The way 5G connectivity will change transport technology across Europe will be examined in detail at the ITS European Congress in Lisbon from 18 - 20 May 2020.

Organisers of the Congress, ERTICO – ITS Europe, will host sessions explaining how 5G will enable vehicle-to-vehicle and vehicle-to-infrastructure solutions in a safe and latency-free way, as well as improving data sharing and personalised services.

"Connectivity and cooperative solutions are key building blocks when it comes to improving the safety and efficiency of mobility and logistics," added ERTICO CEO Jacob Bangsgaard. "They enable systems to handle ever increasing levels of data, and support new smart services and applications that benefit people's lives."

Therefore, the Congress in Lisbon will tackle a wide range of issues around connectivity including cyber security, data sharing, legal issues and privacy. It will also examine personalised services, business models and harmonisation.

As 5G technology becomes widespread across the continent, the ITS industry needs to fully understand its capabilities and how it will change the way connected services are delivered. The Congress will inform delegates about ongoing research.

For example, ERTICO is contributing to 5G transport technology research with its 5G-MOBIX project which is part of the second phase of the European Commission's 5G Public Private Partnership project. The project is conducting Co-operative, Connected and Automated Mobility trials along two cross-border sites - between Spain and Portugal, and Greece and Turkey – plus six urban locations in France, Germany, the Netherlands and Finland.

"The 5G-MOBIX project has a specific objective to solve cross border issues," explained ERTICO's Manager of 5G and Connectivity, Francois Fischer. "Crossing a border with different mobile operators, even when it's the same group, presents challenges. The local networks are different, meaning that you have to make sure there is a seamless handover from one network to another when you cross the border . We are addressing the impact and how to evolve the handover scenario to ensure the right continuity of service."

Understanding the way 5G will support connectivity is vital for the development of Connected and Automated Vehicles; 5G-MOBIX, which launched in November 2018, is designed to do just that. The first year of the project has been used to develop the plans for designing use cases of CAV mobility using 5G technology, with work now moving onto physical trials for around 18 months before the final phase of the project, which will deliver conclusions about the 5G suitability.

"The project aims to ensure a pan-European deployment of 5G on strategic corridors and our role is to ensure the continuity of service," continued Fischer, who is excited that the ITS European Congress 2020 is taking place in Lisbon. "We are very keen to be in Portugal because in 5G-MOBIX we have a cross-border corridor between Vigo in Spain and Porto in Portugal, which is one of the official 5G corridors.

"At the Congress we will organise a workshop to share what are the first findings of the project. These are use cases which have been identified and what challenges there are. We will also discuss data ownership, because the way different countries manage data changes at the border. We have already identified the issues and how we will solve them."

The workshop will also provide deployment templates for 5G. The 5G Action Plan from the European Union is designed to help mobile operators and public authorities to deploy 5G on the main corridors. The Congress will focus on 5G because of the need to fully understand the way data will fundamentally change mobility in the future.

European Congress sponsor Qualcomm is at the forefront of 5G development.   Qualcomm Communications Director Doris Meier says transport is part of a connected future, "We envision this next big change in cellular technology spurring a new era of intelligent, connected devices and enabling new opportunities in connected cars, remote delivery of health care services, and IoT — including smart cities, smart homes, and wearables.

We see quite some interest and deployment of C-V2X in different regions of the world, especially US and China, where it provides a backward compatible path to more demanding and complex scenarios. ."

5G technology will be discussed frequently during the Congress week in Lisbon. 5G-MOBIX, along with broader ERTICO projects CROCO and CARMEN, will present the vision of 5G deployment. There will also be demonstrations with partners from Portugal and Spain to show the exciting solutions 5G can facilitate.   The Internet has changed everyday life over the past 25 years and 5G connectivity is likely to have a similar profound effect on mobility in the future. Therefore, these sessions at the ITS European Congress 2020 are not to be missed.

For more information about the ITS European Congress, visit www.itseuropeancongress.com or join the conversation online with #ITSLisbon2020