



Capgemini  engineering

Engineering the Future of Railway

Bringing innovation to mobility technologies and passenger services solutions

As digitization emerges within the transportation sector, manufacturers and operators must ensure they adapt their solutions with the most advanced technology, around connectivity, big data, and innovation, whilst continuing to ensure safety and security.

New Rail Opportunities

For a sustainable future

Of the 1.3 million km of rail lines worldwide, only 25% are electrified.

A great opportunity for growth

The global autonomous & connected train market size is projected to reach \$5Bn by 2024, with a CAGR of 8.2%.

Enhancing passenger experience

The "smart railway" market is estimated to grow from \$10.5Bn last year to \$20.58Bn by 2021, with a CAGR of 14,4%.

Propelling the industry

The huge rail infrastructure market will continue to grow, from \$47Bn to \$57Bn by 2023.

Customizing the journey

Services is the fastest growing part of the global rail supply market, currently representing 38%, and worth \$70Bn p.a.

Capgemini's expertise in railway comes from over 30 years of experience with leading railway manufacturers, as well as Infrastructure providers & operators. With more than 1,500 rail experts, this vertical contributes to the global engineering and R&D services positioning.

What We Offer

Intelligent train

Design, test, and support of trains, embracing the digital lifecycle

- Intelligent train design
- TCIS / TCMS embedded software
- Autonomous train
- Intelligent validation & verification, test & commissioning

Rail signaling, command and control systems

Development and Integration of critical, autonomous and train control systems

- Signaling, train control, and validation
- Critical systems – development, testing & safety
- Rail communication systems
- Infrastructure and programs

Intelligent manufacturing and operations of rail systems

Advanced tools and process to the manufacturer; and advanced systems and support to the Operator

- Advanced manufacturing for rolling-stock
- Supervision & monitoring systems
- Green mobility

Smart B2B and B2C rail services

Intelligent and transformative services to the passenger, operator, and manufacturer

- Passenger services
- OEM services transformation
- Digital technical publications

Success Stories

In the frame of the SNCF Autonomous Train research program, Capgemini is part of a Freight train partnership which is designed to develop the Autonomous Freight system of tomorrow by demonstrating feasibility on a test platform and rolling prototype.

Capgemini is working in partnership with Network Rail on the Degraded Mode Working System (DMWS), which will minimize disruption to passengers in the event of failures of the signaling system; improving situational awareness and decision making through digitization of the current emergency work.

Strong & successful partnerships



ALSTOM



For more information, contact:
engineering@capgemini.com