The know-how and technology of both companies cross the Bosphorus Strait

OHL and Siemens Mobility launch the Marmaray project in Turkey

- 76 km of railway line already in operation
- The project connects Gebze in Asia and Halkali in Europe with commuter, subway and high-speed trains, as well as a freight link
- OHL has undertaken the design, the complete replacement of the two existing roads and their replacement in three new 62 km roads of the 76 km of the project
- Siemens Mobility Spain puts into service the system of signaling and control of the project
- The project covers signaling and control technology, communication systems and SCADA, as well as ERTMS and CBTC technologies

13 / 03 / 2019. The Ministry of Transport and Infrastructure of the Republic of Turkey has inaugurated the commissioning of the main phase of the Marmaray project, an initiative to connect the Asia-Europe corridor. The project has been carried out by the joint venture integrated by OHL (70%) and Siemens (30%) and represents an important construction and communication milestone at the global level.

OHL, as main contractor, has undertaken the design, the complete replacement of the two existing roads and their replacement in three new 62 km roads of the 76 km of the project, the renovation and construction of 38 stations, the construction of 130 structures, two operation and control centers, garages and workshops, renovation of all electromechanical systems (power supply, catenary, signaling, telecommunications and ticketing systems) along the 76 km of the project.

Siemens Mobility has installed the signaling and control system, the communication systems, as well as the SCADA system.

The line connects 43 km on the Asian side of the peninsula and 19 km on the European side, at 14 km from the tunnel under the Bosphorus Strait. It will provide a mixed commuter and subway service for the metropolitan area of Istanbul, as well as the integration of the Gebze-Halkali section in the Ankara-Istanbul high-speed corridor and a freight link, which will provide greater availability for travelers that cross the continents. The more than 75,000 passengers per hour will find their most efficient journeys at peak times during which the interval between trains will be two minutes.

“We want to thank the Turkish administrations and AYGM for the trust placed in Siemens Mobility to undertake the different projects that we are carrying out in Turkey. Our goal is to help mobility operators around the world have more intelligent trains and infrastructure that increase value sustainably over the entire lifecycle, enhance traveler’s experience and guarantee availability”, said Agustín Escobar, CEO of Siemens Mobility Spain.”

“Having carried out a world-class project such as the railway connection between Europe and Asia under the Bosphorus Strait has been a challenge for OHL from the point of view of executing an infrastructure with important technical and innovation challenges. We are very proud of contributing to boost the economic growth and well-being of this country thanks to projects such as Marmaray,” said José Antonio Fernández Gallar, CEO of OHL.

The Marmaray project is one of the pillars of Turkey’s ambitious rail investment plan. This phase includes the design and replacement of the rail system on both sides of the Istanbul Strait, including the centralization of the Operation and Control Center in Maltepe. With its almost 15 million inhabitants, Istanbul is one of the largest cities in the world. The only previous connections between both parts of the city, before the inauguration of the Marmaray tunnel that crosses the Bosphorus Strait, were provided by ferries and two bridges for road traffic. In an effort to reduce traffic congestion and improve sustainability, the government is expanding the urban transport infrastructure.

Technologically unique, the line is equipped with ERTMS (European Railway Traffic Management System) and CBTC (Communications Based Train Control System). The advanced solution provided by Siemens Mobility Spain includes the ERTMS FUTUR technology that is already in service on the Turkish high-speed line of Ankara and Konya, as well as the Trainguard system in service on the Downtown line of the Singapore subway.

OHL has developed important railway activities in Europe, Asia, Africa and America, including the High-Speed contract between the holy cities of Mecca and Medina in Saudi Arabia and a section of the high-speed train on the Ankara-Istanbul line in Turkey, with 206 km, in service since 2009.

Siemens Mobility is currently developing other signage projects in Turkey on the Bandırma-Manisa line, Samsun-Katılım, Konya-Karaman Ulukisla, the speed increase in Ankara-Konya and recently Yerköy-Sivas, as well as collaborating in the technical solution of the open track detection systems for the Tekirdag-Muratli lines.