



#ITSSeville2025

No. 2 - ITS European
Congress 2025



**Clean,
Resilient
and
Connected
Mobility**

Intelligent Transport Systems - Explained

Technologies to operate and manage transport infrastructure





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Hey everyone!

As Official Media Partner, we are delighted to welcome you to the 2025 ITS European Congress special edition of **ITS Edge**, brought to you by **ITS Now** for ERTICO (ITS Europe), #ITSSeville2025.

In this edition, I sat down with **Joost Vantomme** the CEO of ERTICO to discuss how the upcoming Congress in the beautiful city of Seville will translate 'Clean, Resilient and Connected Mobility' from buzzwords into tangible actions, find out what we discussed in our feature article on page 8.

We also have an article by **Dr Eusebiu Catana** (Senior Consultant at ERTICO), who provides innovations and technologies to look out for at the congress, and we talked to **Coen Bresser** (Senior Manager for Innovation and Deployment at ERTICO), about emerging issues for the use of AI in traffic systems. We also look at the themes for the congress and examine the societal needs and resilience & safety themes in more depth. We also look at some of the exciting opportunities to experience a range of technology use with technical visits whilst in Seville.

We finish this edition with our Technology Insight item for an episode from Season 4 of the @ITSNow YouTube Channel. In this, we have worked with the South Korean firm **bitsensing** to look at why a disaster on a bridge acted as the catalyst to develop a solution to effectively manage traffic.

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See you next time,

Alistair

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"The 16th ITS European Congress in Seville, marks a crucial juncture for all stakeholders to convene and explore future solutions focusing on clean, resilient and smart mobility. Aligned with European initiatives such as the Green Deal and the Sustainable and Smart Mobility Strategy, Seville exemplifies how our host cities' lead the transformation of smarter, cleaner and more sustainable future.

With its commitment to cleaner transportation, Seville embodies the spirit of innovation that our Congress seeks to promote. On behalf of ERTICO as organiser, and together with the host City of Seville, in sync with ITS Spain and the entire host committee, I have the great pleasure of inviting all of you to continue fostering enriching dialogues and unique network opportunities that propel Europe towards a more sustainable future.

I am very much looking forward to greeting you all in Seville."

Joost Vantomme
CEO, ERTICO – ITS Europe

Registrations are open for the 16th ITS European Congress, Europe's premier smart mobility and digital transport event, being held in the vibrant city of Seville, 19-21 May 2025. Organised by ERTICO – ITS Europe, it expects 3,500+ attendees, including professionals, policymakers, researchers and innovators. The released Technical Programme features three Plenary Sessions, 105+ Specialist Sessions and 30+ Paper Sessions, covering key industry trends and innovations. The congress offers an interactive exhibition with 100+ exhibitors, live demonstrations and networking events, including the ITS Dinner. Technical visits showcase Seville's smart mobility initiatives. ERTICO CEO Joost Vantomme highlights it as a crucial event for anyone involved in shaping the future of transport.



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Seville Sets the Stage: Inside the 2025 ITS European Congress Tackling Mobility's Triple Challenge

I sat down with ERTICO CEO **Joost Vantomme** to discuss how the upcoming Congress will translate 'Clean, Resilient and Connected Mobility' from buzzwords into tangible actions, leveraging AI, data and unprecedented collaboration.

The world of transport is evolving at an unprecedented pace, driven by technological innovation, environmental imperatives, and shifting societal needs. At the heart of this transformation lies Intelligent Transportation Systems (ITS), the intricate web of technologies and strategies designed to make mobility safer, more efficient, and sustainable. This May, the European ITS community converges on Seville, Spain, for the 16th ITS European Congress, organised by ERTICO – ITS Europe. Under the compelling theme of 'Clean, Resilient and Connected Mobility,' the event promises not just discussion, but a showcase of practical solutions and collaborative blueprints for Europe's transport future.

Joost Vantomme, CEO of ERTICO – ITS Europe, emphasizes that the theme is far more than just aspirational phrasing. *"These are not just words,"* he asserts. *"We want to bring this into practice and to reality through demonstrations, through, of course, exhibition, but also a lot of sessions."* With over 100 technical sessions and a similar number of special interest sessions packed into three days, the Congress aims to be a melting pot of thought leadership, uniting academics, policymakers, government authorities, private industry and research organisations.

Deconstructing the Theme: Beyond the Buzzwords

The core challenge lies in translating the interconnected concepts of 'clean', 'resilient' and 'connected' into actionable strategies. Vantomme highlights the pivotal role of data and Artificial Intelligence (AI) in achieving this. *"It's not only about ChatGPT and Copilot,"* he clarifies. *"It's definitely about the potential of data for traffic management... AI is one of the technologies, and we're going to explain and showcase how predictive it can work."* This translates into tangible applications: predictive analytics for data-driven decision-making, optimising traffic flow to reduce congestion and emissions (hitting the 'clean' target), and enhancing situational awareness. Vantomme points to the potential for predicting the impacts of nature and climate change on transport infrastructure, enabling proactive measures – a crucial aspect of 'resilience'. Connectivity is the enabler, linking vehicles, infrastructure, and even adjacent sectors like aviation. Policy provides the framework. Vantomme notes the significance of the European data strategy, including the AI Act and Data Act, alongside the overarching ITS Directive. A key focus will be the delegated acts under this directive, such as the one concerning safety-related traffic information. ERTICO's 'Data for Road Safety' platform, a collaborative effort involving vehicle manufacturers, road authorities, and service providers, will be showcased. *"How can we help... the driver see that, for example, there is a slippery road, or there are temporary roadworks... Instead of looking at the road and realising it probably too late, we can inform the driver much earlier,"* Vantomme explains. Real-time traffic information, delivered directly via in-vehicle systems or apps rather than passively through radio, is another crucial element. The Congress will also delve into emerging frontiers like Urban Air Mobility (UAM), building on initiatives launched at the ITS World Congress in Dubai, and exploring the complexities of Mobility Data Spaces – what they are, how they function, the necessary regulations, and the imperative of EU-wide interoperability.



Seville: A Living Laboratory for Smart Mobility

The choice of Seville as the host city is no coincidence. Recognised by the European Commission as one of the 100 climate-neutral and smart cities aiming for neutrality by 2030, Seville offers a compelling case study. "Seville has very good cards in its hands," says Vantomme. He points to the 'e-city Seville' project within the Cartuja district, a model low-emission zone featuring extensive electric vehicle charging infrastructure, real-time energy monitoring, and the integration of innovative cooling technologies to combat the city's intense heat – all enabled by ITS. Furthermore, Seville boasts a remarkable transformation in active mobility. Since 2006, its cycling network has exploded from 12 km to over 180 km, supporting roughly 70,000 daily bike trips facilitated by a comprehensive bike-sharing system and real-time data apps. This commitment to sustainable urban transport provides invaluable lessons for other European cities grappling with similar challenges. The Congress aims to be a conduit for this knowledge transfer.

Forging Connections: The Power of Collaboration

A recurring theme in Vantomme's vision for the Congress is the deliberate fostering of cross-sector collaboration. The goal is to break down silos and develop holistic solutions. "What we wanted to avoid is pre-scripted sessions... where everybody knows everybody. No, you will not see that," he states firmly. Plenary sessions are designed to reflect this, bringing together high-level representatives from the European Commission, Spanish national and regional governments, the City of Seville, industry leaders, and academia. The Special Interest Sessions (SIS) dive deeper into specific topics – from AI in traffic management to managing urban space scarcity through Urban Vehicle Access Regulations (UVARs) – always with a focus on public-private dialogue. A new feature this year is the 'ITS Arena' within the exhibition hall. Envisioned as a dynamic space, it will host hourly 'mini TED Talk' style presentations showcasing cutting-edge trends and societal innovations, moving beyond simple product pitches. Coupled with numerous technical demonstrations allowing hands-on experience with new technologies, both at the venue and around Seville, the emphasis is on tangible interaction. Crucially, the Congress kicks off with a closed 'Summit of Cities and Regions on Smart Mobility,' bringing mayors and city officials together with the EU Commission and ERTICO to specifically address sustainable urban mobility challenges from the municipal perspective. And, of course, ample networking opportunities are built-in, facilitating not just business deals but vital relationship building across the diverse ITS ecosystem.

Addressing the Human Element: Acceptance, Equity, and Resilience

Beyond the technology and policy, Vantomme stresses the importance of the human dimension. A major hurdle, he acknowledges, is public perception and acceptance. "When you come out of your bubble... and talk to Alistair in the street... you will sometimes not receive a very good reception; they don't understand. They don't see the need for it and they don't want to pay for it." Therefore, the Congress will actively focus on the 'user's perspective' – understanding user needs before developing solutions and ensuring technologies are accessible and equitable. This includes a conscious effort towards greater inclusivity, particularly addressing the gender imbalance prevalent in the ITS industry. "We want to have another angle on equity, is to have much more women on board," Vantomme notes. Resilience, too, extends beyond infrastructure to encompass cybersecurity. "In these geopolitical worlds... it's a lot of hybrid things that we see through cyber-attacks. So cyber resilience is important, next to the physical, nature-related resilience," he emphasizes, highlighting its critical importance for the transport sector.

Strengthening the European ITS Ecosystem

Ultimately, the ITS European Congress serves ERTICO's core mission: strengthening the competitiveness of the European intelligent transport industry. It provides a vital "gateway," as Vantomme puts it, for companies large and small, research institutions, and public authorities. It's a platform to showcase innovation (B2B, B2C, B2G), test and demonstrate new technologies, engage with potential procurers who may not be familiar with the latest advancements, and absorb thought leadership on global trends. "If you come out after 3 days of this Congress in Seville," Vantomme concludes, "first of all, you will be very tired, I guess, but very full of new wisdom and new energy actually to drive your business or your academic insights and policy forwards." As Seville prepares to welcome the ITS community, the stage is set not just for discussion, but for concrete progress. By tackling the intertwined challenges of clean, resilient, and connected mobility head-on, fostering genuine collaboration, and keeping the human element central, the 2025 ITS European Congress aims to chart a course towards a smarter, more sustainable transport future for all of Europe.





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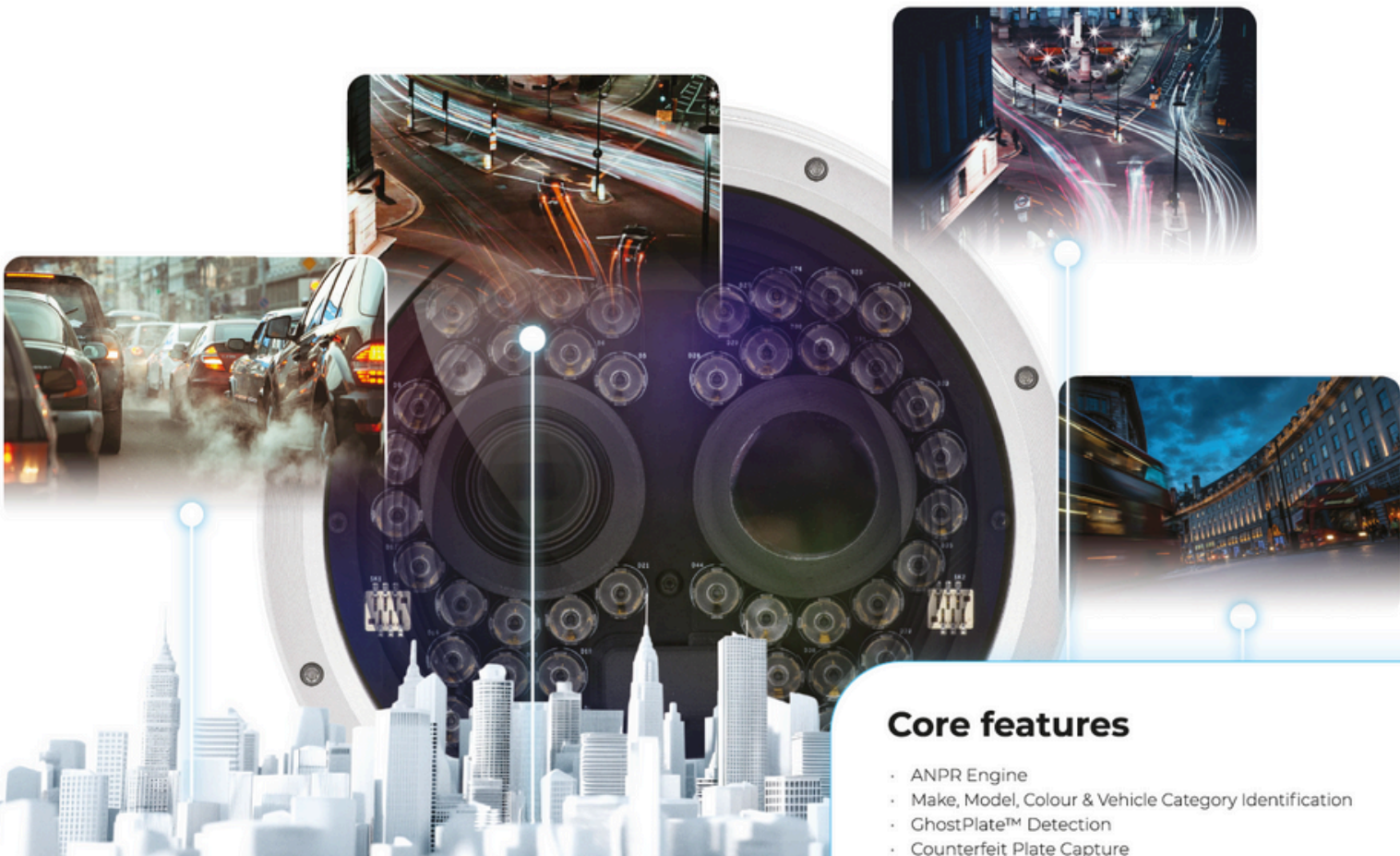
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Charting the Course: The Future of Mobility Takes Shape at the 16th ITS European Congress

Exploring the innovations and strategies driving smarter, safer, and more sustainable transport.



The transport sector is rapidly evolving, demanding more sustainable, efficient, and user-focused mobility. The 16th ITS European Congress, organised by ERTICO – ITS Europe, is a key event where industry leaders, tech pioneers, and authorities converge to showcase and shape the future of Intelligent Transport Systems (ITS). It's a vital forum for collaboration on solutions enhancing safety, reducing congestion, and improving the transport experience. In this article, **Dr Eusebiu Catana**, Senior Consultant at ERTICO provides innovations and technologies to look out for.

The Congress promises a deep dive into the innovations transforming how we move people and goods. From smart mobility ecosystems and autonomous vehicles to the intricacies of electric transportation, IoT-edge enabled Cooperative, Connected and Automated Mobility (CCAM), and smart logistics, the event covers the spectrum of modern transport challenges and opportunities. Central to these discussions are data-driven solutions aimed squarely at creating more sustainable and efficient systems that enhance safety, alleviate congestion, and fundamentally improve the overall transportation experience.

The Innovation Landscape: Technologies Defining Tomorrow's Transport

Attendees at the ITS European Congress can expect to engage with a range of transformative technologies poised to reshape mobility:

- **Autonomous Systems:** Self-driving cars, automated shuttles, and autonomous drones are moving from concept to reality, revolutionising personal transport and logistics. A key enabler is the transition to Software-Defined Vehicles (SDVs), fostering a data-driven ecosystem essential for optimising vehicle performance and integrating seamlessly with urban infrastructure for a truly connected city experience. This shift is critical for commercial scalability and accelerating adoption by OEMs.
- **Connected Infrastructure & IoT:** The integration of sensors and smart devices into our transportation networks (IoT-edge Enabled Infrastructure) is accelerating. This allows for real-time data gathering, condition monitoring, and enhanced operational efficiency. Initiatives focus on orchestrating cross-domain data sharing, minimising energy footprints, stimulating multi-sided marketplaces, and promoting open standards for virtualisation and interoperability – strengthening Europe's competitiveness.
- **Electrification and Sustainability:** Innovations in Electric Vehicles (EVs), sophisticated charging infrastructure, and integrated shared mobility solutions are central to achieving greener transport goals.
- **Advanced Connectivity:** High-bandwidth, low-latency 5G and B5G networks are unlocking the potential for real-time data sharing and communication between vehicles (V2V), infrastructure (V2I), and users (V2X), forming the backbone of smarter, more responsive transportation systems.
- **Intelligent Traffic Management:** AI-powered solutions are optimising traffic flow dynamically, reducing congestion, and enhancing safety through sophisticated real-time data analytics and predictive modelling.
- **Secure Transactions & Data:** Blockchain technology is being explored to enhance the security, transparency, and efficiency of payment systems, ticketing, and data sharing protocols within transport networks. Ensuring cybersecurity across these interconnected systems is paramount.
- **Integrated Mobility Services:** Mobility-as-a-Service (MaaS) platforms continue to evolve, integrating diverse transport options into single, user-friendly applications for seamless journey planning, booking, and payment.
- **Enhanced User Experience:** Augmented Reality (AR) and Virtual Reality (VR) are finding applications in improving navigation, providing immersive training for drivers and operators, and enhancing passenger information systems.

The Powerhouse Duo: AI and Digital Twins Accelerating Progress

Among the array of innovations, Artificial Intelligence (AI) and Digital Twins stand out as particularly potent catalysts for creating greener, safer, and more efficient transport systems. Their combined capabilities offer unprecedented opportunities for optimisation and foresight:

AI-Driven Optimisation: AI algorithms are transforming traffic management by enabling real-time analysis and prediction of traffic patterns, allowing for dynamic signal adjustments that significantly cut idle times, reduce emissions, and improve fuel efficiency. AI is also integral to enhancing the safety features of autonomous vehicles, powering systems like collision avoidance and real-time hazard detection. Furthermore, AI integration in EVs optimises battery management and energy consumption, making electric mobility more practical and reliable.

Digital Twins for Strategic Insight: By creating dynamic virtual replicas of transportation networks – encompassing cities, airports, and ports – Digital Twins allow authorities to simulate complex scenarios, monitor operations in real-time, and optimise infrastructure planning and management. This technology is invaluable for testing interventions before deployment, reducing environmental impacts, enhancing resilience, and ensuring mobility systems are future-ready.

Case Study Spotlight: 3DxVERSE – Digital Twins for Sustainable Communities

A compelling example of these technologies in action is the 3DxVERSE project. This initiative exemplifies how emerging technologies are converging to transform mobility and urban living. 3DxVERSE is committed to fostering an open, transparent, and collaborative approach, making its outcomes open-source to empower cities, planners, researchers, and citizens globally.



The project integrates real-time data from diverse sources (sensors, vehicles, imagery) to create sophisticated virtual models. Key features include:

- **Advanced Technologies:** Leveraging the latest in 3D Digital Twins, AI for predictive analytics, and Extended Reality (XR/VR) for immersive interaction and training.
- **Real-World Applications:** Piloting includes applications for optimising urban mobility and enhancing airport operations. For airports, this involves deploying real-time digital twins offering a bird's-eye view of operations and, crucially, enabling the visual tracking and analysis of aircraft carbon emissions from landing to takeoff, supporting climate goals for airports and airlines alike.
- **Alignment with EU Goals:** The project directly supports the European Green Deal through its focus on sustainable mobility, aligns with the New European Bauhaus initiative by emphasising community-centric innovation, and contributes to Europe's Digital Decade targets by developing ethical frameworks for technology use and data privacy.

Lessons Learned for the ITS Community

The 3DxVERSE project, and others like it, offer valuable lessons for the broader ITS sector:

- **Data Integration is Key:** Combining diverse data streams is fundamental to building accurate and effective digital twins.
- **Cross-Sector Collaboration is Crucial:** Success hinges on partnerships between government, industry, academia, and citizens.
- **Real-Time Feedback Drives Efficiency:** The ability to monitor and adjust systems dynamically is invaluable.
- **Optimisation Delivers Sustainability:** Digital twins provide powerful tools to reduce energy consumption and emissions.
- **Scalability and Adaptability are Essential:** Platforms must evolve with technology and changing needs.
- **Community Engagement Matters:** Solutions must be responsive to local needs and foster inclusivity.
- **Ethical Frameworks are Non-Negotiable:** Data privacy and responsible technology use must be prioritised.
- **Open Standards Foster Innovation:** An open-source approach and global collaboration accelerate progress.

Looking Ahead

The journey towards a fully intelligent, sustainable, and efficient transport future is complex but gathering momentum. Advanced technologies like AI, IoT, 5G, and Digital Twins are not just theoretical concepts; they are increasingly practical tools being deployed to solve real-world challenges. Events like the 16th ITS European Congress are vital platforms for sharing knowledge, forging partnerships, and collectively navigating the path towards a mobility ecosystem that is smarter, safer, greener, and works better for everyone. The innovations showcased promise a future where transportation is seamlessly integrated, highly efficient, and fundamentally sustainable.



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AI in the Driving Seat? Navigating Collaboration, Complexity and Control in Traffic Management



Coen Bresser, Senior Manager for Innovation and Deployment at ERTICO – ITS Europe, is deeply involved in navigating the emerging complex landscape of Artificial Intelligence (AI) in traffic systems.

Artificial Intelligence (AI) is no longer a futuristic buzzword in transport; it's increasingly embedded in the systems managing our road networks. From optimizing signal timings to predicting congestion hotspots, its potential seems boundless. Yet, harnessing this power effectively presents significant challenges, requiring unprecedented collaboration, robust safety protocols and a clear-eyed view of both its capabilities and limitations. Speaking on an episode of the [@ITSNow YouTube Channel](#), Bresser shed light on the critical work underway, particularly through initiatives like the TM 2.0 platform, to integrate AI responsibly and unlock its true potential for safer, more efficient mobility.

The Cooperation Conundrum: Beyond Siloed Navigation

A fundamental challenge arises from the fragmented nature of current traffic information. While navigation apps offer invaluable real-time guidance, their independent operation can inadvertently worsen congestion. *"There are various examples of what can go wrong,"* Bresser notes. *"If there's a traffic jam on the highway and you use a [navigation] app... all the people who are diverted end up in the same school yard, for example. So, you just shift the congestion somewhere else."*

This phenomenon, sometimes echoing the principles of the Braess paradox (where adding capacity can paradoxically decrease overall efficiency), highlights the need for coordination. The TM 2.0 initiative aims to bridge this gap. *"What TM 2.0 aims for is to create cooperation,"* explains Bresser, who co-chairs the platform. *"By sharing the intention of traffic management towards the participants driving there... they can take into account what will happen."*

This involves not just one-way communication from traffic managers to a single service provider, but collaboration between service providers (like Google, Apple, Waze, TomTom, HERE) and public authorities. If competing services optimize routes independently, they might funnel vehicles onto the same alternative routes, creating new bottlenecks. Cooperative strategies, guided by public authorities' overarching goals (like maximizing network flow or prioritizing certain vehicle types), could enable traffic to be spread more logically across the entire network, minimizing overall disruption.

This introduces the concept of "co-opetition" – a blend of cooperation and competition. *"Service providers have their own customer base... or they offer services that their competitors don't,"* Bresser acknowledges. *"But still, you can cooperate on data sharing, for example. If you share data with someone else and you get it back, you both have a better view of what's going on."* Listening to traffic management directives, such as planned road closures and suggested alternative routes, ultimately enhances the value proposition of cooperating service providers. It counters the fear that incorporating external public authority choices might worsen their individual routing algorithms. As Bresser points out, *"This road will be closed anyway,"* and failing to account for it damages user trust – *"Why didn't you know this?"*

Building Trust: Consistency is Key

This trust is fragile. Conflicting messages – a matrix sign instructing drivers left while their app says right – cause confusion, uncertainty and potentially erratic driving behaviour, ultimately reducing safety. Harmonizing information through collaboration ensures drivers receive consistent, reliable guidance, reinforcing the credibility of both public infrastructure and private services. Drivers, pedestrians and cyclists often only perceive their immediate surroundings; conveying the "bigger picture" benefit of coordinated traffic management is crucial but challenging.

AI in ITS: Evolution, Not Overnight Revolution

While generative AI captures headlines, Bresser emphasizes that AI is not new to traffic management. *"AI has been used for over two decades in traffic management,"* he states. Traditional AI and machine learning have long been employed for tasks like object detection via cameras, traffic flow modelling and incident prediction.

The game-changer lies in AI's ability to handle escalating complexity. Modern traffic management systems offer an ever-increasing number of options (signal timings, variable speed limits, ramp metering). Manually managing these, especially through pre-defined "scenario-based" responses, becomes exponentially harder. *"With these advanced traffic management systems, the number of scenarios explodes... to such an extent that there is a limit that you cannot comprehend the entire set,"* says Bresser.

This is where AI, particularly newer forms, can play a vital role. *"AI might be able to assess, given this set of scenarios in this traffic situation, 'I would advise this set of settings,'"* Bresser suggests. AI can act as a powerful decision-support tool, sifting through vast amounts of data and potential outcomes far faster than a human operator, presenting optimised strategies for consideration.

Human in the Loop: The Non-Negotiable Safeguard

Despite AI's analytical prowess, ERTICO and Bresser strongly advocate against allowing AI autonomous control over safety-critical systems. *"We particularly state that AI that is allowed to freely operate in the functional space – so everything on street – you cannot control that... we should not want that,"* he stresses.

The risks are too high. AI systems, fundamentally statistical machines predicting probable outcomes (*"if this, then probably this is what you mean"*), can make mistakes. Allowing an AI to independently control traffic signals without hardwired safety interlocks could, theoretically, lead to catastrophic failures like giving green lights to conflicting approaches simultaneously. *"In Europe, it's physically wired not possible,"* Bresser reassures, highlighting the existing safeguards. *"To safely operate AI in traffic management, these safeguards are a prerequisite."*

A prime example of responsible AI implementation is hard shoulder running. AI-powered object detection systems monitor camera feeds far more efficiently than human operators, automatically closing a hard shoulder lane if an obstruction (like a broken-down vehicle) is detected, significantly enhancing safety. However, the decision to re-open the lane remains firmly with a human operator.

Navigating the Ethical and Data Maze

Beyond operational safety, AI deployment raises profound ethical questions. Training data bias is a major concern. Models trained predominantly on data from one demographic might be less effective at detecting individuals from other groups, creating inherent safety inequities. Ensuring diverse and representative training datasets is crucial, as is transparency about how models are trained and validated.

The "trolley problem" – hypothetical dilemmas about unavoidable accidents – often surfaces in discussions about autonomous systems. While extreme, it highlights the need for societal consensus on decision-making logic embedded in AI. Bresser offers a pragmatic perspective: *"If I'm driving... and I get to choose if I kill myself or the other, lucky me will do my utmost best not to kill the other. But of course, hardwired in your brain is yourself."* He argues that the focus should be on whether AI improves safety compared to the human baseline, even if imperfectly. Refusing deployment because of edge-case ethical dilemmas or biases might mean foregoing significant overall safety gains. Establishing clear probability or certainty levels for AI recommendations could aid transparency and trust.



Monetizing Safety: The Value of Absence

A persistent challenge is demonstrating the value of ITS interventions, especially those enhancing safety. *"The value lies in the absence of the transaction, so being the accident,"* Bresser observes wryly. *"How are you going to monetize something that's not there?"* Unlike a consumer product, safety systems prevent negative outcomes. Proving their effectiveness often relies on analysing trends in accident reduction over time, making direct ROI calculation difficult. This necessitates investment driven by societal value, typically led by governments, public authorities, or entities like insurance companies that benefit from reduced incident costs across large populations.

The Road Ahead: From Concept to Deployment

With the foundational concepts gaining traction, the next critical phase for TM 2.0 and AI in traffic management is deployment. *"What we need is to move towards the deployment of the concept,"* Bresser asserts. This involves clarifying the steps needed for stakeholders – road authorities, service providers, technology suppliers – to participate. *"We need to clarify what the tools are, what the products are, what the standards are that you should use,"* he outlines. The goal is to create a practical roadmap or manual enabling organizations to understand how they can contribute to and benefit from this collaborative, AI-assisted future of traffic management. Guiding authorities, often risk-averse due to budget constraints and fear of making incorrect investments, is paramount.

AI offers transformative potential for ITS, promising smoother traffic flow, enhanced safety and better-informed travellers. However, unlocking this potential requires moving beyond isolated systems towards genuine co-opetition, embedding robust safeguards, addressing ethical considerations head-on and providing clear pathways for adoption. The journey, guided by collaborative platforms like TM 2.0, is complex but essential for navigating the future of mobility.






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ITS That Works for Everyone:

ADDRESSING SOCIETAL NEEDS IN MOBILITY AND LOGISTICS

In an era defined by rapid technological advancement, the integration of Intelligent Transport Systems (ITS) into our daily lives holds immense promise. Yet, as we navigate the complexities of smart and connected mobility, a fundamental question arises: How can ITS truly serve society, ensuring that its benefits extend beyond mere efficiency and connectivity to encompass inclusivity, sustainability and equity for all?

This critical inquiry will take centre stage at the upcoming ITS European Congress in Seville, Spain, forming the core of a key program topic: The societal aspects of mobility for people and transport of goods.

More than just a theoretical discussion, this theme will permeate the entire Congress experience. From meticulously tailored sessions and insightful technical papers to compelling real-world demonstrations and an exclusive technical visit showcasing Seville's pioneering autonomous shuttle service, attendees will have the opportunity to immerse themselves in the practical applications and profound implications of human-centric ITS. The Congress serves as a vital nexus, inviting public authorities tasked with shaping urban futures, visionary industry leaders driving innovation, dedicated researchers pushing the boundaries of knowledge and agile innovators developing groundbreaking solutions to collectively explore how ITS can effectively address pressing societal challenges while simultaneously fostering progress.

Societal Challenges and ITS Opportunities: Bridging the Gaps

The successful and widespread adoption of ITS is intrinsically linked to its ability to demonstrably fulfil the diverse needs of its users and the degree to which these users embrace the transformative potential of these systems and services. The escalating pressures of growing urbanisation, coupled with the ever-increasing demands of freight transport, have placed a significant strain on environmental sustainability, demanding innovative solutions that decouple economic growth from ecological degradation. In this context, the powerful forces of digitalisation, the imperative of electrification across transport modes and the seamless integration of diverse transport options through multimodality are emerging as pivotal drivers in the creation of truly sustainable mobility ecosystems.

However, the pursuit of smarter mobility cannot come at the expense of social cohesion. Some of the most pressing societal challenges directly related to the movement of both people and goods revolve around fundamental issues of equity, accessibility and inclusivity. ITS possesses the unique potential to act as a powerful bridge, effectively closing existing gaps and ensuring that all demographic groups, irrespective of their geographic location, socio-economic status, age, or physical ability, enjoy fair and equitable access to safe, efficient and reliable transportation services.

A diverse array of ITS innovations holds the key to achieving this crucial objective. Enhanced connectivity ensures that real-time information and seamless communication are available to all, empowering individuals to make informed travel decisions. The carefully considered implementation of automation can improve accessibility for those with mobility limitations. The digitalisation of infrastructure creates intelligent networks that can adapt to diverse needs. Human-centric design principles place the user experience at the forefront, ensuring that ITS solutions are intuitive and user-friendly for everyone. The strategic use of space and the innovative integration of multimodality and Mobility-as-a-Service (MaaS) concepts offer flexible and tailored transportation options that cater to a wide spectrum of individual requirements. By thoughtfully deploying these advancements, ITS can become a powerful catalyst for a more just and inclusive society.

Real-World Applications: Witnessing Innovation in Action

The ITS European Congress in Seville will provide a crucial platform for participants to directly engage with tangible examples of how cities and various stakeholders are actively leveraging ITS to address these very societal challenges. Through compelling presentations and interactive discussions, attendees will gain invaluable insights into pioneering initiatives specifically designed to create fairer and more inclusive transport systems. The Congress exhibition will serve as a vibrant showcase of cutting-edge technologies and solutions, while dedicated technical sessions will offer in-depth analyses of the strategies and methodologies employed. Underlying these efforts is a common thread: a commitment to human-centric design, the pervasive power of connectivity and the seamless integration of diverse transport modes to create truly accessible mobility solutions.

Furthermore, the exploration of this critical topic will extend beyond the conference hall through an insightful technical visit to Seville's groundbreaking autonomous shuttle service. This real-world demonstration will offer a firsthand experience of inclusive public transport innovation in practice, vividly illustrating how smart systems are being meticulously designed from the ground up to work effectively and equitably for every member of the community.

Linking Public Transport, Logistics and Workforce Transformation: A Holistic Approach

Innovation within public transport, fuelled by transformative technologies such as Artificial Intelligence (AI), sophisticated big data analytics and the pervasive Internet of Things (IoT), is fundamentally revolutionising the operational paradigms of public transport systems. These advancements are leading to significant enhancements in efficiency, bolstering safety protocols and dramatically improving the overall user experience. The long-held vision of seamless, integrated mobility is drawing ever closer to reality, thanks to the rapid progress in MaaS platforms, the provision of real-time transit information that empowers commuters and the implementation of convenient and unified smart ticketing systems.

In parallel, the transport of goods faces its own set of critical challenges, particularly concerning the imperative for responsible and sustainable logistics practices. The increasing complexity and geographical dispersion of modern supply chains underscore the urgent need for optimising freight operations to enhance efficiency, drastically lower carbon emissions to mitigate environmental impact and minimise waste across the entire logistics lifecycle. Innovative ITS solutions are at the forefront of pioneering sustainable freight practices, with examples ranging from the adoption of green delivery alternatives such as electric and hydrogen-powered vehicles to the development of intelligent logistics hubs that streamline operations, and the establishment of urban consolidation centres designed to reduce congestion and emissions in city centres.

However, the widespread deployment and ultimate success of ITS are inextricably linked to public perception and understanding of these novel mobility solutions. Concepts such as automated driving systems, a diverse array of micro-mobility options and intricately integrated transport systems require public trust and acceptance to achieve their full potential. Moreover, the rapid transition driven by automation and digitalisation inevitably has significant consequences for the existing workforce within the transportation sector. While the multifaceted benefits of ITS are increasingly persuasive, garnering widespread public trust in these new technologies necessitates a proactive and thoughtful consideration of the need for reskilling and upskilling initiatives to support the workforce in navigating this transforming industry landscape.

Finally, the path to widespread ITS deployment is not without its obstacles. Several deployment barriers often associated with the introduction of new technologies must be effectively addressed. These include navigating complex regulatory constraints, managing potentially high initial implementation costs and diligently addressing legitimate concerns surrounding data privacy and security. Overcoming these challenges will require concerted efforts in policy coordination across different levels of governance, strategic investment in enabling infrastructure and a sustained commitment to fostering continuous innovation. Only through a holistic and collaborative approach can we ensure that ITS truly delivers its promised widespread societal benefits, creating a future where mobility is not only smart and connected but also fundamentally inclusive, sustainable and equitable for everyone.

➤ To see the accompanying video, scan the QR code or go to:

<https://youtube.com/shorts/-2BA0XOEBUY?si=niDzi6k2YmXn4SoD>

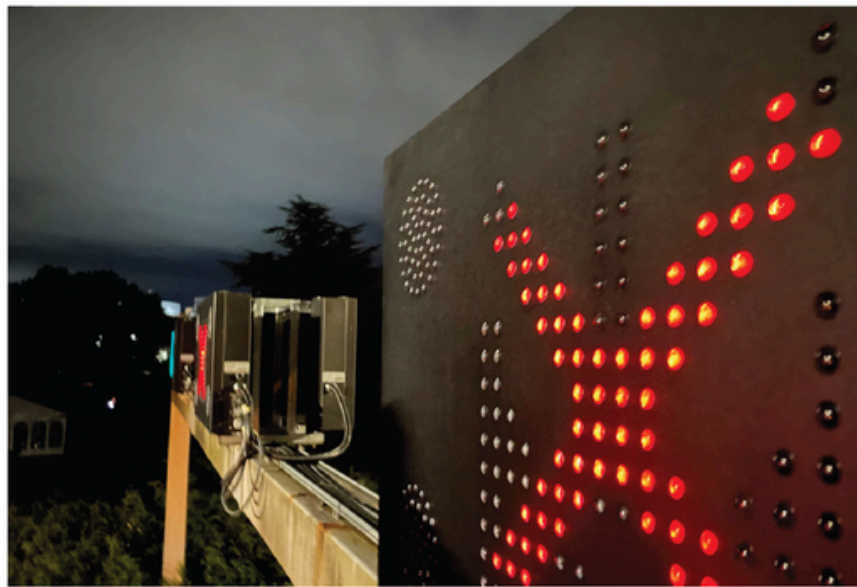


Delivering innovative LED road safety solutions through collaborative partnerships

Tunnels



High Speed



Urban

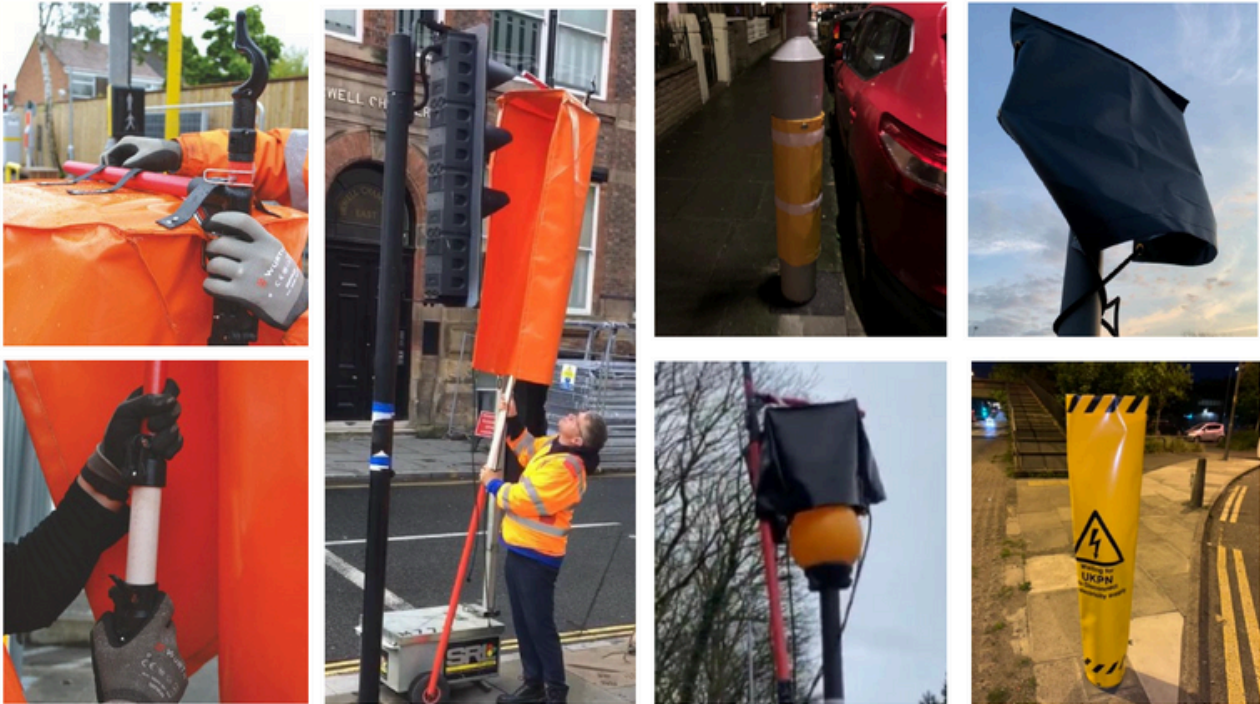


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- MS1 & AMI
- Lane Control
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- Warning signs



Temporary Highway Products

Applications: Traffic Signals, Level Crossing Signals, Road Signs, Belisha Beacons, Push-Buttons, and Street Lights.

CoverMe bagging system makes the process and ease of bagging off signals, road signs, and Belisha beacons much SAFER by ELIMINATING the use of ladders. It allows operatives from the wider highways team to be used as there is NO ladder training required. This makes working in more confined locations EASIER where ladders would have required SLAG or where they would have impeded the footway. This helps REMOVE working at height accidents and meet ZERO working at height targets.

Advantages

- Eliminates the 'working at height' risk, removes the requirement for ladders on site
Eliminates TM requirements - reduces disruption and cost.
- Fast and easy installation by a single operative.
- Secures and fastens to signal backboard.
- Overcomes working width restrictions.
- Fully adjustable pole.
- Poles are made from lightweight non-conductive GRP material.
- Easily transportable.
- Available with bespoke badging.
- Made with Recycleable material.



Why Resilience and Safety Are the Cornerstones of ITS

Intelligent Transportation Systems (ITS) are rapidly transforming how we move, connecting vehicles, infrastructure and users to enhance efficiency, reduce congestion and improve the overall travel experience. From adaptive traffic signals and integrated public transport information to connected vehicles and the nascent stages of automation, technology is the engine driving modern mobility and road network management. However, as our reliance on these complex digital ecosystems grows, two critical imperatives rise to the forefront: resilience and safety. These are no longer desirable features; they are foundational necessities for the future of transportation.

The need for resilience stems from an increasingly unpredictable world. Our road networks and the technologies that manage them face a growing array of threats. Cyberattacks are a persistent and evolving danger, capable of disrupting critical systems, compromising sensitive data or even physically impacting infrastructure control. Beyond malicious acts, the impacts of climate change, leading to more frequent and severe weather events (floods, extreme heat, heavy snow), can cripple physical infrastructure and the electronic systems that monitor and control it. Furthermore, unforeseen events like pandemics highlight the need for systems that can adapt to drastic shifts in demand and operational parameters. A resilient ITS is one designed to withstand these shocks, absorb disruption and rapidly recover, ensuring that essential mobility and logistical functions can continue or be quickly restored. The economic and social costs of prolonged network paralysis are simply too high to ignore.

Safety, inherently central to transportation, takes on new dimensions in the age of ITS. As vehicles become more connected and automated functionalities increase, the potential consequences of system failure or malfunction become more severe. The safety of drivers, passengers, pedestrians, cyclists and roadside workers increasingly depends on the flawless operation of intricate software, reliable communication links and accurate data processing. This includes everything from the integrity of data used by autonomous vehicles to the security of systems managing traffic flow through busy intersections. Ensuring safety requires rigorous testing, robust security measures to prevent system compromise, clear operational protocols and the ability to detect and mitigate potential hazards before they lead to incidents. The public's trust in ITS, vital for its widespread adoption, is directly tied to its perceived and actual safety record.

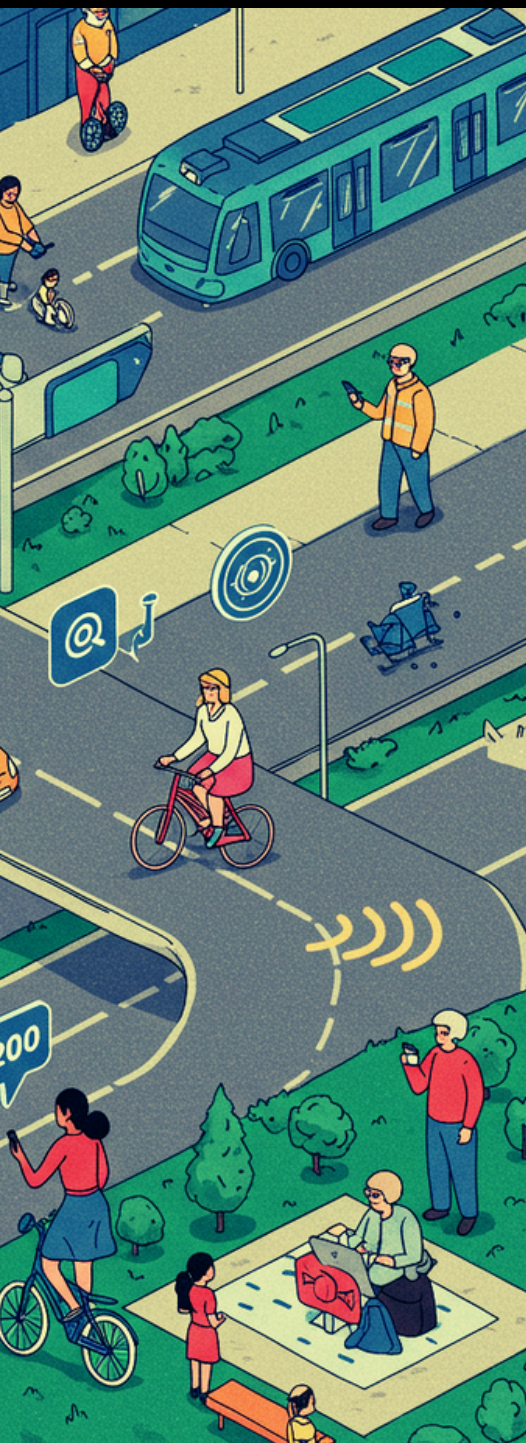
The interconnected nature of modern ITS means that resilience and safety are deeply intertwined. A cyberattack on a traffic management centre is a safety issue if it leads to signal failures and accidents, just as physical damage from a storm that disables communication networks is a resilience failure with immediate safety implications. Building truly robust transportation systems requires a holistic approach, embedding security and resilience considerations from the initial design phase through deployment and ongoing operation. This includes creating redundant systems, developing robust failover procedures, implementing strong cybersecurity defences and establishing clear, practiced emergency response plans.

As ITS continues to evolve and permeate every aspect of mobility and road network management, the focus must irrevocably shift towards embedding resilience and safety at its core. These are not merely technical challenges but fundamental requirements for building a trustworthy, reliable and sustainable transportation future capable of serving society effectively in the face of both known and unknown threats. For the providers and operators of ITS technologies, prioritising resilience and safety is not just good practice – it is an essential commitment to the well-being and continued mobility of the communities they serve.



Key Themes from the ITS European Congress in Seville

The discussions and insights generated in Seville will undoubtedly play a crucial role in shaping the future of ITS and the way we move.



Navigating the Future of Intelligent Transport:

The ITS European Congress, held this month in Seville, Spain, is set to be a pivotal event, bringing together experts, policymakers, and industry leaders to explore the cutting edge of Intelligent Transport Systems (ITS). The congress program is structured around several key themes, each addressing critical aspects of the evolving mobility landscape.

CCAM: Shaping the Future of Automated Mobility

A central focus is on Connected, Cooperative and Automated Mobility (CCAM). The congress will delve into the societal implications of CCAM, examining the industrial and economic opportunities it presents. Crucially, it will address the challenges surrounding the deployment of CCAM, including the need for robust standards, regulations, legislation, and policy frameworks. Integrating CCAM with existing infrastructure and networks is another key area, as is the scaling up of CCAM solutions. This includes discussions on viable business models, identifying and overcoming potential roadblocks, and learning from early deployments. The transformative potential of Artificial Intelligence (AI) for CCAM will also be a major topic, exploring both the opportunities and the challenges it presents.

Societal Aspects of Mobility: Equity, Accessibility, and Innovation

Beyond the technological advancements, the congress will place a strong emphasis on the societal aspects of mobility. Ensuring equity and accessibility for all, regardless of cultural or geographical factors, is paramount. This includes fostering user acceptance of new mobility solutions and addressing potential workforce implications. The program will also showcase innovations in public transport systems and services, and explore new services for freight and logistics, including automation and robotics, with a focus on responsible and sustainable logistics practices.

Emergent Technologies: Data, Connectivity, and Security

The rapid evolution of technology is reshaping mobility, and the congress will dedicate significant attention to emergent technologies. This includes the crucial role of mobility data and AI, as well as the potential of virtual reality (VR) and augmented reality (AR) in shaping future mobility solutions. Data sharing and interoperability are essential for seamless and efficient transport systems, and the congress will address these challenges. The transformative potential of 5G and beyond in communications technology will be explored, alongside the ever-present need to address cyber security challenges. Finally, the congress will highlight clean and green technologies and services, and explore the innovative applications of ITS for aerial services (IAS).

Resilient and Safe Mobility: Adapting to Change

Creating resilient and safe mobility systems is a fundamental goal, and the congress will address this from multiple angles. This includes developing modelling techniques for resilient mobility, ensuring data technology and reliability for resilience, and implementing robust cyber security solutions for smart infrastructure, traffic management, and mobility networks. Adapting mobility to the changing climate, including infrastructure and vehicle operations, is also a critical concern. The congress will also address life-cycle sustainability and the social, business, legislative, and regulatory aspects of creating a more resilient and safe mobility future.

Conclusion

The ITS European Congress in Seville promises to be a dynamic and informative event, providing a platform for collaboration and innovation in the pursuit of smarter, safer, and more sustainable mobility for all. The diverse range of topics, from CCAM deployment and societal impact to emergent technologies and resilience, reflects the complex and multifaceted challenges and opportunities facing the transport sector today.

Bridging the Gap: How Radar Technology Can Prevent Future Road Tragedies – An Interview with Euichul Kim VP ITS at bitsensing



The devastating 100-car pile-up on South Korea's Incheon Yeongjong Bridge in 2015 served as a stark reminder of the limitations of conventional road safety systems, particularly in adverse weather. The incident, caused by dense fog and ice, highlighted an urgent need for more advanced monitoring and warning technologies. We spoke with **Euichul Kim**, Vice President of Intelligent Transportation Systems (ITS) at **bitsensing**, a company specializing in radar solutions, to understand the lessons learned and how emerging technologies can prevent such tragedies in the future.

Alistair: Euichul, thank you for speaking with us. The 2015 Incheon Yeongjong Bridge incident was a major wake-up call for road safety. Could you start by reminding us of the circumstances and why it remains such a significant event?

Euichul: Absolutely. The Incheon Yeongjong Bridge pile-up was a truly tragic event. On that day in February 2015, extremely foggy and icy conditions converged on the bridge connecting the mainland to Incheon International Airport. Visibility dropped drastically, reportedly to less than 10 meters in some areas. Combined with treacherous ice on the road surface, drivers simply couldn't see vehicles ahead or react in time. This led to a horrific chain-reaction collision involving around 100 vehicles. Sadly, two people lost their lives, and dozens more were injured. The scale of the incident stunned the nation and immediately sparked critical discussions about the adequacy of our road safety infrastructure, especially on structures like long bridges prone to unique weather phenomena like dense sea fog.

Alistair: What specific shortcomings in traffic monitoring and safety did this disaster expose?

Euichul: The incident fundamentally highlighted that the traffic monitoring and safety solutions widely deployed then – and often still used today – are simply not equipped to handle such extreme, low-visibility conditions effectively. The core problem was a massive 'visibility gap'. Drivers couldn't see, and the existing infrastructure couldn't adequately detect the developing hazard or warn approaching vehicles in time. It painfully demonstrated how legacy sensors and predominantly camera-based safety systems can fail catastrophically when visibility is severely compromised. Cameras struggle in heavy fog, rain, snow or even just darkness. Other systems might provide some data, but not the real-time, all-weather information needed to proactively manage a rapidly deteriorating situation like the one on the bridge.

Alistair: You mentioned legacy sensors. What are the typical technologies used for traffic monitoring, and what are their main limitations in scenarios like this?

Euichul: Traditionally, systems like inductive loop vehicle detectors utilise coils buried under the road surface have been common. They are relatively inexpensive but have significant drawbacks. Installation is invasive, requiring road closures and cutting into the pavement and maintenance is another burden. More importantly, their ability to provide accurate, real-time data can be limited, making them less effective for scalable and dynamic safety applications needed in adverse weather. Then there are camera-based systems. While cameras are useful for certain applications, like monitoring driver drowsiness within a vehicle, capturing traffic violations or for visual confirmation of traffic flow in clear conditions, their performance degrades significantly in low light, heavy fog, snow, or rain – precisely when you need reliable detection the most. They essentially become blind, just like the drivers. These limitations mean they cannot provide the continuous, reliable data stream needed to prevent pileups or manage traffic effectively during hazardous weather.

Alistair: *This is where advanced technologies like radar come in. How can radar address the failures exposed by the Incheon Bridge incident?*

Euichul: Radar technology offers a fundamental advantage that it doesn't rely on visible light. Radar sensors emit radio waves and analyse the signals that bounce back from objects. This allows them to 'see' regardless of fog, heavy rain, snow, dust or complete darkness. They can accurately detect the presence of vehicles, calculate their speed and direction and even determine the distance to them, all in real-time and under conditions where cameras can fail. In the context of the Incheon incident, radar sensors – either mounted roadside or integrated into vehicles' Advanced Driver Assistance Systems (ADAS) – could have detected the slowed or stopped traffic ahead through the fog, providing crucial warnings to drivers or enabling automated emergency braking.

Alistair: *So, radar provides the all-weather capability that was missing. How is this technology being applied specifically within Intelligent Transport Systems (ITS) for roadside monitoring?*

Euichul: Roadside radar monitoring is a key application for preventing future tragedies. By strategically placing radar sensors along highways, tunnels, bridges or known trouble spots, traffic authorities gain a powerful tool. These sensors continuously emit radar signals, scanning the road to rapidly and accurately detect critical information like the number of vehicles, their individual speeds and their class (car, truck, motorcycle). This detection works reliably 24/7, irrespective of the weather conditions. This overcomes the limitations of older systems, providing city managers and traffic controllers with continuous, dependable data. This data isn't just useful for long-term planning; it allows for real-time interventions – adjusting speed limits dynamically, closing lanes, dispatching emergency services proactively or warning drivers through variable message signs before they enter a hazardous zone.

Alistair: *Can you elaborate on the type and quality of data these modern radar sensors provide? You mentioned vehicle classification?*

Euichul: Yes, the capabilities of modern imaging radar are quite sophisticated. Unlike older radar types that might just detect presence or speed, newer systems use techniques like 'point clouds' to create a detailed radar image of the environment. This allows them to not only count vehicles accurately but also to classify them – distinguishing between cars, trucks, buses, motorcycles and sometimes even pedestrians or cyclists, depending on the system's configuration. For example, advanced sensors like those developed by bitsensing can detect and classify hundreds of vehicles simultaneously – perhaps up to 256 objects – tracking speeds up to and beyond 320 km/h, over ranges of 300 metres or more and collecting this rich data multiple times per second (e.g., 20 times per second). This level of detail gives authorities an unprecedented, real-time, granular understanding of exactly what is happening on their roads – which types of vehicles are where, how fast they are moving, and the overall traffic density.

Alistair: *Are there real-world examples where this technology is already making a difference?*

Euichul: Certainly. We're seeing deployments in various cities globally. For instance, in cities like Verona, Italy, radar sensors installed at busy junctions are being combined with advanced AI algorithms. This setup collects highly specific data on vehicle volume and type passing through intersections. This information empowers local authorities to make data-driven decisions to optimise traffic signal timing, reduce congestion hotspots, cut down on associated pollution and ultimately enhance safety at complex junctions. It moves traffic management from guesswork or reliance on outdated data to precise, real-time control.

Alistair: *Thinking back specifically to the Incheon Bridge tragedy, how might roadside radar have altered the outcome?*

Euichul: With the benefit of hindsight and current technology, it's clear that roadside radar sensors placed along the bridge approach could have detected the dangerously low visibility conditions (some radar can infer this) and, more critically, the build-up of slow-moving or stopped vehicles within the fog bank. This information, relayed instantly to a traffic management centre, could have triggered immediate warnings on overhead gantries or variable message signs miles ahead, alerting drivers to the specific hazard and advising reduced speeds or alternate routes. It could also have automatically lowered speed limits. This early warning system, operating reliably despite the fog, could have significantly mitigated the severity of the pile-up, or potentially even prevented it altogether by slowing traffic flow before the first collisions occurred.

Alistair: *Looking ahead, what is the potential for this technology in terms of predictive safety?*

Euichul: This is where it gets truly exciting. The shift from legacy sensors to advanced, real-time sensors like radar opens the door to predictive accident prevention. By continuously monitoring traffic flow, speed differentials, vehicle density, and environmental conditions, sophisticated algorithms can identify patterns and precursors that often lead to accidents. Instead of just reacting to incidents, traffic management systems can become predictive, identifying high-risk situations before they escalate. Imagine a system automatically detecting dangerous platooning in fog or sudden braking waves and proactively implementing measures to smooth traffic flow or warn drivers. Furthermore, this real-time data can be invaluable for smarter emergency vehicle routing, ensuring first responders reach incidents via the quickest, clearest routes.

Alistair: *Finally, what is the key takeaway message for city planners and infrastructure managers considering the future of road safety?*

Euichul: The key message is that relying solely on older technologies like inductive loops or weather-dependent cameras is no longer sufficient for ensuring public safety on our increasingly complex road networks. The Incheon Bridge incident tragically underscored this. Radar technology, both for roadside infrastructure (ITS) and within vehicles (ADAS contributing to future autonomy), offers a robust, reliable, all-weather solution to 'see through' hazardous conditions and provide the critical real-time data needed for proactive safety measures. For city planners and forward-thinking traffic officials, investing in roadside radar is an investment in a future where traffic management isn't just about reducing congestion, but about actively predicting and preventing accidents in high-risk areas, ultimately saving lives. It's about moving from reactive clean-up to proactive prevention.

Alistair: *Thank you, Euichul for sharing these valuable insights. It's clear that technology like radar has a vital role to play in making our roads significantly safer.*



 **bitsensing**

To find out more,
visit **bitsensing**
at:

<https://www.bitensing.com/>



Bridging Theory and Practice: Seville Congress

Technical Visits Offer Unrivalled ITS Immersion

While the upcoming ITS Congress promises a rich programme packed with insightful Plenary sessions, deep-dive Technical discussions, focused Special Interest Sessions, and a vibrant exhibition hall showcasing over one hundred leading innovators, the event's Technical Visits offer an indispensable bridge between concept and real-world application. These curated tours provide delegates with exclusive, behind-the-scenes access to some of the most advanced ITS implementations in and around the host city of Seville.

Participants will have the unique opportunity to step inside the operational heart of the region's traffic management. Visits to the DGT (Dirección General de Tráfico) Traffic Management Centre of Seville and the Seville City Council's Mobility Centre will allow delegates to observe first-hand how cutting-edge technology and real-time data analytics are leveraged to optimise traffic flow, enhance safety, and manage the complex dynamics of the city's road network.

Moving beyond infrastructure management, the programme delves into the future of automated and connected mobility. Delegates can experience a ride on a Level 4 autonomous, connected shuttle service, offering tangible insights into the passenger experience and operational considerations of high-level automation within an urban context. Furthermore, a visit to one of Amazon's most advanced robotics-enabled distribution centres will showcase the intricate interplay of automation, logistics, and data management that underpins modern supply chains – a critical component of the broader smart mobility ecosystem.

"This programme presents an exceptional opportunity for delegates to witness both current deployments and future-facing smart mobility solutions in action," explains Francisco Sánchez Pons from CTAG, the coordinator for the Congress's technical visits. "We've curated an attractive schedule that we believe effectively showcases the sophisticated transport technology infrastructure and innovation present in the Seville region."

The scope extends further, encompassing multimodal transport and specialised applications. Other compelling visits include tours of the city's Port Management Centre, highlighting ITS applications in maritime logistics and intermodal connectivity. Delegates can also explore the CATEC advanced aerospace technologies centre and the nearby Airbus plant, gaining perspective on potential technological synergies between aerospace and terrestrial transport systems. Additionally, a tour along the connected corridor between the FIBES Convention Centre and the city's airport will demonstrate practical V2X (Vehicle-to-Everything) communication, featuring real-time traffic information dissemination, dynamic hazard alerts, and advanced vehicle-to-infrastructure interactions.

Seville itself provides a dynamic backdrop. Frequently lauded for its beauty and supported by excellent transport links and a state-of-the-art congress centre, the city is actively positioning itself at the vanguard of sustainable transport innovation. Initiatives like the ambitious 'Plan Seville Respira' underscore a commitment to promoting sustainable mobility, ensuring universal accessibility, and enhancing the quality of public spaces. Significant investment in technology for road network optimisation and public transport management – systems and strategies that Congress participants will directly observe and experience during the technical visits – underpins this vision.

"Technical visits are consistently a cornerstone of our events," notes Joost Vantomme, CEO of ERTICO – ITS Europe, the Congress organiser. "They provide an invaluable chance for delegates and visitors to step outside the conference environment and engage directly with real-world ITS innovations deployed within the host city. This year's offerings in Seville are particularly compelling due to their breadth, covering an impressive array of transport modes and technological applications. I strongly encourage attendees to register for the Congress promptly and secure their preferred technical visit spots before availability runs out, as these immersive experiences are truly not to be missed."





AlistairGollop.com

ITS & Traffic Signal Consultancy

Consultancy services to support technologies used to operate and manage highways.



Technical Advisory

Technical executive working with companies (typically at C-Suite level) in the UK and abroad, to provide advice and guidance for product localisation and segment appropriateness, industry engagement, strategic introductions and technical business development support.

- Technical representation to clients, regulators, contractors and the public
- Technical product compliance/application assessments and advice
- Training and product documentation, video product guides

Consultancy Services

I provide a broad range of consultancy and advisory services relating to ITS and Traffic Signal infrastructure for both Clients and Suppliers.

- Feasibility and strategy reports
- Technical due diligence, capability and suitability assessments
- Advice on technology implementations and regulatory requirements

Project Management

My role is to identify and then deliver the 'vision' for a project, often in the face of adversity, whilst maintaining a strong team culture (irrespective of organisation and geographic spread) by using my collegiate management style.

- Technical liaison with clients and regulatory authorities
- Management of technical design and specification teams
- Stakeholder engagement

Design

I have an extensive specialist knowledge of traffic systems which is used to devise and deliver practical and economic solutions with innovative designs to improve capability, safety and efficiency.

- Initial Options Assessments
- Preliminary and Detailed designs
- Equipment specification

Audits

As a freelance consultant, I can undertake independent design audits for clients or as an extra resource for consultancies undertaking design work.

- Design checks
- Specification checks
- Report checks

Inspections

I undertake a variety of different inspections relating to equipment supply, construction compliance to project designs and for existing/legacy installations.

- Factory Acceptance Tests (FAT), Site Acceptance Tests (SAT), Commissioning
- Installation oversight and inspections
- Assessments of existing equipment installations

Training

I undertake a range of technical training packages which can be undertaken in-person or online.

- Introductory level courses to traffic signals and ITS
- Intermediate and advanced level subjects
- I can deliver YOUR training packages to clients and staff in the UK and abroad



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ITS now .org

ITS Now exists to provide informative and educational resources about Intelligent Transport Systems (ITS), and should be of interest to technology practitioners in highways and mobility, along with people working in other engineering disciplines and for anyone who has an interest in transport generally.

Resources include our website - **ITSNow.org**, YouTube channel **@ITSNow** and **ITS Edge** magazine, along with our original books and articles on a broad range of related topics.

Intelligent Transport Systems - Explained



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