• ERTICO coordinates ADASIS Forum

• Establishment of Network of National ITS Associations coordinated by ERTICO

• ERTICO launches CVIS integrated project for C-ITS

• ERTICO starts first Field Operational Tests for ADAS (Advanced Driver-Assistance Systems)

• ITS World Congress breaks attendance record: 20000+ attendees

• After a decade of work and advocacy, the European Parliament votes in favour of eCall becoming mandatory

• Establishment of TIS-ITS

• eCall becomes mandatory

• TISA launched under ERTICO umbrella

• ERTICO coordinates the first HeERO project dedicated to the pre-deployment of eCall

• Establishment of TN-ITS

• ERTICO 25 Years

8 sectors

121 Partners

• ERTICO launches eCall deployment activities

• ERTICO coordinates eSafety Forum

• Establishment of SENSORIS

• Establishment of TM 2.0 ERTICO Innovation Platform

• ERTICO forms the MaaS Alliance

• ERTICO and European Commission host the first European conference on Connected and Automated Driving

• ERTICO 25 Years

121 Partners

• European eCall Implementation Platform

• Steering Committee

Chairs:

H. Meyer, ERTICO - ITS Europe
A. Laurell, Finland

• eSafety Support

Task Force

Chair: H. Meyer, ERTICO - ITS Europe

Economic Recovery Task Force

Chair: J. Jääskeläinen, EC

• eSafety Forum Structure

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• ADVANCING SMART MOBILITY TOGETHER
While our focus is smart mobility in Europe, engaging with stakeholders worldwide is of great importance.
TOWARDS
A SMARTER FUTURE

One year on and we are one step closer towards smarter mobility. Success has already marked our year. This is the year of eCall: the Europe-wide emergency number 112, mandatory in all new cars and light trucks from April. We take pride in being amongst who believed in this project from the very beginning.

Much of 2017 for ERTICO, was spent evaluating our work, listening and talking to our Partners and industry stakeholders, organising meetings and thematic workshops. All this effort has resulted in a comprehensive Vision 2030 paper, which captures for ERTICO the future of transport and lays out concrete roadmaps to advance smarter, safer and cleaner mobility.

For all the goals we have achieved and those to be set out there are many others we are still working on. New technologies are catalysts for faster progress in smart mobility solutions. Blockchain technology, next generation eCall, cybersecurity and privacy are just some of the challenging topics that the ERTICO team is undertaking. Connectivity and automation, after a slow-start, is beginning to gain momentum in Europe and is of particular focus for ERTICO. Connectivity is fundamental to the development of the entire transport sector. Interoperability and the digitalisation of transport across Europe is a real opportunity to create harmonised and seamless services across our borders.

Awareness about the environmental impact of transport is increasing. Both consumers and companies are pushing for the decarbonisation of transport for goods and people. We support this drive with our work on comparable assessments that reveal the effects that intelligent systems can have in reducing transport emissions. We recognise the benefits of electric vehicles and we are working together with ERTICO Partners to create a Europe-wide hyper-network of charging stations.

Mobility as a Service (MaaS) and its counterpart in logistics, Delivery as a Service (DaaS), are two concepts that ERTICO truly believes will have a positive impact on the urban landscape. We recognise the potential of these projects for speeding up the transport of people and goods, and, making it more affordable, seamless and more environmentally concerned.

This year we will also be launching a European Innovation Hub for Logistics. This will be key to overcoming the fragmentation of data exchange in the logistics supply chain and will support the workflow across companies and public authorities. We are enthusiastic about this step that brings us closer to our ambitions in the field of transport & logistics.

In a fast pace and dynamic world, we want to keep an open dialogue with new industry players, not yet our interlocutors. Start-ups, for instance, represent an incredible capital with their enthusiasm, skills and entrepreneurship. That is why, this year, at our Annual Think Tank, start-ups will join us to discuss their mobility priorities. ERTICO is also the organiser of this year’s ITS World Congress in Copenhagen and we are featuring a smart mobility village, specifically targeting start-ups.

While our focus has always been smart mobility in Europe, engaging with stakeholders worldwide is of great importance. This year, we strengthened our collaboration with China and we continue to have strong working relations with North America and the Asia-Pacific regions. Mobility and technology developments are global in nature, so the exchange of ideas and best practices between regions is imperative.

2018 is an equally exciting year for the ERTICO team and our Partners, with many Projects, Innovation Platforms, initiatives, thematic workshops and events to come. I look forward to seeing you join us and welcoming new Partners to the cause of making Europe’s mobility smarter.

Jacob Bangsgaard
Chief Executive Officer
ERTICO brings together private companies and public institutions to make mobility cleaner, safer and more efficient. We develop, promote and deploy technology solutions for a smarter mobility, in collaboration with our Partners. ERTICO connects 120 Partners from a wide range of transport sectors: service providers, suppliers, traffic and transport industry, research, public authorities, user organisations, mobile network operators, and vehicle manufacturers.
Our Vision for Mobility in 2030

Seamless, green, and safe transport; cross-border travel information; implementation of digital infrastructure; inclusive policies: the ERTICO Partnership has a clear vision of what mobility will look like in 2030. ERTICO’s unique position within the transport ecosystem makes us the ideal enabler for the smart mobility solutions that will achieve this vision.

Some of the major challenges that the transport sector is currently facing include population growth, increasing urbanisation of societies and therefore growing transport demand, and climate change. These challenges place different demands on existing mobility services and infrastructure systems. To ensure a holistic mobility management that tackles all these challenges, cities and regions in 2030, we will need to have established strategies for managing the shared use of infrastructure by passenger and freight traffic as well as for personal vehicles and public transport. Cities will become aware that coping with population growth and other transport demand requires the coexistence of passengers and goods in outer- and inner-urban environments. ERTICO already facilitates and pushes for further development of thought-leading concepts in this area, with activities such as MaaS, AEOLIX, TM 2.0, and will continue to do so.

Transport for all modes will be provided by clean and sustainable vehicles. Europe-wide policies for emission free transport and vehicle standards will be in place. By 2030 logistics stakeholders will need to track, document and disclose their CO2 emissions. Improvement of energy efficiency, a move away from carbon-sourced electricity and an extensive development towards electro-mobility will be characteristic for energy usage in 2030. ERTICO will use the experience gained through its Partnership actions to continue taking the lead towards establishing a common methodology on measuring the impact of road-based mobility on air quality.

Significant safety and efficiency gains, in great part due to enhanced automation and connectivity, will ensure less accidents and fatalities related to mobility in 2030. We will see a gradual transformation of the transport network: from a mix of vehicles and infrastructure with some active management towards a fully automated system of vehicles and infrastructure with substantially higher safety. Highly automated vehicles will be routinely produced and deployed for a growing market by 2030. In line with this, the integration of transport networks and the Internet of Things (IoT), coupled with concern regarding hacking of computers, connected and automated cars and payment systems, will have prompted EU-wide action on data formats, management and storage by 2030. ERTICO will continue its work on identifying how technological advancements and new trends affect smart mobility solutions.
Considerable deployment of Cooperative Intelligent Transport Systems (C-ITS) will facilitate the production of precise and constantly updated digital maps and accurate localisation of the vehicle. EU-wide similar regulatory regimes will make cross-border travelling seamless. Driverless buses, multi-brand platooning on inter-urban corridors for trucks as well as unmanned vehicles on various transport modes will ensure seamless logistics solutions. The answer to solving the “last mile” problems will be manned electric vehicles; using unmanned vehicles for moving goods from freight hubs to shared delivery points in cities; more use of consolidation centres; and Delivery as a Service (DaaS).
The technological evolution of wireless communication along with the opportunities for more and innovative services offered by the availability of the plethora of data (Big Data) will bring a ‘revolution’ in both infrastructures and vehicles.

Blockchain technology will be implemented in many transport and mobility services. It will also be used in wider industrial applications where data accessibility and transactions between multiple actors are required but are now done in siloes. Highly innovative technologies such as blockchain and drones will ensure progress in many transport and mobility services, as they will enable fast and secure data sharing in transport. ERTICO is leading the digitalisation of mobility and it promotes the benefits of continuous connectivity for the seamless integration of mobility services. In addition, ERTICO will take an active role in assessing the mobility related technological evolution in terms of societal wellbeing.

Seamless travel services will bring the cooperation of the public and private sectors to a new level, since public transport will continue to be an integral part of travel choices offered to travellers by future mobility providers. The key to the successful large-scale deployment of ITS and smart mobility solutions lies in private-public stakeholder cooperation. Organising, facilitating and enhancing the close relationship of the two sectors has been and will continue to be central to ERTICO activities.

In its function as thought leader, knowledge multiplier, and catalyst, ERTICO is a key player in achieving this mobility Vision 2030. ERTICO identifies key trends for mobility, considers how to best encourage multi-modality and modal integration, assesses the case for data platforms in all areas and helps to specify and develop European and global standards. ERTICO’s role furthermore includes alerting decision makers to potentially significant new developments with technologies and services and similarly advise them how established mobility services can support delivery of their objectives. ERTICO is facilitator while at the same time will guide processes and promote innovative concepts that are beneficial and feasible for the Partnership in all its interactions with decision makers and in all its Partnership activities.
OUR VISION & MISSION

Our Vision  Bringing intelligence into mobility for:

**Safer mobility**
zero accidents

**Smarter mobility**
zero delays and fully informed people

**Cleaner mobility**
reduced impact on the environment

Our Mission  ERTICO develops, promotes and deploys intelligent mobility services, which need multi-stakeholder engagement by:

Implementing necessary deployment enablers

Evaluating, adapting and using most advanced related technologies
ERTICO works to achieve its vision and to fulfil its mission by being a thought leader and engaging relevant stakeholders to advance the smart mobility agenda. We promote and facilitate the roll out of Intelligent Transport Systems and Services (ITS) in Europe through a variety of European co-funded projects, Innovation Platforms, international cooperation, advocacy and events. ERTICO is the organiser of the regional and world ITS Congresses in Europe, which are hosted every year by a different European city.
HOW WE WORK

We bring together private companies and public institutions to make mobility cleaner, safer and more efficient. **How?** By developing, promoting and deploying technology solutions for smarter mobility through...

**STAKEHOLDER ENGAGEMENT**

We always involve all mobility stakeholders. This way we are able to find and implement the most innovative solutions. We do this on a global scale thanks to...

- **Cross-sectoral dialogue**
  Within the ERTICO Partnership we share knowledge and information through our workshops and events.

**THOUGHT LEADERSHIP**

Together with our partners, we are recognised experts in smart mobility and we use our knowledge to pave the way in this field.

- **Advocating for smart mobility**
  We are a technology-neutral supporter of mobility and work together with the European Institutions for innovation and deployment.

**INNOVATION & DEPLOYMENT**

Thanks to the synergy between our Stakeholder Engagement and Thought Leadership, we are able to take a leading role in the development and deployment of innovative mobility solutions. Our activities focus on four areas of smart mobility:

- **CONNECTED AND AUTOMATED DRIVING**
  Accelerating automation and connectivity for safer and smarter mobility

- **URBAN MOBILITY**
  Delivering seamless mobility for all

- **CLEAN MOBILITY**
  Reducing environmental impact

- **TRANSPORT AND LOGISTICS**
  Creating the digital infrastructure for freight transport and logistics operations
ERTICO has a holistic approach to the digitalisation of transport and recognises that only by engaging in dialogue with all stakeholders, the most innovative solutions can be found and implemented.

Cross-sectoral dialogue

Within the Partnership, cross-sectoral workshops and events are organised to ensure a wide-angle perspective to any topic. With this purpose, ERTICO organises Focus On topical workshops and the Annual Think Tank, events that focus on the ERTICO Partnership. ERTICO kicked off 2018 with the launch of the “Year of Multimodality” and the first Focus On workshop that discussed Mobility as a Service and the role of ERTICO in a Europe-wide deployment.

Blockchain and cybersecurity was the topic of the second Focus On workshop that was held as a side event at the International Transport Forum Summit in Leipzig. Subsequent workshops will discuss Internet of Things (IoT) for smart mobility and 5G communications as these relate to automation.

ERTICO’s Annual Think Tank event in 2018 focuses on Multimodality and Access to Data. The sessions on Multimodality are intended to engage with smart mobility stakeholders in Europe and feature a panel discussion with mobility start-ups about their views and drive to improve multimodality.

ERTICO is the secretariat of the European ITS Nationals Network, through which we disseminate knowledge and information about smart mobility to all stakeholders at the local and national level. The Network provides us with the information on local-national needs and initiatives in ITS deployment.
International Cooperation

While “Europe” is in our name, we acknowledge that smart mobility is global. A top priority for ERTICO is to ensure that our Partners take full advantage of cooperation and business opportunities on the global stage. ERTICO engages with the international community and has established privileged relationships with the USA, Japan, Korea, Australia, Singapore, Russia, China and Brazil. Via the exchange of best practices and methodologies, ERTICO promotes global and harmonised standards across the continents, while also contributing to European Commission’s goal of making Europe a leader in the field of smart mobility. We promote interoperability in our international engagement to ensure that the European ITS industry can fully embrace global business opportunities.

ERTICO acts as a European point of contact for the trilateral “EU-US-JP Automation in Road Transportation Working Group” (ART WG). This initiative was established in October 2012 to support the cooperation between Europe, United States and Japan on the topic of automation. The purpose of the working group is to exchange regional information on Connected and Automated Driving, address vehicle and road transport automation topics that apply to public authorities in relation to all stakeholders, identify needs for global harmonisation and standardisation to support international developments and deployment.

In addition, several of ERTICO’s Innovation Platforms are open to international participation and have international links. These include the Traveller Information Services Association (TISA), Mobility as a Service (MaaS) Alliance, Traffic Management (TM) 2.0 and eMI3 (which focuses on interoperability in innovative electro-mobility services).

ERTICO also promotes international cooperation through many of European co-funded projects. C-MobiLE project cooperates with the US Department of Transport to contribute to maintaining compatibility of C-ITS standards across the continents.

In the electro-mobility area, the FABRIC project is liaising internationally and exchanging experiences in dynamic on-road vehicle charging.

ERTICO further strengthened its ties with China by signing a Memorandum of Understanding with China ITS Industry Alliance under which both parties will engage in jointly organised meeting and stakeholder delegation that further the smart mobility topic. In this context, ERTICO and a group of Partners visited China to discuss about the development of traffic control technology, autonomous vehicle technology laws and regulations and national car-sharing business models. During the four-day visit, key representatives from the Chinese and European mobility sector participated in technical visits to meet the country’s leading companies in ITS, gain a deeper insight on the latest technologies and developments of the Chinese ITS industry. Meetings were held in Beijing and Shanghai.
ITS Congress

The ITS Congresses represent the ultimate showcase of mobility services deployment. Every year, ERTICO organises an ITS regional or World Congress in Europe.

Congresses are the yearly celebration of smart mobility: they underline the importance of Intelligent Transport Systems (ITS), particularly in cities and regions where they are hosted and are important channels to raise awareness of smart mobility solutions among policy makers, experts and the public. They include live sessions where industry experts present the latest developments in ITS, a showcase of cutting edge technology and an exhibition space. The Congresses offer stakeholders and patrons the ultimate platform to meet with industry influencers, discuss ideas and initiatives, make new contacts and promote their businesses by taking part in a range of activities.

ERTICO ensures that the themes of the ITS Congresses challenge, deepen and support current and future ERTICO activities. The Congresses represent an ideal channel through which ERTICO fosters cooperation with the international industry community in the Americas and in the Asia-Pacific regions.

**ITS European Congresses in numbers:**
- 2,500+ Attendees
- 50+ Countries
- 100+ Sessions

**ITS World Congress in Numbers:**
- 10,000+ Attendees
- 100+ Countries
- 150+ Sessions

ITS WORLD CONGRESS 2017 - MONTREAL

ERTICO co-organised, together with ITS America and ITS Asia Pacific, the ITS World Congress 2017 in Montreal between 29 October and 2 November. The Congress theme was “Next generation integrated mobility: driving smart cities”. This theme aimed to reflect the remarkable range of smart mobility products that are being deployed by cities to respond to population growth, increased demand for mobility, and users’ appetite for services built on 24/7 connectivity.

The Congress organised 120 sessions where 540 technical and scientific papers were presented. The exhibition displayed products and solutions from over 200 organizations on more than 500,000 sq ft of floor space. There were also several technical tours to local control and service centres, as well as major construction sites and demonstrations. Montreal saw the largest set of technology and service demonstrations at a congress to date, with over 20 separate displays.
JOIN US IN COPENHAGEN

In 2018 the City of Copenhagen hosts the 25th ITS World Congress from 17-21 September. ERTICO organises, in partnership with European Commission, ITS America and ITS Asia-Pacific the world’s largest event focusing on the digitalisation of transport and smart mobility.

With the theme “ITS - Quality of Life”, the 25th ITS World Congress will look at how the industry can contribute to a higher quality of life by improving liveability, making the surrounding environment greener and lowering congestion. Discussions will take place over five days, while exhibitors and demonstrators will showcase ground-breaking results on how their solutions have a positive impact on all people.

The Congress’ three pillars - the Programme, the Exhibition and the Demonstrations - will all have a common thread looking at new mobility services, connected and automated transport, smart freight and delivery of goods, green solutions, satellite technologies and next generation of transport networks.

BRAINPORT 2019

The 13th ITS European Congress will be hosted in 2019 by the Brainport region of Eindhoven-Helmond in the Netherlands. The Brainport region is a leading technology hub and known as one of Europe’s most prominent and innovative high-tech centres.

With the theme “Fulfilling ITS Promises”, the Congress will focus on the changing demand for transport services, innovative traffic management and new forms of smart mobility, including new technology and services that give travellers real-time driving and travel advice during their journey.

The Brainport-Eindhoven region is a magnet for ambitious young professionals to enhance their business networks, and a pinnacle for smart mobility in the Brussels-Düsseldorf-Amsterdam-triangle.

In addition to the four-day programme, demonstrations and technical visits will focus on ITS services and European projects that the Brainport region is currently running with ERTICO and its industry partners. Demonstrations will run between the Evoluon Congress centre and the Helmond Automotive Campus – a living lab for smart mobility solutions.
Envisioning tomorrow’s journey

ERTICO has a unique position given by its diverse membership, a team of experts in mobility and access to the European policy arena. This gives a great advantage in understanding the direction in which mobility is developing, foresee where opportunities lie ahead, but also what measures need to be taken to support the progress of tomorrow’s smart mobility.

ERTICO’s analysis is disseminated and further enhanced through Focus On workshops organised for Partners, discussing new concepts and technologies. We are developing visionary papers to contribute to the discourse about the future of smart mobility and we are regularly invited as experts and ‘influencers’ to contribute to the development of European roadmaps for mobility.

Advocating for smart mobility

ERTICO, as a technology-neutral proponent of mobility, is engaging in dialogue with the European Institutions both in respect to innovation and deployment.

Participation and membership includes the European Commission Cooperative ITS Platform (C-ITS Platform); a body of selected experts from all stakeholder groups set up by the European Commission including national authorities, C-ITS stakeholders and European policy makers to provide policy recommendations for the development of a roadmap and a deployment strategy for C-ITS in Europe.

ERTICO is a member of the Digital Transport and Logistics Forum which brings together EU policy makers and ITS industry actors to develop a European vision for further digitalisation of freight transport and logistics. ERTICO cooperates with the European Parliament on specific issues such as electro-mobility, truck platooning, multimodality, Start-up Prize and Mobility as a Service and holds events under the auspices of Members of the European Parliament.

ERTICO and its Partners are recognised experts in smart mobility and that knowledge makes us thought leaders in the digitalisation of transport and seamless mobility.
Innovation & Deployment
Innovation and Deployment activities play a key role in ERTICO’s work to make mobility smarter, safer and cleaner. European Commission co-funded projects and ERTICO Innovation Platforms are central to developing and deploying innovative mobility solutions together with its Partners.

ERTICO is currently active in over twenty research, pilot and deployment projects engaging the majority of its Partners in their consortia. These collaborative activities are carefully selected to build on the work and knowledge of earlier projects and activities, leading to extensive downstream deployment. Through these projects, ERTICO is able to push forward its focus activities and priorities in the areas of Connected and Automated Driving, Urban Mobility, Clean Mobility, and Transport & Logistics.

Development, innovation and demonstration project activities culminate with pre-deployment results and guidelines. Building on the results of projects, when appropriate, ERTICO creates Innovation Platforms that focus on the deployment of intelligent transport solutions. These platforms are self-funded and open to both ERTICO and non-ERTICO Partners to maximise the deployment outreach. Innovation Platforms target mostly European markets and are mindful of possible global scaling.

Currently, ERTICO manages seven Innovation Platforms covering a range of deployment services from traffic management, spatial data, electro-mobility, traffic and traveller information to ADAS linked digital maps, Mobility as a Service and cloud based vehicle sensor data.

The next sections outline Projects and Innovation Platforms that ERTICO is running in its four focus areas.
CONNECTED AND AUTOMATED DRIVING

Accelerating automation and connectivity for safer and smarter mobility

ERTICO works toward the long-term goal of highly automated vehicles and responsive infrastructure for the transport of goods and people.

Highly automated vehicles are already operating on European roads and they are evolving fast. Every new generation of vehicle increases by an order of magnitude of computing power and the number of sensor data. Many of them are collecting a large amount of real life data that can be used to train deeper their machine learning algorithms. Building an infrastructure that will allow the generation and handling of this data is a challenging but strategic step.

ERTICO is paving the path for the convergence of Cooperative Intelligent Transport Systems (C-ITS), cellular connectivity and automated vehicles along with the evolution of the road infrastructure. This area of work puts into perspective the activities of several ERTICO Innovation Platforms and has fed into European policy activities such as the C-ITS platform, the Roundtable on Connected and Automated Driving, STRIA and relevant European Commission consultation workshops and debates.

ERTICO’s roadmap for 2030 regarding Connected and Automated Driving (CAD) is marked by essential milestones. Through the work done in Innovation Platforms and projects run under this focus area, ERTICO is working to support the achievement of these milestones and the vision of connected automated mobility for people and goods.
CONNECTED AND AUTOMATED DRIVING

Common framework for CAD pilots

CAD enabled by cloud computing, IoT, Big Data and hybrid V2X

Driverless mobility commercial deployment

CAD roadworthiness testing framework

Achieve user acceptance

Next generation V2X enabled level 4 automated mobility

2025
2019
2022
2020
2030
2018
AUTOPILOT is a three-year Innovation Action, running until December 2019, and funded by the European Commission’s Horizon 2020 research and innovation programme. The project brings automated driving towards a new dimension by harnessing the potential of the Internet of Things (IoT).AUTOPILOT will turn the entire transport ecosystem — vehicles, roadside infrastructure, and pedestrians — into sensors, from which data can be gathered in an IoT network for cooperative, connected and automated mobility, giving particular attention to safety-critical aspects of automated driving.

AUTOPILOT project partners active in the automotive sector and in the IoT domain will work together to create a platform of services for automated vehicles. These services will be available for five driving modes — urban driving, automated valet parking, platooning, highway pilot, and real-time car sharing.

AUTOPILOT IoT-enabled autonomous driving services will be trialled in real conditions at six large-scale testing sites in the Netherlands, Italy, France, Finland, Spain and South Korea. The first pilot site event to test the AUTOPILOT automated valet parking and urban driving applications took place in June 2018 in Tampere, Finland. The next event is scheduled to take place in the second half of 2018 in Livorno, Italy.

www.autopilot-project.eu
TN-ITS GO is a Support Action for the implementation and facilitation of seamless spatial data exchange, which is essential for the deployment of ITS applications. TN-ITS GO aims to support Member States and pave the way to a broader adoption of the TN-ITS open interface with its main action focused on developing a dynamic European TN-ITS expert community.

The project will support road and transport agencies in EU Member States in planning and implementing carefully the new ITS spatial data supply chain strategies of nine Member States right from the source all the way to the existing TN-ITS interface and into the map database of the end user. The project will also implement extensions of the TN-ITS existing services in six Member States, with different outcomes depending on the operational readiness of their TN-ITS services, and evaluating TN-ITS services including the integration of data into commercial databases as well as feedback loops.

The key benefits of the project will be the resulting frequent map updates, safer and more seamless driving from destination to destination, the availability of excellent ITS services, an authoritative data feed and effective machine to machine data interface.

www.tn-its.eu
The CONCORDA project is running until June 2020 and it contributes to the preparation of European motorways for automated driving and high density truck platooning. The main objective of the project is to assess the performance of hybrid communication systems, combining 802.11p and LTE connectivity, under real traffic situations.

CONCORDA paves the way for solutions based on the combination of connectivity and infrastructure that will help build the vehicle’s environmental perception model. Moreover, the project aims to aid in the improvement of accuracy and integrity of the localisation services.

As its starting point, the CONCORDA project takes common application specifications that will be updated during the project in an iterative manner and in cooperation with C-Roads. New standards, or evolutions of existing standards, will be proposed as a result of this process.

CONCORDA has test sites in the Netherlands, Belgium, Germany, France, and Spain. Interoperability and continuity of services will be tested on all test sites, aiming at EU-wide interoperability of services. Vehicles will be equipped with COM boxes and C-V2X chipsets.
CARTRE – Coordination of Automated Road Transport Deployment for Europe

CARTRE is a two-year Coordination and Support Action, running until September 2018, to accelerate the development and deployment of automated road transport. It builds on the results of the two previous projects VRA and FOT-NET Data. In collaboration with a Stakeholder Network involving players from both private and public sectors, CARTRE supports the development of clearer and more consistent policies for EU Member States, ensuring that automated road transport systems and services are compatible and deployed in a coherent way.

To this end, CARTRE leads a series of working groups on several thematic areas, such as digital and physical infrastructure, in-vehicle enablers, human factors, socio-economic assessments, safety validation and roadworthiness testing. In collaboration with the European Commission, CARTRE also supports the organisation of many events such as the first EU Conference on Connected and Automated Driving on 3-4 April 2017 or the EUCAD 2018 Symposium.

The project convenes regular joint Stakeholder Network meetings to coordinate and harmonise automated road transport approaches at European and international level.

CARTRE carried out discussions on CAD challenges, deployment scenarios and future research needs with more than 70 cross-sectoral organisations. The conclusions of these discussions contributed to the ERTRAC Roadmap on Automated Driving (May 2017) and Strategic Research Agenda (March 2018).

www.connectedautomateddriving.eu
inLane is a two and a half years Innovation Action that is running until June 2018 and is funded by the European GNSS Agency. The project aims to improve the capabilities of navigation applications by fusing EGNSS and Computer Vision technology and thus making lane-level navigation a reality. inLane’s complex fusion and hybridisation algorithms for EGNSS, IMU, Map and Computer Vision provide an opportunity to reach five centimeters accuracy related to absolute and in-lane location. inLane aims to create a low-cost application affordable to the wider public.

Moreover, inLane envisions a new generation of enhanced mapping information, made possible by real-time updates based on crowdsourcing techniques. Local dynamic maps (LDM) will provide enhanced dynamic scene information to advanced driver assistance system (ADAS) applications. Delivering lane-level information to an in-vehicle navigation system and combining this with the opportunity for vehicles to exchange information between themselves, will give drivers the opportunity to select the optimal road lane, even in dense urban and extra-urban traffic. Thanks to inLane, the risks associated with last-minute lane-change manoeuvres will be reduced. The final event of the inLane project took place in June 2018 in Barcelona and the project is now looking into possible exploitation opportunities for the inLane application.

www.inlane.eu
SAFE STRIP — Safe and green Sensor technologies Europe

SAFE STRIP is a three-year Research and Innovation Action running until May 2020. It aims to introduce a disruptive technology, which will embed C-ITS applications in existing road infrastructure through low-cost, integrated strip markers on the road.

The vast potential of SAFE STRIP will be demonstrated through applications for:

- Cooperative safety functions for enhanced Advanced Driver/Rider Assistance Systems (ADAS/ARAS) in equipped and non-equipped vehicles
- Road wear level and predictive road maintenance
- Road work zones and railway crossings warnings
- Merging/intersection support
- Personalised Variable Message Sign (VMS/VDS) and Traffic Centre Information
- Dynamic trajectory estimation and interface to automated vehicles
- Supportive added value services (such as Virtual Toll Collection, Parking booking and charging)

The project will be evaluated in one testbed in Spain, one in France and two closed test tracks in Italy. It will also be tested in real life conditions on Greek and Italian highways, on cars and powered two-wheelers.

www.safestrip.eu
**CLOUD LSVA** — Large Scale Video Analysis

Cloud LSVA is a three-year Research and Innovation Action, running until December 2018. The project develops a software platform to label and exploit large-scale video data and designs tools to automate the vehicle’s video annotation and to effectively exploit the large amount of labelled data.

Cloud LSVA tools provide a framework for sharing and combining scene analysis resulting from data fusion. A Cloud LSVA open group has been established to handle the standardisation of a Video Content Description standard.

www.cloud-lsva.eu

**VI-DAS** — Vision Inspired Driver Assistance Systems

VI-DAS is a Research and Innovation Action project running until 2019. It aims to improve road safety by developing and deploying ADAS (Advanced Driver Assistance Systems). The navigation system supports in a more personalised manner, based on a reliable understanding of the overall traffic scene and the driver’s overall situation.

In particular, VI-DAS monitors not only the exterior of the vehicle, but also the interior: the driver. Beyond 720 degrees ADAS, an innovative approach is taken to deal with both the interior and exterior situations so that they work together in tandem. Inside the vehicle, VI-DAS uses non-invasive technologies to provide information in real-time about the drivers’ state and behaviour. Driver state monitoring, together with appropriate feedback on the driving situation and interaction with the car, is key in ensuring that the driver is in the loop during mode transitions in semi-automated driving.

www.vi-das.eu
EU-EIP SA4.2 – Facilitating Automated Driving Navigation

EU-EIP SA4.2 is a sub-activity specifically looking at the development of automated vehicles from a road operator point of view. The aim is to prepare road authorities and operators to make decisions on encouraging the development of automated driving and automating their own core business. Initial tasks have been focused on the requirements of higher levels of automated driving towards the road operators especially concerning road markings, traffic signs, real-time and predictive traffic information, digital maps, C-ITS infrastructure and other aspects. The work also has extended requirements to ensure the safety and the efficiency of the transportation system. The presence of ERTICO helps to bridge the gap between public and private discussions on CAD deployment, in particular, to compare high public expectations with the real state of the industry and technology.

www.eip.its-platform.eu
Urban Mobility advances the ways that citizens move about European cities and other urban areas to ensure that journeys are as efficient and seamless as possible.

In cities and urban areas, vehicle technologies, traffic and transport systems and internet applications are coming together in a fast-growing ecosystem of new “connected mobility” services for travellers and transport users. City governments seek mobility solutions able to significantly reduce traffic congestion, while increasing the use of collective and low-carbon means of transport. Exploiting the newest internet and mobile communication technologies is leading to innovative ways to re-think transport services and improve mobility.

A key priority for ERTICO’s focus in the Urban Mobility area is to support the widespread deployment of a new generation of cooperative, connected and personalised mobility services. ERTICO’s goal for 2030 is to achieve full integration of all these mobility solutions. This will reduce traffic congestion and increase the use of low-carbon and low-emission solutions, leading to high-quality travel for all citizens and businesses. ERTICO supports its 2030 roadmap related to Urban Mobility through projects and Innovation Platforms allowing the possibility to develop innovative solutions.
URBAN MOBILITY

Guidelines and framework for Mobility as a Service (MaaS) deployment

Interoperability framework for MaaS (APIs)

Accelerating deployment of C-ITS in cities

Integrating multimodality and traffic management systems

Availability of integrated urban mobility solutions

Connecting traffic management networks

Fully flexible and personalised mobility for all

C-ITS widely deployed in cities

2022

2018

2019

2020

2025

2030
C-MobILE is a three-and-a-half-year project that is running until November 2020. It is deploying Cooperative Intelligent Transport Systems (C-ITS) services designed to deal with mobility challenges in a complex urban areas across Europe. The project also aims to help local authorities deploy the C-ITS services they need and to raise awareness of the potential benefits for all road users.

C-MobILE will upgrade existing research pilot implementations in Europe to large-scale deployments of sustainable C-ITS services, with the support of local authorities. Based on stakeholder assessment, C-MobILE will provide C-ITS services in the form of open, modular and extendable bundles that create a common C-ITS user environment.

A total of eight C-ITS equipped cities and regions are involved in the project, all of which have been research pilot sites for the deployment of sustainable services in the past: Barcelona (Spain), Bilbao (Spain), Bordeaux (France), Copenhagen (Denmark), Newcastle (United Kingdom), the North Brabant Region (Netherlands), Thessaloniki (Greece) and Vigo (Spain). This common approach ensures that interoperability and seamless service availability are prioritised and at an acceptable cost for end-users.

C-MobILE is engaging with public and private stakeholders, including end-users, to enhance C-ITS services and to establish functioning partnerships beyond the project. It is also carrying out cost-benefit analyses and developing demand-driven business plans, particularly from the end-user’s perspective, to ensure a market viability for C-ITS services.

www.c-mobile-project.eu
SPICE is a two-year project that is running until August 2018. It aims to assist public procurers through their procurement practices to seek out innovative and sustainable mobility solutions. SPICE gives public authorities an invaluable opportunity to share their experiences and learn from each other.

SPICE focuses on the topical areas of mobility services, including Mobility as a Service, alternatively fuelled vehicles, and intelligent transport services. It has collected a series of best practices in procurement of these solutions throughout its lifetime. The best practices have been shared in reports and via the SPICE website, as well as discussed at length at SPICE project webinars and workshops.

By bringing procurers together, SPICE also facilitates collaboration between procurers and the creation of Common Buyers Groups. SPICE has identified that, when procuring innovative transport solutions, it is often difficult for small municipalities to act on their own. In Common Buyers Groups, different parties can team up, learn together and procure the best mobility and transportation solutions for their regions.

The project will finish with the publication of an in-depth report with analysis of what has been achieved so far and recommendations for future procurement practice.

www.spice-project.eu
Smart mobility innovations can make a major contribution towards reducing the impact of transport on the environment, particularly in terms of reducing fuel consumption and emissions. Transport currently accounts for almost a quarter of greenhouse gas emissions worldwide and making mobility more sustainable is a key policy objective of governments, EU and international institutions.

Deployment of intelligent transport solutions can help reduce the carbon footprint and emissions by helping transport users and providers make smarter decisions. To achieve this, systems and services need to be made more efficient and attractive through greater interoperability and better information. It is from this angle that ERTICO approaches its work in the area of Clean Mobility. Innovative technologies, connectivity and automation can drive the decarbonisation of transport, improve the use of cleaner technologies for better air quality and tackle congestion.

ERTICO works with and supports its Partners to develop greener services and products, assess the impact on the environment, and work with other stakeholders to facilitate effective deployment of these solutions. ERTICO works on the development of electro-mobility and associated services such as interoperable electric vehicle charging.

Ultimately, ERTICO’s efforts in this area are focused on reducing the impact of transport on surroundings and fulfilling ERTICO’s 2030 vision of a sustainable and clean mobility environment.
Launch activity on measuring ITS effects on air quality and emissions

Smart electric charging tested and validated (Hyper-Network for electro-mobility)

Electric Light Vehicles (ELVs) integrated in at least 6 cities

Fact-based evidence of environmental benefits of different ITS applications

Zero emission mobility widespread in both urban and non-urban areas

Smart electro-mobility widely deployed in cities

2022

2019

2018

2020

2025

2030
This three-year project running until September 2019, aims to make electro-mobility more attractive by deploying a ‘hyper-network’ of services to address some of the issues that currently slow down the shift from petrol and diesel to electric vehicles. Incompatibilities between charging system hardware, service providers, standards and protocols, and payment systems all contribute to limiting the driving range and ease of use of electric vehicles, and stand in the way of convenient e-roaming, or electric vehicle roaming in Europe.

The NeMo Hyper-Network will be a distributed environment with an open architecture based on standardised interfaces. It will provide a basis for all relevant actors (such as charge point operators, users, and electricity distribution system operators) and physical objects (like charge points, vehicles, and the grid) to interact and share data. This and an Open Cloud Marketplace developed by NeMo, will facilitate interoperable complementary services to the work of the eMI³ group and will take into account the ICT interoperability standard and recommendations from eMI³.

The Hyper-Network and associated services will be tested and validated in real-life conditions in five countries: Austria, France, Germany, Italy and Spain; featuring an electric test drive between these countries. The nineteen members of the consortium include vehicle manufacturers, charge point operators and roaming platforms.

www.nemo-emobility.eu
OPTITRUCK – Optimal fuel consumption with Predictive Powertrain Control and calibration for intelligent trucks

This three-year project (until August 2019) brings together the most advanced technologies from powertrain control and ITS to achieve a global optimum for truck fuel consumption (minimum 20% reduction) and other energy sources and consumables, whilst achieving Euro VI emission standards for heavy-duty road haulage (40t vehicles). Many of the current options to reduce energy consumption and CO2 emissions have worked on light-duty vehicles, but are not feasible for heavy-duty applications.

optiTruck works towards the creation of a global optimiser consisting of a set of dynamic, intelligent control and prediction components for effective powertrain management. In doing so, the project uses the environment data related to the transport mission, road topography, weather, road conditions, and surrounding vehicles.

www.optitruck.eu
ELVITEN – Electrified L-category Vehicles Integrated into Transport and Electricity Networks for future electric vehicles

ELVITEN is running until 2020. It aims to demonstrate how electric light vehicles (ELVs) can be used in urban areas for personal and light commercial use and be integrated into the existing transport network of six European cities: Rome, Genoa, Bari, Trikala, Berlin and Malaga. The project aims to encourage replicable usage schemes in these cities with ELVs such as electric bicycles, tricycles, scooters and quads. The potential impact of their use on the liveability of these cities is currently being evaluated through surveys and interviews with operators. Elements such as charging zones, dedicated secure parking and other road infrastructure improvements, access to restricted areas and intermodality with public transport, have been identified as solutions to encourage the development of this mode of transport.

www.elviten-project.eu
FABRIC – Feasibility analysis and development of on-road charging solutions for future electric vehicles

FABRIC, which runs until June 2018, contributes to the Clean Mobility Programme objective to develop ICT solutions for wireless, fast and smart charging of electric vehicles. This project researches and develops solutions for dynamic on-road charging of vehicles. It is expected that advanced on-road charging will lead to an increased take-up of electro-mobility by improving the driving range. Furthermore, it will also allow smaller batteries thus reducing the price and weight of vehicles.

While the project considers light and heavy vehicles and different charging technologies, the development and demonstration work concentrates on wireless power transfer by induction for cars. Demonstrations have taken place at sites in France and Italy, where ICT solutions, infrastructure and grid aspects have been integrated. In 2017 FABRIC successfully demonstrated a wireless charging solution in its 100-meter French test track, including charging of two electric vehicles at the same time. Different use cases were tested, for example testing the efficiency of charging at different speeds, as well as safety aspects. FABRIC is also drawing on data from associated test sites in Sweden and Spain using other technologies to allow benchmarking of the FABRIC wireless solutions. This final year of FABRIC is focusing on analysis of the impact on users, society and the environment and on the development of a deployment roadmap based on detailed business cases.

www.fabric-project.eu
Congestion, especially on the road, is one of the biggest transport challenge. It costs Europe about 1% of its GDP every year and is the cause of considerable carbon emissions. To reduce emissions, logistics actors are implementing environmentally concerned collaborative strategies addressing supply chain integration, multimodal transport, consolidation of deliveries and reverse logistics.

Another challenge for Transport & Logistics is the digitalisation process of transport networks and infrastructure. If fully implemented, this process could better integrate road, rail, air and waterborne travel into a seamless logistics supply chain across Europe. Many solutions for logistics were developed by individual companies based on their Legacy Information Systems. The many different digital platforms, applications and products, that currently exist, cause a high degree of fragmentation. This is due to differences in user requirements, data models, standards, system specification and business models.

To overcome this fragmentation and lack of connectivity of systems for logistics decision making, ERTICO is developing solutions for connecting logistics information systems that have different characteristics, are intra- and cross company, and are based on real-time exchange of information.

Freight and Logistics benefits from an interconnected world and can draw from innovations in other transport areas. ERTICO is creating synergies between technological trends (i.e. Artificial Intelligence, Big Data, Internet of Things, automation) and smart solutions for Transport & Logistics. Given our expertise, we are providing input to the European Technology Platform ALICE, more specifically in the working group on Information Systems in Logistics.

By 2030, ERTICO’s goal is to achieve seamless logistics and freight transport and nearer to 2025, achieve full digitalisation and automation of freight and logistics operations.

ERTICO’s aim in Transport & Logistics (T&L) is to increase interoperability, connectivity in the optimisation of cargo flows, and to facilitate supply chain management, whilst making better use of existing resources.
Facilitate multimodality in T&L operations

Work on automation of freight processes and data exchange

Establish European Digital Innovation Hub for data exchange in supply chain and logistics

Integrate hubs and traffic management for seamless mobility management systems

Seamless and interoperable T&L

Full Digitalisation and automation of T&L Interoperability on trusted data exchange in T&L

Seamless and interoperable T&L
AEOLIX – Architecture for EurOpean Logistics Information eXchange

AEOLIX is the data sharing network for logistics. With a duration of three years, running until August 2019, the project aims to overcome the fragmentation and lack of connectivity of ICT based information systems for logistics decision making. It will provide the framework for ‘demand driven architecture’ through a collaborative infrastructure relating to logistics information systems. AEOLIX can connect any logistics player across the supply chain with any system or platform to better manage, plan and synchronise facilities in that chain. This will enable more sustainable and efficient transport of goods across Europe. The project released its first version of the platform, including the development of the main functionalities of AEOLIX, allowing the basic data feeds to be visible in the dashboard and show, through the tool kit and APIs how the service providers can be connected. The project is currently working on the second version of the platform that includes the integration of the 12 Living Labs. AEOLIX is establishing a cloud-based collaborative logistics ecosystem for configuring and managing the information pipeline.

www.aeolix.eu
InterCor is a three year study, running until August 2019. It will enable vehicles and the related road infrastructure to communicate data through short range Wi-Fi (ITS-G5), cellular (4G) or their (hybrid) combination on network corridors through the Netherlands, Belgium, France and United Kingdom.

The objective is to achieve cross-border interoperability of cooperative systems and services for a safer, more efficient and more convenient mobility of people and goods. InterCor will mainly focus on services such as Road Works Warning, Green Light Optimised Speed Advisory In-Vehicle Signage and Probe Vehicle Data, but it will also test other services such as Multimodal Cargo Optimisation, Truck Parking and Tunnel Logistics. The project has already successfully delivered common upgraded specifications for ITS-G5 communications after validating them in a TEST FEST™ event. InterCor will deliver and validate common upgraded specifications for PKI security, hybrid communications and the said C-ITS services. Specifications will be aligned with the C-Roads Platform to achieve harmonisation at the European level.

[www.intercor-project.eu](http://www.intercor-project.eu)
The NOVELOG project will draw to a close in May 2018. This project has enabled the sharing of knowledge and created further understanding of freight distribution and service trips by providing guidance for implementing effective and sustainable policies and measures. This guidance has supported the choice of optimal solutions for urban freight and service transport. Furthermore, it has facilitated stakeholder collaboration, and the development, field testing and transfer of best governance and business models. These activities are accompanied by the production of four practical tools that can be used by other international cities and industrial networks beyond the project’s lifetime.

www.novelog.eu
Businesses that measure their fleet's emissions have the opportunity to make informed decisions that lead to improved fuel consumption and reduced emissions. The LEARN project is running until 2019. It empowers businesses to reduce their carbon footprint across their global logistics supply chains. Logistics emissions measurement, reporting and verification (MRV) is improved and accelerated through LEARN by providing support to companies through guidance, training, and developing a blueprint for a label; testing and validating with companies the practical applicability of emissions (MRV); promoting and facilitating supportive policy and research and developing and involving the LEARN multi-stakeholder network to maximise business uptake of carbon accounting and reduction.

The LEARN project builds on and seeks to improve the GLEC Framework for Logistics Emissions Methodologies that combines existing methods and fills gaps, making carbon accounting work for the industry. For the first time, emissions can be calculated consistently at the global level across all transport modes and transhipment centres. ERTICO has been invited to the advisory board committee to provide its contribution through its network and also through its programme.

www.learnproject.net
ERTICO takes a 360° approach for progressing digitalisation in transport. When opportunities arise, ERTICO turns them into reality.

The four areas of ERTICO’s work help us to focus on activities and projects that achieve specific milestones and targets in each of these areas. ERTICO recognises that the work is not to be done in silos and smart mobility should be looked at holistically. This is why, ERTICO ensures that progress made in one area seeps into the others and that when opportunities arises, ERTICO takes on activities that further our mission in smart mobility as a whole. We call these activities “cross-sector”. Standardisation, interoperability, smart mobility knowledge centres and training on the digitalisation of transport are examples of activities that fall under the “cross-sector” category. Here is a list of projects we are currently running:
CAPITAL – Collaborative Capacity Programme on ITS Training-education and Liaison

This three-year project, running until September 2019, creates a collaborative capacity-building community and deployment programme to support public and private stakeholders in the implementation of cooperative and intelligent transport systems (ITS & C-ITS). Using training and educational resources, it raises awareness of the services and benefits available.

The project assists public and private stakeholders in developing their knowledge, skills, and abilities to build technical, business and policy making proficiency of ITS deployment while furthering their career paths. CAPITAL will build a network of experts and practitioners, identify and assess the challenges faced by professionals in the deployment of ITS, and develop an ITS handbook featuring case studies and business models.

CAPITAL’s open online training platform provides a training programme and educational resources to public and private stakeholders who wish to learn more about ITS & C-ITS deployment. It addresses audiences with beginner, intermediate and advanced levels of understanding of (C)-ITS and helps them develop their knowledge of the technical, business and policy aspects of ITS deployment. A face-to-face pilots training programme will also take place in 7 European cities in Belgium, Croatia, Finland, Greece, Italy, the Netherlands, and the United Kingdom.

www.capital-project.its-elearning.eu
The I_HeERO project is vital for the introduction of the Europe wide eCall system launched in April 2018. It aims to:

- Prepare the Public Safety Answering Points (PSAP) infrastructure to support pan-European eCall
- Boost Member States investment in PSAP and interoperability of the service
- Prepare for deployment of eCall for Hazardous Goods Vehicles and Long Distance Buses and Coaches
- Prepare for deployment of eCall Powered Two Wheeled machine
- Perform PSAP Conformity Assessment
- Consider advancements in the management of data and next generation 112.

The project has assisted eleven Member States to comply with the legal requirement for PSAP upgrade, in order to receive eCall, which has now been completed. In addition, eCall for powered two wheeled vehicles and eCall for commercial vehicles has also been completed and data integration protocols published. I_HeERO has also defined what the next generation of eCall will look like, in cooperation with both CEN and ETSI.

The work carried out with the activities of I_HeERO, have seen major technical and communication advances, guided by ERTICO. eCall for powered two wheel machines is now a reality, eCall for commercial vehicles is now being linked to other technical advances in the vehicle cab as freight and logistics moves into a digital environment.

Advances in communication mediums have featured with eCall now being available through satellite communication, as well as 4G and beyond. This has all been achieved in close cooperation with both European standards bodies to ensure that this work is translated into tangible progress.

www.iheero.eu
The ITS Observatory is a dynamic marketplace and real-time database for smart mobility knowledge. Functioning like a “virtual café”, it provides a meeting space for the ITS Community to share experience and gain knowledge on ITS deployments, outcomes, impacts and benefits, with links to ITS products, solutions and services.

It is a key access point for ITS in Europe, strengthening ITS research collaboration and spreading intelligence, while enabling users to contact each other directly to share information, build partnerships and create new initiatives.

www.its-observatory.eu
Development, innovation and demonstration projects culminate with deployment efforts. When a gap in the deployment process is identified, ERTICO creates Innovation Platforms to bridge this gap and assist with the uptake of smart mobility solutions.

The Innovation Platforms are open to both ERTICO and non-ERTICO Partners. They ensure successful development, deployment and maintenance of core smart mobility services through long-term commitment and continuity of activities. The ERTICO Innovation Platform combine a strong focus on business cases and strategic leadership in their field.

Currently, ERTICO manages eight Innovation Platforms that work on a range of deployment services, from traffic management, spatial data, electromobility to traveller information, Mobility as a Service, truck platooning and cloud based vehicle sensor data.
ADASIS – Advanced Driver Assistance Systems Interface Specifications

With more than 50 members, ADASIS is a group of major players from the global vehicle industry and suppliers who have joined forces to define an appropriate interface to exchange information between in-vehicle map database, ADAS (Advanced Driver-Assistance Systems) and automated driving applications. The resulting standardised interface enables ADAS applications to access the ADAS horizon, which defines a standardised data model that represents map data and other geo-referenced data ahead of the vehicle.

Since the release of the ADASIS v2.0 specification as a de-facto industrial standard, applications like Predictive Powertrain Control enabled by ADASIS were launched on the market in 2012 by truck companies, resulting in a yearly 5% reduction of fuel consumption. The ADASIS Forum will release the v3.0 enhanced specification to enable automated driving, contributing to programmes such as CAD (Connected and Automated Driving) and two ERTICO Innovation Platforms TISA and SENSORIS.

www.adasis.org
**EMI³** – eMobility ICT Interoperability Innovation Group

Launched in 2013 and established as a non-profit international association in 2015, eMI³ platform is an open group of stakeholders from the global EV market who have joined forces to harmonise ICT definitions, formats, interfaces and exchange mechanisms. This is done in order to enable interoperability of EV charging and services with a common language amongst all ICT systems.

So far eMI³ has released a proposal for “unlocking interoperability in the European EV market” that sets out challenges regarding electro-mobility. eMI³ also launched its first standard specification in November 2015 that included terms and definitions, uses and business objectives for EV interoperability. This was updated to include smart charging in 2017. eMI³ has more recently developed use cases of smart charging and electricity roaming, released in the first quarter of 2018.

Several eMI³ members participate as experts in the Sustainable Transport Forum sub-group to “foster the creation of an electro-mobility market of services”, co-chaired by the European Commission’s DG MOVE and Renault. A MOU “fostering seamless and valuable EV customer experience in Europe” was elaborated and recently signed under the lead of ERTICO.

www.emi3group.com
The ETPC is committed to promoting the use of truck platoons on European highways. Its mission is to bring together all relevant stakeholders by providing a platform for cross-stakeholder dialogue defining the necessary technical, regulatory and organisational framework, and ensuring a way forward after the Amsterdam Declaration of 2016.

ETPC is now linked to a series of national initiatives that are ongoing in Sweden, Germany, Netherlands, Belgium and UK. Moreover, it fully supports the plan for a European large-scale multi-branding project, which has been proposed by the six European commercial truck manufacturers that started in 2018.

Before truck platoons can freely circulate on European roads, there are still a few barriers that the network needs to address in the short term at European level: the definition of a minimum set of safety verification tests, the mutual recognition of exemption for testing platoons, and the harmonisation of traffic regulations across border. Other challenges such as enabling business models and V2V messaging still need to be addressed.

www.eutruckplatooning.com
The Mobility as a Service (MaaS) Alliance is a public-private partnership, creating the foundations for an open market for new mobility services, centred on users’ needs. Mobility as a Service combines multiple transport services into a single mobility service accessible on demand, for both travellers and goods.

The MaaS Alliance and its 50 members work towards achieving a truly seamless and effortless ecosystem for advanced user-oriented mobility services by bringing together all the players in the transport ecosystem – public authorities, start-ups, operators, as well as already established MaaS offerings. In the MaaS Alliance, its members cooperate in order to create the enablers needed for successful deployment of MaaS in Europe and beyond.

At a practical level, MaaS Alliance has three working groups – focused on the MaaS regulatory framework and user perspectives; business and governance models; and technological questions related to interoperability and standards – which work to identify best practices and opportunities, as well as gaps and barriers in the deployment of MaaS.

MaaS Alliance encourages new MaaS initiatives and takes note of existing ones as they appear. The Alliance helps them cooperate in order to improve the roaming and scalability of MaaS services, with a view towards establishing a borderless MaaS system. MaaS Alliance representatives also speak at events throughout the world in order to promote the concept of MaaS not only to industry, but also to policy makers at local and national level in Europe and across the world.

www.maas-alliance.eu
Automated vehicles need to be connected, have access to and share data with other vehicles and infrastructure. SENSORIS is a group of like-minded players from the global vehicle industry, map and data providers, sensors manufacturers and telecom operators that include AISIN AW, Continental, HERE, Qualcomm, Bosch, TomTom and Volvo Cars. These players have joined forces to define and specify an appropriate interface for exchanging information between in-vehicle sensors and a dedicated cloud as well as between other clouds. The specification will enable broad access, delivery and processing of vehicle sensor data, easy exchange of vehicle sensor data between all players and enriched location based services and automated driving.

As a first result, SENSORIS has developed and addressed a questionnaire to all its members in order to identify the need for sensor data to be uploaded to the cloud and the availability of sensor data. Results have been prioritised (short, mid and long term) and interface architecture and specifications are defined in order to produce the first effective specifications to be immediately used by industry. First specifications are planned for Q2 2018.

www.sensor-is.org
TISA – Traveller Information Services Association

TISA (Traveller Information Services Association) is an international, non-profit but market-driven membership association of traffic and traveller information services, content providers, public authorities, car manufacturers, product industry, broadcasters and transmission operators who work together to help its members develop and implement traffic and travel information services and products based on global standards, in particular RDS-TMC and TPEGTM technologies.

TISA envisions a world where open traffic and traveller information standards increase traffic safety and efficiency, offering travellers an easier and more environment-friendly journey. Through activities such as certification and standardisation support and lifecycle management, TISA enhances the benefits for end users, such as drivers and multimodal travellers, and ensures its relevance to current policy and practices by liaising with the platforms TM 2.0, SENSORIS, MaaS Alliance, C-ITS and the organisations DATEX II, EU-EIP, Open AutoDrive Forum, ISO, ETSI, RDS Forum and WorldDAB.

www.tisa.org
**TM 2.0 – Traffic Management 2.0**

The TM 2.0 Innovation platform was launched in 2014 under the ERTICO umbrella of activities, bringing together 36 members from all ITS sectors to focus on new solutions for advanced interactive traffic management.

The objective of TM 2.0 is to provide a discussion forum on interactive traffic management for stakeholders in the entire Traffic Management Procedure value chain. The platform aims to agree on common interfaces, principles and business models for facilitating data and information exchange between road vehicles and Traffic Management and Control Centres. This is expected to improve the value chain for consistent traffic management and mobility services. Now in Phase 3, TM 2.0’s focus has shifted from innovation to deployment and its work is closely linked to a number of ERTICO Programmes. It cooperates with TISA and feeds into the work and discussions of the C-ITS Platform.

TM 2.0’s dynamic participation in ITS Congresses by way of presentations and Special Interest Sessions on Interactive Traffic Management has created momentum in the ITS community. The Platform’s efforts to build a consensus between public authorities and service providers also influence EU policy initiatives.

[www.tm20.org](http://www.tm20.org)

**TN-ITS – Map Update Exchange**

TN-ITS is an international platform facilitating and fostering exchange of ITS-related spatial data throughout Europe between public road authorities, as data providers, and map makers and other parties, as data users. It is the reference interface for road data updates. It aims to maintain and enhance a common exchange framework, support policy and implementation, define and maintain specifications and standardisations.

Highly up-to-date maps are crucial for advanced applications in ADAS, C-ITS, AD and multi-modal domains. TN-ITS updates can be directly incorporated into ITS digital maps as they come from a highly reliable trusted source, they constitute a single data and they enable low-latency updated map information in users devices. Resulting benefits include frequent map updates, safer and more efficient driving, the availability of ITS services, an authoritative data feed and an effective M2M data interface. Through ERTICO’s Innovation Platform TN-ITS and the TN-ITS GO project, 15 EU Member States and Norway will be providing up to date road maps to users.

[www.tn-its.eu](http://www.tn-its.eu)
ERTICO facilitates the cooperation of all its Partners in their ambition to drive forward the deployment of smart mobility solutions and technologies. Partners benefit from the engagement in a wider network across different sectors and the resulting insights allow them to innovate in their area of activity. ERTICO offers a platform for networking, information sharing and relationship building among Partners.
As an ERTICO Partner, your organisation can:

- Initiate, develop and implement projects proposals as well as join consortia of leading multi-sector players – with the support and coordination of ERTICO’s in-house expertise
- Participate in ERTICO Partners-only Annual Think Tank events and Focus On workshops
- Network with other key players and win over new clients and business partners through the ERTICO network of contacts
- Maintain direct links with European Institutions
- Establish contacts with technical specialists, business executives and decision-makers
- Stay ahead of new developments and anticipate key market trends
- Participate in overseas visits and strengthen international contacts
- Actively participate in ERTICO-organised European and worldwide events to promote your own business interests
- Second staff to our office in Brussels, providing an even stronger link to our hub of smart mobility activities
ERTICO Partners can take the opportunity to be active in our governing bodies, ensuring that their vision is reflected in our activities.

ERTICO’s Supervisory Board comprises Partners from each of the eight sectors. They are elected by the General Assembly for a three-year term.

Here is the current composition of ERTICO’s Supervisory Board:

**Mobile Network Operators:** Ericsson; T-Systems International GmbH

**Public Authorities:** City of Glasgow; Rijkswaterstaat/Dutch Ministry of Infrastructure and the Environment; Westdeutscher Rundfunk (WDR)

**Research:** CTAG; Institute of Communication and Computer Systems; Satellite Applications Catapult

**Service Providers:** HERE; Technolution; TomTom

**Suppliers:** Continental Corporation; DENSO

**Traffic & Transport Industry:** Dynniq; Siemens ITS; SWARCO

**Users:** FIA; RACC

**Vehicle Manufacturers:** ACEA; Renault; Volvo Group Trucks Technology