

## **Alstom signs contract to modernise signalling and deliver Madrid's first driverless metro line**

- **The new Urbalis CBTC signalling system will enhance the reliability, frequency, safety, and efficiency of line 6, the busiest line in the Madrid Metro network.**
- **Alstom's Railway Signalling and Safety Centre of Excellence in Madrid will implement the project**

**20 January 2025** – Alstom, global leader in smart and sustainable mobility, has signed a contract with Metro de Madrid to upgrade the signalling of line 6, making it Madrid's first driverless metro line. This 23.5 km circular line with 28 stations is renowned as one of the busiest in the city, serving nearly 400,000 commuters daily and connecting the entire metro network. The upgrade to fully automated operation signifies a notable advancement in Madrid's urban transportation, enhancing the daily travel experience for thousands of residents and visitors, and bringing modernisation, resilience and energy savings to the heart of the metro network.

The contract includes the design, engineering, installation, and commissioning of the new signalling system and electronic interlocks necessary to upgrade the current communications-based train control (CBTC), from Grade of Automation 2 (GoA2) semi-automatic operation to Grade of Automation 4 (GoA4), enabling fully autonomous and driverless operation. The project will also implement a new Automatic Train Supervision (ATS) system to enhance train monitoring and control.

Alstom's new Urbalis CBTC signalling system will improve the safety, reliability, and capacity of the line. This technology will also allow increased frequencies and improved train efficiency, reducing their energy consumption. Alstom is the world leader in CBTC systems, with over 30 years of experience in implementing cutting-edge metro signalling systems. Alstom's CBTC technology is operating on 190 metro lines in 32 different countries, 67 of which are driverless lines, including the metros of São Paulo, Paris, Riyadh, Milan, and Shanghai, among others.

"We are grateful to Metro de Madrid for their trust in our team and in our Railway Signalling Excellence Centre in Madrid to execute this iconic project that will transform and modernise Madrid's metro system. This contract reinforces our commitment to enhance mobility for Madrid residents and visitors, by implementing state-of-the-art technology and continuous innovation. Together, we are paving the way for more sustainable and smart mobility solutions," stated Leopoldo Maestu, Alstom Managing Director for Spain and Portugal.

The project will be led by Alstom's Railway Signalling Excellence Centre in Madrid. This site, that employs over 800 digital mobility experts, is a global reference in urban and mainline signalling and safety technologies. Alstom teams in Madrid have developed notable projects in Spain & Portugal, such as the signalling systems for several ADIF lines in Spain, various urban lines contracts for Metro de Porto, the APM for the T4 terminal in Madrid International Airport and a CBTC contract in Malaga. and also worldwide

such as the Tren Maya in Mexico, and projects in Istanbul, São Paulo, Cairo's monorail and high-speed trains in Saudi Arabia, just to mention some of the most recent international projects.

Alstom has been a strategic partner of Metro de Madrid for over 50 years, providing the first CBTC signalling system for lines 1 and 6, and supplying a significant portion of the interlocks in the metro network. Additionally, Alstom supplied 85% of the fleet traction systems, which were manufactured at its industrial centre in Trápaga (Bizkaia).

More information about Alstom in the Community of Madrid at: [Alstom, key player in Madrid's mobility | Alstom](#).

More information about driverless technology at: [Who drives the driverless train? | Alstom](#)

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**About Alstom** Alstom commits to contribute to a low carbon future by developing and promoting innovative and sustainable transportation solutions that people enjoy riding. From high-speed trains, metros, monorails, trams, to turnkey systems, services, infrastructure, signalling and digital mobility, Alstom offers its diverse customers the broadest portfolio in the industry. With its presence in 64 countries and a talent base of over 84,700 people from 184 nationalities, the company focuses its design, innovation, and project management skills to where mobility solutions are needed most. Listed in France, Alstom generated revenues of €17.6 billion for the fiscal year ending on 31 March 2024.

**About Alstom in Spain** Alstom has a long history of innovation and commitment to Spain's economic and industrial development with local industrial and technological presence for all activities related to rail transport and sustainable mobility. With more than 3,200 people in the country Alstom has an industrial plant in Barcelona dedicated to the manufacture of all types of rolling stock, a propulsion systems factory in Basque Country and, in Madrid, different technological innovation centres for the development of projects in the fields of railway safety, signalling, maintenance and digital mobility. One out of every three trains running in Spain has been manufactured by Alstom.

[www.alstom.com](http://www.alstom.com).

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