

EURAILmag

BUSINESS & TECHNOLOGY



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EDITO

At home, and abroad

Railway systems in upcoming years will be a major investment spotlight, both in emerging and developed countries. Together their strengths, which lie in passenger capacity, environmental protection, energy efficiency, and safety, make this particular mode of transport the ideal solution for the transit of people and goods.

Spain's firm commitment to the railway has placed its industry in a leading position worldwide. With references in more than 90 countries, our industry focuses on innovation through internationalization. All thanks to the trend-setting networks deployed in recent decades, advances in home-grown technology, and to ground-breaking clients. This position reflects both the international prestige of the Spanish rail sector, and its possibilities for significantly contributing to the implementation of new transport projects across the five continents ■



Pedro Fortea, director, MAFEX Spanish Railway Association

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TECHNOLOGY – SETTING AN EXAMPLE WORLDWIDE



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PROJECTIONS FOR WORLD RAIL BUSINESS TURNOVER IN THE PERIOD 2015 TO 2017 ARE ESTIMATED AT €170 BILLION, ACCORDING TO UNIFE. SUCH FIGURES REFLECT THE IMPORTANCE THAT THE IMPLEMENTATION OF NEW LINES, THE MODERNISATION OF EXISTING LINES, OR EXTENSION OF EXISTING NETWORKS WILL HAVE.

In order to develop these infrastructures, both administrations and operators are seeking out state-of-the-art technology to meet the major mobility challenges that are interoperability, comfort and universal access, energy efficiency, and smart grids, as well as the highest safety standards in transit management.

In recent years, advances in technology have placed the Spanish railway industry in a leading position worldwide regarding R&D and highly qualified services. Many countries are now focusing on the technological capability

of the Spanish rail sector, comprised of leading small and large companies in all fields of activity. This capability, gained in all fields of activity, can be particularly perceived abroad: from consulting and engineering, to infrastructure, electrification, safety, equipment, fixed and rolling stock, as well as integral project management.

HIGH SPEED AT HOME

In the field of high speed, the country's large network has become its best showcase. In

Spain, there are nearly 2,900km in service, plus 2,100km in different execution phases, or as studies and projects.

Spain is internationally renowned for these characteristics, and its network, one of the most modern in the world, is equipped with the latest rolling stock and the most advanced communication and signalling systems. This network is a clear example of Spanish companies' capacity to build and maintain efficient and interoperable infrastructure at competitive costs, as well as transit management systems delivering high safety standards. In

fact, Spain is the European country with the greatest implementation of the ERTMS signalling system, currently deployed on more than 1,700km of line.

All these strengths and achievements has been further endorsed by the recently awarded contract for the Mecca-Medina high-speed line, which has confirmed the great advances of the Spanish rail industry worldwide, as well as its ability to confront new technological challenges. The contract with Saudi Arabia also opens the door to competing for other, similarly large projects involving high-speed corridors, such as the those in the US, Russia, Israel, or Brazil.

The future of the Spanish rail industry across the globe goes beyond the major high-speed line segment, with the industry also bringing its specialisation and experience into play for implementing modern metropolitan rail systems, medium-distance connections, and freight networks.

URBAN MOBILITY & MEDIUM DISTANCES TO BOOST SUSTAINABLE TRANSPORT

In recent years, Spanish rail companies have been at the forefront of public transport advances in the country's major cities. Thanks to their participation, a large and high-quality urban network has been created, equipped with the latest innovations in rolling stock, equipment, and facilities.

As a result of this commitment to rail as the most efficient mobility solution, today Madrid, Barcelona, Valencia, and Seville boast modern metro, tramway, and light rail networks. Other cities included are Bilbao, Vitoria, Tenerife, Palma de Mallorca, Zaragoza, Málaga, Murcia, Alicante, and Cádiz. In coming years, the tramway and light rail network will be enlarged with lines in Granada and Málaga, among others.

These developments are complemented by an 11,000km conventional network. Suburban connections are to be highlighted

in such a network. This great progress is the result of years of expertise, increasingly demanded abroad for urban mobility projects around the world.

PIONEERING INNOVATIONS

High speed, long and medium distances, suburban, freight services... the common thread in the Spanish rail industry is the commitment to R&D, and the determination to achieve excellence in solutions of high technological capability. Years of hard work have led to the many innovations introduced by this group of companies in the international market.

Some Spanish developments are the advances in catenary-free trams to better integrate them into cities, pioneering rolling stock such as the two new high-speed platforms, tram-trains, or the light rail and suburban train units in many countries throughout the world. Not to mention innovations such as the automatic variable gauge systems – of great interest for achieving complete interoperability between countries, and for advanced transit management solutions – and the equipment and systems improving energy efficiency, both in the power trains of vehicles and in terms of making the fullest use of the electrical energy of the railway system.

In parallel, advances are being made in the field of railway electrification. Clear examples are the Spanish-developed C-350 catenary, or the new electronic technology developments in level crossing protection, which have increased safety levels.

MAFEX UNIFIES ON AN INTERNATIONAL SCALE

The strength of the Spanish rail sector abroad is a sign of the hard work performed in recent years. The rail sector was Spain's biggest industrial exporter in 2012, with growth of over 20% in comparison to 2011 figures – representing more than €2,500 million.

In this internationalisation process, the association of companies in the sector is essential. In this sense, associations like MAFEX play a dynamic role in promotion and market opening. It is precisely to boost their entry into foreign markets, to contribute to a wider knowledge of their technological capability, and to consolidate their worldwide leadership position that MAFEX continues to intensify its activities year after year. The association has designed an intense plan of activities for 2013, including visits to 18 countries in trade delegations and sector trade fairs.

This year, MAFEX will participate via an information stand at the major trade fairs in the sector: Rail Solutions in Kuala Lumpur (Malaysia), UITP in Geneva (Switzerland), Trako in Gdańsk (Poland), and Business On Rails in São Paulo (Brazil).

MAFEX's agenda started in February 2013 with a direct mission to Saudi Arabia and Qatar, followed in March by a visit to Thailand and Indonesia. And further activities are planned for the rest of the year, with visits to top destinations such as Brazil, Malaysia, Mexico, Russia, the US, Canada, Ukraine, Romania, Colombia, and India.

The 2013 agenda will culminate with the organisation of MAFEX's IV International Railway Convention in Bilbao (Spain), running from September 15 to 19. This event has become a key meeting place for Spanish companies, and for representatives from many participating countries who come to Spain to discover more about the technological advances and innovations made by our members.

The objective is for all MAFEX companies to continue contributing with their products, services, and technological innovations to the railway of the future, with state-of-the-art solutions in all the corresponding fields ■

**Pedro Fortea, director
MAFEX Spanish Railway Association**