

Hitachi Rail awarded €500m framework agreement for ERTMS digital signalling in Italy

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Hitachi Rail has won a contract worth €500 million which will see them design and implement ERTMS (European Rail Transport Management System) digital signalling on 700km of rail lines across Italy.

The framework was awarded by Rete Ferroviaria Italiana (RFI).

Hitachi says the new technology is the most advanced system for digital control of train operations and will be delivered on rail lines in four Italian regions: around 480 km of rail lines in Sicily, 150 km of former “Ferrovia Centrale Umbra” in Umbria and 80 km of the Roccasecca-Avezzano rail line in the Lazio and Abruzzo regions.

Hitachi Rail is the principal provider in a partnership to deliver the digital signalling programme that also includes Alstom Ferroviaria and Ceit.

The introduction of the system will mean that traffic lights are replaced by on-board digital cab signalling, creating a service that can run with more trains on the line, with increased reliability, and at a greater speed. ERTMS aims to harmonise the different train control systems in countries around Europe, creating a

seamless European railway system. This will be achieved by installing a new, harmonizing, automatic train protection system and by introducing GSM-R, a radio system that provides communications between track and train.

This agreement, which is the first technological project financed by Italy's National Plan for Recovery and Resilience, marks a significant step forward towards rail interoperability throughout Europe and will unlock huge benefits for passengers. ERTMS technology has been pioneered for passenger service on high speed rail lines, but this move represents a major extension of the technology, and the benefits it brings, to regional train lines across Italy.

ERTMS technology will allow trains coming from neighboring European countries to operate on Italian lines without interruption. It will also enable automatic activation of train safety functions, including emergency braking in case of danger or if trains exceed the track's line speed. By being able to detect and manage faults it will improve a trains punctuality and reliability.

ERTMS digital signalling system also has a major benefit in reducing the energy footprint of the railway by regulating the speed, acceleration and braking of trains across the 700 km of track covered. Moreover, the technology allows the signalling assets installed alongside the track to be reduced, which helps protect the landscapes that the railway crosses.

Michele Fracchiolla, executive officer, sales & projects EMEA & Australia, Hitachi Rail said: "We are very proud of this award: the European Rail Transport Management System represents 50% of the first objective set by the European Union for the implementation of technological projects financed by PNRR. "This system clearly indicates the intention to extend the benefits of the high speed technological evolution to other type of lines, particularly to regional transport. These benefits are especially represented by the continuous and complete supervision of the operation of trains, through track side equipment. The system will enhance the safety of the railway and allow digital traffic management systems to enable more trains to run on the network, while improving their punctuality at the same time." Hitachi Rail is a global industry leader in digital signalling and is the first provider to introduce ERTMS technology in Europe – in the UK, Italy, Spain, Sweden, and France – and in the highly competitive markets of China and India.