

# Accelerating the deployment of ERTMS in Europe: a key priority for the suppliers



The European Rail Traffic Management System (ERTMS) – as the single, worldwide, interoperable signalling standard – has reached a stage of maturity. For 42 countries, ERTMS is the preferred choice for ATP signalling solutions. More than one billion cumulative train kilometres have been covered with ERTMS-equipped trains and in Europe, complete nation-wide network deployments are ongoing. Here **Michel Van Liefferinge**, UNISIG General Manager, outlines the next priorities for continued success.

ERTMS achieved major milestones in 2016, following the adoption of ERTMS Baseline 3 Release 2 set of specifications, as part of the updated CCS TSI. To ensure stability of the specification and to deploy ERTMS along the entire European railway network, the European Commission, the European Union Agency for Railways, and the representatives of the European railway sector, signed a new Memorandum of Understanding (MoU) in September 2016. This sets the basis for the long-term commitment of all stakeholders: the rail supply industry, infrastructure managers, railway undertakings and EU institutions. It contains several provisions designed to increase cooperation between the parties and further promote the swift and coordinated deployment of ERTMS in Europe. Focus is placed on the stability of the specifications; compliance to the Control Command Signalling Technical Specification for Interoperability (CCS TSI); reduction of national rules; and preparation, in coordination with Shift2Rail, of the evolution of the ERTMS system.

This period of stability should be used to prepare the evolution of the system and the inclusion of additional functionalities (ATO, ETCS Level 3, Next Generation Telecommunication system and Satellite Positioning) in the ERTMS/ETCS specifications that are described in the 'ERTMS Long Term Strategy' document, adopted by the Sector and the Member States in 2016.

On 5 January 2017 the European Commission adopted an implementing regulation on the ERTMS Deployment Plan (ERTMS EDP). The plan sets a new target at 2023, by which time approximately 50% of the Core Network Corridors shall be equipped. In 2023 the ERTMS EDP will be updated again, setting out the precise implementation dates for the remaining part of the Corridors between 2024 and 2030. The visibility given by the EDP is key to allowing suppliers to plan their industrial strategy and anticipate their resource planning.

European ERTMS/ETCS suppliers have identified the following key priorities to contribute to the success of the ERTMS EDP:

- *Implementation of the ERTMS Breakthrough Programme*, put forward by the European ERTMS Coordinator. It aims to improve stability, reliability and cost effectiveness, whilst addressing the needs of the users with an interoperable on-board system and the ability to run everywhere in Europe with no restrictions
- *Harmonisation and stability of requirements; and reliability of*

*timeframe*: Exporting requirements from a national system to ETCS shall be reduced and not impact interoperability. In addition, specific project requirements shall be limited to avoid too many variant solutions that may jeopardise interoperability and lead to an increase in cost. Stability of the products is essential for suppliers to allow them to amortise their development costs prior to a major release

- *Use of economies of scale*: A customer (or a pool of customers) may gain advantage from economies of scale if the size of order is increased. This will allow for a decrease in cost per unit as fixed costs are spread out over the units to be delivered
- *Coordinated implementation of the Fourth Railway Package*: The implementation of the Fourth Railway Package's Technical Pillar will cut the time and cost necessary to obtain authorisation for locomotives and rolling stock for use on the European rail network.

In their shared mission to make the European railway interoperable, sustainable and competitive, the Chief Executives of the eight signalling companies that are members of the UNISIG association renewed their commitment to the development of the ERTMS at a meeting in Brussels on 7 February 2017. It was attended by DG Move Director-General Henrik Hololei, ERTMS Co-ordinator Karel Vinck, and EU Agency for Railways Executive Director Josef Doppelbauer.

Alstom, Ansaldo STS, AZD Praha, Bombardier, CAF, MerMec, Siemens and Thales all signed a letter of intent supporting the updated EDP. They agreed on further cooperation and commitment to ensuring the availability of sufficient industrial capacity and – together with actions by other stakeholders – to increasing quality, improving delivery time and achieving cost reductions. 🚄

**Michel Van Liefferinge** gained a Telecommunication Engineering degree with the highest honours. In 1989 he started his signalling career as Project Manager for the Great Western Main Line ATP project for British Railways at Gec-Alsthom Acec Transport and obtained huge expertise in railway signalling systems. From 1992 to 2011 Michel worked in a number of management positions within Alstom Transport Signalling, among them being Vice President ERTMS North Europe leading the roll-out and the development of ERTMS, mainly for Italian high-speed, Switzerland and Benelux projects and Site Managing Director at Charleroi. Since April 2011 Michel has been working as a Consultant and is currently acting as UNISIG General Manager for UNIFE.