

EU prepares an action plan for ERTMS deployment

European Rail Traffic Management System-ERTMS is one of the most considerable projects being implemented by European authorities and the European rail industry, a project which will serve to make rail transport safer and more competitive.

by Elena Ilie

Being compatible throughout Europe, ERTMS provides the European Union with a unique opportunity to create a seamless railway system, where trains may run from Barcelona to Bucharest without facing technical problems related to signalling.

However, interoperability is far from being the only advantage brought by ERTMS. Indeed, ERTMS has also been designed to be the top of the range train control system in the world. It therefore brings considerable benefits in addition to interoperability, such as increased capacity on existing lines and a greater ability to respond to growing transport demands and higher speeds as ERTMS allows for a maximum speed up to 500 km/h.

ERTMS also provides for higher reliability rates as the train control system may significantly increase reliability and punctuality, which are crucial for both passenger and freight transport.

Lower production costs, reduced maintenance costs, an opened supply market, simplified approval process and improved safety for passengers are other significant assets when it comes to the benefits of implementing ERTMS

alongside the European railway network.

ERTMS is an “enabling” technology to allow exploitation of new business opportunities, operational improvements and efficiency streamlining. Ideally, evolution capability should be “built-in” in the system; it must not become a constraint or a barrier.

On the other hand, promotion of international traffic requires seamless end to end service. Interoperability is core to fulfill this objective. The need to ensure interoperability, combined with the long renewal cycles in railway signalling, establish the obligation to protect the investments in ERTMS systems.

International traffic can't go without ERTMS

At the beginning of June, European Transport Ministers discussed the deployment of ERTMS and ETCS. The main conclusion was that there is an urgent need for the Member States to accelerate the deployment of ERTMS to achieve a fully interoperable European railway area. The Commission seconded this stance and informed the Council that it was working on an action plan to deploy ERTMS which would be presented on June 20. We will return on the ERTMS action plan in the future issues of Railway PRO magazine.

“In the past, most of the national railways systems have developed along their own paths. Therefore, a common European management and signalling system was identified as a key element for developing the EU railways already more than 25 years ago. Although there are many technological advances, the political side must focus on the deployment of the system. The deployment is closely link to economic and financial issues”, the Maltese representative within the Ministry of Transport informed as Malta currently holds the presidency of the Council of the EU.

“When the EU launched this project, Luxembourg was among the pioneers in implementing it. Since 2015, the Luxembourg system has ETCS and all passenger trains will be equipped with this by the end of 2017. In other



Photo: Alstom

countries and corridors, this is taking place at a slower pace.” For this reason, the Luxembourgish representative urged to accelerate the roll out of the European safety system. Luxembourg will continue to give support to measures aimed at rolling out ERTMS across the EU.

The Belgian representative within the Ministry of Transport said that the roll out of ERTMS is crucial if the EU is to create a European railway area. This would benefit security and make rail transport more competitive and foster the shift to rail. Belgium supports this and set itself the target to equip the whole national network by 2022 with a priority for freight corridors.

”For an effective roll out of ERTMS, it is important to focus attention on difficulties arising from cross-border sections. This is a joint task of rail infrastructure administrators and the Commission. Rail freight corridors can play an important role as documented in the Ministerial Declaration on rail freight corridors adopted during the TEN-T Days”, asserted the Dutch representative.

Violeta Bulc, Commissioner in charge of Transport and Mobility acknowledged the existence of modern train and signalling systems, but highlighted that there were many different local versions which compromise the interoperability at EU level. She insisted that the deployment of the latest full interoperable version III was essential. However, to achieve this, much work was still required. The EU is rather better at selling ERTMS outside EU than implementing it at home, China and Saudi Arabia being the largest countries deploying ERTMS.

She further said that the reality of the deployment has been difficult, however, the fact that there is a stable ERTMS version and an agreed deployment plan makes it necessary for ERTMS to deliver.

The Spanish representative expressed the conviction about the ERTMS benefits and advantages. Spain signed



a collaboration agreement with ERA, which looks at transferring knowledge acquired by Spain and approve ERTMS projects. This is due to enter into force in mid-2019.

As a unique European train control system, ERTMS is designed to gradually replace the existing incompatible systems throughout Europe. This will bring considerable benefits to the railway sector as it will boost international freight and passenger transport.

In addition, ERTMS is arguably the most performant train control system in the world and brings significant advantages in terms of maintenance costs savings, safety, reliability, punctuality and traffic capacity. This explains why ERTMS is increasingly successful outside Europe, and is becoming the train control system of choice for countries such as China, India, Taiwan, South Korea and Saudi Arabia.



Photo: Alstom