***Managing congestion***
- ***AI in digitalisation and traffic management***

C – DIGITAL TWIN-BASED MAINTENANCE AND MONITORING FOR ROAD INFRASTRUCTURE SOLUTIONS

The infrastructure world is becoming more and more digitized, and we're seeing increasing applications of digital twinning technology. A digital twin is a virtual representation of an object or a system that spans its lifecycle, is updated from real-time data and uses simulation, machine learning and reasoning to help decision-making. Within the transportation industry, ITS professionals have historically been the best equipped to lead the way with this technology revolution (i.e. ATDM, ATMS) and are often the first ones to have the technology platforms in place. This rapidly developing technology has many use cases, including road user charging and tolling, active transportation management, transportation planning simulation and modeling and structural health monitoring and inspection. Hear from public and private sector representatives about various use cases for this exciting technology in transportation and engage in an interactive exchange about additional use cases for digital twinning in transportation would be the highlights of this track. "Safety, Maintenance, Monitoring Digital Twin for road infrastructures" which will focus on the theme of road safety, the monitoring of bridges, viaducts and tunnels, the maintenance of infrastructure with a view to sustainability.

Topics

- ***Digitalization of motorway management and maintenance***
- ***Digital asset management strategies***
- ***Advanced Structural health monitoring***
- ***Digital twins for the road infrastructure***
- ***Transportation planning simulation and modeling,***
- ***Cyber security resilience***
- ***Predictive maintenance and AI for road management and maintenance***
- ...

D – DRIVING CHANGE: TOLLING SYSTEM AND CO2 REDUCTION FOR NET ZERO TARGETS

The session will explore tolling systems and their pivotal role in achieving net-zero targets through CO2 reduction. It will examine the contributions of tolling infrastructure and forward-thinking strategies to sustainable transportation and a greener future. Our panel, comprising industry leaders, policymakers, and sustainability experts, will illuminate the current landscape of tolling systems and their influence on carbon emissions. Delve into the challenges and opportunities of implementing tolls as a means to incentivize environmentally friendly transportation choices. Gain valuable perspectives on how tolling can be integrated into comprehensive strategies for achieving ambitious net-zero targets. Join us for an enlightening session that explores the intersection of tolling systems, CO2 reduction and the path to a sustainable, net-zero future. Together, let's drive the change and pave the way for a greener and more efficient transportation system.

Topics

- ***Advanced Toll technologies for improved and cleaner mobility***
- ***Price management to optimize facilities' capacities***
- ***Effective solutions for CO2 emission reduction***
- ***The role of dynamic pricing***
- ***Ensuring Interoperability in electronic Tolling Systems***
- ...
- ***Innovative tolling strategies for a greener future***

E- ROAD SAFETY – REACHING VISION ZERO

WHAT NEED TO BE DONE AND HOW?

The challenges for road operators are to improve road safety and performance and to reduce the time to manage an accident or incident and strive towards the goal of vision ZERO. Solutions for automatic incident detection and first response can provide a real added value to our daily business; also, Artificial Intelligence is a powerful tool to analyse huge amounts of available data, and innovative video analytics and advanced decision support can analyse real-time and historical traffic data to predict and detect incidents and provide the most suitable incident management strategies. EU is promoting safe system approach and forgiving roads. The session will delve into policies, practices, issues, challenges, and innovative procedures to both monitor the infrastructure monitor and EU regulation compliance.

Topics

- ***Road safety policies***
- ***Road infrastructure safety management***
- ***Safe system approach***
- ***Accidents data analysis,***
- ***Road safety KPIs***
- ***Road Safety Campaigns***
- ***Initiatives to change driver behaviours***
- ***Infrastructure safety policies and procedure***
- ...

F- WHAT'S NEW IN TOLL COLLECTION?

Cashless tolling, contactless tolling, license plate tolling, also known as—all-electronic tolling (AET) is a big part of the tolling industry today that's poised to get even bigger. In addition, dynamic pricing encourages more efficient use of transportation infrastructure by shifting demand to alternative modes and routing trips to less congested times of the day: car-sharing or car-pooling services, managed lanes with bus lanes or HOV lanes, and the new users' paradigm are evolving to meet the new mobility needs. What is the future of emerging technologies for toll collection, such as mobile phone tolling and license plate recognition? What about vehicle classification and car occupancy detection? Which are the prospects for truck tolling or road charging for light vehicles? How can an efficient toll collection enforcement scheme be created? The session will explore all the innovative toll payment schemes and related management.

Topics

- ***Conversion from traditional cash tolling to AET***
- ***Promoting free flow tolling on EU roads***
- ***Interoperability implementation***
- ***Price management: Optimizing facilities capacities***
- ***Emerging payment systems (mobile phone, ANPR, AI, etc.),***
- ***Managed lanes and HOV lanes, (car sharing, carpooling, dedicated bus lanes, etc.)***
- ***Violation detection and enforcement, including cross border process***
- ***Blockchain technology and tolling,***
- ***How AI will change the operations related to customer care***
- ...

G - COOPERATIVE, CONNECTED AND AUTOMATED MOBILITY (CCAM)

Digitalization, as well as automation (CCAM) are part of the EU priority plan. It will transform most industries, including the toll road industry. Whether you are a network manager, a toll service provider, or a revenue assurance and business analyst, you know the impact and benefits of this amazing digital transformation in your mission and expect the same capacity with customers and stakeholders.

Beyond personal experiences, digital transformation promotes efficiency, performance, and adaptation/customization of toll roads services, which is crucial to the business dimension. It also leverages the opportunities and capabilities of a mix of digital technologies and their accelerated market trends in a strategic and prioritized way. The vision zero fatalities, the decarbonization agenda, and the emergence of cooperative, connected and automated mobility (CCAM), among others, are additional driving forces to accompany this transformation process.

The session will show how digital transformation is already changing Europe's roads and what challenges must be addressed within the next decade to move forward full implementation.

Topics

- ***Preparing the introduction of automated vehicles***
- ***C-ITS deployment for vehicles and road infrastructure***
- ***C-ITS services today and tomorrow: What does the ecosystem of vehicle and road need in future?***
- ***C-ITS ecosystem – applications and services enabled by cooperation***
- ***Cybersecurity for ITS***

H - IMPROVING MOBILITY DATA SPACES AND PLATFORMS TO ENSURE ENHANCED SERVICES AND CYBER SECURITY

The session will focus on the improvement of mobility data spaces and data sharing platforms. As the world becomes more connected and data-driven, it is crucial to explore how these technologies can enhance transportation systems and create smarter and more efficient mobility networks by, for example, increasing traffic flow, optimize public transport routes, enhance user experience or allow data driven decision-making for policymakers. To guarantee data sharing and cooperation, the session will also address how to keep transportation mobility and infrastructure safe and secure from cyber-attacks. Panellists, consisting of industry leaders and experts in data management and mobility, will share their insights on the current state of mobility data spaces and platforms. They will discuss the challenges, opportunities, and potential benefits that lie within these innovative solutions. Discover the latest advancements in data collection, integration and sharing, as panellists highlight the importance of open data and interoperability. Gain valuable insights into the role of data governance, privacy, and security in fostering trust and ensuring the responsible use of mobility data.

Topics

- ***Sharing Data – cooperations and business models for mobility data spaces.***
- ***Liability and quality of data***
- ***Potential applications of mobility data spaces and platforms***
- ***Evolution of mobility data spaces and platforms and shaping the future of transportation for the better***
- ***Cyber security of mobility data spaces and data sharing platforms***
- ***AI for mobility data spaces and data sharing platforms***
- ***Governance and Privacy***

I -IMPACT OF DEPLOYMENT OF ZERO EMISSION VEHICLES ON ROAD INFRASTRUCTURE

The transition from diesel and petrol combustion engine powered vehicles to more ecofriendly alternatives is on-going all over the world. With new innovations in the field of electro mobility, hydrogen combustion and fuel cell as well as biofuels, new challenges and opportunities occur for roads infrastructure operators. It is necessary to consider new energy infrastructures, different safety concepts in case of accidents when refuelling, demands on roads surfaces to reduce particulate matter and more.

Panellists in this session will shed light on the potential reduction of greenhouse gas emissions, improved air quality, and reduced dependency on fossil fuels, taking into account current market developments and simulations for the future. They will also explore the challenges in establishing a robust infrastructure for alternative fuel sources and the role of public-private partnerships in achieving sustainable transportation goals.

Topics

- ***Deployment and development of alternative fuel vehicles***
- ***Providing the energy – creating the infrastructure for alternative fuels on motorways***
- ***Developments and strategy of hydrogen vehicles***
- ***Distributed energy production - creating, storing, converting, and distributing energy on motorways***
- ***Smart grid and digital twins in energy management for road transport***
- ***New and innovative ways to generate sustainable energy on motorways***
- ***Impact on road safety and particulate matter emissions of alternative fuel vehicles***
- ***Partnerships with stakeholders and energy suppliers***
-

J – ATTRACTING YOUNG PROFESSIONAL TO TACKLE THE FUTURE OF NEW MOBILITY SOLUTIONS

As transportation systems evolve with advancements like autonomous vehicles, smart infrastructure, and data-driven decision-making, it becomes imperative to harness the potential of human expertise and interdisciplinary collaboration. But even more, it is of paramount importance to attract new professionals to shape the future of mobility services. By exploring these key topics, the panel aims to inspire collective efforts in attracting new talent to work for the road infrastructure and mobility services.

Topics

- ***Human resources***
- ***Inclusion and Diversity***
- ***Shifting to new skill requirements***
- ***Anticipating seniors' replacement***
- ***Multidisciplinary team management***
- ***Human capital investments***
- ***Equality***
- ***The role of AI***
- ...

K - TOWARDS SUSTAINABLE DEVELOPMENT & ENVIRONMENTAL PROTECTION OF ROAD INFRASTRUCTURE

ESG compliance: Commitments of the industry to meet environmental, social and governance standards through its operations _ Taxonomy regulation

Road operators are fundamentally committed to present and develop innovative solutions to reduce the carbon footprint. The speakers will highlight concrete examples of initiatives that have been implemented or are still being implemented by toll road operators to improve their environmental performances and solutions to reach net zero carbon objectives, addressing infrastructure, customers, maintenance and operation and protection of fauna and water preservation and promote circular economy. One other aspect will be how toll operators integrate those actions to comply with the taxonomy regulation.

Topics:

- ***Taxonomy***
- ***Biodiversity protection***
- ***Fauna and flora protection***
- ***Water protection***
- ***Energy saving plans***
- ***Climate change mitigation***
- ***Circular economy initiatives***

PAPER ACCEPTANCE POLICY

The Technical Program includes a wide range of interesting topics designed to facilitate the exchange of ideas and information.

Please note that a limited number of Papers will be accepted for this Call. The call for presentation is not limited to ASECAP Members, but external companies can submit a presentation which will be accepted on the condition to take a sponsorship/exhibition package which will give the opportunity to speak at one of the plenary sessions (PLATINUM Sponsorship) or during one of the technical sessions (GOLD Sponsorship).

Click [HERE](#) to submit your abstract

PRIVACY POLICY

ALL THE APPROVED ABSTRACTS AND THE PRESENTATIONS sent to the ASECAP will be put in ASECAP websites and will be included in the Conference proceedings, to be distributed to all the delegates. The BIO and the PHOTOS of the speaker will be published in the ASECAP Days Website. The speakers understand and agree that photos from the panel and his/her speech could be published in the ASECAP websites and relevant Social Media.

ASECAP, with offices in 1040 Brussels (Belgium), Rue Guimard, 15, enterprise number 0850.985.948, is controlling and processing the personal data collected and used through its conference and website. The data are mainly collected through the above forms by e-mails.

ASECAP collects and processes personal data such as: names, e-mails, electronic data, social and professional data, video, pictures, etc. It does not collect any sensitive data. The data are collected and processed by ASECAP for performing its activities and services, for HR management, provider's management, online services and data base management, analytics, corporation strategy, financial purposes, and internal direct marketing.

By using ASECAP websites and the registration form, you fully agree to ASECAP personal data collecting and processing as described in this Privacy Policy. The personal data collecting, and processing are also based on the legitimate interests of ASECAP to be able to perform its corporate purpose and activities.

The personal data are mainly aimed for internal use. They may be transferred to partners, providers, or other representatives, such as technical providers (web hosting, webmaster, union members, social medias) but the data will not be transferred to them or other third parties for direct marketing purposes.

Under the current privacy and persona data protection regulations, as individual, you have the rights to access your data, to correct them, to erasure them, to limited processing, to portability, to object the processing based on ASECAP legitimate interest, and the right to file a complaint with the Data Protection Authority in case of infringement.

Your personal data will be saved only for the reasonable time needed to meet the mentioned purposes.