



India's first semi high-speed regional train by Alstom – -NaMo Bharat gets inaugurated, sets a new world standard in advanced signalling technology

- Integrates a new standard in signalling for superior safety with the world debut of ETCS L3 hybrid technology over LTE
- The trains are built in India and can operate at up to 160 km/h
- First phase launched from Duhai-Sahibabad that is set to reduce travel time by 50%

20 October 2023 – Alstom, global leader in smart and sustainable mobility, reached a milestone today for India's rail revolution with the inauguration of NaMo Bharat¹ with its rolling stock and signalling solutions provided by Alstom India. India's first semi-high-speed regional rail service was flagged off today by the Hon'ble Prime Minister Shri Narendra Modi alongside the Chief Minister of Uttar Pradesh, Shri Yogi Adityanath and other government dignitaries. The first phase i.e., the Duhai-Sahibabad section (17 kms) of the Delhi-Meerut corridor which will be operational from 21 October for general public also marks the world debut of the Level 3 ETCS (European Train Control System). This will not only contribute to safety, but also will facilitate interoperability, reduce wait time and enable efficiency. It will be equipped with Automatic Train Operation (ATO) over Long Term Evolution (LTE) in the future to further increase network performance and capacity.

Designed and manufactured in India, the NaMo Bharat reinstates Alstom's commitment to Atmanirbhar Bharat with end-to-end engineering, manufacturing and signalling work done in India. In the last two years, Alstom's 360+ engineers & designers devoted thousands of hours and ran hundreds of hours of tests to deliver the phase-I commitments to National Capital Region Transport Corporation Ltd. (NCRTC). The company is aiming to also achieve its delivery commitments by 2025.

Commenting on this landmark moment, Olivier Loison, Managing Director - Alstom India said, "It is a moment of pride for us at Alstom to yet again be a part of India's Rail Revolution. NaMO Bharat will be a first-of-its-kind experience for Indian commuters for its speed, advanced technology and passenger experience. This project also marks the world premiere of several new signalling technologies which will set new benchmarks in the rail space globally. All of this is set to make sustainable mobility at scale real in India. These Made in India trains reflect our robust capabilities, and we are truly humbled to be contributing to India's rail-based infrastructure growth."

¹ Regional Rapid Transit System (RRTS) is a new, dedicated, high speed, high capacity, comfortable commuter service connecting regional nodes in NCR. There are eight RRTS corridors planned. The first one between Delhi and Meerut will be called Namo Bharat.



World debut of signalling technologies towards modernisation and improved efficiencies

Alstom India is making the world debut of European Train Control System (ETCS) Level 3 signalling, with integrated Platform Screen Doors using Long Term Evolution (LTE) communication with NaMo Bharat. These solutions are designed and stacked together to provide utmost safety to passengers. A key feature of the technology being introduced in RRTS is interoperability, which facilitates seamless commuter movement across the corridors, without the hassle of changing the trains for passengers. ETCS signalling system will not only facilitate interoperability but will also allow to optimise the usage of existing infrastructure, thus reducing the waiting time for passengers. This signalling system provides high level of safety for trains running at close headway of 180 seconds by virtual block implementation (hybrid level 3) to ensure continuous and safe separation and eliminates accidents due to human error. This service also comes with Automatic Train Protection (ATP), Traffic Management System (TMS), Platform Screen Door (PSD) sub-systems using Long Term Evolution (LTE) communication between track side and train.

A one-of-its-kind 'Make in India' marvel

Designed at Alstom's Hyderabad engineering center and manufactured at Savli (Gujarat), these trains perfectly align with the government's Make-in-India and Aatmanirbhar Bharat ambition. The rolling stock is based on Alstom's Adessia commuter train family, incorporating worldwide experience. The propulsion systems and electricals are manufactured at the company's factory in Maneja (Gujarat).

The NaMo Bharat will play a key role in promoting balanced and sustainable economic development of the region. The advanced, eco-friendly design will bring significant efficiencies through the incorporation of energy-saving technologies, including the modern car body, reliable bogies, efficient propulsion system and regenerative braking.

Outstanding ergonomics, safety and comfort, low life cycle costs and high recyclability also contribute to making these new commuter trains an attractive sustainable choice to promote public transport, thereby reducing traffic congestion, air pollution and fuel consumption. They help to save travel costs and time as well as to change the lives of millions of citizens by connecting suburban places with the economic center of the region.

Alstom and NaMo Bharat project commitment

In 2020, Alstom was awarded the contract and the scope of work includes:

- Design, build, and deliver the trainsets. Delivery of 210 commuter and transit train cars.
- Design, supply and install the signalling, train control and telecommunication system, platform screen door & long term evolution which is completed for the ~ 17km priority section for the launch.
- Provide comprehensive maintenance services for 15 years.



The primary purpose of this Regional Rapid Transit System (RRTS) is to relieve the traffic congestion in the national capital and de-urbanise the city by allowing faster commute between nearby satellite towns. Since 2002, after the opening of 1st section of DMRC, the metro network has grown at a rapid pace. The RRTS network will complement the metro and is expected to grow very fast in the country.

Alstom designed the train inspired by Delhi's iconic monument, the Lotus Temple, and unveiled it in September 2020. It is a game changer in the commuter and inter-regional rail transport space which is set to change the way India travels.

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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 63 countries and a talent base of over 80,000 people from 175 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 €16.5 billion for the fiscal year ending on 31 March 2023. For more information, please visit www.alstom.com.

About Alstom in India

Alstom is the only multinational sustainable mobility provider in India, to have a comprehensive portfolio of offerings to meet customer specific needs, from cost-efficient mass-market platforms to high-end technological innovations. Synonymous with the country's 'Rail Revolution', Alstom continues to be a strategic partner in supporting India's freight revolution and passenger movement. With 6 industrial sites and 4 major engineering centres, the company not only caters to domestic project needs, but also delivers for many international projects. Supporting the government's modernization initiatives, Alstom has been at the forefront of introducing several breakthrough technologies in India with world class rolling stock, rail equipment & infrastructure, signalling and services. Fully aligned with the country's vision of Make-in-India and Aatmanirbhar Bharat, Alstom remains deeply committed to strengthening its local sourcing and supply chain ecosystem.

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