ERTMS & UNIFE

The European Railway Traffic Management System (ERTMS) is a major industrial project developed by eight UNIFE* members: Alstom Transport; Ansaldo STS; AZD Praha; Bombardier Transportation; CAF; Mermec; Siemens Mobility and Thales in close co-operation with the European Union, railway stakeholders and the GSM-R industry.

There are two basic components of ERTM: the European Train Control System (ETCS) an automatic train protecting system (ATP) to replace the existing national ATP systems. In addition there is GSM-R, a radio system for providing voice and data communication between the track and the train based on standard GSM using frequencies especially preserved for rail application with certain specific and advanced functions. More on GSM-R can be found at: http://gsm-r.uic.asso.fr

ERTMS aims at replacing the different national train control and command systems in Europe and the deployment of the system will enable the creation of a seamless European railway system and, in turn, increase the competitiveness of European railways. The system brings considerable advantages including: increased capacity; higher reliability rates; an open supply market; improved safety and improved cross-border connections. Importantly, the system has been designed to be fully interoperable across Europe where there are currently 20 control systems across the European Union. Each train used by a national rail company has to be equipped with at least one system but sometimes more, just to be able to run safely within that one country.

Each system is stand-alone and non-interoperable and therefore requires extensive integration, engineering effort raising total delivery costs for cross-border traffic. In turn, this restricts competition and hampers the competitiveness of the European rail sector when compared with road transport by creating technical barriers to international journeys. For example the Thalys train sets running between Paris – Brussels – Cologne and Amsterdam have to be equipped with seven different types of train control systems, which bring considerable costs.

Making rail freight competitive

In mid-September UNIFE released the first edition of its “ERTMS Freight Corridors Tracker” highlighting the progress made to build a fully-interoperable and competitive rail freight network in Europe.

Said Michael Clausecker, UNIFE Director-General: “Whilst ERTMS has been successfully deployed on a large number of high-speed lines in Europe and has
become a worldwide success, some countries are deliberately preventing the creation of interoperable freight corridors in Europe by not equipping their lines. The European Commission must act to ensure that the deadlines contained in ERTMS deployment are met. It is not acceptable that a small minority of countries prevent the others from advancing towards interoperability. In the end, the only winner of today’s situation is road transport, which continues to enjoy a favorable competitive position.”

The data released by UNIFE shows that whilst the European ERTMS deployment plan foresees the gradual installation of ERTMS along six corridors in 2015 and 2020, only few freight lines have been equipped so far.

Ronald Pörner, Managing Director of the German Railway Industry Association (VDB) added: “Also Germany in the heart of Europe has to fulfil the liability for the European ERTMS deployment plan. Four of six ERTMS corridors are crossing Germany. The German government is committed the equipment of these four corridors – it should now take the necessary financial and technical steps to reach this objective.”

The situation of the ERTMS deployment contrasts with both the situation on high-speed lines, which are successfully running with ERTMS in countries such as Spain, Italy or Belgium, and the global success of ERTMS – which is being adopted in countries as diverse as China, India, South Korea, Taiwan, Libya, Morocco, Saudi Arabia, Algeria, Mexico or New Zealand.

As far as European freight traffic, the installation of ERTMS often poses a different challenge as ERTMS installation comes in addition to a pre-existing signalling system, and only brings its full benefits if investments are well-coordinated and implemented along an international freight route. For this reason, UNIFE and VDB backs the EU-coordinated approach contained in the European Deployment Plan, and urges the Member States to support the deadlines contained in this plan.

*European Rail Industry Association.*