



Connectivity is key for the logistics of tomorrow

Our economies and our lives depend on the efficient movement of goods; movement that is underpinned by complex transport and logistics chains. But, while delivering goods from producer to end user, transport and logistics systems are under increasing pressure to deliver greater efficiency, more sustainability and improved cost-effectiveness. A number of initiatives from ERTICO – ITS Europe are addressing these challenges and creating the transport and logistics systems of tomorrow.

Transport and logistics are facing the same challenges as other sectors – the need to increase efficiency, improve sustainability and lower costs. For transport and logistics however, this is further compounded by the need to offer a better customer service in the face of growing customer expectations, and to ensure compliance with ever more stringent regulations.

One of the biggest transport problems globally is congestion, especially on the roads. Congestion costs Europe about 1 % of its GDP every year and is the cause of a large amount of carbon emissions. Another challenge is the digitalisation process of transport networks and infrastructure. If fully implemented, this could better integrate road, rail, air and waterborne travel into a seamless logistics chain across Europe.

The sustainability of urban logistics is a challenge for rapidly growing cities worldwide. Sharing is a big story for logistics – from Uber-style approaches to last-mile delivery, to more formal joint ventures and partnerships at corporate level. The whole sector is redefining collaboration through change, but is still hampered by inconsistencies in everything from shipment sizes to processes and IT systems. Large e-commerce players as well as various start-ups view last mile services as a key differentiator from their competitors. Services are in competition for traffic lanes and parking spaces as well as being vulnerable to other disruptions, like traffic accidents, traffic jams or weather.

Services will need an active data exchange and an open location platform to host the appropriate data. 'New digitized innovations and services will require collaboration since nobody can do this alone,' says Mika Ryttonen CEO behind data driven solution HERE Tracking. 'New innovations, such as HERE Tracking, automated vehicles or active traffic management, are entering the market and are all powered by data. ERTICO with its innovative platforms will play a key role in driving industry collaboration to make transportation smarter.' One of these platforms is ERTICO's TM 2.0 that enhances logistical efficiencies by providing better insight into highly congested delivery areas such as rails and ports.

Also key to meeting these daunting challenges will be improving the way that elements in the freight and logistics chain communicate with each other and exchange data. This is particularly true for highly

congested hubs such as ports. ERTICO, a public-private partnership that develops, promotes and deploys Intelligent Transport Systems and Services (ITS), understands the key importance of improving interoperability and connectivity when it comes to optimising cargo flows and streamlining supply chain management.

ERTICO has set itself the goal of achieving fully digital, interoperable and automated freight and logistics operations in Europe by 2025 and seamless logistics and freight transport by 2030. With this goal in mind the partnership has recently announced its intention to develop the new LogistiX hub for a trusted data exchange in supply chain and logistics.

Dr. Johanna Tzanidaki, Director of Innovation and Deployment at ERTICO, said: 'The LogistiX hub will be a knowledge and business incubation centre, which will help companies to become more competitive with regards to logistics and supply chain services using digital technologies. Offering a catalogue of leading edge ideas, solutions, networks and compliance testing it will enable the optimisation of international end-to-end data visibility of the supply chain.' The LogistiX hub will be formally launched at the ITS Congress in Copenhagen in September 2018.

Leveraging the state-of-the-art

To achieve fully digital and interoperable freight and logistics chains it will be necessary to leverage cutting-edge technologies and solutions, for example autonomous mobility and unmanned aerial vehicles (drones). But the greatest impact in this area will undoubtedly come from exploiting synergies between ICT solutions, such as 5G, IoT, end-to-end visibility networks and blockchain.

ICT platform connectivity is a core consideration of ERTICO's AEOLIX project. This project is developing a digital ecosystem to better manage, plan and synchronise freight and logistics operations across Europe. AEOLIX will improve the overall competitiveness of goods transport in the supply chain by enabling low-complexity and low-cost connectivity of local ICT platforms and systems. It will also overcome fragmentation of data exchange and ensure scalability, interoperability and visibility across the supply chain. The resulting automation of the data flow between logistic chain stakeholders will make management of their relationships more flexible, supporting an improved workflow across companies.

The improved connectivity that the project will deliver will enable the scalable, trusted and secure exchange of information. This, in turn, will improve the overall competitiveness of goods transport in the supply chain and make it more environmentally, economically and socially sustainable. Improved connectivity will also support cooperative ITS solutions, which will also improve logistics operations by generating real-time traffic information, allowing better tracking and tracing of goods.

Join the conversation

Efficiency in freight transport is one of the key topics that will be discussed at this year's Intelligent Transport Systems (ITS) World Congress, which will take place in Copenhagen, Denmark on 17-21 September 2018. If you would like to come to Copenhagen and join the discussion, register [here](#).

Just a few of the relevant sessions on this topic include:

- ES08 Efficiency in Freight Transport
- SIS80 Across the Pavement – Smart Freight Delivery for the last Metres
- ES03 Essentials for developing a Smart City
- SIS70 Port of the Future towards Automation
- SIS87 Ensuring a network for logistics data exchange

For the full programme of the please click [here](#).